CHADWICK GEOTECHNICS

REPORT

Level One Inspection and Testing Services

Meridian Estate Stage 9A, Lots 9001 to 9039

Prepared for:

Brown Property Group Pty Ltd

January 2020

Our Ref: 3807351.009A.v1

25 Metcalf Street, Dandenong South, Vic 3175, Australia
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Title: Level One Inspection and Testing Services					
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Distribution:

Brown Property Group Pty Ltd	1 electronic copy
Chadwick Geotechnics Pty Ltd (FILE)	1 electronic copy

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1 Introduction

Chadwick Geotechnics Pty Ltd (Chadwick Geotechnics) was engaged by Brown Property Group Pty Ltd, to provide Level 1 Inspection and Testing services for the earthworks within the Meridian Estate Stage 9A site located in Clyde North.

2 Project details

The project included the preparation and filling of Lots 9001 to 9039. The specification required the earthworks to be completed under Level 1 Supervision that is, full-time Inspection and Testing of the earthworks. Chadwick Geotechnics were onsite for the duration of the earthworks program.

The location of the site is shown in figure 1 below.

Figure 1: Approximate site location *(Image sourced from Nearmaps)*

3 Geology

Published information[1] shows that the site is underlain by various geologies, they are;

- Quaternary Age Unnamed incised alluvium deposits formation (Na) comprising of alluvium, colluvium: gravel, sand, silt, clay, limestone.
- Neogeone Age Brighton Group Formation (Nbh) comprising of Fluvial and marginal marine deposits: gravel, sand, calcarenite, silt, clay. Includes Parilla Sand.

4 Specification

A summary of the specification is shown below:

Compaction Requirement	95% Standard Compaction

5 Inspection and testing

The inspection and testing of earthworks has been carried out in accordance with AS3798-2007, 'Guidelines on earthworks for commercial and residential developments', with a frequency of field density tests as per a type one project (large scale operation). Compaction control laboratory testing was undertaken in our NATA accredited Dandenong South laboratory in accordance with AS1289 'Methods of Testing Soils for Engineering Purposes'.

Prior to fill being placed the subgrade was inspected. The inspections were performed in accordance with the Level 1 guidelines presented in AS 3798–2007 Section 5.5. No soft spots were encountered during the inspections, the area was found to be firm and free of vegetation and other deleterious material.

Full time Level 1 Inspection and Testing of the filling operations commenced in November 2016 and was completed in October 2019. During this period Chadwick Geotechnics observed the earthworks undertaken. The filling process was not continual for this entire period, the earthwork contractor undertook works as discreet packages across the Meridian Estate during the period mentioned, Chadwick Geotechnics were on site when filling works occurred. Earthwork operations included the supply of material, conditioning of material (moisture conditioning and oversize removal), placement and compaction of the fill material.

All fill material was placed in lift sequences and Chadwick Geotechnics verified that the surface of the stripped area and additional lifts were thoroughly scarified, and moisture conditioned prior to placement of additional layers to prevent delamination at the layer interface.

Field density and moisture content testing was carried out using a calibrated nuclear density gauge in accordance with AS 1289.5.8.1. The HILF rapid compaction test was used for peak converted wet density determinations in accordance with AS 1289.5.7.1. Test locations were recorded using a handheld GPS unit. A site plan showing the field density test locations is provided in **Appendix A**.

A total of seventy (70) density and moisture content tests were performed across the Stage 9A site.

The results show that five (5) tests failed to meet the specification requirements for the project. The earthworks contractor was advised of the tests that failed and the fill relevant to those areas was reworked, reconditioned, re-compacted and subsequently retested. The final results show the tests achieved the specification requirements for the project.

[1] BIBBY, L.M., 2004. Simplified 1: 4 000 000 Geology of Victoria. Geological Survey of Victoria Special Publication. GeoScience Victoria.

A summary table of Hilf density tests is provided in **Appendix B** and the laboratory test reports and fill certificates are provided in **Appendix C and D**.

6 Conclusion

On the basis of our inspections and after considering all test results relating to the project, it is our opinion, so far as it is able to be determined, that:

- The materials used by the earthworks contractor met the geotechnical property requirements of the specification.
- The sourced fill was considered to be natural and clean and suitable for use at the site.
- The fill material placed was tested at a suitable frequency in accordance with AS 3798-2007- Table 8.1 and the results indicate the compacted clay achieved the density requirement of the specification.
- Given the consistent construction practices followed by the earthworks contractor and as witnessed by the Chadwick Geotechnics, combined with the satisfactory verification of test results achieved, it is inferred that areas of the site between test locations were performed to the same standard as those areas that have been tested.

It is our opinion that the earthworks undertaken have been performed in accordance with the requirements of Section 8.2 of AS3798-2007 - Level 1 Inspection and Testing.

7 Applicability

This report has been prepared for the exclusive use of our client Brown Property Group Pty Ltd in good faith and in accordance with the Chadwick Geotechnics quality system for the earthworks filling at the site.

This report is based on the nature of the project and the conditions present in, factors affecting the soil at the time of the inspections, namely November 2016 to October 2019. No responsibility or liability will be accepted, and Chadwick Geotechnics is indemnified to the full extent permitted by law in respect of the use of this report where there has been a change in the nature of the project or the conditions on site that may alter or affect the conclusions of this report.

Should you require any further information regarding this report, please do not hesitate to contact the undersigned on (03) 8796 7900.

Chadwick Geotechnics Pty Ltd

Report prepared by:	Authorised for Chadwick Geotechnics Pty Ltd by:
	
.....	.....
Robert Barden	Timothy Chadwick
Geotechnical Engineer	Project Director

www.chadwickgeotechnics.com.au

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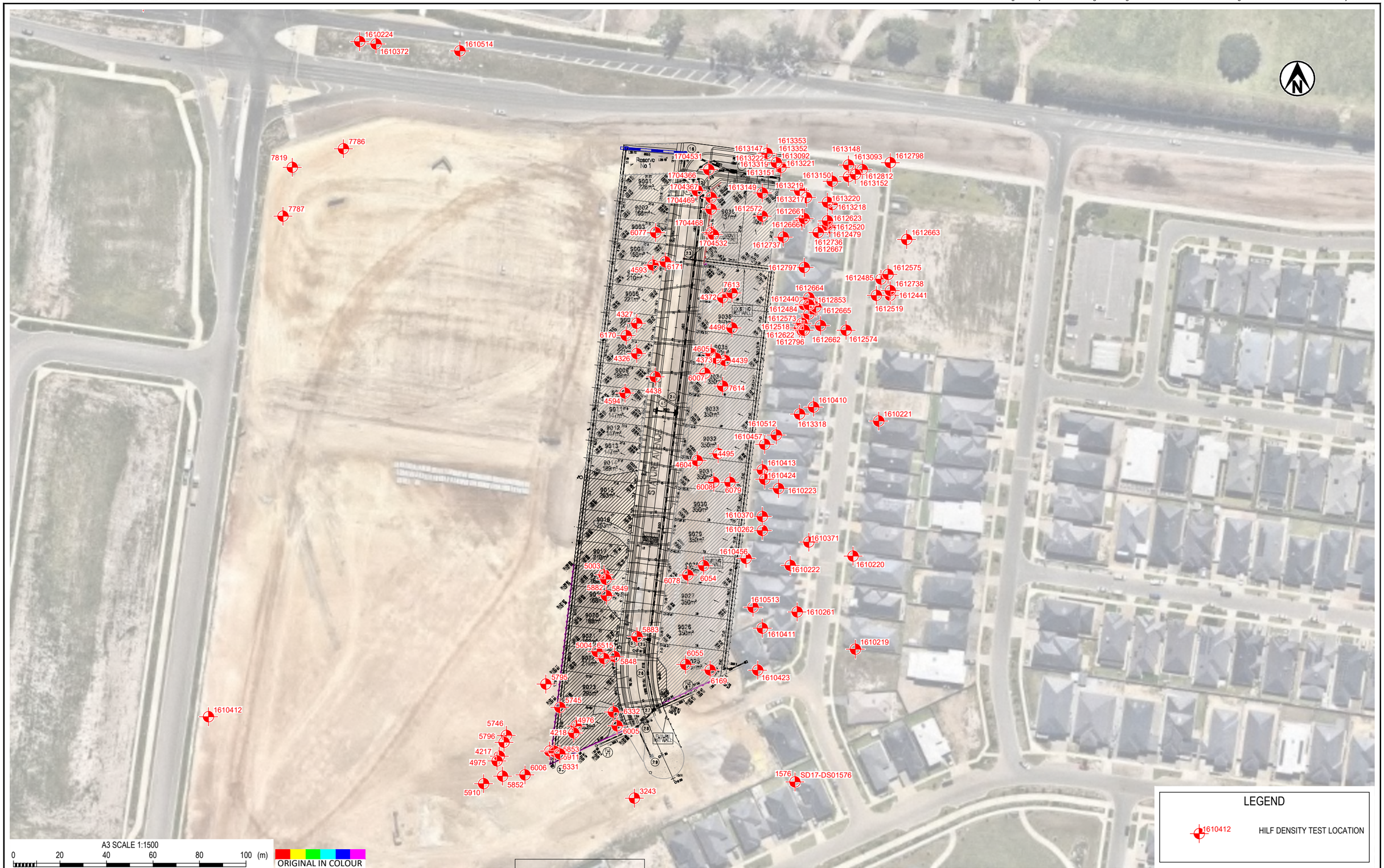
Appendix A: Density Test Location Plan

T:\Dandenong\Geo Projects\3807351\9 Stage 9\WorkingMaterial\CAD\FIGS\3807351.09A-F1.dwg 2020-Jan-16 12:30:00 PM Plotted By: SHAN LIU



NOTE

1. AERIAL PHOTO SOURCED FROM NEARMAP. COPYRIGHT NEARMAP PTY LTD IMAGERY DATE: 24/10/2019.

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PROJECT No.	3807351.09A	
DESIGNED		Nov.19
DRAWN	SHLI	Nov.19
CHECKED		
APPROVED	DATE	

CLIENT **GROSVENER LODGE PTY LTD**

PROJECT **MERIDIAN ESTATE - STAGE 09A**

TITLE HILF DENSITY TEST LOCATION PLAN

UNDER REVISION 1

SCALE (A3) 1:1500 FIG No. 3807351.09A-F1 REV 1

Appendix B: Table of field density results

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Chadwick Geotechnics
25 Metcalf Street
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Tel : (03) 8796 7900
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Report No	Sample No	Date	Test Number	Location [E]	Location [N]	Layer	Density Ratio HILF test (≥95%)	Moisture Variation From OMC (±3%)	Pass / Fail	Remarks
42	1610219	30/08/2016	146	354948	5782576	2	97.5	0.5 wet	Pass	
	1610220	30/08/2016	147	354947	5782616	1	100.5	1.5 dry	Pass	
	1610221	30/08/2016	148	354958	5782674	2	98	1.5 dry	Pass	
	1610222	30/08/2016	149	354920	5782612	1	93.5	1 wet	Fail	Retested see 1610371
	1610223	30/08/2016	150	354915	5782645	1	97.5	0.5 wet	Pass	
	1610224	30/08/2016	151	354735	5782837	Road 1	95.5	0.5 wet	Pass	
43	1610261	31/08/2016	152	354923	5782592	2	97	2 wet	Pass	
	1610262	31/08/2016	153	354908	5782627	2	98.5	2.5 wet	Pass	
44	1610370	1/09/2016	154	354908	5782633	3	101.5	0.5 wet	Pass	
	1610371	1/09/2016	155	354928	5782622	1	100	omc	Pass	Retest of 1610222
	1610372	1/09/2016	156	354742	5782836	Road 2	98.5	2.5 wet	Pass	
46	1610410	2/09/2016	160	354930	5782680	3	99	.5 wet	Pass	
	1610411	2/09/2016	161	354908	5782585	4	98.5	1.5 dry	Pass	
	1610412	2/09/2016	162	354670	5782547		101	1.0 wet	Pass	
	1610413	2/09/2016	163	354908	5782653	4	102	1.5 dry	Pass	
45	1610423	3/09/2016	157	354906	5782567	5	103.5	1.5 dry	Pass	
	1610424	3/09/2016	158	354909	5782649	5	99	1 dry	Pass	
	1610425	3/09/2016	159	354606	5782856	road	100.5	3 dry	Pass	
47	1610456	5/09/2016	164	354901	5782615	6	101.5	0.5 dry	Pass	
	1610457	5/09/2016	165	354909	5782664	6	102.5	0.5 dry	Pass	

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	1610458	5/09/2016	166	354642	5782854	road	100.5	0.5 dry	Pass	
49	1610512	6/09/2016	168	354914	5782668	7	97.5	omc	Pass	
	1610513	6/09/2016	169	354904	5782594	7	102	omc	Pass	
	1610514	6/09/2016	170	354778	5782833	Road	101	2.5 dry	Pass	
64	1612572	15/11/2016	210	354908	5782762	3	95.5	1.5 wet	Pass	
	1612573	15/11/2016	211	354925	5782716	1	94	2.5 wet	Fail	Retest of 1612484, Retested, see 1612662
	1612574	15/11/2016	212	354944	5782713	3	94	omc	Fail	Retested, see 1612665
	1612575	15/11/2016	213	354962	5782737	3	97	1.5 wet	Pass	
66	1612661	17/11/2016	216	354926	5782761	5	100	0.5 wet	Pass	
	1612662	17/11/2016	217	354933	5782715	1	97	1 wet	Pass	Retest of 1612573
	1612663	17/11/2016	218	354970	5782752	fsl	98.5	1 wet	Pass	
	1612664	17/11/2016	219	354928	5782727	5	101	2.5 wet	Pass	
	1612665	17/11/2016	220	354931	5782723	3	101	omc	Pass	Retest of 1612574
	1612666	17/11/2016	221	354925	5782760	-	96	2 wet	Pass	
	1612667	17/11/2016	222	354932	5782755	4	97.5	omc	Pass	Retest of 1612623
67	1612736	18/11/2016	223	354932	5782755	-	96	omc	Pass	
	1612737	18/11/2016	224	354917	5782753	-	96.5	1.5 wet	Pass	
	1612738	18/11/2016	225	354963	5782730	fsl(4)	99.5	omc	Pass	
72	1613147	29/11/2016	233	354910	5782789	2	97	omc	Pass	
	1613148	29/11/2016	234	354945	5782784	2	92.5	0.5 wet	Fail	Retested, see 1613221
	1613149	29/11/2016	235	354908	5782772	3	106.5	0.5 dry	Pass	
	1613150	29/11/2016	236	354938	5782777	3	94	2 wet	Fail	Area reworked, see 1613352 and 1613353
	1613151	29/11/2016	237	354916	5782783	4	97.5	1.5 wet	Pass	
	1613152	29/11/2016	238	354948	5782780	4	101	3 wet	Pass	
73	1613217	30/11/2016	239	354927	5782770	5	96	2 wet	Pass	
	1613218	30/11/2016	240	354938	5782767	6	97.5	2.5 wet	Pass	

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	1613219	30/11/2016	241	354924	5782773	7	95	omc	Pass	
	1613220	30/11/2016	242	354936	5782768	8	99	2 wet	Pass	
	1613221	30/11/2016	243	354914	5782785	2	92	3 wet	Fail	Retest of 1613148. Retested see 1613352
	1613222	30/11/2016	244	354914	5782785	4	97.5	4.5 wet	Fail	Retested, see 1613353
75	1613352	2/12/2016	249	354914	5782785	2	100.5	2 wet	Pass	Retest of 1613221
	1613353	2/12/2016	250	354914	5782785	4	98	0.5 wet	Pass	Retest of 1613222
	1613354	2/12/2016	251	355292	5782709	4	96	2 wet	Pass	
	1613355	2/12/2016	252	355283	5782737	5	99	0.5 wet	Pass	
	1613356	2/12/2016	253	355292	5782733	6	96.5	0.5 dry	Pass	
1	1704366	14/03/2017	304	354880	5782773	1	95.5	2 dry	Pass	
	1704367	14/03/2017	305	354886	5782770	2	100	3 dry	Pass	
2	1704468	15/03/2017	306	354886	5782755	4	95.5	omc	Pass	
	1704469	15/03/2017	307	354886	5782765	3	99.5	1 dry	Pass	
3	1704531	16/03/2017	308	354885	5782782	5	99	1.5 dry	Pass	
	1704532	16/03/2017	309	354887	5782754	6	102	0.5 dry	Pass	
4	1704747	18/03/2017	310	354922	5782519	1	105.5	3.5 dry	Fail	Retested, SD17-DS00125
HDR:W17DS00032	123	4/04/2017		355071	5782401		98.5	1.0 dry	Pass	
HDR:W17DS00032	124	4/04/2017	311	355103	5782410	fsl	101.5	4.0 dry	Pass	Retest of 1612483
HDR:W17DS00032	125	4/04/2017	312	354922	5782519	3	103	3.5 dry	Fail	Retest of 1704747, See SD17-DS01576
HDR:W17DS00032	126	4/04/2017		354922	5782519		100	0.5 dry	Pass	Retest of 1705194
HDR:W17DS00422	1574	5/05/2017	1	355072	5782248		107	1.5 dry	Pass	

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Hilf Summary Table

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Report No	Sample No	Date	Test Number	Location [E]	Location [N]	Layer	Density Ratio HILF test (≥95%)	Moisture Variation From OMC (±3%)	Pass / Fail	Remarks
HDR:W17DS00422	1575	5/05/2017	2	355098	5782288		103	1 dry	Pass	
HDR:W17DS00422	1576	5/05/2017	3	354922	5782519		102.5	2.0 dry	Pass	Retest of SD17-DS00125
HDR:W17DS00422	1577	5/05/2017	4	355071	5782202		100.5	0.5 dry	Pass	
HDR:W17DS02277	8395	10/11/2017	1	354820	5782321		103.5	3 dry	Pass	Retest of 1653
HDR:W19DS01250	4217	16/05/2019	1	354795	5782530	30.72	100	0.5 dry	Pass	
HDR:W19DS01250	4218	16/05/2019	2	354827	5782540	31.390	99	0.1 dry	Pass	
HDR:W19DS01276	4326	17/05/2019	1	354854	5782703	30.260	95	1.8 dry	Pass	
HDR:W19DS01276	4327	17/05/2019	2	354854	5782716	29.990	99.5	1.5 dry	Pass	
HDR:W19DS01292	4372	20/05/2019	1	354891	5782727	30.620	101	OMC	Pass	
HDR:W19DS01292	4373	20/05/2019	2	354888	5782701	30.390	102	4.2 dry	Pass	
HDR:W19DS01303	4438	21/05/2019	1	354862	5782693	30.580	97	OMC	Pass	
HDR:W19DS01303	4439	21/05/2019	2	354892	5782700	30.620	96	1.9 dry	Pass	
HDR:W19DS01320	4495	22/05/2019	1	354889	5782660		91.5	0.4 wet	Fail	Area reworked, see 4604
HDR:W19DS01320	4496	22/05/2019	2	354895	5782714		94	0.1 wet	Fail	Area reworked, see 4605
HDR:W19DS01339	4593	23/05/2019	1	354861	5782741	29.990	94.5	1.8 dry	Fail	Area reworked, see 6077
HDR:W19DS01339	4594	23/05/2019	2	354849	5782686	30.590	95.5	1.7 dry	Pass	
HDR:W19DS01343	4604	24/05/2019	1	354880	5782657	30.960	98.5	0.2 wet	Pass	Retest of 4495
HDR:W19DS01343	4605	24/05/2019	2	354886	5782703	30.830	98.5	0.8 wet	Pass	Retest of 4496
HDR:W19DS01442	4975	12/06/2019	1	354794	5782528	31.360	101	0.3 wet	Pass	
HDR:W19DS01442	4976	12/06/2019	2	354828	5782543	31.870	99.5	2.6 wet	Pass	
HDR:W19DS01456	5003	17/06/2019	1	354840	5782608	31.170	100.5	2.4 wet	Pass	
HDR:W19DS01456	5004	17/06/2019	2	354837	5782575	31.270	97.5	2.8 wet	Pass	
HDR:W19DS01673	5745	25/07/2019	1	354821	5782551		95.5	0.1 wet	Pass	
HDR:W19DS01673	5746	25/07/2019	2	354798	5782539		97	1.6 wet	Pass	
HDR:W19DS01693	5795	26/07/2019	1	354815	5782561		95	2.3 wet	Pass	

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Hilf Summary Table

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Report No	Sample No	Date	Test Number	Location [E]	Location [N]	Layer	Density Ratio HILF test (≥95%)	Moisture Variation From OMC (±3%)	Pass / Fail	Remarks
HDR:W19DS01693	5796	26/07/2019	2	354797	5782536		98.5	0.6 wet	Pass	
HDR:W19DS01709	5852	29/07/2019	1	354796	5782521	31.842	96.5	1.6 wet	Pass	
HDR:W19DS01709	5853	29/07/2019	2	354817	5782532	32.277	96	1.5 wet	Pass	
HDR:W19DS01707	5848	29/07/2019	1	354845	5782573	31.695	100	0.6 wet	Pass	
HDR:W19DS01707	5849	29/07/2019	2	354841	5782599	31.450	98.5	0.9 wet	Pass	
HDR:W19DS01721	5882	30/07/2019	1	354841	5782606	31.599	103	0.3 wet	Pass	
HDR:W19DS01721	5883	30/07/2019	2	354854	5782581	32.147	97.5	0.5 wet	Pass	
HDR:W19DS01731	5910	31/07/2019	1	354788	5782518	31.953	98.5	0.6 wet	Pass	
HDR:W19DS01731	5911	31/07/2019	2	354819	5782532	32.640	97	1.6 wet	Pass	
HDR:W19DS01746	6003	1/08/2019	1	354740	5782469	L1	99	0.2 wet	Pass	
HDR:W19DS01746	6004	1/08/2019	2	354760	5782473	L2	97	1.4 dry	Pass	
HDR:W19DS01746	6005	1/08/2019	3	354846	5782543	32.769	100.5	OMC	Pass	
HDR:W19DS01746	6006	1/08/2019	4	354806	5782522	32.628	98	0.5 wet	Pass	
HDR:W19DS01746	6007	1/08/2019	5	354883	5782695	30.195	98.5	0.4 wet	Pass	
HDR:W19DS01746	6008	1/08/2019	6	354887	5782648	31.143	98.5	0.5 wet	Pass	
HDR:W19DS01746	6009	1/08/2019	7	354740	5782474	L3	95	0.1 wet	Pass	
HDR:W19DS01765	6054	2/08/2019	1	354883	5782612	31.753	95	0.1 wet	Pass	
HDR:W19DS01765	6055	2/08/2019	2	354875	5782569	32.594	99	0.1 dry	Pass	
HDR:W19DS01765	6056	2/08/2019	3	354744	5782472	30.026	99	2.3 wet	Pass	
HDR:W19DS01765	6057	2/08/2019	4	354734	5782473	29.605	92	2.1 wet	Fail	See Retest 9387
HDR:W19DS01772	6077	5/08/2019	1	354862	5782755	29.883	98.5	2.1 wet	Pass	Retest of 4593
HDR:W19DS01772	6078	5/08/2019	2	354876	5782608	31.789	101	OMC	Pass	
HDR:W19DS01772	6079	5/08/2019	3	354894	5782648	31.515	98.5	0.1 dry	Pass	
HDR:W19DS01804	6169	7/08/2019	1	354886	5782567	33.071	103	2.2 dry	Pass	
HDR:W19DS01804	6170	7/08/2019	2	354849	5782711	30.323	100.5	OMC	Pass	

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Hilf Summary Table

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HDR:W19DS01804	6171	7/08/2019	3	354866	5782742	30.433	100.5	0.1 wet	Pass	
HDR:W19DS01860	6331	20/08/2019	1	354821	5782531	33.200	103	0.5 dry	Pass	
HDR:W19DS01860	6332	20/08/2019	2	354844	5782549	33.300	101.5	OMC	Pass	
HDR:W19DS01918	6515	28/08/2019	1	354840	5782572	32.200	95.5	2.7 wet	Pass	
HDR:W19DS02117	7423	25/09/2019	1	354757	5782359		108.5	3.0 dry	Pass	
HDR:W19DS02116	7421	25/09/2019	1	354728	5782312		103	3.0 wet	Pass	
HDR:W19DS02116	7422	25/09/2019	2	354730	5782287		103.5	0.2 wet	Pass	
HDR:W19DS02123	7438	26/09/2019	1	354721	5782364	31.050	101.5	1.9 dry	Pass	
HDR:W19DS02123	7439	26/09/2019	2	354737	5782314	31.120	100	0.9 dry	Pass	
HDR:W19DS02133	7464	30/09/2019	1	354731	5782321	30.700	108.5	2.9 dry	Pass	
HDR:W19DS02133	7465	30/09/2019	2	354738	5782285	30.860	101	2.0 dry	Pass	
HDR:W19DS02143	7519	1/10/2019	1	354716	5782349	30.880	99.5	1.9 wet	Pass	
HDR:W19DS02154	7546	2/10/2019	1	354726	5782286	30.800	99	0.3 wet	Pass	
HDR:W19DS02154	7547	2/10/2019	2	354711	5782328	30.700	97.5	1.8 wet	Pass	
HDR:W19DS02168	7582	3/10/2019	1	354735	5782298	31.260	101	0.9 wet	Pass	
HDR:W19DS02168	7583	3/10/2019	2	354702	5782379	30.560	97	3.1 wet	Pass	
HDR:W19DS02181	7613	4/10/2019	1	354895	5782729	31.100	105	1.8 dry	Pass	
HDR:W19DS02181	7614	4/10/2019	2	354891	5782689	31.170	102.5	0.6 dry	Pass	
HDR:W19DS02181	7615	4/10/2019	3	354722	5782332	31.280	101.5	2.0 dry	Pass	
HDR:W19DS02181	7616	4/10/2019	4	354726	5782300	31.150	100.5	0.5 dry	Pass	
HDR:W19DS02199	7662	7/10/2019	1	354684	5782388	29.647	102	0.6 dry	Pass	
HDR:W19DS02199	7663	7/10/2019	2	354700	5782276	29.990	99	OMC	Pass	
HDR:W19DS02229	7778	10/10/2019	1	354765	5782241	31.170	104	2.0 dry	Pass	
HDR:W19DS02235	7786	10/10/2019	1	354728	5782791	28.540	99	1.8 dry	Pass	
HDR:W19DS02235	7787	10/10/2019	2	354702	5782762	28.520	102	0.3 wet	Pass	

CHADWICK GEOTECHNICS

Hilf Summary Table

3807351.009A Meridian Estate Stage 9A

Chadwick Geotechnics
25 Metcalf Street
Dandenong South VIC 3175
Tel : (03) 8796 7900
Fax: (03) 8796 7944

Think Act Be Safe

Report No	Sample No	Date	Test Number	Location [E]	Location [N]	Layer	Density Ratio HILF test (≥95%)	Moisture Variation From OMC (±3%)	Pass / Fail	Remarks
HDR:W19DS02243	7819	11/10/2019	1	354706	5782783	28.750	108.5	2.8 dry	Pass	
HDR:W19DS02242	7816	11/10/2019	1	354767	5782295	31.960	97	0.6 dry	Pass	
HDR:W19DS02242	7817	11/10/2019	2	354745	5782221	30.830	95.5	1.9 wet	Pass	
HDR:W19DS02242	7818	11/10/2019	3	354764	5782212	30.850	98	0.7 wet	Pass	
HDR:W19DS02250	7838	14/10/2019	1	354741	5782259	31.160	99.5	0.1 wet	Pass	
HDR:W19DS02250	7839	14/10/2019	2	354753	5782213	31.070	97	1.8 wet	Pass	
HDR:W19DS02250	7840	14/10/2019	3	354777	5782203	31.250	95	0.1 wet	Pass	
HDR:W19DS02250	7841	14/10/2019	4	354762	5782242	31.220	96.5	0.2 dry	Pass	
HDR:W19DS02261	7873	15/10/2019	1	354772	5782224	31.167	100	0.1 wet	Pass	
HDR:W19DS02261	7874	15/10/2019	2	354749	5782219	31.045	96.5	OMC	Pass	
HDR:W19DS02276	7942	16/10/2019	1	354739	5782254	31.440	100	0.1 dry	Pass	
HDR:W19DS02276	7943	16/10/2019	2	354773	5782208	31.520	98.5	OMC	Pass	
HDR:W19DS02276	7944	16/10/2019	3	354775	5782302	32.160	100	OMC	Pass	
HDR:W19DS02292	7996	18/10/2019	1	354751	5782252	31.520	102.5	0.7 dry	Pass	
HDR:W19DS02292	7997	18/10/2019	2	354742	5782208	31.670	101.5	2.2 dry	Pass	
HDR:W19DS02292	7998	18/10/2019	3	354763	5782203	31.730	98	0.8 wet	Pass	
HDR:W19DS02315	8059	22/10/2019	1	354774	5782190	31.850	98.5	0.2 dry	Pass	
HDR:W19DS02329	8110	23/10/2019	1	354784	5782265	32.200	101	0.1 dry	Pass	
HDR:W19DS02635	9387	28/11/2019	1	354735	5782471	29.650	100	2.0 dry	Pass	Retest of 6057
HDR:W20DS00028	102	13/01/2020	1	354778	5782402	32.657	102	OMC	Pass	

Appendix C: NATA endorsed laboratory reports

Head Office
25 Metcalf Street
DANDENONG SOUTH VIC 3175

Ph: +61 3 8796 7900
Fax: +61 3 8796 7944

CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

Report Number: **380735 - 42**

Report Date: 02/09/16

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

HILF DENSITY RATIO REPORT

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1610219**	**1610220**	**1610221**	**1610222**	**1610223**	**1610224**				
ID No.:	1	2	3	4	5	6				
Lot No.:	-	-	-	-	-	-				
Date Sampled:	30/08/2016	30/08/2016	30/08/2016	30/08/2016	30/08/2016	30/08/2016				
Time Sampled:	am	am	am	am	am	am				
Date Tested:	31/08/2016	31/08/2016	31/08/2016	31/08/2016	31/08/2016	31/08/2016				
Material Source:	Site Derived	Site Derived	Site Derived	Site Derived	Site Derived	Site Derived				
Material Description:	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay				
To Be Used As	Fill	Fill	Fill	Fill	Fill	Fill				
Sample Location :	E 354948 N 5782576 Layer 2	E 354947 N 5782616 Layer 1	E 354958 N 5782674 Layer 2	E 354920 N 5782612 Layer 1	E 354915 N 5782645 Layer 1	E 354735 N 5782837 Layer 1 Road Way				
Layer Depth (mm):	150	150	150	150	150	150				
Test Depth (mm):	125	125	125	125	125	125				
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)				
Max Size (mm):	19.0	19.0	19.0	19.0	19.0	19.0				
Oversize Wet (%):	0	0	0	2	10	4				
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.03**	**2.00**	**2.02**	**2.00**	**2.05**	**2.01**				
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**	**-**	**-**	**-**	**-**				
PCWD (t/m^3):	**2.08**	**1.99**	**2.06**	**-**	**-**	**-**				
APCWD (t/m^3)	**-**	**-**	**-**	**2.14**	**2.10**	**2.10**				
O.M.C (%) AS1289.5.7.1:	**-**	**-**	**-**	**-**	**-**	**-**				
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**	**-**	**-**	**-**	**-**				
Moisture Variation (of omc):	**0.5% (wet)**	**1.5% (dry)**	**1.5% (dry)**	**1% (wet)**	**0.5% (wet)**	**0.5% (wet)**				
Adjusted Moisture Variation (of omc):	**-**	**-**	**-**	**-**	**-**	**-**				
Compactive Effort:	Standard	Standard	Standard	Standard	Standard	Standard				
Hilf Density Ratio (%):	**97.5**	**100.5**	**98.0**	**93.5**	**97.5**	**95.5**				
Min Hilf Density Ratio (%):	95	95	95	95	95	95				

Remarks:

ilac-MRA NATA Accreditation No. 12719

Accredited for compliance with ISO/IEC 17025. The results of tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

APPROVED SIGNATORY

A. Catton

Form No.: **CG.315.002**

Issue Date: 19/02/2013

Head Office
25 Metcalf Street
DANDENONG SOUTH VIC 3175

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Fax: +61 3 8796 7944

CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

HILF DENSITY RATIO REPORT

Report Number: **380735 - 43**

Report Date: 02/09/16

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1610261**	**1610262**								
ID No.:	1	2								
Lot No.:	-	-								
Date Sampled:	31/08/2016	31/08/2016								
Time Sampled:	am/pm	am/pm								
Date Tested:	1/09/2016	1/09/2016								
Material Source:	Site Dervied	Site Dervied								
Material Description:	Clay	Clay								
To Be Used As	-	-								
Sample Location :	E 354923 N 5782592 Layer 2	E 354908 N 5782627 Layer 2								
Layer Depth (mm):	200	200								
Test Depth (mm):	150	150								
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)								
Max Size (mm):	19.0	19.0								
Oversize Wet (%):	5	4								
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.00**	**2.03**								
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**								
PCWD (t/m^3):	**-**	**-**								
APCWD (t/m^3)	**2.06**	**2.06**								
O.M.C (%) AS1289.5.7.1:	**-**	**-**								
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**								
Moisture Variation (of omc):	**2% (wet)**	**2.5% (wet)**								
Adjusted Moisture Variation (of omc):	**-**	**-**								
Compactive Effort:	Standard	Standard								
Hilf Density Ratio (%):	**97.0**	**98.5**								
Min Hilf Density Ratio (%):	95	95								

Remarks:

ilac-MRA NATA Accreditation No. 12719

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A. Catton

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

Report Number: **380735 - 44**

Report Date: 02/09/16

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

HILF DENSITY RATIO REPORT

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1610370**	**1610371**	**1610372**							
ID No.:	1	2	3							
Lot No.:	-	-	-							
Date Sampled:	1/09/2016	1/09/2016	1/09/2016							
Time Sampled:	am/pm	am/pm	am/pm							
Date Tested:	2/09/2016	2/09/2016	2/09/2016							
Material Source:	Site Derived	Site Derived	Site Derived							
Material Description:	Clay	Clay	Clay							
To Be Used As	-	-	-							
Sample Location :	E 354908 N 5782633 Layer 3	E 354928 N 5782622 Layer 1 Retest 1610222	E 354742 N 5782836 Layer 2 Roadways							
Layer Depth (mm):	200	200	200							
Test Depth (mm):	150	150	150							
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)							
Max Size (mm):	19.0	19.0	19.0							
Oversize Wet (%):	0	0	0							
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**1.98**	**1.98**	**2.05**							
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**	**-**							
PCWD (t/m^3):	**1.95**	**1.98**	**2.07**							
APCWD (t/m^3)	**-**	**-**	**-**							
O.M.C (%) AS1289.5.7.1:	**-**	**-**	**-**							
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**	**-**							
Moisture Variation (of omc):	**0.5% (wet)**	**omc**	**2.5% (wet)**							
Adjusted Moisture Variation (of omc):	**-**	**-**	**-**							
Compactive Effort:	Standard	Standard	Standard							
Hilf Density Ratio (%):	**101.5**	**100.0**	**98.5**							
Min Hilf Density Ratio (%):	95	95	95							

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

A. Catton

A. Catton

Form No.: **CG.315.002**

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

HILF DENSITY RATIO REPORT

Report Number: **380735 - 45**

Report Date: 05/09/16

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1610423**	**1610424**	**1610425**							
ID No.:	1	2	3							
Lot No.:	-	-	-							
Date Sampled:	3/09/2016	3/09/2016	3/09/2016							
Time Sampled:	am/pm	am/pm	am/pm							
Date Tested:	5/09/2016	5/09/2016	5/09/2016							
Material Source:	Site Derived	Site Derived	Site Derived							
Material Description:	Silty Clay	Silty Clay	Silty Clay							
To Be Used As	Fill	Fill	Fill							
Sample Location :	354906E 5782567N Layer 5 -	354909E 5782649N Layer 5 -	354606E 5782856N Road -							
Layer Depth (mm):	200	200	200							
Test Depth (mm):	175	175	175							
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)							
Max Size (mm):	19.0	19.0	19.0							
Oversize Wet (%):	0	0	0							
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.02**	**1.91**	**1.90**							
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**	**-**							
PCWD (t/m^3):	**1.95**	**1.93**	**1.90**							
APCWD (t/m^3)	**-**	**-**	**-**							
O.M.C (%) AS1289.5.7.1:	**-**	**-**	**-**							
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**	**-**							
Moisture Variation (of omc):	**1.5% (dry)**	**1% (dry)**	**3% (dry)**							
Adjusted Moisture Variation (of omc):	**-**	**-**	**-**							
Compactive Effort:	Standard	Standard	Standard							
Hilf Density Ratio (%):	**103.5**	**99.0**	**100.5**							
Min Hilf Density Ratio (%):	95	95	95							

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

M.Robinson

Form No.: **CG.315.002**

Issue Date: 19/02/2013

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

Report Number: **380735 - 46**

Report Date: 05/09/16

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

HILF DENSITY RATIO REPORT

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1610410**	**1610411**	**1610412**	**1610413**						
ID No.:	1	2	3	4						
Lot No.:	-	-	-	-						
Date Sampled:	2/09/2016	2/09/2016	2/09/2016	2/09/2016						
Time Sampled:	am/pm	am/pm	am/pm	am/pm						
Date Tested:	5/09/2016	5/09/2016	5/09/2016	5/09/2016						
Material Source:	Site Derived	Site Derived	Site Derived	Site Derived						
Material Description:	Clay	Clay	Clay	Clay						
To Be Used As	Fill	Fill	Fill	Fill						
Sample Location :	E354930 N5782680 Layer 3 -	E354908 N5782585 Layer 4 -	E354670 N5782847 Thompsons Road -	E354908 N5782653 Layer 4 -						
Layer Depth (mm):	200	200	200	200						
Test Depth (mm):	150	150	150	150						
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)						
Max Size (mm):	19.0	19.0	19.0	19.0						
Oversize Wet (%):	0	8	0	0						
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.04**	**2.03**	**2.10**	**1.96**						
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**	**-**	**-**						
PCWD (t/m^3):	**2.06**	**-**	**2.08**	**1.92**						
APCWD (t/m^3)	**-**	**2.06**	**-**	**-**						
O.M.C (%) AS1289.5.7.1:	**-**	**-**	**-**	**-**						
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**	**-**	**-**						
Moisture Variation (of omc):	**0.5% (wet)**	**1.5% (dry)**	**1% (wet)**	**1.5% (dry)**						
Adjusted Moisture Variation (of omc):	**-**	**-**	**-**	**-**						
Compactive Effort:	Standard	Standard	Standard	Standard						
Hilf Density Ratio (%):	**99.0**	**98.5**	**101.0**	**102.0**						
Min Hilf Density Ratio (%):	95	95	95	95						

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

A Catton

A. Catton

Form No.: **CG.315.002**

Issue Date: 19/02/2013

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

HILF DENSITY RATIO REPORT

Report Number: **380735 - 47**

Report Date: 07/09/16

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1610456**	**1610457**	**1610458**							
ID No.:	1	2	3							
Lot No.:	-	-	-							
Date Sampled:	5/09/2016	5/09/2016	5/09/2016							
Time Sampled:	am	am	am							
Date Tested:	5/09/2016	6/09/2016	5/09/2016							
Material Source:	Site Derived	Site Derived	Site Derived							
Material Description:	Silty Clay	Silty Clay	Silty Clay							
To Be Used As	Fill	Fill	Fill							
Sample Location :	Meridian Estate E354901 N5782615 Layer 6	Meridian Estate E354909 N5782664 Layer 6	Meridian Estate E354642 N5782854 Roadways							
Layer Depth (mm):	200	200	200							
Test Depth (mm):	150	150	150							
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)							
Max Size (mm):	19.0	19.0	19.0							
Oversize Wet (%):	0	0	0							
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.03**	**2.07**	**2.01**							
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**	**-**							
PCWD (t/m^3):	**2.00**	**2.01**	**2.00**							
APCWD (t/m^3)	**-**	**-**	**-**							
O.M.C (%) AS1289.5.7.1:	**-**	**-**	**-**							
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**	**-**							
Moisture Variation (of omc):	**0.5% (dry)**	**0.5% (dry)**	**0.5% (dry)**							
Adjusted Moisture Variation (of omc):	**-**	**-**	**-**							
Compactive Effort:	Standard	Standard	Standard							
Hilf Density Ratio (%):	**101.5**	**102.5**	**100.5**							
Min Hilf Density Ratio (%):	95	95	95							

Remarks:

ilac-MRA NATA Accreditation No. 12719

Accredited for compliance with ISO/IEC 17025. The results of tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

APPROVED SIGNATORY

A Catton

A. Catton

Form No.: **CG.315.002**

Issue Date: 19/02/2013

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

HILF DENSITY RATIO REPORT

Report Number: **380735 - 48**

Report Date: 08/09/16

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1610555**									
ID No.:	1									
Lot No.:	-									
Date Sampled:	7/09/2016									
Time Sampled:	pm									
Date Tested:	8/09/2016									
Material Source:	Site Derived									
Material Description:	Silty Clay									
To Be Used As	Fill									
Sample Location :	Meridian Estate E354716 N57828414 Roadway									
Layer Depth (mm):	200									
Test Depth (mm):	150									
Sampling Procedure:	AS1289.1.2.1.6.4(b)									
Max Size (mm):	19.0									
Oversize Wet (%):	0									
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.03**									
Fld. Moisture Content (%) AS1289.2.1.1:	**-**									
PCWD (t/m^3):	**1.95**									
APCWD (t/m^3)	**-**									
O.M.C (%) AS1289.5.7.1:	**-**									
Moisture Ratio (%) AS1289.5.4.1:	**-**									
Moisture Variation (of omc):	**2.5% (dry)**									
Adjusted Moisture Variation (of omc):	**-**									
Compactive Effort:	Standard									
Hilf Density Ratio (%):	**104.5**									
Min Hilf Density Ratio (%):	95									

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

A. Catton

A. Catton

Form No.: **CG.315.002**

Issue Date: 19/02/2013

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

Report Number: **380735 - 49**

Report Date: 08/09/16

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

HILF DENSITY RATIO REPORT

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1610512**	**1610513**	**1610514**							
ID No.:	1	2	3							
Lot No.:	-	-	-							
Date Sampled:	6/09/2016	6/09/2016	6/09/2016							
Time Sampled:	am/pm	am/pm	am/pm							
Date Tested:	7/09/2016	8/09/2016	8/09/2016							
Material Source:	Site Derived	Site Derived	Site Derived							
Material Description:	Clay	Clay	Clay							
To Be Used As	Fill	Fill	Fill							
Sample Location :	E 354914 N 5782668 Layer 7 -	E 354904 N 5782594 Layer 7 -	E 354778 N 5782833 Thompsons Road -							
Layer Depth (mm):	200	200	200							
Test Depth (mm):	150	150	150							
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)							
Max Size (mm):	19.0	19.0	19.0							
Oversize Wet (%):	0	0	0							
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**1.95**	**2.04**	**1.91**							
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**	**-**							
PCWD (t/m^3):	**1.99**	**2.00**	**1.89**							
APCWD (t/m^3)	**-**	**-**	**-**							
O.M.C (%) AS1289.5.7.1:	**-**	**-**	**-**							
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**	**-**							
Moisture Variation (of omc):	**omc**	**omc**	**2.5% (dry)**							
Adjusted Moisture Variation (of omc):	**-**	**-**	**-**							
Compactive Effort:	Standard	Standard	Standard							
Hilf Density Ratio (%):	**97.5**	**102.0**	**101.0**							
Min Hilf Density Ratio (%):	95	95	95							

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

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CHADWICK GEOTECHNICS

HILF DENSITY RATIO REPORT

Customer: Grosevnor Lodge Pty Ltd
Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175
Project: Meridian Estate
Location: Clyde North
Customer Order No.: -

Report Number: **380735 - 64**
Report Date: 16/11/16
C.G Order No: -
Test Method: AS1289.5.7.1
Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1612572**	**1612573**	**1612574**	**1612575**						
ID No.:	1	2	3	4						
Lot No.:	0	-	-	0						
Date Sampled:	15/11/2016	15/11/2016	15/11/2016	15/11/2016						
Time Sampled:	am/pm	am/pm	am/pm	am/pm						
Date Tested:	16/11/2016	16/11/2016	16/11/2016	16/11/2016						
Material Source:	Site Derived	Site Derived	Site Derived	Site Derived						
Material Description:	Silty Clay	Silty Clay	Silty Clay	Silty Clay						
To Be Used As	Fill	Fill	Fill	Fill						
Sample Location :	E 354908 N 5782762 FSL Layer 3	E354925 N 5782716 FSL Layer 1	E 354944 N 5782713 FSL Layer 3	E 354962 N 5782737 FSL Layer 3						
Layer Depth (mm):	200	200	200	200						
Test Depth (mm):	175	175	175	175						
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)						
Max Size (mm):	19.0	19.0	19.0	19.0						
Oversize Wet (%):	13	7	19	17						
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.11**	**2.06**	**2.11**	**2.17**						
Fld. Moisture Content (%) AS1289.2.1.1:	-	-	-	-						
PCWD (t/m^3):	-	-	-	-						
APCWD (t/m^3)	**2.21**	**2.19**	**2.25**	**2.24**						
O.M.C (%) AS1289.5.7.1:	-	-	-	-						
Moisture Ratio (%) AS1289.5.4.1:	-	-	-	-						
Moisture Variation (of omc):	**1.5% (wet)**	**2.5% (wet)**	**omc**	**1.5% (wet)**						
Adjusted Moisture Variation (of omc):	-	-	-	-						
Compactive Effort:	Standard	Standard	Standard	Standard						
Hilf Density Ratio (%):	**95.5**	**94.0**	**94.0**	**97.0**						
Min Hilf Density Ratio (%):	95	95	95	95						

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

M.Robinson

Form No.: **CG.315.002**
Issue Date: 19/02/2013

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

Report Number: **380735 - 65**

Report Date: 16/11/16

C.G Order No: -

Test Method: AS1289.5.7.1

Page: 1 of 1

HILF DENSITY RATIO REPORT

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1612622**	**1612623**								
ID No.:	1	2								
Lot No.:	-	-								
Date Sampled:	16/11/2016	16/11/2016								
Time Sampled:	am/pm	am/pm								
Date Tested:	16/11/2016	16/11/2016								
Material Source:	Site Derived	Site Derived								
Material Description:	Silty Clay	Silty Clay								
To Be Used As	Fill	Fill								
Sample Location :	E 354925 N 5782713 FSL Layer 4	E 354936 N 5782760 FSL Layer 4								
Layer Depth (mm):	200	200								
Test Depth (mm):	150	150								
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)								
Max Size (mm):	19.0	19.0								
Oversize Wet (%):	17	18								
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.19**	**2.06**								
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**								
PCWD (t/m^3):	**-**	**-**								
APCWD (t/m^3)	**2.23**	**2.24**								
O.M.C (%) AS1289.5.7.1:	**-**	**-**								
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**								
Moisture Variation (of omc):	**1.5% (wet)**	**1% (wet)**								
Adjusted Moisture Variation (of omc):	**-**	**-**								
Compactive Effort:	Standard	Standard								
Hilf Density Ratio (%):	**98.0**	**92.0**								
Min Hilf Density Ratio (%):	95	95								

Remarks:

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APPROVED SIGNATORY

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

HILF DENSITY RATIO REPORT

Report Number: **380735 - 66**

Report Date: 16/11/16

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1612661**	**1612662**	**1612663**	**1612664**	**1612665**	**1612666**	**1612667**			
ID No.:	1	2	3	4	5	6	7			
Lot No.:	-	-	-	-	-	-	-			
Date Sampled:	17/11/2016	17/11/2016	17/11/2016	17/11/2016	17/11/2016	17/11/2016	17/11/2016			
Time Sampled:	am/pm	am/pm	am/pm	am/pm	am/pm	pm	pm			
Date Tested:	18/11/2016	18/11/2016	18/11/2016	18/11/2016	18/11/2016	18/11/2016	18/11/2016			
Material Source:	Site Derived	Site Derived	Site Derived	Site Derived	Site Derived	Site Derived	Site Derived			
Material Description:	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay	Silty Clay			
To Be Used As	Fill	Fill	Fill	Fill	Fill	Fill	Fill			
Sample Location :	E 354926 N 5782761 FSL Layer 5	E 354933 N 5782715 FSL Layer 1	E 354970 N 5782752 FSL	E 354928 N 5782727 FSL Layer 5	E 354931 N 5782723 FSL Layer 3	E 354925 N 5782760 FSL	E 354932 N 5782755 FSL Layer 4			
Layer Depth (mm):	175	175	175	175	175	175	175			
Test Depth (mm):	150	150	150	150	150	150	150			
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)			
Max Size (mm):	19.0	19.0	19.0	19.0	19.0	19.0	19.0			
Oversize Wet (%):	12	5	13	12	0	10	18			
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.22**	**2.16**	**2.18**	**2.23**	**2.00**	**2.15**	**2.14**			
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**	**-**	**-**	**-**	**-**	**-**			
PCWD (t/m^3):	**-**	**-**	**-**	**-**	**1.98**	**-**	**-**			
APCWD (t/m^3)	**2.22**	**2.23**	**2.22**	**2.21**	**-**	**2.24**	**2.20**			
O.M.C (%) AS1289.5.7.1:	**-**	**-**	**-**	**-**	**-**	**-**	**-**			
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**	**-**	**-**	**-**	**-**	**-**			
Moisture Variation (of omc):	**0.5% (wet)**	**1% (wet)**	**1% (wet)**	**2.5% (wet)**	**omc**	**2% (wet)**	**omc**			
Adjusted Moisture Variation (of omc):	**-**	**-**	**-**	**-**	**-**	**-**	**-**			
Compactive Effort:	Standard	Standard	Standard	Standard	Standard	Standard	Standard			
Hilf Density Ratio (%):	**100.0**	**97.0**	**98.5**	**101.0**	**101.0**	**96.0**	**97.5**			
Min Hilf Density Ratio (%):	95	95	95	95	95	95	95			

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

M.Robinson

Form No.: **CG.315.002**

Issue Date: 19/02/2013

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

Report Number: **380735 - 67**

Report Date: 21/11/16

C.G Order No: -

Test Method: AS1289.5.7.1

Page: 1 of 1

HILF DENSITY RATIO REPORT

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1612736**	**1612737**	**1612738**							
ID No.:	1	2	3							
Lot No.:	-	-	-							
Date Sampled:	18/11/2016	18/11/2016	18/11/2016							
Time Sampled:	pm	pm	pm							
Date Tested:	19/11/2016	19/11/2016	21/11/2016							
Material Source:	Site Derived	Site Derived	Site Derived							
Material Description:	Mudstone	Mudstone	Mudstone							
To Be Used As	Fill	Fill	Fill							
Sample Location :	E354926 N5782726	E354917 N5782753	E354963 N5782730							
Layer Depth (mm):	200	200	200							
Test Depth (mm):	150	150	150							
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)							
Max Size (mm):	19.0	19.0	19.0							
Oversize Wet (%):	19	11	13							
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.17**	**2.11**	**2.19**							
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**	**-**							
PCWD (t/m^3):	**-**	**-**	**-**							
APCWD (t/m^3)	**2.26**	**2.18**	**2.21**							
O.M.C (%) AS1289.5.7.1:	**-**	**-**	**-**							
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**	**-**							
Moisture Variation (of omc):	**omc**	**1.5% (wet)**	**omc**							
Adjusted Moisture Variation (of omc):	**-**	**-**	**-**							
Compactive Effort:	Standard	Standard	Standard							
Hilf Density Ratio (%):	**96.0**	**96.5**	**99.5**							
Min Hilf Density Ratio (%):	95	95	95							

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

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Form No.: **CG.315.002**

Issue Date: 19/02/2013

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

HILF DENSITY RATIO REPORT

Report Number: **380735 - 72**

Report Date: 02/12/16

C.G Order No: -

Test Method: AS1289.5.7.1

Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1613147**	**1613148**	**1613149**	**1613150**	**1613151**	**1613152**				
ID No.:	1	2	3	4	5	6				
Lot No.:	-	-	-	-	-	-				
Date Sampled:	29/11/2016	29/11/2016	29/11/2016	29/11/2016	29/11/2016	29/11/2016				
Time Sampled:	am/pm	am/pm	am/pm	am/pm	am/pm	am/pm				
Date Tested:	30/11/2016	30/11/2016	30/11/2016	30/11/2016	30/11/2016	30/11/2016				
Material Source:	Site derived	Site derived	Site derived	Site derived	Site derived	Site derived				
Material Description:	Clay	Clay	Clay	Clay	Clay	Clay				
To Be Used As	Fill	Fill	Fill	Fill	Fill	Fill				
Sample Location :	N 5782789 E 354910 Layer 2	N 5782784 E 354945 Layer 2	N 5782772 E 354908 Layer 3	N 5782777 E 354938 Layer 3	N 5782783 E 354916 Layer 4	N 5782780 E 354948 Layer 4				
Layer Depth (mm):	200	200	200	200	200	200				
Test Depth (mm):	150	150	150	150	150	150				
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)				
Max Size (mm):	19.0	19.0	19.0	19.0	19.0	19.0				
Oversize Wet (%):	16	18	12	15	4	7				
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.19**	**2.07**	**2.21**	**2.14**	**2.13**	**2.13**				
Fld. Moisture Content (%) AS1289.2.1.1:	-	-	-	-	-	-				
PCWD (t/m^3):	-	-	-	-	-	-				
APCWD (t/m^3)	**2.26**	**2.24**	**2.08**	**2.28**	**2.18**	**2.10**				
O.M.C (%) AS1289.5.7.1:	-	-	-	-	-	-				
Moisture Ratio (%) AS1289.5.4.1:	-	-	-	-	-	-				
Moisture Variation (of omc):	**omc**	**0.5% (wet)**	**0.5% (dry)**	**2% (wet)**	**1.5% (wet)**	**3% (wet)**				
Adjusted Moisture Variation (of omc):	-	-	-	-	-	-				
Compactive Effort:	Standard	Standard	Standard	Standard	Standard	Standard				
Hilf Density Ratio (%):	**97.0**	**92.5**	**106.5**	**94.0**	**97.5**	**101.0**				
Min Hilf Density Ratio (%):	95	95	95	95	95	95				

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

M.Robinson

Form No.: **CG.315.002**

Issue Date: 19/02/2013

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate

Location: Clyde North

Customer Order No.: -

HILF DENSITY RATIO REPORT

Report Number: **380735 - 73**

Report Date: 02/12/16

C.G Order No: -

Test Method: AS1289.5.7.1

Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1613217**	**1613218**	**1613219**	**1613220**	**1613221**	**1613222**				
ID No.:	1	2	3	4	5	6				
Lot No.:	-	-	-	-	-	-				
Date Sampled:	30/11/2016	30/11/2016	30/11/2016	30/11/2016	30/11/2016	30/11/2016				
Time Sampled:	am/pm	am/pm	am/pm	am/pm	am/pm	am/pm				
Date Tested:	1/12/2016	1/12/2016	1/12/2016	1/12/2016	1/12/2016	1/12/2016				
Material Source:	Site derived	Site derived	Site derived	Site derived	Site derived	Site derived				
Material Description:	Clay	Clay	Clay	Clay	Clay	Clay				
To Be Used As	Fill	Fill	Fill	Fill	Fill	Fill				
Sample Location :	N 5782770 E 354927 Layer 5	N 5782767 E 354938 Layer 6	N 5782773 E 354924 Layer 7	N 5782768 E 354936 Layer 8	N 5782785 E 354914 Layer 2	N 5782785 E 354914 Layer 4				
Layer Depth (mm):	200	200	200	200	200	200				
Test Depth (mm):	150	150	150	150	150	150				
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)				
Max Size (mm):	19.0	19.0	19.0	19.0	19.0	19.0				
Oversize Wet (%):	0	6	5	0	7	0				
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.00**	**2.10**	**2.00**	**2.09**	**2.02**	**2.04**				
Fld. Moisture Content (%) AS1289.2.1.1:	-	-	-	-	-	-				
PCWD (t/m^3):	**2.08**	-	-	**2.11**	-	**2.10**				
APCWD (t/m^3)	-	**2.15**	**2.11**	-	**2.19**	-				
O.M.C (%) AS1289.5.7.1:	-	-	-	-	-	-				
Moisture Ratio (%) AS1289.5.4.1:	-	-	-	-	-	-				
Moisture Variation (of omc):	**2% (wet)**	**2.5% (wet)**	**omc**	**2% (wet)**	**3% (wet)**	**4.5% (wet)**				
Adjusted Moisture Variation (of omc):	-	-	-	-	-	-				
Compactive Effort:	Standard	Standard	Standard	Standard	Standard	Standard				
Hilf Density Ratio (%):	**96.0**	**97.5**	**95.0**	**99.0**	**92.0**	**97.5**				
Min Hilf Density Ratio (%):	95	95	95	95	95	95				

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

M.Robinson

Form No.: **CG.315.002**

Issue Date: 19/02/2013

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CHADWICK GEOTECHNICS

HILF DENSITY RATIO REPORT

Customer: Grosevnor Lodge Pty Ltd
Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175
Project: Meridian Estate
Location: Clyde North
Customer Order No.: -

Report Number: **380735 - 75**
Report Date: 07/12/16
C.G Order No: -
Test Method: AS1289.5.7.1
Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 21712

Sample No.:	**1613352**	**1613353**	**1613354**	**1613355**	**1613356**					
ID No.:	1	2	3	4	5					
Lot No.:	-	-	-	-	-					
Date Sampled:	2/12/2016	2/12/2016	2/12/2016	2/12/2016	2/12/2016					
Time Sampled:	am/pm	am/pm	am/pm	am/pm	am/pm					
Date Tested:	5/12/2016	5/12/2016	5/12/2016	5/12/2016	5/12/2016					
Material Source:	Site Derived	Site Derived	Site Derived	Site Derived	Site Derived					
Material Description:	Clay	Clay	Clay	Clay	Clay					
To Be Used As	Fill	Fill	Fill	Fill	Fill					
Sample Location :	N 5782785 E 354914 Layer 2	N 5782785 E 354914 Layer 4	N 5782709 E 355292 Layer 4	N 5782737 E 355283 Layer 5	N 5782733 E 355292 Layer 6					
Layer Depth (mm):	200	200	200	200	200					
Test Depth (mm):	150	150	150	150	150					
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)					
Max Size (mm):	19.0	19.0	19.0	19.0	19.0					
Oversize Wet (%):	2	0	4	4	3					
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.11**	**2.06**	**2.04**	**2.13**	**2.08**					
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**	**-**	**-**	**-**					
PCWD (t/m^3):	**-**	**2.10**	**-**	**-**	**-**					
APCWD (t/m^3)	**2.10**	**-**	**2.12**	**2.15**	**2.16**					
O.M.C (%) AS1289.5.7.1:	**-**	**-**	**-**	**-**	**-**					
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**	**-**	**-**	**-**					
Moisture Variation (of omc):	**2% (wet)**	**0.5% (wet)**	**2% (wet)**	**0.5% (wet)**	**0.5% (dry)**					
Adjusted Moisture Variation (of omc):	**-**	**-**	**-**	**-**	**-**					
Compactive Effort:	Standard	Standard	Standard	Standard	Standard					
Hilf Density Ratio (%):	**100.5**	**98.0**	**96.0**	**99.0**	**96.5**					
Min Hilf Density Ratio (%):	95	95	95	95	95					

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

M.Robinson

Form No.: **CG.315.002**
Issue Date: 19/02/2013

Head Office
25 Metcalf Street
DANDENONG SOUTH VIC 3175

Ph: +61 3 8796 7900
Fax: +61 3 8796 7944

CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate - Stage 2

Location: Clyde North

Customer Order No.: -

HILF DENSITY RATIO REPORT

Report Number: **380735.002 - 1**

Report Date: 21/03/17

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 12712

Sample No.:	**1704366**	**1704367**								
ID No.:	1	2								
Lot No.:	-	-								
Date Sampled:	14/03/2017	14/03/2017								
Time Sampled:	am/pm	am/pm								
Date Tested:	15/03/2017	15/03/2017								
Material Source:	Site Derived	Site Derived								
Material Description:	Clay	Clay								
To Be Used As	Fill	Fill								
Sample Location :	E354880 N5782773 - Layer 1	E354886 N5782770 - Layer 2								
Layer Depth (mm):	200	200								
Test Depth (mm):	150	150								
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)								
Max Size (mm):	19.0	19.0								
Oversize Wet (%):	6	3								
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.04**	**2.09**								
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**								
PCWD (t/m^3):	**-**	**-**								
APCWD (t/m^3)	**2.13**	**2.09**								
O.M.C (%) AS1289.5.7.1:	**-**	**-**								
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**								
Moisture Variation (of omc):	**2% (dry)**	**3% (dry)**								
Adjusted Moisture Variation (of omc):	**-**	**-**								
Compactive Effort:	Standard	Standard								
Hilf Density Ratio (%):	**95.5**	**100.0**								
Min Hilf Density Ratio (%):	95	95								

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

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Form No.: **CG.315.002**

Issue Date: 19/02/2013

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate - Stage 2

Location: Clyde North

Customer Order No.: -

HILF DENSITY RATIO REPORT

Report Number: **380735.002 - 2**

Report Date: 21/03/17

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 12712

Sample No.:	**1704468**	**1704469**								
ID No.:	1	2								
Lot No.:	-	-								
Date Sampled:	15/03/2017	15/03/2017								
Time Sampled:	am/pm	am/pm								
Date Tested:	16/03/2017	16/03/2017								
Material Source:	Site Derived	Site Derived								
Material Description:	Clay	Clay								
To Be Used As	Fill	Fill								
Sample Location :	E354886 N5782755 - Layer 4	E354886 N5782765 - Layer 3								
Layer Depth (mm):	200	200								
Test Depth (mm):	150	150								
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)								
Max Size (mm):	19.0	19.0								
Oversize Wet (%):	0	0								
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.00**	**2.11**								
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**								
PCWD (t/m^3):	**2.10**	**2.12**								
APCWD (t/m^3)	**-**	**-**								
O.M.C (%) AS1289.5.7.1:	**-**	**-**								
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**								
Moisture Variation (of omc):	**omc**	**1% (dry)**								
Adjusted Moisture Variation (of omc):	**-**	**-**								
Compactive Effort:	Standard	Standard								
Hilf Density Ratio (%):	**95.5**	**99.5**								
Min Hilf Density Ratio (%):	95	95								

Remarks:

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Form No.: **CG.315.002**

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CHADWICK GEOTECHNICS

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate - Stage 2

Location: Clyde North

Customer Order No.: -

HILF DENSITY RATIO REPORT

Report Number: **380735.002 - 3**

Report Date: 21/03/17

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 12712

Sample No.:	**1704531**	**1704532**								
ID No.:	1	2								
Lot No.:	-	-								
Date Sampled:	16/03/2017	16/03/2017								
Time Sampled:	am/pm	am/pm								
Date Tested:	17/03/2017	17/03/2017								
Material Source:	Site Derived	Site Derived								
Material Description:	Clay	Clay								
To Be Used As	Fill	Fill								
Sample Location :	E354885 N5782782 - Layer 5	E354887 N5782754 - Layer 6								
Layer Depth (mm):	200	200								
Test Depth (mm):	150	150								
Sampling Procedure:	AS1289.1.2.1.6.4(b)	AS1289.1.2.1.6.4(b)								
Max Size (mm):	19.0	19.0								
Oversize Wet (%):	0	0								
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**1.92**	**1.95**								
Fld. Moisture Content (%) AS1289.2.1.1:	**-**	**-**								
PCWD (t/m^3):	**1.94**	**1.92**								
APCWD (t/m^3)	**-**	**-**								
O.M.C (%) AS1289.5.7.1:	**-**	**-**								
Moisture Ratio (%) AS1289.5.4.1:	**-**	**-**								
Moisture Variation (of omc):	**1.5% (dry)**	**0.5% (dry)**								
Adjusted Moisture Variation (of omc):	**-**	**-**								
Compactive Effort:	Standard	Standard								
Hilf Density Ratio (%):	**99.0**	**102.0**								
Min Hilf Density Ratio (%):	95	95								

Remarks:

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CHADWICK GEOTECHNICS

HILF DENSITY RATIO REPORT

Customer: Grosevnor Lodge Pty Ltd

Customer Address: 48 Healy Road, Dandenong Sth,Vic 3175

Project: Meridian Estate - Stage 2

Location: Clyde North

Customer Order No.: -

Report Number: **380735.002 - 4**

Report Date: 21/03/17

C.G Order No: **-**

Test Method: AS1289.5.7.1

Page: 1 of 1

Testing performed and reported at our Dandenong South Laboratory 12712

Sample No.:	**1704747**
ID No.:	1
Lot No.:	-
Date Sampled:	18/03/2017
Time Sampled:	am/pm
Date Tested:	20/03/2017
Material Source:	Site Derived
Material Description:	Clay
To Be Used As	Fill
Sample Location :	E354922 N5782519 Layer 1
Layer Depth (mm):	200
Test Depth (mm):	150
Sampling Procedure:	AS1289.1.2.1.6.4(b)
Max Size (mm):	19.0
Oversize Wet (%):	0
Fld. Wet Density (t/m^3) AS 1289.5.8.1:	**2.01**
Fld. Moisture Content (%) AS1289.2.1.1:	**-**
PCWD (t/m^3):	**1.91**
APCWD (t/m^3)	**-**
O.M.C (%) AS1289.5.7.1:	**-**
Moisture Ratio (%) AS1289.5.4.1:	**-**
Moisture Variation (of omc):	**3.5% (dry)**
Adjusted Moisture Variation (of omc):	**-**
Compactive Effort:	Standard
Hilf Density Ratio (%):	**105.5**
Min Hilf Density Ratio (%):	95

Remarks:

ilac-MRA NATA Accreditation No. 12719

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APPROVED SIGNATORY

M.Robinson

Form No.: **CG.315.002**

Issue Date: 19/02/2013

CHADWICK GEOTECHNICS

Dandenong South
ACN 143 009 330
25 Metcalf Street
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Report No: HDR:W17DS00032
Issue No: 2
This report replaces all previous issues of report no 'HDR:W17DS00032'.

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate
Project No.: 3807351
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation No. 12719

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national

12712

Approved Signatory: M. Robinson
(Senior Technician)
Date of Issue: 10/05/2017

Sample Details

Location:	Lots for homes Stage 2-5
Client Request ID:	
Specification Requirements:	Minimum Hilf Density Ratio of 95% Std Compaction
Field Test procedures:	AS 1289.5.8.1
Laboratory Test procedures:	AS 1289.5.7.1
Sampling Method:	AS1289.1.2.1 Clause 6.4 (b)
Source:	Onsite
Material:	General Fill

Sample Data

Sample ID	S17DS-00123	S17DS-00124	S17DS-00125	S17DS-00126		
Field Sample ID	1	2	3	4		
Date Tested	4/04/2017	4/04/2017	4/04/2017	4/04/2017		
Location	E: 355071	E 355103	Retest	Retest		
	N: 5782401	N: 5782410	Stage 2	Stage 3		
	Stage 5					

Field and Laboratory Data

Depth of Test (mm)	150	150	150	150		
Depth of Layer (mm)	175	175	175	175		
AS Sieve Size (mm)	19.0	19.0	19.0	19.0		
Oversize Wet (%)	0	0	0	0		
Field Wet Density (t/m³)	1.95	2.00	2.00	2.07		
Peak Converted Wet Density (t/m³)	1.98	1.97	1.94	2.08		
Compactive Effort	Standard	Standard	Standard	Standard		
Moisture Variation (%)	1.0 dry	4.0 dry	3.5 dry	0.5 dry		
Hilf Density Ratio (%)	**98.5**	**101.5**	**103.0**	**100.0**		

Comments

CHADWICK GEOTECHNICS

Dandenong South
ACN 143 009 330
25 Metcalf Street
DANDENONG SOUTH, VIC 3175

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Report No: HDR:W17DS00422
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate
Project No.: 3807351
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation No. 12719

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national 12712

Approved Signatory: M. Robinson
(Senior Technician)
Date of Issue: 10/05/2017

Sample Details

Location: Stage 6
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample Data

Sample ID	S17DS-01574	S17DS-01575	S17DS-01576	S17DS-01577		
Field Sample ID	1	2	3	4		
Date Tested	5/05/2017	5/05/2017	5/05/2017	5/05/2017		
E	355072	355098	354922	355071		
N	5782248	5782288	5782519	5782202		
Soil Description	Clay	Clay	Clay	Clay		
Field and Laboratory Data						
Depth of Test (mm)	150	150	150	150		
Depth of Layer (mm)	200	200	200	200		
Field Wet Density (t/m³)	2.17	2.10	2.02	2.06		
Peak Converted Wet Density (t/m³)	2.02	2.04	1.98	2.05		
Compactive Effort	Standard	Standard	Standard	Standard		
Moisture Variation (%)	1.5 dry	1.0 dry	2.0 dry	0.5 dry		
Hilf Density Ratio (%)	**107.0**	**103.0**	**102.5**	**100.5**		

Comments

CHADWICK GEOTECHNICS

Dandenong South
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25 Metcalf Street
DANDENONG SOUTH, VIC 3175

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Report No: HDR:W17DS02277
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate Clyde Stage 7
Project No.: 3807351.007
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation No. 12719

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Approved Signatory: M. Robinson
(Senior Technician)
12712 Date of Issue: 14/11/2017

Sample Details

Location:	Clyde North
Client Request ID:	
Specification Requirements:	Minimum Hilf Density Ratio of 95% Standard Compaction
Field Test procedures:	AS 1289.5.8.1
Laboratory Test procedures:	AS 1289.5.7.1
Sampling Method:	AS1289.1.2.1 Clause 6.4 (b)
Source:	Onsite
Material:	General Fill

Sample Data

Sample ID	S17DS-08395					
Field Sample ID	1					
Date Tested	10/11/2017					
E	354820					
N	5782321					
Soil Description	Clay					

Field and Laboratory Data

Depth of Test (mm)	150					
Field Wet Density (t/m³)	2.02					
Peak Converted Wet Density (t/m³)	1.95					
Compactive Effort	Standard					
Moisture Variation (%)	3.0 dry					
Hilf Density Ratio (%)	**103.5**					

Comments

CHADWICK GEOTECHNICS

Dandenong South
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25 Metcalf Street
DANDENONG SOUTH, VIC 3175

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Report No: HDR:W19DS01250
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Krushik Patel
(Senior Geotechnician)

12712 Date of Issue: 29/05/2019

Sample Details

Location:	Clyde North
Client Request ID:	
Specification Requirements:	Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures:	AS 1289.5.8.1
Laboratory Test procedures:	AS 1289.5.7.1
Sampling Method:	AS1289.1.2.1 Clause 6.4 (b)
Source:	Onsite
Material:	Clay

Sample ID	S19DS-04217	S19DS-04218	
Field Sample ID	1	2	
Date Tested	16/05/2019	16/05/2019	
E:	354795	354827	
N:	5782530	5782540	
RL:	30.72	31.39	
Depth of Test (mm)	150	150	
Depth of Layer (mm)	200	200	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	11	8	
Field Wet Density (t/m³)	2.21	2.14	
Peak Converted Wet Density (t/m³)	2.21	2.16	
Compactive Effort	Standard	Standard	
Moisture Variation (%)	0.5 dry	0.0	
Hilf Density Ratio (%)	**100.0**	**99.0**	

Comments

CHADWICK GEOTECHNICS

Dandenong South
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Report No: HDR:W19DS01276
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

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Approved Signatory: Krushik Patel
(Senior Geotechnician)

12712 Date of Issue: 29/05/2019

Sample Details

Location:	Clyde North
Client Request ID:	
Specification Requirements:	Minimum Hilf Density Ratio of 98% Standard Compaction +- 3% of OMC
Field Test procedures:	AS 1289.5.8.1
Laboratory Test procedures:	AS 1289.5.7.1
Sampling Method:	AS1289.1.2.1 Clause 6.4 (b)
Source:	Onsite
Material:	General Fill

Sample ID	S19DS-04326	S19DS-04327	
Field Sample ID	1	2	
Date Tested	17/05/2019	17/05/2019	
Location	354854	354854	
E	5782703	5782716	
N	RL 30.26 m	RL 29.99 m	
Soil Description	Clay	Clay	
Depth of Test (mm)	150	150	
Depth of Layer (mm)	200	200	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	0	
Field Wet Density (t/m³)	1.89	1.99	
Peak Converted Wet Density (t/m³)	1.98	2.00	
Compactive Effort	Standard	Standard	
Moisture Variation (%)	2.0 dry	1.5 dry	
Hilf Density Ratio (%)	**95.0**	**99.5**	

Comments

CHADWICK GEOTECHNICS

Dandenong South
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Report No: HDR:W19DS01292
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

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Approved Signatory: Krushik Patel
(Senior Geotechnician)

12712 Date of Issue: 29/05/2019

Sample Details

Location:	Clyde North
Client Request ID:	
Specification Requirements:	Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures:	AS 1289.5.8.1
Laboratory Test procedures:	AS 1289.5.7.1
Sampling Method:	AS1289.1.2.1 Clause 6.4 (b)
Source:	Onsite
Material:	General Fill

Sample ID	S19DS-04372	S19DS-04373	
Field Sample ID	1	2	
Date Tested	20/05/2019	20/05/2019	
Location	354891	354888	
E	5782727	5782701	
N	RL 30.62 m	RL 30.39 m	
Soil Description	Clay	Clay	
Depth of Test (mm)	150	150	
Depth of Layer (mm)	200	200	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	0	
Field Wet Density (t/m³)	2.06	1.93	
Peak Converted Wet Density (t/m³)	2.04	1.89	
Compactive Effort	Standard	Standard	
Moisture Variation (%)	0.0	4.0 dry	
Hilf Density Ratio (%)	**101.0**	**102.0**	

Comments

CHADWICK GEOTECHNICS

Dandenong South
ACN 143 009 330
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Report No: HDR:W19DS01303
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

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Approved Signatory: Krushik Patel
(Senior Geotechnician)

12712 Date of Issue: 29/05/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-04438	S19DS-04439	
Field Sample ID	1	2	
Date Tested	21/05/2019	21/05/2019	
Location	354862	354892	
E	5782693	5782700	
N	RL 30.58 m	RL 30.62 m	
		re-test	
Soil Description	Clay	Clay	
Depth of Test (mm)	150	150	
Depth of Layer (mm)	200	200	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	0	
Field Wet Density (t/m³)	1.97	1.90	
Peak Converted Wet Density (t/m³)	2.03	1.98	
Compactive Effort	Standard	Standard	
Moisture Variation (%)	0.0	2.0 dry	
Hilf Density Ratio (%)	**97.0**	**96.0**	

Comments

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Report No: HDR:W19DS01320
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Krushik Patel
(Senior Geotechnician)
12712 Date of Issue: 29/05/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-04495	S19DS-04496	
Field Sample ID	1	2	
Date Tested	22/05/2019	22/05/2019	
Location	354889	354895	
E	5782660	5782714	
Soil Description	Clay	Clay	
Depth of Test (mm)	150	150	
Depth of Layer (mm)	200	200	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	3	0	
Field Wet Density (t/m³)	1.90	1.97	
Peak Converted Wet Density (t/m³)	2.08	2.10	
Compactive Effort	Standard	Standard	
Moisture Variation (%)	0.5 wet	0.0	
Hilf Density Ratio (%)	**91.5**	**94.0**	

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS01339
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Krushik Patel
(Senior Geotechnician)

12712 Date of Issue: 29/05/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-04593	S19DS-04594	
Field Sample ID	1	2	
Date Tested	23/05/2019	23/05/2019	
Location	354861	354849	
E	5782741	5782686	
N	29.99	30.59	
Soil Description	Clay	Clay	
Depth of Test (mm)	150	150	
Depth of Layer (mm)	200	200	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	0	
Field Wet Density (t/m³)	1.95	1.96	
Peak Converted Wet Density (t/m³)	2.05	2.06	
Compactive Effort	Standard	Standard	
Moisture Variation (%)	2.0 dry	1.5 dry	
Hilf Density Ratio (%)	**94.5**	**95.5**	

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS01343
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Krushik Patel
(Senior Geotechnician)

12712 Date of Issue: 29/05/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-04604	S19DS-04605	
Field Sample ID	1	2	
Date Tested	24/05/2019	24/05/2019	
Location	354880	354886	
E	5782657	5782703	
N	RL 30.96 m	RL 30.83 m	
Soil Description	Clay	Clay	
Depth of Test (mm)	150	150	
Depth of Layer (mm)	200	200	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	0	
Field Wet Density (t/m³)	2.02	2.03	
Peak Converted Wet Density (t/m³)	2.05	2.06	
Compactive Effort	Standard	Standard	
Moisture Variation (%)	0.0	1.0 wet	
Hilf Density Ratio (%)	**98.5**	**98.5**	

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS01442
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)

12712 Date of Issue: 17/06/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-04975	S19DS-04976				
Field Sample ID	1	2				
Date Tested	12/06/2019	12/06/2019				
Location	354794	354828				
E	5782528	5782543				
N	RL 31.36 m	RL 31.87 m				
Soil Description	Clay	Clay				
Depth of Test (mm)	150	150				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Wet Density (t/m³)	2.07	1.99				
Peak Converted Wet Density (t/m³)	2.05	2.00				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	0.5 wet	2.5 wet				
Hilf Density Ratio (%)	**101.0**	**99.5**				

Comments

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Report No: HDR:W19DS01456
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)

12712 Date of Issue: 20/06/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-05003	S19DS-05004				
Field Sample ID	1	2				
Date Tested	17/06/2019	17/06/2019				
Location	354840	354837				
E	5782608	5782575				
N	RL 31.17 m	RL 31.27				
Soil Description	Clay	Clay				
Depth of Test (mm)	150	150				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Wet Density (t/m³)	1.98	1.97				
Peak Converted Wet Density (t/m³)	1.97	2.02				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	2.5 wet	3.0 wet				
Hilf Density Ratio (%)	**100.5**	**97.5**				

Comments

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Report No: HDR:W19DS01673
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

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Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 1/08/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-05745	S19DS-05746				
Field Sample ID	1	2				
Date Tested	25/07/2019	25/07/2019				
E:	354821	354798				
N:	5782551	5782539				
Soil Description	CLAY	CLAY				
Depth of Test (mm)	125	125				
Depth of Layer (mm)	150	150				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	14				
Field Wet Density (t/m³)	1.93	2.09				
Peak Converted Wet Density (t/m³)	2.02	2.15				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	0.0	1.5 wet				
Hilf Density Ratio (%)	**95.5**	**97.0**				

Comments

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Report No: HDR:W19DS01693
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 1/08/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-05795	S19DS-05796				
Field Sample ID	1	2				
Date Tested	26/07/2019	26/07/2019				
E	354815	354797				
N	5782561	5782536				
Soil Description	CLAY	CLAY				
Depth of Test (mm)	125	125				
Depth of Layer (mm)	150	150				
Field Wet Density (t/m³)	1.95	2.01				
Peak Converted Wet Density (t/m³)	2.05	2.04				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	2.5 wet	0.5 wet				
Hilf Density Ratio (%)	**95.0**	**98.5**				

Comments

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Report No: HDR:W19DS01707
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12715

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 1/08/2019

Sample Details

Location: CLyde North
Client Request ID:
Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-05848	S19DS-05849				
Field Sample ID	1	2				
Date Tested	29/07/2019	29/07/2019				
E:	354844.510	354841.320				
N:	5782572.821	578299.012				
EL:	31.695	31.450				
Soil Description	CLAY	CLAY				
Depth of Test (mm)	125	125				
Depth of Layer (mm)	150	150				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Wet Density (t/m³)	2.04	2.05				
Peak Converted Wet Density (t/m³)	2.04	2.07				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	0.5 wet	1.0 wet				
Hilf Density Ratio (%)	**100.0**	**98.5**				

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS01709
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 1/08/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-05852	S19DS-05853				
Field Sample ID	1	2				
Date Tested	29/07/2019	29/07/2019				
E:	354796.397	354816.633				
N:	5782521.483	5782532.281				
EL:	31.842	32.277				
Soil Description	CLAY	CLAY				
Depth of Test (mm)	125	125				
Depth of Layer (mm)	150	150				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Wet Density (t/m³)	1.96	1.97				
Peak Converted Wet Density (t/m³)	2.03	2.05				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	1.5 wet	1.5 wet				
Hilf Density Ratio (%)	**96.5**	**96.0**				

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS01721
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12715

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Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 1/08/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-05882	S19DS-05883				
Field Sample ID	1	2				
Date Tested	30/07/2019	30/07/2019				
E:	354840.799	354854.167				
N:	5782606.010	5782581.391				
EL:	31.599	32.147				
Soil Description	CLAY	CLAY				
Depth of Test (mm)	125	125				
Depth of Layer (mm)	150	150				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Wet Density (t/m³)	2.04	1.94				
Peak Converted Wet Density (t/m³)	1.98	1.99				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	0.5 wet	0.5 wet				
Hilf Density Ratio (%)	**103.0**	**97.5**				

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS01731
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 1/08/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-05910	S19DS-05911				
Field Sample ID	1	2				
Date Tested	31/07/2019	31/07/2019				
E:	354788.222	354818.613				
N:	5782518.252	5782532.174				
EL:	31.953	32.640				
Soil Description	CLAY	CLAY				
Depth of Test (mm)	125	125				
Depth of Layer (mm)	150	150				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Wet Density (t/m³)	2.03	1.99				
Peak Converted Wet Density (t/m³)	2.06	2.05				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	0.5 wet	1.5 wet				
Hilf Density Ratio (%)	**98.5**	**97.0**				

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS01746
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 7/08/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-06003	S19DS-06004	S19DS-06005	S19DS-06006	S19DS-06007	S19DS-06008
Field Sample ID	1	2	3	4	5	6
Date Tested	1/08/2019	1/08/2019	1/08/2019	1/08/2019	1/08/2019	1/08/2019
E	354740	354760	354845.573	354806.259	354883.353	354887.186
N	5782469	5782473	5782543.119	578522.379	5782694.548	5782647.726
RL	Layer 1	Layer 2	32.769	32.628	30.195	31.143
	Septic Tank Area	Septic Tank Area				
Soil Description	Silty Gravelly Clay	Silty Gravelly Clay	Silty Gravelly Clay	Silty Gravelly Clay	Silty Gravelly Clay	Silty Gravelly Clay
Depth of Test (mm)	225	175	175	175	175	175
Depth of Layer (mm)	250	200	200	200	200	200
AS Sieve Size (mm)	19.0	37.5	19.0	19.0	19.0	19.0
Oversize Wet (%)	28	12	0	0	3	3
Field Wet Density (t/m³)	2.20	2.11	2.07	2.03	2.00	2.06
Peak Converted Wet Density (t/m³)	2.23	2.19	2.05	2.07	2.03	2.09
Compactive Effort	Standard	Standard	Standard	Standard	Standard	Standard
Moisture Variation (%)	0.0	1.5 dry	0.0	0.5 wet	0.5 wet	0.5 wet
Hilf Density Ratio (%)	**98.5**	**96.5**	**100.5**	**98.0**	**98.5**	**98.5**

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS01746
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 7/08/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-06009					
Field Sample ID	7					
Date Tested	1/08/2019					
E	354740					
N	5782474					
RL	Layer 3					
	Septic Tank Area					
Soil Description	Silty Gravelly Clay					
Depth of Test (mm)	175					
Depth of Layer (mm)	200					
AS Sieve Size (mm)	19.0					
Oversize Wet (%)	8					
Field Wet Density (t/m³)	2.04					
Peak Converted Wet Density (t/m³)	2.14					
Compactive Effort	Standard					
Moisture Variation (%)	0.0					
Hilf Density Ratio (%)	**95.0**					

Comments

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Report No: HDR:W19DS01765
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12715

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 7/08/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-06054	S19DS-06055	S19DS-06056	S19DS-06057		
Field Sample ID	1	2	3	4		
Date Tested	2/08/2019	2/08/2019	2/08/2019	2/08/2019		
E:	354882.789	354875.058	354744.273	354734.094		
N:	5782611.888	5782569.431	5782471.848	5782472.840		
EL:	31.753	32.594	30.026	29.605		
Soil Description	CLAY	CLAY	CLAY	CLAY		
Depth of Test (mm)	125	125	125	125		
Depth of Layer (mm)	150	150	150	150		
AS Sieve Size (mm)	19.0	19.0	19.0	19.0		
Oversize Wet (%)	0	0	0	5		
Field Wet Density (t/m³)	1.92	1.96	2.08	1.98		
Peak Converted Wet Density (t/m³)	2.02	1.98	2.09	2.14		
Compactive Effort	Standard	Standard	Standard	Standard		
Moisture Variation (%)	0.0	0.0	2.5 wet	2.0 wet		
Hilf Density Ratio (%)	**95.0**	**99.0**	**99.0**	**92.0**		

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS01772
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 7/08/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-06077	S19DS-06078	S19DS-06079			
Field Sample ID	1	2	3			
Date Tested	5/08/2019	5/08/2019	5/08/2019			
E:	354862.153	354876.012	354894.059			
N:	5782754.995	5782607.847	5782647.665			
	29.883	31.789	31.515			
Soil Description	CLAY	CLAY	CLAY			
Depth of Test (mm)	125	125	125			
Depth of Layer (mm)	150	150	150			
Field Wet Density (t/m³)	2.01	2.06	2.07			
Peak Converted Wet Density (t/m³)	2.05	2.04	2.10			
Compactive Effort	Standard	Standard	Standard			
Moisture Variation (%)	2.0 wet	0.0	0.0			
Hilf Density Ratio (%)	**98.5**	**101.0**	**98.5**			

Comments

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Report No: HDR:W19DS01804
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12715

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 12/08/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-06169	S19DS-06170	S19DS-06171			
Field Sample ID	1	2	3			
Date Tested	7/08/2019	7/08/2019	7/08/2019			
E:	354885.585	354849.498	354866.286			
N:	5782567.058	5782710.749	5782742.401			
EL:	33.071	30.323	30.433			
Soil Description	Clay	Clay	Clay			
Depth of Test (mm)	125	125	125			
Depth of Layer (mm)	150	150	150			
AS Sieve Size (mm)	19.0	19.0	19.0			
Oversize Wet (%)	0	0	0			
Field Wet Density (t/m³)	2.04	2.05	2.13			
Peak Converted Wet Density (t/m³)	1.98	2.04	2.11			
Compactive Effort	Standard	Standard	Standard			
Moisture Variation (%)	2.0 dry	0.0	0.0			
Hilf Density Ratio (%)	**103.0**	**100.5**	**100.5**			

Comments

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Report No: HDR:W19DS01860
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 22/08/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-06331	S19DS-06332				
Field Sample ID	1	2				
Date Tested	20/08/2019	20/08/2019				
Location	354821	354844				
E	5782531	5782549				
Soil Description	Clay	Clay				
Depth of Test (mm)	150	150				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	9	5				
Field Wet Density (t/m³)	2.16	2.19				
Peak Converted Wet Density (t/m³)	2.10	2.16				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	0.5 dry	0.0				
Hilf Density Ratio (%)	**103.0**	**101.5**				

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS01918
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)

12712 Date of Issue: 6/09/2019

Sample Details

Location:	Clyde North
Client Request ID:	
Specification Requirements:	Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures:	AS 1289.5.8.1
Laboratory Test procedures:	AS 1289.5.7.1
Sampling Method:	AS1289.1.2.1 Clause 6.4 (b)
Source:	Onsite
Material:	General Fill

Sample ID	S19DS-06515					
Field Sample ID	1					
Date Tested	28/08/2019					
Location	354840					
E	5782572					
N	RL 32.20 m					
Soil Description	Clay					
Depth of Test (mm)	150					
Depth of Layer (mm)	200					
AS Sieve Size (mm)	19.0					
Oversize Wet (%)	0					
Field Wet Density (t/m³)	2.00					
Peak Converted Wet Density (t/m³)	2.10					
Compactive Effort	Standard					
Moisture Variation (%)	2.5 wet					
Hilf Density Ratio (%)	**95.5**					

Comments

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Report No: HDR:W19DS02116
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 30/09/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-07421	S19DS-07422				
Field Sample ID	1	2				
Date Tested	25/09/2019	25/09/2019				
Location	354728	354730				
E	5782312	5782287				
Soil Description	Clay	Clay				
Depth of Test (mm)	150	150				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Wet Density (t/m³)	2.10	2.07				
Peak Converted Wet Density (t/m³)	2.04	2.00				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	3.0 wet	0.0				
Hilf Density Ratio (%)	**103.0**	**103.5**				

Comments

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Report No: HDR:W19DS02117
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

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Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 30/09/2019

Sample Details

Location:	Clyde North
Client Request ID:	
Specification Requirements:	Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures:	AS 1289.5.8.1
Laboratory Test procedures:	AS 1289.5.7.1
Sampling Method:	AS1289.1.2.1 Clause 6.4 (b)
Source:	Onsite
Material:	General Fill

Sample ID	S19DS-07423					
Field Sample ID	1					
Date Tested	25/09/2019					
Location	354757					
E	5782359					
Soil Description	Clay					
Depth of Test (mm)	150					
Depth of Layer (mm)	200					
AS Sieve Size (mm)	19.0					
Oversize Wet (%)	0					
Field Wet Density (t/m³)	2.03					
Peak Converted Wet Density (t/m³)	1.87					
Compactive Effort	Standard					
Moisture Variation (%)	3.0 dry					
Hilf Density Ratio (%)	**108.5**					

Comments

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Report No: HDR:W19DS02123
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 30/09/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements:
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-07438	S19DS-07439				
Field Sample ID	1	2				
Date Tested	26/09/2019	26/09/2019				
Location	354721	354737				
E	5782364	5782314				
N	RL 31.05 m	RL 31.12 m				
Soil Description	Clay	Clay				
Depth of Test (mm)	150	150				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	2	0				
Field Wet Density (t/m³)	2.03	2.05				
Peak Converted Wet Density (t/m³)	2.01	2.05				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	2.0 dry	1.0 dry				
Hilf Density Ratio (%)	**101.5**	**100.0**				

Comments

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Report No: HDR:W19DS02133
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 4/10/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-07464	S19DS-07465				
Field Sample ID	1	2				
Date Tested	30/09/2019	30/09/2019				
E	354731	354738				
N	5782321	5782285				
	RL 30.70 m	RL 30.86				
Soil Description	Clay	Clay				
Depth of Test (mm)	150	150				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Wet Density (t/m³)	2.05	2.04				
Peak Converted Wet Density (t/m³)	1.89	2.02				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	3.0 dry	2.0 dry				
Hilf Density Ratio (%)	**108.5**	**101.0**				

Comments

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Report No: HDR:W19DS02143
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 4/10/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-07519					
Field Sample ID	1					
Date Tested	1/10/2019					
E	354716					
N	5782349					
	RL 30.88 m					
Soil Description	Clay					
Depth of Test (mm)	150					
Depth of Layer (mm)	200					
AS Sieve Size (mm)	19.0					
Oversize Wet (%)	0					
Field Wet Density (t/m³)	2.06					
Peak Converted Wet Density (t/m³)	2.07					
Compactive Effort	Standard					
Moisture Variation (%)	2.0 wet					
Hilf Density Ratio (%)	**99.5**					

Comments

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Report No: HDR:W19DS02154
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 4/10/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-07546	S19DS-07547				
Field Sample ID	1	2				
Date Tested	2/10/2019	2/10/2019				
E	354726	354711				
N	5782286	5782328				
	RL 30.80 m	RL 30.70 m				
Soil Description	Clay	Clay				
Depth of Test (mm)	150	150				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Wet Density (t/m³)	2.06	2.02				
Peak Converted Wet Density (t/m³)	2.08	2.07				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	0.5 wet	2.0 wet				
Hilf Density Ratio (%)	**99.0**	**97.5**				

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS02168
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)

12712 Date of Issue: 11/11/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-07582	S19DS-07583				
Field Sample ID	1	2				
Date Tested	3/10/2019	3/10/2019				
Location	354735	354702				
E	5782298	5782379				
N	RL 31.26 m	RL 30.56 m				
Soil Description	Clay	Clay				
Depth of Test (mm)	150	150				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Wet Density (t/m³)	2.04	2.01				
Peak Converted Wet Density (t/m³)	2.02	2.08				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	1.0 wet	3.0 wet				
Hilf Density Ratio (%)	**101.0**	**97.0**				

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS02181
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 16/01/2020

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-07613	S19DS-07614	S19DS-07615	S19DS-07616		
Field Sample ID	1	2	3	4		
Date Tested	4/10/2019	4/10/2019	4/10/2019	4/10/2019		
Location	354895	354891	354722	354726		
E	5782729	5782689	5782332	5782300		
N	RL 31.10 m	RL 31.17 m	RL 31.28 m	RL 31.15 m		
Soil Description	Clay	Clay	Clay	Clay		
Depth of Test (mm)	150	150	150	150		
Depth of Layer (mm)	200	200	200	200		
AS Sieve Size (mm)	19.0	19.0	19.0	19.0		
Oversize Wet (%)	0	0	0	0		
Field Wet Density (t/m³)	2.07	2.07	2.05	2.08		
Peak Converted Wet Density (t/m³)	1.97	2.02	2.01	2.07		
Compactive Effort	Standard	Standard	Standard	Standard		
Moisture Variation (%)	2.0 dry	0.5 dry	2.0 dry	0.5 dry		
Hilf Density Ratio (%)	**105.0**	**102.5**	**101.5**	**100.5**		

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS02199
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 11/11/2019

Sample Details

Location: Clyde Nth
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 98% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Imported
Material: General Fill

Sample ID	S19DS-07662	S19DS-07663				
Field Sample ID	1	2				
Date Tested	7/10/2019	7/10/2019				
Location	Summit	Summit				
	354684	354700				
	5782388	5782276				
	RL: 29.647	RL: 29.990				
Soil Description	CLAY	CLAY				
Depth of Test (mm)	175	175				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Wet Density (t/m³)	2.00	2.03				
Peak Converted Wet Density (t/m³)	1.96	2.05				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	0.5 dry	0.0				
Hilf Density Ratio (%)	**102.0**	**99.0**				

Comments

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Report No: HDR:W19DS02229
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 11/11/2019

Sample Details

Location: Clyde Nth
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 98% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Imported
Material: General Fill

Sample ID	S19DS-07778					
Field Sample ID	1					
Date Tested	10/10/2019					
Location	354765					
	5782241					
	RL: 31.17					
Soil Description	CLAY					
Depth of Test (mm)	200					
Depth of Layer (mm)	175					
AS Sieve Size (mm)	19.0					
Oversize Wet (%)	0					
Field Wet Density (t/m³)	2.11					
Peak Converted Wet Density (t/m³)	2.03					
Compactive Effort	Standard					
Moisture Variation (%)	2.0 dry					
Hilf Density Ratio (%)	**104.0**					

Comments

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Report No: HDR:W19DS02235
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9A Tavern Site
Project No.: 3807351.009T
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 11/11/2019

Sample Details

Location: Clyde
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 98% Standard Compaction
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: Clay

Sample ID	S19DS-07786	S19DS-07787				
Field Sample ID	1	2				
Date Tested	10/10/2019	10/10/2019				
E:	354728	354702				
N:	5782791	5782762				
RL:	28.54	28.52				
Depth of Test (mm)	225	225				
Depth of Layer (mm)	250	250				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	11	0				
Field Wet Density (t/m³)	2.12	2.12				
Peak Converted Wet Density (t/m³)	2.14	2.08				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	2.0 dry	0.5 wet				
Hilf Density Ratio (%)	**99.0**	**102.0**				

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS02242
Issue No: 2
This report replaces all previous issues of report no 'HDR:W19DS02242'.

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9B
Project No.: 3807351.009B
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 11/11/2019

Sample Details

Location: Clyde Nth
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 98% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Imported
Material: General Fill

Sample ID	S19DS-07816	S19DS-07817	S19DS-07818			
Field Sample ID	1	2	3			
Date Tested	11/10/2019	11/10/2019	11/10/2019			
Location	354767	354745	354764			
	5782295	5782221	5782212			
	RL: 31.96	RL: 30.83	RL: 30.85			
Soil Description	CLAY	CLAY	CLAY			
Depth of Test (mm)	175	175	175			
Depth of Layer (mm)	200	200	200			
AS Sieve Size (mm)	19.0	19.0	19.0			
Oversize Wet (%)	0	0	0			
Field Wet Density (t/m³)	1.92	2.00	2.04			
Peak Converted Wet Density (t/m³)	1.97	2.09	2.08			
Compactive Effort	Standard	Standard	Standard			
Moisture Variation (%)	0.5 dry	2.0 wet	0.5 wet			
Hilf Density Ratio (%)	**97.0**	**95.5**	**98.0**			

Comments

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Report No: HDR:W19DS02243
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9A Tavern Site
Project No.: 3807351.009T
Order No.: **CG Request No.:**
TRN: **Lot No.:**

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ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 11/11/2019

Sample Details

Location:	Clyde Nth
Client Request ID:	
Specification Requirements:	Minimum Hilf Density Ratio of 98% Standard Compaction +- 3% of OMC
Field Test procedures:	AS 1289.5.8.1
Laboratory Test procedures:	AS 1289.5.7.1
Sampling Method:	AS1289.1.2.1 Clause 6.4 (b)
Source:	Imported
Material:	General Fill

Sample ID	S19DS-07819					
Field Sample ID	1					
Date Tested	11/10/2019					
Location	354706					
	5782783					
	RL: 28.75					
Soil Description	CLAY					
Depth of Test (mm)	225					
Depth of Layer (mm)	250					
AS Sieve Size (mm)	19.0					
Oversize Wet (%)	0					
Field Wet Density (t/m³)	2.20					
Peak Converted Wet Density (t/m³)	2.02					
Compactive Effort	Standard					
Moisture Variation (%)	3.0 dry					
Hilf Density Ratio (%)	**108.5**					

Comments

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Report No: HDR:W19DS02250
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9B
Project No.: 3807351.009B
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 11/11/2019

Sample Details

Location: Clyde Nth
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Imported
Material: General Fill

Sample ID	S19DS-07838	S19DS-07839	S19DS-07840	S19DS-07841		
Field Sample ID	1	2	3	4		
Date Tested	14/10/2019	14/10/2019	14/10/2019	14/10/2019		
Location	354741	354753	354777	354762		
	5782259	5782213	5782203	5782242		
	RL: 31.16	RL: 31.07	RL: 31.25	RL: 31.22		
Soil Description	CLAY	CLAY	CLAY	CLAY		
Depth of Test (mm)	175	175	175	175		
Depth of Layer (mm)	200	200	200	200		
AS Sieve Size (mm)	19.0	19.0	19.0	19.0		
Oversize Wet (%)	0	0	0	0		
Field Wet Density (t/m³)	2.03	2.04	2.02	2.01		
Peak Converted Wet Density (t/m³)	2.04	2.10	2.13	2.08		
Compactive Effort	Standard	Standard	Standard	Standard		
Moisture Variation (%)	0.0	2.0 wet	0.0	0.0		
Hilf Density Ratio (%)	**99.5**	**97.0**	**95.0**	**96.5**		

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS02261
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9B
Project No.: 3807351.009B
Order No.: **CG Request No.:**
TRN: **Lot No.:**

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 11/11/2019

Sample Details

Location: meridian estate stage 9B
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source:
Material:

Sample ID	S19DS-07873	S19DS-07874				
Field Sample ID	1	2				
Date Tested	15/10/2019	15/10/2019				
E:	354772	354749				
N:	5782224	5782219				
	31.167	31.045				
Soil Description	clay (general fill)	clay (general fill)				
Depth of Test (mm)	175	175				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Wet Density (t/m³)	2.12	2.08				
Peak Converted Wet Density (t/m³)	2.12	2.15				
Compactive Effort	Standard	Standard				
Moisture Variation (%)	0.0	0.0				
Hilf Density Ratio (%)	**100.0**	**96.5**				

Comments

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Report No: HDR:W19DS02276
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9B
Project No.: 3807351.009B
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 11/11/2019

Sample Details

Location: Clyde Nth
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Imported
Material: General Fill

Sample ID	S19DS-07942	S19DS-07943	S19DS-07944			
Field Sample ID	1	2	3			
Date Tested	16/10/2019	16/10/2019	16/10/2019			
Location	354739	354773	354775			
	5782254	5782208	5782302			
	RL: 31.44	RL: 31.52	RL 32.16			
Soil Description	CLAY	CLAY	CLAY			
Depth of Test (mm)	175	175	175			
Depth of Layer (mm)	200	200	200			
AS Sieve Size (mm)	19.0	19.0	19.0			
Oversize Wet (%)	0	0	0			
Field Wet Density (t/m³)	2.13	2.10	2.14			
Peak Converted Wet Density (t/m³)	2.14	2.13	2.14			
Compactive Effort	Standard	Standard	Standard			
Moisture Variation (%)	0.0	0.0	0.0			
Hilf Density Ratio (%)	**100.0**	**98.5**	**100.0**			

Comments

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Report No: HDR:W19DS02292
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9B
Project No.: 3807351.009B
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 11/11/2019

Sample Details

Location: Clyde Nth
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Imported
Material: General Fill

Sample ID	S19DS-07996	S19DS-07997	S19DS-07998			
Field Sample ID	1	2	3			
Date Tested	18/10/2019	18/10/2019	18/10/2019			
Location	354751	354742	354763			
	5782252	5782208	5782203			
	RL: 31.52	RL: 31.67	RL: 31.73			
Soil Description	CLAY	CLAY	CLAY			
Depth of Test (mm)	175	175	175			
Depth of Layer (mm)	200	200	200			
AS Sieve Size (mm)	19.0	19.0	19.0			
Oversize Wet (%)	0	0	0			
Field Wet Density (t/m³)	2.08	2.05	1.88			
Peak Converted Wet Density (t/m³)	2.02	2.02	1.92			
Compactive Effort	Standard	Standard	Standard			
Moisture Variation (%)	0.5 dry	2.0 dry	1.0 wet			
Hilf Density Ratio (%)	**102.5**	**101.5**	**98.0**			

Comments

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Report No: HDR:W19DS02315
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9B
Project No.: 3807351.009B
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 11/11/2019

Sample Details

Location: Clyde Nth
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Imported
Material: General Fill

Sample ID	S19DS-08059					
Field Sample ID	1					
Date Tested	22/10/2019					
Location	354774					
	5782190					
	RL: 31.85					
Soil Description	CLAY					
Depth of Test (mm)	200					
Depth of Layer (mm)	175					
AS Sieve Size (mm)	19.0					
Oversize Wet (%)	0					
Field Wet Density (t/m³)	1.89					
Peak Converted Wet Density (t/m³)	1.92					
Compactive Effort	Standard					
Moisture Variation (%)	0.0					
Hilf Density Ratio (%)	**98.5**					

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W19DS02329
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9B
Project No.: 3807351.009B
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Longfield
(Senior Technician)
12712 Date of Issue: 11/11/2019

Sample Details

Location: Clyde Nth
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Imported
Material: General Fill

Sample ID	S19DS-08110					
Field Sample ID	1					
Date Tested	23/10/2019					
Location	354784					
	5782265					
	RL: 32.20					
Soil Description	CLAY					
Depth of Test (mm)	175					
Depth of Layer (mm)	200					
AS Sieve Size (mm)	19.0					
Oversize Wet (%)	0					
Field Wet Density (t/m³)	2.09					
Peak Converted Wet Density (t/m³)	2.06					
Compactive Effort	Standard					
Moisture Variation (%)	0.0					
Hilf Density Ratio (%)	**101.0**					

Comments

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Report No: HDR:W19DS02635
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

ilac-MRA NATA Accreditation No. 12712

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 19/12/2019

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S19DS-09387					
Field Sample ID	1					
Date Tested	28/11/2019					
E:	354735					
N:	5782471					
RL:	29.650					
Depth of Test (mm)	150					
Depth of Layer (mm)	200					
AS Sieve Size (mm)	19.0					
Oversize Wet (%)	0					
Field Wet Density (t/m³)	1.98					
Peak Converted Wet Density (t/m³)	1.98					
Compactive Effort	Standard					
Moisture Variation (%)	2.0 dry					
Hilf Density Ratio (%)	**100.0**					

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W20DS00028
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate - Stage 9
Project No.: 3807351.009
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: M. Robinson
(Team Leader)
12712 Date of Issue: 16/01/2020

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% Standard Compaction +- 3% of OMC
Field Test procedures: AS 1289.5.8.1
Laboratory Test procedures: AS 1289.5.7.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: General Fill

Sample ID	S20DS-00102					
Field Sample ID	1					
Date Tested	13/01/2020					
Location	354778					
E	5782402					
N	RL 32.657					
Soil Description	Clay					
Depth of Test (mm)	150					
Depth of Layer (mm)	200					
AS Sieve Size (mm)	19.0					
Oversize Wet (%)	0					
Field Wet Density (t/m³)	1.95					
Peak Converted Wet Density (t/m³)	1.91					
Compactive Effort	Standard					
Moisture Variation (%)	0.0					
Hilf Density Ratio (%)	**102.0**					

Comments

Appendix D: Controlled fill certificates

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9001 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9002 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9003 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9004 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9005 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9006 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9007 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9008 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9009 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9010 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9011 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9012 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9013 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9014 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9015 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9016 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9017	**Chadwick REF:**	3807351.009A.v1
	Meridian Estate Stage 9A		
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9018 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9019 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9020 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9021 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9022 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9023 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9024 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9025 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9026 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9027 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9028 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9029 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9030 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9031 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

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CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9032 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

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CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9033 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

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CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9034 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

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CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9035 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9036 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9037 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9038 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT	: Lot No: 9039 Meridian Estate Stage 9A	**Chadwick REF:**	3807351.009A.v1
CLIENT	: Brown Property Group Pty Ltd PO Box 4136 DANDENONG SOUTH VIC 3164	**DATE:**	January 2020

SUMMARY

Chadwick Geotechnics Pty Ltd conducted Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing *AS3798-2007, Guidelines on earthworks for commercial and residential developments,* during the filling of the site.

So far as it is able to be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding top soil).

This report is based on the conditions present and factors affecting the soil at the time of inspection, namely November 2016 to October 2019. No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Geotechnical Engineer

Timothy Chadwick
Project Director

CHADWICK
GEOTECHNICS