LEVEL ONE

Reference No.: 2344-129

SURVEILLANCE

AND INSPECTION REPORT

Carried Out By



PREPARED FOR: -

1152 TAYLORS DEVELOPMENT PTY LTD



Table of Contents

1)	Introduction & Scope	2
2)	Site Preparation	2
3)	Fill Material	2
4)	Fill Construction Procedure	3
5)	Compaction Control Testing	3
6)	Testing Frequency	3
7)	Statement of Compliance	4
8)	Limitations of this Report	4

Appendices

Appendix A Construction Drawings

Appendix B Daily Field Compaction Summary Results



Client Name: 1152 Taylors Development Pty Ltd Project Name: Botania Estate Stage 3 Date: 4th of June 2021 Author: Mr. Sam Loza Reference No.: 2344-129 Revision: 0 Project Manager: Mr. Dom Modric

1. Introduction & Scope

At the request of 1152 Taylors Development Pty Ltd, Geotechnical Laboratories has carried out inspection and testing of the above-mentioned site from the 16th of November 2020 to the 3rd of June 2021 where a residential development is being constructed. Inspection and testing of stripping, material quality and compaction control tests were carried out to comply with the requirements of AS 3798 Appendix B, Level 1.

The following documentation was submitted to Geotechnical Laboratories by Taylors Development Pty Ltd and was used to determine compliance of earthworks in conjunction with the requirements of AS 3798 – 2007.

(1). Site Layout Plan Drawing Number 010 & 011 (Rev. P3).

General site works involved the placement of fill, using on-site derived and imported materials, to bring the fill construction regions to the required finished levels as indicated on the civil construction drawings.

2. Site Preparation

Site inspections were undertaken on the 16th of November 2020 confirming that selected areas to be filled were completely stripped of topsoil prior to filling. The topsoils were stockpiled around the site for later removal off-site.

The existing dams were de-sludged and a clean firm base established prior to backfilling.

Initial proof roll inspections were performed and subsequently throughout the project duration to ensure no significant soft areas were present prior to filling.

3. <u>Fill Material</u>

The on-site fill material used was sourced from service trench excavations and road boxing.



The imported fill materials were mostly sourced from local sites in the surrounding Plumpton area.

The material is best described as a silty CLAY, brown, dark brown, slightly moist to moist, high plasticity with gravels and cobbles of a basalt origin.

The fill material is consistent with the naturally occurring soils for this region.

Source material was deemed a **Suitable Material** in accordance with guidelines set out in AS 3798 - 2007 Section 4.4.

4. Fill Construction Procedure

The following plant (but not always limited to) were engaged in the fill placement process:

- Highway trucks / dump trucks
- A watercart
- A sheepsfoot compactor (815)

The sheepsfoot compactor placed material in horizontal loose layers of approximately 250mm-300mm. The compactor also performed compaction of the fill operating in a criss-cross pattern where possible.

The moisture condition of the fill was closely monitored and moisture conditioning procedures were applied to bring the material closer to its Standard Optimum Moisture Content (AS 1289 5.7.1).

5. Compaction Control Testing

Compaction control testing was performed on-site using a Nuclear Densometer in accordance with AS 1289 5.8.1. Laboratory reference densities were determined from material sampled at each test site location using the Hilf Rapid Compaction Method in accordance with AS 1289 5.7.1.

A total of one hundred and forty-nine compaction tests were performed on the fill construction. Results are presented in Appendix B of this report.

6. <u>Testing Frequency</u>

Testing frequencies were in accordance with **AS 3798 - 2007 Table 8.1** for **Type 1 Large Scale Operations and Type 3 Concentrated Operations.**

Acceptance of fill layers for compaction was based on the requirements of **AS** 3798 - 2007 Table 5.1 Item 1. Residential.



As a result, the compliance criteria adopted by Geotechnical Laboratories was a hilf density ratio not less than 95 percent of the maximum hilf density value as determined by the Standard Hilf Rapid Compaction Method in accordance with AS 1289 5.7.1.

Test results indicate that the above-mentioned requirements have been successfully achieved.

No moisture criteria was specified.

7. Statement of Compliance

So far as can be determined, 1152 Taylors Development Pty Ltd has satisfactorily complied with the compaction and construction processes required for the structural filling of this site. As such, structural filling placed on this site by Taylors Development Pty Ltd from the 16th of November 2020 to the 3rd of June 2021 can be categorised as CONTROLLED FILL in accordance with AS 2870-2011.

8. Limitations and Liability of this Report

This report has been produced for and remains the property of 1152 Taylors Development Pty Ltd.

The release of this report to a third party will only occur if Geotechnical Laboratories Pty Ltd has received, in writing, the authority to do so by our client.

Geotechnical Laboratories Pty Ltd will not engage in any third-party communication regarding this report.

Where information has been supplied by the client or third party, the assumption is made that this is correct. Geotechnical Laboratories Pty Ltd will not be held responsible for any inaccuracies supplied.

Test results and controlled fill compliance relates only to fill placed by 1152 Taylors Development Pty Ltd and for earthworks completed at the time of inspection and testing. Any previous or subsequent earthworks will require a separate evaluation.

For & on behalf of Geotechnical Laboratories Pty Ltd.

Sam Loza Laboratory Manager.



LEVEL ONE

SURVEILLANCE

AND INSPECTION REPORT

APPENDIX A







LEVEL ONE

SURVEILLANCE

AND INSPECTION REPORT

APPENDIX B



GEOTECHNICAL LABORATORIES ACN 102 571 077

REPORT NO.: # 2343/001

14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au PH: (03) 8361-9140 LOCATION: 1152 Taylors Development - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARI FF OPT MOIS CON	ATION ROM TIMUM STURE ITENT %)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
16/11/20	1		1.94	24.0	102.0	1.91	25.0	175	1.0	Drier	96.0	0	0	0
16/11/20	2		1.97	23.0	102.0	1.93	26.0	175	2.5	Drier	89.5	0	0	100
16/11/20	3	Refer to #2343/002 for	1.91	20.5	103.0	1.86	24.0	175	3.5	Drier	85.0	0	0	50
-	-	locations.	-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite	-			Compactio	n specimens	s sampled	lafter	comp	action.			
	Test s	ites located - Geolab Procedure 4, P	art 4.4.			Start Time:	1:45pm F	Finish Tim	ie: 2:2	25pm				
A Hilf Rap	id Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	tion to obtai	in the Cor	npact	ion Pa	arameters ta	abulated	I on this	Report.
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer	thickr	ness: 200mm	Compaction Test: AS 1289 5.7.1 M/n											
Hilf Densi	ty Rati	io and Hilf Moisture Variation ,Hil	f Adjusted	(APCWD)	& Peak (PC	WD) Conve	erted Wet De	ensity AS	1289	5.7.1		<i>' </i> '	ya	
Field Den	sity, N	uclear Gauge: AS 1289 5.8.1				Acoudita	l for compliant	an with ISO	/IEC			MIC	K CROW	ΙE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(b))		NATA	<u>Accredited</u> 17025 - Te	<u>i jor complian</u> esting	ce with ISO	<u>TEC</u>			(Approv	/ed Signa	atory)
₩	•	, , , , , , , , , , , , , , , , , , ,			ACCREDITED FOR	NATA Acc	redited Labor	atory Numb	er 145	<u>61</u>		Issue D	ate: 19/11/	2020

TECHNICAL COMPETENCE





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: #	2343/003
LOCATION:	1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

VARIATION STANDARD HILF STANDARD FIELD FIELD PROBE FROM DATE DENSITY PCWD OPTIMUM MOISTURE WET WET APPROX. DEPTH WET MOISTURE DEPTH OPTIMUM TEST OF TEST LOCATION RATIO OR MOISTURE RATIO +19mm ⊦37.5mm **BELOW FINISH** NUM. DENSITY CONTENT SETTING MOISTURE TESTS STANDARD APCWD CONTENT LEVEL (mm) (%) (%) (%) CONTENT (t/m³) (%) (mm) (%) (t/m³) (%) (%) 19/01/21 1.91 27.5 101.0 1.88 27.0 175 0.5 Wetter 101.0 0 0 1800 1 2 104.5 19/01/21 1.85 30.5 98.5 1.88 29.0 175 1.5 Wetter 0 0 1600 *Refer to #2343/004 for* 3 19/01/21 1.93 25.0 100.5 25.0 0.5 Wetter 0 1.92 175 101.0 0 1400 approx. test site _ -_ _ _ -_ _ locations. ----_ --_ ---_ -_ -NOTES: Clayey Fill Ex. Onsite Compaction specimens sampled after compaction. Start Time: 1:20pm Finish Time: 1:35pm Test sites located - Geolab Procedure 4, Part 4.4. A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report. Moisture Content: AS 1289 2.1.1 Soil Laver thickness: 200mm Compaction Test: AS 1289 5.7.1 Hilf Density Ratio and Hilf Moisture Variation, Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1 MICK CROWE Field Density, Nuclear Gauge: AS 1289 5.8.1 Accredited for compliance with ISO/IEC NATA (Approved Signatory) Materials Sampled : AS 1289 1.2.1 Clause 6.4(b) 17025 - Testing NATA Accredited Laboratory Number 14561 Ħ Issue Date: 21/1/2021

ACCREDITED FOR TECHNICAL COMPETENCE





1152 TAYLORS DEVELOPMENT - Botania Plumtpon Stage 3

REPORT NO.: # 2343/005

LOCATION:

GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATIO FROM OPTIMU MOISTUI CONTEN (%)	N MOISTURE E RATIO T (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
20/01/21	1		1.92	25.5	104.0	1.85	28.0	175	3.0 Dr	er 90.0	0	0	150
20/01/21	2		2.00	23.0	107.5	1.86	25.0	175	2.0 Dr	er 91.0	0	0	150
20/01/21	3	Refer to #2343/006 for	1.92	26.5	103.0	1.87	28.0	175	1.5 Dr	er 94.5	0	0	150
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen:	s sampled	l after co	npaction.			
	Test s	sites located - Geolab Procedure 4, F	Part 4.4.			Start Time:	2:05pm	Finish Tirr	ne: 2:25p	n			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpactior	Parameters	tabulate	ed on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thick	ness: 200mm				Comp	action Test:	AS 1289	5.7.1		M	LA	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hil	f Adjusted	(APCWD)	& Peak (PO	CWD) Conv	erted Wet D	Density AS	5 1289 <u>5</u> .	'. 1	1	/~~	
Field Den	sity, N	uclear Gauge: AS 1289 5.8.1				Accredited	d for complian	ce with ISO	/IEC		MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(b))		NATA	<u>17025 - T</u>	esting				(Approv	/ed Sign	atory)
₽					ACCREDITED FOR	<u>NATA Acc</u>	credited Labor	atory Numb	er 14561		Issue E	Date: 22/1/	2021
*					COMPETENCE								





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/007 LOCATION: 1152 TAYLORS DEVELOPMENT - Botanian Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURI CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
21/01/21	1		1.89	27.0	103.5	1.83	29.0	175	2.0 Drie	94.0	0	0	300
21/01/21	2		1.88	27.0	103.0	1.82	29.5	175	3.0 Drie	90.5	0	0	400
21/01/21	3	Refer to #2343/008 for	1.81	25.0	98.5	1.84	27.0	175	2.0 Drie	93.5	0	0	300
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	d after com	paction.			
	Tests	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	1:10pm	Finish Tin	ne: 1:25pm				
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction I	Parameters	tabulate	d on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thick	ness: 200mm				Comp	action Test:	AS 1289	5.7.1		M	ID	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	lf Adjusted	d (APCWD)	& Peak (P	CWD) Conv	erted Wet D	Density AS	6 1289 5.7	1	1	yes	
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredite	d for complian	a with ISO	VIEC		MIC	K CROV	VE
Materials	Samp	led : AS 1289 1.2.1 Clause 6.4()		NATA	<u>17025 - T</u>	<u>esting</u>	<u>ce wun 150</u>	<u>nec</u>		(Approv	/ed Sign	atory)
Ð	•	,	-		ACCREDITED FOI	NATA Acc	redited Labor	atory Numb	oer 14561		Issue D	Date: 27/1/	2021
*					COMPETENCI								





GEOTECHNICAL LABORATORIES ACN 102 571 077

REPORT NO.: # 2343/009

14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au PH: (03) 8361-9140

LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIA FR OPTI MOIS CON	ATION OM MUM TURE TENT %)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
22/01/21	1		1.91	23.5	102.0	1.87	26.0	175	3.0	Drier	88.5	0	0	200
22/01/21	2		1.89	25.5	102.5	1.85	28.0	175	2.5	Drier	91.0	0	0	150
22/01/21	3	Refer to #2343/010 for	1.97	25.5	106.0	1.86	28.0	175	2.5	Drier	91.0	0	0	150
22/01/21	4	locations.	2.06	24.0	104.5	∞ 1.96	26.5	175	2.0	Drier	91.5	9	0	150
-	-	iocaiions.	-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite	Part / /			Compaction	n specimens	s sampled Finish Tin	after	comp 10pm	action.	<u>.</u>		
	id Co	meantion tost was carried out on	$\frac{114.4}{2}$	takan from	oach Eiold I	Donsity loca	tion to obtai	n the Con	ne. r	on Do	vramotore to	bulator	l on this	Roport
Α ΓΙΙΙΙ Παμ		npaction lest was camed out on	a sample	laken nom	each i leiù i	Moistu	illon lo oblai	ΔS 1289	11 pacii 2 1 1	UIFa		abulated	1 011 1115	перии.
Soil Laver	thickr	iess: 200mm				Comp	action Test:	AS 1289	571			M	IN	
Hilf Densi	ty Rati	o and Hilf Moisture Variation ,Hill	f Adjusted	(APCWD)	& Peak (PC	WD) Conve	erted Wet De	ensity AS	1289	5.7.1		1	Me	
Field Den	sity, N	uclear Gauge: AS 1289 5.8.1	-	. ,		Acaradita	l for complian	ee with ISO	/IEC			MIC	K CROW	/E
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(b	NATA	<u>17025 - Te</u>	esting					(Approv	ed Sign	atory)		
✤ Indicate	s APC	CWD	ACCREDITED FOR	<u>NATA Acc</u>	redited Labor	atory Numb	er 1456	<u>61</u>		Issue D	Date: 28/1/2	2021		
*					COMPETENCE									





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/011 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATIOI FROM OPTIMUM MOISTURI CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
28/01/21	1		1.89	25.5	101.0	1.86	28.0	175	2.5 Drie	r 92.0	0	0	600
28/01/21	2		1.92	23.5	102.0	1.88	26.5	175	3.0 Drie	r 89.0	0	0	0
28/01/21	3	Refer to #2343/012 for	1.98	23.0	104.5	1.89	26.0	175	3.0 Drie	r 88.5	0	0	100
28/01/21	4	locations.	1.88	23.5	100.0	1.88	25.5	175	2.0 Drie	r 91.5	0	0	600
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	l after con	paction.			
	Test s	sites located - Geolab Procedure 4, F	Part 4.4.			Start Time:	9:40am	Finish Tin	ne: 1:35pn	1			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction	Parameters	tabulate	ed on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	ID	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hil	lf Adjusted	d (APCWD)	& Peak (Po	CWD) Conv	erted Wet D	Density AS	6 1289 5.7	.1	1	-	
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredite	d for complian	ca with ISO	/IFC		MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(b)		NATA	<u>17025 - Te</u>	esting		<u>nill</u>		(Approv	/ed Sign	atory)
₽ ∻						<u>NATA Acc</u>	redited Labor	atory Numb	<u>er 14561</u>		Issue	Date: 2/2/2	2021





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au PH: (03) 8361-9140 REPORT NO.: # 2343/013 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIA FR OPTI MOIS CON	ATION OM IMUM TURE TENT %)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
2/02/21	1		1.94	23.5	101.5	1.92	24.5	175	0.5	Drier	97.0	0	0	0
2/02/21	2		2.04	20.0	106.5	1.92	23.0	175	2.5	Drier	88.5	0	0	200
2/02/21	3	Refer to #2343/014 for	1.95	22.5	100.0	1.95	23.5	175	0.5	Drier	97.0	0	0	300
2/02/21	4	locations.	1.94	26.0	102.5	1.90	25.0	175	1.0	Wetter	104.0	0	0	150
-	-		-	-	-	-	-	-	-		-	I	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	l after	comp	paction.			
	Test s	sites located - Geolab Procedure 4, F	Part 4.4.			Start Time:	7:55am	Finish Tim	1e: 11	:04an	1			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	in the Co	mpact	tion P	arameters t	abulate	d on this	Report.
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1			M	ID	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hil	If Adjusted	d (APCWD)	& Peak (P0	CWD) Conv	erted Wet D	ensity AS	5 1 2 8 9	9 5.7.1	l	· [per	
Field Den	sity, N	uclear Gauge: AS 1289 5.8.1				Accredited	d for complian	ce with ISO	/IFC			MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(k	c)		NATA	<u>17025 - Te</u>	<u>esting</u>	<u>ee wiiii 150</u>	<u>nec</u>			(Approv	ved Sign	atory)
æ					ACCREDITED FOR	NATA Acc	redited Labor	atory Numb	er 145	<u>61</u>		Issue [Date: 4/2/2	2021
*					COMPETENCE									





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/015 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATIO FROM OPTIML MOISTU CONTEI (%)	MOISTURE MOISTURE RATIO T (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
3/02/21	1		1.95	21.0	101.5	ቋ 1.92	24.0	175	2.5 Dr	er 89.0	4	0	250
3/02/21	2		1.92	26.0	103.5	1.86	28.0	175	2.0 Dr	er 93.0	0	0	200
3/02/21	3	Refer to #2343/016 for	1.99	23.0	105.5	1.89	26.0	175	2.5 Dr	er 89.5	0	0	0
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	after co	npaction.			
	Test s	sites located - Geolab Procedure 4, F	Part 4.4.			Start Time:	11:20am	Finish Ti	me: 11:	5am			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpactior	Parameters	tabulate	ed on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	r thicki	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	LQ	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hil	lf Adjusted	d (APCWD)	& Peak (P	CWD) Conv	erted Wet D	Density AS	S 1289 5.	7.1	1		
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredite	d for complian	ce with ISO	/IFC		MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(k	c)		NATA	<u>17025 - T</u>	<u>esting</u>	<u> mun 150</u>	<u>,</u>		(Approv	/ed Sign	atory)
✤ Indicate	es APC	CWD				<u>NATA Acc</u>	redited Labor	atory Numb	<u>per 14561</u>		Issue	Date: 8/2/2	2021





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/017 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIA FRO OPTIM MOIST CONTI (%)	FION M IUM URE ENT	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
4/02/21	1		1.89	21.0	96.0	∞ 1.97	22.5	175	1.5 [Drier	93.5	3	0	250
4/02/21	2		1.93	23.5	101.5	1.90	25.0	175	1.0	Drier	95.0	0	0	50
4/02/21	3	Refer to #2343/018 for	1.96	22.5	102.5	1.92	24.5	175	2.0 I	Drier	92.0	0	0	100
-	-	locations.	-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	d after o	comp	paction.			
	Test s	ites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	10:40am	Finish Ti	me: 11	:15a	m			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpactio	on Pa	arameters t	tabulate	d on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1			M	la	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	If Adjusted	d (APCWD)	& Peak (P	CWD) Conv	erted Wet D	Density AS	5 1289	5.7.1		ľ	/~~	
Field Den	sity, N	uclear Gauge: AS 1289 5.8.1				Accredited	d for complian	ce with ISO	/IEC			MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(h	o)		NATA	<u>17025 - T</u>	esting		-			(Approv	ved Sign	atory)
✤ Indicate	s APC	CWD				NATA Acc	redited Labor	atory Numb	per 1456	<u>l</u>		Issue [Date: 8/2/2	2021
**					COMPETENCI									





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/019 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIAT FROM OPTIM MOISTU CONTE (%)	ON 1 M JM RE NT	IOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
5/02/21	1		1.84	26.5	98.5	∞ 1.87	28.5	175	2.5 D	rier	92.0	7	0	600
5/02/21	2		1.91	26.5	105.0	1.82	29.0	175	3.0 D	rier	90.5	0	0	400
5/02/21	3	Refer to #2343/020 for	1.89	28.0	102.5	1.85	29.5	175	1.5 D	rier	95.0	0	0	600
-	-	locations.	-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	d after c	mpac	ction.			
	Test s	ites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	10:40am	Finish Ti	me: 11:	30am				
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpactio	n Para	ameters t	abulate	d on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer	thick	ness: 200mm				Comp	action Test:	AS 1289	5.7.1			M	la	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	If Adjusted	d (APCWD)	& Peak (Po	CWD) Conv	erted Wet D	Density AS	5 1289 5	.7.1		1	100	
Field Den	sity, N	uclear Gauge: AS 1289 5.8.1				Accredite	l for complian	ce with ISO	VIEC			MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(h	c)		NATA	<u>17025 - T</u>	esting					(Approv	ved Sign	atory)
✤ Indicate	s APC	CWD			ACCREDITED FOR	NATA Acc	redited Labor	atory Numb	per 14561			Issue [Date: 9/2/2	2021
*					COMPETENCE									





GEOTECHNICAL LABORATORIES ACN 102 571 077

REPORT NO.: # 2343/021

14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au PH: (03) 8361-9140

1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3 LOCATION:

(Approved Signatory)

Issue Date: 11/2/2021

VARIATION HILF STANDARD STANDARD FROM FIELD FIELD PROBE DATE DENSITY PCWD OPTIMUM MOISTURE WET WET APPROX, DEPTH TEST WET MOISTURE DEPTH OPTIMUM OF RATIO OR MOISTURE RATIO TEST LOCATION +19mm +37.5mm **BELOW FINISH** CONTENT NUM. DENSITY SETTING MOISTURE TESTS STANDARD CONTENT LEVEL (mm) APCWD (%) (%) (%) (t/m³) (%) (mm) CONTENT (%) (t/m³) (%) (%) 3.0 8/02/21 1 1.95 21.0 102.5 ₩ 1.90 24.0175 Drier 87.0 3 0 0 8/02/21 2 103.5 1.92 175 1.0 0 1.98 23.5 24.5Drier 95.0 0 50 *Refer to #2343/022 for* 8/02/21 1.95 3 3.0 22.5 101.5 1.93 25.5 175 Drier 88.5 0 0 300 approx. test site _ -_ -_ _ locations. _ _ _ -_ _ _ ---NOTES: Clayey Fill Ex. Onsite Compaction specimens sampled after compaction. Start Time: 11:40am Finish Time: 12:30pm Test sites located - Geolab Procedure 4, Part 4.4. A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report. Moisture Content: AS 1289 2.1.1 Soil Layer thickness: 200mm Compaction Test: AS 1289 5.7.1 Hilf Density Ratio and Hilf Moisture Variation, Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1 MICK CROWE Field Density, Nuclear Gauge: AS 1289 5.8.1 Accredited for compliance with ISO/IEC NATA

17025 - Testing

TECHNICAL COMPETENCE

NATA Accredited Laboratory Number 14561

Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)

Indicates APCWD





GEOTECHNICAL LABORATORIES ACN 102 571 077

REPORT NO.: # 2343/023

14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au PH: (03) 8361-9140

LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

VARIATION HILF STANDARD STANDARD FROM FIELD FIELD PROBE DATE DENSITY PCWD OPTIMUM MOISTURE WET WET APPROX, DEPTH TEST WET MOISTURE DEPTH OPTIMUM OF RATIO OR MOISTURE RATIO TEST LOCATION +19mm +37.5mm **BELOW FINISH** CONTENT NUM. DENSITY SETTING MOISTURE TESTS STANDARD CONTENT LEVEL (mm) APCWD (%) (%) (%) (t/m³) (%) (mm) CONTENT (%) (t/m³) (%) (%) 2.5 9/02/21 1 1.92 27.5 104.5 1.84 30.0 175 Drier 92.5 0 0 500 9/02/21 2 104.0 1.5 0 1.91 28.0 1.84 29.5 175 Drier 95.0 0 300 *Refer to #2343/024 for* 9/02/21 1.99 3 2.5 20.0 102.5 1.94 22.5 175 Drier 88.5 0 0 200 approx. test site _ -_ -_ _ locations. _ _ _ -_ _ _ ---NOTES: Clayey Fill Ex. Onsite Compaction specimens sampled after compaction. Start Time: 11:10am Finish Time: 12:30pm Test sites located - Geolab Procedure 4, Part 4.4. A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report. Moisture Content: AS 1289 2.1.1 Soil Layer thickness: 200mm Compaction Test: AS 1289 5.7.1 Hilf Density Ratio and Hilf Moisture Variation, Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1 MICK CROWE Field Density, Nuclear Gauge: AS 1289 5.8.1 Accredited for compliance with ISO/IEC NATA (Approved Signatory) Materials Sampled : AS 1289 1.2.1 Clause 6.4(b) 17025 - Testing NATA Accredited Laboratory Number 14561 ¥ Issue Date: 11/2/2021

> **TECHNICAL** COMPETENCE





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/025 LOCATION: 1152 TAYLORS DEVELOPMENT - Botanian Plumpton Stage 3

	1				1			1	1		1	I		
DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIA FRO OPTII MOIS CONT	ATION OM MUM TURE FENT 6)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
10/02/21	1		1.92	24.5	99.5	1.93	25.5	175	1.0	Drier	96.0	0	0	150
10/02/21	2		1.91	26.0	99.5	1.92	26.5	175	0.5	Drier	98.0	0	0	200
10/02/21	3	Refer to #2343/026 for	1.89	27.0	99.5	1.90	28.0	175	1.0	Drier	96.5	0	0	300
-	-	locations.	-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	d after	comp	paction.			
	Test s	sites located - Geolab Procedure 4, I	² art 4.4.			Start Time:	10:25am	Finish Ti	me: 1	1:30a	m			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpact	ion P	arameters t	tabulate	d on this	Report.
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1			M	LA	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	If Adjusted	d (APCWD)	& Peak (P	CWD) Conv	erted Wet D	Density AS	5 1289	5.7.1	l	1		
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredite	l for complian	ce with ISO)/IEC			MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(h)		NATA	<u>17025 - T</u>	esting					(Approv	/ed Sign	atory)
Ð					ACCREDITED FOR	<u>NATA Acc</u>	redited Labor	atory Numb	per 1456	<u>61</u>		Issue D	Date: 12/2/	2021
*					COMPETENCE									





GEOTECHNICAL LABORATORIES ACN 102 571 077

REPORT NO.: # 2343/027

14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au PH: (03) 8361-9140

LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

VARIATION HILF STANDARD STANDARD FROM FIELD FIELD PROBE DATE DENSITY PCWD OPTIMUM MOISTURE WET WET APPROX, DEPTH TEST WET MOISTURE DEPTH OPTIMUM OF RATIO OR MOISTURE RATIO TEST LOCATION +19mm +37.5mm **BELOW FINISH** CONTENT NUM. DENSITY SETTING MOISTURE TESTS STANDARD CONTENT LEVEL (mm) APCWD (%) (%) (%) (t/m³) (%) (mm) CONTENT (%) (t/m³) (%) (%) 15/03/21 1 1.90 24.5 97.0 1.96 25.0175 0.5 Drier 98.0 0 0 2600 15/03/21 2 25.0 99.5 0.5 0 1.95 1.96 25.5175 Drier 98.0 0 2500 *Refer to #2343/028 for* 15/03/21 2.06 3 0.5 22.0 103.5 1.99 22.5 175 Drier 97.0 0 0 2300 approx. test site _ -_ -_ _ locations. _ _ -_ _ _ ---NOTES: Clayey Backfill Ex. Onsite Compaction specimens sampled after compaction. Test sites located - Geolab Procedure 4, Part 4.4. Start Time: 12:35pm Finish Time: 12:50pm A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report. Moisture Content: AS 1289 2.1.1 Soil Layer thickness: 200mm Compaction Test: AS 1289 5.7.1 Hilf Density Ratio and Hilf Moisture Variation, Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1 MICK CROWE Field Density, Nuclear Gauge: AS 1289 5.8.1 Accredited for compliance with ISO/IEC NATA (Approved Signatory) Materials Sampled : AS 1289 1.2.1 Clause 6.4(b) 17025 - Testing NATA Accredited Laboratory Number 14561 ¥ Issue Date: 18/3/2021

> **TECHNICAL** COMPETENCE




GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/029 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARI FF OPT MOIS CON	ATION ROM TIMUM STURE ITENT %)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
17/03/21	1		1.92	26.0	99.0	1.94	25.5	175	0.5	Wetter	102.0	0	0	1700
17/03/21	2		1.87	26.5	97.5	1.91	24.5	175	2.0	Wetter	107.0	0	0	1900
17/03/21	3	Refer to #2343/030 for approx. test site	1.90	22.5	100.5	1.89	23.0	175	0.5	Drier	98.0	0	0	2100
-	-	locations.	-	-	-	-	-	-	-		-	-	-	-
-	-	locations.	-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
NOTES:	Clay	Backfill Ex. Onsite				Compactio	n specimen	s sampled	d afte	r comp	paction.			
	Test s	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	1:40pm	Finish Tin	ne: 2:	00pm				
A Hilf Rap	id Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpac	tion P	arameters	tabulate	d on this	Report.
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1			M	HQ	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	If Adjusted	d (APCWD)	& Peak (P	CWD) Conv	erted Wet D	Density AS	6 1 2 8	9 5.7.1	l	ľ	/	
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredited	d for complian	ce with ISO	/IEC			MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(h		<u> 17025 - T</u>	esting					(Approv	/ed Sign	atory)		
₽						NATA Acc	redited Labor	atory Numb	oer 145	5 <u>61</u>		Issue D	Date: 22/3/	2021
*					COMPETENCI									





1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

REPORT NO.: # 2343/031

LOCATION:

GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
18/03/21	1		1.93	23.0	100.5	1.92	24.5	175	1.5 Drier	93.0	0	0	1700
18/03/21	2		1.91	24.0	102.0	1.87	26.5	175	2.5 Drier	90.5	0	0	1500
18/03/21	3	Refer to #2343/032 for	1.97	24.5	104.0	1.89	27.0	175	2.5 Drier	91.0	0	0	1400
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Clay Test s	Backfill Ex. Onsite ites located - Geolab Procedure 4, F	Part 4.4.			Compaction Start Time:	n specimen: 1:35pm	s samplec Finish Tirr	l after com ne: 1:45pm	paction.			
A Hilf Rap	id Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	in the Co	mpaction F	arameters t	abulate	d on this	Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thickr	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	HQ	
Hilf Densi	ty Rati	io and Hilf Moisture Variation ,Hil	f Adjusted	(APCWD)	& Peak (PC	CWD) Conv	erted Wet D	ensity AS	5 1289 5.7.	1	1	/ ~	
Field Den	sity, N	uclear Gauge: AS 1289 5.8.1				Accredited	d for complian	ce with ISO	/IEC		MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(k))		NAIA	<u> 17025 - T</u>	esting				(Approv	ed Sign	atory)
ACREDITE OF ALL A CHARTER OF ALL A CHARTER OF ALL AND ALL												ate: 23/3/	2021





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/033 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIA FRC OPTIM MOIST CONT (%	TION OM MUM FURE ENT	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
19/03/21	1		1.87	33.5	99.5	1.88	30.5	175	3.0 V	Vetter	109.5	0	0	2000
19/03/21	2		1.94	25.5	104.0	1.86	27.5	175	2.0	Drier	92.5	0	0	1800
19/03/21	3	Refer to #2343/034 for	1.91	22.5	100.0	1.91	25.5	175	2.5	Drier	89.5	0	0	1800
-	-	locations.	-	-	-	-	-	-	-		-	-	-	-
-	-	locations.	-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
NOTES:	Clay	Backfill Ex. Onsite				Compactio	n specimen:	s sampled	after	comp	action.			
	Test s	sites located - Geolab Procedure 4, F	Part 4.4.			Start Time:	1:05pm	Finish Tin	ne: 2:0	0pm				
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	in the Co	mpacti	ion Pa	arameters t	tabulate	d on this	Report.
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer	thick	ness: 200mm				Comp	action Test:	AS 1289	5.7.1			M	LQ	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	If Adjusted	d (APCWD)	& Peak (Po	CWD) Conv	erted Wet D	ensity AS	5 1289	5.7.1		1		
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredite	l for complian	ce with ISO	/IEC			MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(b)		NATA	<u>17025 - T</u>	esting					(Approv	ved Sign	atory)
Ð					ACCREDITED FOR	NATA Acc	redited Labor	atory Numb	er 1456	<u>61</u>		Issue D)ate: 24/3/	2021
*					COMPETENCE									





GEOTECHNICAL LABORATORIES ACN 102 571 077

REPORT NO.: # 2343/035

14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au PH: (03) 8361-9140

LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIA FR OPT MOIS CON	ATION OM IMUM TURE TENT %)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
22/03/21	1		1.94	23.5	101.0	1.92	24.5	175	1.0	Drier	96.0	0	0	1200
22/03/21	2		1.93	23.0	100.0	1.92	25.0	175	1.5	Drier	93.0	0	0	600
22/03/21	3	Refer to #2343/036 for approx. test site	1.91	21.5	98.5	1.94	22.0	175	0.5	Drier	96.5	0	0	1500
-	-	locations.	-	-	-	-	-	-	-		-	-	-	-
-	-	locations.	-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compaction	n specimens	s sampled	lafter	comp	action.			
	Test s	ites located - Geolab Procedure 4, P	art 4.4.			Start Time:	1:40pm F	-inish Tim	ie: 2:0	5pm				
A Hilf Rap	id Cor	mpaction test was carried out on a	a sample ⁻	taken from	each Field [Density loca	tion to obtai	n the Con	npacti	on Pa	rameters ta	bulated	on this	Report.
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer	thickr	ness: 200mm				Compa	action Test:	AS 1289	5.7.1			M	In.	
Hilf Densit	ty Rati	o and Hilf Moisture Variation ,Hilf	Adjusted	(APCWD)	& Peak (PC	WD) Conve	rted Wet De	ensity AS	1289	5.7.1		<i>'</i> '	ya	
Field Dens	sity, N	uclear Gauge: AS 1289 5.8.1				A	1					MICI	K CROW	/E
Materials	Sampl	led: AS 1289 1.2.1 Clause 6.4(b)		NATA	<u>17025</u> - Te	e <u>sting</u>	<i>Le with</i> 150/	<u>ILC</u>			(Approv	ed Signa	atory)
¥		Υ.	,			NATA Acc	redited Labord	atory Numbe	er 1450	<u>51</u>		Issue D	ate: 25/3/2	2021
.•.					TECHNICAL									

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GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/037 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
26/03/21	1		1.91	29.5	105.0	1.82	31.5	175	2.0 Drier	93.5	0	0	500
26/03/21	2		1.88	29.5	104.0	1.81	31.0	175	1.5 Drier	95.0	0	0	600
26/03/21	3	Refer to #2343/038 for approx. test site	2.03	24.0	105.5	ቋ 1.92	26.0	175	2.0 Drier	91.5	10	0	600
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-	iocations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	d after comp	paction.			
	Test s	sites located - Geolab Procedure 4, I	² art 4.4.			Start Time:	1:15pm	Finish Tin	ne: 1:40pm				
A Hilf Rap	id Co	mpaction test was carried out on	a sample	taken from	each Field	Density loc	ation to obta	ain the Co	mpaction P	arameters	tabulate	d on this	Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thick	ness: 200mm				Comp	action Test:	AS 1289	5.7.1		M	HQ	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	If Adjusted	d (APCWD)	& Peak (P	CWD) Conv	erted Wet D	Density AS	6 1289 5.7.1	l	ľ	/	
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredite	d for complian	ce with ISO	/IEC		MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(b	o)		NATA	<u> 17025 - T</u>	esting				(Approv	/ed Sign	atory)
✤ Indicate	s APC	CWD				NATA Acc	redited Labor	atory Numb	<u>per 14561</u>		Issue D	Date: 30/3/	2021
*					COMPETENCI								





GEOTECHNICAL LABORATORIES ACN 102 571 077

14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au PH: (03) 8361-9140

 REPORT NO.: #
 2343/039

 LOCATION:
 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3 Reserve

DATE OF TESTSTEST LOCATIONFIELD WET DENSITY (t/m3)FIELD MOISTURE (%)HILF DENSITY RATIO (%)STANDARD PCWD OR APCWD (%)STANDARD OPTIMUM MOISTURE OR APCWD (%)VARIATION PROBE OPTIMUM MOISTURE CONTENT (%)VARIATION PROBE OPTIMUM MOISTURE CONTENT (%)MOISTURE PROBE OPTIMUM MOISTURE (%)VARIATION PROBE OPTIMUM MOISTURE CONTENT (%)MOISTURE PROBE OPTIMUM MOISTURE (%)MOISTURE RATIO (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM MOISTURE (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM (%)MOISTURE PROBE OPTIMUM <th>WET \ +19mm +3 (%)</th> <th>WET APPROX. DEPTH 37.5mm BELOW FINISH (%) LEVEL (mm)</th>	WET \ +19mm +3 (%)	WET APPROX. DEPTH 37.5mm BELOW FINISH (%) LEVEL (mm)									
25/03/21 1 1.95 30.0 101.0 1.93 28.0 175 2.0 Wetter 107.5	0	0 0									
25/03/21 2 1.87 21.5 100.0 1.86 25.0 175 3.5 Drier 86.5	0	0 0									
25/03/21 3 Refer to #2343/040 for 1.93 27.0 104.0 1.86 28.0 175 1.0 Drier 96.5	0	0 0									
25/03/21 4 <i>approx. lest sue locations.</i> 1.88 25.5 101.0 1.87 27.5 175 2.0 Drier 92.5	0	0 0									
. 	-										
- · · · · · · · ·	-										
NOTES: Clayey Fill Ex. OnsiteCompaction specimens sampled after compaction.											
Test sites located - Geolab Procedure 4, Part 4.4. Start Time: 1:50pm Finish Time: 2:10pm											
A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tab	bulated o	on this Report.									
Moisture Content: AS 1289 2.1.1											
Soil Layer thickness: 200mm Compaction Test: AS 1289 5.7.1	Mil	Q.									
Hilf Density Ratio and Hilf Moisture Variation ,Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1	1 /	0.0									
Field Density, Nuclear Gauge: AS 1289 5.8.1	MICK C	CROWE									
Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)	Approved	J Signatory)									
ACCREDITED FOR TECHNICAL TECHNICAL											





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/041 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
29/03/21	1		1.88	26.0	104.5	1.80	29.5	175	3.5 Drier	89.0	0	0	0
29/03/21	2		1.85	31.0	98.5	1.87	30.5	175	0.5 Wette	r 101.5	0	0	2000
29/03/21	3	Refer to #2343/042 for	1.87	28.5	98.0	1.90	28.0	175	1.0 Wette	r 103.0	0	0	1500
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen:	s sampled	d after com	paction.			
	Test s	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	3:00pm	Finish Tin	ne: 3:37pm				
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction F	Parameters	tabulate	d on this	BReport.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	LQ	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	If Adjusted	& Peak (P	CWD) Conv	erted Wet D	Density AS	6 1289 5.7.	1	ľ	/~~		
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredited	l for complian	ce with ISO	/IEC		MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(h)		NATA	<u>17025 - T</u>	esting				(Approv	ved Sign	atory)
Æ					ACCREDITED FO	NATA Acc	redited Labor	atory Numb	<u>er 14561</u>		Issue D	Date: 31/3/	2021
*					COMPETENCI								





1152 TAYLORS DEVELOPMENT - Botania Plumpton, Stage 3

REPORT NO.: # 2343/043

LOCATION:

GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
30/03/21	1		1.86	29.5	98.0	1.90	28.0	175	2.0 Wette	r 106.5	0	0	1500
30/03/21	2		1.93	30.0	103.0	1.87	28.0	175	2.5 Wette	r 108.5	0	0	1300
30/03/21	3	Refer to #2343/044 for	2.00	24.0	104.0	1.92	24.0	175	0.0 Drier	100.0	0	0	0
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compaction	n specimens	s sampled	after com	paction.			
	Tests	Ites located - Geolab Procedure 4, F	² art 4.4.				12:05pm		me: 12:40				. .
А НІІТ Кар	na Co	mpaction test was carried out on	a sample	taken from	each Fleid	Density loca	ation to obta		mpaction F	arameters t	abulate	d on this	s Report.
	thick	2000 mm				NOISU	re Content:	AS 1209	2.1.1 E 7 1			10	
Soli Layer	triicki ty Rat	less: 200mm in and Hilf Moisture Variation, Hil	f Adjuctor		& Poak (P(Compa Conv	action Test:	AS 1289 Noncity AS	0.7.1 1280 5 7	1	19	HL	
Field Don	city N								5 1203 5.7.	1	MIC		VE
Matariala	Sily, N Samo	uclear Gauye. AS 1209 5.0.1			NATA	Accredited	<u>l for complian</u>	ce with ISO	<u>/IEC</u>		(Approv	red Sian	atory)
	Samp	100 . AS 1209 1.2.1 UIAUSE 0.4(1)		<u>17025 - 10</u> NATA Aco	<u>esung</u> redited Labor	atory Numb	er 14561				0001	
*							. canca Eubor	<u></u>	<u>e. 17501</u>		issue l	Jale: 0/4/2	:UZ I





GEOTECHNICAL LABORATORIES ACN 102 571 077 REPORT NO.: # 2343/045

14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au PH: (03) 8361-9140

023	LOCATION:	1152 TAYLORS DEVELOPMENT - Botania Plumpton, Stage 3 Dam Backfil
(00) 0004 0440		

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIA FR OPTI MOIS CON	ATION OM IMUM TURE TENT %)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
31/03/21	1		1.86	28.0	106.0	1.76	31.0	175	3.0	Drier	90.0	0	0	0
31/03/21	2		1.91	28.5	108.0	1.76	31.0	175	2.5	Drier	92.5	0	0	0
31/03/21	3	Refer to #2343/046 for	1.91	27.5	109.5	1.74	31.0	175	3.5	Drier	88.5	0	0	0
-	-	locations.	-	-	-	-	-	-	-		-	-	-	-
-	-	locations.	-	-	-	-	-	-	-		-	-	-	-
-	-		-	-	-	-	-	-	-		-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen:	s sampled	d after	comp	paction.			
	Test	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	12:20pm	Finish Ti	ime: 1	:05pn	n			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpact	tion P	arameters	tabulate	ed on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer	r thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1			M	LA	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	lf Adjusted	d (APCWD)	& Peak (P	CWD) Conv	erted Wet D	Density AS	5 1289	9 5.7.1	1	ľ		
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredite	d for complian	ce with ISO)/IFC			MIC	K CROV	VE.
Materials	Samp	led : AS 1289 1.2.1 Clause 6.4(I	c)		NATA	<u>17025 - T</u>	<u>esting</u>	<u> mun 150</u>	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>			(Approv	ved Sign	atory)
₩						<u>NATA Acc</u>	credited Labor	atory Numb	ber 1450	<u>61</u>		Issue I	Date: 6/4/2	2021





1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

REPORT NO.: # 2343/047

LOCATION:

GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
1/04/21	1		1.87	29.5	99.5	1.87	28.5	175	1.0 Wetter	103.5	0	0	1500
1/04/21	2		1.93	28.0	106.0	1.82	30.0	175	2.0 Drier	93.0	0	0	1350
1/04/21	3	Refer to #2343/048 for	1.95	28.5	105.5	1.85	27.5	175	1.0 Wetter	103.5	0	0	1200
-	-	approx. test sue locations.	-	-	-	-	-	-	-	-	-	-	-
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimens	s samplec	l after comp	action.			
	Test s	ites located - Geolab Procedure 4, F	Part 4.4.			Start Time:	1:10pm	Finish Tim	ne: 1:49pm				
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	in the Co	mpaction Pa	arameters t	abulate	d on this	Report.
						Moistu	re Content:	AS 1289	2.1.1			1 -	
Soil Layer	thickr	ness: 200mm				Comp	action Test:	AS 1289	5.7.1		M	HQ.	
Hilf Densi	ty Rati	o and Hilf Moisture Variation ,Hil	f Adjusted	(APCWD)	& Peak (PO	CWD) Conv	erted Wet D	ensity AS	5 1289 5.7.1		1	/	
Field Den	sity, N	uclear Gauge: AS 1289 5.8.1				Accredited	l for complian	ce with ISO	/IEC		MICI	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(b))		NATA	<u> 17025 - T</u>	esting				(Approv	ed Sign	atory)
₽					ACCREDITED FOR	<u>NATA Acc</u>	redited Labor	atory Numb	<u>er 14561</u>		Issue [Date: 9/4/2	2021
*					COMPETENCE								





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/049 LOCATION: 1152 TAYLORS DEVELOPMENT - Botanina Plumpton, Stage 3

	1	-	1					1			1	1	
DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATIC FROM OPTIMUM MOISTUR CONTEN (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
7/04/21	1		1.94	24.5	109.0	∞ 1.78	28.0	175	3.5 Drie	r 87.5	13	0	1200
7/04/21	2		1.84	22.5	105.0	1.76	27.0	175	5.0 Drie	r 82.0	0	0	1200
7/04/21	3	Refer to #2343/050 for	1.87	22.5	105.0	1.79	26.5	175	4.0 Drie	r 85.0	0	0	1000
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	d after cor	paction.			
	Test s	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	1:45pm	Finish Tin	ne: 2:15pr	1			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction	Parameters	tabulate	d on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thick	ness: 200mm				Comp	action Test:	AS 1289	5.7.1		M	IN	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	lf Adjusted	d (APCWD)	& Peak (P	CWD) Conv	erted Wet D	Density AS	6 1289 5.7	.1	<i>'</i> /	ya	
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredite	d for complian	a with ISO	VIEC		MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(h	c)		NATA	<u>17025 - T</u>	<u>esting</u>	<i>ice with</i> 150			(Approv	/ed Sign	atory)
✤ Indicate	s APC	CWD			NATA Acc	redited Labor	atory Numb	per 14561		Issue E	Date: 12/4/	2021	
					COMPETENCI								





1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

Accredited for compliance with ISO/IEC

NATA Accredited Laboratory Number 14561

17025 - Testing

GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)		
8/04/21	1		1.90	24.0	103.0	1.84	26.5	175	2.5 Drier	90.5	0	0	800		
8/04/21	2	Refer to #2343/052 for approx. test site locations.	1.95	31.0	103.5	1.88	29.5	175	1.5 Wetter	104.5	0	0	800		
8/04/21	3		1.98	28.5	105.0	1.88	28.5	175	0.5 Drier	99.0	0	0	600		
-	-		-	-	-	-	-	-	-	-	-	-	-		
-	-		-	-	-	-	-	-	-	-	-	-	-		
-	-		-	-	-	-	-	-	-	-	-	-	-		
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimens	s sampled	l after comp	action.					
	Test s	sites located - Geolab Procedure 4, F	Part 4.4.			Start Time:	12:30pm	Finish Ti	me: 1:00pn	ı					
A Hilf Rap	id Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	in the Co	mpaction P	arameters t	abulate	d on this	Report.		
			-			Moistu	re Content:	AS 1289	2.1.1						
Soil Layer	thick	ness: 200mm		Soil Layer thickness: 200mm M.//											

Hilf Density Ratio and Hilf Moisture Variation ,Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1

NATA

ACCREDITED FOR TECHNICAL COMPETENCE

REPORT NO.: # 2343/051

LOCATION:

Field Density, Nuclear Gauge: AS 1289 5.8.1

Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)

H *

Rev 15 SS3092-1 Jan 2019

, Inder MICK CROWE

(Approved Signatory) Issue Date: 14/4/2021





1152 TAYLORS DEVELOPMENT - Botania Stage 3

REPORT NO.: # 2343/053

LOCATION:

GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
9/04/21	1		1.90	29.0	102.0	1.87	29.0	175	0.5 Drier	99.0	0	0	600
9/04/21	2		1.89	30.0	101.5	1.86	30.0	175	0.0 Drier	100.0	0	0	600
9/04/21	3	Refer to #2343/054 for	1.95	28.0	102.0	1.91	27.5	175	0.5 Wetter	101.0	0	0	600
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	y Fill Ex. Onsite				Compaction	n specimen:	s sampled	l after comp	paction.			
	Test s	ites located - Geolab Procedure 4, F	Part 4.4.			Start Time:	12:05pm	Finish Ti	me: 12:25p	m			
A Hilf Rap	id Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	in the Co	mpaction P	arameters t	abulate	d on this	Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thickr	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	LQ.	
Hilf Densi	ty Rati	o and Hilf Moisture Variation ,Hil	f Adjusted	I (APCWD)	& Peak (PC	CWD) Conv	erted Wet D	ensity AS	5 1289 5.7. ⁻		1		
Field Den	sity, N	uclear Gauge: AS 1289 5.8.1				Accredited	l for complian	ce with ISO	/IEC		MIC	K CROW	/E
Materials	Samp	ed: AS 1289 1.2.1 Clause 6.4(b))		NATA	<u>17025 - Te</u>	esting				(Approv	ed Signa	atory)
₽					ACCREDITED FOR	<u>NATA Acc</u>	redited Labor	atory Numb	er 14561		Issue D	ate: 15/4/2	2021
*					COMPETENCE								





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

14 Ravenhall Way, Ravenhall, Vic 3023Email: info@geolab.com.auPH: (03) 8361-9140

REPORT NO.: # 2343/055 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)	
12/04/21	1		1.96	23.5	100.0	1.96	23.0	175	0.5 Wetter	103.0	0	0	600	
12/04/21	2		1.96	26.5	101.0	1.94	25.5	175	1.0 Wetter	103.0	0	0	850	
12/04/21	3	Refer to #2343/056 for	1.91	25.5	100.0	1.91	25.5	175	0.5 Drier	99.0	0	0	1100	
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	-	-	-	
NOTES:	Claye	ey Fill Ex. Onsite	-			Compactio	n specimen	s sampled	after comp	action.	-			
	Test s	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	12:05pm	Finish Ti	me: 12:50p	m				
A Hilf Rap	id Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction P	arameters	tabulate	ed on this	Report.	
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	LQ		
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	If Adjusted	d (APCWD)	& Peak (P	CWD) Conv	erted Wet D	Density AS	6 1289 5.7.1		ľ	/~~		
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredited	d for complian	ce with ISO	/IEC		MICK CROWE			
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(b	o)		NATA	<u> 17025 - T</u>	esting				(Approved Signatory)			
Ð						<u>NATA Acc</u>	redited Labor	atory Numb	<u>er 14561</u>		Issue D	Date: 16/4/2	2021	
*					COMPETENCI									





1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

REPORT NO.: # 2343/057

LOCATION:

GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
13/04/21	1		2.06	24.5	105.5	1.95	22.5	175	2.0 Wette	109.0	0	0	450
13/04/21	2		1.87	24.5	100.5	1.86	27.0	175	2.5 Drier	90.5	0	0	400
13/04/21	3	Refer to #2343/058 for approx. test site	1.94	30.5	102.0	1.90	29.0	175	1.5 Wette	105.5	0	0	500
13/04/21	4	locations.	1.89	33.5	98.5	1.91	29.5	175	3.5 Wette	112.5	0	0	1000
-	-		-	-	-	-	-	-	-	-	I	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen:	s sampled	d after com	paction.			
	Tests	sites located - Geolab Flocedule 4, F		1	a a ala 🗖 a lat								Deveet
А нії кар		mpaction test was carried out on	a sample	taken from	each Fleid	Density loca			mpaction P	arameters t	abulate	a on this	Report.
0	41-1-1	000				NOISU		AS 1289	2.1.1			10	
Soll Layer		ness: 200mm is and Lilf Maisture Veriation, Lii	f Adjustes		9 Deels (D		action Test:	AS 1289	5./.I		19	HL.	£
			Aujusted	I (AFGVVD)				Jensity Ac	5 1209 3.7.				
Field Den	SITY, N	uclear Gauge: AS 1289 5.8.1	NATA	<u>Accredited</u>	l for complian	ce with ISO	/IEC						
Materials	Samp	led : AS 1289 1.2.1 Clause 6.4(b)			<u>17025 - T</u>	<u>esting</u>				(Approv	rea Sign	atory)
Ā					ACCREDITED FOR	<u>NATA Acc</u>	redited Labor	atory Numb	<u>er 14561</u>		Issue D	ate: 16/4/2	2021
*					COMPETENCE								





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/059 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)	
15/04/21	1		1.86	29.0	96.5	1.93	29.0	175	0.5 Drier	99.0	0	0	600	
15/04/21	2		1.99	27.5	102.5	1.93	28.0	175	0.5 Drier	98.0	0	0	600	
15/04/21	3	Refer to #2343/060 for	1.92	28.5	99.5	1.93	29.0	175	0.5 Drier	99.0	0	0	1000	
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	-	-	-	
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	d after com	paction.				
	Test s	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	12:00pm	Finish Ti	me: 12:20p	om				
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction P	arameters	tabulate	d on this	s Report.	
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	HQ		
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	If Adjusted	d (APCWD)	& Peak (P	CWD) Conv	erted Wet D	Density AS	6 1289 5.7. ⁻	1	ľ	/		
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredited	l for complian	ce with ISO	/IEC		MIC	K CROV	VE	
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(I	o)		NATA	<u> 17025 - T</u>	esting				(Approved Signatory)			
¥						NATA Acc	redited Labor	atory Numb	<u>per 14561</u>		Issue D	Date: 19/4/	2021	
*					COMPETENCI									





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/061 LOCATION: 1152 TAYLORS DEVELOPMENT - Botanina Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATIO FROM OPTIMUM MOISTUR CONTEN (%)	I MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
14/04/21	1		1.90	32.0	101.0	1.88	30.0	175	2.0 Wett	er 107.0	0	0	600
14/04/21	2		1.99	29.5	105.0	1.89	29.0	175	0.5 Wett	er 101.0	0	0	800
14/04/21	3	Refer to #2343/062 for	1.95	28.5	103.5	1.88	28.5	175	0.0 Drie	· 100.0	0	0	800
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen:	s sampled	d after con	paction.			
	Test s	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	10:00am	Finish Ti	ime: 10:30	am			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction	Parameters	tabulate	d on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	ila	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	If Adjusted	d (APCWD)	& Peak (P	CWD) Conv	erted Wet D	Density AS	6 1289 5.7	1	. [
Field Den	sity, N	uclear Gauge: AS 1289 5.8.1				Accredite	l for complian	ce with ISO)/IEC		MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(I	c)		NATA	<u>17025 - T</u>	esting				(Approv	/ed Sign	atory)
₩						<u>NATA Acc</u>	redited Labor	atory Numb	<u>per 14561</u>		Issue E	Date: 19/4/	2021

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GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/063 LOCATION: 1152 TAYLORS DEVELOPMENT - Botanina Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATIC FROM OPTIMUI MOISTUF CONTEN (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)	
16/04/21	1		1.97	24.5	104.0	1.89	26.0	175	1.5 Drie	r 93.5	0	0	600	
16/04/21	2		1.99	23.5	104.5	1.90	25.5	175	1.5 Drie	r 93.0	0	0	600	
16/04/21	3	Refer to #2343/064 for approx. test site	1.96	25.5	101.5	1.93	26.0	175	0.5 Drie	r 98.0	0	0	600	
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	-	-	-	
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen:	s sampled	d after cor	paction.	-	-	• •	
	Test s	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	11:00am	Finish Ti	ime: 11:20	am				
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction	Parameters	tabulate	ed on this	s Report.	
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	HQ		
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hi	If Adjusted	d (APCWD)	& Peak (P	CWD) Conv	erted Wet D	Density AS	5 1289 5.7	.1	1	/ / ~ ~		
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredited	d for complian	ce with ISO	VIEC		MIC	K CROV	VE	
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(h	o)		NATA	<u> 17025 - T</u>	esting				(Approved Signatory)			
¥						NATA Acc	redited Labor	atory Numb	<u>per 14561</u>		Issue D	Date: 20/4/	2021	
*					COMPETENCI									




1152 TAYLORS DEVELOPMENT - Botanina Plumpton Stage 3

REPORT NO.: # 2343/065

LOCATION:

GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
19/04/21	1		1.88	29.0	98.5	1.91	29.0	175	0.0 Drier	100.0	0	0	1000
19/04/21	2		1.84	29.5	97.0	1.90	29.0	175	0.5 Wetter	101.0	0	0	1000
19/04/21	3	Refer to #2343/066 for	1.98	24.5	100.5	∞ 1.98	25.0	175	0.5 Drier	98.0	8	0	800
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	I	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	y Fill Ex. Onsite				Compaction	n specimen:	s sampled	l after comp	action.			
	Test s	ites located - Geolab Procedure 4, F	Part 4.4.			Start Time:	1:35pm	Finish Tim	ne: 2:00pm				
A Hilf Rap	id Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction Pa	arameters t	abulate	d on this	Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thickr	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	ID.	e e e e e e e e e e e e e e e e e e e
Hilf Density Ratio and Hilf Moisture Variation, Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1													
Field Den	sity, N	uclear Gauge: AS 1289 5.8.1				Accredited	l for complian	ce with ISO	/IFC		MIC	K CROV	/E
Naterials	Samp	led: AS 1289 1.2.1 Clause 6.4(k	c)		NATA	<u>17025 - Te</u>	e <u>sting</u>	<u>ee wiin 150</u>			(Approved Signatory)		
Indicates APCWD							NATA Accredited Laboratory Number 14561 Issue Date: 23/4/2021						
					COMPETENCE								

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GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

REPORT NO.: # 2343/067

14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au PH: (03) 8361-9140 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
22/04/21	1		1.92	20.0	97.0	ቋ 1.98	21.5	175	1.5 Drie	92.0	10	0	400
22/04/21	2		1.88	20.5	99.5	1.89	23.5	175	3.0 Drie	87.5	0	0	200
22/04/21	3	Refer to #2343/068 for	2.04	19.0	107.5	1.89	22.0	175	3.5 Drie	85.0	0	0	0
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	d after com	paction.			
	Test s	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	10:00am	Finish Ti	me: 10:30	am			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction I	Parameters	tabulate	ed on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	Soil Layer thickness: 200mm Compaction Test: AS 1289 5.7.1 MLQ												
Hilf Density Ratio and Hilf Moisture Variation ,Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1													
Field Density, Nuclear Gauge: AS 1289 5.8.1 Accredited for compliance with ISO/IEC MICK CROWE								VE					
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(h	c)		NATA	<u>17025 - T</u>	<u>esting</u>		<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		(Approv	/ed Sign	atory)
✤ Indicate	s APC	CWD				<u>NATA Acc</u>	credited Labor	atory Numb	<u>per 14561</u>		Issue E	Date: 26/4/	2021





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/069 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
23/04/21	1		1.97	20.5	104.0	1.89	23.5	175	2.5 Drier	88.5	0	0	600
23/04/21	2		1.89	18.5	104.0	1.82	24.0	175	6.0 Drier	75.5	0	0	0
23/04/21	3	Refer to #2343/070 for	1.87	22.5	98.0	1.92	26.0	175	3.0 Drier	87.5	0	0	0
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	d after com	paction.			
	Test s	ites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	8:40am	Finish Tin	ne: 9:20am				
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction F	arameters	tabulate	d on this	Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	il Layer thickness: 200mm Compaction Test: AS 1289 5.7.1 Mill .												
Hilf Density Ratio and Hilf Moisture Variation, Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1													
Field Density, Nuclear Gauge: AS 1289 5.8.1 Accredited for compliance with ISO/IEC MICK CROWE									VE				
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(h	o)		NATA	<u> 17025 - T</u>	esting				(Approv	ved Sign	atory)
Æ					ACCREDITED FO	NATA Acc	credited Labor	atory Numb	per 14561		Issue D	Date: 27/4/	2021
*					COMPETENCI								





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/071 LOCATION: 1152 TAYLORS DEVELOPMENT - Botanina Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m ³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
26/04/21	1		2.07	21.0	108.0	∞ 1.92	25.5	175	4.5 Drier	83.0	14	0	400
26/04/21	2		1.98	24.5	106.0	1.87	27.5	175	3.0 Drier	88.5	0	0	400
26/04/21	3	Refer to #2343/072 for	1.99	18.0	103.5	∞ 1.92	21.5	175	3.5 Drier	83.5	6	0	200
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite		-	-	Compactio	n specimen	s sampled	after com	paction.			
	Tests	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	8:20am	Finish Tin	ne: 9:00am				
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction F	arameters t	tabulate	d on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	Soil Layer thickness: 200mm Compaction Test: AS 1289 5.7.1 M//												
Hilf Density Ratio and Hilf Moisture Variation ,Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1													
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredite	d for complian	ca with ISO	/IFC		MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(I	o)		NATA	<u>17025 - Te</u>	<u>esting</u>	ce wiii 150			(Approv	ved Sign	atory)
✤ Indicate	s APC	CWD			ACCREDITED FO	NATA Acc	redited Labor	atory Numb	er 14561		Issue D)ate: 28/4/	2021





GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

REPORT NO.: #	2343/073
LOCATION:	1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
27/04/21	1		1.95	22.0	102.5	1.91	24.5	175	2.5 Drier	89.0	0	0	0
27/04/21	2		1.94	18.5	101.0	ቋ 1.92	22.0	175	3.5 Drier	84.0	4	0	0
27/04/21	3	Refer to #2343/074 for	1.95	19.5	104.0	1.87	24.0	175	4.5 Drier	81.0	0	0	0
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	after com	paction.			
	Test s	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	: 10:30am	Finish Tir	me: 10:55a	m			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loc	ation to obta	ain the Co	mpaction P	arameters	tabulate	ed on this	s Report.
						Moistu	ire Content:	AS 1289	2.1.1				
Soil Layer thickness: 200mm Compaction Test: AS 1289 5.7.1 Mill .													
Hilf Density Ratio and Hilf Moisture Variation ,Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1													
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1				Accredite	d for complian	nce with ISO	/IEC		MIC	K CROV	VE
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(h	o)		NATA	A <u>17025 - Testing</u> (Approved Signator					atory)		
✤ Indicate	s APC	CWD			ACCREDITED FO	NATA Acc	credited Labor	ratory Numb	<u>er 14561</u>		Issue D	Date: 30/4/	2021
*					COMPETENCI								



GEOTECHNICAL LABORATORIES	GEOTECHNIC ACN : 14 Ravenhall W Email: info@geolab.	CAL LABORATORIES 102 571 077 /ay, Ravenhall, Vic 3023 .com.au PH: (03) 8361-9140
CLIENT: 1152 TAYLORS DEVELOPMENT	DATE: 27/04/2021	JOB No.: 2343/074
LOCATION: Botania, Plumpton Stage 3	OPERATOR: DB	CHECKED: KK
Sketch indicating compaction test locations	SCALE: NTS	FIGURE No: -



1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

REPORT NO.: # 2343/075

LOCATION:

GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

14 Ravenhall Way, Ravenhall, Vic 3023Email: info@geolab.com.auPH: (03) 8361-9140

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
28/04/21	1		2.05	18.5	106.0	1.93	23.0	175	4.5 Drier	80.5	0	0	0
28/04/21	2		2.07	19.5	105.5	1.96	22.5	175	3.0 Drier	86.0	0	0	0
28/04/21	3	Refer to #2343/076 for	2.09	18.5	107.5	ቋ 1.95	23.0	175	4.5 Drier	80.5	3	0	100
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	I	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite	Port 1 3			Compactio	n specimen: 7:30am	s sampled Finish Tim	after com	paction.			
A Hilf Bar	id Co	mpaction test was carried out on	a sample	taken from	each Field	Density loc:	ation to obta	ain the Co	mnaction P	arameters t	abulate	d on this	Benort
, er in ride		npaolion test was carried out on	a sample			Moistu	re Content:	AS 1289	2.1.1		abulato		
Soil Layer	Soil Laver thickness: 200mm Compaction Test: AS 1289 5.7.1 M./												
Hilf Density Ratio and Hilf Moisture Variation ,Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1													
Field Density, Nuclear Gauge: AS 1289 5.8.1 Accredited for compliance with ISO/IEC MICK CROWE								VE					
Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)							esting				(Approv	ved Sign	atory)
▲ Indicates APCWD Accredited Laboratory Number 14561 Issue Date: 30/4/2021							2021						



GEOTECHNICAL LABORATORIES	GEOTECHNIC ACN : 14 Ravenhall W Email: info@geolab.	CAL LABORATORIES 102 571 077 'ay, Ravenhall, Vic 3023 com.au PH: (03) 8361-9140
CLIENT: 1152 TAYLORS DEVELOPMENT	DATE: 28/04/2021	JOB No.: 2343/076
LOCATION: Botania, Plumpton Stage 3	OPERATOR: DB	CHECKED: KK
Sketch indicating compaction test locations	SCALE: NTS	FIGURE No: -



GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/077 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)	
29/04/21	1		2.00	24.5	100.5	⊯ 1.99	23.0	175	1.0 Wette	r 105.5	4	0	0	
29/04/21	2		2.01	24.0	103.5	শ্ব 1.94	24.0	175	0.0 Drier	100.0	4	0	0	
29/04/21	3	Refer to #2343/078 for	1.97	21.5	102.0	1.94	24.5	175	3.0 Drier	88.0	0	0	0	
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	-	-	-	
-	-		-	-	-	-	-	-	-	-	-	-	-	
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	d after com	paction.				
	Test s	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	1:20pm F	-inish Tim	e: 1:55pm					
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction F	arameters	tabulate	d on this	s Report.	
						Moistu	re Content:	AS 1289	2.1.1					
Soil Layer thickness: 200mm Compaction Test: AS 1289 5.7.1 M./														
Hilf Density Ratio and Hilf Moisture Variation ,Hilf Adjusted (APCWD) & Peak (PCWD)						CWD) Conv	erted Wet D	Density AS	6 1289 5.7.	1	<i>' [</i> '	ya		
Field Den	sity, N	uclear Gauge: AS 1289 5.8.1	-			A	1.6 1.				MIC	K CROV	VE	
Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)							<u>Accredited for compliance with ISO/IEC</u> 17025 - Testing (pproved Signatory)		
✤ Indicate	s APC	CWD	,			NATA Acc	redited Labor	atory Numb	per 14561		Issue I	Date: 4/5/2	2021	
AUGREDIED FOR TECHNICAL COMPETENCE														



GEOTECHNICAL LABORATORIES	ACN 14 Ravenhall W Email: info@geolab.	102 571 077 /ay, Ravenhall, Vic 3023 .com.au PH: (03) 8361-9140
CLIENT: 1152 TAYLORS DEVELOPMENT	DATE: 29/04/2021	JOB No.: 2343/078
LOCATION: Botania, Plumpton Stage 3	OPERATOR: SL	CHECKED: KK
Sketch indicating compaction test locations	SCALE: NTS	FIGURE No: -



GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: #	2343/079
LOCATION:	1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATIO FROM OPTIMUN MOISTUR CONTEN (%)	N MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
30/04/21	1		1.97	23.5	104.5	1.88	25.0	175	1.0 Drie	r 95.0	0	0	100
30/04/21	2		1.90	20.0	99.0	1.92	21.0	175	1.0 Drie	r 94.5	0	0	400
30/04/21	3	Refer to #2343/080 for	1.89	23.0	102.0	1.86	26.5	175	3.0 Drie	r 88.0	0	0	500
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye Test s	ey Fill Ex. Onsite/Diggers Rest sites located - Geolab Procedure 4, F	² art 4.4.			Compaction Start Time:	n specimen: 1:40pm	s sampleo Finish Tin	d after cor ne: 2:20pr	paction.			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction	Parameters	tabulate	d on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	la	
Hilf Densi	ty Rat	io and Hilf Moisture Variation ,Hil	CWD) Conv	erted Wet D	Density AS	6 1289 5.7	.1	1	/~~				
Field Den	sity, N	luclear Gauge: AS 1289 5.8.1	Accredited	d for complian	ce with ISO	/IEC		MIC	K CROV	VE			
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(b	NATA	17025 - Testing					(Approv	/ed Sign	atory)		
₽						NATA Acc	redited Labor	atory Numb	er 14561		Issue	Date: 5/5/2	2021
**					COMPETENCE								

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1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

REPORT NO.: # 2343/081

LOCATION:

GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
19/05/21	1		1.87	27.0	98.5	1.90	27.0	175	0.0 Drier	100.0	0	0	200
19/05/21	2		2.05	24.0	106.5	ቋ 1.92	25.0	175	1.0 Drier	96.0	8	0	0
19/05/21	3	Refer to #2343/082 for	2.10	21.5	107.0	∞ 1.96	23.5	175	2.0 Drier	92.0	5	0	0
19/05/21	4	locations.	2.04	23.5	105.5	∞ 1.93	26.0	175	2.5 Drier	89.5	12	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye Test s	y Fill Ex. Onsite ites located - Geolab Procedure 4. F	Part 4.4.			Compaction Start Time:	n specimen: 10:00am	s samplec Finish Tir	l after comp ne: 10:40ai	paction. m			
A Hilf Rap	id Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction P	arameters t	tabulate	d on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	40	
Hilf Density Ratio and Hilf Moisture Variation, Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1													
Field Density, Nuclear Gauge: AS 1289 5.8.1											VE		
Materials	Samp	led : AS 1289 1.2.1 Clause 6.4(k	с)		NAIA	<u> 17025 - T</u>	esting				(Approv	ved Sign	atory)
✤ Indicate	s APC	WD				<u>NATA Acc</u>	redited Labor	atory Numb	<u>er 14561</u>		Issue D	ate: 24/5/	2021





1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

REPORT NO.: # 2343/083

LOCATION:

GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
24/05/21	1		1.92	22.0	100.0	⊮ 1.92	25.0	175	3.0 Drier	88.5	5	0	0
24/05/21	2		1.99	22.5	105.5	1.89	25.5	175	3.0 Drier	88.5	0	0	0
24/05/21	3	Refer to #2343/084 for	2.00	21.5	105.5	1.89	24.5	175	3.0 Drier	87.0	0	0	0
24/05/21	4	locations.	2.01	23.5	103.5	1.94	24.0	175	0.5 Drier	97.0	0	0	0
-	-		-	-	-	-	-	-	-	-	I	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compaction	n specimen:	s sampled	l after comp	paction.			
	Tests	ites located - Geolab Procedure 4, F	² art 4.4.			Start Time:	8.45am		ie: 9:05am				
A Hilf Rap	old Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction P	arameters t	abulate	d on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1			10	
Soil Layer	thicki	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M.	HR	
Hilf Density Ratio and Hilf Moisture Variation, Hilf Adjusted (APCWD) & Peak (PCWD) Converted wet Density AS 1289 5.7.1													
Field Density, Nuclear Gauge: AS 1289 5.8.1 MICK CROWE Accredited for compliance with ISO/IEC MICK CROWE											VE		
Materials Sampled : AS 1289 1.2.1 Clause 6.4(b) (Approved Signatory)										atory)			
✤ Indicate	Indicates APCWD Issue Date: 26/5/2											2021	





GEOTECHNICAL LABORATORIES ACN 102 571 077

REPORT NO.: # 2343/085

14 Ravenhall Way, Ravenhall, Vic 3023Email: info@geolab.com.auPH: (03) 8361-9140

LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

NATA Accredited Laboratory Number 14561

Issue Date: 28/5/2021

VARIATION HILF STANDARD STANDARD FROM FIELD FIELD PROBE DATE DENSITY PCWD OPTIMUM MOISTURE WET WET APPROX, DEPTH TEST WET MOISTURE DEPTH OPTIMUM OF RATIO OR MOISTURE RATIO TEST LOCATION +19mm +37.5mm **BELOW FINISH** CONTENT NUM. DENSITY SETTING MOISTURE TESTS STANDARD CONTENT LEVEL (mm) APCWD (%) (%) (%) (t/m³) (%) (mm) CONTENT (%) (t/m³) (%) (%) 25/05/21 1 1.93 22.0 98.0 ₩ 1.97 24.0175 1.5 Drier 93.0 9 0 0 25/05/21 2 23.5 97.0 2.5 0 0 1.85 1.90 26.0 175 Drier 89.5 0 *Refer to #2343/086 for* 25/05/21 2.00 3 ¥ 1.0 19.5 97.0 2.06 20.5 175 Drier 94.0 6 0 0 approx. test site 3.0 25/05/21 4 1.97 20.0 101.5 ₩ 1.94 23.0 175 Drier 86.5 4 0 0 locations. -_ ---NOTES: Clayey Fill Ex. Onsite Compaction specimens sampled after compaction. Start Time: 8:20am Finish Time: 8:50am Test sites located - Geolab Procedure 4, Part 4.4. A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report. Moisture Content: AS 1289 2.1.1 Soil Layer thickness: 200mm Compaction Test: AS 1289 5.7.1 Hilf Density Ratio and Hilf Moisture Variation, Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1 MICK CROWE Field Density, Nuclear Gauge: AS 1289 5.8.1 Accredited for compliance with ISO/IEC NATA (Approved Signatory) Materials Sampled : AS 1289 1.2.1 Clause 6.4(b) 17025 - Testing

> **TECHNICAL** COMPETENCE

✤ Indicates APCWD

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GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

REPORT NO.: #	2343/087
LOCATION:	1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
26/05/21	1		2.03	26.0	104.0	1.96	24.5	175	1.5 Wetter	105.0	0	0	0
26/05/21	2		2.07	25.5	106.0	1.95	25.5	175	0.0 Drier	100.0	0	0	0
26/05/21	3	Refer to #2343/088 for	1.86	26.5	95.5	ቋ 1.95	26.0	175	0.5 Wetter	101.0	5	0	0
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	d after comp	action.			
	Test s	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	10:20am	Finish Ti	me: 10:40a	m			
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction P	arameters	tabulate	d on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	LQ	
Hilf Density Ratio and Hilf Moisture Variation ,Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1													
Field Density, Nuclear Gauge: AS 1289 5.8.1 Accredited for compliance with ISO/IEC MICK CROWE											VE		
Materials	Samp	led : AS 1289 1.2.1 Clause 6.4(I	o)		NATA	<u>17025 - T</u>	<u>17025 - Testing</u> (Approved Sig					ved Sign	atory)
✤ Indicate	s APC	CWD				<u>NATA Acc</u>	redited Labor	atory Numl	<u>er 14561</u>		Issue E	Date: 28/5/	2021
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GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

REPORT NO.: # 2343/089 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURI CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
27/05/21	1		1.86	19.5	96.0	1.94	22.0	175	2.5 Drie	. 89.0	0	0	0
27/05/21	2		2.02	19.0	103.5	1.95	22.0	175	3.0 Drie	· 87.0	0	0	0
27/05/21	3	Refer to #2343/090 for	2.01	19.0	103.0	1.95	21.0	175	2.0 Drie	90.0	0	0	0
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compactio	n specimen	s sampled	l after com	paction.			
	Test s	sites located - Geolab Procedure 4, F	Part 4.4.			Start Time:	12:15pm	Finish Ti	me: 12:40	om			
A Hilf Rap	id Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	in the Co	mpaction I	Parameters	tabulate	ed on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	LA	
Hilf Density Ratio and Hilf Moisture Variation ,Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1													
Field Density, Nuclear Gauge: AS 1289 5.8.1 Accredited for compliance with ISO/IEC MICK CROWE											VE		
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(b	<u>ee waa 190</u>			(Approved Signatory)							
₩						<u>NATA Acc</u>	credited Labor	atory Numb	er 14561		Issue E	Date: 31/5/	2021





GEOTECHNICAL LABORATORIES ACN 102 571 077

14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au PH: (03) 8361-9140 REPORT NO.: # 2343/091 LOCATION: 1152 TAYLORS DEVELOPMENT - Botania Plumpton Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m ³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
28/05/21	1		1.93	22.0	106.5	1.81	26.0	175	4.5 Drie	83.5	0	0	0
28/05/21	2		1.92	22.0	103.0	1.86	25.0	175	3.0 Drie	87.5	0	0	0
28/05/21	3	Refer to #2343/092 for	2.03	21.5	106.5	1.91	24.0	175	2.5 Drie	89.0	0	0	200
-	-	locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	ey Fill Ex. Onsite				Compaction	n specimen	s sampled	d after com	paction.			
	l est s	sites located - Geolab Procedure 4, I	Part 4.4.			Start Time:	1:15pm	Finish I in	ne: 1:40pm				
A Hilf Rap	oid Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	ain the Co	mpaction I	Parameters	tabulate	ed on this	s Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thick	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	ID	
Hilf Density Ratio and Hilf Moisture Variation, Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1													
Field Density, Nuclear Gauge: AS 1289 5.8.1											K CROV	VE	
Materials	Samo	led : AS 1289 1.2.1 Clause 6 4/I	NATA	<u>Accredited</u> 17025 - T	<u>i for complian</u> esting	ce with ISO	<u>MEC</u>		(Approv	/ed Sign	atory)		
₩.	camp		-,			NATA Acc	redited Labor	atory Numb	per 14561		ا میرود ا	Date: 1/6/2	2021
- *					TECHNICAI COMPETENCI						10000	2410. 1/0/2	





1152 TAYLORS DEVELOPMENT - Botania Plumptom Stage 3

REPORT NO.: # 2343/093

LOCATION:

GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023

									VARIATION				
DATE	TFOT		FIELD	FIELD		PCWD	OPTIMUM	PROBE	FROM	MOISTURE	WET	WET	APPROX. DEPTH
OF	TEST NUM.	TEST LOCATION	WEI DENSITY	CONTENT	RATIO	OR	MOISTURE	SETTING	MOISTURE	RATIO	+19mm	+37.5mm	BELOW FINISH
1512			(t/m³)	(%)	STANDARD (%)	(t/m ³)	(%)	(mm)	CONTENT	(%)	(70)	(70)	
0/00/01			1.07	04.0	101.0	1.05	00.0	475		100.0		0	000
3/06/21	1		1.97	24.0	101.0	1.95	23.0	1/5	0.5 Wetter	103.0	0	0	200
3/06/21	2		2.01	22.5	98.5	ቋ 2.04	22.5	175	0.0 Wetter	101.0	13	0	0
3/06/21	3	<i>Refer to #2343/094 for</i>	2.02	25.0	103.0	∞ 1.97	27.0	175	2.0 Drier	91.5	16	0	0
-	-	approx. test site locations.	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
NOTES:	Claye	y Fill Ex. Onsite	<u></u>			Compactio	n specimen:	s sampled	after comp	paction.		1	
	Test s	ites located - Geolab Procedure 4, F	°art 4.4.			Start Time:	1:10pm	Finish Tim	ne: 1:40pm				
A Hilf Rap	id Co	mpaction test was carried out on	a sample	taken from	each Field	Density loca	ation to obta	in the Co	mpaction P	arameters t	abulate	d on this	Report.
						Moistu	re Content:	AS 1289	2.1.1				
Soil Layer	thickr	ness: 200mm				Compa	action Test:	AS 1289	5.7.1		M	la	
Hilf Density Ratio and Hilf Moisture Variation ,Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1													
Field Density, Nuclear Gauge: AS 1289 5.8.1 Accredited for compliance with ISO/IEC MICK CROWE											VE		
Materials	Samp	led: AS 1289 1.2.1 Clause 6.4(k	<u>17025 - T</u>	esting				(Approv	ved Sign	atory)			
✤ Indicate	s APC	WD			ACCREDITED FOR	<u>NATA Acc</u>	redited Labor	atory Numb	er 14561		Issue I	Date: 4/6/2	2021
*					COMPETENCE								

