

LEVEL ONE

Reference
No.: 2324-086

SURVEILLANCE

AND INSPECTION REPORT

*Carried Out
By*



PREPARED FOR: -

SYMON BROS CONSTRUCTIONS PTY LTD



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Appendix A Construction Drawings

Appendix B Daily Field Compaction Summary Results



Client Name: Symon Bros Constructions Pty Ltd

Project Name: Lucas Estate Stage M1

Date: 21st of April 2022

Author: Mr. Sam Loza

Reference No.: 2324-086

Revision: 0

Project Manager: Mr. Nick Goutzamanis

1. Introduction & Scope

At the request of Symon Bros. Constructions Pty Ltd, Geotechnical Laboratories has carried out inspection and testing of the above-mentioned site from the 21st of June 2021 to the 13th of April 2022 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 Symon Bros. Constructions Pty Ltd and was used to determine compliance of earthworks in conjunction with the requirements of AS 3798 – 2007.

(1) . Fill Layout Plan Drawing No. 18775-207.

General site works involved the placement of fill, using on-site derived clay, to bring the fill region to the required finished levels as indicated on the faceplan drawings.

2. Site Preparation

Site inspections were undertaken on the 16th of June 2021 confirming the selected areas to be filled as highlighted on the cut to fill plan were stripped of topsoil prior to filling.

An initial proof roll was undertaken and subsequently throughout the project duration to identify and rectify any soft areas.

3. Fill Material

It is understood that the fill material used was from on-site excavations, mainly drainage trenches and road boxing.



The fill material is best described as a silty CLAY, brown, pale brown, slightly moist to moist, medium to high plasticity with basalt gravels and occasional cobbles.

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
- A watercart
- A sheepsfoot compactor (815)

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

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 sixteen compaction tests were performed on the fill construction. Results are presented in Appendix B of this report.

6. Testing Frequency

Testing frequencies were in accordance with **AS 3798 - 2007 Table 8.1 for Large Scale 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 hilt density ratio not less than 95 percent of the maximum hilt density value as determined by the Standard Hilt Rapid Compaction Method in accordance with AS 1289 5.7.1.

The specified moisture criteria was a moisture content within the range of -10 percent to +5 percent of the material's optimum moisture content.

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

7. Statement of Compliance

So far as can be determined, Symon Bros. Constructions 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 Symon Bros. Constructions Pty Ltd from the 21st of June 2021 to the 13th of April 2022 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 Symon Bros Constructions 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 Symon Bros. Constructions 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.

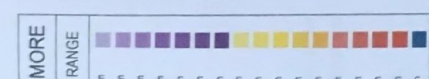


LEVEL ONE
SURVEILLANCE
AND INSPECTION REPORT

APPENDIX A



SURFACE LEVEL
 SURFACE LEVEL
 TITLE BOUNDARY
 EASEMENT
 PROPOSED ROAD KERB & CHANNEL
 EXISTING ROAD AND KERB
 LOT NUMBER & DIRECTION OF NATURAL SURFACE FALL



FOR CONSTRUCTION

CIVIL DRAWING
LOT LEVELS & ABOVE 300mm LAYOUT PLAN

LUCAS ESTATE
RESIDENTIAL SUBDIVISION
STAGE M1 (31 LOTS)



Cardno TGM
1315 Short Street, Ballarat, VIC 3240
Phone: +61 3 5350 8888 Fax: +61 3 5350 8889
Email: info@cardno.com.au

DATE	DRAWN	APPROVED	SCALE	DATE	DATE	DATE
08.11.2020	S.L.	L.D.	SCALE 1:500	SEP 2020	08.11.2020	28.02.2021
04.10.2020	S.L.	-	SLOTAY	AS SHOWN	-	-
01.02.2021	S.L.	-	CARDNO TGM	BEEF SIZE A1	-	-
08.02.2021	R.F.	-	LARA DE KILIN	APPROVED	ROLAND DUNN	-
11.02.2021	R.F.	-	DATE	08.11.2020	DATE	28.02.2021

DATE	DRAWN	APPROVED	SCALE	DATE	DATE	DATE
08.11.2020	S.L.	L.D.	SCALE 1:500	SEP 2020	08.11.2020	28.02.2021
04.10.2020	S.L.	-	SLOTAY	AS SHOWN	-	-
01.02.2021	S.L.	-	CARDNO TGM	BEEF SIZE A1	-	-
08.02.2021	R.F.	-	LARA DE KILIN	APPROVED	ROLAND DUNN	-
11.02.2021	R.F.	-	DATE	08.11.2020	DATE	28.02.2021

DATE	DRAWN	APPROVED	SCALE	DATE	DATE	DATE
08.11.2020	S.L.	L.D.	SCALE 1:500	SEP 2020	08.11.2020	28.02.2021
04.10.2020	S.L.	-	SLOTAY	AS SHOWN	-	-
01.02.2021	S.L.	-	CARDNO TGM	BEEF SIZE A1	-	-
08.02.2021	R.F.	-	LARA DE KILIN	APPROVED	ROLAND DUNN	-
11.02.2021	R.F.	-	DATE	08.11.2020	DATE	28.02.2021



LEVEL ONE
SURVEILLANCE
AND INSPECTION REPORT

APPENDIX B



GEOTECHNICAL LABORATORIES
ACN 102 571 077
 14 Ravenhall Way, Ravenhall, Vic 3023
 Email: info@geolab.com.au PH: (03) 8361-9140

DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 2323/097
 LOCATION: SYMON BROS - Lucas Estate Stage M1

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)
21/06/21	1	<i>Refer to #2323/098 for approx. test site locations.</i>	2.05	26.0	100.5	2.04	26.0	175	0.0 Drier	100.0	0	0	0
21/06/21	2		2.03	25.0	98.5	2.06	25.5	175	0.5 Drier	99.0	0	0	0
21/06/21	3		2.04	26.0	101.5	2.01	25.5	175	0.5 Wetter	101.0	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite Compaction specimens sampled after compaction.
 Test sites located - Geolab Procedure 4, Part 4.4. Start Time: 2:10pm Finish Time: 2:30pm

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
 Compaction Test: AS 1289 5.7.1

Soil Layer thickness: 200mm
 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
 Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)

ACCREDITED FOR TECHNICAL COMPETENCE

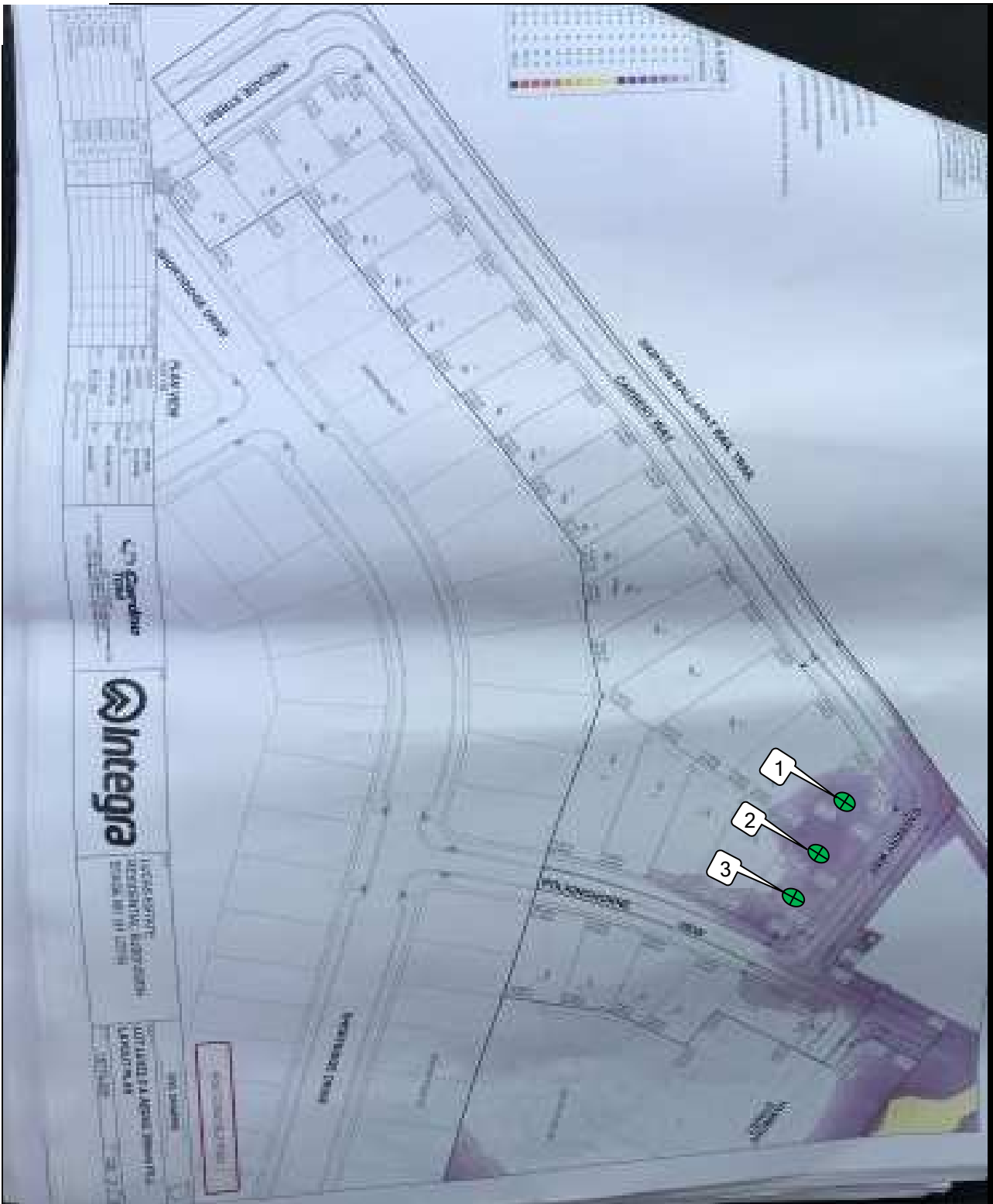
Accredited for compliance with ISO/IEC 17025 - Testing
NATA Accredited Laboratory Number 14561

MICK CROWE
 (Approved Signatory)

 Issue Date: 22/6/2021

❖

❖



**GEOTECHNICAL
LABORATORIES**

GEOTECHNICAL LABORATORIES

ACN 102 571 077

14 Ravenhall Way, Ravenhall, Vic 3023

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

CLIENT: SYMON BROS

LOCATION: Lucas Estate Stage M1

Sketch indicating compaction test locations

DATE 21/06/2021

OPERATOR: TI

SCALE: NTS

JOB No.: 2323/098

CHECKED: KK

FIGURE No: -



**GEOTECHNICAL
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ACN 102 571 077

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

DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 2323/099

LOCATION: SYMON BROS - Lucas Estate, Stage M1

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)	
9/07/21	1	<i>Refer to #2323/100 for approx. test site locations.</i>	1.97	28.5	97.0	2.03	25.5	175	3.0 Wetter	112.0	0	0	0	
9/07/21	2		1.95	30.0	96.5	✱ 2.02	27.0	175	3.0 Wetter	111.5	8	0	0	
9/07/21	3		1.90	31.5	96.5	1.98	28.5	175	3.5 Wetter	112.0	0	0	0	
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Compaction specimens sampled after compaction.

Test sites located - Geolab Procedure 4, Part 4.4.

Start Time: 10:45am Finish Time: 12:00pm

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

Compaction Test: AS 1289 5.7.1

Soil Layer thickness: 200mm

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

Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)

✱ Indicates APCWD

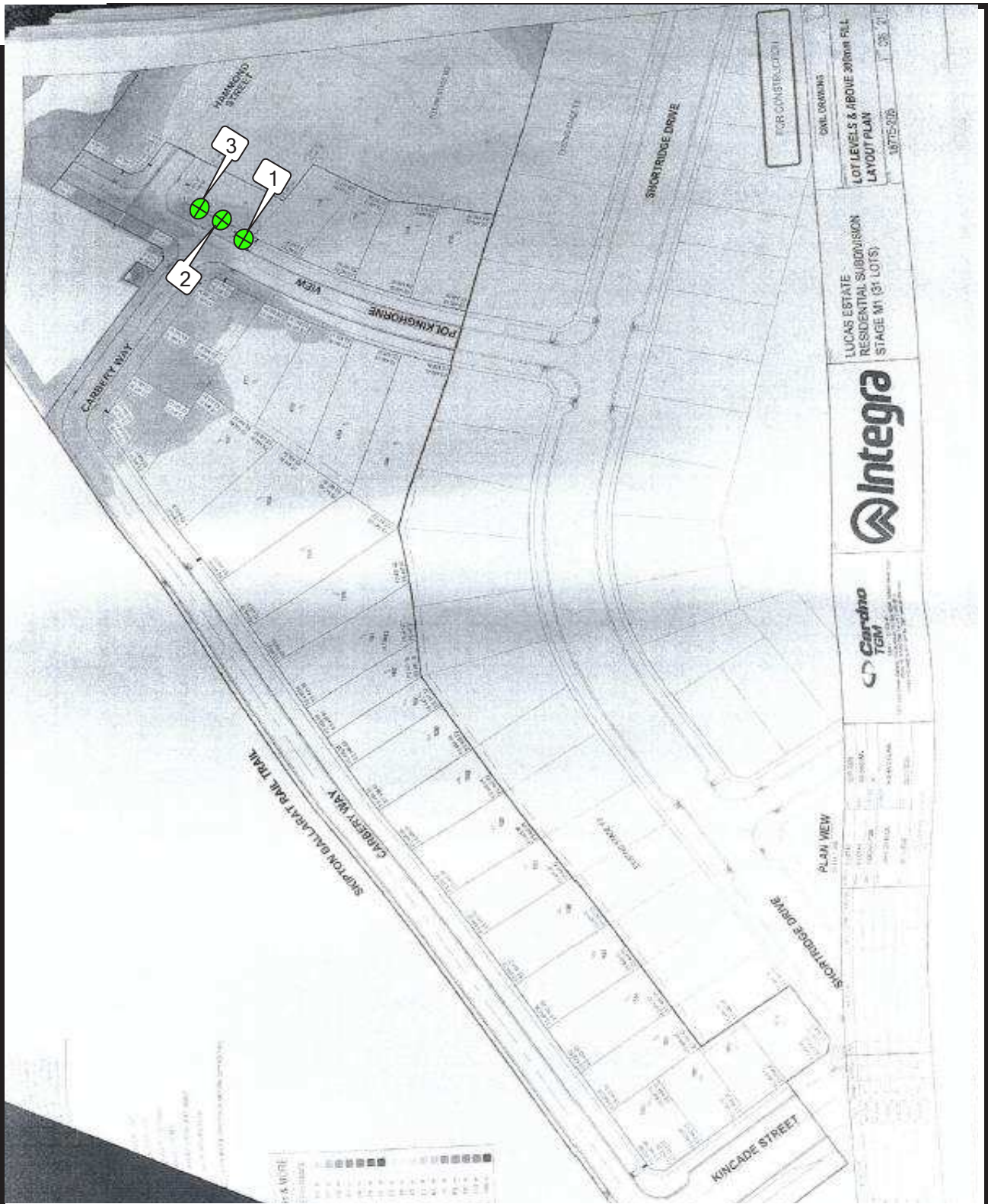


Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 14/7/2021



**GEOTECHNICAL
LABORATORIES**

GEOTECHNICAL LABORATORIES

ACN 102 571 077

14 Ravenhall Way, Ravenhall, Vic 3023

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

CLIENT: SYMON BROS

LOCATION: Lucas Estate Stage M1

Sketch indicating compaction test locations

DATE: 9/07/2021

OPERATOR: TC

SCALE: NTS

JOB No.: 2323/100

CHECKED: KK

FIGURE No: -

DAILY SUMMARY - FIELD DENSITY TESTS

 REPORT NO.: # 2323/153

 LOCATION: SYMON BROS - Lucas, Stage M2

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)
15/02/22	1	<i>Refer to #2323/154 for approx. test site locations.</i>	2.07	17.5	98.5	2.09	21.0	175	3.0 Drier	85.5	0	0	0
15/02/22	2		2.11	17.5	98.5	2.15	18.0	175	0.5 Drier	97.5	0	0	0
15/02/22	3		2.18	16.5	102.5	2.13	17.5	175	1.5 Drier	92.0	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 11:00am Finish Time: 11:35am

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

Compaction Test: AS 1289 5.7.1

Soil Layer thickness: 200mm

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

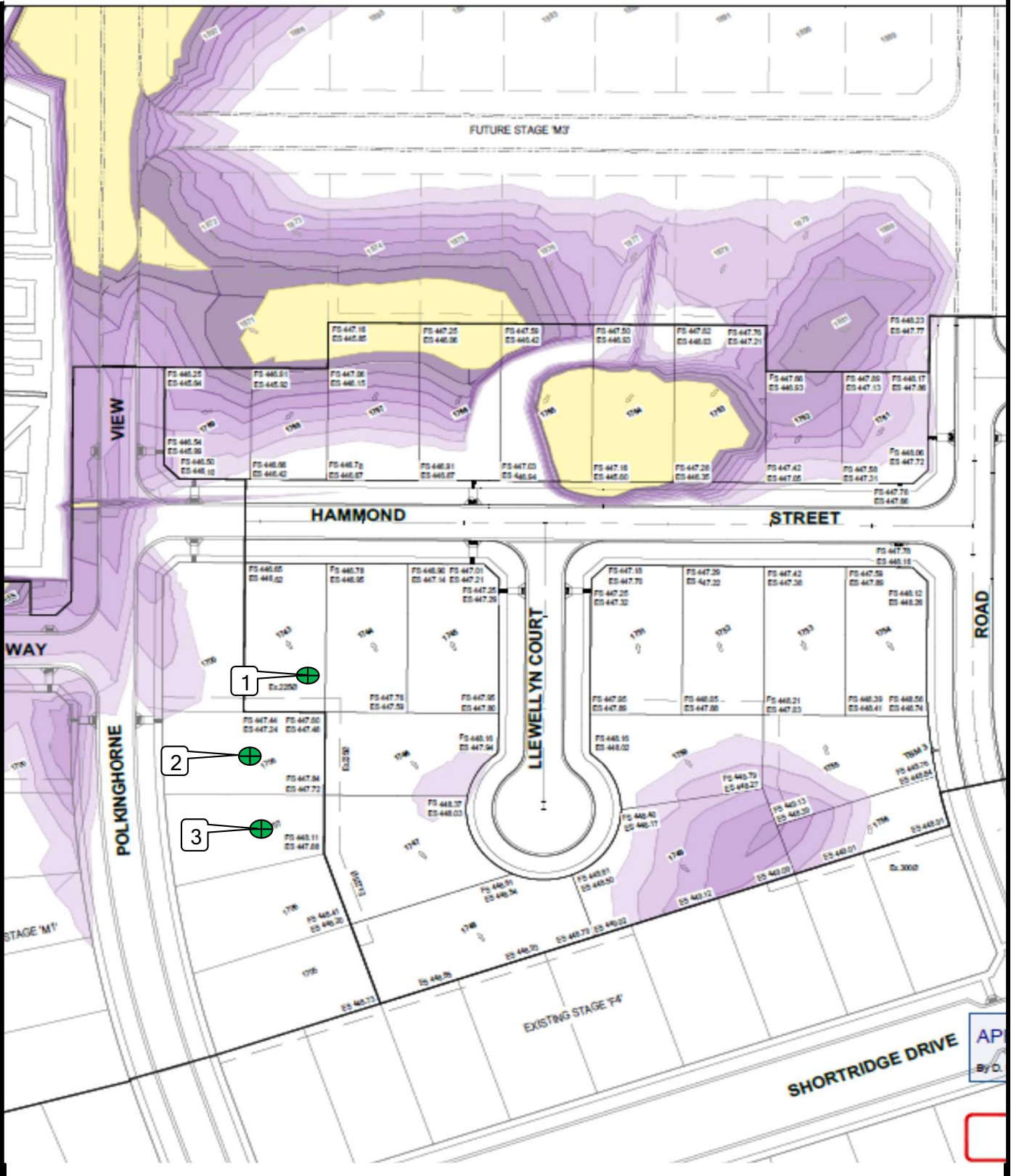
Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)


 Accredited for compliance with ISO/IEC
 17025 - Testing

NATA Accredited Laboratory Number 14561


MICK CROWE
 (Approved Signatory)

Issue Date: 21/2/2022



**GEOTECHNICAL
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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

CLIENT: SYMON BROS
LOCATION: Lucas Estate Stage M2
Sketch indicating compaction test locations

DATE: 15/02/2022
OPERATOR: BM
SCALE: NTS

JOB No.: 2323/154
CHECKED: KK
FIGURE No: -



GEOTECHNICAL LABORATORIES
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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 2323/157

LOCATION: SYMON BROS - Lucas, Stage M1

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)	
18/02/22	1	<i>Refer to #2323/158 for approx. test site locations.</i>	2.17	19.5	104.5	2.08	19.5	175	0.0 Wetter	101.0	0	0	300	
18/02/22	2		1.98	22.0	98.0	2.02	21.5	175	0.5 Wetter	103.5	0	0	500	
18/02/22	3		1.88	33.5	99.5	1.89	30.0	175	3.5 Wetter	111.5	0	0	300	
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 2:00pm Finish Time: 2:40pm

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

Compaction Test: AS 1289 5.7.1

Soil Layer thickness: 200mm

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

Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)

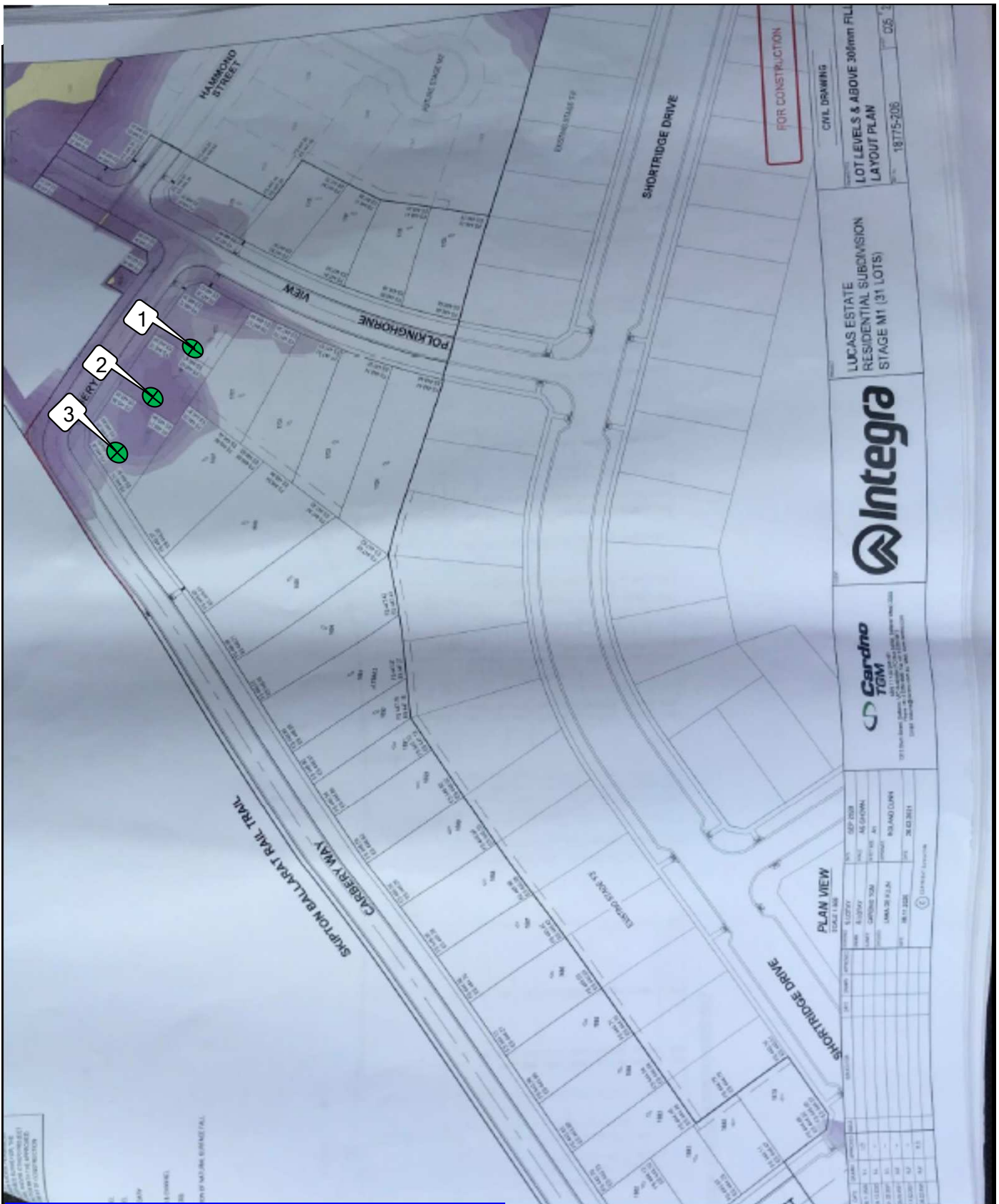


*Accredited for compliance with ISO/IEC
 17025 - Testing*

NATA Accredited Laboratory Number 14561

MICK CROWE
 (Approved Signatory)

Issue Date: 25/2/2022



GEOTECHNICAL LABORATORIES

GEOTECHNICAL LABORATORIES

ACN 102 571 077

14 Ravenhall Way, Ravenhall, Vic 3023

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

CLIENT: SYMON BROS

LOCATION: Lucas Estate Stage M1

Sketch indicating compaction test locations

DATE: 18/02/2022

OPERATOR: DB

SCALE: NTS

JOB No.: 2323/158

CHECKED: KK

FIGURE No: -



GEOTECHNICAL LABORATORIES
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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 2323/159

LOCATION: SYMON BROS - Lucas Estate, Stage M1

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)
21/02/22	1	<i>Refer to #2323/160 for approx. test site locations.</i>	2.09	17.5	98.5	2.13	17.0	175	0.0 Wetter	101.5	0	0	100
21/02/22	2		2.07	16.0	96.0	2.16	16.0	175	0.0 Wetter	101.5	0	0	100
21/02/22	3		2.07	16.0	96.0	2.15	16.0	175	0.0 Wetter	101.5	0	0	100
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 2:20pm Finish Time: 3:10pm

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

Compaction Test: AS 1289 5.7.1

Soil Layer thickness: 200mm

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

Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)

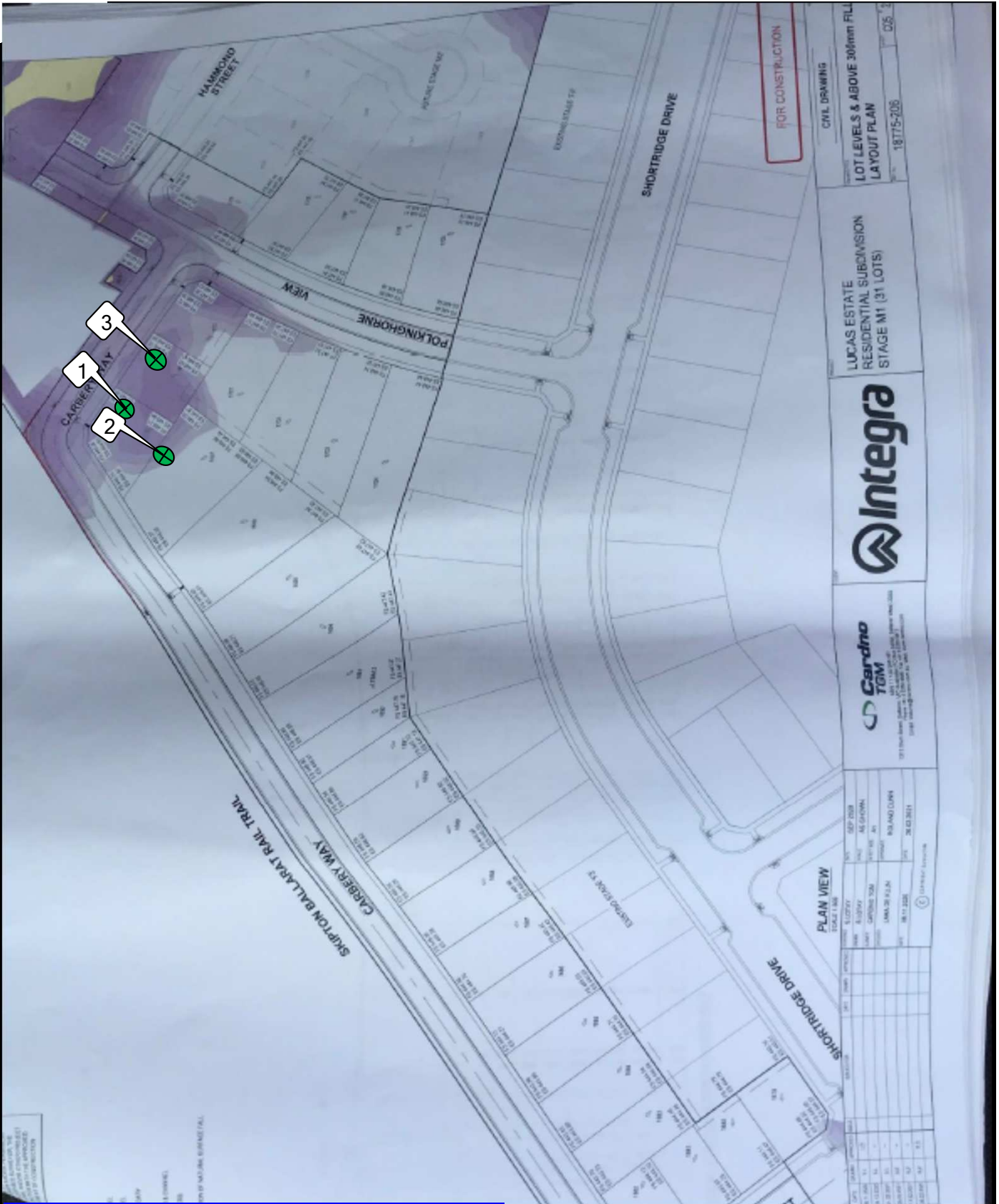


*Accredited for compliance with ISO/IEC
17025 - Testing*

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 28/2/2022



**GEOTECHNICAL
LABORATORIES**

GEOTECHNICAL LABORATORIES

ACN 102 571 077

14 Ravenhall Way, Ravenhall, Vic 3023

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

CLIENT: SYMON BROS

LOCATION: Lucas Estate Stage M1

Sketch indicating compaction test locations

DATE: 21/02/2022

OPERATOR: BM

SCALE: NTS

JOB No.: 2323/160

CHECKED: KK

FIGURE No: -



GEOTECHNICAL LABORATORIES
 ACN 102 571 077
 14 Ravenhall Way, Ravenhall, Vic 3023
 Email: info@geolab.com.au PH: (03) 8361-9140

DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 2323/161

LOCATION: SYMON BROS - Lucas Estate, Stage M1

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)	
22/02/22	1	<i>Refer to #2323/162 for approx. test site locations.</i>	2.08	16.5	96.5	2.16	16.5	175	0.0 Drier	98.5	0	0	0	
22/02/22	2		2.17	20.5	99.5	2.18	18.5	175	2.0 Wetter	110.5	0	0	0	
22/02/22	3		2.12	19.5	98.0	2.16	18.5	175	1.0 Wetter	105.0	0	0	0	
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 2:10pm Finish Time: 2:45pm

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

Compaction Test: AS 1289 5.7.1

Soil Layer thickness: 200mm

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

Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)

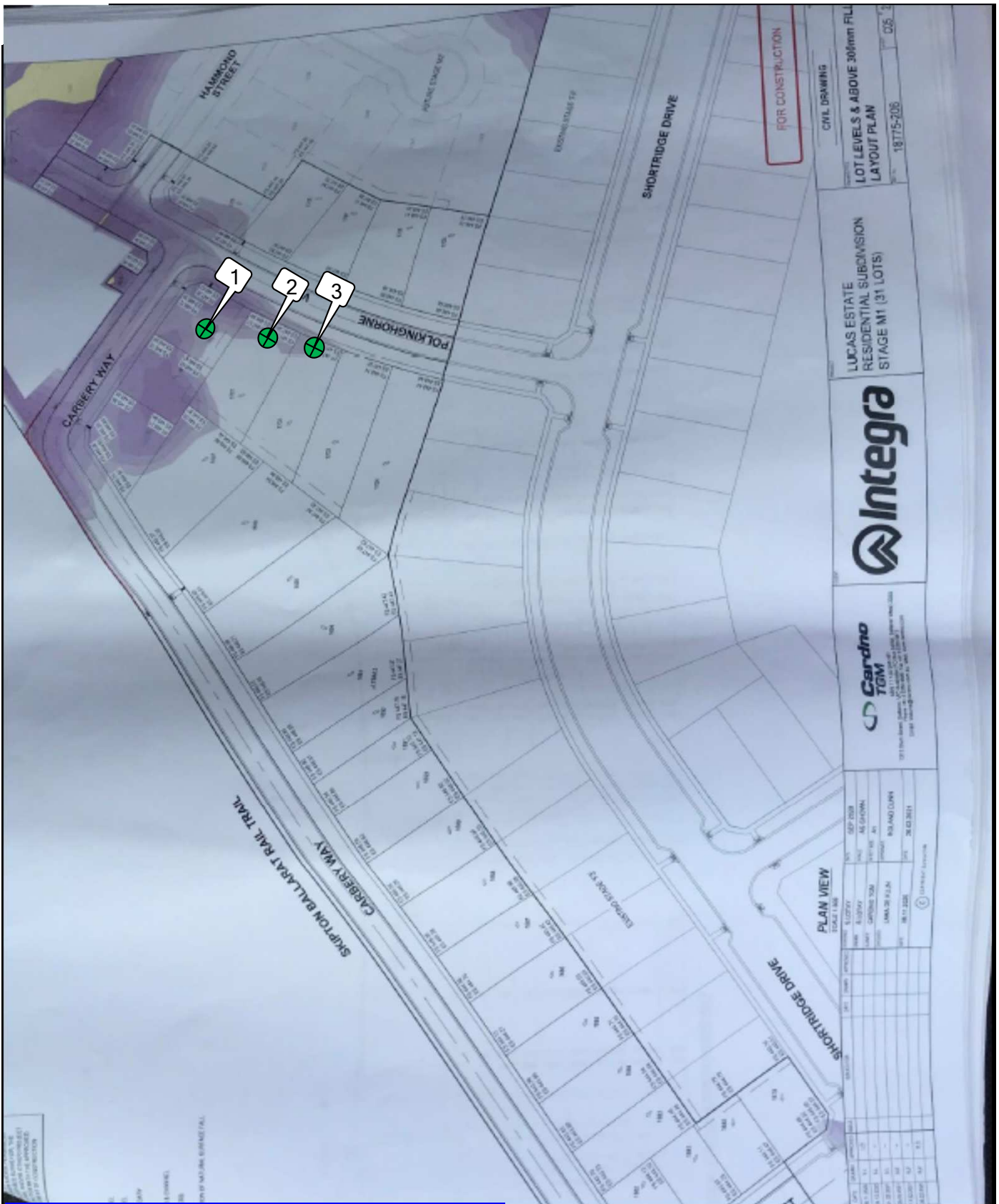


Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 28/2/2022



GEOTECHNICAL LABORATORIES

GEOTECHNICAL LABORATORIES

ACN 102 571 077

14 Ravenhall Way, Ravenhall, Vic 3023

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

CLIENT: SYMON BROS

DATE: 22/02/2022

JOB No.: 2323/162

LOCATION: Lucas Estate Stage M1

OPERATOR: BM

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

DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 2323/221

LOCATION: SYMON BROS - Lucas Estate - Stage M1

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)	
13/04/22	1	<i>Refer to #2323/222 for approx. test site locations.</i>	2.06	25.0	107.5	1.92	26.5	175	1.5 Drier	94.5	0	0	400	
13/04/22	2		2.05	26.5	104.5	1.96	26.5	175	0.5 Wetter	101.0	0	0	200	
13/04/22	3		2.03	29.0	103.0	1.98	27.0	175	2.0 Wetter	107.5	0	0	0	
-	-		-	-	-	-	-	-	-	-	-	-	-	-
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NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.3.

Compaction specimens sampled after compaction.

Start Time: 12:10pm Finish Time: 1:50pm

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

Compaction Test: AS 1289 5.7.1

Soil Layer thickness: 200mm

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

Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)

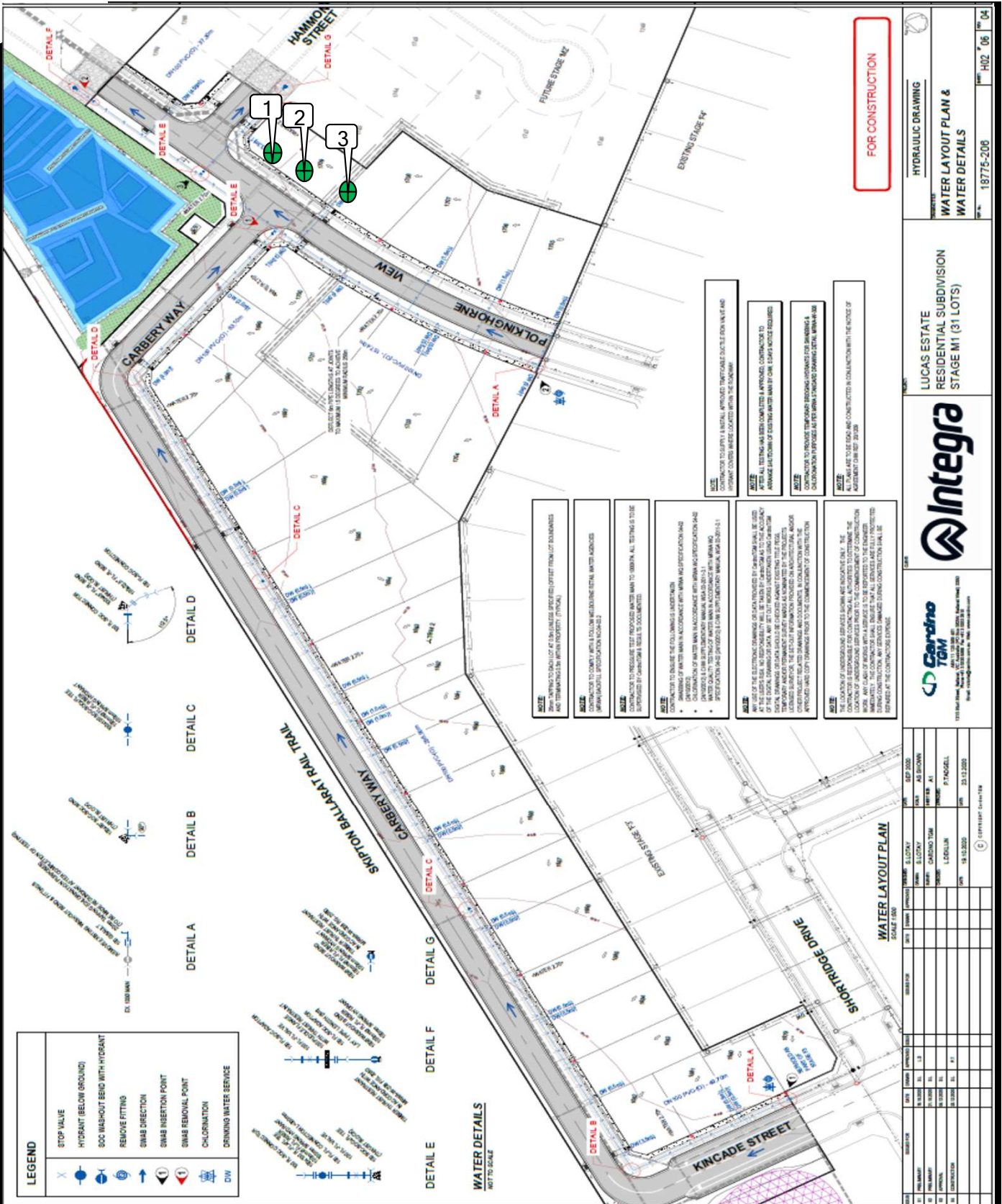


Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 20/4/2022



GEOTECHNICAL LABORATORIES

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CLIENT: SYMON BROS

LOCATION: Lucas Estate Stage M1

Sketch indicating compaction test locations

DATE: 13/04/2022

JOB No.: 2323/222

OPERATOR: VN

CHECKED: DM

SCALE: NTS

FIGURE No: -

DATE: 13/04/2022 DRAWN: SYLVAIN CHECKED: AS BROWN PROJECT: AT CLIENT: SYMON BROS PROJECT: LUCAS ESTATE DATE: 23/12/2021	SCALE: 1:500 DRAWN: SYLVAIN CHECKED: AS BROWN PROJECT: AT CLIENT: SYMON BROS PROJECT: LUCAS ESTATE DATE: 23/12/2021	PROJECT: LUCAS ESTATE RESIDENTIAL SUBDIVISION STAGE M1 (31 LOTS)	DRAWING NO: 18775-208 REV: H02_06 OF: 04