WOODSONG ESTATE - STAGE 4

Level One Report

Winslow Constructors Pty Ltd

P242092

4th September 2025

Pearce Geotech Pty Ltd ABN 96 155 312 879
23 Nobility Street, Moolap, VIC 3221 Australia
Ph: 03 5248 7887

4th September 2025

Winslow Constructors Pty Ltd
Level 1, 6 English Street
Essendon Fields, VIC, 3041

Attention: Michael Di Martino

Dear Michael

RE: Woodsong Estate - Stage 4

Level 1 Compaction Control

This letter presents a report by Pearce Geotech Pty Ltd (PG) on Level 1 Testing Services undertaken during the construction of fill at Woodsong Estate - Stage 4. One electronic copy provided.

Please do not hesitate to contact the undersigned should there be any queries regarding this report.

For and on behalf of Pearce Geotech Pty Ltd

Regards

Mitch Francis

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The leading provider of construction material testing in Australia

CONTENTS

Appendices:

1 INTRODUCTION

This report presents the results of compaction control and laboratory testing services provided by Pearce Geotech Pty Ltd (PG) during the construction of fill at Woodsong Estate - Stage 4.

PG was engaged by Winslow Constructors Pty Ltd to provide Level 1 testing services for the duration of these works in accordance with the project specification. The work was commissioned by Mr Michael Di Martino of Winslow Constructors.

Level 1 testing, as defined in AS3798-2007 “Guidelines on Earthworks for Commercial and Residential Development”, provides for full-time inspection of the construction of controlled fill and compaction testing in accordance with AS1289 “Methods of Testing Soils for Engineering Purposes”. The Level 1 testing was undertaken by technicians from PG on the 3rd of September 2024 and the 19th of August 2025.

2 SCOPE OF WORK

2.1 Area of Work

PG provided testing and supervision of fill placed for the dates shown in Table 4.2.1. Conditioning and placement methodology was observed by experienced PG technicians during the period of works. The testing locations were chosen randomly by PG technicians within the relevant work areas. Additionally, spot checks for density and moisture were conducted to provide feedback to ground staff during the construction of fill.

This report does not include fill other than where mentioned in this report or any other fill that may be placed during this period or subsequent periods at or surrounding the subject site. Maintenance and protection of the fill is the obligation of the contractor and PG takes no responsibility for the state of works outside the dates shown under Table 4.2.1 which may be influenced by weather events or continued work on the subject site.

2.2 Placement Specification

While no earthworks specification was supplied, the fill placement and testing requirements for the structural fill were derived from AS 3798 “Guidelines on earthworks for commercial and residential developments” – Table 5.1, with the minimum density ratio as item One (1) below;

TABLE 5.1

MINIMUM RELATIVE COMPACTION

Item	Application	Minimum relative compaction, %	
		Minimum density ratio (at standard compactive effort) (Cohesive soils) (see Note 1)	Minimum density index (Cohesionless soils) (see Note 2)
1	Residential—lot, fill, house, sites	95 (see Note 3)	70
2	Commercial—fills to support minor loadings, including floor loadings of up to 20 kPa and isolated pad or strip footings to 100 kPa	98 (see Note 4)	75
3	Fill to support pavements (see Note 5)		
	(a) General fill	95	70
	(b) Subgrade (to a depth of 0.3 m)	98	75

3 CONSTRUCTION PLANT

The following construction plant was used on site as required:

- 1 x Excavator
- 1 x Grader
- 1 x Compactor
- 1 x Pad Foot Roller
- 1 x Water Cart
- Dump Trucks as required

4 INSPECTION AND TESTING

4.1 Construction Materials

Clay was used as fill for this project.

Fill material was sourced from:

- Site won

Pearce Geotech was not involved in the selection of fill material. All fill material was spread, watered and compacted to achieve the specified compaction control requirements.

4.2 Fill Placement

Initial site inspection showed areas of existing fill as per the attached site plan. These areas were subsequently inspected and proof rolled to confirm adherence to the specification.

Compaction tests and a proof roll were conducted on each tested layer of compacted fill to ensure compliance with the specification and samples of the fill material were tested in PG's NATA accredited laboratory (Accreditation Number 18877) to determine the Hilf density ratio and moisture ratio of the material. In total 10 field density tests, 10 Hilf rapid compaction tests and 10 moisture contents were conducted.

Control Fill material was placed by dump truck, spread by grader, simultaneously water conditioned wherever required and compacted. Where the material appeared too wet, dry soil was mixed in and processed to a homogenous state.

4.2.1 Test Summary

Field No.	Date	Location	Layer	Min. Ratio [%]	Density Ratio [%]
24-31006A	3/09/2024	Refer to Plan	FSL	95% Std	99.0
24-31006B	3/09/2024	Refer to Plan	FSL	95% Std	98.0
24-31006C	3/09/2024	Refer to Plan	FSL	95% Std	100.0
24-31006D	3/09/2024	Refer to Plan	FSL	95% Std	98.5
24-31006E	3/09/2024	Refer to Plan	FSL	95% Std	101.0
24-31006F	3/09/2024	Refer to Plan	FSL	95% Std	102.5
24-31006G	3/09/2024	Refer to Plan	FSL	95% Std	100.5
25-35403A	19/08/2025	Refer to Plan	FSL	95% Std	102.5
25-35403B	19/08/2025	Refer to Plan	FSL	95% Std	101.5
25-35403C	19/08/2025	Refer to Plan	FSL	95% Std	102.0

5 STATEMENT OF COMPLIANCE

PG personnel have provided Level 1 inspection and testing services during construction of the fill at Woodsong Estate - Stage 4. A technician from PG was on site on a fulltime basis during fill placement and observed the construction techniques adopted.

Based on these observations made by PG personnel and the results of field and laboratory tests, we consider that the fill has been placed in accordance with the intent of the specification.

For and on behalf of Pearce Geotech Pty Ltd

Regards

Mitch Francis
B.Eng. Civil (Hons)
Pearce Geotech

Appendix A

Test Results

Material Test Report

Pearce Geotech Pty Ltd
23 Nobility Street Moolap VIC 3221
Phone: (03) 5248 7887
Email: Mitch@pgeo.com.au

Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Mitch Francis
Laboratory Manager
NATA Accredited Laboratory Number: 18877

Report Number: **P242092-1**
Issue Number: 2 - *This version supersedes all previous issues*
Reissue Reason: *Layer amended*
Date Issued: 02/09/2025
Client: Winslow Constructors Pty Ltd
Level 1, 6 English Street, Essendon Fields Vic 3041
Project Number: P242092
Project Name: Woodsong Estate - Stage 4
Project Location: Olivers Road, Mickleham
Client Reference: WC403436
Work Request: 31006
Date Sampled: 03/09/2024
Dates Tested: 10/09/2024 - 12/09/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Remarks: TRN 13935
Specification: 98% Standard
Location: TRN 13935
Material: Clay
Material Source: Site Won

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	24-31006A	24-31006B	24-31006C	24-31006D
Date Tested	03/09/2024	03/09/2024	03/09/2024	03/09/2024
Time Tested	13:40	13:44	13:50	13:53
Test Request #/Location	Lot 401	Lot 402	Lot 403	Lot 404
Layer / Reduced Level	FSL	FSL	FSL	FSL
Thickness of Layer (mm)	200	200	200	200
Soil Description	Clay	Clay	Clay	Clay
Test Depth (mm)	175	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	11	7	10	5
Field Wet Density (FWD) t/m^3	1.96	1.91	1.95	1.91
Field Moisture Content %	18.8	19.0	19.9	19.2
Field Dry Density (FDD) t/m^3	1.65	1.61	1.63	1.61
Peak Converted Wet Density t/m^3	**	**	**	**
Adjusted Peak Converted Wet Density t/m^3	1.97	1.95	1.95	1.94
Moisture Variation (Wv) %	**	**	**	**
Adjusted Moisture Variation %	0.5	0.0	0.0	0.0
Hilf Density Ratio (%)	**99.0**	**98.0**	**100.0**	**98.5**
Compaction Method	**Standard**	**Standard**	**Standard**	**Standard**
Report Remarks	**	**	**	**

Moisture Variation Note:
Positive values = test is dry of OMC
Negative values = test is wet of OMC

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Client: Winslow Constructors Pty Ltd
Level 1, 6 English Street, Essendon Fields Vic 3041
Project Number: P242092
Project Name: Woodsong Estate - Stage 4
Project Location: Olivers Road, Mickleham
Client Reference: WC403436
Work Request: 31006
Date Sampled: 03/09/2024
Dates Tested: 10/09/2024 - 12/09/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Remarks: TRN 13935
Specification: 98% Standard
Location: TRN 13935
Material: Clay
Material Source: Site Won

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	24-31006E	24-31006F	24-31006G	
Date Tested	03/09/2024	03/09/2024	03/09/2024	
Time Tested	13:57	14:00	14:04	
Test Request #/Location	Lot 405	Reserve Road	Reserve Road	
Layer / Reduced Level	FSL	FSL	FSL	
Thickness of Layer (mm)	200	200	200	
Soil Description	Clay	Clay	Clay	
Test Depth (mm)	175	175	175	
Sieve used to determine oversize (mm)	19.0	19.0	19.0	
Percentage of Wet Oversize (%)	13	12	10	
Field Wet Density (FWD) t/m^3	2.01	2.03	1.99	
Field Moisture Content %	19.0	18.5	19.2	
Field Dry Density (FDD) t/m^3	1.69	1.71	1.67	
Peak Converted Wet Density t/m^3	**	**	**	
Adjusted Peak Converted Wet Density t/m^3	1.99	1.98	1.98	
Moisture Variation (Wv) %	**	**	**	
Adjusted Moisture Variation %	0.0	0.0	0.0	
Hilf Density Ratio (%)	**101.0**	**102.5**	**100.5**	
Compaction Method	**Standard**	**Standard**	**Standard**	
Report Remarks	**	**	**	

Moisture Variation Note:
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Material Test Report

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Approved Signatory: Mitch Francis
Laboratory Manager
NATA Accredited Laboratory Number: 18877

Report Number: **P242092-2**
Issue Number: 1
Date Issued: 02/09/2025
Client: Winslow Constructors Pty Ltd
Level 1, 6 English Street, Essendon Fields Vic 3041
Contact: Michael Di Martino
Project Number: P242092
Project Name: Woodsong Estate - Stage 4
Project Location: Olivers Road, Mickleham
Client Reference: WC403436
Work Request: 35403
Date Sampled: 19/08/2025 14:00
Dates Tested: 19/08/2025 - 29/08/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 98% Standard
Location: 220 Olivers Rd - Mickleham 3064
Material: Clay
Material Source: Insitu

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	25-35403A	25-35403B	25-35403C
Date Tested	19/08/2025	19/08/2025	19/08/2025
Time Tested	14:30	14:40	14:50
Test Request #/Location	Lot 417	Lot 421	Lot 419
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	300	300	300
Soil Description	Gravelly Clay	Gravelly Clay	Gravelly Clay
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	3	1	4
Field Wet Density (FWD) t/m^3	2.23	2.24	2.22
Field Moisture Content %	12.6	13.3	11.1
Field Dry Density (FDD) t/m^3	1.98	1.98	2.00
Peak Converted Wet Density t/m^3	**	**	**
Adjusted Peak Converted Wet Density t/m^3	2.18	2.21	2.18
Moisture Variation (Wv) %	**	**	**
Adjusted Moisture Variation %	-1.0	-1.0	0.5
Hilf Density Ratio (%)	**102.5**	**101.5**	**102.0**
Compaction Method	**Standard**	**Standard**	**Standard**
Remarks	**	**	**

Moisture Variation Note:
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Pearce Geotech

CLIENT NAME:
Winslow Constructors Pty Ltd

PROJECT NAME:
Woodsong Estate - Stage 4

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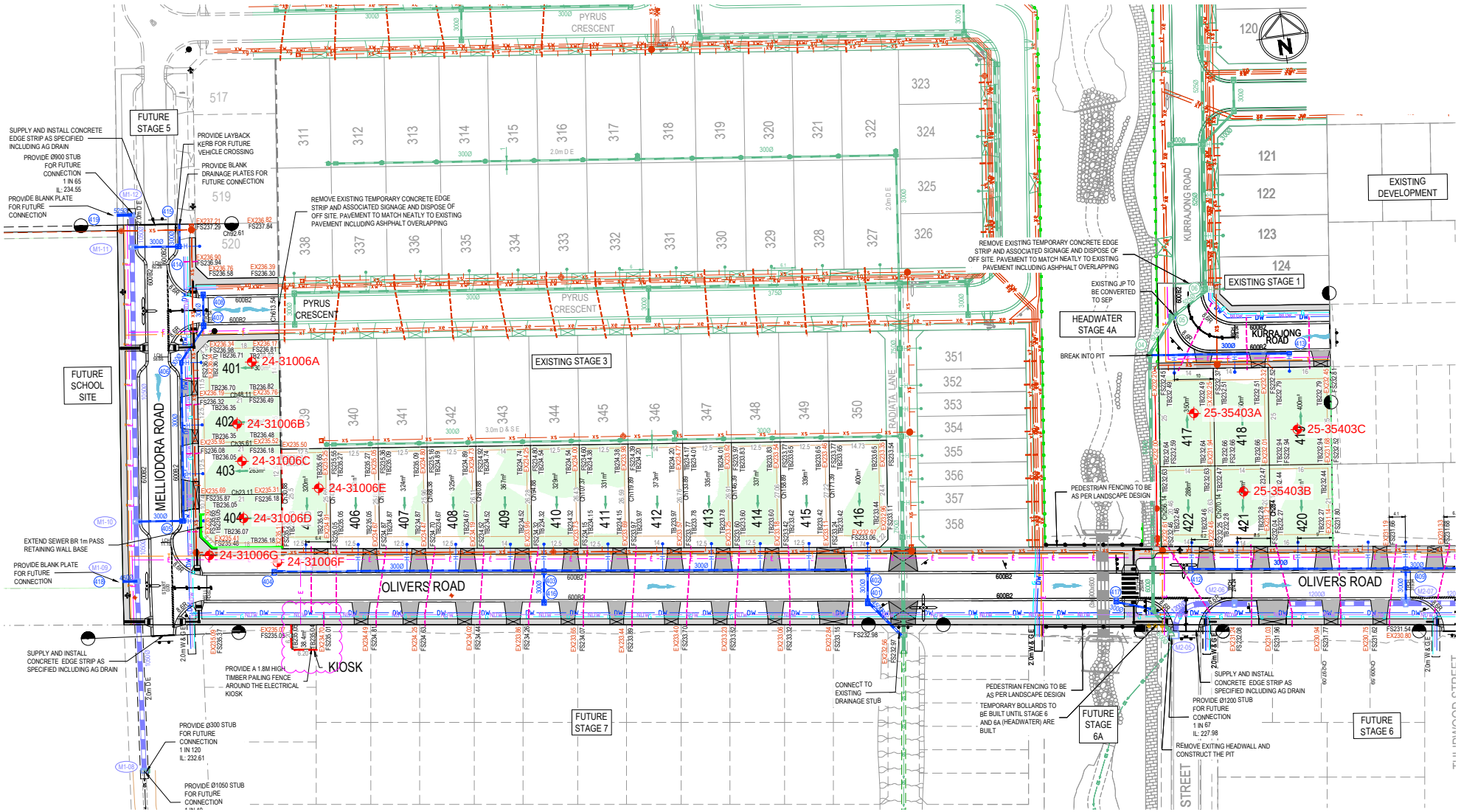

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Approved Signatory: Mitch Francis
Laboratory Manager
NATA Accredited Laboratory Number: 18877

Report Number: **P242092-5**
Issue Number: 2 - *This version supersedes all previous issues*
Reissue Reason: *Constant mass added*
Date Issued: 17/11/2025
Client: Winslow Constructors Pty Ltd
Level 1, 6 English Street, Essendon Fields Vic 3041
Contact: Michael Di Martino
Project Number: P242092
Project Name: Woodsong Estate - Stage 4
Project Location: Olivers Road, Mickleham
Client Reference: WC403436
Work Request: 36133
Date Sampled: 13/10/2025
Dates Tested: 13/10/2025 - 13/10/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Location: TRN 20258
Material: Clay
Material Source: Insitu

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1					
Sample Number	25-36133A	25-36133B	25-36133C	25-36133D	25-36133E
Date Tested	13/10/2025	13/10/2025	13/10/2025	13/10/2025	13/10/2025
Time Tested	10:13	10:18	10:25	10:30	10:38
Test Request #/Location	TRN 20258 Lot 407	TRN 20258 Lot 408	TRN 20258 Lot 409	TRN 20258 Lot 410	TRN 20258 Lot 410
Layer / Reduced Level	FSL	FSL	FSL	FSL	FSL
Thickness of Layer (mm)	200	200	200	200	200
Soil Description	Clay	Clay	Clay	Clay	Clay
Test Depth (mm)	175	175	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0	0
Field Wet Density (FWD) t/m^3	2.02	2.12	2.11	1.96	2.06
Field Moisture Content %	21.0	20.5	20.2	21.0	21.5
Field Dry Density (FDD) t/m^3	1.67	1.76	1.75	1.62	1.69
Peak Converted Wet Density t/m^3	1.95	2.04	2.01	1.91	1.97
Adjusted Peak Converted Wet Density t/m^3	**	**	**	**	**
Moisture Variation (Wv) %	0.5	0.5	0.0	1.5	2.5
Adjusted Moisture Variation %	**	**	**	**	**
Hilf Density Ratio (%)	**103.5**	**104.0**	**105.0**	**103.0**	**104.5**
Compaction Method	**Standard**	**Standard**	**Standard**	**Standard**	**Standard**
Remarks	**	**	**	**	**

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Reissue Reason: *Constant mass added*
Date Issued: 17/11/2025
Client: Winslow Constructors Pty Ltd
Level 1, 6 English Street, Essendon Fields Vic 3041
Contact: Michael Di Martino
Project Number: P242092
Project Name: Woodsong Estate - Stage 4
Project Location: Olivers Road, Mickleham
Client Reference: WC403436
Work Request: 36133
Date Sampled: 13/10/2025
Dates Tested: 13/10/2025 - 13/10/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Location: TRN 20258
Material: Clay
Material Source: Insitu

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1					
Sample Number	25-36133F	25-36133G	25-36133H	25-36133I	25-36133J
Date Tested	13/10/2025	13/10/2025	13/10/2025	13/10/2025	13/10/2025
Time Tested	10:45	10:52	11:01	11:09	11:15
Test Request #/Location	TRN 20258 Lot 411	TRN 20258 Lot 411	TRN 20258 Lot 413	TRN 20258 Lot 414	TRN 20258 Lot 416
Layer / Reduced Level	FSL	FSL	FSL	FSL	FSL
Thickness of Layer (mm)	200	200	200	200	200
Soil Description	Clay	Clay	Clay	Clay	Clay
Test Depth (mm)	175	175	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0	0
Field Wet Density (FWD) t/m^3	1.93	1.96	1.99	1.99	2.05
Field Moisture Content %	22.2	20.8	19.2	20.2	21.2
Field Dry Density (FDD) t/m^3	1.58	1.62	1.67	1.66	1.69
Peak Converted Wet Density t/m^3	1.96	1.93	1.96	1.93	1.95
Adjusted Peak Converted Wet Density t/m^3	**	**	**	**	**
Moisture Variation (Wv) %	0.0	0.5	1.5	1.5	-2.0
Adjusted Moisture Variation %	**	**	**	**	**
Hilf Density Ratio (%)	**98.5**	**101.0**	**102.0**	**103.5**	**104.5**
Compaction Method	**Standard**	**Standard**	**Standard**	**Standard**	**Standard**
Remarks	**	**	**	**	**

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Material Test Report

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Contact: Michael Di Martino
Project Number: P242092
Project Name: Woodsong Estate - Stage 4
Project Location: Olivers Road, Mickleham
Client Reference: WC403436
Work Request: 36133
Date Sampled: 13/10/2025
Dates Tested: 13/10/2025 - 13/10/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Location: TRN 20258
Material: Clay
Material Source: Insitu

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1					
Sample Number	25-36133K	25-36133L	25-36133M		
Date Tested	13/10/2025	13/10/2025	13/10/2025		
Time Tested	11:20	11:26	11:33		
Test Request #/Location	TRN 20258 Lot 418	TRN 20258 Lot 420	TRN 20258 Lot 422		
Layer / Reduced Level	FSL	FSL	FSL		
Thickness of Layer (mm)	200	200	200		
Soil Description	Clay	Clay	Clay		
Test Depth (mm)	175	175	175		
Sieve used to determine oversize (mm)	19.0	19.0	19.0		
Percentage of Wet Oversize (%)	5	5	7		
Field Wet Density (FWD) t/m^3	2.05	2.06	2.20		
Field Moisture Content %	20.1	19.8	19.2		
Field Dry Density (FDD) t/m^3	1.70	1.72	1.84		
Peak Converted Wet Density t/m^3	**	**	**		
Adjusted Peak Converted Wet Density t/m^3	2.00	1.99	2.06		
Moisture Variation (Wv) %	**	**	**		
Adjusted Moisture Variation %	-2.0	1.5	1.5		
Hilf Density Ratio (%)	**102.5**	**103.5**	**107.0**		
Compaction Method	**Standard**	**Standard**	**Standard**		
Remarks	**	**	**		

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Pearce Geotech

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