



Australian Geotechnical Testing

Level One Inspection and Testing

Project No: 21387

Project: Alluvium Estate Stage 2

Suburb: Delacombe



Client: Wayne Horne Earth Moving

Date: 10th November 2021

Geotechnical	Pavement	Environmental	Residential	Design
Slope Stability Assessment	Land Capability Assessments	Erosion and Sediment Control Plan		
Retaining Walls	Level 1 Supervision	Earthworks Specification's	Percolation	

Adelaide | Brisbane | Ballarat | Melbourne | Warrnambool

Contents

Contents	2
1 Introduction.....	1
2 Scope of Works.....	1
3 Inspections / Supervision.....	1
4 Testing.....	1
5 Conclusion	2
6 Applicability	2
Appendix A – Site Plan	4
Appendix B – Laboratory Testing.....	5

1 Introduction

Australian Geotechnical Testing (AGT) has been engaged by Wayne Horne Earth Moving to provide Level 1 Geotechnical Supervision for the Alluvium Estate Stage 2 project. The Estate is located in Delacombe.

This Level 1 report presents the results of supervision activities, compaction and moisture control, material placement and laboratory testing for ground works undertaken for the project. This report covers construction activities carried out from **15/03/2021 to 21/10/2021**.

2 Scope of Works

The scope of works involved the placement of on-site General Fill. Fill Material was placed in Level one fill areas, in accordance with **AS 3798-2007, Guidelines on earthworks for commercial and residential developments and project specifications**. The level of FILL to be placed is less than 5m as per AS3798 Section 1.1.

The fill material is required as per AS3798 and the project specification to achieve:

- **95% Standard Maximum Dry Density (Compaction)**

General fill material used for the construction was locally sourced and predominantly comprising of **Silty Clay**.

3 Inspections / Supervision

Full-time Level 1 supervision and inspection was undertaken including the supervision and inspections regarding the stripping and removal as per AS3798 Section 3 shall have removed:

- Organic soils, such as topsoils, severely root affected subsoils and peat;
- Contaminated soils are part of the brief;
- Materials which undergo volume change or loss of strength when disturbed and exposed to moisture;
- Silts, or materials that have deleterious engineering properties of silt;
- Other materials with properties that are unsuitable for the forming of structural fill;
- Fill that contains wood, metal plastic, boulders or other deleterious material, in sufficient proportions to affect the required performance of the fill.
- The maximum particle size of any rocks or other lumps, within the layer, has not exceeded two-thirds ($\frac{2}{3}$) of the compacted layer thickness.

The lots inspected were essentially homogeneous in relation to material type and moisture condition, rolling response and compaction technique and which has been used for the assessment of relative compaction of an area of work (AS3798 Section 1.2.8).

Prior to placement any existing filled ground, for which the conditions of the placement are not adequately documented have not been assumed to have been of either standard compaction or of the composition adequate to support fill or any loads has been removed (AS3798 Section 2).

4 Testing

The project was classified as **Residential**, thereby requiring a minimum compaction result of **95%** density ratio Standard Compaction for the **cohesive soils** (AS 1289 5.7.1 & 5.1.1)

throughout the Level 1 Fill and in accordance with AS 3798-2007 – Table 5.2. The test was performed using a Nuclear Density Gauge for field density determination AS 1289.5.8.1.

As a minimum testing was undertaken either 3 tests per lot, 1 test per 2,500m² per layer, or 1 test per 500m³ throughout the placement of fill as per AS3798 Table 8.1.

The material was site derived **Silty Clay Fill**. The material was placed in approximately 200 mm loose layers, rolling effort with on-site Compactor (to seal of each layer of placed General Fill material) to a compacted 150mm layer that achieved 95% Standard Compaction which met Australian Standards specifications. This was considered the best method to achieve compaction using the plant and machinery available.

The NATA compaction reports verify the achievement of the minimum density requirement of 95% Standard Compaction throughout the full depth area, with each layer tested accordingly. All test results were provided to our client: Wayne Horne Earth Moving for inclusion within their internal quality system.

At the completion of the structural layers and material within 150mm of permanent subgrade level in cuttings, test rolling was undertaken and the layers withstood test rolling without visible deformation or springing (AS 3798 Section 5.5).

The area covered by this Level 1 Supervision report is shown in the Site Plan (Refer to Appendix A). The results of the laboratory Testing are indicated in Appendix B.

5 Conclusion

On the completion of the earthworks and after analysing the materials used, it has been concluded that the filling procedure conducted by our client **Wayne Horne Earth Moving satisfied** the general requirements of AS 3798 regards to the placement of fill materials on a project under Level 1 Supervision and in accordance with the project specification as provided to AGT.

The fill meets the requirements for “structural fill for residential applications” in accordance with AS3798. The fill has been placed, compacted and tested in accordance with AS3798 and the fill meets the requirements for controlled fill in accordance with AS2870 (2011) “Residential Slabs and Footings”.

This report has been prepared for the benefit of our client with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement. No responsibility for this report will be taken by AGT if it is altered in any way, or not reproduced in full.

6 Applicability

The findings and conclusions contained in this Report are made based on site conditions that existed at the time this work was conducted. The conclusions presented in this report are relevant to the conditions of the site and the state of legislation currently enacted as at the date of this report.

Findings and conclusions are made assuming that the soil, groundwater, geological and chemical conditions detailed within this report are accurate and remain applicable to the site at the time of writing. The conclusions of this report may become invalid if filling or excavation occurs after the boreholes and test pits referred to in this report were drilled or excavated. No other warranties are made or intended.

AGT has used a degree of skill and care ordinarily exercised by reputable members of our profession practicing in the same or similar locality.

AGT does not make any representation or warranty that the conclusions in this report will be applicable in the future as there may be changes in the condition of the site, applicable legislation or other factors that would affect the conclusions contained in this report. This report has been prepared exclusively for use by our Client. This report cannot be reproduced without the written authorisation of AGT and then can only be reproduced in its entirety.

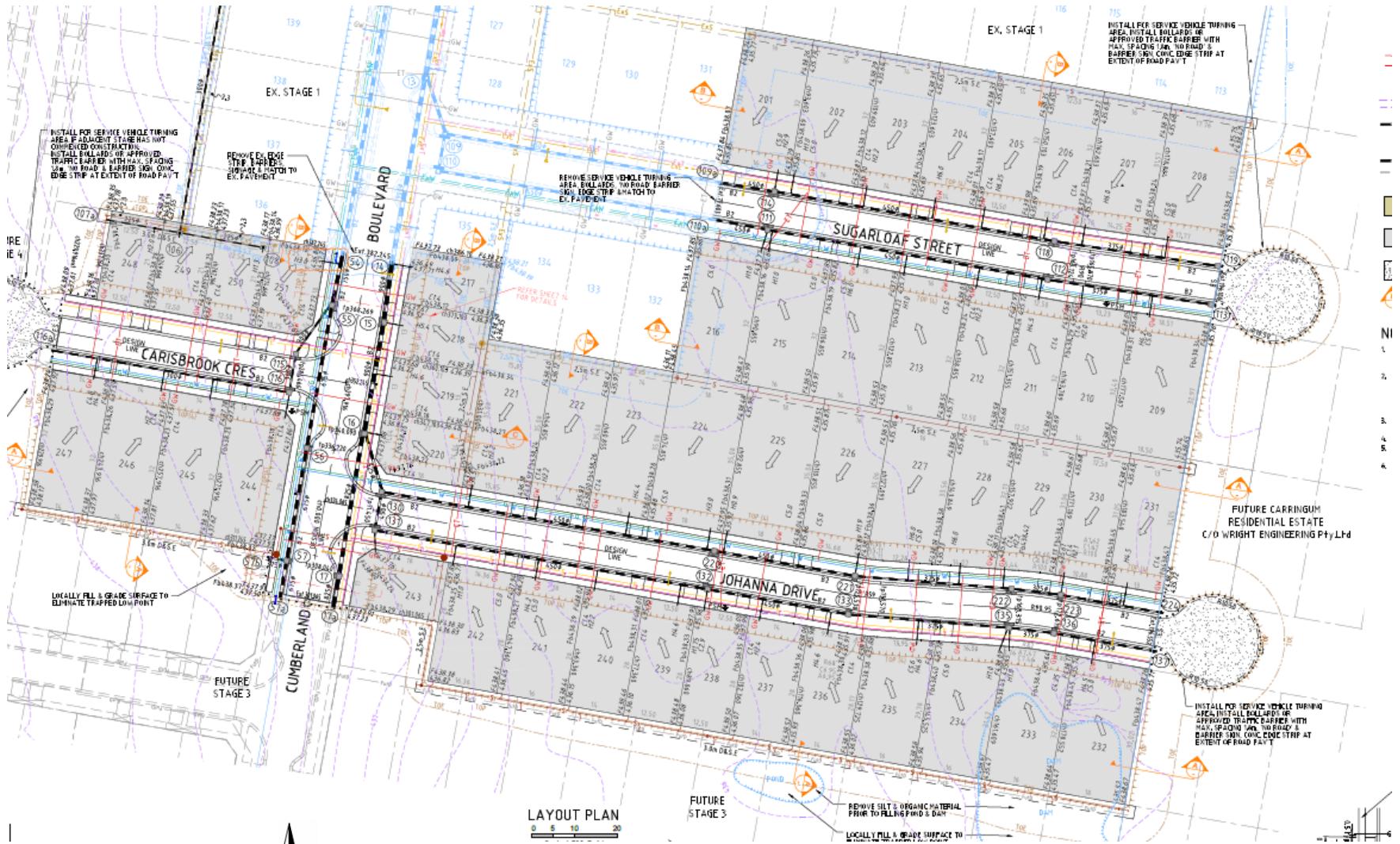


Matt Noonan

Senior Geotechnical, Pavement & Environmental Engineer
CPENG (Civil & Geotechnical); NER; RPEQ
BEng (Geological), Grad Cert (Pavement Technology)
Cert IV (Training & Assessment), BCC, Grad Dip (Div)
mattn@ausgeotest.com.au
0419 349 906

Document No: AGT.REP.310

Appendix A – Site Plan



SITE PLAN - NOT TO SCALE



Alluvium Estate
Delacombe
Wayne Horne Earth Moving

Appendix B – Laboratory Testing

Material Test Report

Report Number: AGT60044-1
Issue Number: 1
Date Issued: 16/03/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 568
Date Sampled: 15/03/2021
Dates Tested: 16/03/2021 - 16/03/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: (CI) silty CLAY- Brown
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	60044-1	60044-2	60044-3
Date Tested	15/03/2021	15/03/2021	15/03/2021
Time Tested	13:05	13:15	13:25
Test Request #/Location	Alluvium Estate Stage 2 Lot 201	Alluvium Estate Stage 2 Lot 202	Alluvium Estate Stage 2 Lot 203
Latitude	-37.570543	-37.570542	-37.570563
Longitude	143.795120	143.795284	142.7941978
Layer / Reduced Level	2.4m Below FSL	2.4m Below FSL	2.4m Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	(CI) silty CLAY- Brown	(CI) silty CLAY- Brown	(CI) silty CLAY- Brown
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m ³	2.00	2.00	2.03
Field Moisture Content %	24.6	24.8	23.5
Field Dry Density (FDD) t/m ³	1.61	1.60	1.64
Peak Converted Wet Density t/m ³	2.04	1.98	2.09
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	**	**	**
Moisture Ratio % (AS1289.5.4.1)	109.0	99.0	101.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	-2.0	0.0	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	98.5	101.0	97.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Density Ratio and Moisture Ratio - Lot Characteristics (RC 316.00)

Mean Density Ratio	98.8
Mean Moisture Variation	-0.6
Mean Moisture Ratio	103.0

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-2
Issue Number: 1
Date Issued: 17/03/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 567
Date Sampled: 16/03/2021
Dates Tested: 16/03/2021 - 17/03/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-4	60044-5	60044-6
Date Tested	16/03/2021	16/03/2021	16/03/2021
Time Tested	13:00	13:10	13:20
Test Request #/Location	Alluvium Estate Stage 2 Lot 211	Alluvium Estate Stage 2 Lot 210	Alluvium Estate Stage 2 Lot 209
Latitude	-37.570894	-37.570782	-37.570542
Longitude	143.795716	143.795406	143.795284
Layer / Reduced Level	2.4m Below FSL	2.4m Below FSL	2.4m Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.06	1.99	2.03
Field Moisture Content %	23.1	21.6	18.9
Field Dry Density (FDD) t/m ³	1.67	1.63	1.70
Peak Converted Wet Density t/m ³	2.03	2.01	1.98
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	0.5	0.5	2.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	101.0	98.5	102.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-3
Issue Number: 1
Date Issued: 22/03/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 570
Date Sampled: 17/03/2021
Dates Tested: 17/03/2021 - 19/03/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	60044-7	60044-8	60044-9
Date Tested	17/03/2021	17/03/2021	17/03/2021
Time Tested	13:05	13:15	13:25
Test Request #/Location	Alluvium Estate Stage 2 Lot 206	Alluvium Estate Stage 2 Lot 207	Alluvium Estate Stage 2 Lot 208
Latitude	-37.571119	-37.571061	-37.571012
Longitude	143.795839	143.795637	143.795339
Layer / Reduced Level	2.1 below	2.1 below	2.1 below
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m ³	2.03	2.03	1.98
Field Moisture Content %	**	**	**
Field Dry Density (FDD) t/m ³	**	**	**
Peak Converted Wet Density t/m ³	1.94	1.94	1.91
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	**	**	**
Moisture Ratio % (AS1289.5.4.1)	**	**	**
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	2.5	3.5	3.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	104.5	104.5	103.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Density Ratio and Moisture Ratio - Lot Characteristics (RC 316.00)

Mean Density Ratio	104.3
Mean Moisture Variation	3.0
Mean Moisture Ratio	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-4
Issue Number: 1
Date Issued: 22/03/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 576
Date Sampled: 22/03/2021
Dates Tested: 22/03/2021 - 22/03/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Location: Alluvium Estate
Material: (CH) silty CLAY- Brown
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-10	60044-11	60044-12
Date Tested	18/03/2021	18/03/2021	18/03/2021
Time Tested	13:00	13:10	13:20
Test Request #/Location	Lot 229	Lot 230	Lot 231
Latitude	37.571262	37.571308	37.571402
Longitude	143.795540	143.795677	143.795828
Layer / Reduced Level	2.1 Below	2.1 Below	2.1 Below
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	1.98	2.09	2.12
Field Moisture Content %	18.6	21.7	15.2
Field Dry Density (FDD) t/m ³	1.67	1.71	1.84
Peak Converted Wet Density t/m ³	2.00	2.00	2.03
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	2.5	3.0	3.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	99.0	104.5	104.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-5
Issue Number: 1
Date Issued: 22/03/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 577
Dates Tested: 22/03/2021 - 22/03/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-13	60044-14	60044-15
Date Tested	19/03/2021	19/03/2021	19/03/2021
Time Tested	13:00	13:05	13:10
Test Request #/Location	Alluvium Estate Stage 2 LOT 232	Alluvium Estate Stage 2 LOT 233	Alluvium Estate Stage 2 LOT 234
Latitude	37.571793	37.571959	37.571988
Longitude	143.795860	143.795817	143.795601
Layer / Reduced Level	2.1 Below FSL	2.1 Below FSL	2.1 Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.02	1.98	2.06
Field Moisture Content %	16.9	20.8	18.7
Field Dry Density (FDD) t/m ³	1.73	1.64	1.74
Peak Converted Wet Density t/m ³	1.92	1.98	1.99
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	3.5	3.0	2.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	105.0	100.0	103.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-6
Issue Number: 1
Date Issued: 06/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 584
Dates Tested: 29/03/2021 - 31/03/2021
Location: Alluvium Estate Stage 2



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-16	60044-17	60044-18
Date Tested	29/03/2021	29/03/2021	29/03/2021
Time Tested	13:00	13:05	13:10
Test Request #/Location	Alluvium Estate Stage 2 Lot 241	Alluvium Estate Stage 2 Lot 242	Alluvium Estate Stage 2 Lot 243
Latitude	37.571882	37.571700	37.571589
Longitude	143.794367	143.794475	143.794296
Layer / Reduced Level	1.9 Below	1.9 Below	1.9 Below
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.19	2.03	2.01
Field Moisture Content %	**	**	**
Field Dry Density (FDD) t/m ³	**	**	**
Peak Converted Wet Density t/m ³	2.14	2.10	2.09
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	0.0	-0.5	-1.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	102.5	96.5	96.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-7
Issue Number: 1
Date Issued: 06/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 586
Dates Tested: 30/03/2021 - 31/03/2021
Location: Alluvium Estate Stage 2



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-22	60044-23	60044-24
Date Tested	30/03/2021	30/03/2021	30/03/2021
Time Tested	13:05	13:15	13:25
Test Request #/Location	Alluvium Estate Stage 2 Lot 221	Alluvium Estate Stage 2 Lot 222	Alluvium Estate Stage 2 Lot 223
Latitude	-37.571184	-37.571182	-37.571415
Longitude	143.794365	143.794307	143.793749
Layer / Reduced Level	1.8m Below FSL	1.8m Below FSL	1.8m Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	1.96	2.01	2.02
Field Moisture Content %	18.5	19.3	19.9
Field Dry Density (FDD) t/m ³	1.66	1.68	1.68
Peak Converted Wet Density t/m ³	1.99	1.99	2.00
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	2.0	1.5	1.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	98.5	101.0	101.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-8
Issue Number: 1
Date Issued: 06/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 587
Date Sampled: 31/03/2021
Dates Tested: 31/03/2021 - 06/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-25	60044-26	60044-27
Date Tested	31/03/2021	31/03/2021	31/03/2021
Time Tested	13:05	13:15	13:25
Test Request #/Location	Alluvium Estate Stage 2 Lot 238	Alluvium Estate Stage 2 Lot 239	Alluvium Estate Stage 2 Lot 240
Latitude	-37.571049	-37.571693	-37.571672
Longitude	143.794493	143.794532	143.794563
Layer / Reduced Level	1.8m Below FS	1.8m Below FS	1.8m Below FS
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m ³	1.98	2.08	2.06
Field Moisture Content %	17.2	15.8	19.0
Field Dry Density (FDD) t/m ³	1.69	1.79	1.73
Peak Converted Wet Density t/m ³	2.06	2.07	2.14
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	**	**	**
Moisture Ratio % (AS1289.5.4.1)	102.5	101.5	94.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	-0.5	0.0	1.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	96.0	100.0	96.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Density Ratio and Moisture Ratio - Lot Characteristics (RC 316.00)	
Mean Density Ratio	97.4
Mean Moisture Variation	0.2
Mean Moisture Ratio	99.2

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-9
Issue Number: 1
Date Issued: 06/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 588
Date Sampled: 01/04/2021
Dates Tested: 01/04/2021 - 06/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	60044-28	60044-29	60044-30
Date Tested	01/04/2021	01/04/2021	01/04/2021
Time Tested	13:05	13:15	13:25
Test Request #/Location	Alluvium Estate Stage 2 Lot 225	Alluvium Estate Stage 2 Lot 224	Alluvium Estate Stage 2 Lot 2162
Latitude	-37.571366	-37.571356	-37.571334
Longitude	143.794447	143.794301	143.794198
Layer / Reduced Level	1.5m Below FSL	1.5m Below FSL	1.5m Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m ³	2.07	2.04	1.99
Field Moisture Content %	11.0	10.9	20.1
Field Dry Density (FDD) t/m ³	1.86	1.84	1.66
Peak Converted Wet Density t/m ³	2.13	2.14	2.06
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	**	**	**
Moisture Ratio % (AS1289.5.4.1)	103.0	105.0	104.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	-0.5	-0.5	-1.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	97.0	95.0	96.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Density Ratio and Moisture Ratio - Lot Characteristics (RC 316.00)

Mean Density Ratio	96.2
Mean Moisture Variation	-0.6
Mean Moisture Ratio	103.9

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-10
Issue Number: 1
Date Issued: 09/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 589
Date Sampled: 06/04/2021
Dates Tested: 06/04/2021 - 08/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	60044-31	60044-32	60044-33
Date Tested	06/04/2021	06/04/2021	06/04/2021
Time Tested	13:10	13:20	13:30
Test Request #/Location	Alluvium Estate Stage 2 Lot 222	Alluvium Estate Stage 2 Lot 223	Alluvium Estate Stage 2 Lot 241
Latitude	-37.571188	-37.571281	-37.571347
Longitude	143.794260	143.794229	143.794179
Layer / Reduced Level	1.5m Below FSL	1.5m Below FSL	1.5m Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m ³	1.98	2.00	2.10
Field Moisture Content %	14.5	15.4	16.6
Field Dry Density (FDD) t/m ³	1.73	1.73	1.80
Peak Converted Wet Density t/m ³	1.99	2.06	2.05
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	**	**	**
Moisture Ratio % (AS1289.5.4.1)	77.5	89.0	92.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	4.0	2.0	1.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	99.5	97.5	102.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Density Ratio and Moisture Ratio - Lot Characteristics (RC 316.00)

Mean Density Ratio	99.7
Mean Moisture Variation	2.4
Mean Moisture Ratio	86.3

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-11
Issue Number: 1
Date Issued: 09/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 591
Date Sampled: 07/04/2021
Dates Tested: 07/04/2021 - 09/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	60044-34	60044-35	60044-36	60044-37	60044-38	60044-39
Date Tested	07/04/2021	07/04/2021	07/04/2021	07/04/2021	07/04/2021	07/04/2021
Time Tested	09:30	09:40	10:15	10:25	14:05	14:15
Test Request #/Location	Alluvium Estate Stage 2 Lot 227	Alluvium Estate Stage 2 Lot 235	Alluvium Estate Stage 2 Lot 226	Alluvium Estate Stage 2 Lot 236	Alluvium Estate Stage 2 Lot 225	Alluvium Estate Stage 2 Lot 215
Latitude	-37.5662092	-37.5662092	-37.5662092	-37.5662092	-37.5677578	-37.5754243
Longitude	143.7967653	143.7967653	143.7967653	143.7967653	143.7955695	143.8055857
Layer / Reduced Level	2.4m Below FSL	2.4m Below FSL	2.1m Below FSL	2.1m Below FSL	1.8m Below FSL	1.8m Below FSL
Thickness of Layer (mm)	150	150	150	150	150	150
Soil Description	Brown Silty Clay					
Test Depth (mm)	125	125	125	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**	**	**	**
Field Wet Density (FWD) t/m ³	2.06	1.99	2.04	2.11	1.99	1.95
Field Moisture Content %	21.9	20.5	20.6	19.7	24.5	18.9
Field Dry Density (FDD) t/m ³	1.69	1.66	1.69	1.76	1.60	1.64
Peak Converted Wet Density t/m ³	2.04	2.03	2.06	2.01	2.05	1.98
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**	**
Moisture Variation (Wv) %	0.0	2.5	0.0	2.5	0.5	2.0
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	101.0	98.5	99.0	105.0	97.5	98.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-12
Issue Number: 1
Date Issued: 09/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 592
Date Sampled: 08/04/2021
Dates Tested: 08/04/2021 - 09/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	60044-40	60044-41	60044-42
Date Tested	08/04/2021	08/04/2021	08/04/2021
Time Tested	**	**	**
Test Request #/Location	Alluvium Estate Stage 2Stage 2 Lot 227	Alluvium Estate Stage 2Stage 2 Lot 228	Alluvium Estate Stage 2Stage 2 Lot 235
Latitude	-37.571467	-37.571617	-37.571848
Longitude	143.794997	143.795016	143.795001
Layer / Reduced Level	1.5m Below FLS	1.5m Below FLS	1.5m Below FLS
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m ³	2.08	2.01	2.03
Field Moisture Content %	19.1	18.9	18.5
Field Dry Density (FDD) t/m ³	1.75	1.69	1.71
Peak Converted Wet Density t/m ³	2.03	2.07	2.12
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	**	**	**
Moisture Ratio % (AS1289.5.4.1)	92.5	102.5	112.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	1.5	-0.5	-2.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	103.0	97.0	96.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Density Ratio and Moisture Ratio - Lot Characteristics (RC 316.00)

Mean Density Ratio	98.5
Mean Moisture Variation	-0.3
Mean Moisture Ratio	102.5

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-13
Issue Number: 1
Date Issued: 15/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 593
Dates Tested: 09/04/2021 - 13/04/2021
Location: Alluvium Estate Stage 2



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-43	60044-44	60044-45
Date Tested	09/04/2021	09/04/2021	09/04/2021
Time Tested	13:10	13:20	13:30
Test Request #/Location	Aluvium Stage 2 226	Aluvium Stage 2 237	Aluvium Stage 2 238
Latitude	37.571320	37.571448	37.571599
Longitude	143.794968	143.795114	143.795392
Layer / Reduced Level	1.5	1.5	1.5
Thickness of Layer (mm)	150	150	150
Soil Description	Silty Brown Clay	Silty Brown Clay	Silty Brown Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.12	2.14	2.02
Field Moisture Content %	19.0	17.5	19.6
Field Dry Density (FDD) t/m ³	1.78	1.82	1.69
Peak Converted Wet Density t/m ³	2.15	2.12	2.11
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	-0.5	-0.5	2.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	98.5	101.0	95.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-14
Issue Number: 1
Date Issued: 15/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 594
Date Sampled: 12/04/2021
Dates Tested: 12/04/2021 - 13/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-46	60044-47	60044-48
Date Tested	12/04/2021	12/04/2021	12/04/2021
Time Tested	13:00	13:10	13:20
Test Request #/Location	Alluvium Stage 2 221	Alluvium Stage 2 224	Alluvium Stage 2 225
Latitude	37.571448	37.571350	37.571322
Longitude	143.793959	143.794110	143.794296
Layer / Reduced Level	1.5 Below	1.5 Below	1.5 Below
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	1.96	2.01	2.06
Field Moisture Content %	21.4	20.5	18.8
Field Dry Density (FDD) t/m ³	1.62	1.67	1.74
Peak Converted Wet Density t/m ³	2.07	2.09	2.00
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	-0.5	-0.5	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	95.0	96.0	103.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-15
Issue Number: 1
Date Issued: 15/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 595
Date Sampled: 13/04/2021
Dates Tested: 13/04/2021 - 13/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-49	60044-50	60044-51
Date Tested	13/04/2021	13/04/2021	13/04/2021
Time Tested	13:00	13:10	13:20
Test Request #/Location	Alluvium Estate Stage 2 Lot 242	Alluvium Estate Stage 2 Lot 241	Alluvium Estate Stage 2 Lot 240
Chainage (m)	-37.571637	-37.571786	-37.571723
Location Offset (m)	143.794176	143.794268	143.794370
Layer / Reduced Level	1.2m Below FSL	1.2m Below FSL	1.2m Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	1.98	2.13	2.00
Field Moisture Content %	18.7	21.7	20.4
Field Dry Density (FDD) t/m ³	1.67	1.75	1.66
Peak Converted Wet Density t/m ³	2.08	2.12	2.07
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	-0.5	-0.5	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	95.0	100.5	97.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-16
Issue Number: 1
Date Issued: 19/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 596
Date Sampled: 14/04/2021
Dates Tested: 14/04/2021 - 17/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-52	60044-53	60044-54
Date Tested	14/04/2021	14/04/2021	14/04/2021
Time Tested	13:05	13:15	13:25
Test Request #/Location	Alluvium Estate - Stage 2 Lot 221	Alluvium Estate - Stage 2 Lot 219	Alluvium Estate - Stage 2 Lot 220
Latitude	-37.570971	-37.570872	-37.570885
Longitude	143.793926	143.793780	143.793642
Layer / Reduced Level	1.2m Below FSL	1.2m Below FSL	1.2m Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.08	2.06	2.12
Field Moisture Content %	16.3	19.1	19.1
Field Dry Density (FDD) t/m ³	1.79	1.72	1.78
Peak Converted Wet Density t/m ³	2.03	2.11	2.09
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	2.5	0.0	2.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	102.5	97.5	101.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-17
Issue Number: 1
Date Issued: 19/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 599
Date Sampled: 15/04/2021
Dates Tested: 15/04/2021 - 17/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-55	60044-56	60044-57
Date Tested	15/04/2021	15/04/2021	15/04/2021
Time Tested	13:05	13:15	13:25
Test Request #/Location	Alluvium Estate Stage 2 Lot 217	Alluvium Estate Stage 2 Lot 218	Alluvium Estate Stage 2 Lot 221
Latitude	-37.571099	-37.571253	-37.571318
Longitude	143.793914	143.793988	143.794144
Layer / Reduced Level	0.9m Below FSL	0.9m Below FSL	0.9m Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.08	2.06	2.11
Field Moisture Content %	19.8	6.8	16.0
Field Dry Density (FDD) t/m ³	1.74	1.93	1.82
Peak Converted Wet Density t/m ³	2.07	1.98	2.02
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	2.0	2.5	2.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	100.5	104.0	104.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-18
Issue Number: 1
Date Issued: 19/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 600
Date Sampled: 16/04/2021
Dates Tested: 16/04/2021 - 17/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-58	60044-59	60044-60
Date Tested	16/04/2021	16/04/2021	16/04/2021
Time Tested	13:00	13:10	13:20
Test Request #/Location	Alluvium Estate Stage 2 Lot 249	Alluvium Estate Stage 2 Lot 250	Alluvium Estate Stage 2 Lot 251
Latitude	37.571319	37.571288	37.571105
Longitude	143.793485	143.793301	143.793292
Layer / Reduced Level	1.2 Below	1.2 Below	1.2 Below
Thickness of Layer (mm)	150 mm	150 mm	150 mm
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.12	2.08	2.14
Field Moisture Content %	14.8	23.8	19.3
Field Dry Density (FDD) t/m ³	1.85	1.68	1.80
Peak Converted Wet Density t/m ³	2.10	2.02	2.10
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	2.0	0.0	1.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	101.0	102.5	102.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-19
Issue Number: 1
Date Issued: 21/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 601
Dates Tested: 19/04/2021 - 20/04/2021
Location: Alluvium Estate Stage 2



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-61	60044-62	60044-63
Date Tested	19/04/2021	19/04/2021	19/04/2021
Time Tested	13:00	13:10	13:20
Test Request #/Location	Alluvium Estate Level 2 Lot 249	Alluvium Estate Level 2 Lot 250	Alluvium Estate Level 2 Lot 251
Latitude	37.571520	37.571772	37.571603
Longitude	143.793596	143.793423	143.793402
Layer / Reduced Level	900 Below Level	900 Below Level	900 Below Level
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.03	2.04	2.00
Field Moisture Content %	21.3	19.5	23.0
Field Dry Density (FDD) t/m ³	1.68	1.70	1.63
Peak Converted Wet Density t/m ³	2.12	2.11	2.05
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	-0.5	-0.5	-1.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	96.0	97.0	97.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-20
Issue Number: 1
Date Issued: 24/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 604
Date Sampled: 21/04/2021
Dates Tested: 21/04/2021 - 23/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-64	60044-65	60044-66
Date Tested	21/04/2021	21/04/2021	21/04/2021
Time Tested	13:00	13:10	13:20
Test Request #/Location	Alluvium Estate - Stage 2 Lot 214	Alluvium Estate - Stage 2 Lot 215	Alluvium Estate - Stage 2 Lot 216
Latitude	-37.570856	-37.570996	-37.570917
Longitude	143.754950	143.795141	143.795340
Layer / Reduced Level	1.2m Below FSL	1.2m Below FSL	1.2m Below FSL
Thickness of Layer (mm)	150 mm	150 mm	150 mm
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.09	2.03	1.98
Field Moisture Content %	19.9	20.1	28.8
Field Dry Density (FDD) t/m ³	1.74	1.69	1.53
Peak Converted Wet Density t/m ³	2.10	2.11	1.98
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	-0.5	2.0	2.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	99.0	96.0	99.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-21
Issue Number: 1
Date Issued: 27/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 605
Date Sampled: 22/04/2021
Dates Tested: 22/04/2021 - 23/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-67	60044-68	60044-69
Date Tested	22/04/2021	22/04/2021	22/04/2021
Time Tested	13:05	13:15	13:25
Test Request #/Location	Alluvium Estate - Stage 2 Lot 211	Alluvium Estate - Stage 2 Lot 210	Alluvium Estate - Stage 2 Lot 209
Latitude	-37.571106	-37.579043	-37.570805
Longitude	143.795599	143.795532	143.795458
Layer / Reduced Level	900 Below FSL	900 Below FSL	900 Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.14	2.03	2.02
Field Moisture Content %	18.5	16.8	22.5
Field Dry Density (FDD) t/m ³	1.80	1.74	1.64
Peak Converted Wet Density t/m ³	2.12	2.10	2.10
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	1.5	0.0	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	100.5	97.0	96.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-22
Issue Number: 1
Date Issued: 27/04/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 606
Date Sampled: 23/04/2021
Dates Tested: 23/04/2021 - 26/04/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-70	60044-71	60044-72
Date Tested	23/04/2021	23/04/2021	23/04/2021
Time Tested	13:00	13:10	13:20
Test Request #/Location	Alluvium Estate - Stage 2 Lot 228	Alluvium Estate - Stage 2 Lot 229	Alluvium Estate - Stage 2 Lot 230
Latitude	37.571151	37.571272	37.571488
Longitude	143.795187	143.795246	143.795096
Layer / Reduced Level	900mm Below FSL	900mm Below FSL	900mm Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.03	2.03	2.04
Field Moisture Content %	22.9	24.8	20.5
Field Dry Density (FDD) t/m ³	1.65	1.63	1.70
Peak Converted Wet Density t/m ³	2.02	2.03	2.05
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	4.5	3.0	2.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	100.5	100.0	99.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-23
Issue Number: 1
Date Issued: 03/05/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 611
Date Sampled: 29/04/2021
Dates Tested: 29/04/2021 - 03/05/2021
Sampling Method: AS 1289.1.3.1 3.1.4 (b) - Open-drive samplers - piston samplers - floating type
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-73	60044-74	60044-75
Date Tested	29/04/2021	29/04/2021	29/04/2021
Time Tested	14:30	14:44	14:50
Test Request #/Location	Alluvium Stg 2 - Landfill SugarLoaf Street - Lot 212	Alluvium Stg 2 - Landfill SugarLoaf Street - Lot 207	Alluvium Stg 2 - Landfill SugarLoaf Street - Bowl
Latitude	37.570707	37.570678	37.570669
Longitude	143.795395	143.795230	143.794925
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	1.90	1.91	1.96
Field Moisture Content %	20.6	18.3	21.6
Field Dry Density (FDD) t/m ³	1.58	1.62	1.61
Peak Converted Wet Density t/m ³	1.99	1.95	1.95
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	3.0	2.5	2.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	95.5	98.0	101.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-24
Issue Number: 1
Date Issued: 03/05/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 613
Date Sampled: 30/04/2021
Dates Tested: 30/04/2021 - 03/05/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1					
Sample Number	60044-76	60044-77	60044-78	60044-79	60044-80
Date Tested	30/04/2021	30/04/2021	30/04/2021	30/04/2021	30/04/2021
Time Tested	13:30	13:40	13:50	15:00	15:05
Test Request #/Location	Alluvium Estate - Stage 2 landfill Lot 213	Alluvium Estate - Stage 2 landfill Lot 212	Alluvium Estate - Stage 2 landfill Lot 210	Alluvium Estate - Stage 2 landfill Lot 228	Alluvium Estate - Stage 2 landfill Lot 229
Latitude	37.570743	37.570758	37.570763	37.571572	37.571556
Longitude	143.795612	143.795756	143.795894	143.795291	143.795408
Layer / Reduced Level	300 Below FSL				
Thickness of Layer (mm)	150	150	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay	Dark, Fine Clay/Organic material	Dark, Fine Clay/Organic material
Test Depth (mm)	125	125	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**	**	**
Field Wet Density (FWD) t/m ³	2.05	2.11	2.09	1.94	2.02
Field Moisture Content %	16.6	14.7	13.7	18.2	18.6
Field Dry Density (FDD) t/m ³	1.76	1.84	1.84	1.64	1.70
Peak Converted Wet Density t/m ³	1.96	2.10	2.02	2.12	2.08
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**
Moisture Variation (Wv) %	2.5	1.0	2.5	0.0	1.0
Adjusted Moisture Variation %	**	**	**	**	**
Hilf Density Ratio (%)	104.5	100.5	103.5	91.5	97.0
Compaction Method	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	Retested 03/05/2021	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-25
Issue Number: 1
Date Issued: 10/05/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 614
Date Sampled: 03/05/2021
Dates Tested: 03/05/2021 - 04/05/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: RC 316.10
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	60044-81	60044-82	60044-83	60044-84	60044-85	60044-86
Date Tested	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021	03/05/2021
Time Tested	11:30	11:40	11:45	11:55	12:05	12:15
Test Request #/Location	Alluvium Stage 2 - Landfill Lot 213	Alluvium Stage 2 - Landfill Lot 212	Alluvium Stage 2 - Landfill Lot 209	Alluvium Stage 2 - Landfill Lot 231	Alluvium Stage 2 - Landfill Lot 230	Alluvium Stage 2 - Landfill Re-Test Lot 228
Latitude	37.570797	37.570875	37.570911	37.571207	37.571124	37.571572
Longitude	143.795557	143.795663	143.795857	143.795879	143.795699	143.795291
Layer / Reduced Level	300 Below FSL					
Thickness of Layer (mm)	150 mm					
Soil Description	Dark Fine Clay					
Test Depth (mm)	125	125	125	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**	**	**	**
Field Wet Density (FWD) t/m ³	2.04	2.12	2.06	2.17	2.14	2.10
Field Moisture Content %	13.1	16.7	16.3	15.7	15.0	17.8
Field Dry Density (FDD) t/m ³	1.80	1.81	1.78	1.88	1.86	1.78
Peak Converted Wet Density t/m ³	2.14	2.20	2.16	2.19	2.18	2.14
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**	**
Moisture Variation (Wv) %	0.5	-1.5	0.5	-1.0	0.0	0.0
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	95.5	96.0	95.5	99.0	98.0	98.0
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-26
Issue Number: 1
Date Issued: 10/05/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 618
Date Sampled: 06/05/2021
Dates Tested: 06/05/2021 - 07/05/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-87	60044-88	60044-89
Date Tested	06/05/2021	06/05/2021	06/05/2021
Time Tested	15:00	15:05	15:15
Test Request #/Location	Alluvium Stage 2 - Landfill Lot 244	Alluvium Stage 2 - Landfill Cumberland Blvd	Alluvium Stage 2 - Landfill Lot 251
Latitude	-37.571577	-37.571604	-37.571425
Longitude	143.793592	143.793592	143.793655
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.21	2.10	1.98
Field Moisture Content %	16.1	21.9	25.1
Field Dry Density (FDD) t/m ³	1.90	1.72	1.58
Peak Converted Wet Density t/m ³	2.17	2.07	2.06
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	0.0	0.0	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	102.0	101.5	96.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-27
Issue Number: 1
Date Issued: 10/05/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 619
Date Sampled: 07/05/2021
Dates Tested: 07/05/2021 - 07/05/2021
Sampling Method: AS 1289.1.3.1 3.1.4 (b) - Open-drive samplers - piston samplers - floating type
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-90	60044-91	60044-92
Date Tested	07/05/2021	07/05/2021	07/05/2021
Time Tested	13:00	13:10	13:20
Test Request #/Location	Alluvium Stage 2 - Landfill Lot 226	Alluvium Stage 2 - Landfill Lot 237	Alluvium Stage 2 - Landfill Lot 236
Latitude	-37.571875	-37.751631	-37.571670
Longitude	143.74229	143.794171	143.794250
Layer / Reduced Level	300 Below FSL	300 Below FSL	300 Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.15	2.01	2.20
Field Moisture Content %	**	**	**
Field Dry Density (FDD) t/m ³	**	**	**
Peak Converted Wet Density t/m ³	2.11	2.08	2.16
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	0.5	1.0	0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	102.0	96.5	102.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-28
Issue Number: 1
Date Issued: 15/05/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 621
Date Sampled: 12/05/2021
Dates Tested: 12/05/2021 - 14/05/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-93	60044-94	60044-95
Date Tested	12/05/2021	12/05/2021	12/05/2021
Time Tested	13:10	13:15	13:20
Test Request #/Location	Alluvium Estate Stage 2 Lot 224	Alluvium Estate Stage 2 Lot 225	Alluvium Estate Stage 2 Lot 226
Latitude	-37.571270	-37.571145	-37.571169
Longitude	143.793860	143.794108	143.794133
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.13	2.04	2.07
Field Moisture Content %	17.4	19.7	19.8
Field Dry Density (FDD) t/m ³	1.81	1.70	1.73
Peak Converted Wet Density t/m ³	2.11	2.09	2.10
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	1.0	-0.5	-0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	101.0	97.5	98.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-29
Issue Number: 1
Date Issued: 15/05/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 623
Date Sampled: 13/05/2021
Dates Tested: 13/05/2021 - 14/05/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-96	60044-97	60044-98
Date Tested	13/05/2021	13/05/2021	13/05/2021
Time Tested	11:50	11:55	12:05
Test Request #/Location	Alluvium Estate - Stage 2 Lot 241	Alluvium Estate - Stage 2 Lot 240	Alluvium Estate - Stage 2 Lot 222
Latitude	-37.571802	-37.571620	-37.571590
Longitude	143.793521	143.793623	143.793622
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.02	2.05	2.05
Field Moisture Content %	12.3	27.5	22.5
Field Dry Density (FDD) t/m ³	1.80	1.61	1.67
Peak Converted Wet Density t/m ³	2.09	2.03	2.04
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	0.0	-0.5	-1.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	97.0	100.5	100.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-30
Issue Number: 1
Date Issued: 31/05/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 625
Date Sampled: 19/05/2021
Dates Tested: 19/05/2021 - 25/05/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-99	60044-100	60044-101
Date Tested	19/05/2021	19/05/2021	19/05/2021
Time Tested	16:00	16:05	16:10
Test Request #/Location	Alluvium Estate Stage 2 Lot 223	Alluvium Estate Stage 2 Lot 224	Alluvium Estate Stage 2 Lot 225
Latitude	-37.571679	-37.571636	-37.571713
Longitude	143.793898	143.794001	143.794122
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.16	2.16	2.10
Field Moisture Content %	20.8	19.3	19.9
Field Dry Density (FDD) t/m ³	1.78	1.81	1.75
Peak Converted Wet Density t/m ³	2.13	2.14	2.11
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	-0.5	-0.5	-0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	101.0	100.5	99.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-31
Issue Number: 1
Date Issued: 31/05/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 626
Date Sampled: 20/05/2021
Dates Tested: 20/05/2021 - 26/05/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-102	60044-103	60044-104
Date Tested	20/05/2021	20/05/2021	20/05/2021
Time Tested	13:00	13:05	13:10
Test Request #/Location	Alluvium Estate Stage 2 Lot 215	Alluvium Estate Stage 2 Lot 214	Alluvium Estate Stage 2 Lot 213
Latitude	-37.571166	-37.571193	-37.571253
Longitude	143.794756	143.794789	143.794630
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.18	2.17	2.08
Field Moisture Content %	15.4	15.7	14.1
Field Dry Density (FDD) t/m ³	1.89	1.88	1.82
Peak Converted Wet Density t/m ³	2.16	2.16	2.19
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	0.0	0.0	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	101.0	100.5	95.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-32
Issue Number: 1
Date Issued: 31/05/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 627
Date Sampled: 21/05/2021
Dates Tested: 21/05/2021 - 26/05/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-105	60044-106	60044-107
Date Tested	21/05/2021	21/05/2021	21/05/2021
Time Tested	13:05	13:10	13:15
Test Request #/Location	Alluvium Estate Stage 2 Lot 226	Alluvium Estate Stage 2 Lot 227	Alluvium Estate Stage 2 Lot 228
Latitude	-37.571519	-37.571552	-37.571600
Longitude	143.794795	143.794704	143.794531
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.16	2.10	2.07
Field Moisture Content %	14.7	18.1	17.6
Field Dry Density (FDD) t/m ³	1.88	1.78	1.76
Peak Converted Wet Density t/m ³	2.18	2.12	2.10
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	-0.5	0.0	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	99.0	99.0	99.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-33
Issue Number: 1
Date Issued: 31/05/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 628
Dates Tested: 24/05/2021 - 26/05/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-108	60044-109	60044-110
Date Tested	24/05/2021	24/05/2021	24/05/2021
Time Tested	13:10	13:15	13:20
Test Request #/Location	Alluvium Estate Stage 2 Lot 248	Alluvium Estate Stage 2 Lot 246	Alluvium Estate Stage 2 Lot 247
Latitude	-37.571074	-37.571145	-37.793340
Longitude	143.793491	143.793404	143.793340
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.05	2.06	2.20
Field Moisture Content %	14.8	14.4	15.2
Field Dry Density (FDD) t/m ³	1.78	1.80	1.91
Peak Converted Wet Density t/m ³	2.11	2.11	2.17
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	2.5	2.5	0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	97.0	97.5	101.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-34
Issue Number: 1
Date Issued: 31/05/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 629
Date Sampled: 25/05/2021
Dates Tested: 25/05/2021 - 27/05/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-111	60044-112	60044-113
Date Tested	25/05/2021	25/05/2021	25/05/2021
Time Tested	10:00	10:10	10:15
Test Request #/Location	Alluvium Estate Stage 2 Lot 227	Alluvium Estate Stage 2 Lot 228	Alluvium Estate Stage 2 Lot 229
Latitude	-37.571264	-37.571315	-37.571449
Longitude	143.795069	143.795258	143.795350
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.14	2.16	2.11
Field Moisture Content %	12.7	14.8	22.7
Field Dry Density (FDD) t/m ³	1.90	1.88	1.72
Peak Converted Wet Density t/m ³	2.14	2.13	2.15
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	0.5	2.5	-0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	100.0	101.5	98.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-35
Issue Number: 1
Date Issued: 06/06/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 631
Date Sampled: 28/05/2021
Dates Tested: 28/05/2021 - 04/06/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-114	60044-115	60044-116
Date Tested	28/05/2021	28/05/2021	28/05/2021
Time Tested	13:00	13:10	13:20
Test Request #/Location	Alluvium Estate - Stage 2 Lot 243	Alluvium Estate - Stage 2 Lot 242	Alluvium Estate - Stage 2 Lot 240
Latitude	-37.571796	-37.571729	-37.571718
Longitude	143.794318	143.794441	143.794501
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.15	2.03	2.10
Field Moisture Content %	12.4	18.8	14.2
Field Dry Density (FDD) t/m ³	1.92	1.71	1.84
Peak Converted Wet Density t/m ³	2.12	2.06	2.18
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	1.5	2.5	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	101.5	98.5	96.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-35
Issue Number: 1
Date Issued: 06/06/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 631
Date Sampled: 28/05/2021
Dates Tested: 28/05/2021 - 04/06/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-114	60044-115	60044-116
Date Tested	28/05/2021	28/05/2021	28/05/2021
Time Tested	13:00	13:10	13:20
Test Request #/Location	Alluvium Estate - Stage 2 Lot 243	Alluvium Estate - Stage 2 Lot 242	Alluvium Estate - Stage 2 Lot 240
Latitude	-37.571796	-37.571729	-37.571718
Longitude	143.794318	143.794441	143.794501
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.15	2.03	2.10
Field Moisture Content %	12.4	18.8	14.2
Field Dry Density (FDD) t/m ³	1.92	1.71	1.84
Peak Converted Wet Density t/m ³	2.12	2.06	2.18
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	1.5	2.5	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	101.5	98.5	96.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-36
Issue Number: 1
Date Issued: 06/06/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 632
Date Sampled: 31/05/2021
Dates Tested: 31/05/2021 - 04/06/2021
Sampling Method: AS 1289.1.3.1 3.1.4 (b) - Open-drive samplers - piston samplers - floating type
Specification: 95% Standard
Site Selection: Selected by Client
Location: Aluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-117	60044-118	60044-119
Date Tested	31/05/2021	31/05/2021	31/05/2021
Time Tested	13:00	13:10	13:25
Test Request #/Location	Alluvium Estate - Stage 2 Lot 237	Alluvium Estate - Stage 2 Lot 235	Alluvium Estate - Stage 2 Lot 234
Latitude	-37.571790	-37.571777	-37.571800
Longitude	143.795173	143.795219	143.795326
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.04	2.06	2.14
Field Moisture Content %	20.2	14.9	13.8
Field Dry Density (FDD) t/m ³	1.70	1.79	1.88
Peak Converted Wet Density t/m ³	2.05	2.04	2.10
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	0.0	1.5	2.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	99.5	100.5	102.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-38
Issue Number: 1
Date Issued: 06/06/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 634
Date Sampled: 02/06/2021
Dates Tested: 02/06/2021 - 04/06/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-123	60044-124	60044-125
Date Tested	02/06/2021	02/06/2021	02/06/2021
Time Tested	12:30	12:40	12:50
Test Request #/Location	Alluvium Estate - Stage 2 Lot 239	Alluvium Estate - Stage 2 Lot 238	Alluvium Estate - Stage 2 Lot 232
Latitude	-37.571650	-37.571646	-37.571688
Longitude	143.794987	143.795172	143.795567
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.15	2.09	2.00
Field Moisture Content %	14.8	16.8	21.5
Field Dry Density (FDD) t/m ³	1.87	1.79	1.64
Peak Converted Wet Density t/m ³	2.09	2.07	2.01
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	0.0	2.0	0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	103.0	101.0	99.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-39
Issue Number: 1
Date Issued: 20/09/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 709
Date Sampled: 14/09/2021
Dates Tested: 14/09/2021 - 15/09/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-126	60044-127	60044-128
Date Tested	14/09/2021	14/09/2021	14/09/2021
Time Tested	13:10	13:20	13:30
Test Request #/Location	Alluvium Estate - Stage 2 Lot 225	Alluvium Estate - Stage 2 Lot 224	Alluvium Estate - Stage 2 Lot 226
Latitude	-37.57178	-37.57178	-37.571790
Longitude	143.79446	143.79439	143.79458
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.02	2.00	1.98
Field Moisture Content %	25.0	25.2	25.5
Field Dry Density (FDD) t/m ³	1.62	1.60	1.58
Peak Converted Wet Density t/m ³	2.01	1.97	2.04
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	2.0	1.0	1.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	100.5	101.5	97.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-40
Issue Number: 1
Date Issued: 22/09/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 714
Date Sampled: 17/09/2021
Dates Tested: 17/09/2021 - 20/09/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material Source: In Situ



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-129	60044-130	60044-131
Date Tested	17/09/2021	17/09/2021	17/09/2021
Time Tested	10:20	10:25	10:30
Test Request #/Location	Alluvium Estate Stage 2 Lot 203	Alluvium Estate Stage 2 Lot 204	Alluvium Estate Stage 2 Lot 205
Latitude	-37.57132	-37.57131	-37.57133
Longitude	143.794499	143.79512	143.79527
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.02	2.08	2.05
Field Moisture Content %	22.9	28.3	23.8
Field Dry Density (FDD) t/m ³	1.65	1.62	1.66
Peak Converted Wet Density t/m ³	2.06	2.02	2.01
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	0.5	0.5	0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	98.0	103.5	102.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-41
Issue Number: 1
Date Issued: 25/10/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 727
Date Sampled: 20/10/2021
Dates Tested: 20/10/2021 - 21/10/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1					
Sample Number	60044-132	60044-133	60044-134	60044-135	60044-136
Date Tested	20/10/2021	20/10/2021	20/10/2021	20/10/2021	20/10/2021
Time Tested	08:00	08:10	08:20	08:25	08:30
Test Request #/Location	Alluvium Estate - Stage 2 Lot 249	Alluvium Estate - Stage 2 Lot 250	Alluvium Estate - Stage 2 Lot 246	Alluvium Estate - Stage 2 Lot 245	Alluvium Estate - Stage 2 Lot 215
Latitude	-37.57095	-37.57088	-37.57114	-37.57110	-37.57083
Longitude	143.79354	143.79325	143.79321	143.79313	143.79306
Layer / Reduced Level	FSL	FSL	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150	150	150
Soil Description	Brown Silty Clay				
Test Depth (mm)	125	125	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**	**	**
Field Wet Density (FWD) t/m ³	1.99	2.03	2.10	2.09	2.03
Field Moisture Content %	19.6	20.4	17.8	19.8	21.8
Field Dry Density (FDD) t/m ³	1.67	1.69	1.78	1.74	1.67
Peak Converted Wet Density t/m ³	2.03	2.04	2.10	2.12	2.10
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**
Moisture Variation (Wv) %	0.5	0.5	-1.0	-1.0	-0.5
Adjusted Moisture Variation %	**	**	**	**	**
Hilf Density Ratio (%)	98.0	99.5	100.0	99.0	96.5
Compaction Method	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-42
Issue Number: 1
Date Issued: 25/10/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 728
Date Sampled: 20/10/2021
Dates Tested: 20/10/2021 - 21/10/2021
Sampling Method: AS 1289.1.2.1 6.4 (a) - Sampling from layers in earthworks or pavement - uncompacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60044-142	60044-143	60044-144
Date Tested	20/10/2021	20/10/2021	20/10/2021
Time Tested	13:05	13:15	13:25
Test Request #/Location	Alluvium Estate - Stage 2 Lot 241	Alluvium Estate - Stage 2 Lot 240	Alluvium Estate - Stage 2 Lot 239
Latitude	-37.57186	-37.57186	-37.57187
Longitude	143.79440	143.79459	143.79476
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown silty clay	Brown silty clay	Brown silty clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m ³	2.11	2.06	2.13
Field Moisture Content %	18.1	18.7	17.8
Field Dry Density (FDD) t/m ³	1.79	1.74	1.81
Peak Converted Wet Density t/m ³	2.14	2.12	2.12
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	0.0	-0.5	-0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	99.0	97.5	100.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60044-43
Issue Number: 1
Date Issued: 27/10/2021
Client: Wayne Horne Earthmoving
 3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60044
Project Name: Alluvium Estate Stage 2
Project Location: Delacombe
Work Request: 729
Dates Tested: 21/10/2021 - 25/10/2021
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Alluvium Estate Stage 2
Material: Brown Silty Clay
Material Source: Onsite



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

Phone: 1300 026 583

Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Paul Francis

Laboratory Manager

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	60044-145	60044-146	60044-147	60044-148	60044-149	60044-150
Date Tested	21/10/2021	21/10/2021	21/10/2021	21/10/2021	21/10/2021	21/10/2021
Time Tested	13:00	13:10	13:20	16:00	16:10	16:20
Test Request #/Location	Block Backfill Lot 237	Block Backfill Lot 236	Block Backfill Lot 235	Block Backfill Lot 232	Block Backfill Lot 233	Block Backfill Lot 234
Latitude	-37.57197	-37.57184	-37.57187	-37.57179	-37.56797	-37.57170
Longitude	143.79412	143.79519	143.79535	143.79565	143.79758	143.79521
Layer / Reduced Level	FSL	FSL	FSL	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150	150	150	150
Soil Description	Brown Silty Clay					
Test Depth (mm)	125	125	125	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**	**	**	**
Field Wet Density (FWD) t/m ³	1.96	2.03	2.08	2.08	2.10	1.98
Field Moisture Content %	20.5	22.6	18.5	16.0	43.6	29.1
Field Dry Density (FDD) t/m ³	1.62	1.65	1.76	1.79	1.46	1.54
Peak Converted Wet Density t/m ³	2.05	1.99	2.02	2.04	2.10	1.97
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**	**
Moisture Variation (Wv) %	1.0	1.0	0.0	1.0	0.5	0.5
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	95.5	102.0	103.0	102.0	100.0	100.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC