



Australian Geotechnical Testing

Level One Inspection and Testing

Project No: AGTE240454
Project: Miravale Stage 10B
Suburb: Angle Vale



Client: Diverse Civil and Commercial Projects

Date: 30/01/2025

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

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1 Introduction

Australian Geotechnical Testing (AGT) has been engaged by Diverse Civil and Commercial Projects to provide Level 1 Geotechnical Supervision for the Miravale Stage 10B project. The Estate is located at Angle Vale.

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 **11/10/2024 to 31/10/2024**.

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)**
- **+/- 2% Of Optimum Moisture Content**

General fill material used for the construction was locally sourced and predominantly comprising of **Gravelly Sandy 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 12895.7.1 & 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 & Imported Gravelly Sandy Clay Fill**. The material was placed in approximately 300mm loose layers, rolling effort with on-site Compactor (to seal of each layer of placed General Fill material) to a compacted 200mm 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: **Diverse Civil and Commercial Projects** 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. Prefill survey & post fill survey can be referenced in Appendix C.

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 Diverse Civil and Commercial Projects 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.

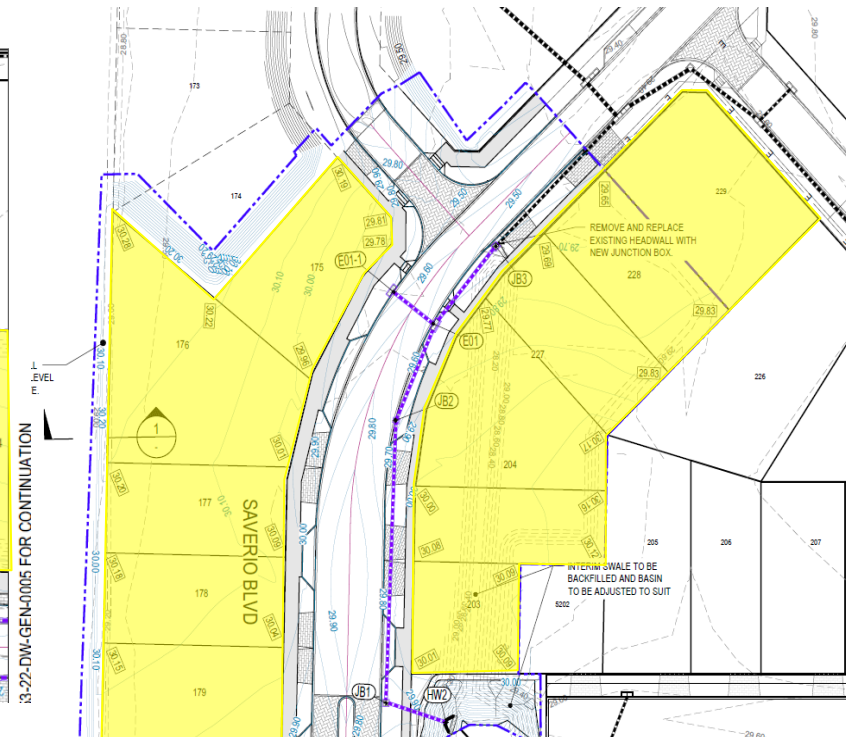
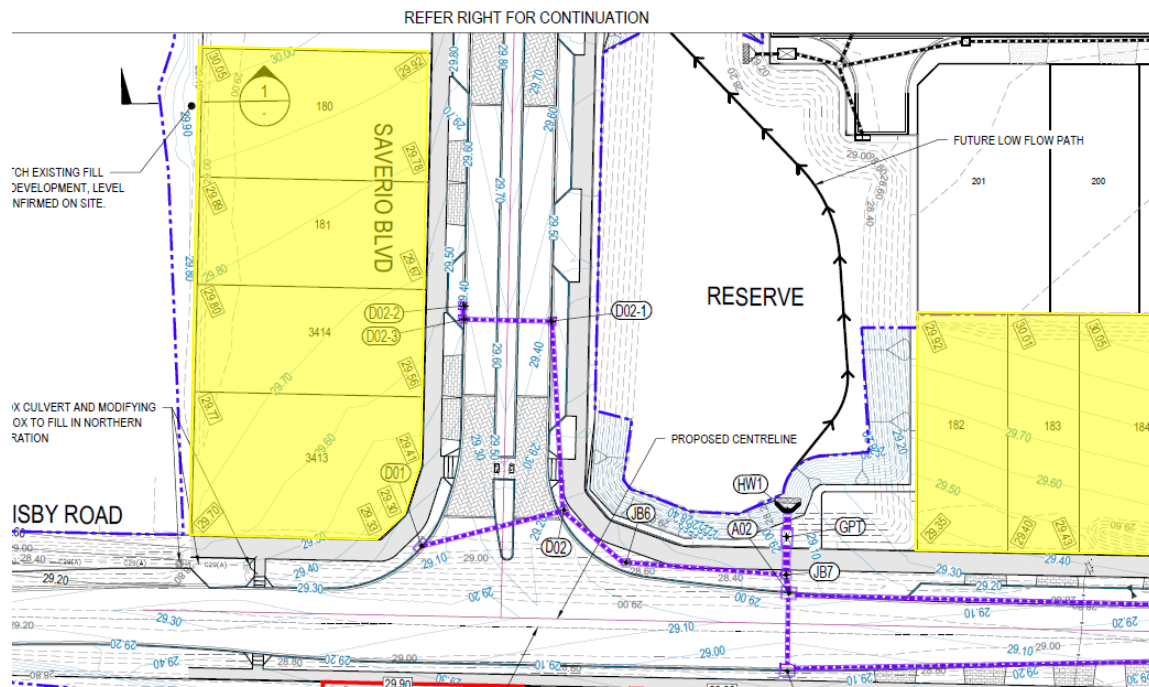


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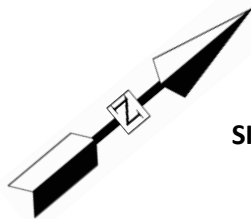
Appendix A – Site Plan



Key



Level One Fill Location



SITE PLAN - NOT TO SCALE



Report No

AGTE240454

Miravale Stage 10B Angle Vale

DCCP

Appendix B – Laboratory Testing

Project Summary Report

Report Date: 30/01/2025
Client: Diverse Civil and Commercial Projects
 PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Specification: 95% Standard AS1289 5.1.1
Test Methods: AS 1289 5.1.1 STD & 5.4.1 & 5.8.1 & 2.1.1



Australian Geotechnical Testing
 Adelaide Laboratory
 37 Nicholson Road Evanston South SA 5116
 Phone: 0435 111 647
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Lot #	Sample #	Date Sampled	Location	Line / Offset	Offset	Elevation (m)	Layer	Relative Compaction (%)	Moisture Variation (%)	Moisture Content (%)	Field Wet Density (t/m3)
**	41755-1	11/10/2024	Lot 3770	6m S	3m W	**	Subgrade	98.0	1.5	5.7	2.10
**	41755-2	11/10/2024	Lot 270	2m S	4m W	**	Subgrade	97.0	2.0	6.4	2.13
**	41755-3	11/10/2024	Lot 903	4m S	11m W	**	Subgrade	96.5	1.5	7.2	2.12
**	41755-4	11/10/2024	Lot 253	1m S	9m W	**	Subgrade	96.5	2.0	5.8	2.13
**	41755-5	11/10/2024	Lot 3002	3m S	8m W	**	Subgrade	96.5	2.0	6.1	2.10
**	41755-6	11/10/2024	Lot 190	10m S	6m W	**	Subgrade	96.5	2.0	5.9	2.16
**	41755-7	11/10/2024	Lot 188	4m S	6m W	**	Subgrade	96.0	1.0	7.9	2.12
**	41755-8	11/10/2024	Lot 186	9m S	4m W	**	Subgrade	98.5	1.0	8.2	2.17
**	41755-9	11/10/2024	Lot 184	3m S	7m W	**	Subgrade	98.0	2.0	7.4	2.16
**	41755-10	11/10/2024	Lot 182	11m S	10m W	**	Subgrade	97.0	2.0	7.4	2.12
**	41755-15	14/10/2024	Lot 191	16m S	2m W	**	Layer 1	98.0	0.5	10.9	2.23
**	41755-12	14/10/2024	Lot 269	7m S	20m W	**	Layer 1	97.5	-0.5	11.8	2.22
**	41755-13	14/10/2024	Lot 268	7m S	6m W	**	Layer 1	98.0	0.0	11.4	2.23
**	41755-14	14/10/2024	Lot 252	2m S	2m W	**	Layer 1	97.0	-0.5	11.5	2.22
**	41755-16	14/10/2024	Lot 189	9m S	26m W	**	Layer 1	97.5	0.0	10.9	2.21
**	41755-17	14/10/2024	Lot 187	9m S	13m W	**	Layer 1	98.5	0.0	11.4	2.24
**	41755-18	14/10/2024	Lot 185	2m S	20m W	**	Layer 1	98.0	0.0	12.5	2.22
**	41755-19	14/10/2024	Lot 183	3m S	3m W	**	Layer 1	97.5	-0.5	12.5	2.24
**	41755-20	14/10/2024	Lot 3770	2m S	4m W	**	Layer 2	96.5	0.0	12.2	2.23
**	41755-21	14/10/2024	Lot 270	10m S	2m W	**	Layer 2	96.5	0.0	12.2	2.26
**	41755-22	14/10/2024	Lot 903	5m S	10m W	**	Layer 2	98.0	0.5	11.9	2.23
**	41755-11	14/10/2024	Lot 3771	5m S	10m W	**	Layer 1	97.0	-0.5	9.9	2.21
**	41755-23	14/10/2024	Lot 253	4m S	5m W	**	Layer 2	98.0	-0.5	11.0	2.15
**	41755-24	14/10/2024	Lot 3002	3m S	11m W	**	Layer 2	98.0	-0.5	11.5	2.14
**	41755-25	14/10/2024	Lot 190	10m S	5m W	**	Layer 2	97.0	0.0	9.7	2.14
**	41755-26	14/10/2024	Lot 188	5m S	12m W	**	Layer 2	98.0	-0.5	11.6	2.14
**	41755-27	14/10/2024	Lot 186	5m S	6m W	**	Layer 2	97.5	1.0	10.3	2.13
**	41755-28	14/10/2024	Lot 184	2m S	11m W	**	Layer 2	98.0	-0.5	11.2	2.14
**	41755-29	16/10/2024	Lot 3771	11m S	15m W	**	Layer 3	102.5	2.0	6.8	2.24
**	41755-30	16/10/2024	Lot 269	4m S	4m W	**	Layer 3	102.0	1.5	7.4	2.23
**	41755-31	16/10/2024	Lot 268	3m S	17m W	**	Layer 3	102.5	2.0	7.7	2.27
**	41755-32	16/10/2024	Lot 252	3m S	8m W	**	Layer 3	102.5	1.5	7.6	2.25
**	41755-33	16/10/2024	Lot 191	5m S	20m W	**	Layer 3	101.5	1.0	8.3	2.25
**	41755-34	16/10/2024	Lot 189	4m S	8m W	**	Layer 3	101.5	1.0	8.0	2.23
**	41755-35	16/10/2024	Lot 187	2m S	8m W	**	Layer 3	101.0	2.0	5.9	2.26
**	41755-36	16/10/2024	Lot 185	2m S	11m W	**	Layer 3	100.5	1.5	7.3	2.24
**	41755-37	16/10/2024	Lot 182	2m S	10m W	**	Layer 3	101.0	2.0	7.0	2.25
**	41755-38	17/10/2024	Lot 3770	5m S	20m W	**	Layer 4	101.0	2.0	6.8	2.25
**	41755-39	17/10/2024	Lot 270	2m S	15m W	**	Layer 4	102.5	1.0	7.6	2.24
**	41755-40	17/10/2024	Lot 903	3m S	22m W	**	Layer 4	102.0	2.0	7.0	2.23
**	41755-42	17/10/2024	Lot 3002	18m S	18m W	**	Layer 4	102.5	2.0	6.8	2.22
**	41755-41	17/10/2024	Lot 253	10m S	11m W	**	Layer 4	103.0	1.5	7.2	2.24
**	41755-43	18/10/2024	Lot 190	2m S	15m W	**	Layer 4	99.5	0.5	9.0	2.25
**	41755-44	18/10/2024	Lot 188	8m S	17m W	**	Layer 4	99.5	0.0	9.8	2.26
**	41755-45	18/10/2024	Lot 186	5m S	20m W	**	Layer 4	98.0	0.0	9.7	2.24
**	41755-50	18/10/2024	Lot 3413	12m S	5m W	**	Subgrade	100.5	-1.0	11.2	2.12
**	41755-51	18/10/2024	Lot 181	24m S	1m W	**	Subgrade	100.5	-0.5	11.3	2.14
**	41755-52	18/10/2024	Lot 179	2m S	6m W	**	Subgrade	101.5	1.0	12.2	2.09
**	41755-53	18/10/2024	Lot 177	10m S	5m W	**	Subgrade	101.0	-0.5	12.2	2.07
**	41755-54	18/10/2024	Lot 175	2m S	2m W	**	Subgrade	98.0	-0.5	11.9	2.07
**	41755-55	18/10/2024	Lot 227	1m S	1m W	**	Subgrade	98.0	2.0	10.5	2.05
**	41755-56	18/10/2024	Lot 204	14m S	1m W	**	Subgrade	99.0	-0.5	11.8	2.10
**	41755-46	18/10/2024	Lot 191	13m S	20m W	**	Layer 5	97.0	0.0	9.7	2.22
**	41755-47	18/10/2024	Lot 189	4m S	23m W	**	Layer 5	98.0	0.0	9.3	2.24
**	41755-48	18/10/2024	Lot 187	5m S	28m W	**	Layer 5	97.5	0.5	9.4	2.20
**	41755-49	18/10/2024	Lot 185	7m S	21m W	**	Layer 5	100.0	0.0	10.2	2.22
**	41755-57	21/10/2024	Lot 3770	3m S	21m W	**	Layer 5	100.5	2.0	7.5	2.24
**	41755-58	21/10/2024	Lot 309	8m S	18m W	**	Layer 5	101.0	2.0	7.7	2.22

Lot #	Sample #	Date Sampled	Location	Line / Offset	Offset	Elevation (m)	Layer	Relative Compaction (%)	Moisture Variation (%)	Moisture Content (%)	Field Wet Density (t/m3)
**	41755-59	21/10/2024	Lot 252	5m S	23m W	**	Layer 5	99.5	1.0	8.4	2.23
**	41755-60	21/10/2024	Lot 269	2m S	18m W	**	Layer 5	100.0	1.0	7.8	2.22
**	41755-61	21/10/2024	Lot 3771	9m S	25m W	**	Layer 6	100.0	1.5	7.1	2.21
**	41755-62	21/10/2024	Lot 268	5m S	20m W	**	Layer 6	101.0	2.0	6.9	2.21
**	41755-63	21/10/2024	Lot 253	9m S	20m S	**	Layer 6	102.0	2.0	8.2	2.22
**	41755-64	22/10/2024	Lot 270	2m S	23m W	**	Layer 7	97.0	1.0	5.2	2.25
**	41755-65	22/10/2024	Lot 903	7m S	25m W	**	Layer 7	97.5	1.5	5.1	2.26
**	41755-66	23/10/2024	Lot 262	1m S	24m W	**	Layer 7	97.0	1.0	5.3	2.27
**	41755-67	23/10/2024	Lot 178	18m S	3m W	**	Layer 1	97.0	1.5	5.4	2.22
**	41755-68	23/10/2024	Lot 176	16m S	10m W	**	Layer 1	97.5	2.0	5.1	2.24
**	41755-69	23/10/2024	Swale Backfill - Lot 203	5	CL	**	Layer 1	98.0	0.5	13.6	2.07
**	41755-70	23/10/2024	Swale Backfill - Lot 204	20	CL	**	Layer 2	98.0	-0.5	14.1	2.09
**	41755-71	23/10/2024	Swale Backfill - Lot 227	89	CL	**	Layer 3	97.0	0.0	13.8	2.09
**	41755-72	24/10/2024	Lot 175	17m S	2m W	**	Layer 2	99.5	1.5	5.8	2.29
**	41755-73	24/10/2024	Lot 177	25m S	8m W	**	Layer 2	99.5	2.0	5.4	2.27
**	41755-74	24/10/2024	Lot 179	23m S	10m W	**	Layer 2	99.0	1.0	6.3	2.28
**	41755-75	24/10/2024	Lot 176	28m S	11m W	**	Layer 3	99.5	2.0	5.4	2.27
**	41755-76	24/10/2024	Lot 178	18m S	6m W	**	Layer 3	99.5	2.0	5.7	2.30
**	41755-77	25/10/2024	Lot 180	4m S	2m W	**	Layer 1	101.0	2.0	4.1	2.29
**	41755-78	25/10/2024	Lot 3414	11m S	5m W	**	Layer 1	100.5	1.5	4.2	2.30
**	41755-79	25/10/2024	Lot 181	12m S	3m W	**	Layer 2	101.0	2.0	3.7	2.30
**	41755-80	25/10/2024	Lot 179	20m S	12m W	**	Layer 4	100.5	2.0	4.1	2.28
**	41755-81	25/10/2024	Lot 176	23m S	25m W	**	Layer 4	100.0	1.5	4.4	2.30
**	41755-82	25/10/2024	Lot 175	16m S	13m W	**	Layer 4	100.5	1.5	3.8	2.31
**	41755-83	25/10/2024	Refer To Map	**	**	**	Layer 1	100.5	2.0	3.8	2.32
**	41755-84	25/10/2024	Refer To Map	**	**	**	Layer 1	100.5	2.0	3.8	2.31
**	41755-85	28/10/2024	Lot 3413	23m S	17m W	**	Layer 2	101.0	2.0	4.9	2.18
**	41755-86	28/10/2024	Lot 180	21m S	10m W	**	Layer 3	100.5	1.5	5.2	2.18
**	41755-87	28/10/2024	Lot 176	25m S	29m W	**	Layer 5	100.0	2.0	4.5	2.17
**	41755-88	28/10/2024	Lot 178	11m S	11m W	**	Layer 5	100.0	1.0	5.7	2.19
**	41755-89	28/10/2024	Lot 3414	20m S	12m W	**	Layer 3	99.0	2.0	4.3	2.18
**	41755-90	28/10/2024	Lot 176	15m S	15m W	**	Layer 6	97.0	0.0	6.7	2.22
**	41755-91	28/10/2024	Lot 177	20m S	10m W	**	Layer 6	96.5	0.5	6.4	2.21
**	41755-92	28/10/2024	Lot 179	20m S	7m W	**	Layer 6	97.5	0.0	6.8	2.23
**	41755-93	28/10/2024	Lot 176	17m S	12m W	**	Layer 7	97.0	0.0	7.1	2.23
**	41755-94	29/10/2024	Lot 228	18m S	3m W	**	Layer 1	100.5	2.0	4.9	2.30
**	41755-95	29/10/2024	Lot 203	12m S	7m W	**	Layer 1	100.5	2.0	4.8	2.31
**	41755-96	29/10/2024	Lot 227	10m S	2m W	**	Layer 2	97.5	2.0	5.1	2.23
**	41755-97	29/10/2024	Lot 204	3m S	4m W	**	Layer 2	100.5	2.0	4.7	2.30
**	41755-98	29/10/2024	Lot 228	5m S	8m W	**	Layer 3	100.5	2.0	4.7	2.32
**	41755-99	29/10/2024	Lot 204	10m S	4m W	**	Layer 3	100.0	2.0	4.9	2.31
**	41755-100	31/10/2024	Lot 203	2m S	11m W	**	Layer 4	98.0	2.0	4.4	2.22
**	41755-101	31/10/2024	Lot 227	15m S	5m W	**	Layer 4	98.5	2.0	4.1	2.25
**	41755-102	31/10/2024	Lot 204	5m S	5m W	**	Layer 5	98.5	2.0	4.2	2.24
**	41755-103	31/10/2024	Lot 227	3m S	6m W	**	Layer 5	99.0	2.0	4.4	2.24
**	41755-104	31/10/2024	Roadway - Refer To Map	**	**	**	Layer 2	98.0	2.0	5.2	2.26

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-1
Issue Number: 1
Date Issued: 23/10/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15155
Date Sampled: 11/10/2024
Dates Tested: 11/10/2024 - 14/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



Australian Geotechnical Testing
Adelaide Laboratory
37 Nicholson Road Evanston South SA 5116
Phone: 0435 111 647
Email: LokyM@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Loky Maynard
Laboratory Manager - Adelaide
NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-1	41755-2	41755-3	41755-4	41755-5	41755-6
Date Tested	11/10/2024	11/10/2024	11/10/2024	11/10/2024	11/10/2024	11/10/2024
Time Tested	10:11	10:25	10:35	10:42	10:45	11:05
Test Request #/Location	Lot 3770	Lot 270	Lot 903	Lot 253	Lot 3002	Lot 190
Line / Offset	6m S	2m S	4m S	1m S	3m S	10m S
Offset	3m W	4m W	11m W	9m W	8m W	6m W
Layer / Reduced Level	Subgrade	Subgrade	Subgrade	Subgrade	Subgrade	Subgrade
Thickness of Layer (mm)	150	150	150	150	150	150
Soil Description	gravelly Clay	gravelly Clay	gravelly Clay	gravelly Clay	gravelly Clay	gravelly Clay
Test Depth (mm)	125	125	125	125	125	125
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**	**
Curing Hours	2.0	2.2	2.3	2.5	2.7	2.8
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.10	2.13	2.12	2.13	2.10	2.16
Field Moisture Content %	5.7	6.4	7.2	5.8	6.1	5.9
Field Dry Density t/m ³	1.99	2.00	1.98	2.02	1.98	2.04
Maximum Dry Density t/m ³	2.03	2.06	2.05	2.09	2.05	2.11
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**	**
Optimum Moisture Content (OMC) %	7.0	8.5	8.5	8.0	8.5	8.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Moisture Variation %	1.5	2.0	1.5	2.0	2.0	2.0
Moisture Ratio %	79.5	76.5	82.5	73.0	74.0	75.5
Density Ratio %	98.0	97.0	96.5	96.5	96.5	96.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-2
Issue Number: 1
Date Issued: 23/10/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15156
Date Sampled: 11/10/2024
Dates Tested: 11/10/2024 - 14/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Laboratory Manager - Adelaide
NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-7	41755-8	41755-9	41755-10
Date Tested	11/10/2024	11/10/2024	11/10/2024	11/10/2024
Time Tested	11:55	12:30	13:40	14:50
Test Request #/Location	Lot 188	Lot 186	Lot 184	Lot 182
Line / Offset	4m S	9m S	3m S	11m S
Offset	6m W	4m W	7m W	10m W
Layer / Reduced Level	Subgrade	Subgrade	Subgrade	Subgrade
Thickness of Layer (mm)	150	150	150	150
Soil Description	Gravelly Clay	Gravelly Clay	Gravelly Clay	Gravelly Clay
Test Depth (mm)	125	125	125	125
Fraction Tested (mm)	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**
Oversize (dry basis) %	**	**	**	**
Curing Hours	2.2	2.3	2.8	3.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.12	2.17	2.16	2.12
Field Moisture Content %	7.9	8.2	7.4	7.4
Field Dry Density t/m ³	1.97	2.01	2.01	1.97
Maximum Dry Density t/m ³	2.05	2.04	2.05	2.03
Adjusted Maximum Dry Density t/m ³	**	**	**	**
Optimum Moisture Content (OMC) %	9.0	9.5	9.5	9.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**
Moisture Variation %	1.0	1.0	2.0	2.0
Moisture Ratio %	86.5	88.0	78.5	77.0
Density Ratio %	96.0	98.5	98.0	97.0
Compaction Method	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-3
Issue Number: 1
Date Issued: 23/10/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15177
Date Sampled: 14/10/2024
Dates Tested: 15/10/2024 - 15/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Approved Signatory: Loky Maynard
Laboratory Manager - Adelaide
NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-11	41755-12	41755-13	41755-14	41755-15	41755-16
Date Tested	14/10/2024	14/10/2024	14/10/2024	14/10/2024	14/10/2024	14/10/2024
Time Tested	13:30	10:40	10:50	10:55	10:00	11:10
Test Request #/Location	Lot 3771	Lot 269	Lot 268	Lot 252	Lot 191	Lot 189
Line / Offset	5m S	7m S	7m S	2m S	16m S	9m S
Offset	10m W	20m W	6m W	2m W	2m W	26m W
Layer / Reduced Level	Layer 1	Layer 1	Layer 1	Layer 1	Layer 1	Layer 1
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**	**
Curing Hours	2.0	2.0	2.0	2.0	2.0	2.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.21	2.22	2.23	2.22	2.23	2.21
Field Moisture Content %	9.9	11.8	11.4	11.5	10.9	10.9
Field Dry Density t/m ³	2.01	1.98	2.00	1.99	2.01	2.00
Maximum Dry Density t/m ³	2.07	2.03	2.04	2.05	2.05	2.05
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**	**
Optimum Moisture Content (OMC) %	9.0	11.5	11.5	11.0	11.5	10.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Moisture Variation %	-0.5	-0.5	0.0	-0.5	0.5	0.0
Moisture Ratio %	108.0	102.5	100.5	106.0	96.0	101.5
Density Ratio %	97.0	97.5	98.0	97.0	98.0	97.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-4
Issue Number: 1
Date Issued: 23/10/2024
Client: Diverse Civil and Commercial Projects
 PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15179
Date Sampled: 14/10/2024
Dates Tested: 15/10/2024 - 15/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1						
Sample Number	41755-17	41755-18	41755-19	41755-20	41755-21	41755-22
Date Tested	14/10/2024	14/10/2024	14/10/2024	14/10/2024	14/10/2024	14/10/2024
Time Tested	11:20	11:30	11:40	13:00	13:10	13:20
Test Request #/Location	Lot 187	Lot 185	Lot 183	Lot 3770	Lot 270	Lot 903
Line / Offset	9m S	2m S	3m S	2m S	10m S	5m S
Offset	13m W	20m W	3m W	4m W	2m W	10m W
Layer / Reduced Level	Layer 1	Layer 1	Layer 1	Layer 2	Layer 2	Layer 2
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**	**
Curing Hours	2.0	2.0	2.0	2.0	2.0	2.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.24	2.22	2.24	2.23	2.26	2.23
Field Moisture Content %	11.4	12.5	12.5	12.2	12.2	11.9
Field Dry Density t/m ³	2.01	1.98	1.99	1.99	2.01	1.99
Maximum Dry Density t/m ³	2.04	2.02	2.04	2.06	2.08	2.03
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**	**
Optimum Moisture Content (OMC) %	11.0	12.5	12.0	12.0	12.0	12.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Moisture Variation %	0.0	0.0	-0.5	0.0	0.0	0.5
Moisture Ratio %	102.0	99.5	106.0	101.0	100.5	95.5
Density Ratio %	98.5	98.0	97.5	96.5	96.5	98.0
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-5
Issue Number: 1
Date Issued: 23/10/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15181
Date Sampled: 14/10/2024
Dates Tested: 15/10/2024 - 15/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-23	41755-24	41755-25	41755-26	41755-27	41755-28
Date Tested	14/10/2024	14/10/2024	14/10/2024	14/10/2024	14/10/2024	14/10/2024
Time Tested	13:30	14:20	14:30	14:40	14:50	15:00
Test Request #/Location	Lot 253	Lot 3002	Lot 190	Lot 188	Lot 186	Lot 184
Line / Offset	4m S	3m S	10m S	5m S	5m S	2m S
Offset	5m W	11m W	5m W	12m W	6m W	11m W
Layer / Reduced Level	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2	Layer 2
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**	**
Curing Hours	3.5	3.8	4.0	4.2	4.5	4.8
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.15	2.14	2.14	2.14	2.13	2.14
Field Moisture Content %	11.0	11.5	9.7	11.6	10.3	11.2
Field Dry Density t/m ³	1.94	1.92	1.95	1.92	1.93	1.92
Maximum Dry Density t/m ³	1.98	1.96	2.01	1.96	1.97	1.97
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**	**
Optimum Moisture Content (OMC) %	10.5	11.0	9.5	11.0	11.0	11.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Moisture Variation %	-0.5	-0.5	0.0	-0.5	1.0	-0.5
Moisture Ratio %	102.5	103.5	101.5	105.0	92.0	104.5
Density Ratio %	98.0	98.0	97.0	98.0	97.5	98.0
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-6
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15197
Date Sampled: 16/10/2024
Dates Tested: 16/10/2024 - 18/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1						
Sample Number	41755-29	41755-30	41755-31	41755-32	41755-33	41755-34
Date Tested	16/10/2024	16/10/2024	16/10/2024	16/10/2024	16/10/2024	16/10/2024
Time Tested	10:30	10:35	10:40	10:45	10:50	10:55
Test Request #/Location	Lot 3771	Lot 269	Lot 268	Lot 252	Lot 191	Lot 189
Line / Offset	11m S	4m S	3m S	3m S	5m S	4m S
Offset	15m W	4m W	17m W	8m W	20m W	8m W
Layer / Reduced Level	Layer 3	Layer 3	Layer 3	Layer 3	Layer 3	Layer 3
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**	**
Curing Hours	2.0	2.2	2.3	2.5	2.7	2.8
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.24	2.23	2.27	2.25	2.25	2.23
Field Moisture Content %	6.8	7.4	7.7	7.6	8.3	8.0
Field Dry Density t/m ³	2.10	2.07	2.11	2.09	2.08	2.07
Maximum Dry Density t/m ³	2.04	2.03	2.06	2.04	2.05	2.04
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**	**
Optimum Moisture Content (OMC) %	9.0	9.0	9.5	9.0	9.0	9.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Moisture Variation %	2.0	1.5	2.0	1.5	1.0	1.0
Moisture Ratio %	78.0	84.5	80.0	84.0	90.0	88.5
Density Ratio %	102.5	102.0	102.5	102.5	101.5	101.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-7
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15198
Date Sampled: 16/10/2024
Dates Tested: 16/10/2024 - 17/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-35	41755-36	41755-37
Date Tested	16/10/2024	16/10/2024	16/10/2024
Time Tested	13:40	13:50	14:00
Test Request #/Location	Lot 187	Lot 185	Lot 182
Line / Offset	2m S	2m S	2m S
Offset	8m W	11m W	10m W
Layer / Reduced Level	Layer 3	Layer 3	Layer 3
Thickness of Layer (mm)	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**
Oversize (dry basis) %	**	**	**
Curing Hours	5.0	5.2	5.5
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.26	2.24	2.25
Field Moisture Content %	5.9	7.3	7.0
Field Dry Density t/m ³	2.14	2.09	2.10
Maximum Dry Density t/m ³	2.11	2.08	2.09
Adjusted Maximum Dry Density t/m ³	**	**	**
Optimum Moisture Content (OMC) %	7.5	9.0	9.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**
Moisture Variation %	2.0	1.5	2.0
Moisture Ratio %	76.5	83.0	79.5
Density Ratio %	101.0	100.5	101.0
Compaction Method	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-8
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15215
Date Sampled: 17/10/2024
Dates Tested: 18/10/2024 - 18/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1					
Sample Number	41755-38	41755-39	41755-40	41755-41	41755-42
Date Tested	17/10/2024	17/10/2024	17/10/2024	17/10/2024	17/10/2024
Time Tested	10:20	10:30	11:00	15:50	13:00
Test Request #/Location	Lot 3770	Lot 270	Lot 903	Lot 253	Lot 3002
Line / Offset	5m S	2m S	3m S	10m S	18m S
Offset	20m W	15m W	22m W	11m W	18m W
Layer / Reduced Level	Layer 4	Layer 4	Layer 4	Layer 4	Layer 4
Thickness of Layer (mm)	200	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**
Curing Hours	3.0	3.2	3.3	3.5	3.7
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.25	2.24	2.23	2.24	2.22
Field Moisture Content %	6.8	7.6	7.0	7.2	6.8
Field Dry Density t/m ³	2.11	2.08	2.08	2.09	2.08
Maximum Dry Density t/m ³	2.09	2.02	2.04	2.03	2.02
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**
Optimum Moisture Content (OMC) %	8.5	9.0	9.0	8.5	9.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**
Moisture Variation %	2.0	1.0	2.0	1.5	2.0
Moisture Ratio %	79.5	86.5	78.5	84.5	76.0
Density Ratio %	101.0	102.5	102.0	103.0	102.5
Compaction Method	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-9
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15238
Date Sampled: 18/10/2024
Dates Tested: 21/10/2024 - 21/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-43	41755-44	41755-45	41755-46	41755-47	41755-48
Date Tested	18/10/2024	18/10/2024	18/10/2024	18/10/2024	18/10/2024	18/10/2024
Time Tested	08:30	08:40	08:50	10:40	10:55	12:00
Test Request #/Location	Lot 190	Lot 188	Lot 186	Lot 191	Lot 189	Lot 187
Line / Offset	2m S	8m S	5m S	13m S	4m S	5m S
Offset	15m W	17m W	20m W	20m W	23m W	28m W
Layer / Reduced Level	Layer 4	Layer 4	Layer 4	Layer 5	Layer 5	Layer 5
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**	**
Curing Hours	2.0	2.0	2.0	2.0	2.0	2.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.25	2.26	2.24	2.22	2.24	2.20
Field Moisture Content %	9.0	9.8	9.7	9.7	9.3	9.4
Field Dry Density t/m ³	2.07	2.06	2.04	2.02	2.05	2.01
Maximum Dry Density t/m ³	2.08	2.08	2.08	2.09	2.08	2.07
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**	**
Optimum Moisture Content (OMC) %	9.5	9.5	9.5	9.5	9.0	10.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Moisture Variation %	0.5	0.0	0.0	0.0	0.0	0.5
Moisture Ratio %	95.5	101.5	101.5	102.5	101.0	95.0
Density Ratio %	99.5	99.5	98.0	97.0	98.0	97.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-10
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15239
Date Sampled: 18/10/2024
Dates Tested: 21/10/2024 - 21/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-49		
Date Tested	18/10/2024		
Time Tested	12:20		
Test Request #/Location	Lot 185		
Line / Offset	7m S		
Offset	21m W		
Layer / Reduced Level	Layer 5		
Thickness of Layer (mm)	200		
Soil Description	Type A Fill		
Test Depth (mm)	175		
Fraction Tested (mm)	19.0		
Oversize (wet basis) %	**		
Oversize (dry basis) %	**		
Curing Hours	4.5		
Method used to Determine Plasticity	Visual/tactile		
Field Wet Density t/m ³	2.22		
Field Moisture Content %	10.2		
Field Dry Density t/m ³	2.01		
Maximum Dry Density t/m ³	2.02		
Adjusted Maximum Dry Density t/m ³	**		
Optimum Moisture Content (OMC) %	10.5		
Adjusted Optimum Moisture Content (OMC) %	**		
Moisture Variation %	0.0		
Moisture Ratio %	99.0		
Density Ratio %	100.0		
Compaction Method	Standard		

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-11
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15240
Date Sampled: 18/10/2024
Dates Tested: 21/10/2024 - 21/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 98% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-50	41755-51	41755-52	41755-53	41755-54	41755-55
Date Tested	18/10/2024	18/10/2024	18/10/2024	18/10/2024	18/10/2024	18/10/2024
Time Tested	09:00	09:10	09:20	09:30	09:40	09:50
Test Request #/Location	Lot 3413	Lot 181	Lot 179	Lot 177	Lot 175	Lot 227
Line / Offset	12m S	24m S	2m S	10m S	2m S	1m S
Offset	5m W	1m W	6m W	5m W	2m W	1m W
Layer / Reduced Level	Subgrade	Subgrade	Subgrade	Subgrade	Subgrade	Subgrade
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay
Test Depth (mm)	175	175	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**	**
Curing Hours	2.0	2.2	2.3	2.5	2.7	2.8
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.12	2.14	2.09	2.07	2.07	2.05
Field Moisture Content %	11.2	11.3	12.2	12.2	11.9	10.5
Field Dry Density t/m ³	1.91	1.92	1.86	1.85	1.85	1.86
Maximum Dry Density t/m ³	1.90	1.91	1.83	1.83	1.89	1.89
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**	**
Optimum Moisture Content (OMC) %	10.0	10.5	13.0	12.0	11.5	12.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Moisture Variation %	-1.0	-0.5	1.0	-0.5	-0.5	2.0
Moisture Ratio %	109.5	107.0	93.5	102.0	102.5	83.0
Density Ratio %	100.5	100.5	101.5	101.0	98.0	98.0
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-12
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15241
Date Sampled: 18/10/2024
Dates Tested: 18/10/2024 - 18/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 98% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-56		
Date Tested	18/10/2024		
Time Tested	10:00		
Test Request #/Location	Lot 204		
Line / Offset	14m S		
Offset	1m W		
Layer / Reduced Level	Subgrade		
Thickness of Layer (mm)	200		
Soil Description	Sandy Clay		
Test Depth (mm)	175		
Fraction Tested (mm)	19.0		
Oversize (wet basis) %	**		
Oversize (dry basis) %	**		
Curing Hours	3.5		
Method used to Determine Plasticity	Visual/tactile		
Field Wet Density t/m ³	2.10		
Field Moisture Content %	11.8		
Field Dry Density t/m ³	1.88		
Maximum Dry Density t/m ³	1.90		
Adjusted Maximum Dry Density t/m ³	**		
Optimum Moisture Content (OMC) %	11.5		
Adjusted Optimum Moisture Content (OMC) %	**		
Moisture Variation %	-0.5		
Moisture Ratio %	103.5		
Density Ratio %	99.0		
Compaction Method	Standard		

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-13
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15246
Date Sampled: 21/10/2024
Dates Tested: 21/10/2024 - 22/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1						
Sample Number	41755-57	41755-58	41755-59	41755-60	41755-61	41755-62
Date Tested	21/10/2024	21/10/2024	21/10/2024	21/10/2024	21/10/2024	21/10/2024
Time Tested	12:40	12:50	13:00	14:00	14:10	14:20
Test Request #/Location	Lot 3770	Lot 309	Lot 252	Lot 269	Lot 3771	Lot 268
Line / Offset	3m S	8m S	5m S	2m S	9m S	5m S
Offset	21m W	18m W	23m W	18m W	25m W	20m W
Layer / Reduced Level	Layer 5	Layer 5	Layer 5	Layer 5	Layer 6	Layer 6
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**	**
Curing Hours	2.0	2.0	2.0	2.0	2.0	2.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.24	2.22	2.23	2.22	2.21	2.21
Field Moisture Content %	7.5	7.7	8.4	7.8	7.1	6.9
Field Dry Density t/m ³	2.08	2.06	2.06	2.06	2.06	2.07
Maximum Dry Density t/m ³	2.07	2.04	2.07	2.06	2.06	2.05
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**	**
Optimum Moisture Content (OMC) %	9.5	9.5	9.5	9.0	8.5	9.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Moisture Variation %	2.0	2.0	1.0	1.0	1.5	2.0
Moisture Ratio %	80.5	80.5	89.0	87.5	81.5	77.0
Density Ratio %	100.5	101.0	99.5	100.0	100.0	101.0
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-14
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15247
Date Sampled: 21/10/2024
Dates Tested: 21/10/2024 - 22/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-63		
Date Tested	21/10/2024		
Time Tested	14:30		
Test Request #/Location	Lot 253		
Line / Offset	9m S		
Offset	20m S		
Layer / Reduced Level	Layer 6		
Thickness of Layer (mm)	200		
Soil Description	Type A Fill		
Test Depth (mm)	175		
Fraction Tested (mm)	19.0		
Oversize (wet basis) %	**		
Oversize (dry basis) %	**		
Curing Hours	2.0		
Method used to Determine Plasticity	Visual/tactile		
Field Wet Density t/m ³	2.22		
Field Moisture Content %	8.2		
Field Dry Density t/m ³	2.05		
Maximum Dry Density t/m ³	2.01		
Adjusted Maximum Dry Density t/m ³	**		
Optimum Moisture Content (OMC) %	10.0		
Adjusted Optimum Moisture Content (OMC) %	**		
Moisture Variation %	2.0		
Moisture Ratio %	80.5		
Density Ratio %	102.0		
Compaction Method	Standard		

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-15
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15307
Date Sampled: 22/10/2024
Dates Tested: 23/10/2024 - 28/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-64	41755-65	
Date Tested	22/10/2024	22/10/2024	
Time Tested	08:00	08:10	
Test Request #/Location	Lot 270	Lot 903	
Line / Offset	2m S	7m S	
Offset	23m W	25m W	
Layer / Reduced Level	Layer 7	Layer 7	
Thickness of Layer (mm)	200	200	
Soil Description	Type A Fill	Type A Fill	
Test Depth (mm)	175	175	
Fraction Tested (mm)	19.0	19.0	
Oversize (wet basis) %	**	**	
Oversize (dry basis) %	**	**	
Curing Hours	72.0	72.0	
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	
Field Wet Density t/m ³	2.25	2.26	
Field Moisture Content %	5.2	5.1	
Field Dry Density t/m ³	2.14	2.15	
Maximum Dry Density t/m ³	2.20	2.21	
Adjusted Maximum Dry Density t/m ³	**	**	
Optimum Moisture Content (OMC) %	6.5	6.5	
Adjusted Optimum Moisture Content (OMC) %	**	**	
Moisture Variation %	1.0	1.5	
Moisture Ratio %	80.5	77.0	
Density Ratio %	97.0	97.5	
Compaction Method	Standard	Standard	

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-16
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15308
Date Sampled: 23/10/2024
Dates Tested: 23/10/2024 - 28/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-66	41755-67	41755-68
Date Tested	23/10/2024	23/10/2024	23/10/2024
Time Tested	14:20	14:25	14:30
Test Request #/Location	Lot 262	Lot 178	Lot 176
Line / Offset	1m S	18m S	16m S
Offset	24m W	3m W	10m W
Layer / Reduced Level	Layer 7	Layer 1	Layer 1
Thickness of Layer (mm)	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**
Oversize (dry basis) %	**	**	**
Curing Hours	72.0	72.0	72.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.27	2.22	2.24
Field Moisture Content %	5.3	5.4	5.1
Field Dry Density t/m ³	2.16	2.11	2.13
Maximum Dry Density t/m ³	2.22	2.18	2.18
Adjusted Maximum Dry Density t/m ³	**	**	**
Optimum Moisture Content (OMC) %	6.5	7.0	7.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**
Moisture Variation %	1.0	1.5	2.0
Moisture Ratio %	81.5	78.5	74.5
Density Ratio %	97.0	97.0	97.5
Compaction Method	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-17
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15309
Date Sampled: 23/10/2024
Dates Tested: 23/10/2024 - 29/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-69	41755-70	41755-71
Date Tested	23/10/2024	23/10/2024	23/10/2024
Time Tested	14:30	14:50	15:00
Test Request #/Location	Swale Backfill - Lot 203	Swale Backfill - Lot 204	Swale Backfill - Lot 227
Chainage (m)	5	20	89
Location Offset (m)	CL	CL	CL
Layer / Reduced Level	Layer 1	Layer 2	Layer 3
Thickness of Layer (mm)	200	200	200
Soil Description	Sandy Clay	Sandy Clay	Sandy Clay
Test Depth (mm)	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**
Oversize (dry basis) %	**	**	**
Curing Hours	24.0	24.0	24.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.07	2.09	2.09
Field Moisture Content %	13.6	14.1	13.8
Field Dry Density t/m ³	1.82	1.83	1.83
Maximum Dry Density t/m ³	1.86	1.87	1.89
Adjusted Maximum Dry Density t/m ³	**	**	**
Optimum Moisture Content (OMC) %	14.0	14.0	14.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**
Moisture Variation %	0.5	-0.5	0.0
Moisture Ratio %	97.0	102.5	100.0
Density Ratio %	98.0	98.0	97.0
Compaction Method	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-18
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15336
Date Sampled: 24/10/2024
Dates Tested: 24/10/2024 - 30/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-72	41755-73	41755-74	41755-75	41755-76
Date Tested	24/10/2024	24/10/2024	24/10/2024	24/10/2024	24/10/2024
Time Tested	14:50	15:00	15:05	15:15	15:20
Test Request #/Location	Lot 175	Lot 177	Lot 179	Lot 176	Lot 178
Line / Offset	17m S	25m S	23m S	28m S	18m S
Offset	2m W	8m W	10m W	11m W	6m W
Layer / Reduced Level	Layer 2	Layer 2	Layer 2	Layer 3	Layer 3
Thickness of Layer (mm)	200	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**
Curing Hours	2.5	2.7	2.9	3.1	3.2
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.29	2.27	2.28	2.27	2.30
Field Moisture Content %	5.8	5.4	6.3	5.4	5.7
Field Dry Density t/m ³	2.16	2.15	2.15	2.16	2.17
Maximum Dry Density t/m ³	2.18	2.16	2.17	2.16	2.18
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**
Optimum Moisture Content (OMC) %	7.5	7.5	7.5	7.5	7.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**
Moisture Variation %	1.5	2.0	1.0	2.0	2.0
Moisture Ratio %	78.0	72.0	85.0	72.5	76.0
Density Ratio %	99.5	99.5	99.0	99.5	99.5
Compaction Method	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-19
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
 PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15381
Date Sampled: 25/10/2024
Dates Tested: 28/10/2024 - 28/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Approved Signatory: Loky Maynard
 Laboratory Manager - Adelaide
 NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1						
Sample Number	41755-77	41755-78	41755-79	41755-80	41755-81	41755-82
Date Tested	25/10/2024	25/10/2024	25/10/2024	25/10/2024	25/10/2024	25/10/2024
Time Tested	10:40	10:45	10:55	11:06	11:15	11:20
Test Request #/Location	Lot 180	Lot 3414	Lot 181	Lot 179	Lot 176	Lot 175
Line / Offset	4m S	11m S	12mS	20m S	23m S	16m S
Offset	2m W	5m W	3m W	12m W	25m W	13m W
Layer / Reduced Level	Layer 1	Layer 1	Layer 2	Layer 4	Layer 4	Layer 4
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**	**
Curing Hours	72.0	72.0	72.0	72.0	72.0	72.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.29	2.30	2.30	2.28	2.30	2.31
Field Moisture Content %	4.1	4.2	3.7	4.1	4.4	3.8
Field Dry Density t/m ³	2.20	2.20	2.22	2.19	2.20	2.22
Maximum Dry Density t/m ³	2.18	2.19	2.20	2.18	2.20	2.21
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**	**
Optimum Moisture Content (OMC) %	6.0	6.0	6.0	6.0	6.0	5.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Moisture Variation %	2.0	1.5	2.0	2.0	1.5	1.5
Moisture Ratio %	65.5	72.0	63.0	68.5	74.5	69.5
Density Ratio %	101.0	100.5	101.0	100.5	100.0	100.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-20
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15382
Date Sampled: 25/10/2024
Dates Tested: 28/10/2024 - 28/10/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 98% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-83	41755-84	
Date Tested	25/10/2024	25/10/2024	
Time Tested	11:30	11:35	
Test Request #/Location	Refer To Map	Refer To Map	
Layer / Reduced Level	Layer 1	Layer 1	
Thickness of Layer (mm)	200	200	
Soil Description	Type A Fill	Type A Fill	
Test Depth (mm)	175	175	
Fraction Tested (mm)	19.0	19.0	
Oversize (wet basis) %	**	**	
Oversize (dry basis) %	**	**	
Curing Hours	72.0	72.0	
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	
Field Wet Density t/m ³	2.32	2.31	
Field Moisture Content %	3.8	3.8	
Field Dry Density t/m ³	2.23	2.22	
Maximum Dry Density t/m ³	2.22	2.21	
Adjusted Maximum Dry Density t/m ³	**	**	
Optimum Moisture Content (OMC) %	6.0	5.5	
Adjusted Optimum Moisture Content (OMC) %	**	**	
Moisture Variation %	2.0	2.0	
Moisture Ratio %	63.5	65.5	
Density Ratio %	100.5	100.5	
Compaction Method	Standard	Standard	

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-21
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15402
Date Sampled: 28/10/2024
Dates Tested: 28/10/2024 - 05/11/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-85	41755-86	41755-87	41755-88	41755-89
Date Tested	28/10/2024	28/10/2024	28/10/2024	28/10/2024	28/10/2024
Time Tested	09:30	09:50	11:00	11:10	13:00
Test Request #/Location	Lot 3413	Lot 180	Lot 176	Lot 178	Lot 3414
Line / Offset	23m S	21m S	25m S	11m S	20m S
Offset	17m W	10m W	29m W	11m W	12m W
Layer / Reduced Level	Layer 2	Layer 3	Layer 5	Layer 5	Layer 3
Thickness of Layer (mm)	200	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**
Curing Hours	3.5	3.8	4.0	4.2	4.5
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.18	2.18	2.17	2.19	2.18
Field Moisture Content %	4.9	5.2	4.5	5.7	4.3
Field Dry Density t/m ³	2.08	2.08	2.07	2.08	2.09
Maximum Dry Density t/m ³	2.06	2.06	2.07	2.07	2.11
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**
Optimum Moisture Content (OMC) %	6.5	7.0	6.5	6.5	6.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**
Moisture Variation %	2.0	1.5	2.0	1.0	2.0
Moisture Ratio %	72.5	76.5	70.0	88.0	68.0
Density Ratio %	101.0	100.5	100.0	100.0	99.0
Compaction Method	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-22
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15403
Date Sampled: 28/10/2024
Dates Tested: 28/10/2024 - 04/11/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Approved Signatory: Loky Maynard
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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-90	41755-91	41755-92	41755-93
Date Tested	28/10/2024	28/10/2024	28/10/2024	28/10/2024
Time Tested	14:20	14:30	14:38	15:10
Test Request #/Location	Lot 176	Lot 177	Lot 179	Lot 176
Line / Offset	15m S	20m S	20m S	17m S
Offset	15m W	10m W	7m W	12m W
Layer / Reduced Level	Layer 6	Layer 6	Layer 6	Layer 7
Thickness of Layer (mm)	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**
Oversize (dry basis) %	**	**	**	**
Curing Hours	3.2	3.5	3.8	4.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.22	2.21	2.23	2.23
Field Moisture Content %	6.7	6.4	6.8	7.1
Field Dry Density t/m ³	2.08	2.08	2.09	2.09
Maximum Dry Density t/m ³	2.14	2.15	2.14	2.15
Adjusted Maximum Dry Density t/m ³	**	**	**	**
Optimum Moisture Content (OMC) %	7.0	7.0	7.0	7.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**
Moisture Variation %	0.0	0.5	0.0	0.0
Moisture Ratio %	98.5	92.5	98.0	103.5
Density Ratio %	97.0	96.5	97.5	97.0
Compaction Method	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-23
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
 PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15416
Date Sampled: 29/10/2024
Dates Tested: 29/10/2024 - 06/11/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Approved Signatory: Loky Maynard
 Laboratory Manager - Adelaide
 NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1						
Sample Number	41755-94	41755-95	41755-96	41755-97	41755-98	41755-99
Date Tested	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024	29/10/2024
Time Tested	11:00	11:08	13:00	13:15	14:50	15:00
Test Request #/Location	Lot 228	Lot 203	Lot 227	Lot 204	Lot 228	Lot 204
Line / Offset	18m S	12m S	10m S	3m S	5m S	10m S
Offset	3m W	7m W	2m W	4m W	8m W	4m W
Layer / Reduced Level	Layer 1	Layer 1	Layer 2	Layer 2	Layer 3	Layer 3
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**	**
Curing Hours	2.7	2.8	3.0	3.2	3.3	3.5
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.30	2.31	2.23	2.30	2.32	2.31
Field Moisture Content %	4.9	4.8	5.1	4.7	4.7	4.9
Field Dry Density t/m ³	2.19	2.21	2.12	2.19	2.22	2.20
Maximum Dry Density t/m ³	2.18	2.20	2.17	2.18	2.20	2.20
Adjusted Maximum Dry Density t/m ³	**	**	**	**	**	**
Optimum Moisture Content (OMC) %	7.0	7.0	7.0	7.0	7.0	7.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Moisture Variation %	2.0	2.0	2.0	2.0	2.0	2.0
Moisture Ratio %	71.0	69.0	73.0	69.5	68.5	72.5
Density Ratio %	100.5	100.5	97.5	100.5	100.5	100.0
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-24
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15427
Date Sampled: 31/10/2024
Dates Tested: 31/10/2024 - 06/11/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

Sample Number	41755-100	41755-101	41755-102	41755-103
Date Tested	31/10/2024	31/10/2024	31/10/2024	31/10/2024
Time Tested	08:00	08:10	15:30	15:40
Test Request #/Location	Lot 203	Lot 227	Lot 204	Lot 227
Line / Offset	2m S	15m S	5m S	3m S
Offset	11m W	5m W	5m W	6m W
Layer / Reduced Level	Layer 4	Layer 4	Layer 5	Layer 5
Thickness of Layer (mm)	200	200	200	200
Soil Description	Type A Fill	Type A Fill	Type A Fill	Type A Fill
Test Depth (mm)	175	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**
Oversize (dry basis) %	**	**	**	**
Curing Hours	3.5	3.8	4.0	4.2
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m ³	2.22	2.25	2.24	2.24
Field Moisture Content %	4.4	4.1	4.2	4.4
Field Dry Density t/m ³	2.13	2.16	2.15	2.14
Maximum Dry Density t/m ³	2.18	2.20	2.18	2.17
Adjusted Maximum Dry Density t/m ³	**	**	**	**
Optimum Moisture Content (OMC) %	6.5	6.0	6.0	6.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**
Moisture Variation %	2.0	2.0	2.0	2.0
Moisture Ratio %	70.5	68.0	70.0	67.5
Density Ratio %	98.0	98.5	98.5	99.0
Compaction Method	Standard	Standard	Standard	Standard

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: AGT41755-25
Issue Number: 1
Date Issued: 07/11/2024
Client: Diverse Civil and Commercial Projects
PO Box 53, Hahndorf SA 5245
Project Number: AGT41755
Project Name: Miravale Stage 10B
Project Location: Angle Vale
Work Request: 15429
Date Sampled: 31/10/2024
Dates Tested: 31/10/2024 - 04/11/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 98% Standard AS1289 5.1.1
Site Selection: Selected by Client
Location: Angle Vale



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NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1

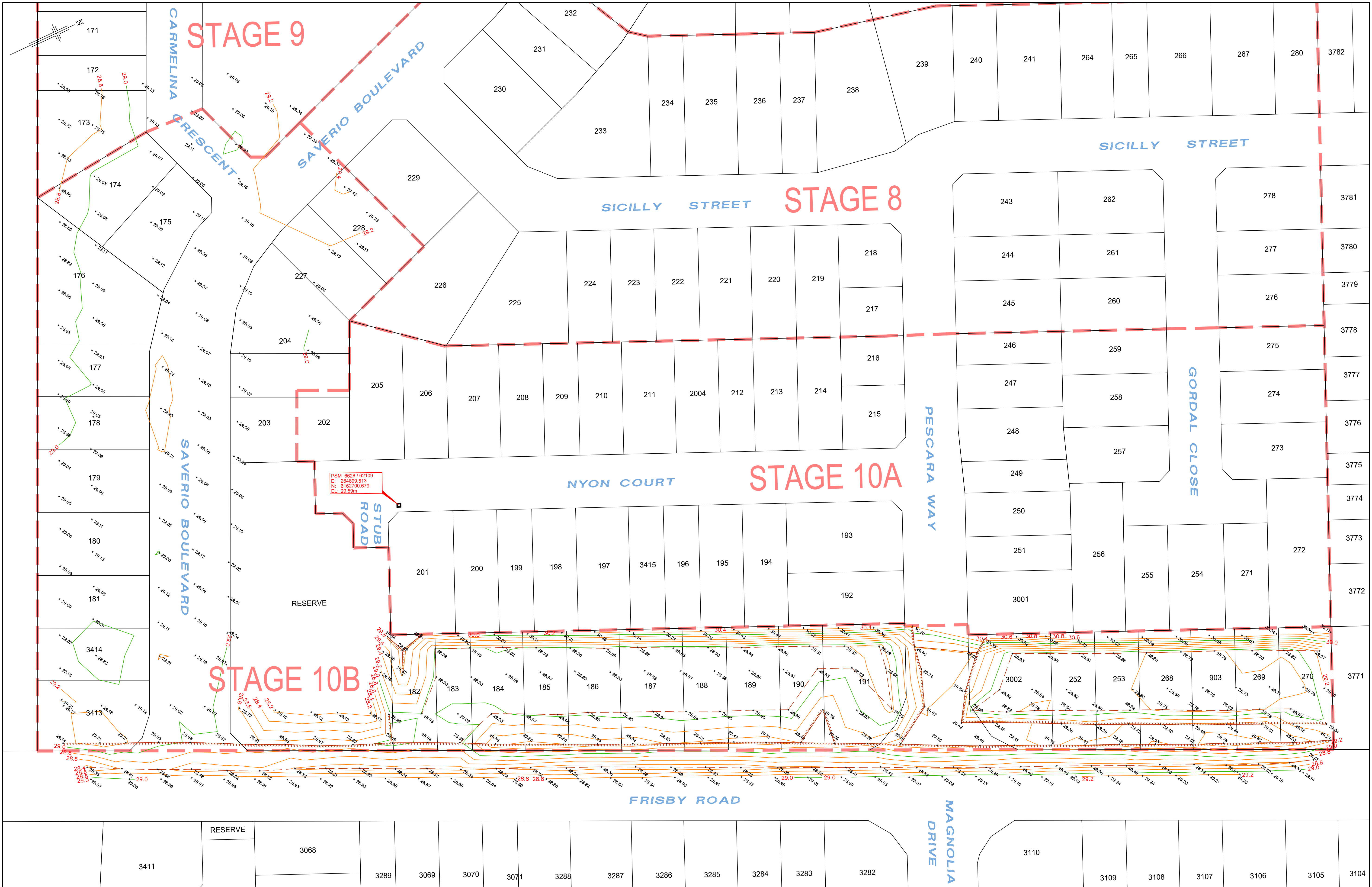
Sample Number	41755-104		
Date Tested	31/10/2024		
Time Tested	15:45		
Test Request #/Location	Roadway - Refer To Map		
Layer / Reduced Level	Layer 2		
Thickness of Layer (mm)	200		
Soil Description	Type A Fill		
Test Depth (mm)	175		
Fraction Tested (mm)	19.0		
Oversize (wet basis) %	**		
Oversize (dry basis) %	**		
Curing Hours	3.0		
Method used to Determine Plasticity	Visual/tactile		
Field Wet Density t/m ³	2.26		
Field Moisture Content %	5.2		
Field Dry Density t/m ³	2.15		
Maximum Dry Density t/m ³	2.20		
Adjusted Maximum Dry Density t/m ³	**		
Optimum Moisture Content (OMC) %	7.0		
Adjusted Optimum Moisture Content (OMC) %	**		
Moisture Variation %	2.0		
Moisture Ratio %	73.5		
Density Ratio %	98.0		
Compaction Method	Standard		

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Appendix C – Pre-Fill & Post Fill Survey



0		29/01/2025	INITIAL RELEASE	MV	N/A	47.51TK TOP KERB 47.36WT WATER TABLE 45.16FL FLOOR LEVEL 48.12IL INVERT LEVEL or TAP WATER METER SPRINKLER / IRRIG VALVE HYDRANT DOMESTIC OUTLET DOWNPIPE DOMESTIC SUMP STORMWATER WHOLE SEP / GRATING	47.51TK TOP KERB 47.36WT WATER TABLE 45.16FL FLOOR LEVEL 48.12IL INVERT LEVEL or TAP WATER METER SPRINKLER / IRRIG VALVE HYDRANT DOMESTIC OUTLET DOWNPIPE DOMESTIC SUMP STORMWATER WHOLE SEP / GRATING	TEL COMM. PILLAR / PIT TRAFFIC LIGHT SIGN / BUS SIGN MAIL BOX / SIGNAL BOX TICKET MACHINE ROAD / ELEC. SERVICE WATER SV / FP ELEC / GAS METER GAS SERVICE	PSM SURVEY MARKS BOREHOLE POWER / LIGHT POLE CABLE MARKER STONE / WOODEN POLE POST / BOLLARD SEWER MH / IO / SIP UNKNOWN POINT / SERVICE	EDGE OF VEGET. ROAD SIGN / HOARD. Possible REGULATED / SIGNIFICANT TREE by measurement only (trunk greater than 2.0m circumference). Professional advice from council / arborist required.	BOTTOM OF BANK TOP OF BANK CHANGE OF GRADE DRAIN SEWER PIPE UG TEL. COMM. UG WATER PIPE UG BUILDING WALL GI BUILDING CONCRETE FENCE GATE	COORDINATE SYSTEM VERTICAL: AHD HORIZONTAL: GROUND PLANE ORIENTED TO: MGA 2020 ZONE 54 SCALE: GROUND (CSF = 1:000 170 345) ADOPTED STATION & AUTHORITY PSM 6628/5151 RL: 28.282 SDB PSM 6628/5151 E: 283865.911 SDB N: 6163070.712 SDB SDB denotes SA Government survey data base	0 5 10 20 30 40 50 m 1:500 ORIGINAL SHEET SIZE A1 © ALEXANDER & SYMONDS PTY. LTD. Notes: Property boundaries and easements shown hereon have been compiled from government records and show discrepancies to Certificate of Title dimensions. Boundaries have not been verified by field survey. Construction or design on or near boundaries or easements will require additional survey work.	CONTOUR INTERVAL: 0.2m MIN 1.0m MAJ SURVEY: PROVIDED 23/01/2025 DRAWN: MV 29/01/2025 CHECKED: RES 29/01/2025	Alexander & Symonds Pty Ltd 11 King William Street Kent Town, South Australia 5067 PO Box 1000 Kent Town, SA 5071 ABN 93007 753 988 T (08) 8130 1666 F (08) 8362 0099 W www.alexander.com.au E adelaide@alexander.com.au + Property + Land Development + + Construction + Mining + + Spatial Information Management +	Alexander Symonds Surveying Consultants	POST TOPSOIL STRIP SURVEY MIRAVALE NOTO STAGE 10B ANGLE VALE DRAWING No. SHEET 1 OF 1 REVISION 20A0464.C010B Post Topsoil Strip (0) B
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REV	DATE	DESCRIPTION	CALC	FIELD	MV JKK MV	JKK JKK	JKK JKK	47.51TK TOP KERB 47.39VT WATER TABLE 45.16FL FLOOR LEVEL 45.12IL INVERT LEVEL 45.12IL TAP WATER METER SPRINKLER / IRRIG VALVE HYDRANT DOMESTIC OUTLET DOWNPIPE DOMESTIC SUMP STORMWATER WHOLE SEP / GRATING	TEL COMM. PILLAR / PIT TRAFFIC LIGHT SIGN / BUS SIGN LITTER BIN MAIL BOX / SIGNAL BOX TICKET MACHINE ROAD / ELEC. SERVICE WATER SV / FP ELEC. / GAS METER GAS SERVICE	PSM BOREHOLE POWER / LIGHT POLE CABLE MARKER STORIE / WOODEN POLE POST / BOLLARD SEWER MH / IO / SIP UNKNOWN POINT / SERVICE	EDGE OF VEGET. ROAD SIGN / HOARD. TREE / SHRUB Possible REGULATED / SIGNIFICANT TREE by measurement only (trunk greater than 2.0m circumference). Professional advice from council / arborist required.	BOTTOM OF BANK TOP OF BANK CHANGE OF GRADE DRAIN SEWER PIPE UG TEL. COMM. UG WATER PIPE UG BUILDING WALL GI BUILDING CONCRETE FENCE GATE	COORDINATE SYSTEM VERTICAL: AHD HORIZONTAL: GROUND PLANE ORIENTED TO: MGA 2020 ZONE 54 SCALE: GROUND (CSF = 1:000 170 345)		0 5 10 20 30 40 50 m 1:500 ORIGINAL SHEET SIZE A1		Alexander & Symonds Pty Ltd 11 King William Street Kent Town, South Australia 5067 PO Box 1000 Kent Town, SA 5071 ABN 93007 753 988 T (08) 8130 1666 F (08) 8362 0099 W www.alexander.com.au E adelaide@alexander.com.au + Property + Land Development + + Construction + Mining + + Spatial Information Management +	BULK EARTHWORKS AS CONSTRUCTED MIRAVALE NOTO STAGE 10B ANGLE VALE	DRAWING No. 20A0464.C010B Bulk Earthworks (B)	SHEET 1 OF 1	REVISION B
													ADOPTED STATION & AUTHORITY PSM 6628/5151 RL: 28.282 SDB PSM 6628/5151 E: 283865.911 SDB N: 6163070.712 SDB SDB denotes SA Government survey data base		Notes: Boundaries have not been verified by field survey. Construction or design on or near boundaries or assessments will require additional survey work.						