

# Compaction Control Test Report



**Report Number:** P18038-1  
**Issue Number:** 1  
**Date Issued:** 18/04/2018  
**Client:** Integra Land

Geotechnical Testing Services (Southern)  
 Bendigo Soil and Concrete Testing Laboratory  
 Gate 7, Sharon Street Bendigo VIC 3550  
 Phone: (03) 5441 4881  
 Email: joshl@gts.com.au

**Contact:** Madeleine Harris  
**Project Number:** P18038  
**Project Name:** Lucas Estate- Stage X7  
**Project Location:** Alfredton  
**Work Request:** 266  
**Date Sampled:** 12/04/2018  
**Sampling Method:** AS1289 1.2.1 6.4 - Sampling from layers in earthworks or pavement - uncompacted/compacted

**Remarks:** Testing Performed at:  
 Geotechnical Testing Services (Southern)  
 Ballarat Soil & Concrete Testing Branch Laboratory  
 Unit 6, 33 Laidlaw Drive  
 Delacombe, 3356



Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Josh Lagodzki  
 NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1		
Sample Number	D18-266A	D18-266B
Date Tested	12/04/2018	12/04/2018
Time Tested	14:06	14:18
Test Request #/Location	House Lot No 1054	House Lot No 1055
Easting	54H 745754	54H 745738
Northing	5841082	5841065
Elevation (m)	600mm BFL	600mm BFL
Layer / Reduced Level	Filling	Filling
Thickness of Layer (mm)	200mm	200mm
Soil Description	White brown clayey silt	Red Brown Silty Clay
Test Depth (mm)	175mm	175mm
Sieve used to determine oversize (mm)	19.0	19.0
Percentage of Wet Oversize (%)	**	**
Field Wet Density (FWD) t/m <sup>3</sup>	2.03	1.94
Field Dry Density (FDD) t/m <sup>3</sup>	**	**
Peak Converted Wet Density t/m <sup>3</sup>	1.97	1.92
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**
Moisture Variation (Wv) %	5.0	3.5
Adjusted Moisture Variation %	**	**
Hilf Density Ratio (%)	<b>103.0</b>	<b>101.0</b>
Compaction Method	<b>Standard</b>	<b>Standard</b>

**Moisture Variation Note:**

Positive values = test is dry of OMC  
 Negative values = test is wet of OMC

# Compaction Control Test Report



**Report Number:** P18038-2  
**Issue Number:** 1  
**Date Issued:** 14/05/2018  
**Client:** Integra Land

Geotechnical Testing Services (Southern)  
 Bendigo Soil and Concrete Testing Laboratory  
 Gate 7, Sharon Street Bendigo VIC 3550  
 Phone: (03) 5441 4881  
 Email: bryanm@gts.com.au

**Contact:** Madeleine Harris  
**Project Number:** P18038  
**Project Name:** Lucas Estate- Stage X7  
**Project Location:** Alfredton  
**Work Request:** 286  
**Date Sampled:** 07/05/2018 08:30  
**Sampling Method:** AS1289 1.2.1 6.4 - Sampling from layers in earthworks or pavement - uncompacted/compacted

**Remarks:** Testing Performed at:  
 Geotechnical Testing Services (Southern)  
 Ballarat Soil & Concrete Testing Branch Laboratory  
 Unit 6, 33 Laidlaw Drive  
 Delacombe, 3356

**Specification:** 95% Standard



Accredited for compliance with ISO/IEC 17025 - Testing

*Bryan Mott*

Approved Signatory: Bryan Mott  
 NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1						
Sample Number	D18-286A	D18-286B	D18-286C	D18-286D	D18-286E	D18-286F
Date Tested	07/05/2018	07/05/2018	07/05/2018	07/05/2018	07/05/2018	07/05/2018
Time Tested	08:32	08:35	08:37	08:46	08:50	09:00
Test Request #/Location	House Lot Nos 1051	House Lot Nos 1051	House Lot Nos 1051	House Lot Nos 1058	House Lot Nos 1058	House Lot Nos 1057
Easting	54H 745706	54H 745705	54H 745704	54H 745679	54H 745678	54H 745702
Northing	5841096	5841095	5841092	5841039	58410374	5841043
Elevation (m)	FL	300mm BFL	600mm BFL	FL	300mm BFL	FL
Layer / Reduced Level	Filling	Filling	Filling	Filling	Filling	Filling
Thickness of Layer (mm)	200mm	200mm	200mm	200mm	200mm	200mm
Soil Description	Orange Brown Sandy Clay	Orange Brown Sandy Clay	Orange Brown Sandy Clay	Orange Brown Sandy Clay	Orange Brown Sandy Clay	Orange Brown Sandy Clay
Test Depth (mm)	175mm	175mm	175mm	175mm	175mm	175mm
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 <sup>3</sup>	1.99	2.00	2.02	1.88	1.89	1.89
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	**	**	**	**
Peak Converted Wet Density t/m <sup>3</sup>	1.88	1.93	1.97	1.76	1.75	1.80
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**	**	**
Moisture Variation (Wv) %	3.0	1.5	2.0	2.0	2.5	0.5
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	<b>106.0</b>	<b>104.0</b>	<b>102.5</b>	<b>106.5</b>	<b>108.0</b>	<b>104.5</b>
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>

**Moisture Variation Note:**

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# Compaction Control Test Report



Report Number: P18038-2  
 Issue Number: 1  
 Date Issued: 14/05/2018  
 Client: Integra Land

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 Gate 7, Sharon Street Bendigo VIC 3550  
 Phone: (03) 5441 4881  
 Email: bryanm@gts.com.au

Contact: Madeleine Harris  
 Project Number: P18038  
 Project Name: Lucas Estate- Stage X7  
 Project Location: Alfredton  
 Work Request: 286  
 Date Sampled: 07/05/2018 08:30  
 Sampling Method: AS1289 1.2.1 6.4 - Sampling from layers in earthworks or pavement - uncompacted/compacted

Remarks: Testing Performed at:  
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Specification: 95% Standard



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Approved Signatory: Bryan Mott  
 NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1						
Sample Number	D18-286G	D18-286H	D18-286I	D18-286J	D18-286L	D18-286M
Date Tested	07/05/2018	07/05/2018	07/05/2018	07/05/2018	07/05/2018	07/05/2018
Time Tested	09:03	09:14	09:16	09:25	09:35	09:39
Test Request #/Location	House Lot Nos 1057	House Lot Nos 1056	House Lot Nos 1056	House Lot Nos 1055	House Lot No 1054	House Lot No 1054
Easting	54H 745708	54H 745714	54H 745720	54H 745737	54H 745752	54H 745754
Northing	5841054	5841052	5841050	5841070	5841080	5841078
Elevation (m)	300mm BFL	FL	300mm BFL	FL	FL	300mm BFL
Layer / Reduced Level	Filling	Filling	Filling	Filling	Filling	Filling
Thickness of Layer (mm)	200mm	200mm	200mm	200mm	200mm	200mm
Soil Description	Orange Brown Sandy Clay	Orange Brown Sandy Clay	Orange Brown Sandy Clay	Orange Brown Sandy Clay	Orange Brown Sandy Clay	Orange Brown Sandy Clay
Test Depth (mm)	175mm	175mm	175mm	175mm	175mm	175mm
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 <sup>3</sup>	1.88	1.94	1.94	1.91	1.99	2.01
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	**	**	**	**
Peak Converted Wet Density t/m <sup>3</sup>	1.79	1.88	1.90	1.87	1.87	1.87
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**	**	**
Moisture Variation (Wv) %	0.5	4.0	2.5	5.5	5.0	5.0
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	105.0	103.0	102.0	101.5	106.5	107.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

**Moisture Variation Note:**

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*Bryan Mott*

Approved Signatory: Bryan Mott  
 NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1	
Sample Number	D18-286K
Date Tested	07/05/2018
Time Tested	09:29
Test Request #/Location	House Lot Nos 1055
Easting	54H 745734
Northing	5841064
Elevation (m)	300mm BFL
Layer / Reduced Level	Filling
Thickness of Layer (mm)	200mm
Soil Description	Orange Brown Sandy Clay
Test Depth (mm)	175mm
Oversize (wet basis) %	0
Oversize (dry basis) %	0
Fraction Tested (mm)	19.0
Field Wet Density t/m <sup>3</sup>	1.91
Field Moisture Content %	12.9
Field Dry Density t/m <sup>3</sup>	1.69
Maximum Dry Density t/m <sup>3</sup>	1.68
Adjusted Maximum Dry Density t/m <sup>3</sup>	**
Optimum Moisture Content (OMC) %	20.0
Adjusted Optimum Moisture Content (OMC) %	**
Moisture Variation %	7.0
Moisture Ratio %	65.0
Density Ratio %	101.0
Compaction Method	Standard

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