

Opalia Estate Stage 8

GITA Inspection Verification Report

Prepared For: Lojac Civil Pty Ltd

Report Number D22760A V1

Version Release Date 15 Jun 2022

Report Released By C Caulfield

Title Project Manager

Signature



Table of Contents

1 Introduction 3

2 Scope of Work 3

 2.1 Area of Work 3

 2.2 Specification 3

 2.3 Limitations 4

3 Construction Method 5

 3.1 Subgrade Preparation 5

 3.2 Fill Placement 5

4 Construction Verification 5

5 Statement of Compliance 6

Appendices

- Appendix 1 Test Location Plan
- Appendix 2 Compaction Test Register and Test Certificates

1 Introduction

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical Inspection and Testing Authority (GITA) to provide Level 1 supervision and testing works on the earthworks component for Opalia Estate Stage 8. This work was conducted over the period of 03/03/2022 to 08/06/2022.

This report presents that the allotment earthworks was carried out in accordance with AS3798-2007 *Guidelines for Earthworks for Commercial and Residential Development* and in compliance with the compaction control specifications established by the contractor.

2 Scope of Work

2.1 Area of Work

The areas of work included lots 801, 809 to 829, 831 to 837 and 848 to 851, bounded by streets Elpis Road, Moneta Way, Gansha Street, Libra Road, Metroon Drive and Paddy Way. The site will be a Residential development.

The area on which fill was placed is shown on site plan (Appendix 1: *Test Location Plan*) based on drawings prepared by Breese Pitt Dixon Pty Ltd (Drawing Reference: 6751 E/8R) and provided by Lojac Civil Pty Ltd.

The supervision work by the GITA involved both inspection of sub grade preparation work and full time inspection and testing of fill placement.

2.2 Specification

The technical specification (Reference from Drawings) for compaction control requirements was provided by Lojac Civil Pty Ltd and established that:

Test Rolling is required for all layers of structural fill and materials within 150mm of permanent subgrade level so as to withstand test rolling without visible deformation or springing. Corrective action is required where unstable areas exceed 20% of the area being considered by test rolling.

Section 5.2 of AS3798-2007 (Section 5.2) establishes a specification requirement for a minimum density ratio of not less than 95% noting that soils containing more than 20% of particles coarser than 37.5mm cannot be tested for relative compaction using the procedures of AS1289 5.1.1 and AS1289 5.2.1.

In accordance with Table 8.1 (AS3798), for large scale operations, (greater than 1500m²), the minimum testing frequency is 1 test per layer per material type per 2500m² or 1 test per 500m³ distributed reasonable evenly throughout full depth and area or 3 tests per lot. AS3798 defines a lot as “an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work”. All three of these test frequencies must be achieved and this is typically confirmed to have been achieved when 3 tests per visit (day) have been completed.

2.3 Limitations

Terra Firma Laboratories cannot verify any works completed by others outside of the time period specified in the introduction. Uncontrolled works may include, but are not limited to trenching for services, cut and fill works for slab preparation or subsequent removal of vegetation and back fill of holes unless specified in section 2.1 of this report.

Terra Firma Laboratories cannot verify that the material used as a filling medium is free from chemical or other contamination. The scope and the period of Terra Firma Laboratories as described in the introduction are subject to restrictions and limitations. Terra Firma Laboratories did not perform a complete assessment of all possible conditions and circumstances that may exist at the site. If a service is not expressly indicated, do not assume it has been provided. If a matter is not addressed, do not assume that any determination has been made by Terra Firma Laboratories.

Verification of finished surface level to design levels is outside of the scope of the GITA report.

Any drawings or marked locations presented in this report should be considered only as pictorial evidence of our work. Therefore, unless otherwise stated, any dimensions should not be used for accurate calculations or dimensioning.

Where data has been supplied by the client or a third party, it is assumed that the information is correct unless otherwise stated. No responsibility is accepted by Terra Firma Laboratories for incomplete or inaccurate data supplied by others.

This document is COPYRIGHT, all rights reserved to Terra Firma Laboratories and therefore no part of this document may be reproduced or copied in any form or by means without the written permission of Terra Firma Laboratories. This submission is for the use only of the party to whom it is addressed and for no other purpose. No responsibility is accepted to any third party who may use or rely on the whole or any part of the content of this submission. No responsibility will be taken for this report if it is altered in any way, or not reproduced in full.

3 Construction Method

3.1 Subgrade Preparation

At the time of subgrade inspection the following was observed:

- Subgrade preparation involved stripping the site of topsoil, vegetation and organic matter to a depth of approximately 200mm below existing levels.
- The site was cleared of all trees and stumps to the extent necessary for the fill placement to proceed
- The roots of all trees and any debris was removed from site prior to any fill placement

The sub-grade area was then proof-rolled to confirm it was capable of withstanding test rolling without visible deformation or springing and any areas observed to be soft or otherwise unsuitable were rectified. The sub-grade was watered and scarified prior to fill placement to aid layer bonding.

3.2 Fill Placement

The contractor was observed to have suitable construction equipment and plant available on-site during the construction period for use in the fill placement.

All fill was placed in layers of thicknesses not exceeding 300mm. At the completion of a placed layer, compaction testing was performed to confirm appropriate compaction had been achieved and supported the observations made. It should be noted that the compaction tests are representative samples of the fill placed and support the visual assessment of the works completed. Each house lot does not necessarily require a compaction test to have been conducted within the house allotment but may have been verified by testing conducted within up to a 2500m² area of the house lot.

Final fill placement levels were verified against design level by others. For the purposes of this report, it was observed that finished levels were in accordance with levels marked on site by survey markers.

The final 300mm of material placed across the site was placed as a topsoil layer or growing medium and should be considered as non-structural, as it was placed in an uncontrolled manner, as allowed by specifications and placement of the final 300mm of material was not observed by the GITA.

4 Construction Verification

Compaction Verification testing is summarized in a detailed test register with test certificates attached provided in Appendix 2: *Compaction Test Register and Test Certificates*. A test location

plan (D22760D1, Appendix 1) providing a schematic of test locations across the extent of scope of works for every placed layer of fill is also documented.

A total of 25 density tests (Hilf method in accordance with 1289 5.7.1) were undertaken with 0 failed results. The results summarised in the compaction test register (Appendix 2) confirm that for every layer of fill placed in a specific work area, satisfactory testing was completed.

5 Statement of Compliance

The intention of this report is to provide a description of the earthworks construction for Stage 8 at Opalia Estate. For completed fill areas of greater than 300mm, and for works completed between 03/03/2022 and 08/06/2022, earthworks construction activities were conducted under the full time supervision of the Geotechnical Inspection and Testing Authority. Inspections and testing of the fill areas at this site indicate that both sub grade preparation and fill placement have been conducted in accordance with the specification. The earthworks construction for Stage 8 of Opalia Estate was observed to be constructed in compliance with the requirements of the Technical Specification.



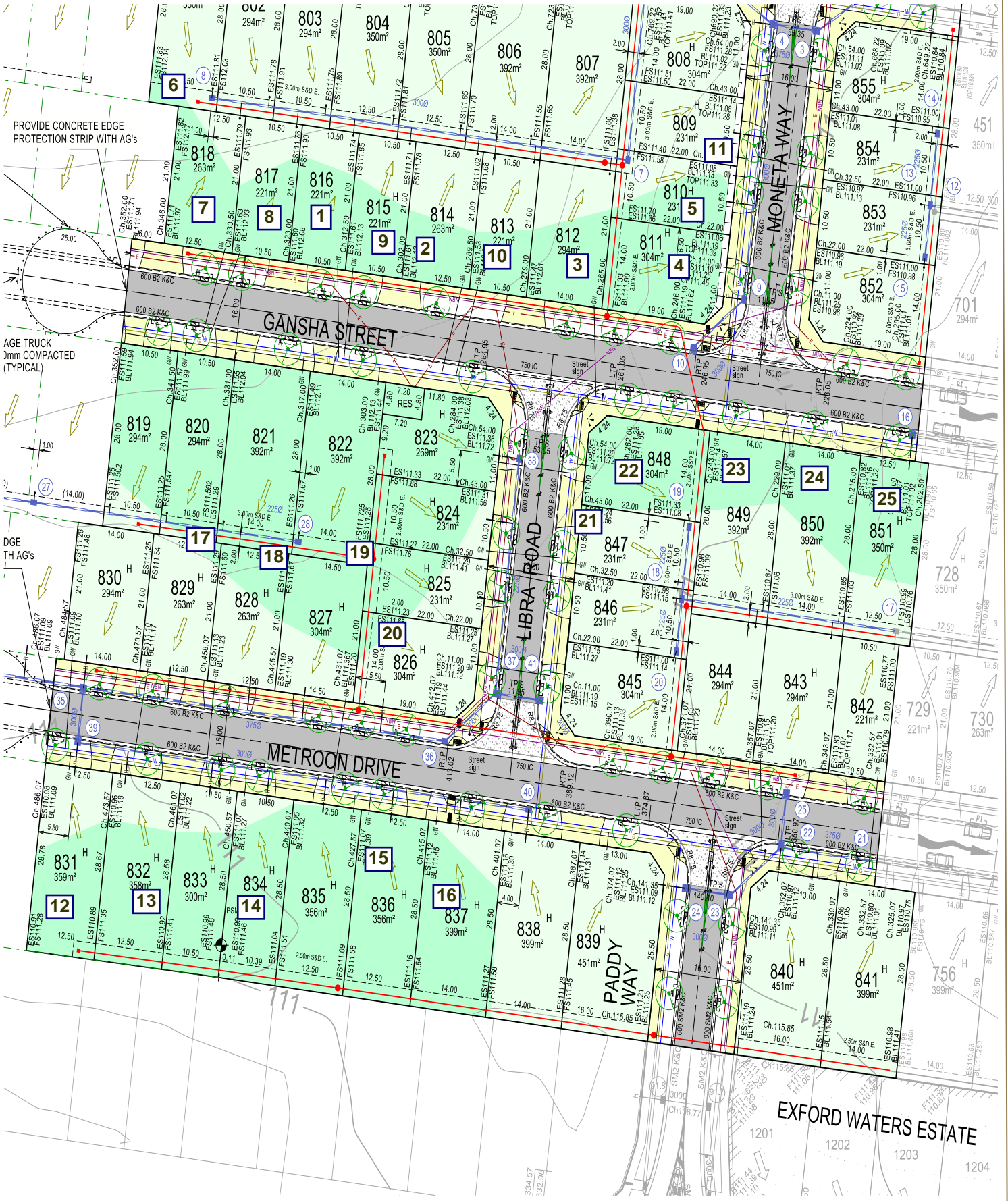
Your Worksite is Our Laboratory.

Appendix 1: Test Location Plan

Our Head Office
47 National Ave
Pakenham, VIC 3810

Our Laboratories
Pakenham 03 9769 5799
Deer Park 03 8348 5596
Bibra Lake 08 9395 7220

TERRAFIRMALABS.COM.AU
Page 1 of 2



Our Head Office
47 National Ave
Pakenham, VIC 3860

Our Laboratories
Pakenham 03 9769 5799
Deer Park 03 8348 5596
Bibra Lake 08 9395 7220

Test Location Plan
not to scale

Client:	Lojac Civil Pty Ltd
Project:	Opalia Estate, Stage 6
Reference:	D22760 D1



Your Worksite is Our Laboratory.

Appendix 2: Compaction Test Register and Test Certificates



Compaction Test Register

Client: Lojac Civil Pty Ltd **Project No:** D22760
Project: Opalia Estate Stage 8 **Specification:** 95%

Date:	Test No:	Layer:	Retest of:	Density:	Pass/Fail:	Lot No:	Report No:
3/03/2022	1	Layer 1		99.5%	Pass	Lot 816	D22760-1
3/03/2022	2	Layer 1		98.5%	Pass	Lot 814	D22760-1
3/03/2022	3	Layer 1		98.5%	Pass	Lot 812	D22760-1
3/03/2022	4	Layer 1		100.5%	Pass	Lot 811	D22760-1
3/03/2022	5	Layer 1		100.0%	Pass	Lot 810	D22760-1
3/03/2022	6	Layer 1		99.5%	Pass	Lot 801	D22760-1
4/03/2022	7	Layer 1		100.5%	Pass	Lot 818	D22760-2
4/03/2022	8	Layer 1		101.0%	Pass	Lot 817	D22760-2
4/03/2022	9	Layer 1		97.5%	Pass	Lot 815	D22760-2
4/03/2022	10	Layer 1		101.0%	Pass	Lot 813	D22760-2
4/03/2022	11	Layer 1		101.5%	Pass	Lot 809	D22760-2
5/05/2022	12	Layer 1		99.0%	Pass	Lot 831	D22760-3
5/05/2022	13	Layer 1		98.0%	Pass	Lot 832	D22760-3
5/05/2022	14	Layer 1		99.5%	Pass	Lot 834	D22760-3
5/05/2022	15	Layer 1		99.0%	Pass	Lot 836	D22760-3
5/05/2022	16	Layer 1		99.0%	Pass	Lot 837	D22760-3
6/05/2022	17	Layer 1		99.5%	Pass	Lot 829	D22760-4
6/05/2022	18	Layer 1		98.5%	Pass	Lot 828	D22760-4
6/05/2022	19	Layer 1		100.5%	Pass	Lot 827	D22760-4
6/05/2022	20	Layer 1		99.5%	Pass	Lot 826	D22760-4
8/06/2022	21	Layer 1		103.0%	Pass	Lot 847	D22760-5
8/06/2022	22	Layer 1		104.5%	Pass	Lot 848	D22760-5
8/06/2022	23	Layer 1		103.5%	Pass	Lot 849	D22760-5
8/06/2022	24	Layer 1		103.5%	Pass	Lot 850	D22760-5
8/06/2022	25	Layer 1		102.5%	Pass	Lot 851	D22760-5

Material Test Report


Report Number: D22760-1
Issue Number: 1
Date Issued: 07/03/2022
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: D22760
Project Name: Opalia estate stage 8 - Level one
Project Location: Melton
Work Request: 4334
Date Sampled: 03/03/2022 15:30
Dates Tested: 03/03/2022 - 04/03/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% STD
Location: Opalia estate stage 8 - Level one
Material: Silty Clay
Material Source: On Site



Deer Park Laboratory
 17 Walhalla Way Ravenhall VIC 3023
 Phone: 0435 751 756
 Email: ehippola@terrafirmalabs.com.au



Accredited for compliance with ISO/IEC 17025 - Testing


 Approved Signatory: Eranda Hippola
 Laboratory Manager
 NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	D22-4334A	D22-4334B	D22-4334C	D22-4334D	D22-4334E	D22-4334F
Test Number	1	2	3	4	5	6
Date Tested	03/03/2022	03/03/2022	03/03/2022	03/03/2022	03/03/2022	03/03/2022
Time Tested	14:10	14:25	14:40	14:50	15:15	15:30
Test Request #/Location	LOT 816	LOT 814	LOT 812	LOT 811	LOT 810	LOT 801
Layer / Reduced Level	LAYER 1	LAYER 1	LAYER 1	LAYER 1	LAYER 1	LAYER 1
Thickness of Layer (mm)	250	250	250	250	250	250
Soil Description	CLAY	CLAY	CLAY	CLAY	CLAY	CLAY
Test Depth (mm)	225	225	225	225	225	225
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	0	0	0	0	0	0
Field Wet Density (FWD) t/m ³	1.86	1.84	1.85	1.87	1.86	1.87
Field Moisture Content %	21.3	20.8	21.9	22.7	23.7	20.2
Field Dry Density (FDD) t/m ³	1.53	1.52	1.52	1.52	1.50	1.55
Peak Converted Wet Density t/m ³	1.87	1.87	1.88	1.87	1.86	1.88
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	26.5	24.5	27.7	28.5	29.6	24.9
Adj. Field Moisture Content % (AS1289.5.4.1)	21.3	20.8	21.9	22.7	23.7	20.2
Moisture Ratio % (AS1289.5.4.1)	80.5	85.0	79.0	79.5	80.0	81.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**	**	**	**
Moisture Variation (Wv) %	5.0	3.5	5.5	5.5	5.5	4.5
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	99.5	98.5	98.5	100.5	100.0	99.5
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: D22760-2
Issue Number: 1
Date Issued: 08/03/2022
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: D22760
Project Name: Opalia estate stage 8 - Level one
Project Location: Melton
Work Request: 4347
Date Sampled: 04/03/2022 09:50
Dates Tested: 04/03/2022 - 07/03/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% STD
Location: Opalia estate stage 8 - Level one
Material: Silty Clay
Material Source: On Site



Deer Park Laboratory
 17 Walhalla Way Ravenhall VIC 3023
 Phone: 0435 751 756
 Email: ehippola@terrafirmalabs.com.au



Accredited for compliance with ISO/IEC 17025 - Testing


 Approved Signatory: Eranda Hippola
 Laboratory Manager
 NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1					
Sample Number	D22-4347A	D22-4347B	D22-4347C	D22-4347D	D22-4347E
Test Number	7	8	9	10	11
Date Tested	04/03/2022	04/03/2022	04/03/2022	04/03/2022	04/03/2022
Time Tested	09:50	10:05	10:20	10:35	10:50
Test Request #/Location	LOT 818	LOT 817	LOT 815	LOT 813	LOT 809
Layer / Reduced Level	LAYER 1	LAYER 1	LAYER 1	LAYER 1	LAYER 1
Thickness of Layer (mm)	250	250	250	250	250
Soil Description	CLAY	CLAY	CLAY	CLAY	CLAY
Test Depth (mm)	225	225	225	225	225
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	0	0	0	0	0
Field Wet Density (FWD) t/m ³	1.83	1.84	1.82	1.87	1.86
Field Moisture Content %	22.0	24.2	23.4	23.4	23.9
Field Dry Density (FDD) t/m ³	1.50	1.48	1.47	1.52	1.50
Peak Converted Wet Density t/m ³	1.82	1.82	1.86	1.85	1.84
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	27.7	30.0	29.3	29.3	30.0
Adj. Field Moisture Content % (AS1289.5.4.1)	22.0	24.2	23.4	23.4	23.9
Moisture Ratio % (AS1289.5.4.1)	79.0	80.5	80.0	80.0	80.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**	**	**
Moisture Variation (Wv) %	5.5	5.5	5.5	5.5	5.5
Adjusted Moisture Variation %	**	**	**	**	**
Hilf Density Ratio (%)	100.5	101.0	97.5	101.0	101.5
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: D22760-3
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason: Correct Lot Numbers Added
Date Issued: 15/06/2022
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: D22760
Project Name: Opalia estate stage 8 - Level one
Project Location: Melton
Work Request: 4601
Date Sampled: 05/05/2022
Dates Tested: 05/05/2022 - 09/05/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% STD
Site Selection: Selected by Client
Location: Opalia estate stage 8 - Level one
Material: Clay
Material Source: On site



Deer Park Laboratory
 17 Walhalla Way Ravenhall VIC 3023
 Phone: 0435 751 756
 Email: ccaulfield@terrafirmalabs.com.au



Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Chris Caulfield
 Project Manager

NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1					
Sample Number	D22-4601A	D22-4601B	D22-4601C	D22-4601D	D22-4601E
Test Number	12	13	14	15	16
Date Tested	05/05/2022	05/05/2022	05/05/2022	05/05/2022	05/05/2022
Time Tested	15:36	15:36	15:36	15:36	15:36
Test Request #/Location	Lot 831	Lot 832	Lot 834	Lot 836	Lot 837
Layer / Reduced Level	Layer 1	Layer 1	Layer 1	Layer 1	Layer 1
Thickness of Layer (mm)	300	300	300	300	300
Soil Description	Clay	Clay	Clay	Clay	Clay
Test Depth (mm)	275	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	6	0	3	4	7
Field Wet Density (FWD) t/m ³	1.96	1.91	1.95	1.93	1.96
Field Moisture Content %	18.4	18.4	19.0	18.7	18.6
Field Dry Density (FDD) t/m ³	1.65	1.62	1.64	1.63	1.65
Peak Converted Wet Density t/m ³	**	1.96	**	**	**
Adjusted Peak Converted Wet Density t/m ³	1.97	**	1.96	1.96	1.98
Moisture Variation (Wv) %	**	2.5	**	**	**
Adjusted Moisture Variation %	2.5	**	2.5	3.0	2.0
Hilf Density Ratio (%)	99.0	98.0	99.5	99.0	99.0
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: D22760-4
Issue Number: 1
Date Issued: 11/05/2022
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: D22760
Project Name: Opalia estate stage 8 - Level one
Project Location: Melton
Work Request: 4613
Date Sampled: 06/05/2022 13:25
Dates Tested: 06/05/2022 - 11/05/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% STD
Site Selection: Selected by Client
Location: Opalia Estate stage 8 - Level one
Material: Clay
Material Source: On site



Deer Park Laboratory
 17 Walhalla Way Ravenhall VIC 3023
 Phone: 0435 751 756
 Email: ehippola@terrafirmalabs.com.au



Accredited for compliance with ISO/IEC 17025 - Testing


 Approved Signatory: Eranda Hippola
 Laboratory Manager
 NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	D22-4613A	D22-4613B	D22-4613C	D22-4613D
Test Number	17	18	19	20
Date Tested	06/05/2022	06/05/2022	06/05/2022	06/05/2022
Time Tested	13:25	14:10	14:35	14:45
Test Request #/Location	Lot 829	Lot 828	Lot 827	Lot 826
Layer / Reduced Level	Layer 1	Layer 1	Layer 1	Layer 1
Thickness of Layer (mm)	250	250	250	250
Soil Description	Clay	Clay	Clay	Clay
Test Depth (mm)	225	225	225	225
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	4	4
Percentage of Dry Oversize (%) (AS1289.5.4.1)	0	0	**	**
Field Wet Density (FWD) t/m ³	1.89	1.87	1.94	1.92
Field Moisture Content %	30.9	30.6	29.5	29.6
Field Dry Density (FDD) t/m ³	1.44	1.43	1.51	1.50
Peak Converted Wet Density t/m ³	1.89	1.90	**	**
Adjusted Peak Converted Wet Density t/m ³	**	**	1.93	1.93
Adj. Optimum Moisture Content % (AS1289.5.4.1)	29.8	29.9	27.3	26.4
Adj. Field Moisture Content % (AS1289.5.4.1)	30.9	30.6	28.3	28.5
Moisture Ratio % (AS1289.5.4.1)	103.5	102.0	**	**
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	103.5	108.0
Moisture Variation (Wv) %	-1.0	-0.5	**	**
Adjusted Moisture Variation %	**	**	-1.0	-2.0
Hilf Density Ratio (%)	99.5	98.5	100.5	99.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

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

Material Test Report


Report Number: D22760-5
Issue Number: 1
Date Issued: 09/06/2022
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: D22760
Project Name: Opalia estate stage 8 - Level one
Project Location: Melton
Work Request: 4734
Date Sampled: 08/06/2022 11:00
Dates Tested: 08/06/2022 - 08/06/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 97% STD
Site Selection: Selected by Client
Location: Opalia Estate stage 8 - Level one (LOT Testing only)
Material: Clay
Material Source: On Site



Deer Park Laboratory
 17 Walhalla Way Ravenhall VIC 3023
 Phone: 0435 751 756
 Email: ehippola@terrafirmalabs.com.au



Accredited for compliance with ISO/IEC 17025 - Testing


 Approved Signatory: Eranda Hippola
 Laboratory Manager
 NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	D22-4734A	D22-4734B	D22-4734C	D22-4734D	D22-4734E
Test Number	21	22	23	24	25
Date Tested	08/06/2022	08/06/2022	08/06/2022	08/06/2022	08/06/2022
Time Tested	11:00	11:00	11:00	11:00	11:00
Test Request #/Location	Lot 847	Lot 848	Lot 849	Lot 850	Lot 851
Layer / Reduced Level	Layer 1	Layer 1	Layer 1	Layer 1	Layer 1
Thickness of Layer (mm)	300	300	300	300	300
Soil Description	Clay	Clay	Clay	Clay	Clay
Test Depth (mm)	275	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	0	0	0	0	0
Field Wet Density (FWD) t/m ³	1.94	1.93	1.90	1.92	1.91
Field Moisture Content %	21.6	21.8	21.8	21.9	21.8
Field Dry Density (FDD) t/m ³	1.59	1.58	1.56	1.58	1.57
Peak Converted Wet Density t/m ³	1.88	1.85	1.83	1.85	1.86
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	26.0	26.2	26.7	26.3	26.0
Adj. Field Moisture Content % (AS1289.5.4.1)	21.6	21.8	21.8	21.9	21.8
Moisture Ratio % (AS1289.5.4.1)	83.5	83.0	81.5	83.5	83.5
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**	**	**
Moisture Variation (Wv) %	4.0	4.0	4.5	4.0	4.0
Adjusted Moisture Variation %	**	**	**	**	**
Hilf Density Ratio (%)	103.0	104.5	103.5	103.5	102.5
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