



LEVEL ONE EARTHWORKS REPORT

**PROPOSED RESIDENTIAL
DEVELOPMENT - WILLOW STAGE 1
LOGANVIEW ROAD NORTH
LOGAN RESERVE**

JUNE 16, 2023

SHADFORTH CIVIL

Authored by: QUALTEST LABORATORY PTY LTD

REF: 3793



Qualtest Laboratory

Est. 1987

Ref: 3793
Job: 22-408
Author: R. Mitchell

16th June 2023

Shadforth Civil
99 Sandalwood Lane
Forest Glen Qld 4556

ATTENTION: **MR MITCH TRONC**
Email: mitch.tronc@shadcivil.com.au

Dear Sir,

RE: **LEVEL ONE EARTHWORKS REPORT**

PROJECT: **PROPOSED RESIDENTIAL DEVELOPMENT
WILLOW STAGE 1
LOGANVIEW ROAD NORTH, LOGAN RESERVE**

CLIENT: **SHADFORTH CIVIL**

CONSULTANT: **PEAKURBAN**

CONTRACTOR: **SHADFORTH CIVIL**

Revision	Date	Author	Reviewer	Description
0	15/6/23	R. Mitchel	M. Morrison	Issued for Comments
A	16/6/23	R. Mitchell	M. Morrison	Issue to Client

1.0 INTRODUCTION

1.1 General

This report presents results and documentation for the Level One Inspection and Testing of earthworks filling operations for the Proposed Residential Development, Willow Stage 1, Loganview Road North, Logan Reserve (The Site).

Qualtest Laboratory Pty Ltd was commissioned by Shadforth Civil (The Client) to provide Level 1 Earthworks Inspection and Testing services as defined in Section 8 of AS3798.

Filling operations covered by this report were constructed between 4th October 2022 and 24th November 2022.

The purpose of Level 1 commission and this report is to provide an opinion that the earthworks operations carried out by the Client have been carried out in accordance with AS3798, relevant project specifications and Local Authority requirements as appropriate.

This report has been carried out in general accordance with the following: -

- AS3798-2007 - Guidelines on Earthwork for Commercial and Residential Development
- Peak Urban Engineers Consulting Drawings and Notes
- Logan City Council Requirements

This report does not cover underground services, trench backfill, pavements, retaining walls, filling outside areas shown on Figure 2 or any other works after 24th November 2022.

1.2 The Development

The development comprises of a 53-lot subdivision with associated infrastructure and underground services.

Earthworks to be constructed at the site is presented on Peak Urban drawings, Stage 1 Bulk Earthworks Layout Plan Sheet 1 and 2, Drawing 102 and 103 respectively reproduced below as Figure 1 and 2 below. These plans are considered to be reasonable indication of the actual fill constructed during our involvement.

Figure 1: Bulk Earthworks Layout Sheet 1 of 2

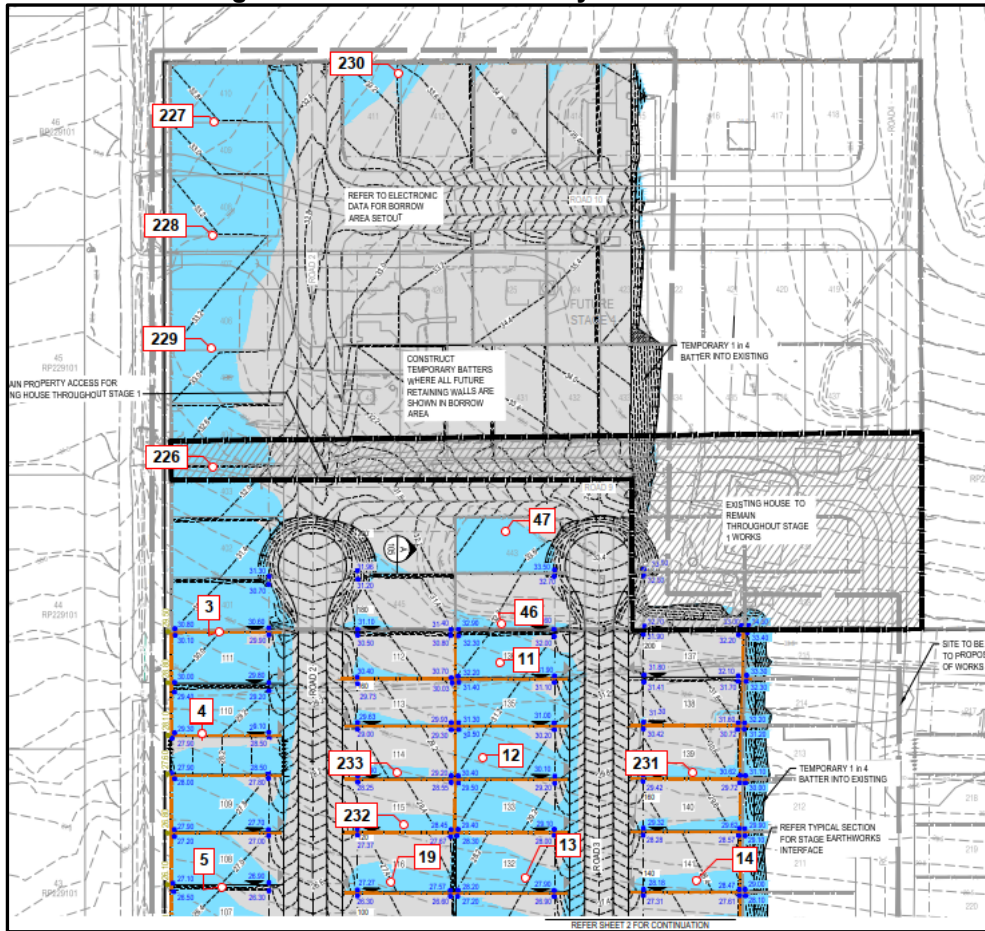
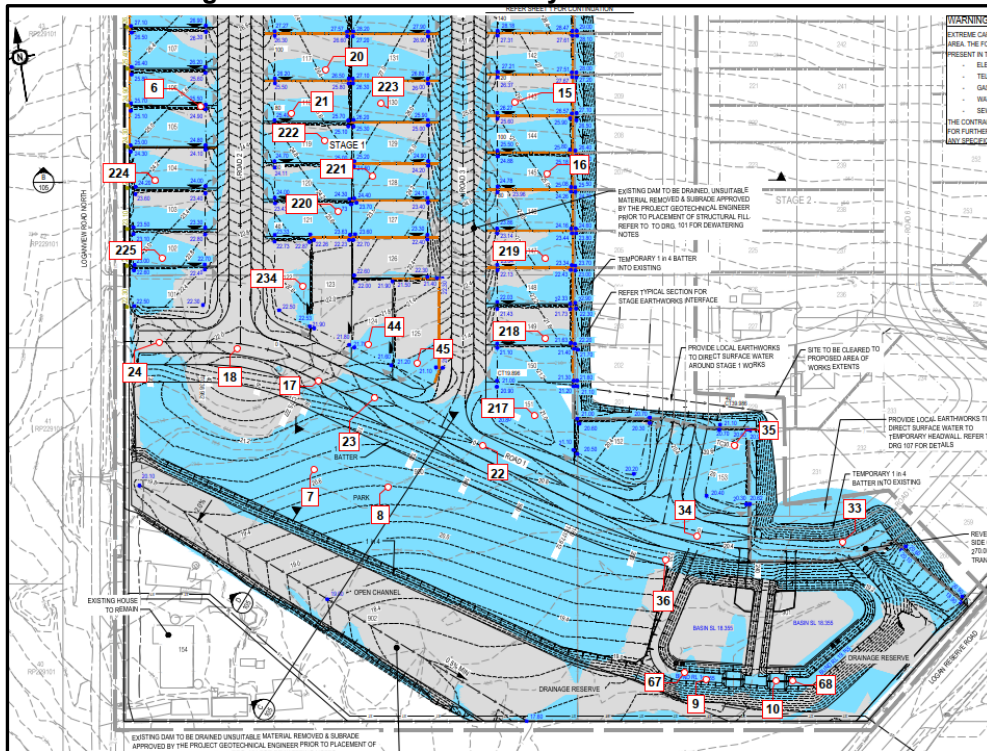


Figure 2: Bulk Earthworks Layout Plan Sheet 2 of 2



2.0 WORKS AND SPECIFICATIONS

All filling operations at the Site are to be placed and compacted in accordance with the following: -

- AS3798 – Type 2 Earthworks Operations.
- Logan City Council Specifications.
- Density Ratio – 95% Standard

3.0 FILL FOUNDATION

Areas to be filled at the site were observed to be stripped of existing fill, vegetation, grass, redundant services, water affected ground and topsoil to depths exposing competent natural ground.

Compliance of the fill foundation and approval to commence filling was on the basis of: -

- Complete removal of existing fill.
- Adequate removal of topsoil and organics.
- Adequate removal of redundant service trenches.
- Compliant proof roll testing of the stripped surface using onsite heavy earthworks plant.

A picture of the stripped natural surface prior to filling is presented below.

Picture 1: View of the Stripping Operations



4.0 FILLING OPERATIONS

Fill at the site was sourced from onsite and included: -

- Onsite Cuts and Trench Spoil.

Materials used as fill can be broadly summarised as: -

- Onsite – Sandy Clay (Cl), medium plasticity fines, fine to medium sand, orange brown, red brown and moist.
- Onsite – Silty Gravelly Clay (CL-Cl) low to medium plasticity fines, fine to coarse gravels, traces of sand, orange brown and moist.

Fill was constructed using the following plant: -

- Articulated Dump Trucks
- Pad Foot Roller
- Excavator
- Dozer
- Water Truck
- Grader

Fill was observed to be placed in layers within the capacity of the above plant, appropriately moisture conditioned and compacted using several passes.

To the extent that was reasonably practicable, fill materials visibly containing excessive amounts of silts or deleterious materials such as sticks, oversize particles were sorted to remove the contaminants prior to placement, or rejected for use. Some cobble sized particles may remain in the body of the fill, however, are unlikely to be in sufficient quantities to adversely affect the performance of the new fill. Sloping areas requiring filling were benched and continually keyed into the slope prior to and during fill placement.

A Picture of the filling operations is presented below.

Picture 2: View of Filling Operations



5.0 COMPACTION TESTING

Compaction testing was carried out on the compacted fill materials in accordance with Table 5.1 and 8.1 of AS3798 2007 and tested to AS1289 test methods. All test locations were selected by Qualtest at random and staggered over the fill area and depth. Test locations were not obtained by survey and on this basis, the locations should be considered as approximate only.

Compaction testing achieved the minimum required compaction specification of 95% Standard at the test locations. Areas where the compaction specification was not achieved were reworked and re-tested using random stratified location processes.

The location of the compaction tests and area of fill covered under this report are shown on the Site Plan contained in Appendix A. Compaction test reports are contained in Appendix B.

6.0 STATEMENT OF COMPLIANCE

Our representatives observed the relevant earthworks operations during our engagement including the stripped surface, new fill placement and compaction operations, and compaction testing.

As far as Qualtest could assess, the fill at The Site has been observed to be placed and compacted in accordance with the requirements outlined in Section 2.0.

The fill at The Site can be considered to be "Controlled" as defined in AS2870.

7.0 EXCLUSIONS

The compliance statement specifically excludes any topsoil, which may be placed for use as Lot dressing or any other subsequent earthworks after 22nd November 2022. All trench backfill, landscaping fill, fill outside the area shown as Figure 2 and other fill placed without our knowledge is also excluded.

Assessments of batter stability, global stability, and material quality such as soaked CBR and site classifications are excluded from this commission. The stability of any fill batters in the long term must take account of the variable materials used for the construction of the fill platforms and all surface loads including traffic loads near the crest of all batters.

Our on-site attendance specifically excludes assessments of fill material quality and engineering properties that are outside the requirements of AS3798 - 2007, including soil or fill reactivity and soaked CBR values. We note that the fill materials comprise clay soils, which may result in unfavourable site classifications for individual lots and low subgrade design strengths for pavements.

Footings and ground slabs for any structures constructed over natural soils or controlled fill should be designed to accommodate the characteristic ground surface movements and settlement potential. Assessments of these design parameters are beyond the scope of this Report.

Controlled fill (Level 1 Fill) provides an overview that the Earthwork Specification has been met. There are instances where significant long-term settlements of controlled fill can occur. Large total and differential settlements can be expected where fill has been placed over soft and compressible soils and where the thickness of controlled fill varies significantly across a lot.

Should you require further information regarding the above please do not hesitate to contact this office.

Yours faithfully,



MICHAEL MORRISON

For and on behalf of

QUALTEST LABORATORY PTY LTD.

Appendix A – Site Plan and Compaction Test Locations

Appendix B – Compaction Test Reports

Ref: 3793
Shadforth Civil



APPENDIX A

SITE PLAN AND COMPACTION TEST LOCATIONS



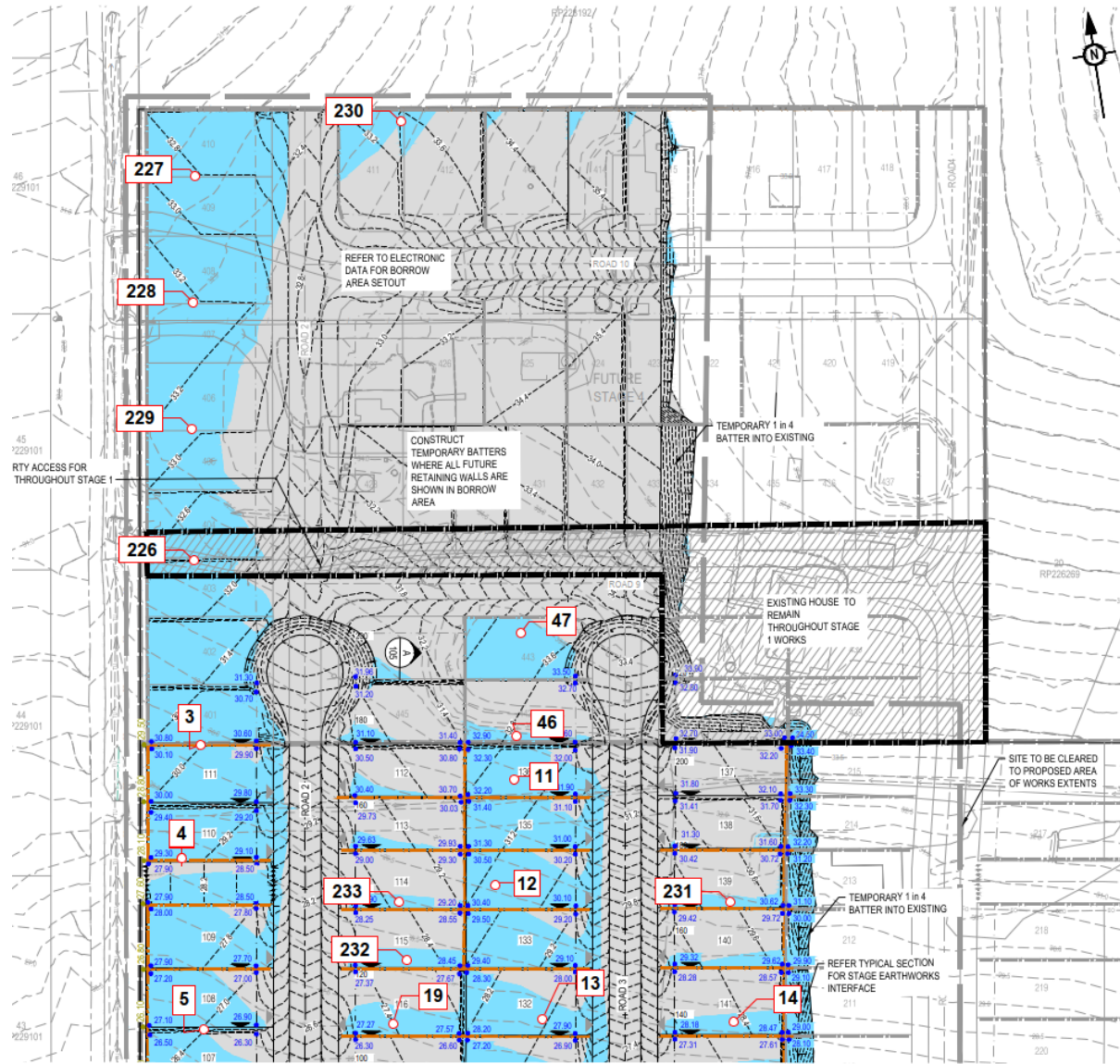
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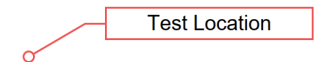
Qualtest Laboratory

Est. 1987



LEGEND:

Test Locations



CLIENT: SHADFORTH CIVIL

LOCATION: WILLOW STAGE 1

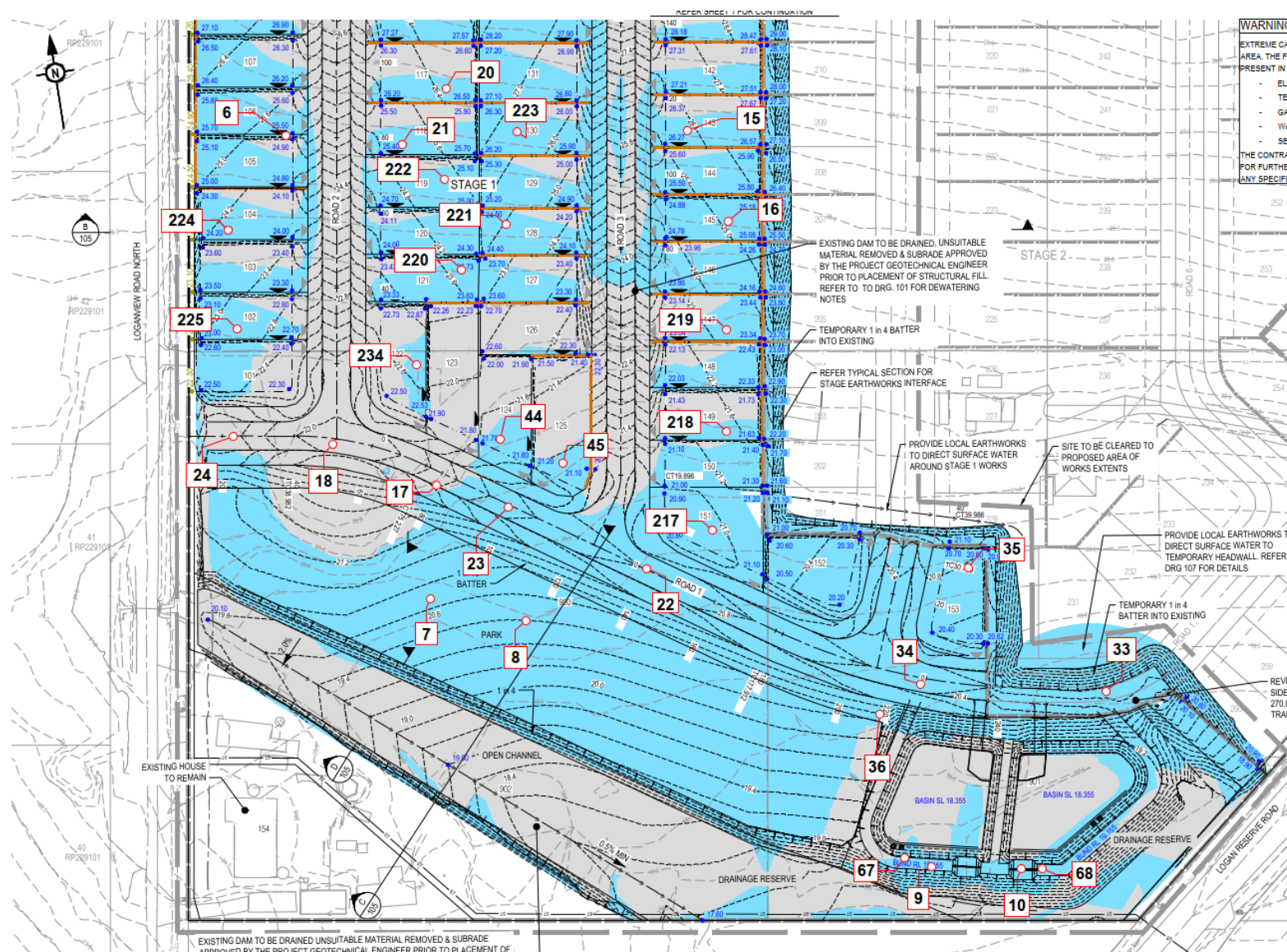
TITLE: APPROXIMATE FIELD DENSITY TEST LOCATIONS (SHEET 1)

DRAWING NO: 22-408-01

DATE: 15th June 2023

PROJECT NO: 22-408

CHECKED BY: GG



LEGEND:

Test Locations

○ — Test Location

CLIENT: SHADFORTH CIVIL

TITLE: APPROXIMATE FIELD DENSITY TEST LOCATIONS (SHEET 2)

DRAWING NO: 22-408-02
DATE: 15th June 2023

LOCATION: WILLOW STAGE 1

PROJECT NO: 22-408
CHECKED BY: GG



APPENDIX B

COMPACTION TEST REPORTS



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Material Test Report

Report Number: 22-408-4
Issue Number: 1
Date Issued: 24/10/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 2859
Date Sampled: 13/10/2022
Dates Tested: 13/10/2022 - 21/10/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 - WILLOW - LOGANVIEW ROAD NORTH
Material: Allotment Fill
Material Source: Onsite



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 Phone: 0417 011 515
 Email: rhys@qualtestgeo.com

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Rhys Mitchell
 Field Technician

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	S2859A	S2859B	
Test Number	3	4	
Date Tested	13/10/2022	13/10/2022	
Time Tested	12:50	13:15	
Test Request #/Location	Allotment Fill - Boundary of Lot 401-111	Allotment Fill - Boundary of Lot 110-109	
Easting	5m From East Boundary	5m From West Boundary	
Northing	**	**	
Layer / Reduced Level	F/L	F/L	
Soil Description	Sandy CLAY	Sandy CLAY	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m ³	2.03	2.01	
Field Moisture Content %	22.5	22.7	
Field Dry Density (FDD) t/m ³	1.66	1.64	
Peak Converted Wet Density t/m ³	2.01	2.00	
Adjusted Peak Converted Wet Density t/m ³	**	**	
Moisture Variation (Wv) %	0.0	0.0	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	101.0	100.5	
Compaction Method	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: 22-408-5
Issue Number: 1
Date Issued: 09/11/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 2891
Date Sampled: 14/10/2022
Dates Tested: 14/10/2022 - 04/11/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 - WILLOW - LOGANVIEW RD NORTH
Material: Allotment Fill
Material Source: Onsite



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Approved Signatory: Rhys Mitchell
 Field Technician

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	S2891A	S2891B	
Test Number	5	6	
Date Tested	14/10/2022	14/10/2022	
Time Tested	12:56	13:01	
Test Request #/Location	Earthworks - Boundary of Lot 108-107	Earthworks - Boundary of Lot 106-105	
Easting	7m From West Boundary	3m From East Boundary	
Northing	**	**	
Layer / Reduced Level	0.3m Below F/L	F/L	
Soil Description	Sandy CLAY	Sandy CLAY	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m ³	1.88	1.94	
Field Moisture Content %	26.3	16.8	
Field Dry Density (FDD) t/m ³	1.49	1.66	
Peak Converted Wet Density t/m ³	1.92	1.96	
Adjusted Peak Converted Wet Density t/m ³	**	**	
Moisture Variation (Wv) %	0.0	2.5	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	98.5	98.5	
Compaction Method	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: 22-408-6
Issue Number: 1
Date Issued: 09/11/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 2924
Date Sampled: 17/10/2022
Dates Tested: 17/10/2022 - 02/11/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 WILLOW - PARKLAND FILL - LOGANVIEW RD NORTH
Material: General Fill
Material Source: Onsite



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Approved Signatory: Rhys Mitchell
 Field Technician

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	S2924A	S2924B	
Test Number	7	8	
Date Tested	17/10/2022	17/10/2022	
Time Tested	14:11	14:38	
Test Request #/Location	Earthworks - Parkland STG 1 WILLOW	Earthworks - Parkland STG 1 WILLOW	
Easting	10637.56	10622.16	
Northing	933704.70	933713.14	
Layer / Reduced Level	0.6m below F/L	0.4m Below F/L	
Soil Description	Sandy, Gravelly, Clay, Brown	Sandy, Gravelly, Clay, Brown	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m ³	1.94	1.95	
Field Moisture Content %	9.5	23.4	
Field Dry Density (FDD) t/m ³	1.77	1.58	
Peak Converted Wet Density t/m ³	2.01	1.89	
Adjusted Peak Converted Wet Density t/m ³	**	**	
Moisture Variation (Wv) %	2.5	2.0	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	96.5	103.0	
Compaction Method	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: 22-408-7
Issue Number: 1
Date Issued: 14/11/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 2944
Date Sampled: 18/10/2022
Dates Tested: 18/10/2022 - 01/11/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - WILLOW STG 1 - BASIN WALLS - LOGANVIEW ROAD NORTH
Material: General Fill
Material Source: Onsite



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Approved Signatory: Rhys Mitchell
 Field Technician

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	S2944A	S2944B	
Test Number	9	10	
Date Tested	18/10/2022	18/10/2022	
Time Tested	14:30	15:00	
Test Request #/Location	Earthworks - Basin Walls	Earthworks - Basin Walls	
Easting	10713.18	10690.52	
Northing	933689.19	933678.50	
Elevation (m)	18.71	18.57	
Soil Description	Sandy CLAY	Sandy CLAY	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m ³	2.09	2.05	
Field Moisture Content %	16.5	15.7	
Field Dry Density (FDD) t/m ³	1.80	1.77	
Peak Converted Wet Density t/m ³	2.02	2.03	
Adjusted Peak Converted Wet Density t/m ³	**	**	
Moisture Variation (Wv) %	1.5	2.0	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	103.5	101.0	
Compaction Method	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: 22-408-8
Issue Number: 1
Date Issued: 15/11/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 3007
Date Sampled: 27/10/2022
Dates Tested: 27/10/2022 - 11/11/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 WILLOW - LOGANVIEW ROAD NORTH
Material: Allotment Fill
Material Source: Onsite



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Approved Signatory: Rhys Mitchell
 Field Technician

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	S3007A	S3007B	S3007C
Test Number	11	12	13
Date Tested	27/10/2022	27/10/2022	27/10/2022
Time Tested	13:04	13:11	13:17
Test Request #/Location	Earthworks - STG 1 - WILLOW - LOT=136	Earthworks - STG 1 - WILLOW - LOT=134	Earthworks - STG 1 - WILLOW - LOT=132
Easting	4m From South Boundary	5m From South Boundary	3m From South Boundary
Northing	8m From West Boundary	5m From West Boundary	7m From East Boundary
Layer / Reduced Level	0.3m Below F/L	F/L	F/L
Soil Description	Sandy CLAY	Sandy CLAY	Sandy CLAY
Test Depth (mm)	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Field Wet Density (FWD) t/m ³	2.00	1.96	1.98
Field Moisture Content %	19.8	20.0	18.0
Field Dry Density (FDD) t/m ³	1.67	1.63	1.67
Peak Converted Wet Density t/m ³	2.01	2.00	2.06
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	0.0	0.0	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	99.5	98.0	96.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

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

Material Test Report

Report Number: 22-408-9
Issue Number: 1
Date Issued: 15/11/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 3031
Date Sampled: 28/10/2022
Dates Tested: 28/10/2022 - 11/11/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 WILLOW - LOGANVIEW ROAD NORTH
Material: Allotment Fill
Material Source: Onsite



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Approved Signatory: Rhys Mitchell
 Field Technician

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	S3031A	S3031B	S3031C
Test Number	14	15	16
Date Tested	28/10/2022	28/10/2022	28/10/2022
Time Tested	12:39	12:45	12:50
Test Request #/Location	Earthworks - Lot =141	Earthworks - Lot =143	Earthworks - Lot =145
Easting	3m From South Boundary	4m From South Boundary	6m From South Boundary
Northing	10m From West Boundary	5m From West Boundary	7m From East Boundary
Layer / Reduced Level	F/L	F/L	F/L
Soil Description	Sandy CLAY	Sandy CLAY	Sandy CLAY
Test Depth (mm)	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Field Wet Density (FWD) t/m ³	1.84	1.89	1.90
Field Moisture Content %	20.5	19.3	23.8
Field Dry Density (FDD) t/m ³	1.53	1.58	1.53
Peak Converted Wet Density t/m ³	1.92	1.95	1.84
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	1.0	2.0	2.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	96.0	97.0	103.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: 22-408-10
Issue Number: 1
Date Issued: 15/11/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 3112
Date Sampled: 04/11/2022
Dates Tested: 04/11/2022 - 14/11/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 WILLOW - Loganview Road North
Material: Allotment Fill
Material Source: Onsite



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Approved Signatory: Rhys Mitchell
 Field Technician

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	S3112A	S3112B	S3112C
Test Number	19	20	21
Date Tested	04/11/2022	04/11/2022	04/11/2022
Time Tested	13:37	13:45	14:00
Test Request #/Location	Allotment Fill - Lot=116	Allotment Fill - Lot=117	Allotment Fill - Lot=118
Easting	2m From South Boundary	3m From South Boundary	4m From South Boundary
Northing	7m From East Boundary	5m From East Boundary	5m From West Boundary
Layer / Reduced Level	F/L	F/L	F/L
Soil Description	Sandy CLAY	Sandy CLAY	Sandy CLAY
Test Depth (mm)	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Field Wet Density (FWD) t/m ³	1.93	1.95	1.98
Field Moisture Content %	18.1	18.2	18.0
Field Dry Density (FDD) t/m ³	1.63	1.65	1.68
Peak Converted Wet Density t/m ³	1.97	2.02	2.02
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Moisture Variation (Wv) %	1.0	1.0	0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	97.5	96.5	98.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

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

Material Test Report

Report Number: 22-408-11
Issue Number: 1
Date Issued: 17/11/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 3071
Date Sampled: 02/11/2022
Dates Tested: 02/11/2022 - 16/11/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 - WILLOW - Roadbox Replacement -
Material: Silty CLAY
Material Source: Onsite



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Approved Signatory: Greg Gibson
ql-greg

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	S3071A	S3071B	
Test Number	17	18	
Date Tested	02/11/2022	02/11/2022	
Time Tested	15:00	15:15	
Test Request #/Location	Earthworks - Road 1 - Replacement	Earthworks - Road 1 - Replacement	
Chainage (m)	80m	50m	
Location Offset (m)	1.8m Right from CL	1.4m Left from CL	
Layer / Reduced Level	0.6m Below F/L	0.5m Below F/L	
Soil Description	Silty CLAY	Silty CLAY	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m ³	1.99	2.07	
Field Moisture Content %	19.5	18.3	
Field Dry Density (FDD) t/m ³	1.67	1.75	
Peak Converted Wet Density t/m ³	2.05	2.04	
Adjusted Peak Converted Wet Density t/m ³	**	**	
Moisture Variation (Wv) %	-1.5	-0.5	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	97.0	101.5	
Compaction Method	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: 22-408-12
Issue Number: 1
Date Issued: 17/11/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 3140
Date Sampled: 07/11/2022
Dates Tested: 07/11/2022 - 17/11/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Road One Replacement - Earthworks - STG 1 WILLOW
Material: General Fill
Material Source: Onsite - Borrow pit



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NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

	S3140A	S3140B	S3140C
Sample Number	22	23	24
Test Number	07/11/2022	07/11/2022	07/11/2022
Date Tested	14:23	14:40	15:01
Time Tested	Earthworks - Road Box Replacement Road 1	Earthworks - Road Box Replacement Road 1	Earthworks - Road Box Replacement Road 1
Test Request #/Location	140m	100m	25m
Chainage (m)	1.4m Right from CL	0.9m Left from CL	1.2m Right from CL
Location Offset (m)	1.2 Below F/L	0.6m Below F/L	0.8m Below F/L
Layer / Reduced Level	Silty CLAY	Silty CLAY	Silty CLAY
Soil Description	150	150	150
Test Depth (mm)	19.0	19.0	19.0
Sieve used to determine oversize (mm)	0	0	0
Percentage of Wet Oversize (%)	2.06	2.09	2.00
Field Wet Density (FWD) t/m ³	15.9	17.6	15.9
Field Moisture Content %	1.77	1.78	1.72
Field Dry Density (FDD) t/m ³	2.10	2.08	2.01
Peak Converted Wet Density t/m ³	**	**	**
Adjusted Peak Converted Wet Density t/m ³	0.0	2.5	3.0
Moisture Variation (Wv) %	**	**	**
Adjusted Moisture Variation %	98.0	100.5	99.0
Hilf Density Ratio (%)	Standard	Standard	Standard
Compaction Method	**	**	**
Report Remarks			

Moisture Variation Note:

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

Material Test Report

Report Number: 22-408-14
Issue Number: 1
Date Issued: 21/11/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 3168
Date Sampled: 08/11/2022
Dates Tested: 08/11/2022 - 16/11/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Road One - Earthworks - STG 1 WILLOW - LOGANVIEW ROAD NORTH
Material: General Fill
Material Source: Onsite



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Approved Signatory: Rhys Mitchell
 Field Technician

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	S3168A	S3168B	
Test Number	33	34	
Date Tested	08/11/2022	08/11/2022	
Time Tested	15:00	15:15	
Test Request #/Location	Earthworks - STG 1 - Road One Replacement	Earthworks - STG 1 - Road One Replacement	
Chainage (m)	265m	225	
Location Offset (m)	1m Right from CL	1m Left from CL	
Layer / Reduced Level	1.6m Below F/L	1.3m Below F/L	
Soil Description	Silty CLAY	Silty CLAY	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m ³	2.01	2.10	
Field Moisture Content %	21.5	18.6	
Field Dry Density (FDD) t/m ³	1.66	1.77	
Peak Converted Wet Density t/m ³	2.11	2.07	
Adjusted Peak Converted Wet Density t/m ³	**	**	
Moisture Variation (Wv) %	0.0	-0.5	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	95.5	101.5	
Compaction Method	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: 22-408-15
Issue Number: 1
Date Issued: 22/11/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 3240
Date Sampled: 11/11/2022
Dates Tested: 11/11/2022 - 18/11/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 - WILLOW - LOGANVIEW RD NORTH
Material: Allotment Fill
Material Source: Onsite



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NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

	S3240A	S3240B	
Sample Number	S3240A	S3240B	
Test Number	35	36	
Date Tested	11/11/2022	11/11/2022	
Time Tested	12:45	12:49	
Test Request #/Location	Earthworks - Allotment Fill - Lot 153	Earthworks - Verge Fill	
Easting	5m From North Boundary	CH= 220m	
Northing	8m From West Boundary	RHS VERGE	
Layer / Reduced Level	1m Below F/L	1.3m Below F/L	
Soil Description	Sandy CLAY	Sandy CLAY	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m ³	1.93	1.99	
Field Moisture Content %	22.9	21.7	
Field Dry Density (FDD) t/m ³	1.57	1.64	
Peak Converted Wet Density t/m ³	1.98	1.99	
Adjusted Peak Converted Wet Density t/m ³	**	**	
Moisture Variation (Wv) %	1.5	2.5	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	97.0	100.0	
Compaction Method	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: 22-408-17
Issue Number: 1
Date Issued: 22/11/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 3342
Date Sampled: 18/11/2022
Dates Tested: 18/11/2022 - 21/11/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 AND FUTURE STG4 - WILLOW
Material: Allotment Fill
Material Source: Onsite



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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	S3342A	S3342B	
Test Number	46	47	
Date Tested	18/11/2022	18/11/2022	
Time Tested	09:52	09:55	
Test Request #/Location	Earthworks - FUTURE STG 4 - LOT=442	Earthworks - FUTURE STG 4 - LOT=443	
Easting	1m From South Boundary	4m From North Boundary	
Northing	7m From West Boundary	6m From East Boundary	
Layer / Reduced Level	F/L	0.3m Below F/L	
Soil Description	Sandy CLAY	Sandy CLAY	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m ³	2.02	1.96	
Field Moisture Content %	21.4	19.7	
Field Dry Density (FDD) t/m ³	1.66	1.64	
Peak Converted Wet Density t/m ³	1.93	1.91	
Adjusted Peak Converted Wet Density t/m ³	**	**	
Moisture Variation (Wv) %	2.5	2.5	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	104.5	102.5	
Compaction Method	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: 22-408-18
Issue Number: 1
Date Issued: 24/11/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 3306
Date Sampled: 16/11/2022
Dates Tested: 16/11/2022 - 22/11/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - Allotment Fill - STG 1 WILLOW
Material: Allotment Fill
Material Source: Onsite



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Approved Signatory: Rhys Mitchell
 Field Technician

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	S3306A	S3306B	
Test Number	44	45	
Date Tested	16/11/2022	16/11/2022	
Time Tested	13:50	14:45	
Test Request #/Location	Earthworks - Lot=124	Earthworks - Lot=125	
Easting	4m From South Boundary	3m From South Boundary	
Northing	4m From East Boundary	6m From East Boundary	
Layer / Reduced Level	F/L	F/L	
Soil Description	Sandy, Gravelly, Clay, Brown	Sandy, Gravelly, Clay, Brown	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m ³	1.97	1.99	
Field Moisture Content %	13.6	16.7	
Field Dry Density (FDD) t/m ³	1.73	1.71	
Peak Converted Wet Density t/m ³	1.92	1.96	
Adjusted Peak Converted Wet Density t/m ³	**	**	
Moisture Variation (Wv) %	5.5	3.0	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	102.5	101.5	
Compaction Method	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: 22-408-22
Issue Number: 1
Date Issued: 10/12/2022
Client: SHADFORTH CIVIL PTY LAD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WBPS - LOGANVIEW ROAD NORTH, LOGAN RESERVE
Client Reference: 564505
Work Request: 3481
Date Sampled: 24/11/2022
Dates Tested: 24/11/2022 - 02/12/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 - BASIN FILL - WILLOW
Material: General Fill
Material Source: Onsite



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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	S3481A	S3481B	
Test Number	67	68	
Date Tested	24/11/2022	24/11/2022	
Time Tested	11:16	11:40	
Test Request #/Location	Earthworks - Basin Fill- Western Basin	Earthworks - Basin Fill - Eastern Basin	
Easting	3m From Western Corner of Basin	6m From Eastern Corner of Basin	
Northing	Southern Wall	Southern Wall	
Layer / Reduced Level	0.5m Below F/L	0.5m Below F/L	
Soil Description	Sandy CLAY	Sandy CLAY	
Test Depth (mm)	150	150	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m ³	2.00	2.08	
Field Moisture Content %	18.7	19.4	
Field Dry Density (FDD) t/m ³	1.68	1.74	
Peak Converted Wet Density t/m ³	2.07	2.08	
Adjusted Peak Converted Wet Density t/m ³	**	**	
Moisture Variation (Wv) %	-1.5	-2.0	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	96.5	100.0	
Compaction Method	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: 22-408-73
Issue Number: 1
Date Issued: 15/06/2023
Client: SHADFORTH CIVIL PTY LTD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WILLOW_STAGE 1
Client Reference: 2472-002
Work Request: 6195
Date Sampled: 13/06/2023
Dates Tested: 13/06/2023 - 14/06/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 WILLOW -
Material: Allotment Fill
Material Source: Onsite



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Approved Signatory: Rhys Mitchell
 Field Technician

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	S6195A	S6195B	S6195C	S6195D	S6195E	S6195F
Test Number	217	218	219	220	221	222
Date Tested	13/06/2023	13/06/2023	13/06/2023	13/06/2023	13/06/2023	13/06/2023
Time Tested	13:00	13:05	13:11	13:21	13:25	13:32
Test Request #/Location	Lot 151	Lot 149	Lot 147	Lot 121	Lot 128	Lot 119
Easting	6m from North Boundary	1m from South Boundary	2m from South Boundary	3m from South Boundary	3m from North Boundary	5m from South Boundary
Northing	7m from East Boundary	4m from East Boundary	6m from East Boundary	4m from East Boundary	5m from West Boundary	5m from East Boundary
Layer / Reduced Level	Final Level	Final Level	Final Level	Final Level	Final Level	Final Level
Thickness of Layer (mm)	175	175	175	175	175	175
Soil Description	Sandy CLAY	Sandy CLAY	Sandy CLAY	Sandy CLAY	Sandy CLAY	Sandy CLAY
Test Depth (mm)	150	150	150	150	150	150
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	**
Field Wet Density (FWD) t/m ³	2.16	2.16	2.17	2.17	2.16	2.18
Field Moisture Content %	15.3	14.4	14.7	14.4	13.8	14.2
Field Dry Density (FDD) t/m ³	1.87	1.89	1.89	1.89	1.89	1.90
Peak Converted Wet Density t/m ³	2.10	2.12	2.10	2.16	2.14	2.12
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**	**
Moisture Variation (Wv) %	2.5	2.5	2.0	2.0	2.5	2.5
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	103.0	101.5	103.5	100.5	101.0	102.5
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: 22-408-74
Issue Number: 1
Date Issued: 16/06/2023
Client: SHADFORTH CIVIL PTY LTD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WILLOW_STAGE 1
Client Reference: 2472-002
Work Request: 6219
Date Sampled: 14/06/2023
Dates Tested: 14/06/2023 - 16/06/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 - Willow
Material: Allotment Fill
Material Source: Onsite



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Approved Signatory: Rhys Mitchell
 Field Technician

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	S6219A	S6219B	S6219C	S6219D	S6219E	S6219F
Test Number	223	224	225	226	227	228
Date Tested	14/06/2023	14/06/2023	14/06/2023	14/06/2023	14/06/2023	14/06/2023
Time Tested	09:00	09:05	09:10	09:15	09:20	09:24
Test Request #/Location	Lot 130	Lot 104	Lot 102	Common Boundary Lot 403 / Lot 404	Common Boundary Lot 419 / Lot 410	Common Boundary Lot 408 / Lot 407
Easting	6m from South Boundary	3m from South Boundary	Centre of Lot	8m from West Boundary	7m from West Boundary	6m from West Boundary
Northing	6m from West Boundary	6m from West Boundary	3m from South Boundary	-	-	-
Layer / Reduced Level	Final Level	Final Level	Final Level	Final Level	Final Level	Final Level
Thickness of Layer (mm)	175	175	175	175	175	175
Soil Description	Sandy CLAY	Sandy CLAY	Sandy CLAY	Sandy CLAY	Sandy CLAY	Sandy CLAY
Test Depth (mm)	150	150	150	150	150	150
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
Field Wet Density (FWD) t/m ³	2.14	2.08	2.11	2.16	2.16	2.14
Field Moisture Content %	8.0	8.2	8.5	7.9	7.6	8.0
Field Dry Density (FDD) t/m ³	1.98	1.92	1.95	2.00	2.00	1.98
Peak Converted Wet Density t/m ³	2.13	2.19	2.14	2.13	2.19	2.19
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**	**
Moisture Variation (Wv) %	2.5	2.5	2.0	4.5	4.0	3.5
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	100.0	95.0	99.0	101.5	98.5	98.0
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**	**

Moisture Variation Note:

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

Material Test Report

Report Number: 22-408-74
Issue Number: 1
Date Issued: 16/06/2023
Client: SHADFORTH CIVIL PTY LTD
 99 SANDALWOOD LANE, FOREST GLEN QLD 4556
Contact: ADEN MAYTHERS
Project Number: 22-408
Project Name: RESIDENTIAL DEVELOPMENT
Project Location: WILLOW_STAGE 1
Client Reference: 2472-002
Work Request: 6219
Date Sampled: 14/06/2023
Dates Tested: 14/06/2023 - 16/06/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Preparation Method: AS 1289.1.1 - Sampling and preparation of soils
Specification: 95% Standard
Site Selection: Selected by GTA
Location: Earthworks - STG 1 - Willow
Material: Allotment Fill
Material Source: Onsite



Qualtest Laboratory Pty Ltd
 Brisbane Laboratory
 2 / 40 Boyland Ave Cooper Plains QLD 4108
 Phone: 0417 011 515
 Email: rhys@qualtestgeo.com

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Rhys Mitchell
 Field Technician

NATA Accredited Laboratory Number: 2316

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	S6219G	S6219H	S6219I	S6219J	S6219K	S6219L
Test Number	229	230	231	232	233	234
Date Tested	14/06/2023	14/06/2023	14/06/2023	14/06/2023	14/06/2023	14/06/2023
Time Tested	09:29	09:34	09:38	09:44	09:49	09:52
Test Request #/Location	Common Boundary Lot 406 / Lot 405	Common Boundary Lot 411 / Lot 412	Lot 139	Lot 115	Lot 114	Lot 122
Easting	6m from West Boundary	2m from North Boundary	1m from South Boundary	2m from South Boundary	1m from South Boundary	2m from East Boundary
Northing	-	-	6m from East Boundary	6m from East Boundary	6m from West Boundary	2m from East Boundary
Layer / Reduced Level	Final Level	Final Level	Final Level	Final Level	Final Level	Final Level
Thickness of Layer (mm)	175	175	175	175	175	175
Soil Description	Sandy CLAY	Sandy CLAY	Sandy CLAY	Sandy CLAY	Sandy CLAY	Sandy CLAY
Test Depth (mm)	150	150	150	150	150	150
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
Field Wet Density (FWD) t/m ³	2.17	2.15	2.13	2.14	2.12	2.13
Field Moisture Content %	8.2	29.0	8.3	8.2	19.5	7.9
Field Dry Density (FDD) t/m ³	2.00	1.66	1.97	1.98	1.77	1.97
Peak Converted Wet Density t/m ³	2.17	2.23	2.17	2.20	2.21	2.19
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**	**
Moisture Variation (Wv) %	3.5	0.0	3.5	3.0	0.5	2.5
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	100.0	96.0	98.5	97.0	96.0	97.0
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**	**

Moisture Variation Note:

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