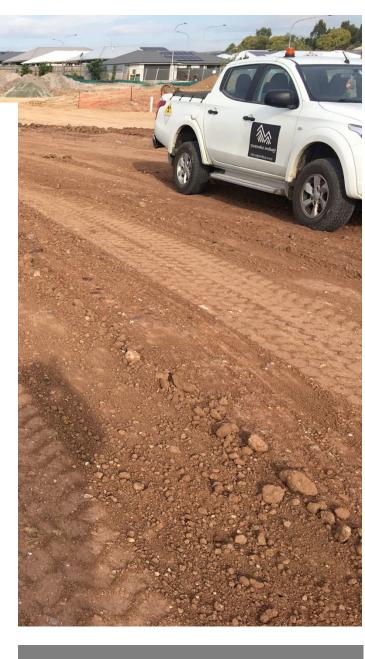
# LEVEL ONE EARTHWORKS REPORT

Proposed Residential Subdivision Dawn Estate Waterlea Stages 6B2 & 6B3



JULY 19 2023

Winslow Authored by: QUALTEST LABORATORY PTY LTD REF: 3912



Ref: 3912 Job: 22-372 Author: J Fowler



19<sup>th</sup> July 2023

Winslow 1587 Ipswich Road Rocklea QLD 4106

ATTENTION: MR KIERAN HOY Email: kieranh@ccawinslow.com.au

Dear Sir

RE: LEVEL ONE EARTHWORKS REPORT PROPOSED RESIDENTIAL SUBDIVISION DAWN ESTATE WATERLEA 6B2 AND 6B3

PROJECT: DAWN ESTATE DAWN ESTATE STAGES 6B2 AND 6B3

CLIENT: WINSLOW

SUPERINTENDENT: CALIBRE

CONTRACTOR: WINSLOW



Qualtest Laboratory Pty Ltd 2/40 Boyland Avenue Coopers Plains QLD 4108 PO Box 733 Archerfield QLD 4108

(07) 3875 1898 qualtest@qualtestgeo.com www.qualtestgeo.com ABN 74 010 752 815

## 1.0 INTRODUCTION

This report presents results and documentation for the Level One Inspection and Testing of earthworks filling operations at Dawn Estate Waterlea Stage 6B2 and 6B3 – Walloon (The Site).

Qualtest Laboratory Pty Ltd was commissioned by Winslow (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 26<sup>th</sup> August 2022 to the 26<sup>th</sup> June 2023.

The purpose of Level 1 commission, and this report, is to provide an opinion that the earthworks operations carried out by the Contractor 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 Developments
- AS1289 Testing of Soils for Engineering Purposes.
- AS2870-2011 Residential Slabs and Footings.
- Ipswich City Council Requirements
- Calibre Drawings and Notes on Drawings.

This report does not cover underground services, pavements, retaining walls, or any other works after the 26<sup>th</sup> June 2023.

## 2.0 THE DEVELOPMENT

The development comprises of a 75-lot residential subdivision and associated infrastructure including pavements, stormwater and sewer reticulation.

The earthworks generally comprised:

- Filling of the following on Stage 6B2 Lots and Road Embankments: -
  - Lots 666, 672 to 678, 659 to 660 and 626 to 629.
  - Part of Roads 1, 3, 5 and 7.
- Filling of the following on Stage 6B3 Lots and Road Embankments: -
  - Lots 706 to 719.
  - Part of Roads 5 and 6.
- Filling of the following on Future Stage 6E Lots and Road Embankments: -
  - Lots 687 to 705, 720 to 721 and 726 to 727.
  - Parts of Road 6.
- Filling of the following on Future Stage 6F Lots and Road Embankments:
  - o Lots 727 to 734.
  - Parts of Road 5.

Calibre Earthworks Plans, Bulk Earthworks Layout Plan Sheet 1 to 2, Drawing No. 2200 and 2201, Revision 1, dated 22<sup>nd</sup> May 2022 indicates the approximate extent of earthworks filling to be constructed at The Site. These plans are considered to be a reasonable indication of the actual extent of fill constructed during our involvement.

The extent of earthworks covered by this report is presented as a marked-up Site Plan attached.

A Lot Disclosure Plan should be requested from the developer to confirm the actual depth of fill at the site.

Calibre Earthworks Plan showing the extent of fill are presented at Figure 1 below.

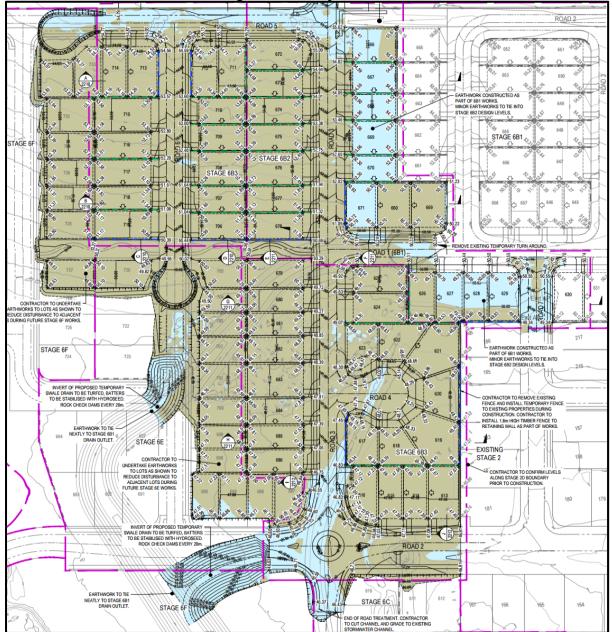
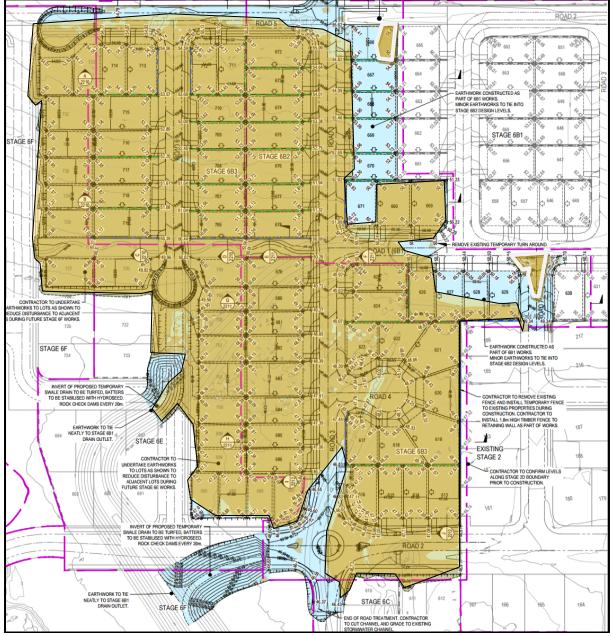


Figure 1: Site Layout Plan



## Figure 2: Controlled Fill Plan – Shaded Yellow

## 3.0 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.
- Ipswich City Council Specifications.
- Notes on Calibre Drawings.

• Density Ratio – 95% Standard

## 4.0 FILL FOUNDATION

Areas to be filled at the site were observed to be stripped of grass and topsoil to depths exposing competent natural ground.

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

- Adequate removal of topsoil and organics exposing natural ground which generally consisted of: -
  - Silty Clay (CH) at least stiff, high plasticity fines, dark brown, brown, orange brown and moist.
- o Compliant proof roll testing of the stripped surface using onsite heavy earthworks plant.

A picture of the stripped surface are presented below.



## Picture 1: View of the Stripped Surface on Stage 6B1 and 6B2

## 5.0 FILLING OPERATIONS

Fill at the site was sourced from localised onsite cuts, trench spoil and road box spoil.

Materials used as fill can be broadly summarised as: -

o Silty Clay (CH) high plasticity fines, dark brown, brown, orange brown and moist.

Fill was constructed using the following plant: -

0	Padfoot Roller	0	Water Trucks
0	Compactor	0	Articulated Moxi Dump Trucks
0	Dozer	0	Excavators

Fill was observed to be placed in layers within the capacity of the above plant and compacted using several passes (up and back).

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.

Pictures of the filling operations are presented below.



Picture 2: View of Filling Operations

## 6.0 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.

## 7.0 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 AS3798.

## 8.0 EXCLUSIONS

The compliance statement specifically excludes any topsoil, which may be placed for use as Lot dressing or any other subsequent earthworks after 26<sup>th</sup> June 2023. All trench backfill, landscaping fill 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 AS.3798 - 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,

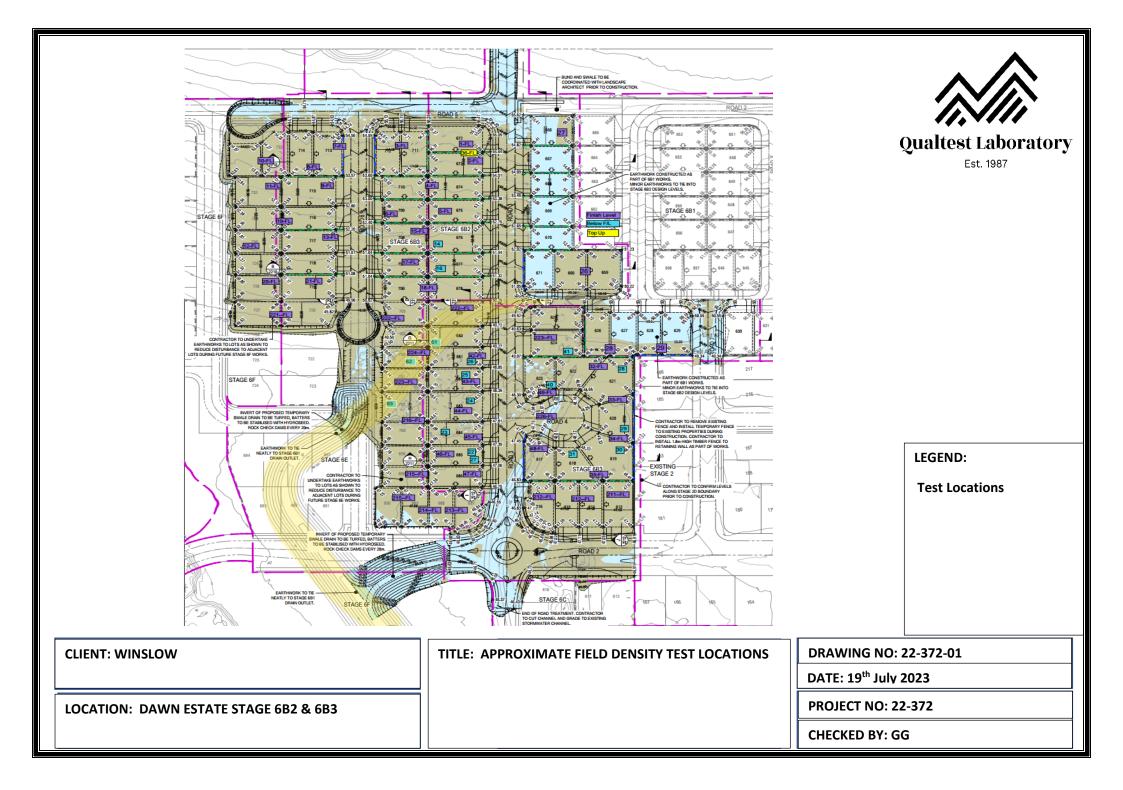
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MICHAEL MORRISON For and on behalf of QUALTEST LABORATORY PTY LTD. Appendix A – Site Plan and Compaction Test Locations Appendix B – Compaction Test Reports

# **APPENDIX A**

# Site Plan and Compaction Test Locations





# **APPENDIX B**

# COMPACTION TEST REPORTS



Report Number:	22-372-1
Issue Number:	1
Date Issued:	02/09/2022
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	2299
Date Sampled:	30/08/2022
Dates Tested:	30/08/2022 - 01/09/2022
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:	Dawn Estate Stage 6B2
Material:	Allotment Fill
Material Source:	On-site



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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

Compaction Control AS 1289 5.7.1 & 5.8	δ. Ι & Ζ. Ι. Ι			
Sample Number	S2299A	S2299B	S2299C	S2299D
Test Number	1	2	3	4
Date Tested	30/08/2022	30/08/2022	30/08/2022	30/08/2022
Time Tested	01:30	01:35	01:40	01:00
Test Request #/Location	Allotment Fill Lot 672	Allotment Fill Lot 673	Allotment Fill Lot 711	Allotment Fill Lot 710
Easting	6m Off South Boundary	8m Off Northern Boundary	8m Off North Boundary	6m Off North Boundary
Northing	10m Off East Boundary	6m Off East Boundary	0m Off West Boundary	3m Off East Boundary
Layer / Reduced Level	Final Level	Final Level	Final Level	Final Level
Thickness of Layer (mm)	200	200	200	200
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	175	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0
Field Wet Density (FWD) t/m <sup>3</sup>	2.02	2.06	1.95	2.05
Field Moisture Content %	20.8	18.6	28.3	18.6
Field Dry Density (FDD) t/m <sup>3</sup>	1.67	1.74	1.52	1.73
Peak Converted Wet Density t/m <sup>3</sup>	2.02	2.03	1.93	1.92
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**
Moisture Variation (Wv) %	0.5	0.5	1.0	3.0
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	100.5	101.5	101.5	106.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

#### **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-2
Issue Number:	1
Date Issued:	06/09/2022
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	2328
Date Sampled:	01/09/2022
Dates Tested:	01/09/2022 - 05/09/2022
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:	Dawn Estate Stage 6B3
Material:	Allotment Fill
Material Source:	on-site



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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

Compaction Control AS 1289 5.7.1 & 5.8	.1 & 2.1.1		
Sample Number	S2328A	S2328B	
Test Number	5	6	
Date Tested	01/09/2022	01/09/2022	
Time Tested	12:30	12:35	
Test Request #/Location	Allotment Fill Lot 675	Allotment Fill Lot 709	
Easting	5m Off South Boundary	2m Off South Boundary	
Northing	11m Off West Boundary	5m Off West Boundary	
Layer / Reduced Level	Final Level	Final Level	
Thickness of Layer (mm)	200	200	
Soil Description	Silty CLAY	Silty CLAY	
Test Depth (mm)	175	175	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m <sup>3</sup>	1.92	1.93	
Field Moisture Content %	19.0	19.2	
Field Dry Density (FDD) t/m <sup>3</sup>	1.61	1.62	
Peak Converted Wet Density t/m <sup>3</sup>	1.91	1.94	
Adjusted Peak Converted Wet Density	**	**	
Moisture Variation (Wv) %	1.0	0.5	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	100.5	99.5	
Compaction Method	Standard	Standard	
Report Remarks	**	**	

## **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-3
Issue Number:	1
Date Issued:	20/09/2022
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	2428
Date Sampled:	08/09/2022
Dates Tested:	08/09/2022 - 19/09/2022
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:	Dawn Estate Stage 6B3
Material:	Allotment Fill
Material Source:	On-site



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NATA

Approved Signatory: Rhys Mitchell Field Technician NATA Accredited Laboratory Number: 2316

## Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Compaction Control AS 1289 5.7.1 & 5.8.4 Sample Number	S2428A	S2428B	S2428C
Test Number	7	8	9
Date Tested	08/09/2022	08/09/2022	08/09/2022
Time Tested	10:00	10:05	10:10
Test Request #/Location	Allotment Fill Lot 713	Allotment Fill Lot 714	Allotment Fill Lot 715
Easting	5m Off East Boundary	6m Off East Boundary	7m Off East Boundary
Northing	6m Off North Boundary	7m Off South Boundary	4m Off North Boundary
Layer / Reduced Level	Finish Level	Finish Level	Finish Level
Thickness of Layer (mm)	200	200	200
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	175	175	175
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 <sup>3</sup>	1.91	1.88	1.95
Field Moisture Content %	25.0	22.3	23.6
Field Dry Density (FDD) t/m <sup>3</sup>	1.53	1.54	1.58
Peak Converted Wet Density t/m <sup>3</sup>	1.96	1.94	1.98
Adjusted Peak Converted Wet Density t/m3	**	**	**
Moisture Variation (Wv) %	-1.5	-0.5	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	97.0	97.0	98.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

### **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-4
Issue Number:	1
Date Issued:	26/09/2022
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	2571
Date Sampled:	20/09/2022
Dates Tested:	20/09/2022 - 23/09/2022
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:	Dawn Estate Stage 6B2 And 6B3
Material:	General Fill
Material Source:	On-site



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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

Compaction Control AS 1289 5.7.1 & 5.8	.1 & Z.1.1		
Sample Number	S2571A	S2571B	
Test Number	14	15	
Date Tested	20/09/2022	20/09/2022	
Time Tested	01:00	01:05	
Test Request #/Location	General Fill Lot 676	General Fill Lot 708	
Easting	4m Off South Boundary	4m Off North Boundary	
Northing	5m Off East Boundary	6m Off East Boundary	
Layer / Reduced Level	0.5m Below F/L	Finish Level	
Thickness of Layer (mm)	200	200	
Soil Description	Silty CLAY	Silty CLAY	
Test Depth (mm)	175	175	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m <sup>3</sup>	1.96	1.92	
Field Moisture Content %	24.3	25.6	
Field Dry Density (FDD) t/m <sup>3</sup>	1.57	1.53	
Peak Converted Wet Density t/m <sup>3</sup>	1.96	1.96	
Adjusted Peak Converted Wet Density	**	**	
Moisture Variation (Wv) %	0.5	0.5	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	100.0	98.5	
Compaction Method	Standard	Standard	
Report Remarks	**	**	

### **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-5
Issue Number:	1
Date Issued:	28/09/2022
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	2465
Date Sampled:	13/09/2022
Dates Tested:	13/09/2022 - 26/09/2022
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:	Dawn Stage 6B2, 6B3 and Partial 6F
Material:	Allotment Fill
Material Source:	Onsite



Qualtest Laboratory Pty Ltd Qualtest Laboratory Pty Limited 2 / 40 Boyland Ave Cooper Plains QLD 4108 Phone: 0417 011 515 Email: greg@qualtestgeo.com Accredited for compliance with ISO/IEC 17025 - Testing



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 S2465A S2465B S2465C S2465D Test Number 10 11 12 13 Date Tested 13/09/2022 13/09/2022 13/09/2022 13/09/2022 Time Tested 10:12 10:15 10:22 10:27 Test Request #/Location Lot 730 Lot 733 / Lot 734 Lot 732 Lot 717 Easting On Boundary Line of Lot 6m from North Boundary 7m from South Boundary 6m from North Boundary 733 & 734 Northing 10m from front of Lot 5m from East Boundary 5m from West Boundary 5m from East Boundary Layer / Reduced Level Finish Level Finish Level Finish Level Finish Level Thickness of Layer (mm) 175 175 175 175 Soil Description Silty Clay Silty Clay Silty Clay Silty Clay Test Depth (mm) 150 150 150 150 Sieve used to determine oversize (mm) 19.0 19.0 19.0 19.0 Percentage of Wet Oversize (%) 0 0 0 0 Field Wet Density (FWD) t/m<sup>3</sup> 1.98 1.95 1.98 1.98 Field Moisture Content % 18.2 20.0 19.1 19.0 Field Dry Density (FDD) t/m<sup>3</sup> 1.68 1.63 1.67 1.67 Peak Converted Wet Density t/m<sup>3</sup> 1.94 1.96 1.90 1.97 \*\* \*\* \*\* \*\* Adjusted Peak Converted Wet Density t/m Moisture Variation (Wv) % 1.0 -0.5 2.5 1.0 Adjusted Moisture Variation % \*\* \*\* \*\* \*\* Hilf Density Ratio (%) 102.0 99.5 104.5 100.5 **Compaction Method** Standard Standard Standard Standard Report Remarks \*\* \*\* \*\* \*\*

### **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-6
Issue Number:	1
Date Issued:	28/09/2022
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	2594
Date Sampled:	21/09/2022
Dates Tested:	21/09/2022 - 26/09/2022
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:	Dawn Estate Stage 6B2-6B3,Walloon
Material:	General Fill
Material Source:	On-site



Qualtest Laboratory Pty Ltd Qualtest Laboratory Pty Limited 2 / 40 Boyland Ave Cooper Plains QLD 4108 Phone: 0417 011 515 Email: greg@qualtestgeo.com Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Greg Gibson ql-greg NATA Accredited Laboratory Number: 2316

## Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Compaction Control AS 1289 5.7.1 & 5.8	.1 & 2.1.1		
Sample Number	S2594A	S2594B	
Test Number	16	17	
Date Tested	21/09/2022	21/09/2022	
Time Tested	12:20	12:25	
Test Request #/Location	Lot 677	Lot 707	
Easting	6m Off West Boundary	4m Off North Boundary	
Northing	7m Off South Boundary	7m Off East Boundary	
Layer / Reduced Level	0.5m Below F/L	Finish Level	
Thickness of Layer (mm)	200	200	
Soil Description	Silty CLAY	Silty CLAY	
Test Depth (mm)	175	175	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	
Field Wet Density (FWD) t/m <sup>3</sup>	1.95	2.00	
Field Moisture Content %	23.3	20.2	
Field Dry Density (FDD) t/m <sup>3</sup>	1.59	1.66	
Peak Converted Wet Density t/m <sup>3</sup>	1.93	1.99	
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	
Adj. Field Moisture Content % (AS1289.5.4.1)	23.3	20.2	
Moisture Ratio % (AS1289.5.4.1)	97.0	98.0	
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	
Moisture Variation (Wv) %	0.5	0.5	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	101.5	100.0	
Compaction Method	Standard	Standard	
Report Remarks	**	**	
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Moisture Variation Note:

Report Number:	22-372-7
Issue Number:	1
Date Issued:	10/10/2022
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	2655
Date Sampled:	28/09/2022
Dates Tested:	28/09/2022 - 05/10/2022
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:	Dawn Estate Stage 6B2 & 6B3
Material:	Allotment Fill
Material Source:	On-site



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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

Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1			
Sample Number	S2655A	S2655B	S2655C	S2655D
Test Number	18	19	20	21
Date Tested	28/09/2022	28/09/2022	28/09/2022	28/09/2022
Time Tested	12:00	12:05	12:10	12:15
Test Request #/Location	Allotment Fill Lot 706 & 678	Allotment Fill Lot 731 & 716	Allotment Fill Lot 728	Allotment Fill Lot 719
Easting	Boarder Between Lots 706 & 678	Boarder Between Lots 731 & 716	6m Off North Boundary	17m Off West Boundary
Northing	5m Off South Boarder	10m Off South Boarder	10m Off East Boundary	7m Off South Boundary
Layer / Reduced Level	Finish Level	Finish Level	Finish Level	Finish Level
Thickness of Layer (mm)	200	200	200	200
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	175	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0
Field Wet Density (FWD) t/m <sup>3</sup>	1.96	1.94	1.91	1.95
Field Moisture Content %	20.2	22.6	24.5	24.4
Field Dry Density (FDD) t/m <sup>3</sup>	1.63	1.59	1.53	1.57
Peak Converted Wet Density t/m <sup>3</sup>	1.92	1.94	1.96	1.95
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**
Moisture Variation (Wv) %	0.5	0.5	0.5	0.5
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	102.0	100.0	97.5	100.0
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

#### **Moisture Variation Note:**

Report Number:	22-372-8
Issue Number:	1
Date Issued:	13/01/2023
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	3809
Date Sampled:	14/12/2022
Dates Tested:	14/12/2022 - 13/01/2023
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:	Dawn Estate Stage 6B3
Material:	General Fill
Material Source:	On-site



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Report Remarks	**	**	**	**	**	**
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard
Hilf Density Ratio (%)	95.0	96.0	103.0	105.0	99.0	102.0
Adjusted Moisture Variation %	**	**	**	**	**	**
Moisture Variation (Wv) %	2.0	-0.5	2.0	2.5	-0.5	-0.5
Adjusted Peak Converted Wet Density t/m	**	**	**	**	**	**
Peak Converted Wet Density t/m <sup>3</sup>	2.13	2.11	2.00	1.96	2.03	2.00
Field Dry Density (FDD) t/m <sup>3</sup>	1.73	1.71	1.71	1.71	1.70	1.72
Field Moisture Content %	17.0	18.7	20.5	20.7	18.2	17.9
Field Wet Density (FWD) t/m <sup>3</sup>	2.03	2.03	2.06	2.07	2.01	2.03
Percentage of Wet Oversize (%)	0	0	0	0	0	0
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Test Depth (mm)	175	175	175	175	175	175
Soil Description	Sandy CLAY					
Thickness of Layer (mm)	200	200	200	200	200	200
Layer / Reduced Level	0.5m Below F/L	0.5m Below F/L	0.5m Below F/L	0.2m Below F/L	0.2m Below F/L	0.2m Below F/L
Northing	5m Off West Boundary	7m Off North Boundary	4m Off North Boundary	4m Off South Boundary	4m Off South Boundary	3m Off East Boundary
Easting	6m Off North Boundary	10m Off West Boundary	11m Off East Boundary	12m Off East Boundary	9m Off East Boundary	2m Off South Boundary
Test Request #/Location	General Fill Lot 685	General Fill Lot 684	General Fill Lot 683	General Fill Lot 682	General Fill Lot 681	General Fill Lot 685
Time Tested	10:00	10:05	10:10	10:15	10:20	10:25
Date Tested	14/12/2022	14/12/2022	14/12/2022	14/12/2022	14/12/2022	14/12/2022
Test Number	22	23	24	25	26	27
Sample Number	S3809A	S3809B	S3809C	S3809D	S3809E	S3809F
Compaction Control AS 1289 5.7.1 & 5.8	3.1 & 2.1.1					

## Moisture Variation Note:

Report Number:	22-372-9
Issue Number:	1
Date Issued:	16/01/2023
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	3878
Date Sampled:	16/12/2022
Dates Tested:	16/12/2022 - 16/01/2023
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:	Dawn Estate Stage 6B3.Walloon
Material:	General Fill
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

Compaction Control AS 1289 5.7.1 & 5.8	5. I & Z. I. I			
Sample Number	S3878A	S3878B	S3878C	S3878D
Test Number	28	29	30	31
Date Tested	16/12/2022	16/12/2022	16/12/2022	16/12/2022
Time Tested	10:00	10:05	10:10	10:15
Test Request #/Location	General Fill Lot 621	General Fill Lot 620	General Fill Lot 619	General Fill Lot 618
Easting	4m Off East Boundary	4m Off East Boundary	7m Off East Boundary	3m Off East Boundary
Northing	6m Off North Boundary	7m Off North Boundary	5m Off North Boundary	3m Off North Boundary
Layer / Reduced Level	0.6m Below F/L	0.6m Below F/L	1m Below F/L	1.3m Below F/L
Thickness of Layer (mm)	200	200	200	200
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	175	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**	**
Field Wet Density (FWD) t/m <sup>3</sup>	1.97	1.97	1.94	1.94
Field Moisture Content %	19.9	21.1	21.1	19.9
Field Dry Density (FDD) t/m <sup>3</sup>	1.64	1.63	1.60	1.62
Peak Converted Wet Density t/m <sup>3</sup>	2.00	1.96	2.02	1.97
Adjusted Peak Converted Wet Density	**	**	**	**
Moisture Variation (Wv) %	0.5	1.5	-0.5	0.0
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	98.5	100.0	95.5	98.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

### **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-10
Issue Number:	1
Date Issued:	01/02/2023
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	4023
Date Sampled:	12/01/2023
Dates Tested:	12/01/2023 - 27/01/2023
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:	Dawn Estate Stage 6B3
Material:	General Fill
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	S4023A	S4023B	S4023C	S4023D	S4023E
Test Number	32	33	34	35	36
Date Tested	12/01/2023	12/01/2023	12/01/2023	12/01/2023	12/01/2023
Time Tested	13:05	13:08	**	**	**
Test Request #/Location	General Fill Lot 622/621	General Fill Lot 621/620	General Fill Lot 620/619	General Fill Lot 619/618	General Fill Lot 672/673
Easting	6m Off North Boundary	5m Off East Boundary	4m Off East Boundary	8m Off South Boundary	Boundary Of Lot 672/673
Northing	Boundary Of Lot 622/621	Boundary Of Lot 621/620	Boundary Of Lot 620/619	Boundary Of Lots 618/619	6m Off East Boundary
Layer / Reduced Level	Finish Level	Finish Level	Finish Level	Finish Level	Finish Level
Thickness of Layer (mm)	175	175	175	175	175
Soil Description	Silty CLAY				
Test Depth (mm)	150	150	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**	**	**
Field Wet Density (FWD) t/m <sup>3</sup>	2.02	2.06	2.06	2.03	2.04
Field Moisture Content %	19.8	16.7	14.3	14.9	17.4
Field Dry Density (FDD) t/m <sup>3</sup>	1.69	1.76	1.80	1.77	1.74
Peak Converted Wet Density t/m <sup>3</sup>	1.95	2.05	2.02	1.99	2.05
Adjusted Peak Converted Wet Density	**	**	**	**	**
Moisture Variation (Wv) %	2.5	1.0	3.0	1.5	3.0
Adjusted Moisture Variation %	**	**	**	**	**
Hilf Density Ratio (%)	103.5	100.5	102.0	102.5	99.5
Compaction Method	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**

## **Moisture Variation Note:**

Report Number: Issue Number:	<b>22-372-11</b> 1
Date Issued:	06/02/2023
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	4099
Date Sampled:	18/01/2023
Dates Tested:	18/01/2023 - 31/01/2023
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:	Dawn Estate Stage 6B2-3,( Basin Backfill)
Material:	General Fill (Basin)
Material Source:	On-site



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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

Compaction Control AS 1289 5.7.1 & 5.8	0.1 & Z.1.1		
Sample Number	S4099A	S4099B	
Test Number	40	41	
Date Tested	18/01/2023	18/01/2023	
Time Tested	10:00	10:05	
Test Request #/Location	Basin Backfill Lot 623	Basin Backfill Lot 624	
Easting	6m Off North Boundary	7m Off South Boundary	
Northing	4m Off East Boundary	5m Off East Boundary	
Layer / Reduced Level	2m Below Final Level	1.5mm Below Final Level	
Thickness of Layer (mm)	200	200	
Soil Description	Silty CLAY	Silty CLAY	
Test Depth (mm)	175	175	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m <sup>3</sup>	2.03	2.03	
Field Moisture Content %	20.3	20.1	
Field Dry Density (FDD) t/m <sup>3</sup>	1.69	1.69	
Peak Converted Wet Density t/m <sup>3</sup>	2.01	2.05	
Adjusted Peak Converted Wet Density t/m3	**	**	
Moisture Variation (Wv) %	1.0	0.5	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	101.0	98.5	
Compaction Method	Standard	Standard	
Report Remarks	**	**	

### **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-13
Issue Number:	1
Date Issued:	21/02/2023
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	4458
Date Sampled:	13/02/2023
Dates Tested:	13/02/2023 - 17/02/2023
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:	Dawn Estate Stage 6B2-B3
Material:	General Fill
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	S4458A	S4458B	S4458C	S4458D
Test Number	42	43	44	45
Date Tested	13/02/2023	13/02/2023	13/02/2023	13/02/2023
Time Tested	07:05	07:10	07:15	07:20
Test Request #/Location	General Fill Lot 681	General Fill Lot 682	General Fill Lot 683	General Fill Lot 684
Easting	7m Off North Boundary	7m Off East Boundary	9m Off North Boundary	7m Off East Boundary
Northing	6m Off East Boundary	4m Off North Boundary	6m Off East Boundary	4m Off South Boundary
Layer / Reduced Level	Finish Level	Finish Level	Finish Level	Finish Level
Thickness of Layer (mm)	200	200	200	200
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	175	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0
Field Wet Density (FWD) t/m <sup>3</sup>	2.09	2.10	2.12	2.11
Field Moisture Content %	18.0	15.8	12.2	15.9
Field Dry Density (FDD) t/m <sup>3</sup>	1.77	1.82	1.88	1.82
Peak Converted Wet Density t/m <sup>3</sup>	2.10	2.11	2.13	2.13
Adjusted Peak Converted Wet Density	**	**	**	**
Moisture Variation (Wv) %	-2.0	2.0	2.0	2.0
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	99.5	100.0	99.5	99.0
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

#### **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-13
Issue Number:	1
Date Issued:	21/02/2023
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	4458
Date Sampled:	13/02/2023
Dates Tested:	13/02/2023 - 17/02/2023
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:	Dawn Estate Stage 6B2-B3
Material:	General Fill
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	S4458E	S4458F	S4458G	S4458H
Test Number	46	47	48	49
Date Tested	13/02/2023	13/02/2023	13/02/2023	13/02/2023
Time Tested	07:25	07:50	07:55	08:00
Test Request #/Location	General Fill Lot 685	General Fill Lot 686	General Fill Lot 617	General Fill Lot 623
Easting	4m Off West Boundary	4m Off East Boundary	3m Off North Boundary	10m Off North Boundary
Northing	5m Off North Boundary	6m Off North Boundary	5m Off West Boundary	3m Off East Boundary
Layer / Reduced Level	Finish Level	Finish Level	Finish Level	Finish Level
Thickness of Layer (mm)	200	200	200	200
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	175	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0
Field Wet Density (FWD) t/m <sup>3</sup>	2.06	2.08	2.01	2.07
Field Moisture Content %	13.5	11.6	19.5	12.5
Field Dry Density (FDD) t/m <sup>3</sup>	1.82	1.87	1.68	1.84
Peak Converted Wet Density t/m <sup>3</sup>	2.14	2.13	2.05	2.12
Adjusted Peak Converted Wet Density	**	**	**	**
Moisture Variation (Wv) %	2.5	3.0	0.5	2.0
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	96.5	98.0	98.0	97.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

#### **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-20
Issue Number:	1
Date Issued:	15/03/2023
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	4782
Date Sampled:	06/03/2023
Dates Tested:	06/03/2023 - 07/03/2023
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
<b>Preparation Method:</b>	AS 1289.1.1 - Sampling and preparation of soils
Specification:	95% Standard
Site Selection:	Selected by GTA
Location:	Dawn Estate Stage 6 General Fill (V Drain)
Material:	General Fill (V Drain)
Material Source:	On-site



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Approved Signatory: Rhys Mitchell WORLD RECOGNISED

NATA Accredited Laboratory Number: 2316

Field Technician

## ction Control AS 1289 5 7 1 8 5 8 1 8 2 1

Compaction Control AS 1289 5.7.1 & 5.8	.1 & 2.1.1		
Sample Number	S4782A	S4782B	S4782C
Test Number	61	62	63
Date Tested	06/03/2023	06/03/2023	06/03/2023
Time Tested	10:05	10:10	10:25
Test Request #/Location	V Drain Lot 680	V Drain Lot 703	V Drain Lot 701
Easting	5m Off West Boundary	7m Off North Boundary	6m Off North Boundary
Northing	5m Off South Boundary	9m Off East Boundary	4m Off West Boundary
Layer / Reduced Level	1.5m Below F/L	1.5m Below F/L	1.2 Below F/L
Thickness of Layer (mm)	200	200	200
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	**
Field Wet Density (FWD) t/m <sup>3</sup>	2.02	2.02	1.90
Field Moisture Content %	19.2	19.3	17.1
Field Dry Density (FDD) t/m <sup>3</sup>	1.69	1.69	1.62
Peak Converted Wet Density t/m <sup>3</sup>	2.04	1.99	1.98
Adjusted Peak Converted Wet Density t/m3	**	**	**
Moisture Variation (Wv) %	0.5	0.5	0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	98.5	101.5	96.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

## **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number: Issue Number:	<b>22-372-55</b> 1
Date Issued:	01/06/2023
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	5895
Date Sampled:	25/05/2023
Dates Tested:	25/05/2023 - 31/05/2023
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:	Dawn Estate Stage 6B
Material:	General Fill
Material Source:	On-site



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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

Report Remarks	**	**	**	**
Compaction Method	Standard	Standard	Standard	Standard
Hilf Density Ratio (%)	102.0	102.0	101.5	99.0
Adjusted Moisture Variation %	**	**	**	**
Moisture Variation (Wv) %	2.0	2.5	2.5	3.0
Adjusted Peak Converted Wet Density t/m3	**	**	**	**
Peak Converted Wet Density t/m <sup>3</sup>	2.04	2.06	2.01	2.12
Field Dry Density (FDD) t/m <sup>3</sup>	1.81	1.82	1.78	1.83
Field Moisture Content %	14.8	15.4	14.3	14.1
Field Wet Density (FWD) t/m <sup>3</sup>	2.08	2.10	2.03	2.09
Percentage of Wet Oversize (%)	0	0	0	0
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Test Depth (mm)	175	175	175	175
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY
Thickness of Layer (mm)	200	200	200	200
Layer / Reduced Level	Finish Level	Finish Level	Finish Level	Finish Level
Northing	7m Off East Boundary	14m Off East Boundary	8m Off East Boundary	14m Off East Boundary
Easting	5m Off North Boundary	8m Off North Boundary	6m Off North Boundary	9m Off North Boundary
Test Request #/Location	General Fill Lot 613	General Fill Lot 614/615	General Fill Lot 616	General Fill Lot 688/687
Time Tested	08:00	08:05	08:10	08:15
Date Tested	25/05/2023	25/05/2023	25/05/2023	25/05/2023
Test Number	211	212	213	214
Sample Number	S5895A	S5895B	S5895C	S5895D

## **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-55
Issue Number:	1
Date Issued:	01/06/2023
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	5895
Date Sampled:	25/05/2023
Dates Tested:	25/05/2023 - 31/05/2023
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:	Dawn Estate Stage 6B
Material:	General Fill
Material Source:	On-site



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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

Compaction Control AS 1289 5.7.1 & 5.8	5.1 & Z.1.1			
Sample Number	S5895E	S5895F	S5895G	S5895H
Test Number	215	216	217	218
Date Tested	25/05/2023	25/05/2023	25/05/2023	25/05/2023
Time Tested	08:20	08:25	08:30	08:40
Test Request #/Location	General Fill Lot 689/688	General Fill Lot 690/689	General Fill Lot 699	General Fill Lot 700/701
Easting	9m Off North Boundary	10m Off North Boundary	6m Off North Boundary	6m Off North Boundary
Northing	14m Off East Boundary	15m Off East Boundary	11m Off East Boundary	7m Off East Along Common Boundary
Layer / Reduced Level	Finish Level	Finish Level	Finish Level	Finish Level
Thickness of Layer (mm)	200	200	200	200
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	175	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0
Field Wet Density (FWD) t/m <sup>3</sup>	1.94	1.94	1.91	1.93
Field Moisture Content %	20.2	19.3	19.5	19.2
Field Dry Density (FDD) t/m <sup>3</sup>	1.61	1.63	1.60	1.62
Peak Converted Wet Density t/m <sup>3</sup>	1.95	1.95	1.90	1.92
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**
Moisture Variation (Wv) %	0.5	0.5	1.0	0.5
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	99.5	99.5	100.5	101.0
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

#### **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-58
Issue Number:	1
Date Issued:	06/06/2023
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	5963
Date Sampled:	30/05/2023
Dates Tested:	30/05/2023 - 01/06/2023
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
<b>Preparation Method:</b>	AS 1289.1.1 - Sampling and preparation of soils
Specification:	95% Standard
Site Selection:	Selected by GTA
Location:	Dawn Estate Stage 6B (General Fill)
Material:	General Fill
Material Source:	On-site



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Approved Signatory: Rhys Mitchell Field Technician NATA Accredited Laboratory Number: 2316

Sample Number	S5963A	S5963B	S5963C	S5963D
Test Number	221	222	223	224
Date Tested	30/05/2023	30/05/2023	30/05/2023	30/05/2023
Time Tested	09:50	09:55	10:00	10:05
Test Request #/Location	General Fill Lot 727/720	General Fill Lot 679	General Fill Lot 702	General Fill Lot 703
Easting	Common Boundary 727/720	4m Off North Boundary	7m Off North Boundary	7m Off North Boundary
Northing	5m Off North Boundary	6m Off EastBoundary	6m Off East Boundary	6m Off East Boundary
Layer / Reduced Level	Finish Level	Finish Level	Finish Level	Finish Level
Thickness of Layer (mm)	200	200	200	200
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	175	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0
Field Wet Density (FWD) t/m <sup>3</sup>	1.97	2.03	1.99	2.00
Field Moisture Content %	16.1	16.0	16.0	16.2
Field Dry Density (FDD) t/m <sup>3</sup>	1.69	1.75	1.72	1.72
Peak Converted Wet Density t/m <sup>3</sup>	1.92	2.06	2.05	2.06
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**
Moisture Variation (Wv) %	1.5	0.0	0.5	0.5
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	102.0	98.5	97.0	97.0
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

**Moisture Variation Note:** 

Positive values = test is dry of OMC

Report Number:	22-372-58
Issue Number:	1
Date Issued:	06/06/2023
Client:	CCA WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	5963
Date Sampled:	30/05/2023
Dates Tested:	30/05/2023 - 01/06/2023
Sampling Method:	AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
<b>Preparation Method:</b>	AS 1289.1.1 - Sampling and preparation of soils
Specification:	95% Standard
Site Selection:	Selected by GTA
Location:	Dawn Estate Stage 6B (General Fill)
Material:	General Fill
Material Source:	On-site



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# Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	S5963E	S5963F	S5963G	
Test Number	225	226	227	
Date Tested	30/05/2023	30/05/2023	30/05/2023	
Time Tested	10:15	11:05	10:25	
Test Request #/Location	General Fill Lot 624	General Fill Road 4	General Fill Lot 705	
Easting	8m Off North Boundary	CH 20	3m Off South Boundary	
Northing	2m Off West Boundary	CL	3m Off West Boundary	
Layer / Reduced Level	Finish Level	Finish Level	Finish Level	
Thickness of Layer (mm)	200	200	200	
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	
Test Depth (mm)	175	175	175	
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 <sup>3</sup>	2.01	2.05	2.02	
Field Moisture Content %	16.2	16.0	19.5	
Field Dry Density (FDD) t/m <sup>3</sup>	1.73	1.77	1.69	
Peak Converted Wet Density t/m <sup>3</sup>	2.01	2.10	2.09	
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	
Moisture Variation (Wv) %	0.5	0.5	0.5	
Adjusted Moisture Variation %	**	**	**	
Hilf Density Ratio (%)	99.5	98.0	97.0	
Compaction Method	Standard	Standard	Standard	
Report Remarks	**	**	**	

#### **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number: Issue Number:	<b>22-372-72</b>
Date Issued:	03/07/2023
Client:	WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	6316
Date Sampled:	20/06/2023
Dates Tested:	20/06/2023 - 23/06/2023
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:	Dawn - Western Fill
Material:	General Fill
Material Source:	On-site



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## Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Compaction Control AS 1289 5.7.1 & 5.8	.1 & 2.1.1			
Sample Number	S6316A	S6316B	S6316C	S6316D
Test Number	465	466	467	468
Date Tested	20/06/2023	20/06/2023	20/06/2023	20/06/2023
Time Tested	13:00	13:05	13:10	13:15
Test Request #/Location	General Fill	General Fill	General Fill	General Fill
Easting	465045	465046	465058	465077
Northing	6947252	6947235	6947249	6947244
Layer / Reduced Level	Finish Level	Finish Level	Finish Level	Finish Level
Thickness of Layer (mm)	175	175	175	175
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	150	150	150	150
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0
Field Wet Density (FWD) t/m <sup>3</sup>	2.07	2.05	1.98	2.04
Field Moisture Content %	22.5	20.7	20.6	20.0
Field Dry Density (FDD) t/m <sup>3</sup>	1.69	1.70	1.65	1.70
Peak Converted Wet Density t/m <sup>3</sup>	2.05	2.03	2.00	2.03
Adjusted Peak Converted Wet Density t/m3	**	**	**	**
Moisture Variation (Wv) %	0.5	0.5	0.5	0.5
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	101.0	100.5	99.0	100.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

### **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-76
Issue Number:	1
Date Issued:	05/07/2023
Client:	WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	4391
Date Sampled:	08/02/2023
Dates Tested:	08/02/2023 - 10/02/2023
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:	Dawn Western Fill
Material:	General Fill
Material Source:	On site



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Compaction Control AS 1289 5.7.1 & 5.8	8.1 & 2.1.1					
Sample Number	S4391A	S4391B	S4391C	S4391D	S4391E	S4391F
Test Number	407	408	409	410	411	412
Date Tested	08/02/2023	08/02/2023	08/02/2023	08/02/2023	08/02/2023	08/02/2023
Time Tested	10:00	10:05	10:10	10:15	10:20	10:30
Test Request #/Location	Sewer Trench Backfill	Sewer Trench Backfill	Sewer Trench Backfill	Sewer Trench Backfill	Sewer Trench Backfill	Sewer Trench Backfill
Line / Offset	26/T1 - 27/T1	27/T1 - 28/T1	28/T1 - 29/T1	28/T1 - 29/T1	26/T1 - 27/T1	28/T1 - 29/T1
Offset	20m Left 27/T1	50m Left 28/T1	40m Off 28/T1 And 55m Left Of Line	70m Off 28/T1 and 40m Left Of Line	30m Off 26/T1 and 20m Left Of Line	30m Left 29/T1 and 70m Off Line
Layer / Reduced Level	Finish Level	1.3m Below F/L	0.4m Below F/L	Finish Level	0.6m Below F/L	Finish Level
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	175	175	175	175	175	175
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 <sup>3</sup>	1.96	2.01	2.02	2.01	2.02	2.00
Field Moisture Content %	17.3	16.9	17.2	17.4	16.6	16.7
Field Dry Density (FDD) t/m <sup>3</sup>	1.67	1.72	1.73	1.71	1.73	1.71
Peak Converted Wet Density t/m <sup>3</sup>	2.01	1.99	2.04	2.01	2.02	2.01
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**	**	**
Moisture Variation (Wv) %	0.5	1.5	-0.5	0.5	0.0	2.0
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	97.5	100.5	99.5	100.0	100.0	99.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**	**

Moisture Variation Note:

Report Number:	22-372-77
Issue Number:	1
Date Issued:	05/07/2023
Client:	WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	5809
Date Sampled:	22/05/2023
Dates Tested:	22/05/2023 - 26/05/2023
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:	Western Fill Area
Material:	General Fill
Material Source:	On-site



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Compaction Control AS 1289 5.7.1 & 5.8	8.1 & 2.1.1					
Sample Number	S5809A	S5809B	S5809C	S5809D	S5809E	S5809F
Test Number	430	431	432	433	434	435
Date Tested	22/05/2023	22/05/2023	22/05/2023	22/05/2023	22/05/2023	22/05/2023
Time Tested	08:45	09:00	09:30	09:40	09:50	10:00
Test Request #/Location	Western Fill	Western Fill	Western Fill	Western Fill	Western Fill	Western Fill
Easting	28/1 - 29/1	28/1 - 29/1	28/1 - 29/1	27/1 - 28/1	29/1 - 30/1	29/1 - 30/1
Northing	10m Off 29/1, 20m Left OF Line	20m Off 28/1, 20m Left Of Line	40m Off 28/1,40m Left Of Line	30m Off 27/1,20m Left Of Line	60m Left Of 29/1	20m Off 29/1,50m Left Of Line
Layer / Reduced Level	Finish Level	Finish Level	Finish Level	Finish Level	Finish Level	Finish Level
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	175	175	175	175	175	175
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 <sup>3</sup>	2.09	2.09	1.99	2.04	2.03	2.04
Field Moisture Content %	16.2	15.8	18.0	18.1	18.4	18.5
Field Dry Density (FDD) t/m <sup>3</sup>	1.80	1.81	1.69	1.73	1.71	1.72
Peak Converted Wet Density t/m <sup>3</sup>	2.12	2.14	2.07	2.10	2.08	2.07
Adjusted Peak Converted Wet Density t/m3	**	**	**	**	**	**
Moisture Variation (Wv) %	0.5	0.5	1.0	0.5	0.5	0.5
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	98.5	98.0	96.0	97.0	97.5	98.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**	**
Meioture Variation Nato		•				

**Moisture Variation Note:** 

Report Number:	22-372-78
Issue Number:	1
Date Issued:	05/07/2023
Client:	WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	6208
Date Sampled:	14/06/2023
Dates Tested:	14/06/2023 - 19/06/2023
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:	Dawn-Western Fill
Material Source:	General Fill



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## Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Compaction Control AS 1289 5.7.1 & 5.8						
Sample Number	S6208A	S6208B	S6208C	S6208D	S6208E	S6208F
Test Number	443	444	445	446	447	448
Date Tested	14/06/2023	14/06/2023	14/06/2023	14/06/2023	14/06/2023	14/06/2023
Time Tested	10:00	10:05	10:10	10:15	10:25	10:30
Test Request #/Location	General Fill					
Easting	465065	465099	465145	465175	465195	465221
Northing	6947277	6947275	6947273	6947270	6947269	6947266
Layer / Reduced Level	0.5m Below F/L	0.6m Below F/L	0.6m Below F/L	0.5m Below F/L	0.7m Below F/L	0.7m Below F/L
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Silty CLAY					
Test Depth (mm)	175	175	175	175	175	175
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 <sup>3</sup>	1.94	1.98	1.76	1.76	1.78	1.78
Field Moisture Content %	20.0	17.4	21.4	22.0	21.0	21.7
Field Dry Density (FDD) t/m <sup>3</sup>	1.62	1.69	1.45	1.45	1.47	1.47
Peak Converted Wet Density t/m <sup>3</sup>	1.92	2.00	1.81	1.81	1.81	1.81
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**	**	**
Moisture Variation (Wv) %	0.5	0.5	0.5	0.5	1.0	1.0
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	101.0	99.0	97.0	97.5	98.0	98.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**	**

## **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-79
Issue Number:	1
Date Issued:	05/07/2023
Client:	WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	6209
Date Sampled:	13/06/2023
Dates Tested:	13/06/2023 - 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:	Dawn-Western Fill
Material Source:	General Fill



Compaction Control AS 1289 5.7.1 & 5.8	Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1							
Sample Number	S6209A	S6209B	S6209C	S6209D	S6209E	S6209F		
Test Number	449	450	451	452	453	454		
Date Tested	13/06/2023	13/06/2023	13/06/2023	13/06/2023	13/06/2023	13/06/2023		
Time Tested	09:55	10:00	10:05	10:10	10:15	10:25		
Test Request #/Location	General Fill	General Fill	General Fill	General Fill	General Fill	General Fill		
Easting	465216	465185	465158	465123	465091	465059		
Northing	6947238	6947239	6947240	6947243	6947242	6947256		
Layer / Reduced Level	1m Below F/L	0.8m Below F/L	0.8m Below F/L	0.9m Below F/L	0.5m Below F/L	0.5m Below F/L		
Thickness of Layer (mm)	200	200	200	200	200	200		
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY		
Test Depth (mm)	175	175	175	175	175	175		
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 <sup>3</sup>	1.96	1.97	1.91	1.92	1.90	1.94		
Field Moisture Content %	20.7	20.3	20.5	20.5	20.6	16.9		
Field Dry Density (FDD) t/m <sup>3</sup>	1.63	1.64	1.58	1.60	1.58	1.66		
Peak Converted Wet Density t/m <sup>3</sup>	2.01	2.00	1.97	1.97	1.98	2.02		
Adjusted Peak Converted Wet Density t/m3	**	**	**	**	**	**		
Moisture Variation (Wv) %	0.5	0.0	0.0	0.5	0.5	0.5		
Adjusted Moisture Variation %	**	**	**	**	**	**		
Hilf Density Ratio (%)	97.5	98.5	97.0	98.0	96.0	96.0		
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



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

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Approved Signatory: Rhys Mitchell Field Technician NATA Accredited Laboratory Number: 2316

Report Number:	22-372-80
Issue Number:	1
Date Issued:	05/07/2023
Client:	WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	6236
Date Sampled:	15/06/2023
Dates Tested:	15/06/2023 - 21/06/2023
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:	Dawn-Western Fill
Material:	General Fill
Material Source:	On-site



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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

Compaction Control AS 1289 5.7.1 & 5.8	.   & 2.   .			
Sample Number	S6236A	S6236B	S6236C	S6236D
Test Number	455	456	457	458
Date Tested	15/06/2023	15/06/2023	15/06/2023	15/06/2023
Time Tested	09:50	09:55	10:00	10:10
Test Request #/Location	General Fill	General Fill	General Fill	General Fill
Easting	465201	465182	465161	465137
Northing	6947254	6947253	6947251	6947254
Layer / Reduced Level	1.2m Below F/L	1m Below F/L	1m Below F/L	0.9m Below F/L
Thickness of Layer (mm)	200	200	200	200
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY
Test Depth (mm)	175	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0
Field Wet Density (FWD) t/m <sup>3</sup>	1.94	2.01	2.00	1.96
Field Moisture Content %	23.2	22.6	22.9	22.2
Field Dry Density (FDD) t/m <sup>3</sup>	1.57	1.64	1.62	1.61
Peak Converted Wet Density t/m <sup>3</sup>	2.01	2.00	2.01	2.01
Adjusted Peak Converted Wet Density t/m3	**	**	**	**
Moisture Variation (Wv) %	-1.5	0.5	0.5	0.5
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	96.5	100.5	99.0	97.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

### **Moisture Variation Note:**

Positive values = test is dry of OMC

Report Number:	22-372-81
Issue Number:	1
Date Issued:	05/07/2023
Client:	WINSLOW PTY LTD
	1587 IPSWICH ROAD, ROCKLEA QLD 4106
Contact:	HAYDN LANE
Project Number:	22-372
Project Name:	RESIDENTIAL SUBDIVISION
Project Location:	DAWN ESTATE - STAGES 6B2 & 6B3 - WALLOON
Client Reference:	55297
Work Request:	6285
Date Sampled:	19/06/2023
Dates Tested:	19/06/2023 - 21/06/2023
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:	Dawn - Western Fill
Material:	General Fill
Material Source:	On-site



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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	S6285A	S6285B	S6285C	S6285D	S6285E	S6285F		
Test Number	459	460	461	462	463	464		
Date Tested	19/06/2023	19/06/2023	19/06/2023	19/06/2023	19/06/2023	19/06/2023		
Time Tested	10:00	10:10	10:15	10:20	10:23	10:30		
Test Request #/Location	General Fill	General Fill	General Fill	General Fill	General Fill	General Fill		
Easting	465085	465115	465138	465158	465179	465202		
Northing	6947234	6947241	6947239	6947243	6947247	6947239		
Layer / Reduced Level	0.8m Below F/L	1m Below F/L	0.6m Below F/L	0.8m Below F/L	0.6m Below F/L	0.8m Below F/L		
Thickness of Layer (mm)	175	175	175	175	175	175		
Soil Description	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY	Silty CLAY	Silty 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 <sup>3</sup>	2.07	2.04	2.07	2.05	2.02	2.06		
Field Moisture Content %	17.9	18.6	18.4	18.2	18.4	18.4		
Field Dry Density (FDD) t/m <sup>3</sup>	1.75	1.72	1.75	1.73	1.71	1.74		
Peak Converted Wet Density t/m <sup>3</sup>	2.07	2.03	2.08	2.05	2.05	2.05		
Adjusted Peak Converted Wet Density t/m3	**	**	**	**	**	**		
Moisture Variation (Wv) %	0.5	0.5	0.0	0.5	0.5	0.5		
Adjusted Moisture Variation %	**	**	**	**	**	**		
Hilf Density Ratio (%)	100.0	100.0	100.0	100.0	98.5	100.0		
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard		
Report Remarks	**	**	**	**	**	**		

### **Moisture Variation Note:**

Positive values = test is dry of OMC