



**CIVIL GEOTECHNICAL SERVICES**  
**ABN 26 474 013 724**  
**PO Box 678 Croydon Vic 3136**  
**Telephone: 9723 0744 Facsimile: 9723 0799**

13<sup>th</sup> November 2020

Our Reference: 18053:NB842

Winslow Constructors Pty Ltd  
50 Barry Road  
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING**  
**AQUAREVO – STAGE 7 (LYNDHURST)**

Please find attached our Report No's 18053/R001 to 18053/R015 which relate to the field density testing that was conducted within the filled allotments at the above subdivision. The level 1 inspections and associated field density testing commenced in January 2018 and was completed in April 2018.

The inspections and testing of the earthworks was undertaken in general accordance with the Level 1 requirements of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments.

The site inspection and testing was performed by experienced geotechnicians from this office. Any areas that were deemed unsatisfactory were reworked and retested under their supervision. The testing was performed to the relevant Australian Standards and the accompanying test reports carry NATA endorsement. The attached compaction results, which were located randomly throughout the fill profile, are considered to be representative of the bulk fill materials that were placed across the reported allotments by Winslow Constructors during the aforementioned period. The approximate locations of the field density tests can be seen on the attached plan (Figure 1).

We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

# FIGURE 1 (1 of 2)





# FIGURE 1 (2 of 2)





## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)  
Project SQUAREVO ESTATE - STAGE 7  
Location LYNDHURST

Job No 18053  
Report No 18053/R001  
Date Issued 27/02/2018

Tested by K S  
Date tested 24/01/18  
Checked by JHF

Feature EARTHWORKS

Layer thickness 200 mm

Time: 10:20

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	5	6
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m <sup>3</sup>	1.82	1.83	1.82	1.85	1.83	1.84
Field moisture content %	25.2	32.5	31.3	35.7	30.6	30.5

Test procedure AS 1289.5.7.1

Test No	1	2	3	4	5	6
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m <sup>3</sup>	1.81	1.90	1.86	1.92	1.91	1.93
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	27.5	30.0	30.0	34.0	28.0	28.5

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% wet	1.5% wet	1.5% wet	2.5% wet	2.0% wet
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Density Ratio ( $R_{HD}$ )	%	100.5	96.0	98.0	96.5	95.5	95.5
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Material description

No 1 - 6 Clay Fill



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards. Accredited for compliance to ISO/IEC 17025. Accreditation No 9909

*Justin Fry*

Approved Signatory : Justin Fry

AVRLOT HILF V1.10 MAR 13



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)  
Project SQUAREVO ESTATE - STAGE 7  
Location LYNDHURST

Job No 18053  
Report No 18053/R002  
Date Issued 09/02/2018

Tested by K S  
Date tested 25/01/18  
Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 08:02

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	7	8	9	10	11	12
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m <sup>3</sup>	1.74	1.69	1.70	1.69	1.77	1.71
Field moisture content %	27.6	22.3	27.5	26.1	28.3	30.2

Test procedure AS 1289.5.7.1

Test No	7	8	9	10	11	12
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m <sup>3</sup>	1.82	1.75	1.76	1.78	1.79	1.78
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	29.5	25.0	29.5	28.0	30.0	32.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	2.0% dry	2.0% dry	2.0% dry	1.5% dry
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Density Ratio ( $R_{HD}$ )	%	96.0	96.5	96.5	95.0	99.0	96.0
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Material description

No 7 - 12 Clay Fill



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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 18053  
Report No 18053/R003  
Date Issued 03/10/2018

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	CGS
Project	AQUAREVO ESTATE - STAGE 7	Date tested	07/02/18
Location	LYNDHURST	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 09:07
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	13	14	15	16	17	18
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m <sup>3</sup>	1.87	1.91	1.82	1.84	1.83	1.86
Field moisture content %	29.6	22.4	29.1	26.5	23.1	24.2

Test procedure AS 1289.5.7.1

Test No	13	14	15	16	17	18
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m <sup>3</sup>	1.95	2.01	1.92	1.90	1.88	1.90
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	27.0	21.5	27.5	27.0	25.5	27.0

Moisture Variation From Optimum Moisture Content	2.5% wet	1.0% wet	1.5% wet	0.5% dry	2.5% dry	2.5% dry
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Density Ratio ( $R_{HD}$ )	%	96.0	95.0	95.5	97.0	97.5	98.0
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Material description

No 13 - 18 Clay Fill
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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 18053  
Report No 18053/R004  
Date Issued 04/04/2019

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	CGS
Project	AQUAREVO ESTATE - STAGE 7	Date tested	15/02/18
Location	LYNDHURST	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 09:53
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	19	20	21	22	23	24
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m <sup>3</sup>	1.79	1.89	1.79	1.94	1.86	1.89
Field moisture content %	31.2	24.2	27.6	26.6	22.1	23.2

Test procedure AS 1289.5.7.1

Test No	19	20	21	22	23	24
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m <sup>3</sup>	1.83	1.89	1.87	1.92	1.89	1.88
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	31.5	25.5	25.0	26.5	24.5	24.5

Moisture Variation From Optimum Moisture Content	0.5% dry	1.0% dry	2.5% wet	0.0%	2.5% dry	1.0% dry
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Density Ratio ( $R_{HD}$ )	%	98.5	100.5	95.5	101.0	98.5	100.5
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Material description

No 19 - 24 Clay Fill

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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 18053  
Report No 18053/R005  
Date Issued 23/05/2019

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	CGS
Project	AQUAREVO ESTATE - STAGE 7	Date tested	20/02/18
Location	LYNDHURST	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 08:47
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	25	26	27	28	29	30
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m <sup>3</sup>	1.80	1.81	1.74	1.76	1.69	1.79
Field moisture content %	32.1	30.1	25.9	30.8	29.8	24.1

Test procedure AS 1289.5.7.1

Test No	25	26	27	28	29	30
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m <sup>3</sup>	1.83	1.84	1.77	1.79	1.71	1.83
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	29.5	30.5	28.0	30.5	29.5	26.5

Moisture Variation From Optimum Moisture Content	2.5% wet	0.5% dry	2.0% dry	0.5% wet	0.5% wet	2.5% dry
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Density Ratio ( $R_{HD}$ )	%	98.5	98.5	98.5	98.5	98.5	98.0
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Material description

No 25 - 30 Clay Fill

AVRLOT HILF V1.10 MAR 13



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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 18053  
Report No 18053/R006  
Date Issued 11/04/2019

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	CGS
Project	AQUAREVO ESTATE - STAGE 7	Date tested	24/02/18
Location	LYNDHURST	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 08:57
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	31	32	33	34	-	-
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1		
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	-	-
Field wet density t/m <sup>3</sup>	1.85	1.84	1.89	1.84	-	-
Field moisture content %	20.0	22.4	22.5	25.3	-	-

Test procedure AS 1289.5.7.1

Test No	31	32	33	34	-	-
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	-	-
Percent of oversize material wet	0	0	0	0	-	-
Peak Converted Wet Density t/m <sup>3</sup>	1.93	1.91	1.98	1.93	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	22.5	23.0	22.0	25.0	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	1.0% dry	0.5% wet	0.5% wet	-	-
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Density Ratio ( $R_{HD}$ )	%	96.0	96.5	95.0	95.5	-	-
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Material description

No 31 - 34 Clay Fill

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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)  
Project SQUAREVO ESTATE - STAGE 7  
Location LYNDHURST

Job No 18053  
Report No 18053/R007  
Date Issued 03/08/2018

Tested by CGS  
Date tested 01/03/18  
Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 10:48

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	35	36	37	38	39	40
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m <sup>3</sup>	1.73	1.83	1.75	1.85	1.81	1.78
Field moisture content %	25.7	30.0	29.9	27.3	26.9	31.6

Test procedure AS 1289.5.7.1

Test No	35	36	37	38	39	40
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m <sup>3</sup>	1.81	1.91	1.81	1.91	1.81	1.81
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	25.5	30.0	30.0	27.5	24.5	29.0

Moisture Variation From Optimum Moisture Content	0.0%	0.0%	0.5% dry	0.0%	2.5% wet	2.5% wet
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Density Ratio ( $R_{HD}$ )	%	96.0	95.5	97.0	97.0	100.5	98.5
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Material description

No 35 - 40 Clay Fill



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*Justin Fry*

Approved Signatory : Justin Fry

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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)  
Project SQUAREVO ESTATE - STAGE 7  
Location LYNDHURST

Job No 18053  
Report No 18053/R008  
Date Issued 20/07/2018

Tested by CGS  
Date tested 08/03/18  
Checked by JHF

Feature **EARTHWORKS** Layer thickness 200 mm Time: 09:39

#### Test procedure AS 1289.2.1.1 & 5.8.1

Test No	41	42	43	-	-	-
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL						
Measurement depth mm	175	175	175	-	-	-
Field wet density t/m <sup>3</sup>	1.94	1.94	1.88	-	-	-
Field moisture content %	23.4	17.5	19.8	-	-	-

#### Test procedure AS 1289.5.7.1

Test No	41	42	43	-	-	-
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	-	-	-
Percent of oversize material wet	0	0	0	-	-	-
Peak Converted Wet Density t/m <sup>3</sup>	2.02	1.99	1.96	-	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	22.0	20.0	21.5	-	-	-

Moisture Variation From Optimum Moisture Content	1.5% wet	2.5% dry	1.5% dry	-	-	-
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Density Ratio ( $R_{HD}$ )	%	96.0	97.5	95.5	-	-	-
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#### Material description

No 41 - 43 Clay Fill



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*Justin Fry*

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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 18053  
Report No 18053/R009  
Date Issued 27/09/2018

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	K S
Project	AQUAREVO ESTATE - STAGE 7	Date tested	14/03/18
Location	LYNDHURST	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:15
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	44	45	46	47	-	-
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1		
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	-	-
Field wet density t/m <sup>3</sup>	1.80	1.83	1.80	1.84	-	-
Field moisture content %	30.5	25.4	31.2	26.1	-	-

Test procedure AS 1289.5.7.1

Test No	44	45	46	47	-	-
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	-	-
Percent of oversize material wet	0	0	0	0	-	-
Peak Converted Wet Density t/m <sup>3</sup>	1.80	1.84	1.81	1.84	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	30.5	26.5	33.0	25.5	-	-

Moisture Variation From Optimum Moisture Content	0.0%	1.0% dry	1.5% dry	0.5% wet	-	-
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Density Ratio ( $R_{HD}$ )	%	100.0	100.0	99.0	100.0	-	-
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Material description

No 44 - 47 Clay Fill



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# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 18053  
Report No 18053/R010  
Date Issued 27/09/2018

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	K S
Project	AQUAREVO ESTATE - STAGE 7	Date tested	22/03/18
Location	LYNDHURST	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:37
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	48	49	50	51	52	53
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m <sup>3</sup>	1.79	1.79	1.75	1.81	1.73	1.76
Field moisture content %	29.4	21.4	30.0	27.5	25.4	21.5

Test procedure AS 1289.5.7.1

Test No	48	49	50	51	52	53
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m <sup>3</sup>	1.79	1.76	1.72	1.79	1.75	1.75
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	27.0	20.5	29.5	26.5	25.0	21.5

Moisture Variation From Optimum Moisture Content	2.5% wet	1.0% wet	0.5% wet	1.0% wet	0.5% wet	0.0%
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Density Ratio ( $R_{HD}$ )	%	100.0	101.5	101.5	101.0	98.5	100.5
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Material description

No 48 - 53 Clay Fill



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*Justin Fry*

Approved Signatory : Justin Fry

AVRLOT HILF V1.10 MAR 13





## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 18053  
Report No 18053/R011  
Date Issued 25/05/2018

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	CGS
Project	AQUAREVO ESTATE - STAGE 7	Date tested	23/03/18
Location	LYNDHURST	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 09:21
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	54	55	56	57	-	-
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1		
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	-	-
Field wet density t/m <sup>3</sup>	1.82	1.79	1.81	1.77	-	-
Field moisture content %	28.8	22.8	31.8	34.2	-	-

Test procedure AS 1289.5.7.1

Test No	54	55	56	57	-	-
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	-	-
Percent of oversize material wet	0	0	0	0	-	-
Peak Converted Wet Density t/m <sup>3</sup>	1.90	1.88	1.89	1.86	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	26.5	21.0	29.5	31.5	-	-

Moisture Variation From Optimum Moisture Content	2.5% wet	2.0% wet	2.0% wet	2.5% wet	-	-
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Density Ratio ( $R_{HD}$ )	%	96.0	95.5	96.0	95.5	-	-
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Material description

No 54 - 57 Clay Fill

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Accreditation No 9909

Approved Signatory : Justin Fry



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)  
Project SQUAREVO ESTATE - STAGE 7  
Location LYNDHURST

Job No 18053  
Report No 18053/R012  
Date Issued 03/08/2018

Tested by CGS  
Date tested 29/03/18  
Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 10:28

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	58	59	60	61	62	63
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m <sup>3</sup>	1.82	1.84	1.83	1.83	1.84	1.83
Field moisture content %	28.7	30.1	27.3	32.9	36.2	30.1

Test procedure AS 1289.5.7.1

Test No	58	59	60	61	62	63
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m <sup>3</sup>	1.90	1.91	1.91	1.91	1.91	1.90
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	26.0	28.0	25.0	30.0	33.5	27.5

Moisture Variation From Optimum Moisture Content	2.5% wet	2.0% wet	2.5% wet	2.5% wet	2.5% wet	2.5% wet
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Density Ratio ( R <sub>HD</sub> )	%	95.5	96.5	96.0	96.0	96.5	96.0
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Material description

No 58 - 63 Clay Fill



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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 18053  
Report No 18053/R013  
Date Issued 25/05/2018

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	CGS
Project	AQUAREVO ESTATE - STAGE 7	Date tested	03/04/18
Location	LYNDHURST	Checked by	JHF

**Feature** EARTHWORKS

Layer thickness

200 mm

Time: 09:24

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	64	65	66	67	68	69
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m <sup>3</sup>	1.73	1.80	1.73	1.80	1.78	1.80
Field moisture content %	29.2	25.6	26.6	28.6	28.3	20.0

Test procedure AS 1289.5.7.1

Test No	64	65	66	67	68	69
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m <sup>3</sup>	1.77	1.83	1.75	1.79	1.80	1.81
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	26.5	23.5	24.5	26.0	26.0	18.0

Moisture Variation From Optimum Moisture Content	2.5% wet	2.0% wet	2.0% wet	2.5% wet	2.5% wet	2.0% wet
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Density Ratio ( $R_{HD}$ )	%	97.5	98.5	99.0	100.5	99.0	99.5
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Material description

No 64 - 69 Clay Fill

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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 18053  
Report No 18053/R014  
Date Issued 21/06/2018

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	CGS
Project	AQUAREVO ESTATE - STAGE 7	Date tested	05/04/18
Location	LYNDHURST	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 11:06
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	70	71	72	73	74	75
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m <sup>3</sup>	1.92	1.99	1.99	1.96	1.96	1.96
Field moisture content %	31.6	24.2	28.1	32.2	29.7	30.5

Test procedure AS 1289.5.7.1

Test No	70	71	72	73	74	75
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m <sup>3</sup>	1.97	2.00	2.02	2.01	2.02	2.00
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	29.5	21.5	25.5	30.0	27.0	28.0

Moisture Variation From Optimum Moisture Content	2.0% wet	2.5% wet	2.5% wet	2.0% wet	2.5% wet	2.5% wet
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Density Ratio ( $R_{HD}$ )	%	97.0	99.5	98.0	98.0	97.0	98.0
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Material description

No 70 - 75 Clay Fill



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## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)  
Project SQUAREVO ESTATE - STAGE 7  
Location LYNDHURST

Job No 18053  
Report No 18053/R015  
Date Issued 08/08/2018

Tested by CGS  
Date tested 09/04/18  
Checked by JHF

Feature **EARTHWORKS** Layer thickness 200 mm Time: 11:31

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	76	77	78	79	80	81
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m <sup>3</sup>	1.77	1.92	1.81	1.76	1.83	1.88
Field moisture content %	23.3	31.6	23.2	29.1	28.8	24.9

Test procedure AS 1289.5.7.1

Test No	76	77	78	79	80	81
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m <sup>3</sup>	1.81	1.91	1.81	1.80	1.91	1.91
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	21.5	29.0	21.0	27.0	27.0	23.0

Moisture Variation From Optimum Moisture Content	2.0% wet	2.5% wet	2.5% wet	2.5% wet	2.0% wet	2.0% wet
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Density Ratio ( $R_{HD}$ )	%	98.0	100.5	100.0	97.5	96.0	98.5
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Material description

No 76 - 81 Clay Fill



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*Justin Fry*

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