



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

27<sup>th</sup> March 2020

Our Reference: 19067:NB710

Winslow Constructors Pty Ltd  
50 Barry Road  
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING**  
**ALBRIGHT – STAGE 6 (TRUGANINA)**

Please find attached our Report No's 19067/R001 to 19067/R004 which relate to the field density testing that was conducted within the filled allotments of the above subdivision. The level 1 inspections and associated field density testing commenced in January 2019 and was completed in January 2020.

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).

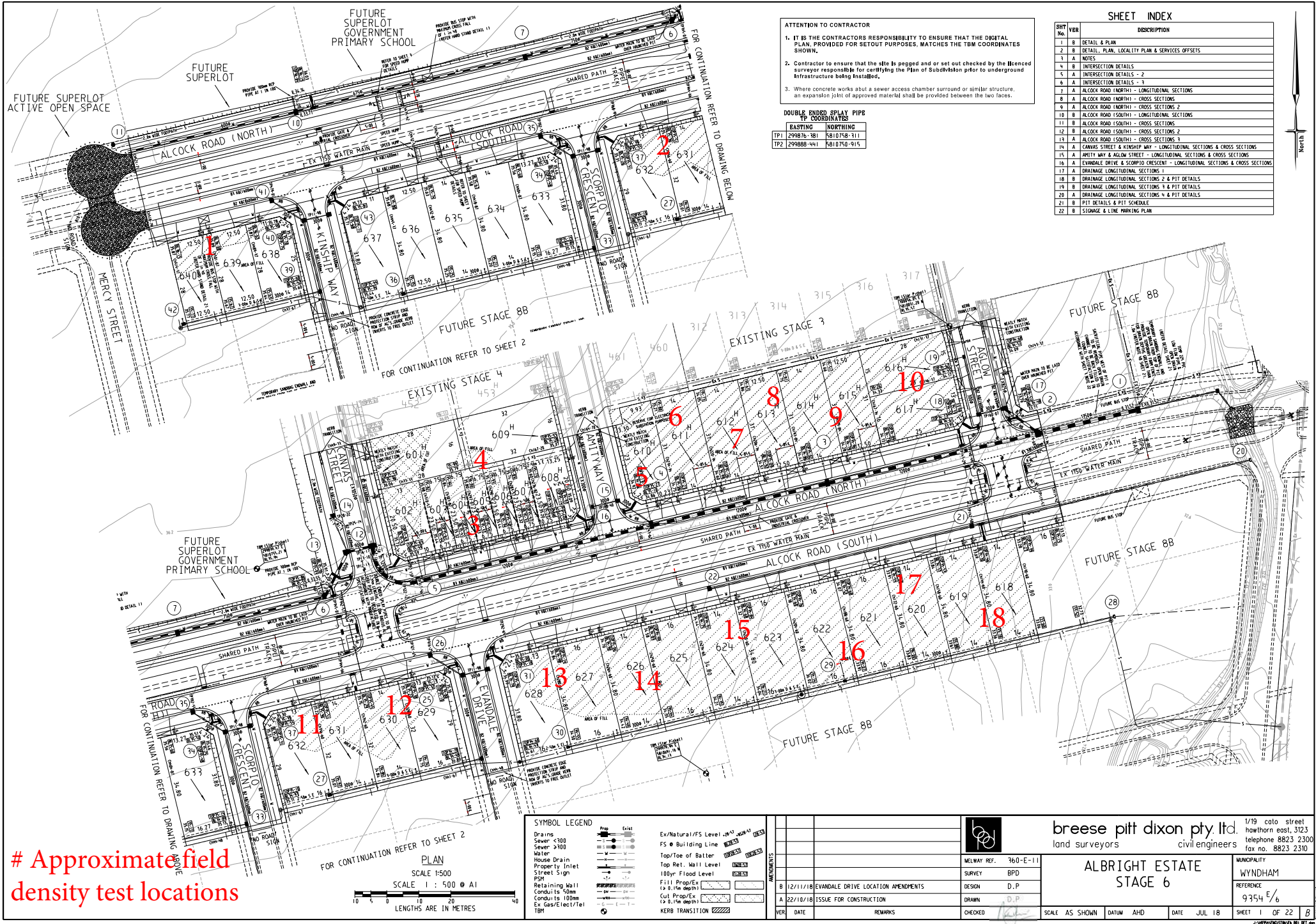
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

# FIGURE 1



# Approximate field density test locations



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 19067  
Report No 19067/R001  
Date Issued 24/05/2019

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	BGG
Project	ALBRIGHT ESTATE - STAGE 6	Date tested	02/03/19
Location	TRUGANINA	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:09
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	-	-	-
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>	1.80	1.75	1.79	-	-	-
Field moisture content %	23.3	23.3	23.1	-	-	-

Test procedure AS 1289.5.7.1

Test No	1	2	3	-	-	-
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>	1.85	1.78	1.86	-	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	21.0	21.0	20.5	-	-	-

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

No 1 - 3 Clay Fill



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.  
Accredited for compliance with ISO/IEC 17025 - Testing

Accreditation No 9909

AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 19067  
Report No 19067/R002  
Date Issued 24/05/2019

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	BGG
Project	ALBRIGHT ESTATE - STAGE 6	Date tested	04/03/19
Location	TRUGANINA	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:48
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	4	5	6	7	8	9
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>	2.07	1.94	1.98	1.95	1.93	1.97
Field moisture content %	31.2	36.1	31.9	31.4	33.6	34.3

Test procedure AS 1289.5.7.1

Test No	4	5	6	7	8	9
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>	2.11	1.97	2.01	1.98	1.97	2.01
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	28.0	34.0	30.0	29.5	31.5	31.5

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

No 4 - 9 Clay Fill



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Approved Signatory : Justin Fry



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 19067  
Report No 19067/R003  
Date Issued 29/05/2019

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	BGG
Project	ALBRIGHT ESTATE - STAGE 6	Date tested	05/03/19
Location	TRUGANINA	Checked by	JHF

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

Test No	10	11	12	13	14	15
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>	1.83	1.81	1.86	1.82	1.84	1.92
Field moisture content %	26.8	27.0	26.6	23.3	28.1	24.4

Test procedure AS 1289.5.7.1

Test No	10	11	12	13	14	15
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>	1.87	1.88	1.90	1.90	1.88	1.95
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	29.0	29.5	29.0	26.0	30.0	27.0

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

No 10 - 15 Clay Fill



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Approved Signatory : Justin Fry





# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 19067  
Report No 19067/R004  
Date Issued 04/02/2020  
Tested by AC  
Date tested 22/01/20  
Checked by JHF

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
Project	ALBRIGHT ESTATE - STAGE 6
Location	TRUGANINA

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:14
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	16	17	18	-	-	-
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>	1.89	1.87	1.88	-	-	-
Field moisture content %	26.1	30.3	29.5	-	-	-

Test procedure AS 1289.5.7.1

Test No	16	17	18	-	-	-
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>	1.90	1.89	1.92	-	-	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	26.0	29.0	27.5	-	-	-

Moisture Variation From Optimum Moisture Content	0.0%	1.0% wet	2.0% wet	-	-	-
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Density Ratio ( $R_{HD}$ )	%	99.0	98.5	98.0	-	-	-
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Material description

No 16 - 18 Clay Fill

AVRLOT HILF V1.10 MAR 13



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*Justin Fry*

Approved Signatory : Justin Fry