

CIVIL GEOTECHNICAL SERVICES ABN 26 474 013 724

PO Box 678 Croydon Vic 3136 Telephone: 9723 0744 Facsimile: 9723 0799

5th September 2024

Our Reference: 24327:NB1995

Winslow Constructors Pty Ltd 50 Barry Road CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING EYNESBURY – STAGE 23A (EYNESBURY)

Please find attached our Report No's 24327/R001 to 24327/R010 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 June 2024 and was completed in July 2024.

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).

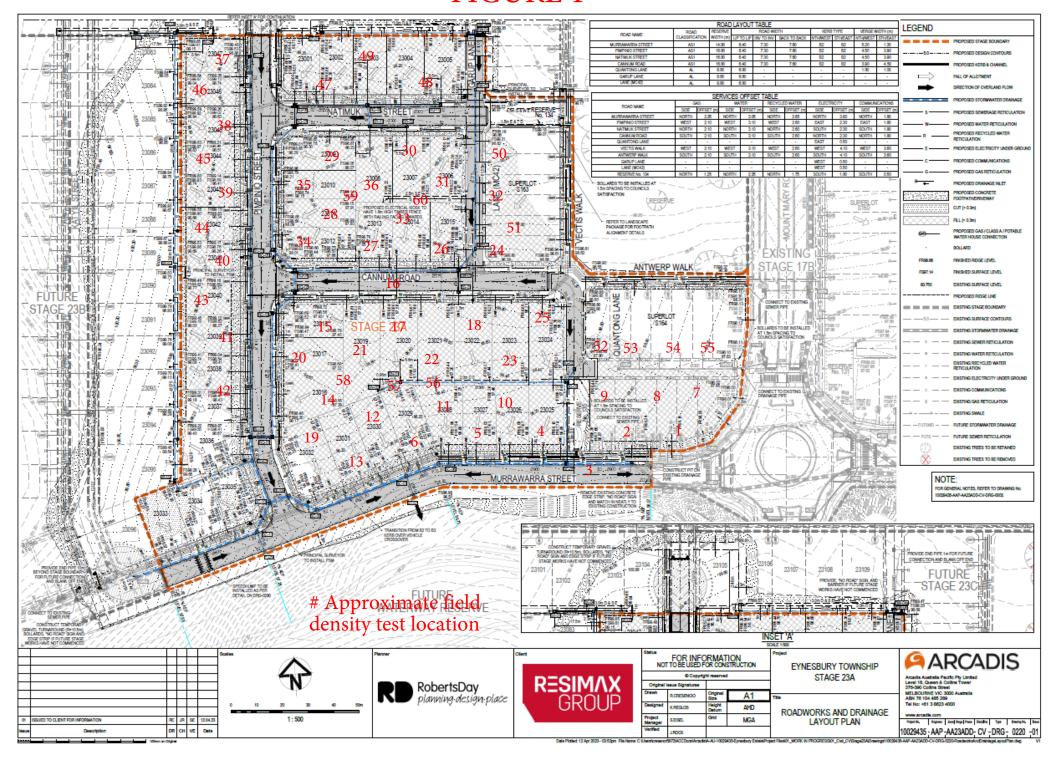
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

FIGURE 1





 CIVIL GEOTECHNICAL SERVICES
 Job No
 24327

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 24327/R001

 Date Issued
 05/07/24

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byBSProjectEYNESBURY - STAGE 23ADate tested05/06/24LocationEYNESBURYChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 08:09

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		1	2	3	4	5	6
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	TO	TO	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	2.05	2.01	1.97	1.98	2.06	2.05
Field moisture content	%	23.4	22.9	27.4	19.3	19.8	23.0

Test procedure AS 1289.5.7.1

Test No		1	2	3	4	5	6
Compactive effort				Stan	dard		
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/m³	2.10	2.05	2.00	2.06	2.15	2.11
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	26.0	24.5	30.0	21.5	22.5	25.5

Moisture Variation From	2.0%	1.5%	2.0%	2.0%	2.5%	2.5%
Optimum Moisture Content	dry	dry	dry	dry	dry	dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R _{HD}) %	97.5	98.0	98.5	96.5	96.0	97.0

Material description

No 1 - 6 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

AVRLOT HILF V1.10 MAR 13



 CIVIL GEOTECHNICAL SERVICES
 Job No
 24327

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 24327/R002

 Date Issued
 15/07/24

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byAMProjectEYNESBURY - STAGE 23ADate tested01/07/24LocationEYNESBURYChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 12:36

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		7	8	9	10	11	12
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	TO	TO	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.72	1.72	1.73	1.72	1.72	1.72
Field moisture content	%	23.9	25.1	26.2	31.5	26.2	25.4

Test procedure AS 1289.5.7.1

Test No		7	8	9	10	11	12
Compactive effort				Stan	dard		
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/m³	1.74	1.77	1.77	1.77	1.77	1.76
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	26.0	26.5	28.5	33.5	26.0	28.0

Moisture Variation From	2.0%	1.5%	2.5%	2.0%	0.0%	2.5%
Optimum Moisture Content	dry	dry	dry	dry		dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R _{HD})	%	98.5	97.5	98.0	97.5	97.0	98.0

Material description

No 7 - 12 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

AVRLOT HILF V1.10 MAR 13



 CIVIL GEOTECHNICAL SERVICES
 Job No
 24327

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 24327/R003

 Date Issued
 20/07/24

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byAMProjectEYNESBURY - STAGE 23ADate tested03/07/24LocationEYNESBURYChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 09:55

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		13	14	15	16	17	18
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	TO	TO	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.75	1.75	1.73	1.77	1.74	1.75
Field moisture content	%	25.6	30.2	29.8	27.4	22.1	25.0

Test procedure AS 1289.5.7.1

Test No		13	14	15	16	17	18
Compactive effort				Stan	dard		
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/m³	1.80	1.78	1.79	1.80	1.80	1.79
Adjusted Peak Converted Wet Density	t/m³	ı	-	-	-	-	-
Optimum Moisture Content	%	25.5	33.0	31.0	28.0	22.5	25.0

Moisture Variation From	0.0%	2.5%	1.0%	0.5%	0.0%	0.0%
Optimum Moisture Content		dry	dry	dry		

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R _{HD}) %	97.5	98.5	96.5	98.0	96.5	98.0

Material description

No 13 - 18 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

AVRLOT HILF V1.10 MAR 13



 CIVIL GEOTECHNICAL SERVICES
 Job No
 24327

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 24327/R004

 Date Issued
 15/07/24

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byBSProjectEYNESBURY - STAGE 23ADate tested05/07/24LocationEYNESBURYChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 13:25

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		19	20	21	22	23	24
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	TO	TO	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.81	1.81	1.82	1.84	1.83	1.81
Field moisture content	%	27.5	29.7	30.1	27.2	25.3	25.9

Test procedure AS 1289.5.7.1

Test No		19	20	21	22	23	24
Compactive effort				Stan	dard		
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/m³	1.83	1.88	1.87	1.86	1.89	1.84
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	30.0	30.5	32.5	29.5	27.0	28.0

Moisture Variation From	2.5%	1.0%	2.0%	2.5%	1.5%	2.0%
Optimum Moisture Content	dry	dry	dry	dry	dry	dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R _{HD})	%	99.0	96.5	97.5	98.5	97.5	98.5

Material description

No 19 - 24 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

AVRLOT HILF V1.10 MAR 13



 CIVIL GEOTECHNICAL SERVICES
 Job No
 24327

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 24327/R005

 Date Issued
 15/07/24

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byBSProjectEYNESBURY - STAGE 23ADate tested09/07/24LocationEYNESBURYChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 09:05

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		25	26	27	28	29	30
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	TO	TO	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.91	1.91	1.84	1.88	1.88	1.93
Field moisture content	%	22.6	18.0	21.1	21.4	15.6	19.9

Test procedure AS 1289.5.7.1

Test No		25	26	27	28	29	30
Compactive effort				Stan	dard		
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/m³	1.96	1.92	1.88	1.96	1.94	2.01
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	22.5	20.0	21.0	23.5	18.0	22.5

Moisture Variation From	0.0%	2.0%	0.5%	2.0%	2.5%	2.5%
Optimum Moisture Content		dry	wet	dry	dry	dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R _{HD})	%	97.5	99.5	98.0	96.0	97.0	96.0

Material description

No 25 - 30 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

AVRLOT HILF V1.10 MAR 13



Job No 24327 CIVIL GEOTECHNICAL SERVICES Report No 24327/R006 6 - 8 Rose Avenue, Croydon 3136 Date Issued 29/07/24

WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Client Tested by BS Project EYNESBURY - STAGE 23A Date tested 23/07/24 Location **EYNESBURY** Checked by JHF

EARTHWORKS Layer thickness 200 mm Time: 13:14 Feature

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		31	32	33	34	35	36
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	TO	TO	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	2.02	1.98	2.11	2.01	1.98	2.02
Field moisture content	%	18.5	21.9	19.9	20.9	21.4	22.3

Test procedure AS 1289.5.7.1

Test No		31	32	33	34	35	36
Compactive effort				Stan	dard		
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/m³	2.05	2.06	2.12	2.10	2.03	2.13
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	20.5	23.0	22.5	23.0	23.0	25.0

Moisture Variation From	2.0%	1.0%	2.5%	2.0%	1.5%	2.5%
Optimum Moisture Content	dry	dry	dry	dry	dry	dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R _{HD}) %	98.5	96.5	100.0	96.0	98.0	95.0

Material description

No 31 - 36 Clay Fill

NATA Accredited Laboratory No 9909 Accredited for compliance with ISO/IEC 17025 - Testing

AVRLOT HILF V1.10 MAR 13



 CIVIL GEOTECHNICAL SERVICES
 Job No
 24327

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 24327/R007

 Date Issued
 30/07/24

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byBSProjectEYNESBURY - STAGE 23ADate tested25/07/24LocationEYNESBURYChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 13:13

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		37	38	39	40	41	42
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	TO	TO	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	2.06	2.09	2.11	2.13	2.14	2.13
Field moisture content	%	21.4	22.9	20.9	27.2	20.4	25.4

Test procedure AS 1289.5.7.1

Test No		37	38	39	40	41	42
Compactive effort				Stan	dard		
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/m³	2.14	2.14	2.12	2.13	2.20	2.16
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	24.0	22.5	21.0	27.0	22.0	27.5

Moisture Variation From	2.5%	0.0%	0.0%	0.0%	1.5%	2.0%
Optimum Moisture Content	dry				dry	dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

					_		
Density Ratio (R _{HD})	%	96.0	97.5	99.5	100.0	97.5	98.5

Material description

No 37 - 42 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

AVRLOT HILF V1.10 MAR 13



 CIVIL GEOTECHNICAL SERVICES
 Job No
 24327

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 24327/R008

 Date Issued
 31/07/24

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byAMProjectEYNESBURY - STAGE 23ADate tested26/07/24LocationEYNESBURYChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 12:58

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		43	44	45	46	47	48
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	TO	TO	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.91	1.83	1.88	1.79	1.76	1.77
Field moisture content	%	27.5	26.8	25.0	22.9	21.9	22.4

Test procedure AS 1289.5.7.1

Test No		43	44	45	46	47	48
Compactive effort				Star	ndard		
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/m³	1.97	1.93	1.91	1.84	1.84	1.81
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	27.0	29.5	26.0	25.0	24.0	22.5

Moisture Variation From	0.5%	2.5%	1.0%	2.0%	2.0%	0.0%
Optimum Moisture Content	wet	dry	dry	dry	dry	

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R _{HD})	%	97.5	95.0	98.5	97.5	95.5	97.5

Material description

No 43 - 48 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

AVRLOT HILF V1.10 MAR 13



Job No 24327 CIVIL GEOTECHNICAL SERVICES Report No 24327/R009 6 - 8 Rose Avenue, Croydon 3136 Date Issued 31/07/24

WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Client Tested by AM Project EYNESBURY - STAGE 23A Date tested 29/07/24 Location **EYNESBURY** Checked by JHF

EARTHWORKS Layer thickness 200 mm Time: 10:42 Feature

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		49	50	51	52	53	54
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	TO	TO	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.87	1.87	1.86	1.81	1.84	1.85
Field moisture content	%	22.8	22.9	25.9	23.3	23.1	22.4

Test procedure AS 1289.5.7.1

Test No		49 50 51 52 53 5						
Compactive effort				Stan	dard			
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/m³	1.89	1.92	1.89	1.88	1.86	1.89	
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-	
Optimum Moisture Content	%	25.0	25.5	27.0	25.0	25.5	24.5	

Moisture Variation From	2.0%	2.5%	1.0%	1.5%	2.5%	2.0%
Optimum Moisture Content	dry	dry	dry	dry	dry	dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R _{HD})	%	99.0	97.5	98.5	96.5	99.0	98.0

Material description

No 49 - 54 Clay Fill

NATA Accredited Laboratory No 9909 Accredited for compliance with ISO/IEC 17025 - Testing

AVRLOT HILF V1.10 MAR 13



 CIVIL GEOTECHNICAL SERVICES
 Job No
 24327

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 24327/R010

 Date Issued
 01/08/24

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byBSProjectEYNESBURY - STAGE 23ADate tested30/07/24LocationEYNESBURYChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 13:56

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		55	56	57	58	59	60
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		ТО	ТО	ТО	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.93	1.95	1.91	1.98	1.92	1.87
Field moisture content	%	19.5	19.0	19.3	20.1	19.7	23.2

Test procedure AS 1289.5.7.1

Test No		55	56	57	58	59	60
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/m³	1.96	2.02	1.96	2.05	2.00	1.96
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	22.0	18.5	21.5	22.0	22.0	24.0

Moisture Variation From	2.5%	0.5%	2.0%	2.0%	2.5%	1.0%
Optimum Moisture Content	dry	wet	dry	dry	dry	dry

density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R _{HD})	%	98.0	97.0	97.5	96.5	96.0	95.5

Material description

No 55 - 60 Clay Fill

NATA Accredited Laboratory No 9909
Accredited for compliance with
ISO/IEC 17025 - Testing

AVRLOT HILF V1.10 MAR 13