

# CIVIL GEOTECHNICAL SERVICES ABN 26 474 013 724

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

5<sup>th</sup> October 2021

Our Reference: 21366:NB1082

Winslow Constructors Pty Ltd 50 Barry Road CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING SHERWOOD GRANGE – STAGE 2 (SUNBURY)

Please find attached our Report No's 21366/R001 to 21366/R014 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 May 2021 and was completed in July 2021.

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).

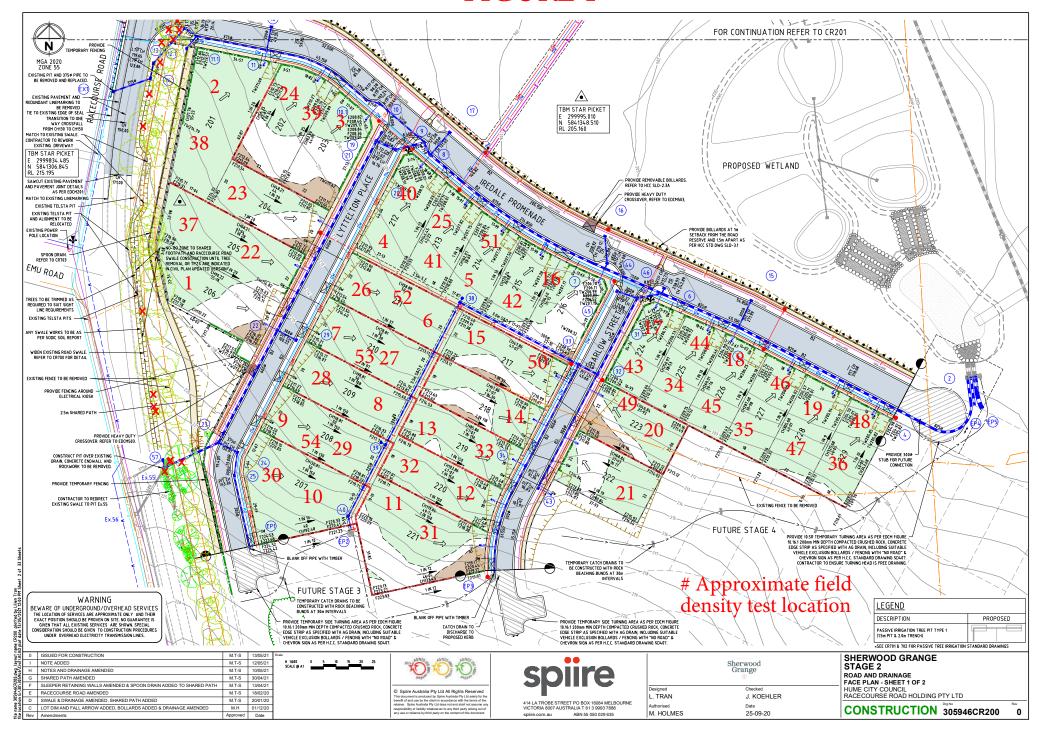
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

# FIGURE 1





Job No 21366 CIVIL GEOTECHNICAL SERVICES Report No 21366/R001 Date Issued 23/09/2021 6 - 8 Rose Avenue, Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by Client AM Project SHERWOOD GRANGE - STAGE 2 Date tested 31/05/21 Location **SUNBURY** Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 16:47

Test No		1	2	3	-	-	-
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
							<u> </u>
Approximate depth below FSL							<del>1                                    </del>
··	mm	175	175	175	<u>-</u>		
Measurement depth	mm t/m³	175 2.04	175 2.02	175 2.06	<u>-</u>		- - -
Approximate depth below FSL  Measurement depth  Field wet density  Field moisture content				_	-	- - -	-
Measurement depth Field wet density Field moisture content Test procedure AS 1289.5.7.1 Test No	t/m³	2.04	2.02	2.06	-		
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort	t/m³	2.04 15.6	2.02	2.06 16.0 3 Stan	-		
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve	t/m³	2.04 15.6 1	2.02 16.8 2	2.06 16.0 3 Stan 19.0	-		
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No Compactive effort Oversize rock retained on sieve Percent of oversize material	t/m³ % mm wet	2.04 15.6 1 19.0 0	2.02 16.8 2 19.0 0	2.06 16.0 3 Stan 19.0 0	- dard	-	
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	t/m³ % mm wet t/m³	2.04 15.6 1	2.02 16.8 2	2.06 16.0 3 Stan 19.0	- dard -	-	
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	mm wet t/m³	2.04 15.6 1 19.0 0 2.09	2.02 16.8 2 19.0 0 2.09	2.06 16.0 3 Stan 19.0 0 2.08	- dard - -	-	
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	t/m³ % mm wet t/m³	2.04 15.6 1 19.0 0	2.02 16.8 2 19.0 0	2.06 16.0 3 Stan 19.0 0	- dard - -	- - -	
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	mm wet t/m³	2.04 15.6 1 19.0 0 2.09	2.02 16.8 2 19.0 0 2.09	2.06 16.0 3 Stan 19.0 0 2.08	- dard - -	- - -	
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	mm wet t/m³	2.04 15.6 1 19.0 0 2.09	2.02 16.8 2 19.0 0 2.09	2.06 16.0 3 Stan 19.0 0 2.08	- dard - -	- - -	

#### Material description

No 1 - 3 Clay Fill

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





 CIVIL GEOTECHNICAL SERVICES
 Job No
 21366

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 21366/R002

 Client
 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Tested by
 AM

ProjectSHERWOOD GRANGE - STAGE 2Date tested01/06/21LocationSUNBURYChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 14:19

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		4	5	6	7	8	9
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	1.89	1.85	1.83	1.88	1.84
Field moisture content	%	25.5	24.0	26.5	25.7	26.4	26.1

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/m³	1.86	1.88	1.86	1.85	1.86	1.86	
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-	
Optimum Moisture Content	%	27.5	26.5	28.5	28.5	28.5	29.0	

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

Density Ratio (R <sub>HD</sub> )	%	100.5	100.5	100.0	99.0	101.0	99.0

#### Material description

No 4 - 9 Clay Fill

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





 CIVIL GEOTECHNICAL SERVICES
 Job No
 21366

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 21366/R003

 Client
 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Tested by
 AM

Project SHERWOOD GRANGE - STAGE 2 Date tested 02/06/21
Location SUNBURY Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 15:48

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		10	11	12	13	14	15
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	1.94	1.92	1.91	1.85	1.89	1.85
Field moisture content	%	13.3	19.9	17.4	23.7	21.9	24.6

Test procedure AS 1289.5.7.1

Test No		10	11	12	13	14	15
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	1.95	1.95	1.92	1.86	1.95	1.86
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	15.0	21.5	19.5	26.0	21.0	27.0

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

Density Ratio (R <sub>HD</sub> ) %	99.5	98.5	100.0	99.5	97.0	99.5

#### Material description

No 10 - 15 Clay Fill

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

AVRLOT HILF V1.10 MAR 13



Job No 21366 **CIVIL GEOTECHNICAL SERVICES** Report No 21366/R004 Date Issued 23/09/2021 6 - 8 Rose Avenue, Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by Client AM Project SHERWOOD GRANGE - STAGE 2 Date tested 03/06/21 Location **SUNBURY** Checked by JHF

Feature **EARTHWORKS** Layer thickness 200 mm Time: 15:36

Test procedure	40	1280 2	1 1	252	1
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Test No		16	17	18	19	20	21
Location		REFER TO FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.92	1.87	1.89	1.87	1.86	1.89
Field moisture content	%	26.6	25.3	26.6	25.3	27.2	25.9

#### Test procedure AS 1289.5.7.1

Test No		16	17	18	19	20	21
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	2.00	1.94	1.94	1.94	1.95	1.94
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	27.0	28.0	29.5	26.5	27.0	27.0

Moisture Variation From	0.5%	2.5%	2.5%	1.5%	0.0%	1.0%
Optimum Moisture Content	dry	dry	dry	dry		dry

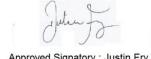
Density Ratio (R <sub>HD</sub> )	%	96.0	96.5	97.0	96.5	95.5	97.5

#### Material description

No 16 - 21 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
 21366

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 21366/R005

 Client
 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Tested by
 AM

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byAMProjectSHERWOOD GRANGE - STAGE 2Date tested04/06/21LocationSUNBURYChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 14:58

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		22	23	24	25	26	27
Location		REFER TO FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	2.01	2.00	1.95	1.82	1.84	1.84
Field moisture content	%	23.8	18.0	23.8	26.7	23.0	24.7

Test procedure AS 1289.5.7.1

Test No		22	23	24	25	26	27
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	2.06	2.07	2.03	1.88	1.92	1.92
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	26.5	20.0	26.0	28.0	25.0	27.5

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

Density Ratio (R <sub>HD</sub> )	%	98.0	96.5	96.0	97.0	95.5	96.0

#### Material description

No 22 - 27 Clay Fill

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

AVRLOT HILF V1.10 MAR 13

Approved Signatory: Justin Env



Job No 21366 **CIVIL GEOTECHNICAL SERVICES** Report No 21366/R006 Date Issued 23/09/2021 6 - 8 Rose Avenue, Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by Client AM Project SHERWOOD GRANGE - STAGE 2 Date tested 07/06/21 Location **SUNBURY** Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 14:34

Test No		28	29	30	-	-	-
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
				475			
·	mm	175	175	175	-	-	-
Field wet density	mm t/m³ %	175 1.93 24.2	175 1.89 25.7	1.86 27.0	- -	-	-
Field wet density Field moisture content Test procedure AS 1289.5.7.1	t/m³	1.93	1.89	1.86		-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No	t/m³	1.93 24.2	1.89 25.7	1.86 27.0	-	!	1
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort	t/m³	1.93 24.2	1.89 25.7	1.86 27.0	-	!	1
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort  Oversize rock retained on sieve	t/m³ %	1.93 24.2 28	1.89 25.7 29	1.86 27.0 30 Stan	- dard	-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material	t/m³ % mm	1.93 24.2 28 19.0	1.89 25.7 29 19.0	1.86 27.0 30 Stan 19.0	- dard	-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	t/m³ % mm wet	1.93 24.2 28 19.0 0	1.89 25.7 29 19.0 0	1.86 27.0 30 Stan 19.0 0	- dard - -	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density Optimum Moisture Content	mm wet t/m³	1.93 24.2 28 19.0 0	1.89 25.7 29 19.0 0	1.86 27.0 30 Stan 19.0 0	- dard - -	-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density Optimum Moisture Content	mm wet t/m³	1.93 24.2 28 19.0 0 1.99 - 27.0	1.89 25.7 29 19.0 0 1.95 - 28.5	1.86 27.0 30 Stan 19.0 0 1.96 -	- dard - - -	- - - -	- - - -
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density  Adjusted Peak Converted Wet Density	mm wet t/m³	1.93 24.2 28 19.0 0 1.99	1.89 25.7 29 19.0 0 1.95	30 Stan 19.0 0 1.96	- dard - - -	- - - -	- - - -

#### Material description

No 28 - 30 Clay Fill

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





 CIVIL GEOTECHNICAL SERVICES
 Job No
 21366

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 21366/R007

 Client
 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)
 Tested by
 AM

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byAMProjectSHERWOOD GRANGE - STAGE 2Date tested13/07/21LocationSUNBURYChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 12:27

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	1.96	1.97	1.92	1.95	1.96	1.95
Field moisture content	%	22.4	23.8	22.3	23.0	20.7	22.1

Test procedure AS 1289.5.7.1

Test No		31	32	33	34	35	36
Compactive effort				Stan	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	1.98	2.00	1.98	2.03	2.00	2.00
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	20.0	21.0	20.0	21.0	18.5	19.5

Moisture Variation From	2.5%	2.5%	2.5%	2.0%	2.0%	2.5%
Optimum Moisture Content	wet	wet	wet	wet	wet	wet

Density Ratio (R <sub>HD</sub> )	%	99.0	98.0	97.0	95.5	98.0	97.5

#### 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



Job No 21366 **CIVIL GEOTECHNICAL SERVICES** Report No 21366/R008 Date Issued 21/07/2021 6 - 8 Rose Avenue, Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by Client AM Project SHERWOOD GRANGE - STAGE 2 Date tested 14/07/21 Location **SUNBURY** Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 12:40

REFER TO FIGURE 1 175 1.98 18.5	REFER TO FIGURE 1 175 1.95 17.9	REFER TO FIGURE 1 175 1.99 21.1	- -	- - -	- -
1.98 18.5	1.95 17.9	1.99 21.1	-	- - -	- - -
1.98 18.5	1.95 17.9	1.99 21.1	-	-	-
18.5 37	17.9	21.1	-	-	-
37			-	-	-
	38	30			
			-	-	-
	1	Stand	dard	•	
19.0	19.0	19.0	-	-	-
_		·	-	-	<u> </u>
	2.06	2.06	-	-	-
		-	-	-	-
18.5	18.0	20.5	-	-	-
	<del>,                                      </del>	· · · · · · · · · · · · · · · · · · ·		Ţ	
0.0%	0.0%		-	-	-
		wet			<u> </u>
	0 2.08 - 18.5	2.08     2.06       -     -       18.5     18.0       0.0%     0.0%	2.08     2.06       -     -       18.5     18.0       20.5         0.0%     0.5%       wet	2.08     2.06     2.06     -       -     -     -     -       18.5     18.0     20.5     -       0.0%     0.5%     -     wet	2.08     2.06     -     -       -     -     -     -       18.5     18.0     20.5     -     -       0.0%     0.5%     -     -

Material description

No 37 - 39 Clay Fill

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

Julia J

Approved Signatory : Justin Fry



Job No 21366 **CIVIL GEOTECHNICAL SERVICES** Report No 21366/R009 Date Issued 23/09/2021 6 - 8 Rose Avenue, Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by Client AM Project SHERWOOD GRANGE - STAGE 2 Date tested 15/07/21 Location **SUNBURY** Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 13:18

Test No		40	41	42	-	-	-
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Approximate depth select 1 GE							
	mm	175	175	175	-	-	-
Measurement depth	mm t/m³	175 1.83	175 1.82	175 1.80	-	-	-
Measurement depth Field wet density		_	_	_	-	- - -	- - -
Measurement depth Field wet density Field moisture content Test procedure AS 1289.5.7.1	t/m³	1.83 28.5	1.82 29.9	1.80 32.3	-		I
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No	t/m³	1.83	1.82	1.80 32.3	-	- - -	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort	t/m³ %	1.83 28.5	1.82 29.9	1.80 32.3 42 Stan	- dard	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve	t/m³ % mm	1.83 28.5 40	1.82 29.9 41 19.0	1.80 32.3 42 Stan 19.0	-		I
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No Compactive effort Oversize rock retained on sieve Percent of oversize material	t/m³ % mm wet	1.83 28.5 40 19.0 0	1.82 29.9 41 19.0 0	1.80 32.3 42 Stan 19.0 0	- dard	- -	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	mm wet t/m³	1.83 28.5 40 19.0 0 1.88	1.82 29.9 41 19.0 0 1.86	1.80 32.3 42 Stan 19.0 0 1.86	- dard - -	- - -	
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	mm wet t/m³	1.83 28.5 40 19.0 0 1.88	1.82 29.9 41 19.0 0 1.86	1.80 32.3 42 Stan 19.0 0 1.86	- dard	- -	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	mm wet t/m³	1.83 28.5 40 19.0 0 1.88	1.82 29.9 41 19.0 0 1.86	1.80 32.3 42 Stan 19.0 0 1.86	- dard - -	- - -	
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No Compactive effort  Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density  Adjusted Peak Converted Wet Density  Optimum Moisture Content	mm wet t/m³	1.83 28.5 40 19.0 0 1.88 - 28.5	1.82 29.9 41 19.0 0 1.86 - 30.0	1.80 32.3 42 Stan 19.0 0 1.86 -	- dard - -	- - -	
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	mm wet t/m³	1.83 28.5 40 19.0 0 1.88	1.82 29.9 41 19.0 0 1.86	1.80 32.3 42 Stan 19.0 0 1.86	- dard - -	- - -	

Material description

No 40 - 42 Clay Fill

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





Job No 21366 **CIVIL GEOTECHNICAL SERVICES** Report No 21366/R010 Date Issued 23/09/2021 6 - 8 Rose Avenue, Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by Client AM Project SHERWOOD GRANGE - STAGE 2 Date tested 16/07/21 Location **SUNBURY** Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 12:45

Test No		43	44	45	-	-	-
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
P. P							1
··	mm	175	175	175	-	-	-
Measurement depth	mm t/m³	175 1.98	175 1.97	175 1.96	<u>-</u>	-	-
Measurement depth Field wet density			_	_		- - -	
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1	t/m³	1.98 27.3	1.97 28.9	1.96 30.3	-	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No	t/m³	1.98	1.97	1.96 30.3	-	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort	t/m³ %	1.98 27.3 43	1.97 28.9	1.96 30.3 45 Stan	- - - dard	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve	t/m³ % mm	1.98 27.3 43	1.97 28.9 44 19.0	1.96 30.3 45 Stan 19.0	-	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material	t/m³ % mm wet	1.98 27.3 43 19.0 0	1.97 28.9 44 19.0 0	1.96 30.3 45 Stan 19.0 0	- - - dard	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	t/m³ % mm wet t/m³	1.98 27.3 43	1.97 28.9 44 19.0	1.96 30.3 45 Stan 19.0	- - dard - -	- - -	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort	t/m³ % mm wet	1.98 27.3 43 19.0 0 2.04	1.97 28.9 44 19.0 0 2.03	1.96 30.3 45 Stan 19.0 0 2.01	- - dard - -	- - - -	- - - -
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	t/m³ %  mm wet t/m³ t/m³	1.98 27.3 43 19.0 0 2.04	1.97 28.9 44 19.0 0 2.03	1.96 30.3 45 Stan 19.0 0 2.01	- - dard - -	- - - - -	- - - -

Material description

No 43 - 45 Clay Fill

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Job No 21366 CIVIL GEOTECHNICAL SERVICES Report No 21366/R011 Date Issued 27/07/2021 6 - 8 Rose Avenue, Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by Client AM Project SHERWOOD GRANGE - STAGE 2 Date tested 19/07/21 Location **SUNBURY** Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 12:37

Test No		46	47	48	-	-	-
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
· · ·							
Measurement depth	mm	175	175	175	-	-	-
Measurement depth Field wet density	mm t/m³ %	175 1.85 24.1	175 1.89 25.9	175 1.93 31.2	-	- - -	-
• • • • • • • • • • • • • • • • • • • •	t/m³	1.85	1.89	1.93	-	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No	t/m³	1.85 24.1	1.89 25.9	1.93 31.2	-	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort	t/m³	1.85 24.1	1.89 25.9	1.93 31.2	-	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve	t/m³ %	1.85 24.1 46	1.89 25.9 47	1.93 31.2 48 Stan	- - dard		-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No Compactive effort Oversize rock retained on sieve Percent of oversize material	t/m³ % mm	1.85 24.1 46 19.0	1.89 25.9 47 19.0	1.93 31.2 48 Stan 19.0	- - dard	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	t/m³ % mm wet	1.85 24.1 46 19.0 0	1.89 25.9 47 19.0 0	1.93 31.2 48 Stan 19.0 0	- - dard -	- - -	- - -
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1	t/m³ % mm wet t/m³	1.85 24.1 46 19.0 0	1.89 25.9 47 19.0 0	1.93 31.2 48 Stan 19.0 0	- - dard -	- - -	- - -
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	mm wet t/m³	1.85 24.1 46 19.0 0 1.95	1.89 25.9 47 19.0 0 1.97	1.93 31.2 48 Stan 19.0 0 1.93	- dard - - -	- - - - -	- - -

#### Material description

No 46 - 48 Clay Fill

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Job No 21366 CIVIL GEOTECHNICAL SERVICES Report No 21366/R012 Date Issued 23/09/2021 6 - 8 Rose Avenue, Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by Client AM Project SHERWOOD GRANGE - STAGE 2 Date tested 20/07/21 Location **SUNBURY** Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 12:06

Test No		49	50	51	-	-	-
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
	mm	175	175	175	-	-	-
Measurement depth	mm t/m³	175 1.90	175 1.91	175 1.95		-	-
Measurement depth Field wet density		_	_	_	-	-	- - -
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1	t/m³	1.90 23.1	1.91 24.5	1.95 26.3	-		I
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No	t/m³	1.90	1.91	1.95 26.3	-	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No Compactive effort	t/m³ %	1.90 23.1 49	1.91 24.5 50	1.95 26.3 51 Stan	- dard	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve	t/m³ % mm	1.90 23.1 49	1.91 24.5 50 19.0	1.95 26.3 51 Stan	-		I
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No Compactive effort Oversize rock retained on sieve Percent of oversize material	t/m³ % mm wet	1.90 23.1 49 19.0 0	1.91 24.5 50 19.0 0	1.95 26.3 51 Stand 19.0 0	- dard	-	-
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	t/m³ % mm wet t/m³	1.90 23.1 49	1.91 24.5 50 19.0	1.95 26.3 51 Stan	- dard		-
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	t/m³ % mm wet	1.90 23.1 49 19.0 0 1.96	1.91 24.5 50 19.0 0 1.94	1.95 26.3 51 Stand 19.0 0 1.99	- dard - -	- - -	
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	t/m³ % mm wet t/m³ t/m³	1.90 23.1 49 19.0 0 1.96	1.91 24.5 50 19.0 0 1.94	1.95 26.3 51 Stan 19.0 0 1.99	- dard - -	- - -	
Measurement depth Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	t/m³ % mm wet t/m³ t/m³	1.90 23.1 49 19.0 0 1.96	1.91 24.5 50 19.0 0 1.94	1.95 26.3 51 Stan 19.0 0 1.99	- dard - -	- - -	

#### Material description

No 49 - 51 Clay Fill

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AVRLOT HILF V1.10 MAR 13



Job No 21366 CIVIL GEOTECHNICAL SERVICES Report No 21366/R013 Date Issued 09/08/2021 6 - 8 Rose Avenue, Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by Client AM Project SHERWOOD GRANGE - STAGE 2 Date tested 27/07/21 Location **SUNBURY** Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 14:21

Test No		52	53	54	-	-	-
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	mm	175	175	175	-	-	-
Measurement depth Field wet density	t/m³	1.85	1.82	1.83	-	-	-
·					- - -	-	
Field wet density	t/m³	1.85	1.82	1.83	- - -	-	- - -
Field wet density Field moisture content Test procedure AS 1289.5.7.1	t/m³	1.85	1.82	1.83	-	-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No	t/m³	1.85 27.7	1.82 21.3	1.83 22.6	-	-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort	t/m³	1.85 27.7	1.82 21.3	1.83 22.6	-	-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort  Oversize rock retained on sieve	t/m³ %	1.85 27.7 52	1.82 21.3	1.83 22.6 54 Stan	-	-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material	t/m³ % mm	1.85 27.7 52 19.0	1.82 21.3 53	1.83 22.6 54 Stan 19.0	-	-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	t/m³ % mm wet	1.85 27.7 52 19.0 0	1.82 21.3 53 19.0 0	1.83 22.6 54 Stan 19.0	- - dard -	- - -	- - -
Field wet density Field moisture content	t/m³ % mm wet t/m³	1.85 27.7 52 19.0 0	1.82 21.3 53 19.0 0	1.83 22.6 54 Stan 19.0	- - dard -	- - -	- - -
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort  Oversize rock retained on sieve  Percent of oversize material  Peak Converted Wet Density  Adjusted Peak Converted Wet Density	mm wet t/m³	1.85 27.7 52 19.0 0 1.88	1.82 21.3 53 19.0 0 1.84	1.83 22.6 54 Stan 19.0 0 1.82	- - dard - - -	- - -	- - -
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort  Oversize rock retained on sieve  Percent of oversize material  Peak Converted Wet Density  Adjusted Peak Converted Wet Density	mm wet t/m³	1.85 27.7 52 19.0 0 1.88	1.82 21.3 53 19.0 0 1.84	1.83 22.6 54 Stan 19.0 0 1.82	- - dard - - -	- - -	- - -

#### Material description

No 52 - 54 Clay Fill

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AVRLOT HILF V1.10 MAR 13



Job No 21366 **CIVIL GEOTECHNICAL SERVICES** Report No 21366/R014 Date Issued 25/08/2021 6 - 8 Rose Avenue, Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by Client AM Project SHERWOOD GRANGE - STAGE 2 Date tested 29/07/21 Location **SUNBURY** Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 16:01

Test No		55	56	57	-	-	-
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	mm	175	175	175	-	-	-
· · · · · · · · · · · · · · · · · · ·	t/m³	1.99	2.02	1.94	-	-	-
Field wet density	t/m³ %	1.99 13.0	2.02 13.4	1.94 12.9	-	-	-
Field wet density Field moisture content					-	-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1					-	-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No		13.0	13.4	12.9			-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort		13.0	13.4	12.9 57			-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort  Oversize rock retained on sieve	%	13.0 55	13.4 56	12.9 57 Stan		-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material	% mm	13.0 55 19.0	13.4 56 19.0	12.9 57 Stan 19.0		-	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort  Oversize rock retained on sieve  Percent of oversize material  Peak Converted Wet Density	% mm wet	13.0 55 19.0 0	13.4 56 19.0 0	57 Stan 19.0	dard - -	- -	-
Field wet density Field moisture content	mm wet t/m³	13.0 55 19.0 0	13.4 56 19.0 0	57 Stan 19.0	dard - -	- - -	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort  Oversize rock retained on sieve  Percent of oversize material  Peak Converted Wet Density  Adjusted Peak Converted Wet Density	mm wet t/m³	13.0 55 19.0 0 2.03	13.4 56 19.0 0 2.04	57 Stan 19.0 0 1.99	dard - -	- - -	-
Field wet density Field moisture content  Test procedure AS 1289.5.7.1  Test No  Compactive effort  Oversize rock retained on sieve  Percent of oversize material  Peak Converted Wet Density  Adjusted Peak Converted Wet Density	mm wet t/m³	13.0 55 19.0 0 2.03	13.4 56 19.0 0 2.04	57 Stan 19.0 0 1.99	dard - -	- - -	-

# Material description

No 55 - 57 Clay Fill

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