

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

12th December 2023

Our Reference: 23321:NB1763

Winslow Constructors Pty Ltd 50 Barry Road CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING NEWBRIDGE – STAGE 15 (WALLAN)

Please find attached our Report No's 23321/R001 to 23321/R020 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 commenced in April 2023 and was completed in August 2023.

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).

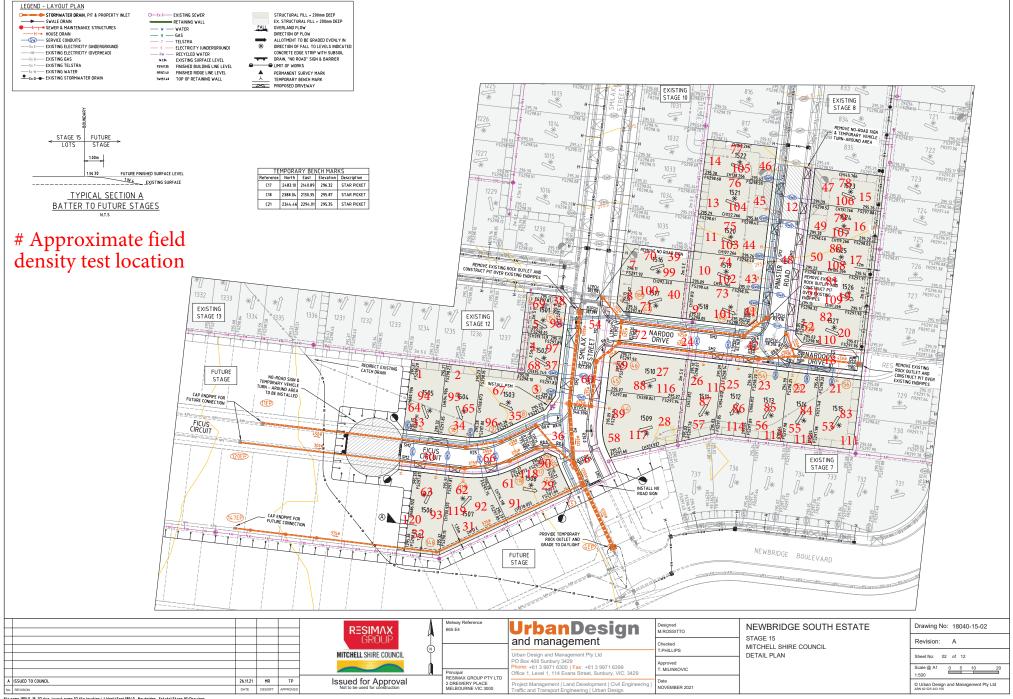
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

FIGURE 1



file name 18040-15-02.dwg layout name 02 file location L:\Work\Eng\18040 Newbridge Estate\Stage 15\Drawings



NSTRUCTORS STAGE 15 .1 & 5.8.1 .1 & 5.8.1 .1 & 5.8.1 .1		er thickness REFER TO FIGURE 1 175 1.91 24.1	200 3 REFER TO FIGURE 1 175 1.94 24.3	Da Cł	sted by ate tested necked by Time: 5 REFER TO FIGURE 1	6 REFER TO
.1 & 5.8.1	1 REFER TO FIGURE 1 175 1.91	2 REFER TO FIGURE 1 175 1.91	3 REFER TO FIGURE 1 175 1.94	4 REFER TO FIGURE 1 175	5 REFER TO FIGURE 1	6 REFER TO FIGURE 1
 	REFER TO FIGURE 1 175 1.91	REFER TO FIGURE 1 175 1.91	REFER TO FIGURE 1 175 1.94	REFER TO FIGURE 1 175	REFER TO FIGURE 1 175	REFER TO FIGURE 1
<i>t/m</i> ³ %	REFER TO FIGURE 1 175 1.91	REFER TO FIGURE 1 175 1.91	REFER TO FIGURE 1 175 1.94	REFER TO FIGURE 1 175	REFER TO FIGURE 1 175	REFER TO FIGURE 1
<i>t/m</i> ³ %	TO FIGURE 1 175 1.91	TO FIGURE 1 175 1.91	TO FIGURE 1 175 1.94	TO FIGURE 1 175	TO FIGURE 1 175	TO FIGURE 1
<i>t/m</i> ³ %	1.91	1.91	1.94			175
<i>t/m</i> ³ %	1.91	1.91	1.94			175
%				1 94		4.00
	26.5	24.1		19.5	1.93 19.0	1.93 18.5
	1	2	3 Stan	4 dard	5	6
e mm	19.0	19.0	19.0	19.0	19.0	19.0
wet	0	0	0	0	0	0
	1.93	1.92	1.94	1.95	1.95	1.94
	-	-	-	-	-	-
%	29.0	26.5	27.0	19.5	21.5	21.0
n	2.0%	2.0%	2.5%	0.0%	2.5%	2.5%
ent	dry	dry	dry		dry	dry
	-	-			-	-
%	99.0	99.0	100.0	100.0	99.0	99.5
	ent	Density t/m³ - % 29.0 n 2.0% ent dry o results relate only to the so	Density t/m³ - - % 29.0 26.5 m 2.0% 2.0% ent dry dry o results relate only to the soil to the deption 1000000000000000000000000000000000000	Density t/m³ -	Density t/m³ -	Density t/m³ -



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8 Rose Avenue Client Project Location	e, Croydon 3136 WINSLOW CONSTRUC NEWBRIDGE - STAGE WALLAN		PTY LTD (C/	AMPBELLFIE	ELD)	Te Da	ate Issued ested by ate tested hecked by	23/06/23 AC 14/04/23 JHF
Feature	EARTHWORKS		Lay	er thickness	200	mm	Time:	10:35
	ure AS 1289.2.1.1 & 5.8.	1	-				I	
Test No			7	8	9	10	11	12
Location			REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate	depth below FSL							
Measurement		mm	175	175	175	175	175	175
Field wet den	sity	t∕m³	1.91	1.90	1.86	1.83	1.93	1.95
Field moisture	e content	%	25.1	25.2	23.9	29.1	25.9	24.4
Test proced	ure AS 1289.5.7.1							
Test No			7	8	9	10	11	12
Compactive e					Stan	dard		
	k retained on sieve	тт	19.0	19.0	19.0	19.0	19.0	19.0
	ersize material	wet	0	0	0	0	0	0
	ted Wet Density	t∕m³	1.94	1.92	1.87	1.90	1.95	1.96
	k Converted Wet Density	t∕m³	-	-	-	-	-	-
Optimum Moi	sture Content	%	27.5	27.5	26.5	31.0	28.5	27.0
Moist	ture Variation From		2.5%	2.0%	2.5%	2.0%	2.5%	2.0%
Optim	um Moisture Content		dry	dry	dry	dry	dry	dry
density	and moisture ratio results	relate o	only to the so	il to the dept	h of test and	not to the fu	ll depth of the	e layer
D 1/	o (R _{HD})	%	99.0	99.0	99.5	96.0	99.0	99.0



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WORKS 289.2.1.1 & 5.8 ow FSL	2.1	Lay 13 REFER TO FIGURE 1	er thickness 14 REFER TO FIGURE 1	200 15 REFER TO FIGURE 1	mm 16 REFER TO FIGURE 1	Time: 17 REFER TO	10:26 18 REFER TO
	2.1	REFER TO	REFER TO	REFER TO	REFER TO	REFER TO	REFER
ow FSL		REFER TO	REFER TO	REFER TO	REFER TO	REFER TO	REFER
ow FSL		то	ТО	то	то	то	
ow FSL					FIGURE I	FIGURE 1	FIGURE 1
	тт	175	175	175	175	175	175
	t∕m³	1.90	1.93	1.90	1.94	1.93	1.90
	%	17.2	18.1	22.2	17.3	17.6	19.6
289.5.7.1		10	11	15	16	17	18
		13	14	-	_	17	10
on sieve	mm	10.0	10.0			10.0	19.0
							0
							1.94
		-	-	-	-	-	-
	%	19.5	20.5	24.5	19.0	17.5	21.0
ion From		2.5%	2.5%	2.5%	2.0%	0.0%	1.5%
							dry
	relate o					l depth of the	
		-	-			-	98.0
	289.5.7.1 on sieve nterial Density ted Wet Density ntent tion From tre Content ture ratio results	on sieve mm aterial wet Density t/m ³ ted Wet Density t/m ³ atent % tion From ure Content sture ratio results relate of %	13on sievemm19.0aterialwet0bensityt/m³1.93ted Wet Densityt/m³-atent%19.5tion From2.5%ure Contentdryature ratio results relate only to the so%98.5	13 14 on sieve mm 19.0 19.0 aterial wet 0 0 bensity t/m³ 1.93 1.94 ted Wet Density t/m³ - - atent % 19.5 20.5 tion From 2.5% 2.5% ure Content dry dry otture ratio results relate only to the soil to the deption % 98.5 100.0	13 14 15 Stan Stan on sieve mm 19.0 19.0 19.0 aterial wet 0 0 0 0 bensity t/m³ 1.93 1.94 1.94 ted Wet Density t/m³ - - - otent % 19.5 20.5 24.5 tion From 2.5% 2.5% 2.5% 2.5% tree Content dry dry dry dry dry sture ratio results relate only to the soil to the depth of test and % 98.5 100.0 97.5	13 14 15 16 Standard on sieve mm 19.0 19.0 19.0 19.0 iterial wet 0 0 0 0 0 iterial wet 0 0 0 0 0 0 iterial wet 0 0 0 0 0 0 iterial wet 0 0 19.5 20.5 24.5 19.0 iterial % 19.5 2.5% 2.5% 2.5% 2.0% 2.0% iterial % 19.5 100.0 97.5 99.0 99.0 99.0 90.0	13 14 15 16 17 Standard on sieve mm 19.0 19.0 19.0 19.0 19.0 iterial wet 0 0 0 0 0 0 iterial wet 0 0 0 0 0 0 0 iterial wet 0 0 0 0 0 0 0 iterial wet 0 0 0 0 0 0 0 iterial wet 0 0 0 0 0 0 0 0 iterial wet 0 </td



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	LOW CONSTRUC BRIDGE - STAGE		PTY LTD (C/	AMPBELLFIE	ELD)	Da Te Da	eport No ate Issued ested by ate tested hecked by	20/06/23 AC 19/04/23 JHF
<i>Feature</i> EART	HWORKS		Lay	er thickness	200	mm	Time:	09:27
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				
Approximate depth b	elow FSL							
Measurement depth		mm	175	175	175	175	175	175
Field wet density		t/m³	1.94	1.94	1.93	1.92	1.93	1.95
Field moisture conter	nt	%	19.2	22.1	20.2	22.8	21.7	22.3
Test procedure AS	1289.5.7.1		10	00	04	00	00	04
Test No Compactive effort			19	20	21 Stor	22 dard	23	24
Oversize rock retaine	d on siovo	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize n		wet	0	0	0	0	0	0
Peak Converted Wet		t/m ³	1.97	1.96	1.90	1.90	1.95	1.98
Adjusted Peak Conve		t/m³	-	-	-	-	-	-
Optimum Moisture Co		%	21.5	24.5	22.5	23.0	24.0	22.5
Moisture Van Optimum Mois			2.0% dry	2.5% dry	2.0% dry	0.0%	2.5% dry	0.0%
		relate c				not to the fu		e laver
		%	98.0	99.0	101.5	101.5	99.0	98.0
density and mo Density Ratio (R _{HD}	1		.70.U	33.0	101.5	101.5	33.0	30.0



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	Checked by	Di Ci				15	WINSLOW CONSTRUC NEWBRIDGE - STAGE WALLAN	Project Location
<i>Time:</i> 11:54	Time	mm	200	er thickness	Lay		EARTHWORKS	Feature
						1	edure AS 1289.2.1.1 & 5.8.	
9 30	29	28	27	26	25			Test No
о то	то	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			Location
							ate depth below FSL	
	175	175	175	175	175	mm	-	Measuremer
	1.96 20.5	1.97 24.2	1.98 23.3	1.95 23.9	1.96 21.4	t/m³ %		Field wet der Field moistur
29 30	29	28 dard	27 Stan	26	25		edure AS 1289.5.7.1 ve effort	Test No Compactive
0.0 19.0	19.0	19.0	19.0	19.0	19.0	тт	ock retained on sieve	Oversize roc
0 0	0	0	0	0	0	wet	oversize material	Percent of or
99 1.95	1.99	2.01	2.00	1.98	1.97	t∕m³	verted Wet Density	Peak Conve
	-	-	-	-	-	t∕m³	Peak Converted Wet Density	Adjusted Pea
2.5 24.0	22.5	26.5	26.0	26.0	23.5	%	Moisture Content	Optimum Mc
0% 2.0%	2.0%	2.0%	2.5%	2.0%	2.0%		oisture Variation From	Mois
	full depth of th	dry not to the fu	dry n of test and	dry il to the depth	dry only to the so	relate c	<i>timum Moisture Content</i> sity and moisture ratio results	
.5 100.0	98.5	98.0	99.0	99.0	99.5	%	Patio (R _{HD})	Density Rat
ספ ry	2.0% dry	2.0% dry not to the fu	2.5% dry n of test and	2.0% dry il to the depth	2.0% dry only to the so	% relate c	Disture Content Disture Variation From timum Moisture Content Sity and moisture ratio results Patio (R _{HD})	Optimum Mo Mois Optim density Density Rat



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8 Rose Avenue Client Project Location	e, Croydon 3136 WINSLOW CONSTRUC NEWBRIDGE - STAGE WALLAN		PTY LTD (C/	AMPBELLFIE	ELD)	Te Da	ate Issued ested by ate tested hecked by	21/07/23 AC 26/04/23 JHF
Feature	EARTHWORKS		Lay	er thickness	200	mm	Time:	09:29
Test proced	lure AS 1289.2.1.1 & 5.8	. 1						
Test No			31	32	33	34	35	36
Location			REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate	depth below FSL							
Measuremen		mm	175	175	175	175	175	175
Field wet den	-	t∕m³	1.92	1.90	1.90	1.91	1.90	1.89
Field moisture		%	19.7	18.7	20.4	22.7	23.6	19.8
Test proced	lure AS 1289.5.7.1							
Test No			31	32	33	34	35	36
Compactive e	effort				Stan	dard		
	k retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of ov	versize material	wet	0	0	0	0	0	0
Peak Conver	ted Wet Density	t∕m³	1.98	1.94	1.91	1.98	1.91	1.91
Adjusted Pea	ak Converted Wet Density	t∕m³	-	-	-	-	-	-
Optimum Moi	isture Content	%	22.0	20.5	23.0	25.0	26.0	22.0
Moist	ture Variation From		2.0%	1.5%	2.5%	2.5%	2.5%	2.5%
Optim	um Moisture Content		dry	dry	dry	dry	dry	dry
density	and moisture ratio results	relate o	only to the so	il to the dept	h of test and	not to the fu	I depth of the	e layer
	o(R _{HD})	%	97.0	98.0	99.5	96.0	99.0	99.0



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Test procedure A Test No	RTHWORKS		Lay	er thickness	200			
Test No						mm	Time:	09:28
Test No Location	S 1289.2.1.1 & 5.8.	1						
Location			37	38	39	40	41	42
			REFER TO FIGURE 1					
Approximate depth	below FSL							
Measurement dept		mm	175	175	175	175	175	175
Field wet density		t∕m³	1.87	1.89	1.89	1.90	1.86	1.85
Field moisture con	tent	%	16.8	21.1	20.5	17.8	20.5	20.3
Test procedure A	S 1289.5.7.1		07			10		
Test No Compactive effort			37	38	39 Stan	40 dord	41	42
Oversize rock reta	ined on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize		wet	0	0	0	0	0	0
Peak Converted W		t/m ³	1.92	1.95	1.93	1.95	1.92	1.86
	verted Wet Density	t/m ³	-	-	-	-	-	-
Optimum Moisture		%	19.0	23.0	23.0	20.0	23.0	23.0
Moisture V	ariation From		2.5%	2.0%	2.5%	2.5%	2.5%	2.5%
	oisture Content		dry	dry	dry	dry	dry	dry
	moisture ratio results	rolato d						
-			-	· ·			-	-
Density Ratio (R	нд)	%	97.5	97.0	97.5	97.0	97.0	99.5



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8 Rose Avenue, Croydon 3136 Client WINSLOW CONSTRUCT Project NEWBRIDGE - STAGE 1 Location WALLAN		PTY LTD (C/	AMPBELLFIE	ELD)	Te Da	ate Issued ested by ate tested necked by	09/08/23 AC 30/05/23 JHF
Feature EARTHWORKS		Lay	er thickness	200	mm	Time:	09:32
Test procedure AS 1289.2.1.1 & 5.8.	1						
Test No		43	44	45	46	47	48
Location		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∕m³	1.89	1.91	1.90	1.89	1.91	1.90
Field moisture content	%	24.9	21.6	22.4	23.7	21.6	21.9
Test procedure AS 1289.5.7.1 Test No		43	44	45	46	47	48
Compactive effort		43	44		idard	47	40
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 ³	1.91	1.95	1.92	1.89	1.95	1.93
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-	-
Optimum Moisture Content	%	27.0	24.0	24.5	26.0	22.0	24.0
Moisture Variation From		2.0%	2.0%	2.0%	2.0%	0.5%	2.0%
Optimum Moisture Content		dry	dry	dry	dry	dry	dry
density and moisture ratio results r	elate d	· · · · ·					
		-					-
Density Ratio (R _{HD})	%	99.0	98.5	99.0	99.5	98.0	98.5
<i>Material description</i> No 43 - 48 Clay Fill							



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

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PTY LTD (C. <i>Lay</i> 49 REFER TO FIGURE 1 175 1.94 20.4	rer thickness 50 REFER TO FIGURE 1 175 1.94 20.4	200 51 REFER TO FIGURE 1 175 1.96	Da Cł	53 REFER TO	175
49 REFER TO FIGURE 1 175 1.94	50 REFER TO FIGURE 1 175 1.94	51 REFER TO FIGURE 1	52 REFER TO FIGURE 1	53 REFER TO FIGURE 1	54 REFER TO FIGURE 1
REFER TO FIGURE 1 175 1.94	REFER TO FIGURE 1 175 1.94	REFER TO FIGURE 1 175	REFER TO FIGURE 1 175	REFER TO FIGURE 1 175	REFER TO FIGURE 1 175
REFER TO FIGURE 1 175 1.94	REFER TO FIGURE 1 175 1.94	REFER TO FIGURE 1 175	REFER TO FIGURE 1 175	REFER TO FIGURE 1 175	REFER TO FIGURE 1 175
TO FIGURE 1 175 1.94	TO FIGURE 1 175 1.94	TO FIGURE 1 175	TO FIGURE 1 175	TO FIGURE 1 175	TO FIGURE 1 175
1.94	1.94				
1.94	1.94				
		1.96	1.95	1 0/	1
20.4	20.4			1.94	1.94
		19.3	24.0	21.0	19.0
49	50	51	52	53	54
		Star	dard		
19.0	19.0	19.0	19.0	19.0	19.0
					0
	1.96	1.96	1.96	1.93	1.95
	-	-	-	-	-
22.5	23.0	21.5	26.0	23.5	21.5
2.0%	2.5%	2.5%	2.0%	2.0%	2.0%
dry	dry	dry	dry	dry	dry
only to the sc	il to the dept	h of test and	not to the ful	ll depth of the	e layer
99.0	98.5	99.5	99.5	100.0	99.5
	19.0 0 1.96 - 22.5 2.0% dry only to the sc	19.0 19.0 0 0 1.96 1.96 - - 22.5 23.0 2.0% 2.5% dry dry only to the soil to the dept	Stan 19.0 19.0 0 0 1.96 1.96 - - 22.5 23.0 21.5 2.0% 2.5% dry dry dry dry	Standard 19.0 19.0 19.0 19.0 0 0 0 0 0 1.96 1.96 1.96 1.96 - - - - 22.5 23.0 21.5 26.0 2.0% 2.5% 2.5% 2.0% dry dry dry dry only to the soil to the depth of test and not to the full -	Standard 19.0 19.0 19.0 19.0 19.0 0 0 0 0 0 0 1.96 1.96 1.96 1.96 1.93 - - - - - 22.5 23.0 21.5 26.0 23.5 2.0% 2.5% 2.5% 2.0% 2.0% dry dry dry dry dry dry



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e, Croydon 3136 WINSLOW CONSTRUC NEWBRIDGE - STAGE WALLAN		PTY LTD (C/	AMPBELLFIE	ELD)	Te Da	ate Issued ested by ate tested hecked by	15/08/23 AC 09/06/23 JHF
EARTHWORKS		Lay	er thickness	200	mm	Time:	09:29
ıre AS 1289.2.1.1 & 5.8	. 1		50	67	50	50	
		55	56	57	58	59	60
		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
depth below FSL							
depth	mm	175	175	175	175	175	175
sity	t∕m³	1.95	1.95	1.93	1.92	1.94	1.94
ıre AS 1289.5.7.1						T	-
1 ((((((((((55	56			59	60
		10.0	10.0			10.0	10.0
							19.0 0
							1.96
		1.90	1.90	1.92	1.95	2.01	1.90
sture Content	%	26.5	26.0	28.5	27.5	28.0	31.5
		0.00/	0.00/	. = 0/	0.00/	. /	0.70/
	1	0.0%	0.0%	1.5%	2.0%	0.0%	2.5%
ure Variation From				dry	dry		dry
Im Moisture Content							
	relate c %	only to the so 99.0	il to the dept 98.5	h of test and 100.5	not to the fu 99.5	Il depth of the 96.5	e layer 99.0
	EARTHWORKS	EARTHWORKS	EARTHWORKS Lay ure AS 1289.2.1.1 & 5.8.1 55 gree AS 1289.2.1.1 & 5.8.1 REFER TO FIGURE 1 Algorithm of the second secon	EARTHWORKS Layer thickness ure AS 1289.2.1.1 & 5.8.1 55 56 REFER TO FIGURE 1 REFER TO FIGURE 1 REFER TO FIGURE 1 REFER TO FIGURE 1 depth below FSL - - depth mm 175 175 sity t/m³ 1.95 1.95 content % 26.1 26.0 ure AS 1289.5.7.1 55 56 ffort - - retained on sieve mm 19.0 19.0 ersize material wet 0 0 ed Wet Density t/m³ 1.98 1.98	EARTHWORKS Layer thickness 200 ure AS 1289.2.1.1 & 5.8.1 55 56 57 REFER REFER REFER REFER REFER TO Job Strain FIGURE 1 FIGURE 1 REFER TO FIGURE 1 FIGURE 1	EARTHWORKS Layer thickness 200 mm ure AS 1289.2.1.1 & 5.8.1 55 56 57 58 REFER REFER REFER REFER REFER TO FIGURE 1 FIGURE 1 FIGURE 1 FIGURE 1 FIGURE 1 FIGURE 1 depth below FSL depth mm 175 175 175 175 175 depth mm 1.95 1.93 1.92 depth mm 175 175 175 175 175 192 depth mm 1.95 1.93 1.92	EARTHWORKS Layer thickness 200 mm Time: ure AS 1289.2.1.1 & 5.8.1 55 56 57 58 59 REFER REFER REFER REFER REFER TO TO TO Jepth below FSL Image: Content 1.95 1.95 1.93 1.92 1.94 Acontent % 26.1 26.0 26.6 25.5 28.3 Ire AS 1289.5.7.1 55 56 57 58 59 ffort 55 56 57 58 59 ffort 55 56 57 58 59 fort 55 56 57 58 59 foredined on sieve



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8 Rose Avenue, Croydon 3136 Client WINSLOW CONSTRUCT Project NEWBRIDGE - STAGE 1 Location WALLAN		PTY LTD (C/	AMPBELLFIE	ELD)	Da Te Da	eport No ate Issued ested by ate tested hecked by	31/08/23 AC 14/06/23 JHF
Feature EARTHWORKS		Lay	er thickness	200	mm	Time:	08:33
Test procedure AS 1289.2.1.1 & 5.8.	1						
Test No		61	62	63	64	65	66
Location		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∕m³	1.90	1.90	1.91	1.89	1.91	1.90
Field moisture content	%	16.3	19.3	17.6	16.8	17.3	17.1
Test procedure AS 1289.5.7.1							
Test No		61	62	63	64	65	66
Compactive effort		•			Idard		
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	1.93	1.93	1.98	1.91	1.95	1.92
Adjusted Peak Converted Wet Density	t∕m³	-	-	-	-	-	-
Optimum Moisture Content	%	18.5	21.5	20.0	16.5	20.0	19.5
Moisture Variation From Optimum Moisture Content		2.0% dry	2.0% dry	2.5% dry	0.0%	2.5% dry	2.5% dry
density and moisture ratio results r	elate d				not to the fu		
Density Ratio (R _{HD})	%	98.5	99.0	96.5	99.0	98.0	99.0
	70						
Natarial description							
<i>Material description</i> No 61 - 66 Clay Fill							



AVRLOT HILF V1.10 MAR 13

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Project I	Croydon 3136 WINSLOW CONSTRUC NEWBRIDGE - STAGE WALLAN		PTY LTD (C/	AMPBELLFIE	ELD)	Te Da	ate Issued ested by ate tested hecked by	31/07/23 AC 20/06/23 JHF
Feature I	EARTHWORKS		Lay	er thickness	200	mm	Time:	08:59
Test procedure	e AS 1289.2.1.1 & 5.8	.1						
Test No			67	68	69	70	71	72
Location			REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate de	oth below FSL							
Measurement d		mm	175	175	175	175	175	175
Field wet densit		t/m³	1.95	1.93	1.94	1.96	1.93	1.94
Field moisture d		%	26.1	25.9	26.5	21.2	21.1	23.8
Test procedure Test No	e AS 1289.5.7.1		67	68	69	70	71	72
Compactive effo	ort		07	00	Stan		11	12
	etained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of over		wet	0	0	0	0	0	0
Peak Converted		t/m³	1.96	1.92	1.96	1.97	1.92	1.97
	Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moist		%	28.5	28.0	29.5	22.0	23.5	26.0
Moistur	e Variation From		2.5%	2.0%	2.5%	0.5%	2.5%	2.0%
	Moisture Content		dry	dry	dry	dry	dry	dry
	nd moisture ratio results	relate o						
Density Ratio		%	99.5	100.5	99.0	99.5	100.0	98.0
	(THD /	70	55.0	100.0	00.0	00.0	100.0	30.0



Approved Signatory : Justin Fry



Test procedure A Test No	RTHWORKS		Laye	er thickness	000			
Test No					200	mm	Time:	09:25
	S 1289.2.1.1 & 5.8.	1						
			73	74	75	76	77	78
Location			REFER TO FIGURE 1					
Approximate depth	below FSL							
Measurement dept		mm	175	175	175	175	175	175
Field wet density	-	t/m³	1.94	1.93	1.95	1.95	1.94	1.94
Field moisture cont	ent	%	21.7	22.3	25.3	20.4	25.3	23.8
Test procedure A	S 1289.5.7.1							
Test No			73	74	75	76	77	78
Compactive effort			10.0	40.0	Stan		40.0	40.0
Oversize rock retail		mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize		wet t/m³	0	0	0	0	0	0
Peak Converted W	verted Wet Density	t/m ³	1.98	1.95	1.99	1.96	1.95	1.95
Optimum Moisture		<i>011</i> %	- 21.5	- 25.0	- 26.0	- 22.5	- 28.0	26.0
	Contont	70	21.0	20.0	20.0	22.0	20.0	20.0
Moisture V	ariation From		0.5%	2.5%	0.5%	2.0%	2.5%	2.0%
	pisture Content		wet	dry	dry	dry	dry	dry
	noisture ratio results	relate c						
-		%	98.0	99.5	98.0	99.5	99.5	99.5
Density Ratio (R	HD)	70	30. 0	33.0	30. 0	33.0	33.0	33.0



Approved Signatory : Justin Fry



CIVIL GEOTECHN	ICAL SERVICES	Job No Report No	23321 23321/R014
6 - 8 Rose Avenue, 0	Croydon 3136	Date Issued	01/08/23
Client	VINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	IEWBRIDGE - STAGE 15	Date tested	30/06/23
Location	VALLAN	Checked by	JHF

Feature

EARTHWORKS

Layer thickness

200 mm

Time: 08:28

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		79	80	81	82	83	84
Location							
	l	REFER	REFER	REFER	REFER	REFER	REFER
	l	то	то	то	то	то	то
	l	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t∕m³	1.94	1.94	1.96	1.95	1.94	1.95
Field moisture content	%	16.2	17.1	21.7	21.2	20.0	17.6
Test procedure AS 1289.5.7.1							
Test No		79	80	81	82	83	84
Compactive effort				Stan	Idard		
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	1.93	1.98	1.97	1.93	1.99
Adjusted Peak Converted Wet Density	t∕m³	-	-	-	-	-	-
Optimum Moisture Content	%	19.0	19.5	24.5	24.0	22.5	19.5
Moisture Variation From		2.5%	2.5%	2.5%	2.5%	2.0%	2.0%
Optimum Moisture Content		dry	dry	dry	dry	dry	dry
	relate c	only to the so	il to the dept	h of test and	not to the ful	depth of the	layer
density and moisture ratio results		99.5	100.5	99.0	99.0	100.0	98.0



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AVRLOT HILF V1.10 MAR 13

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VIL GEOTECHNICAL SERVICES 8 Rose Avenue, Croydon 3136					R D	ob No eport No ate Issued	23321 23321/R01 15/08/23
Client WINSLOW CONSTRUCT Project NEWBRIDGE - STAGE 1 Location WALLAN		PTY LTD (C	AMPBELLFIE	ELD)	D	ested by ate tested hecked by	AC 10/07/23 JHF
Feature EARTHWORKS		Lay	er thickness	200	mm	Time:	08:26
Test procedure AS 1289.2.1.1 & 5.8.	1					1	
Test No		85	86	87	88	89	90
Location		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/m³	1.90	1.90	1.90	1.91	1.92	1.91
Field moisture content	%	22.7	15.6	20.6	15.1	20.4	17.9
						-	-
Test procedure AS 1289.5.7.1 Test No		85	86	87	88	89	90
Compactive effort				Star	dard	Д	
Versize 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	1.91	1.89	1.93	1.95	1.95	1.92
Adjusted Peak Converted Wet Density	t∕m³	-	-	-	-	-	-
Optimum Moisture Content	%	25.0	17.5	23.0	17.0	23.0	20.5
		<i>i</i>		<i>i</i>			
Moisture Variation From		2.5%	2.0%	2.0%	2.0%	2.5%	2.5%
Optimum Moisture Content	oloto d	dry	dry	dry	dry	dry	dry
density and moisture ratio results		-		-		-	-
Density Ratio(R _{HD})	%	99.5	100.5	98.5	98.5	98.5	99.5
<i>Material description</i> No 85 - 90 Clay Fill							



AVRLOT HILF V1.10 MAR 13

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<u>8 Rose Avenu</u> Client Project Location	ue, Croydon 3136 WINSLOW CONSTRUC NEWBRIDGE - STAGE WALLAN		PTY LTD (C/	AMPBELLFIE	Te Da	ate Issued ested by ate tested necked by	31/08/23 AC 12/07/23 JHF	
							,	
Feature	EARTHWORKS		Lay	er thickness	200	mm	Time:	09:34
Test proced	dure AS 1289.2.1.1 & 5.8.	1						
Test No			91	92	93	94	95	96
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	e depth below FSL							
Measuremer	· · ·	mm	175	175	175	175	175	175
Field wet de		t∕m³	1.91	1.90	1.90	1.90	1.89	1.90
Field moistu	re content	%	17.4	16.0	20.3	19.7	16.9	17.3
Test proced	dure AS 1289.5.7.1							
Test No			91	92	93	94	95	96
Compactive	effort		_	-		dard		
	k retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
	versize material	wet	0	0	0	0	0	0
Peak Conve	rted Wet Density	t∕m³	1.97	1.96	1.96	1.92	1.91	1.93
Adjusted Pe	ak Converted Wet Density	t∕m³	-	-	-	-	-	-
Optimum Mo	bisture Content	%	19.5	18.0	23.0	22.0	19.0	20.0
Mois	sture Variation From		2.0%	2.0%	2.5%	2.0%	2.5%	2.5%
Optin	num Moisture Content		dry	dry	dry	dry	dry	dry
densit	y and moisture ratio results	relate o	only to the so	il to the dept	h of test and	not to the fu	l depth of the	e layer
Density Rat	io (R _{up})	%	96.5	97.0	97.0	98.5	99.0	98.0
	. ,.							
Material des	cription							
No 91 - 9	96 Clay Fill							



Approved Signatory : Justin Fry



	AL SERVICES	Report No	23321/R017
6 - 8 Rose Avenue, Croy	/don 3136	Date Issued	31/08/23
Client WIN	SLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project NE	WBRIDGE - STAGE 15	Date tested	18/07/23
Location WA	LLAN	Checked by	JHF

Feature

EARTHWORKS

Layer thickness

200 mm

Time: 07:36

Test procedure AS 1289.2.1.1 & 5.8.1

	97	98	99	100	101	102
ŀ	REFER	REFER	REFER	REFER	REFER	REFER
ŀ	то	то	то	то	то	то
ŀ	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	REFER TO	FIGURE 1
ŀ						
ļ						
mm	175	175	175	175	175	175
t/m³	1.91	1.92	1.93	1.95	_	1.94
%	26.7	26.3	27.4	24.3		26.1
	97	98	99	100	101	102
			Stan	dard		
mm	19.0	19.0	19.0	19.0	19.0	19.0
wet	0	0	0	0	0	0
t∕m³	1.89	1.92	1.94	1.96	1.94	1.95
t∕m³	-	-	-	-	-	-
%	29.0	29.0	30.0	26.5	29.5	29.0
_						
	2.0%	2.5%	2.5%	2.0%	2.5%	2.5%
I	dry	dry	dry	dry	dry	dry
	,				-	
relate c	, , , , , , , , , , , , , , , , , , ,	il to the dept	h of test and	not to the full	depth of the	layer
	t/m ³ % mm wet t/m ³ t/m ³	REFER TO FIGURE 1 mm 175 t/m³ 1.91 % 26.7 97 97 97 97 97 97 97 97 97 97 97 97 9	$\begin{array}{c c c c c c c c } REFER \\ TO \\ FIGURE 1 \\ \hline $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $



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AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry



VIL GEOTECHNICAL SERVICES 8 Rose Avenue, Croydon 3136 Client WINSLOW CONSTRUC ^T Project NEWBRIDGE - STAGE 1		PTY LTD (C/	AMPBELLFI	ELD)	Da Te	eport No ate Issued ested by ate tested	23321/R01 06/09/23 AC 24/07/23
Location WALLAN						hecked by	JHF
Feature EARTHWORKS		Lay	er thickness	200	mm	Time:	09:36
Test procedure AS 1289.2.1.1 & 5.8.	1	400	404	405	400	407	400
Test No		103	104	105	106	107	108
Location		REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate depth below FSL							
Measurement depth	тт	175	175	175	175	175	175
Field wet density	t∕m³	1.91	1.88	1.89	1.91	1.91	1.90
Field moisture content	%	19.0	18.6	21.8	20.8	17.3	18.7
Test procedure AS 1289.5.7.1							
Test No		103	104	105	106	107	108
Compactive effort				Stan	dard		
Oversize rock retained on sieve	тт	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	1.91	1.93	1.94	1.96	1.95
Adjusted Peak Converted Wet Density	<i>t/m</i> ³	-	-	-	-	-	-
Optimum Moisture Content	%	18.5	20.0	24.0	23.0	17.5	21.0
		0.50/	4 504	0.00/	0.5%	0.00/	0.50(
Moisture Variation From		0.5%	1.5%	2.0%	2.5%	0.0%	2.5%
Optimum Moisture Content	!	wet	dry	dry	dry		dry
density and moisture ratio results		-		_		-	-
Density Ratio(R _{HD})	%	97.5	99.0	98.0	99.0	97.5	97.5
<i>Material description</i> No 103 - 108 Clay Fill							



Approved Signatory : Justin Fry



8 Rose Avenue, Croydon 3136 Client WINSLOW CONSTRUC Project NEWBRIDGE - STAGE 1 Location WALLAN	PTY LTD (C/	AMPBELLFIE	Te Da	ate Issued ested by ate tested hecked by	06/09/23 AC 02/08/23 JHF		
Feature EARTHWORKS		Lay	er thickness	200	mm	Time:	09:31
Test procedure AS 1289.2.1.1 & 5.8.	1						
Test No		109	110	111	112	113	114
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∕m³	1.94	1.93	1.92	1.92	1.93	1.93
Field moisture content	%	24.7	25.4	23.5	25.4	22.9	23.3
Test procedure AS 1289.5.7.1		400	440		440	440	
Test No Compactive effort		109	110	111 Stor	112 dard	113	114
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 ³	2.03	1.94	1.94	1.97	1.97	1.96
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-	-
Optimum Moisture Content	%	24.5	28.0	26.0	27.5	25.5	23.0
,					I		
Moisture Variation From		0.5%	2.5%	2.0%	2.0%	2.5%	0.5%
Optimum Moisture Content		wet	dry	dry	dry	dry	wet
density and moisture ratio results	rolato (
		-	-				-
Density Ratio(R _{HD})	%	95.5	99.5	99.0	97.5	98.0	98.5
Material description No 109 - 114 Clay Fill							



Approved Signatory : Justin Fry



CIVIL GEOTECHNICAL SERVICES - 8 Rose Avenue, Croydon 3136 Client WINSLOW CONSTRUCTORS Project NEWBRIDGE - STAGE 15			PTY LTD (C/	AMPBELLFIE	ELD)	Re Da Te	b No eport No ate Issued ested by	23321/R020 31/08/23 AC	
Project Location	NEWBRIDGE - STAGE WALLAN	15				ate tested hecked by	04/08/23 JHF		
Feature	EARTHWORKS		Lay	er thickness	200	mm	Time:	07:58	
Test proced	dure AS 1289.2.1.1 & 5.8	.1							
Test No			115	116	117	118	119	120	
Location			REFER TO FIGURE 1	REFER TO FIGURE 1					
	e depth below FSL								
Measuremer	-	mm	175	175	175	175	175	175	
Field wet der Field moistur		t/m³ %	1.92 19.8	1.95 18.9	1.94 20.1	1.92 21.3	1.93 19.3	1.93 19.6	
Test proced Test No Compactive	dure AS 1289.5.7.1 effort		115	116	117 Stan	118 dard	119	120	
Oversize roc	k retained on sieve	тт	19.0	19.0	19.0	19.0	19.0	19.0	
Percent of o	versize material	wet	0	0	0	0	0	0	
Peak Conve	rted Wet Density	t∕m³	1.91	2.00	1.95	1.91	1.95	1.92	
Adjusted Pea	ak Converted Wet Density	t∕m³	-	-	-	-	-	-	
Optimum Mo	pisture Content	%	22.0	19.0	22.5	24.0	22.0	22.0	
	sture Variation From		2.0%	0.0%	2.5%	2.5%	2.5%	2.5%	
Mois	num Moisture Content	rolato	dry	il to the dept	dry h of test and	dry not to the fu	dry	dry e laver	
Optim	y and moisture ratio results	relate							



Approved Signatory : Justin Fry