

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

12th August 2023

Our Reference: 23021:NB1640

Winslow Constructors Pty Ltd 50 Barry Road CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING GRACE – STAGE 7 (TARNEIT)

Please find attached our Report No's 23021/R001 to 23021/R004 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 was performed in January 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).

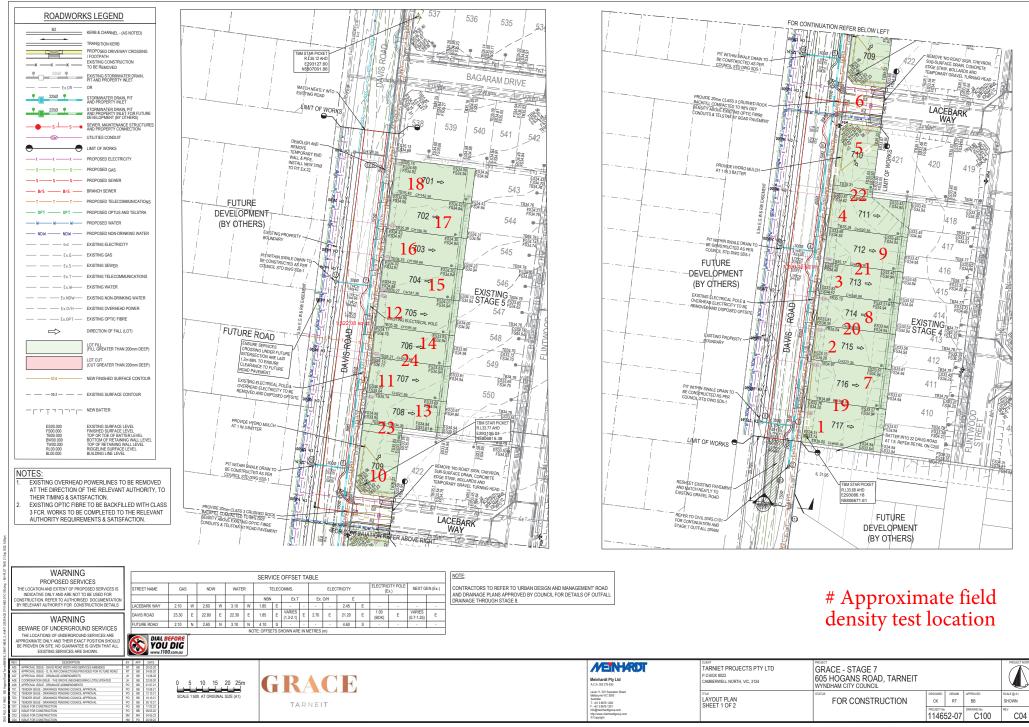
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

FIGURE 1





ES				Re Da	b No eport No ate Issued	23021 23021/R00 25/01/23 JB
ClientWINSLOW CONSTRUCTORSProjectGRACE - STAGE 7LocationTARNEIT			PTY LTD (CAMPBELLFIELD)			
5	Lay	er thickness	200	mm	Time:	10:00
.1 & 5.8.1						
	1	2	3	4	5	6
	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
mm						175
						1.99 20.3
.1	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
t/m³	2.06	2.05	2.01	1.99	2.02	2.02
Density t/m³	-	-	-	-	-	-
%	27.5	23.5	25.0	21.5	23.0	23.0
n	2.0%	2.0%	2.5%	1.5%	2.0%	2.5%
e <i>nt</i> o results relate c	dry only to the so	dry il to the deptl	dry h of test and	dry not to the fu	dry Il depth of the	dry e layer
		100.0	98.5	98.5	99.0	98.5
	E 7 .1 & 5.8.1 .1 & 5.8.1 .1 & 1 .1 & 1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1 .1	E 7 Lay Lay TO $FIGURE 1$ TO $FIGURE 1$ Lay TO $FIGURE 1$ TO TO TO Lay TO TO TO TO TO TO TO TO	E 7 Layer thickness Layer thickness Layer thickness Layer thickness Layer thickness Layer thickness Layer thickness REFER TO FIGURE 1 REFER TO FIGURE 1 FIGURE 1 FIGURE 1 FIGURE 1 FIGURE 1 FIGURE 1 TO FIGURE 1 C TO FIGURE	Layer thickness 200 .1 & 5.8.1 1 2 3 .1 & 5.8.1 REFER TO FIGURE 1 REFER TO FIGURE 1 <t< td=""><td>E 7 Date Classical Constraints S Layer thickness 200 mm S Layer thickness 200 mm I & S.8.1 I & Z 3 4 REFER REFER REFER REFER TO FIGURE 1 FIGURE 1 FIGURE 1 FIGURE 1 FIGURE 1 mm 175 175 175 175 mm 175 175 175 175 Mm 175 2.04 1.97 1.96 % 25.3 21.4 22.6 20.1 1 2 3 4 Standard Standard mm 19.0 19.0 19.0 19.0 19.0 19.0 19.0 Density t/m³ - - % 27.5 23.5 25.0 21.5</td><td>E 7 Date tested Checked by S Layer thickness 200 mm Time: 1 2 3 4 5 .1 & 5.8.1 1 2 3 4 5 .1 & 5.8.1 REFER TO FIGURE 1 REFER TO FIGURE 1<</td></t<>	E 7 Date Classical Constraints S Layer thickness 200 mm S Layer thickness 200 mm I & S.8.1 I & Z 3 4 REFER REFER REFER REFER TO FIGURE 1 FIGURE 1 FIGURE 1 FIGURE 1 FIGURE 1 mm 175 175 175 175 mm 175 175 175 175 Mm 175 2.04 1.97 1.96 % 25.3 21.4 22.6 20.1 1 2 3 4 Standard Standard mm 19.0 19.0 19.0 19.0 19.0 19.0 19.0 Density t/m³ - - % 27.5 23.5 25.0 21.5	E 7 Date tested Checked by S Layer thickness 200 mm Time: 1 2 3 4 5 .1 & 5.8.1 1 2 3 4 5 .1 & 5.8.1 REFER TO FIGURE 1 REFER TO FIGURE 1<



Approved Signatory : Justin Fry



9101112RREFERREFERREFERREFERTOTOTOTOTO		Layer thickn		Feature EARTHWORKS
R REFER REFER REFER TO TO TO	9			
R REFER REFER REFER REFER TO TO TO TO	9		3.1	Test procedure AS 1289.2.1.1 & 5.8.
то то то то		7 8		Test No
	то	REFER REFE TO TO FIGURE 1 FIGUR		Location
				Approximate depth below FSL
175 175 175 175		175 175	mm	Measurement depth
1.92 1.97 1.97 1.94 17.5 22.3 21.8 17.6		1.931.9322.218.5	t/m³ %	Field wet density Field moisture content
9 10 11 12 Standard		7 8		Test procedure AS 1289.5.7.1 Test No Compactive effort
19.0 19.0 19.0 19.0		19.0 19.0	mm	Oversize rock retained on sieve
0 0 0 0		0 0	wet	Percent of oversize material
1.96 2.00 2.03 2.00		2.01 1.95	t/m³	Peak Converted Wet Density
	-		t∕m³	Adjusted Peak Converted Wet Density
19.5 22.5 24.0 19.5	19.5	22.0 18.5	%	Optimum Moisture Content
1.5% 0.0% 2.0% 1.5%	1.5%	0.0% 0.0%		Moisture Variation From
epth of test and not to the full depth of the layer		only to the soil to the o	relate c	•
97.5 98.5 97.5 97.0	97.5	96.0 99.0	%	Density Ratio (R _{HD})
1.5% 0.0% 2.0 dry d epth of test and not to the full depth	b 1.5% dry lepth of test and	0.0% 0.0%	s relate c	Moisture Variation From Optimum Moisture Content density and moisture ratio results



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CIVIL GEOTEC	HNICAL SERVICES	Job No Report No	23021 23021/R003
6 - 8 Rose Avenu	e, Croydon 3136	Date Issued	31/01/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	GRACE - STAGE 7	Date tested	24/01/23
Location	TARNEIT	Checked by	JHF

Feature

EARTHWORKS

Layer thickness

200 mm

Time: 11:00

Test procedure AS 1289.2.1.1 & 5.8.1	I
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Test No		13	14	15	16	17	18
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		то	то	то	то	то	то
		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	1.82	1.76	1.83	1.82	1.85	1.98
Field moisture content	%	22.7	23.3	23.0	22.1	21.1	22.1
	70		20.0	20.0			
Test procedure AS 1289.5.7.1							
Test No		13	14	15	16	17	18
Compactive effort				Stan	idard	•	-
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	1.87	1.79	1.89	1.89	1.90	2.02
Adjusted Peak Converted Wet Density	t∕m³	-	-	-	-	-	-
Optimum Moisture Content	%	22.5	25.5	25.5	24.5	23.5	25.0
Moisture Variation From		0.0%	2.5%	2.5%	2.5%	2.0%	2.5%
Optimum Moisture Content			dry	dry	dry	dry	dry
density and moisture ratio results	relate c	only to the so	il to the dept	h of test and	not to the ful	l depth of the	layer
-	%	97.5	98.5	97.0	96.5	97.5	98.0



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

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8 Rose Avenue Client Project Location	, Croydon 3136 WINSLOW CONSTRUC GRACE - STAGE 7 TARNEIT	TORS	PTY LTD (C/	AMPBELLFIE	ELD)	Da Te Da	eport No ate Issued ested by ate tested hecked by	28/02/23 JB 25/01/23 JHF
Feature	EARTHWORKS		Lay	er thickness	200	mm	Time:	13:00
	ıre 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 c	lepth below FSL							
Measurement		тт	175	175	175	175	175	175
Field wet dens	Sity	t∕m³	1.95	1.97	1.99	1.95	1.94	1.95
Field moisture	content	%	19.0	19.8	17.4	21.9	18.2	16.3
Test procedu	ıre AS 1289.5.7.1							
Test No			19	20	21	22	23	24
Compactive en						dard		
	retained on sieve	тт	19.0	19.0	19.0	19.0	19.0	19.0
Percent of ove		wet	0	0	0	0	0	0
	ed Wet Density	t/m³	2.04	2.00	2.00	1.96	1.98	1.97
	Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Mois	sture Content	%	21.0	20.0	20.0	24.0	19.0	18.0
Moistu	ure Variation From		1.5%	0.0%	2.5%	2.0%	1.0%	1.5%
Optimu	m Moisture Content		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
Donaity Datia) (R _{HD})	%	96.0	99.0	99.5	99.5	98.0	99.0



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