

CIVIL GEOTECHNICAL SERVICES ABN 26 474 013 724

PO Box 678 Croydon Vic 3136

Telephone: 9723 0744 Facsimile: 9723 0799

24th March 2020

Our Reference: 19434:NB703

Winslow Constructors Pty Ltd 50 Barry Road CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING OLIVINE – STAGE 9 (DONNYBROOK)

Please find attached our Report No's 19434/R001 and 19434/R002 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 was performed in December 2019.

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).

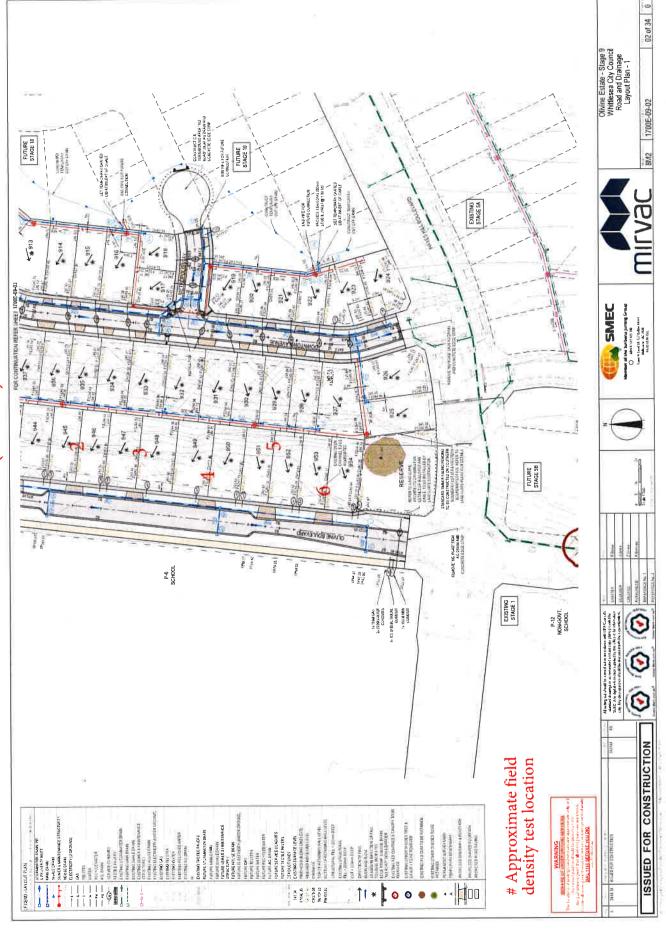
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

FIGURE 1 (1 of 2)



FURECON IN 03 of 34 0 Olivine Estate - Stage 9 Whittlesea City Council Road and Drainage Layout Plan - 2 PROPOSEG SNAREG FOOTHAL HIGHARED ROAD FANKS 8M2 1700E-09-03 FUTURE STAGE 10 FUTURE STAGE 11 0 SETTELNOGARY CALTED LIDATINALPH OF SHALE PHANDE SKKO STURL ALLIE 11 FUTURE STAGE 11 HURHUIVE COMPACION SMEC ** COG Coo PET-Us Transporter Ventarional TUTURE STADE 19 FUTURE STAGE 19 (O) POINT OUT OR DUTALL MIGRINWESTERN MALL NOT INCOME OUT ALL WE INCOME OF THE MALL OF THE TO SEE PLUSCATO NOTE: CONTOURS SHOWN ARE THE EXISTING SURFACE 0 FUTURE CAC. ISSUED FOR CONSTRUCTION # Approximate field density test location DRAIN OUTFALL TYPICAL CROSS SECTION 1/2TTO SCALE

FIGURE 1 (2 of 2)



COMPACTION ASSESSMENT

Job No 19434 Report No 19434/R001 CIVIL GEOTECHNICAL SERVICES Date Issued 16/03/2020 6 - 8 Rose Avenue, Croydon 3136 WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by AC Client Project OLIVINE - STAGE 9 Date tested 02/12/19 JHF Checked by Location DONNYBROOK

200 mm Time: 13:32 Feature **EARTHWORKS** Layer thickness

Test No		1	2	3	4	5	6
Location		REFER TO FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.98	1.92	1.90	1.83	1.82	1.84
Field moisture content	%	22.4	21.0	20.0	23.3	23.2	25.0
Test procedure AS 1289.5.7.1					S		E
Test No		1	2	3	4	5	6
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	1.96	1.96	1.92	1.90	1.81	1.86
Adjusted Peak Converted Wet Density	t/m³	1 35	27.	- 38	•	ÿ	ű
Optimum Moisture Content	%	24.5	23.5	22.0	24.5	26.0	25.5

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	1.96	1.92	1.90	1.81	1.86
Adjusted Peak Converted Wet Density	t/m³	-36	(27)		Ě	<u> </u>	=
Optimum Moisture Content	%	24.5	23.5	22.0	24.5	26.0	25.5

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

Density Ratio (R _{HD})	%	101.0	98.0	99.0	96.5	100.5	99.0
1 112 1							

Material	desc	ription
----------	------	---------

No 1 - 6 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

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

CIVIL GEOTECI 6 - 8 Rose Avenue	HNICAL SERVICES Croydon 3136	Job No Report No Date Issued	19434 19434/R002 24/03/2020
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	OLIVINE - STAGE 9	Date tested	02/12/19
Location	DONNYBROOK	Checked by	JHF

Feature STRUCTURAL FILL Layer thickness 200 mm Time: 14:26

Test No		7	8	-	-	-	-
Location		REFER TO FIGURE 1	REFER TO FIGURE 1			a a	
Approximate depth below FSL							
Measurement depth	mm	175	175	-	*		*
ield wet density	t/m³	1.89	1.95	=	-	-1	:#:
Field moisture content	%	23.2	22.3	-	-		(#X
Test procedure AS 1289.5.7.1 Test No		7	8	=		18.1	*
Compactive effort					ndard		20
Oversize rock retained on sieve	mm	19.0	19.0	Ъ	-	-	1
Percent of oversize material	wet	0	0	2			-
Peak Converted Wet Density	t/m³	1.92	1.99		4		20
Adjusted Peak Converted Wet Density	t/m³	·		¥	4		
Optimum Moisture Content	%	24.5	24.0	=	4	- 141	(4)
_							
Moisture Variation From		1.5%	1.5%	×	-	81	-
Optimum Moisture Content		dry	dry				
		98.0	98.0				

NATA

AVRLOT HILF V1.10 MAR 13

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

Approved Signatory : Justin Fry

