

***Material Testing and Laboratory Services for the Construction Industry***

Mr Sidney Glenister  
Drapers Civil Contracting Pty Ltd  
PO Box 287  
Belmont VIC 3216

20<sup>th</sup> April 2024  
Ref : 7189

Dear Sid

**,RE : SUPERVISION OF FILL PLACEMENT  
ESTUARY ESTATE II – STAGE 2  
Lot 1831**

I write with reference to your request for Geotest Civil Services to provide Level One supervision of the placement of fill to the above project during reinstatement of a former swimming pool found during site stripping operations within the limits of Lot 1831.

I confirm that on the 5<sup>th</sup> and 6<sup>th</sup> October 2023, Geotest Civil Services performed Level One supervision and surveillance by monitoring the level of compaction achieved during the course of the works for placement of fill to reinstate the excavation.

The supervision involved one of our experienced geotechnicians inspecting the stripped and cleared surface prior to fill placement commencing and then monitoring the placement of the fill within the affected Lot.

Fill material for these works were sourced from within the site.

Verification of compliance of all fill was based on the compaction test results which were undertaken as each layer was completed.

The Level One supervision does not include placement of topsoil used to complete landscaping of the project.

Based on the results of our testing, and as far as we have been able to determine, we conclude that the filling placed within the filled area meets or exceeds the requirements of the specification, that is, 95% relative Standard compaction in accordance with Australian Standard 3798 – 2007 and the project specification.

Test results from the testing program are attached.

We trust that this information meets your requirements. Should you have any further queries in regards to the above, please do not hesitate to contact me on telephone 0418 525775.

Yours Sincerely



Rod Bennett  
Geotest Civil Services

## REPORT OF COMPACTION CONTROL (HILF RAPID METHOD)

Job No.: 7189/23/956

AS 1289 2.1.1, 5.7.1, 5.8.1 RC 316.00		Using Humboldt:	8639	Date field tested :	5/10/23
Compaction Report Ref. No. 7189/23/956		K Value : 0		Time : 11:40:00	
Project: Estuary Estate II Stage 2 Lot Fill					
Client : Drapers Civil Contracting Pty Ltd PO Box 287 Belmont VIC 3216					
Material: Clay ex Site		Compactive effort:		Standard	
Sand used:	no	Standard count:	DS: 2768.5	MS:	332.2
Layer depth of	275 mm	Test depth of	250 mm	for 60 secs	
Test Lot Bounds	NA	to	NA	Client Ref:	
Site No.	1				
Location	E278129 N5768971 Lot 1831 Old Pool Infill				
wet density (t/m <sup>3</sup> )	1.93				
field mc%	25.6				
dry density (t/m <sup>3</sup> )	1.53				
pcwd (t/m <sup>3</sup> )	1.88				
omc (%)	26.0				
Oversize material retained on sieve...(mm)	19.0				
% wet oversize	0				
% dry oversize	0				
adjusted pcwd	1.88				
adjusted omc	26.0				
moisture variation (+ wet / - dry of omc)	-0.5				
moisture ratio (%)	98.5				
<b>density ratio (%)</b>	<b>102.5</b>				

Tested over period : 05/10/2023 to 12/10/2023

mean moisture ratio	98.5
mean density ratio	102.5

### Sampling Method Used :

AS1289.1.2.1 Clause 6.4 – from layers in pavement or earthworks

Notes:



NATA Accredited Testing Facility : Accreditation Number : No 10664  
 Accredited for compliance with ISO/IEC 17025 - Testing

*R Bennett*

Approved Signatory:

R.Bennett

Date:

12/10/2023

Page 2 of 2

## REPORT OF COMPACTION CONTROL (HILF RAPID METHOD)

Job No.: 7189/23/960

AS 1289 2.1.1, 5.7.1, 5.8.1 RC 316.00		Using Humboldt: 8639		Date field tested : 6/10/23		
Compaction Report Ref. No. 7189/23/960		K Value : 0		Time : 13:10:00		
Project: Estuary Estate II Stage 2 Lot Fill						
Client : Drapers Civil Contracting Pty Ltd PO Box 287 Belmont VIC 3216						
Material: Clay ex Site		Compactive effort:		Standard		
Sand used: no		Standard count: DS: 2787.6		MS: 338		
Layer depth of 275 mm		Test depth of 250 mm		for 60 secs		
Test Lot Bounds NA to NA		Client Ref:				
Site No.	1	2	3	4	5	
Location	E278088 N57689089 Lot 1809 Layer 1	E278084 N5769084 Lot 1810 Layer 1	E278130 N5768967 Lot 1831 Layer 2	E278122 N5768893 Lot 1826 Layer 1	E278119 N5768886 Lot 1825	
wet density (t/m <sup>3</sup> )	1.95	1.98	1.90	1.96	1.98	
field mc%	15.5	19.7	22.4	23.3	22.3	
dry density (t/m <sup>3</sup> )	1.69	1.65	1.55	1.59	1.62	
pcwd (t/m <sup>3</sup> )	1.89	1.96	1.94	1.95	1.93	
omc (%)	19.0	20.0	22.0	23.0	25.0	
Oversize material retained on sieve...(mm)	19.0	19.0	19.0	19.0	19.0	
% wet oversize	0	0	0	0	0	
% dry oversize	0	0	0	0	0	
adjusted pcwd	1.89	1.96	1.94	1.95	1.93	
adjusted omc	19.5	19.7	22.3	23.3	24.7	
moisture variation (+ wet / - dry of omc)	-4.0	0.0	0.0	0.0	-2.5	
moisture ratio (%)	79.5	100.0	100.4	100.0	90.3	
<b>density ratio (%)</b>	<b>103.5</b>	<b>101.0</b>	<b>98.0</b>	<b>100.0</b>	<b>102.5</b>	

Tested over period : 06/10/2023 to 12/10/2023

mean moisture ratio	94.0
mean density ratio	101.0

### Sampling Method Used :

AS1289.1.2.1 Clause 6.4 – from layers in pavement or earthworks

Notes:



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*R Bennett*

Approved Signatory:

R.Bennett

Date:

12/10/2023

Page 1 of 1