



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

11th August 2022

Our Reference: 21616:NB1315

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
ACACIA – STAGE 1 (WOLLERT)**

Please find attached our Report No's 21616/R001 and 21616/R002 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 May 2022.

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).

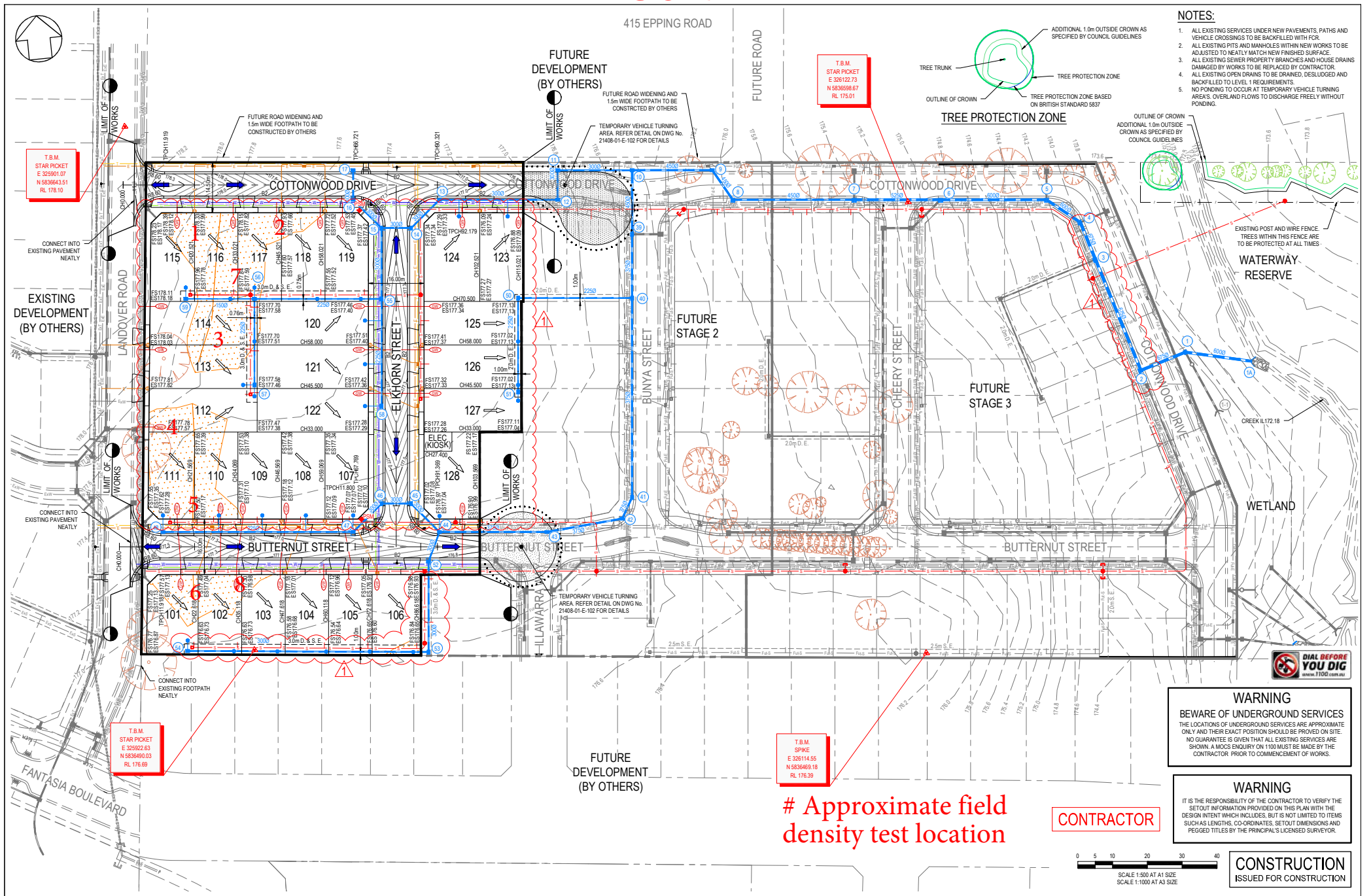
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

A handwritten signature in blue ink, appearing to read 'Nick Brock', is written over a light blue circular stamp.

Nick Brock

FIGURE 1



Approximate field density test location

<table border="1"> <tr> <td>EXISTING GAS MAIN</td> <td>PROPOSED GAS MAIN</td> <td>STREET NAME SIGN</td> <td>T.B.M. ↑</td> </tr> <tr> <td>EXISTING WATER MAIN</td> <td>PROPOSED WATER MAIN</td> <td>P.S.M.</td> <td>T.B.M. ↑</td> </tr> <tr> <td>EXISTING ELECTRICITY CABLE</td> <td>PROPOSED NON-DRINKING WATER</td> <td>PROPOSED GAS & WATER CONDUIT</td> <td></td> </tr> <tr> <td>EXISTING TELCO CABLE & PIT</td> <td>PROPOSED ELECTRICITY CABLE & PIT</td> <td>EXISTING SURFACE LEVEL</td> <td>FS1 260</td> </tr> <tr> <td>EXISTING SEWER MAIN & M.H.</td> <td>PROPOSED TELCO CABLE</td> <td>FINISHED SURFACE LEVEL</td> <td>FS1 046</td> </tr> <tr> <td>EXISTING DRAIN & PIT</td> <td>PROPOSED SEWER MAIN & M.H.</td> <td>FILLING ON LOTS DEEPER THAN 200mm</td> <td></td> </tr> </table>	EXISTING GAS MAIN	PROPOSED GAS MAIN	STREET NAME SIGN	T.B.M. ↑	EXISTING WATER MAIN	PROPOSED WATER MAIN	P.S.M.	T.B.M. ↑	EXISTING ELECTRICITY CABLE	PROPOSED NON-DRINKING WATER	PROPOSED GAS & WATER CONDUIT		EXISTING TELCO CABLE & PIT	PROPOSED ELECTRICITY CABLE & PIT	EXISTING SURFACE LEVEL	FS1 260	EXISTING SEWER MAIN & M.H.	PROPOSED TELCO CABLE	FINISHED SURFACE LEVEL	FS1 046	EXISTING DRAIN & PIT	PROPOSED SEWER MAIN & M.H.	FILLING ON LOTS DEEPER THAN 200mm		<p>TAYLORS Urban Development Infrastructure 8 270 Ferntree Gully Road, Ferntree Gully, VIC 3168 Tel: 61 3 9501 2000 www.taylorsonline.com.au</p> <p>DESIGNED: ALP AUTHORIZED: JOY DRAFTED: BAB CHECKED: MIO AUTH. DATE: 04/06/2020 CAD REF: 21408-01-E-106</p>	<p>CITY OF WHITTELESEA 405 EPPING ROAD, WOLLERT VIC 3570 STAGE 1 DETAIL LAYOUT PLAN</p>	<p>SCALE 1:500 AT A1 VERSION 1 SHEET 7 OF 19 DRAWING No. 21408-01-E-106</p>
EXISTING GAS MAIN	PROPOSED GAS MAIN	STREET NAME SIGN	T.B.M. ↑																								
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COMPACTION ASSESSMENT

Job No 21616
 Report No 21616/R001
 Date Issued 15/06/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	ACACIA - STAGE 1	Date tested	11/05/22
Location	WOLLERT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:35
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	5	6
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
Field wet density	t/m ³	1.87	1.85	1.87	1.85	1.84
Field moisture content	%	21.2	21.7	18.6	19.5	19.5

Test procedure AS 1289.5.7.1

Test No	1	2	3	4	5	6
Compactive effort	Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m ³	1.91	1.88	1.90	1.92	1.89
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	21.5	24.5	21.0	22.0	22.5

Moisture Variation From Optimum Moisture Content	0.5% dry	2.5% dry	2.5% dry	2.5% dry	2.5% dry	1.5% dry
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density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R _{HD})	%	98.0	98.5	98.5	96.5	97.5	97.0
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Material description

No 1 - 6 Clay Fill

AVRLOT HILF V1.10 MAR 13



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

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 21616
 Report No 21616/R002
 Date Issued 15/06/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	ACACIA - STAGE 1	Date tested	11/05/22
Location	WOLLERT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 14:31
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	7	8	-	-	-	-
Location	REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate depth below FSL						
Measurement depth mm	175	175	-	-	-	-
Field wet density t/m ³	1.90	1.86	-	-	-	-
Field moisture content %	22.9	21.3	-	-	-	-

Test procedure AS 1289.5.7.1

Test No	7	8	-	-	-	-
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	-	-	-	-
Percent of oversize material wet	0	0	-	-	-	-
Peak Converted Wet Density t/m ³	1.89	1.91	-	-	-	-
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	23.0	24.0	-	-	-	-

Moisture Variation From Optimum Moisture Content	0.0%	2.5% dry	-	-	-	-
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density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R _{HD}) %	100.5	97.5	-	-	-	-
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Material description

No 7 - 8 Clay Fill

AVRLOT HILF V1.10 MAR 13



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 ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry