



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

11<sup>th</sup> 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).

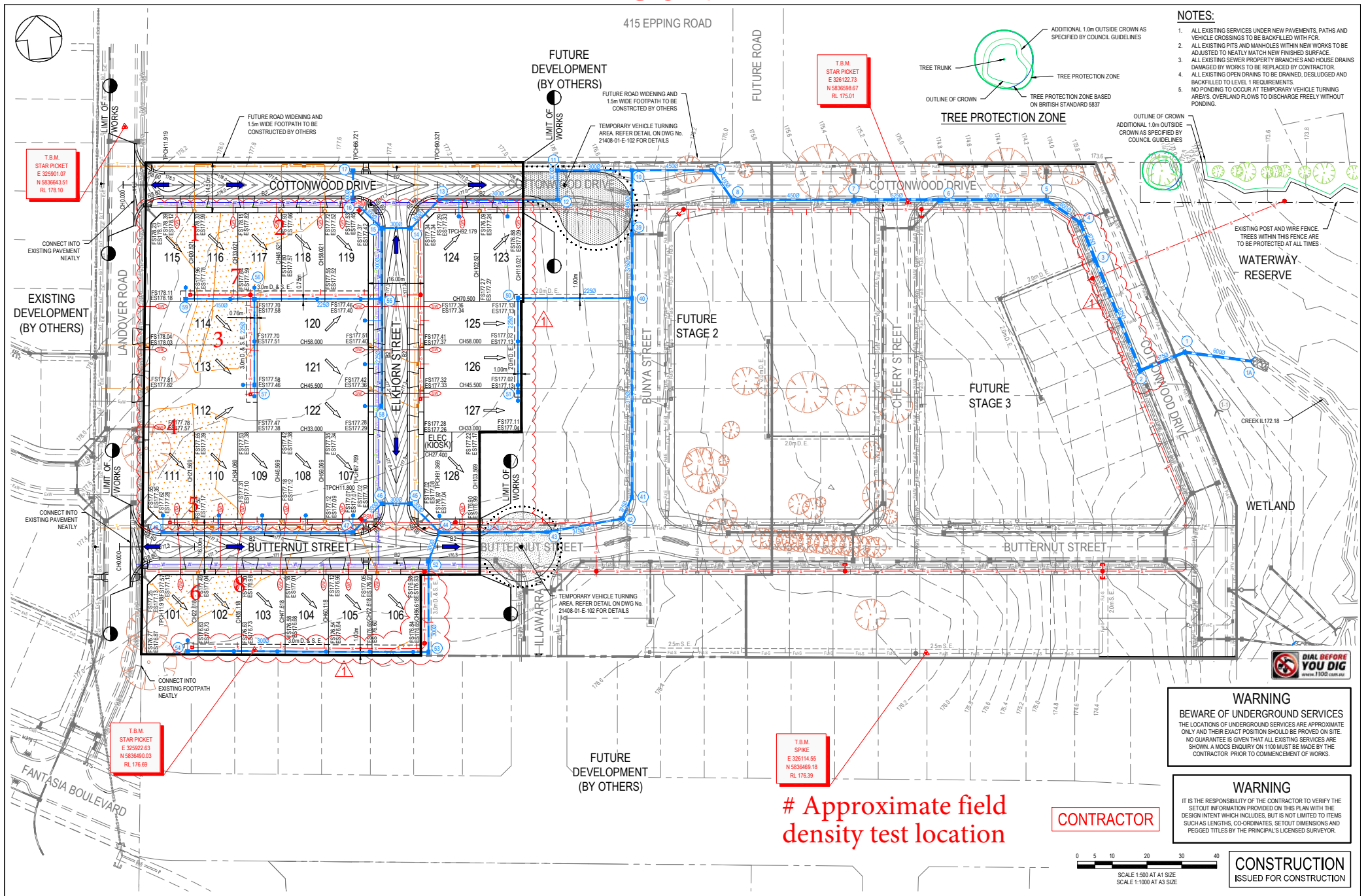
Please contact the undersigned if you require any additional information.

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

CONTRACTOR

<table border="1"> <tr> <td>1</td> <td>19/07/2021</td> <td>POS, SERVICES, DRAINAGE AND FS LEVELS UPDATED</td> <td>CSH</td> </tr> <tr> <td>0</td> <td>12/01/2020</td> <td>ISSUED FOR CONSTRUCTION</td> <td>MIO</td> </tr> </table>	1	19/07/2021	POS, SERVICES, DRAINAGE AND FS LEVELS UPDATED	CSH	0	12/01/2020	ISSUED FOR CONSTRUCTION	MIO	<table border="1"> <tr> <td>EXISTING GAS MAIN</td> <td>EXISTING WATER MAIN</td> <td>EXISTING ELECTRICITY CABLE &amp; PIT</td> <td>EXISTING TELCO CABLE &amp; PIT</td> <td>EXISTING SEWER MAIN &amp; M.H.</td> <td>EXISTING DRAIN &amp; PIT</td> </tr> <tr> <td>PROPOSED GAS MAIN</td> <td>PROPOSED WATER MAIN</td> <td>PROPOSED NON-DRINKING WATER</td> <td>PROPOSED ELECTRICITY CABLE &amp; PIT</td> <td>PROPOSED TELCO CABLE</td> <td>PROPOSED SEWER MAIN &amp; M.H.</td> </tr> <tr> <td>PROPOSED RAINWATER</td> <td>PROPOSED PAVEMENT</td> <td>PROPOSED FILLING ON LOTS DEEPER THAN 200mm</td> <td>STREET NAME SIGN</td> <td>P.S.M.</td> <td>T.B.M.</td> </tr> </table>	EXISTING GAS MAIN	EXISTING WATER MAIN	EXISTING ELECTRICITY CABLE & PIT	EXISTING TELCO CABLE & PIT	EXISTING SEWER MAIN & M.H.	EXISTING DRAIN & PIT	PROPOSED GAS MAIN	PROPOSED WATER MAIN	PROPOSED NON-DRINKING WATER	PROPOSED ELECTRICITY CABLE & PIT	PROPOSED TELCO CABLE	PROPOSED SEWER MAIN & M.H.	PROPOSED RAINWATER	PROPOSED PAVEMENT	PROPOSED FILLING ON LOTS DEEPER THAN 200mm	STREET NAME SIGN	P.S.M.	T.B.M.	<table border="1"> <tr> <td>FINISHED SURFACE LEVEL</td> <td>FINISHED SURFACE LEVEL</td> <td>FINISHED SURFACE LEVEL</td> </tr> <tr> <td>FS11.260</td> <td>FS11.046</td> <td>FS11.046</td> </tr> </table>	FINISHED SURFACE LEVEL	FINISHED SURFACE LEVEL	FINISHED SURFACE LEVEL	FS11.260	FS11.046	FS11.046	<table border="1"> <tr> <td>DESIGNED:</td> <td>ALP</td> <td>AUTHORISED:</td> <td>JOY</td> <td>DRAFTED:</td> <td>BAB</td> </tr> <tr> <td>CHECKED:</td> <td>MIO</td> <td>AUTH. DATE:</td> <td>04/06/2020</td> <td>CAD REF.:</td> <td>21408-01-E-106</td> </tr> </table>	DESIGNED:	ALP	AUTHORISED:	JOY	DRAFTED:	BAB	CHECKED:	MIO	AUTH. DATE:	04/06/2020	CAD REF.:	21408-01-E-106	<p><b>TAYLORS</b> Urban Development   Infrastructure 8/270 Ferntree Gully Road, Ferntree Gully, Victoria, 3168 Tel: 61 3 9501 2800   www.taylorsonline.com.au</p>	<p>CITY OF WHITTELSIA 405 EPPING ROAD, WOLLERT VIC 3570 STAGE 1 DETAIL LAYOUT PLAN</p>	<p>SCALE 1:500 AT A1 SCALE 1:1000 AT A3</p> <p>SCALE 1:500 AT A1 VERSION 1 SHEET 7 OF 19 DRAWING No. 21408-01-E-106</p>
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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

<b>Feature</b>	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	175
Field wet density t/m <sup>3</sup>	1.87	1.85	1.87	1.85	1.84	1.85
Field moisture content %	21.2	21.7	18.6	19.5	19.7	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	19.0
Percent of oversize material wet	0	0	0	0	0	0
Peak Converted Wet Density t/m <sup>3</sup>	1.91	1.88	1.90	1.92	1.89	1.91
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	21.5	24.5	21.0	22.0	22.5	21.0

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

<b>Density Ratio ( R<sub>HD</sub> )</b>	<b>%</b>	<b>98.0</b>	<b>98.5</b>	<b>98.5</b>	<b>96.5</b>	<b>97.5</b>	<b>97.0</b>
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Material description

No 1 - 6 Clay Fill
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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

<b>Feature</b>	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 <i>mm</i>	175	175	-	-	-	-
Field wet density <i>t/m<sup>3</sup></i>	1.90	1.86	-	-	-	-
Field moisture content <i>%</i>	22.9	21.3	-	-	-	-

Test procedure AS 1289.5.7.1

Test No	7	8	-	-	-	-
Compactive effort	Standard					
Oversize rock retained on sieve <i>mm</i>	19.0	19.0	-	-	-	-
Percent of oversize material <i>wet</i>	0	0	-	-	-	-
Peak Converted Wet Density <i>t/m<sup>3</sup></i>	1.89	1.91	-	-	-	-
Adjusted Peak Converted Wet Density <i>t/m<sup>3</sup></i>	-	-	-	-	-	-
Optimum Moisture Content <i>%</i>	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 ( $R_{HD}$ )	%	<b>100.5</b>	<b>97.5</b>	-	-	-
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Material description

No 7 - 8 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry