

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

12<sup>th</sup> May 2021

Our Reference: 20623:NB952

Winslow Constructors Pty Ltd 50 Barry Road CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

#### RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING DELARAY – STAGE 19 (CLYDE NORTH)

Please find attached our Report No's 20623/R001 and 20623/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 was performed in November 2020.

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).

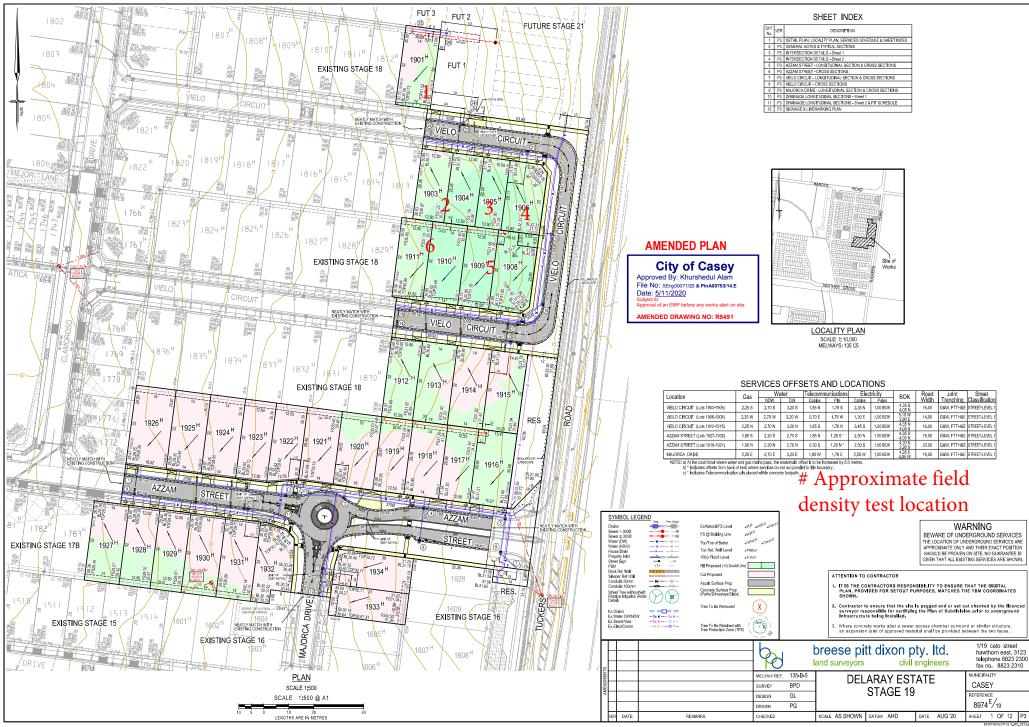
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

# FIGURE 1





### **COMPACTION ASSESSMENT**

VIL GEOTECHNICAL SERVICES 8 Rose Avenue, Croydon 3136 Client WINSLOW CONSTRUC	Job No Report No Date Issued Tested by	20623 20623/R00 <sup>-</sup> 01/12/2020 SB					
ProjectDELARAY - STAGE 19LocationCLYDE NORTH		Date tested Checked by	19/11/20 JHF				
Feature EARTHWORKS		Layer thickness		200 mm		<i>Time:</i> 11:30	
Test procedure AS 1289.2.1.1 & 5.8.	1						
Test No		1	2	3	-	-	-
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	mm	175	175	175	-	-	-
Field wet density	t/m³ %	2.01 20.7	1.98 21.4	1.99 21.7	-	-	-
Test procedure AS 1289.5.7.1 Test No Compactive effort		1	2	3 Stand	-	-	-
Oversize rock retained on sieve	mm	19.0	19.0	19.0	-	-	-
Percent of oversize material	wet	0	0	0	-	-	-
Peak Converted Wet Density	t/m <sup>3</sup>	2.09	2.08	2.02	-	-	-
Adjusted Peak Converted Wet Density	t∕m³	-	-	-	-	-	-
Optimum Moisture Content	%	19.0	19.5	20.5	-	-	-
Moisture Variation From		2.0%	2.0%	1.0%	-	-	-
Optimum Moisture Content		wet	wet	wet			
Density Ratio(R <sub>HD</sub> )	%	96.0	95.0	98.5	-	-	-
Material description No 1 - 3 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

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### **COMPACTION ASSESSMENT**

A Rose Avenue, Croydon 3136         Client       WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)         Project       DELARAY - STAGE 19         Location       CLYDE NORTH								
re AS 1289.2.1.1 & 5.	8.1							
		4	5	6	-	-	-	
		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1				
epth below FSL								
	mm	175	175	175	-	-	-	
•					-	-	-	
		4	5	6 Stan	-	-	-	
	mm	19.0	19.0	· · · · · ·	-	-	-	
					-	_	-	
					-	-	-	
-		-	-	-	-	-	-	
ture Content	%	21.0	20.5	22.0	-	-	-	
re Variation From		1.0%	1.5%	1.0%	-	-	-	
m Moisture Content		wet	wet	wet				
( R <sub>HD</sub> )	%	98.5	95.5	97.5	-	-	-	
ption	%	98.5	95.5	97.5	<u> </u>	-	-	
	Croydon 3136 WINSLOW CONSTRU DELARAY - STAGE 19 CLYDE NORTH EARTHWORKS re AS 1289.2.1.1 & 5. epth below FSL depth ity content re AS 1289.5.7.1 fort retained on sieve rsize material of Wet Density	Croydon 3136         WINSLOW CONSTRUCTORS I         DELARAY - STAGE 19         CLYDE NORTH <b>EARTHWORKS</b> re AS 1289.2.1.1 & 5.8.1    epth below FSL depth          depth         ity         t/m3         content         %         re AS 1289.5.7.1         fort         retained on sieve         mm         rsize material         wet         of Wet Density         t/m3         Converted Wet Density         wet         of Wet Density         t/m3         Converted Wet Density         wet         mod Wet Density         t/m3         ture Content         %         tree Variation From         m Moisture Content         (R HD)         %	Croydon 3136WINSLOW CONSTRUCTORS PTY LTD (CADELARAY - STAGE 19 CLYDE NORTHEARTHWORKSLayre AS 1289.2.1.1 & 5.8.1 $free AS 1289.2.1.1 & 5.8.1$ $free AS 1289.5.7.1$ </td <td>Croydon 3136         WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIE DELARAY - STAGE 19 CLYDE NORTH         EARTHWORKS         Layer thickness         re AS 1289.2.1.1 &amp; 5.8.1         <b>4 5</b>         REFER TO FIGURE 1       REFER TO FIGURE 1         re AS 1289.2.1.1 &amp; 5.8.1         <b>WEET 6</b>         REFER TO FIGURE 1         FIGURE 1         repth below FSL         depth mm 175 175         tity       t/m³ 2.04 2.00         content       % 21.9       22.2         re AS 1289.5.7.1         <b>4</b>       5         fort         ret AS 1289.5.7.1         <b>4</b>       5         <b>6 1 6 1 9 6 1 6 1 6 6 6 6</b></td> <td>Croydon 3136         WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)         DELARAY - STAGE 19         CLYDE NORTH         EARTHWORKS       Layer thickness       200         Te AS 1289.2.1.1 &amp; 5.8.1         <b>4 5 6</b>         REFER       REFER       TO         FIGURE 1       FIGURE 1         Pepth below FSL       Pepth below FSL       Pepth below FSL       Pepth People       People         re AS 1289.5.7.1       <b>4</b>       5       <b>6</b>         To       FIGURE 1       People         <b>6</b>       CLYDE 175       175         PEOPL SET       CO         PEOPL SET       PEOPL SET         <b>6 6 6 6 7 7 7 7 6 6 6</b></td> <td>Croydon 3136           WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) DELARAY - STAGE 19 CLYDE NORTH           EARTHWORKS         Layer thickness         200 mm           Te AS 1289.2.1.1 &amp; 5.8.1           REFER TO FIGURE 1         Clyptic Higher 1           epth below FSL depth         d         2.00         2.00         -           epth below FSL depth         d         2.01         2.00         2.00           epth below FSL depth         d         2.01         2.02         2.3.1           epth below FSL depth         d         2.00         2.00         -           epth below FSL depth         d         2.00         2.00         -           epth below FSL depth         d         2         2         2         2         2</td> <td>Croydon 3136         Date Issued           WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) DELARAY - STAGE 19 CLYDE NORTH         Tested by Date tested CLYDE NORTH           EARTHWORKS         Layer thickness         200 mm         Time           re AS 1289.2.1.1 &amp; 5.8.1         4         5         6         -         -           REFER TO FIGURE 1         REFER TO FIGURE 1</td>	Croydon 3136         WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIE DELARAY - STAGE 19 CLYDE NORTH         EARTHWORKS         Layer thickness         re AS 1289.2.1.1 & 5.8.1 <b>4 5</b> REFER TO FIGURE 1       REFER TO FIGURE 1         re AS 1289.2.1.1 & 5.8.1 <b>WEET 6</b> REFER TO FIGURE 1         FIGURE 1         repth below FSL         depth mm 175 175         tity       t/m³ 2.04 2.00         content       % 21.9       22.2         re AS 1289.5.7.1 <b>4</b> 5         fort         ret AS 1289.5.7.1 <b>4</b> 5 <b>6 1 6 1 9 6 1 6 1 6 6 6 6</b>	Croydon 3136         WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)         DELARAY - STAGE 19         CLYDE NORTH         EARTHWORKS       Layer thickness       200         Te AS 1289.2.1.1 & 5.8.1 <b>4 5 6</b> REFER       REFER       TO         FIGURE 1       FIGURE 1         Pepth below FSL       Pepth below FSL       Pepth below FSL       Pepth People       People         re AS 1289.5.7.1 <b>4</b> 5 <b>6</b> To       FIGURE 1       People <b>6</b> CLYDE 175       175         PEOPL SET       CO         PEOPL SET       PEOPL SET <b>6 6 6 6 7 7 7 7 6 6 6</b>	Croydon 3136           WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) DELARAY - STAGE 19 CLYDE NORTH           EARTHWORKS         Layer thickness         200 mm           Te AS 1289.2.1.1 & 5.8.1           REFER TO FIGURE 1         Clyptic Higher 1           epth below FSL depth         d         2.00         2.00         -           epth below FSL depth         d         2.01         2.00         2.00           epth below FSL depth         d         2.01         2.02         2.3.1           epth below FSL depth         d         2.00         2.00         -           epth below FSL depth         d         2.00         2.00         -           epth below FSL depth         d         2         2         2         2         2	Croydon 3136         Date Issued           WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) DELARAY - STAGE 19 CLYDE NORTH         Tested by Date tested CLYDE NORTH           EARTHWORKS         Layer thickness         200 mm         Time           re AS 1289.2.1.1 & 5.8.1         4         5         6         -         -           REFER TO FIGURE 1         REFER TO FIGURE 1	

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