

# CIVIL GEOTECHNICAL SERVICES ABN 26 474 013 724

# PO Box 678 Croydon Vic 3136 Telephone: 9723 0744 Facsimile: 9723 0799

12<sup>th</sup> November 2015

Our Reference: 15506:DK087

Winslow Constructors Pty Ltd 50 Barry Road CAMPBELLFIELD VIC 3061

Dear Sirs,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING ASTON ESTATE (STAGE 22) - CRAIGIEBURN

Please find attached our Report No 15506/R001 that relates 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 early November 2015.

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 inspections and testing was performed by an experienced geotechnician 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 filled 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).

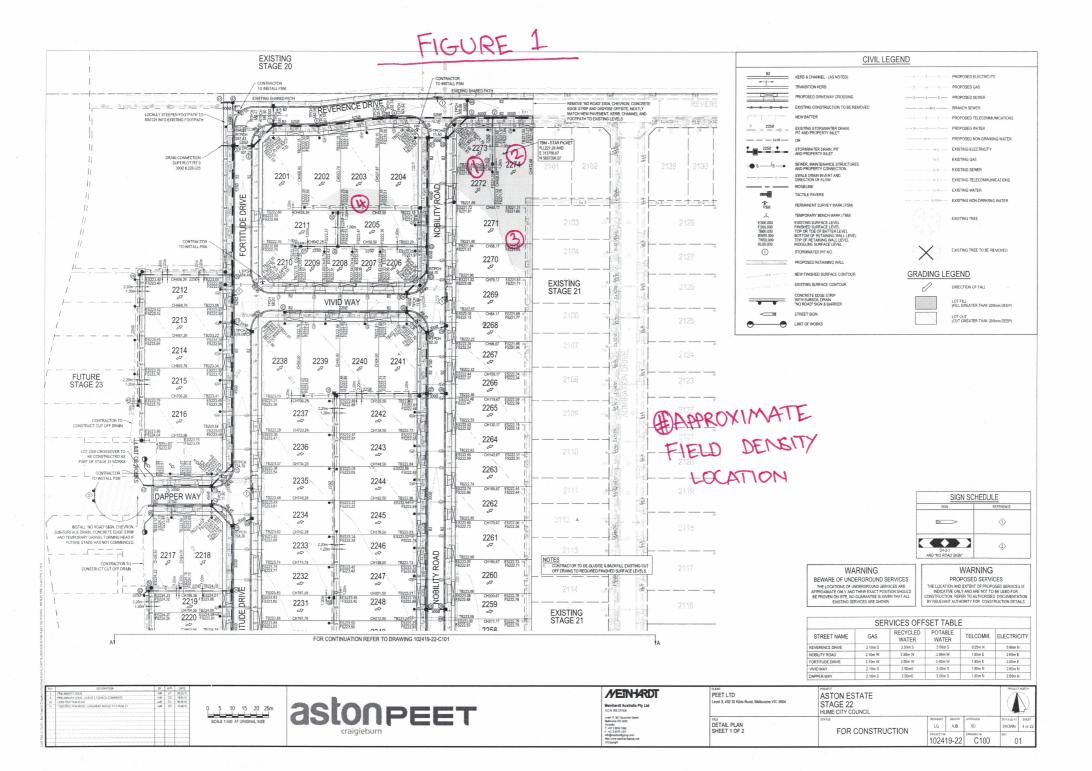
We are of the view that the bulk fill materials that have been placed across the filled allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Dino Kondzic

15506: DK087: November 2015





### **COMPACTION ASSESSMENT**

 CIVIL GEOTECHNICAL SERVICES
 Job No
 15506

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 15506/R001

 Date Issued
 12/11/15

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byZMProjectASTON - STAGE 22Date tested10/11/15LocationCRAIGIEBURNChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 08:20

Test procedure	A.S	1289 2	1 1	12	581	
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Test No		1	2	3	4	-	-
		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	-	-
Field wet density	t/m³	2.04	2.16	1.98	1.92	-	•
Field moisture content	%	22.5	19.9	21.0	23.9	-	-

### Test procedure AS 1289.5.7.1

Test No		1	2	3	4	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	wet	0	1	0	0	-	-
Peak Converted Wet Density	t/m³	2.05	2.11	2.05	2.00	-	-
Adjusted Peak Converted Wet Density	t/m³	-	2.13	-	-	-	-
Optimum Moisture Content	%	22.5	19.5	20.5	22.5	-	-

Moisture Variation From	0.0%	0.5%	0.5%	1.5%	-	-
Optimum Moisture Content		wet	wet	wet		

Density Ratio (R <sub>HD</sub> )	%	100.0	101.5	96.5	96.0	-	-

#### Material description

No 1 - 4 Clay Fill



Approved Signatory: Justin Fry

AVRLOT HILF V1.10 MAR 13