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

23rd September 2015

Our Reference: 15222:JHF907

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
ASTON ESTATE – STAGE 21, CRAIGIEBURN

Please find attached our Report Nos 15222/R001 to 15222/R002 that 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 commenced in late April 2015 and was completed in mid June 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 inspection 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 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).

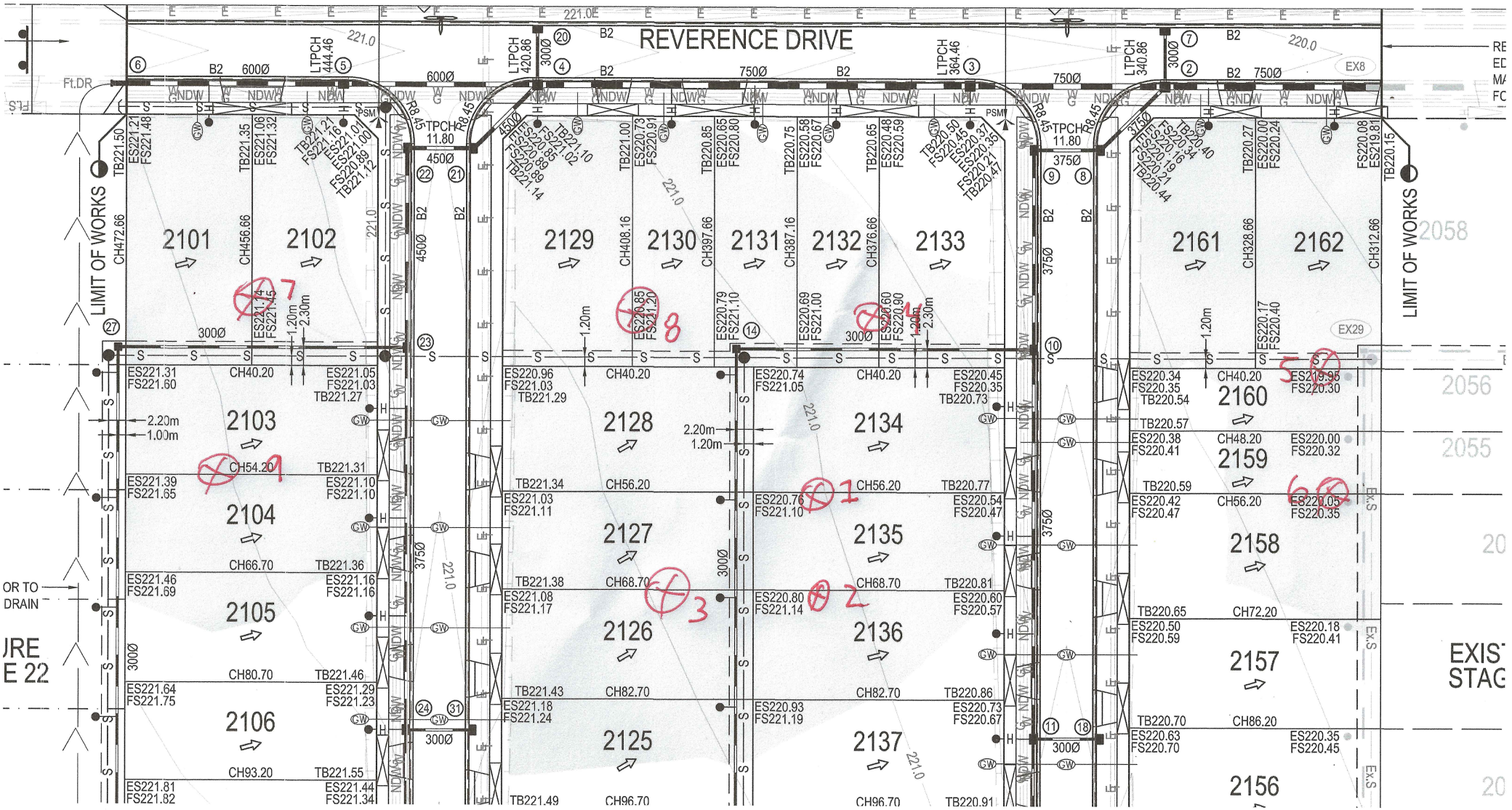
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Justin Fry

FIGURE 1



⊗ APPROXIMATE FIELD DENSITY LOCATION

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	15222
		Report No	15222/R001
		Date Issued	05/05/15
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JWM
Project	ASTON - STAGE 21	*Date tested*	30/04/15
Location	CRAIGIEBURN	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:40

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**1**	**2**	**3**	**-**	**-**	**-**
		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*	2.00	1.87	1.93	-	-	-
Field moisture content	*%*	25.2	20.2	25.2	-	-	-

Test procedure AS 1289.5.7.1

Test No		1	2	3	-	-	-
Compactive effort		Standard					
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/m³*	1.99	1.97	1.91	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	27.5	23.0	27.5	-	-	-

Moisture Variation From Optimum Moisture Content		2.0% dry	2.5% dry	2.0% dry	-	-	-

Density Ratio (R_{HD})	***%***	**100.0**	**95.0**	**101.0**	**-**	**-**	**-**

Material description

No 1 - 3 Clay Fill

AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	15222
		Report No	15222/R002
		Date Issued	21/07/15
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	DK
Project	ASTON - STAGE 21	*Date tested*	13/06/15
Location	CRAIGIEBURN	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 08:25

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**4**	**5**	**6**	**7**	**8**	**9**
		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/m³*	1.89	2.00	1.92	2.02	2.04	2.02
Field moisture content	*%*	23.5	19.8	23.3	20.2	21.5	22.6

Test procedure AS 1289.5.7.1

Test No		4	5	6	7	8	9
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/m³*	1.94	2.02	1.93	2.02	2.03	2.01
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	26.5	22.0	25.0	22.5	21.5	22.5

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.0% dry	2.0% dry	0.0%	0.0%

Density Ratio (R_{HD})	***%***	**97.0**	**99.0**	**99.5**	**100.5**	**100.5**	**100.0**

Material description

No 4 - 9 Clay Fill

Approved Signatory : Justin Fry