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

8th June 2021

Our Reference: 21189:NB969

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
CORNERSTONE – STAGE 16B (WYNDHAM VALE)

Please find attached our Report No's 21189/R001 to 21189/R003 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 March 2021.

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).

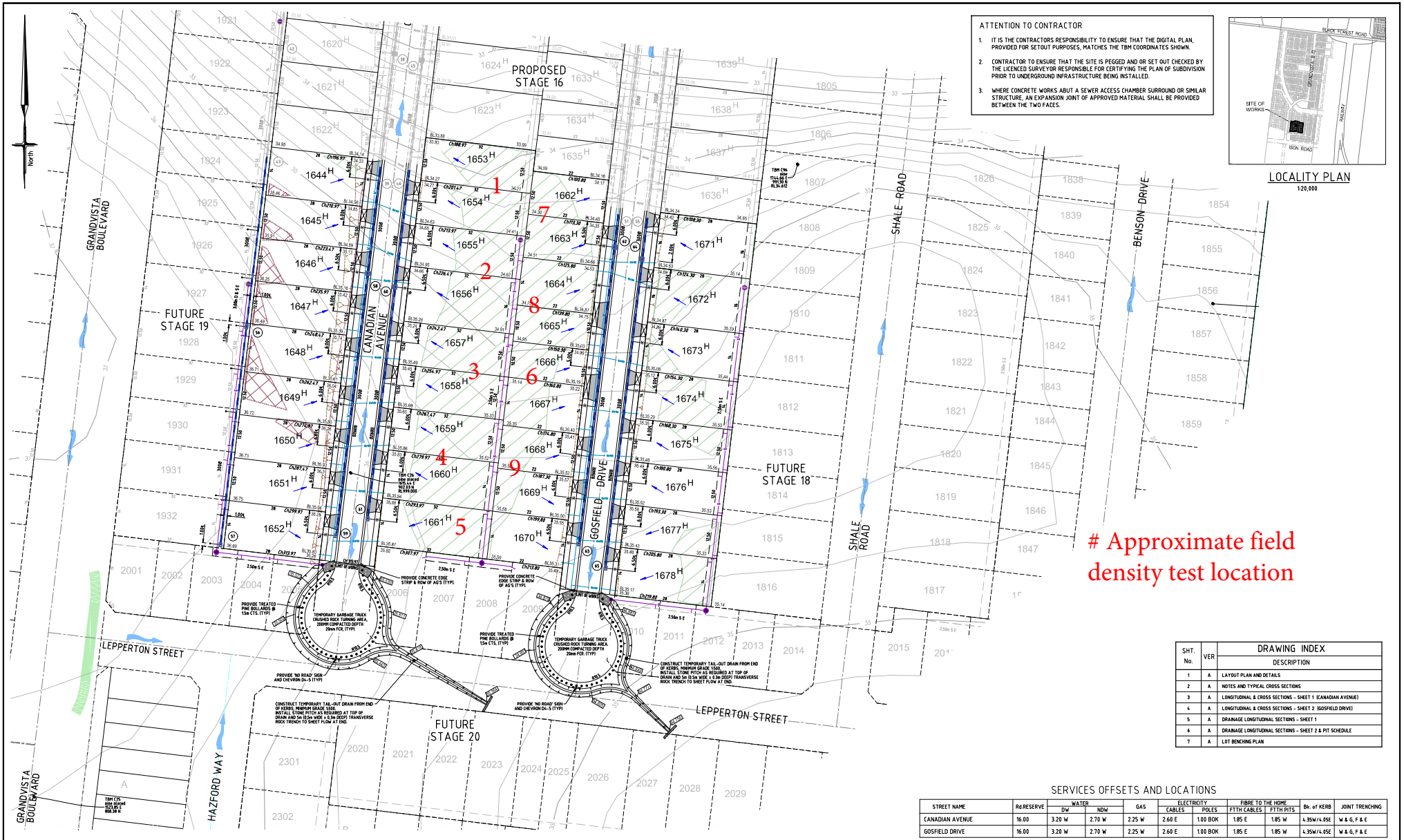
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

FIGURE 1



ATTENTION TO CONTRACTOR

1. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM COORDINATES SHOWN.
2. CONTRACTOR TO ENSURE THAT THE SITE IS PEGGED AND OR SET OUT CHECKED BY THE LICENCED SURVEYOR RESPONSIBLE FOR CERTIFYING THE PLAN OF SUBDIVISION PRIOR TO UNDERGROUND INFRASTRUCTURE BEING INSTALLED.
3. WHERE CONCRETE WORKS ABUT A SEWER ACCESS CHAMBER SURROUND OR SIMILAR STRUCTURE, AN EXPANSION JOINT OF APPROVED MATERIAL SHALL BE PROVIDED BETWEEN THE TWO FACES.

LOCALITY PLAN
1:20,000

DRAWING INDEX

SHT. No.	VER	DESCRIPTION
1	A	LAYOUT PLAN AND DETAILS
2	A	NOTES AND TYPICAL CROSS SECTIONS
3	A	LONGITUDINAL & CROSS SECTIONS - SHEET 1 (CANADIAN AVENUE)
4	A	LONGITUDINAL & CROSS SECTIONS - SHEET 2 (GOSFIELD DRIVE)
5	A	DRAINAGE LONGITUDINAL SECTIONS - SHEET 1
6	A	DRAINAGE LONGITUDINAL SECTIONS - SHEET 2 & PIT SCHEDULE
7	A	LOT BENCHING PLAN

SERVICES OFFSETS AND LOCATIONS

STREET NAME	Rd.RESERVE	WATER		GAS	ELECTRICITY		FIBRE TO THE HOME		Bk. of KERB	JOINT TRENCHING
		DW	NDW		CABLES	POLES	FTTH CABLES	FTTH PITS		
CANADIAN AVENUE	16.00	3.20 W	2.70 W	2.25 W	2.60 E	1.00 BOK	1.85 E	1.85 W	4.35W/4.05E	W & G, F & E
GOSFIELD DRIVE	16.00	3.20 W	2.70 W	2.25 W	2.60 E	1.00 BOK	1.85 E	1.85 W	4.35W/4.05E	W & G, F & E

DIAL BEFORE YOU DIG www.1100.com.au

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

PLAN
1:500

LENGTHS ARE IN METRES
10 5 0 10 20 40
SCALE 1 : 500 (A1)

SYMBOL LEGEND

Drains
Sewer <300
Sewer >300
Water
House Drain
Property Inlet
Street Sign
PSM
Retaining Wall
Conduits 50mm
Conduits 100mm
Ex Gas/Elect/Tel

Ex/Natural/FS Level
FS @ Building Line
Top/Toe of Batter
Top Ret. Wall Level
100yr Flood Level
Fill Prop/Ex
Cut Prop/Ex
ROCK RET WALL
SLEEPER RET WALL

VER.	DATE	REMARKS
A	21.04.20	CONSTRUCTION ISSUE

breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF.	204-G-8
SURVEY	BPD
DESIGN	BPD
DRAWN	DG
CHECKED	C.HAGEN
SCALE	As Shown
DATUM	AHD
DATE	Nov'19

CORNERSTONE ESTATE
STAGE 16B
LAYOUT PLAN AND DETAILS

MUNICIPALITY: WYNDHAM
REFERENCE: 8890 E/16B
SHEET: 1 OF 7 A

T:\Projects\BPD\8890 Cornerstone\CAD\Drawings\Stage 16B\8890_E16B_R01_DET.dwg (R01)

Plotted: Apr 21, 2020 - 9:58am

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	21189
		Report No	21189/R001
		Date Issued	08/04/2021
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AM
Project	CORNERSTONE - STAGE 16B	*Date tested*	24/03/21
Location	WYNDHAM VALE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 15:49

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*	1.77	1.79	1.82	-	-	-
Field moisture content	*%*	28.4	24.4	30.8	-	-	-

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*	1.78	1.83	1.84	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	31.0	27.0	31.0	-	-	-

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	0.5% dry	-	-	-

Density Ratio (R_{HD})	***%***	**99.5**	**98.0**	**99.0**	**-**	**-**	**-**

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	21189
		Report No	21189/R002
		Date Issued	07/06/2021
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	CORNERSTONE - STAGE 16B	*Date tested*	26/03/21
Location	WYNDHAM VALE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**4**	**5**	**6**	**-**	**-**	**-**
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*	1.97	1.92	2.01	-	-	-
Field moisture content	*%*	19.6	13.4	14.0	-	-	-

Test procedure AS 1289.5.7.1

Test No		4	5	6	-	-	-
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*	1.96	1.93	2.02	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.5	15.5	16.0	-	-	-

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

Density Ratio (R_{HD})	*%*	**100.5**	**99.5**	**99.5**	**-**	**-**	**-**

Material description

No 4 - 6 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	21189
		Report No	21189/R003
		Date Issued	08/06/2021
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BGG
Project	CORNERSTONE - STAGE 16B	*Date tested*	27/03/21
Location	WYNDHAM VALE	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 12:11

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**7**	**8**	**9**	**-**	**-**	**-**
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*	1.76	1.74	1.75	-	-	-
Field moisture content	*%*	23.2	25.4	26.6	-	-	-

Test procedure AS 1289.5.7.1

Test No		7	8	9	-	-	-
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*	1.84	1.82	1.81	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.0	26.0	26.0	-	-	-

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

Density Ratio (R_{HD})	*%*	**95.5**	**96.0**	**96.5**	**-**	**-**	**-**

Material description

No 7 - 9 Clay Fill

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

Approved Signatory : Justin Fry