

# CIVIL GEOTECHNICAL SERVICES ABN 26 474 013 724

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

29th January 2023

Our Reference: 23952:NB1768

Winslow Constructors Pty Ltd 50 Barry Road CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING ASPIRE – STAGE 30 (PLUMPTON)

Please find attached our Report No's 23952/R001 to 23952/R004 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 July 2023.

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).

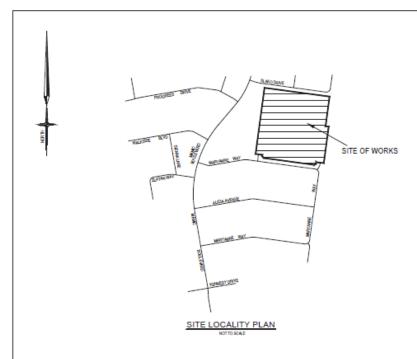
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

# FIGURE 1



#### SERVICE OFFSETS AND LOCATION TABLE

Location	Gas	Water		Telecommunications		Electricity		вок	Road	Joint	Steet
Coodison		NDW	DW	Cables	Pts	Cables	Poles	DOM	Width	Trenching	Classification
ANGELICA CIRCUIT	2.05 N		3.05 N	1,775 N	1.775 N	2.10 N	1.00 BOK	6.20 N 6.20 S	20.00	GAW, FTTH NE	ACCESS PLACE
ANGELICA CIRCUIT (EAST)	2.70 W		3.10W	1.00 W	1.00W	2:10W	1.00 BOK	4.35 W 3.35 E	1530	GAW, FTTH NE	ACCESS PLACE
ANGELICA CIRCUIT (WEST)	2.25 €		2.75 €	0.35W	035W/180E	0.70W	090 BOK	2.20 W 4.20 E	14.00	GAW, FTTH NE	ACCESS PLACE
RAKIA LANE	-		-		-	-	100E	0.50 W 1.50 E	6.00		LANE
HARMONICA WALK	2.80E		3.30 €	2.20E	2.30 E	2.30 €	-	-	4.00	GBW, FTTHBE	WALK

NOTE: "OFFSET FROM BACK OF KERB

NOTE:

KERB OUTOUT FOR PASSIVE IRRIGATION, REFER TO DITAL ON SHEET 13. FINAL STREET RT LOCATION TO BE COORDINATED WITH LANDSCAPE DRAWINGS.

PRELIMINARY LEVELS TO BE ADJUSTED DURING THE DETAILED DESIGN PHASE ONCE MW DRAINAGE SCHEME AND OVERLAND FLOWS HAVE BEEN APPROVED.

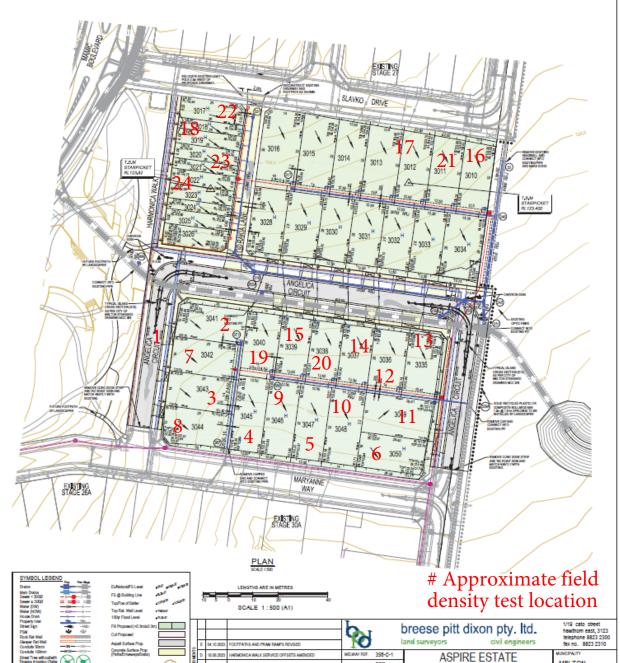
#### WARNING

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

#### ATTENTION TO CONTRACTOR

- IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM CO-ORDINATES SHOWN.
- WHERE CONCRETE WORKS ABUT A SEWER ACCESS CHAMBER SURROUND OR SIMILAR STRUCTURE, AN EXPANSION JOINT OF APPROVAL MATERIAL SHALL BE PROVIDED BETWEEN THE TWO FACES.
- 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.

	EET	INDEX
Mo.	VER	Description
1	Е	LAYOUT PLAN SHEET
2	D	TYPICAL CROSS SECTIONS
3	Α	ROAD PAVEMENT DETAILS & NOTES
4	C	ROAD PAVEMENT DETAILS
6	В	INTERSECTION DETAIL PLAN
6		LONGITUDINAL & CROSS SECTIONS
۰	l ^	ANGELICA CIRCUIT - SHEET 1 OF 4
,		CROSS SECTIONS
1	٨	ANGELICA CIRCUIT - SHEET 2 OF 4
		CROSS SECTIONS
•	Α.	ANGELICA CIRCUIT - SHEET 3 OF 4
		CROSS SECTIONS
,	A	ANGELICA CIRCUIT - SHEET 4 OF 4
		LONGITUDINAL & CROSS SECTIONS
10	В	RAKIA LANE
11	A	DRAINAGE LONGITUDINAL SECTIONS - SHEET 1
		DRAINAGE LONGITUDINAL SECTION - SHEET 2
12	c	& DRAINAGE STRUCTURE DETAILS
13	В	SIGNAGE & LINEMARKING PLAN
14	В	PASSIVE IRRIGATION PLAN
15	В	NOBILITY PLAN
16	С	EARTHWORKS PLAN



10.00.2020 HARIMONICA WALK SERVICE OFFSETS AME

REMARKS

SURVEY BPD

DESIGN J.B

26.06.2023 LOT 3017-3026 ARRANGEMENT AMENDE

27.02-2023 SHEET INDEX UPDATED

Tree To De Removed

Tree To De Retained with Tree Protection Zone (TPZ)

MELTON

8226 E/30

STAGE 30

LAYOUT PLAN

SCALE AS SHOWN DATUM AND DATE AUG 2022 SHEET 01 OF 16 E



 CIVIL GEOTECHNICAL SERVICES
 Job No
 23952

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 23952/R001

 Date Issued
 23/01/24

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byAMProjectASPIRE - STAGE 30Date tested04/07/23LocationPLUMPTONChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 13:56

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		1	2	3	4	5	6
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	ТО	ТО	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.90	1.90	1.89	1.90	1.91	1.91
Field moisture content	%	32.7	31.3	29.6	33.9	30.2	24.5

Test procedure AS 1289.5.7.1

Test No		1	2	3	4	5	6
Compactive effort							
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	1.90	1.90	1.91	1.92	1.91	1.92
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	33.0	31.0	29.5	36.5	30.5	25.0

Moisture Variation From	0.0%	0.0%	0.0%	2.5%	0.5%	0.5%
Optimum Moisture Content				dry	dry	dry

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 <sub>HD</sub> )	%	100.0	100.0	99.0	99.0	100.0	99.5

Material description

No 1 - 6 Clay Fill

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

AVRLOT HILF V1.10 MAR 13



 CIVIL GEOTECHNICAL SERVICES
 Job No
 23952

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 23952/R002

 Date Issued
 23/01/24

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byAMProjectASPIRE - STAGE 30Date tested06/07/23LocationPLUMPTONChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 11:43

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		7	8	9	10	11	12
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	TO	TO	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.89	1.89	1.88	1.89	1.90	1.91
Field moisture content	%	24.8	23.5	23.5	24.4	24.9	22.5

Test procedure AS 1289.5.7.1

Test No		7	8	9	10	11	12			
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	1.91	1.92	1.91	1.89	1.93	1.94			
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-			
Optimum Moisture Content	%	26.5	26.0	23.5	24.5	26.5	23.0			

Moisture Variation From	1.5%	2.5%	0.0%	0.0%	1.5%	0.0%
Optimum Moisture Content	dry	dry			dry	

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 <sub>HD</sub> ) %	6	99.5	98.5	98.5	100.0	98.5	98.5

Material description

No 7 - 12 Clay Fill

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

AVRLOT HILF V1.10 MAR 13



 CIVIL GEOTECHNICAL SERVICES
 Job No
 23952

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 23952/R003

 Date Issued
 29/01/24

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byAMProjectASPIRE - STAGE 30Date tested11/07/23LocationPLUMPTONChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 13:03

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		13	14	15	16	17	18
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	TO	TO	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.85	1.90	1.87	1.87	1.85	1.86
Field moisture content	%	24.2	25.5	26.5	23.6	26.2	26.6

Test procedure AS 1289.5.7.1

Test No		13	14	15	16	17	18			
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	1.99	1.96	1.96	1.95	1.95			
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-			
Optimum Moisture Content	%	27.0	27.5	29.5	26.5	28.0	29.5			

Moisture Variation From	2.5%	2.0%	2.5%	2.5%	1.5%	2.5%
Optimum Moisture Content	dry	dry	dry	dry	dry	dry

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 <sub>HD</sub> )	%	95.0	95.5	95.0	95.5	95.0	95.5

#### Material description

No 13 - 18 Clay Fill

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

AVRLOT HILF V1.10 MAR 13



 CIVIL GEOTECHNICAL SERVICES
 Job No
 23952

 6 - 8 Rose Avenue, Croydon 3136
 Report No
 23952/R004

 Date Issued
 29/01/24

ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byAMProjectASPIRE - STAGE 30Date tested13/07/24LocationPLUMPTONChecked byJHF

Feature EARTHWORKS Layer thickness 200 mm Time: 12:49

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		19	20	21	22	23	24
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		TO	ТО	TO	TO	TO	TO
		FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m³	1.76	1.81	1.69	1.71	1.80	1.84
Field moisture content	%	31.0	28.7	30.6	30.4	27.0	30.0

Test procedure AS 1289.5.7.1

Test No		19	20	21	22	23	24
Compactive effort				Stan	dard		
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	1.79	1.80	1.75	1.74	1.83	1.92
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	33.5	31.5	31.5	32.5	28.5	32.5

Moisture Variation From	2.0%	2.5%	1.0%	2.0%	1.0%	2.0%
Optimum Moisture Content	dry	dry	dry	dry	dry	dry

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 <sub>HD</sub> ) %	98.5	100.5	96.5	98.5	98.0	96.0

Material description

No 19 - 24 Clay Fill

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

AVRLOT HILF V1.10 MAR 13