



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

8th May 2019

Our Reference: 18798:NB489

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
ASPIRE – STAGE 21B (PLUMPTON)

Please find attached our Report No's 18798/R001 and 18798/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 testing was performed in January 2019.

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

A handwritten signature in blue ink, appearing to be 'Nick Brock', is written over a light blue circular stamp.

Nick Brock

FIGURE 1

ATTENTION TO CONTRACTOR

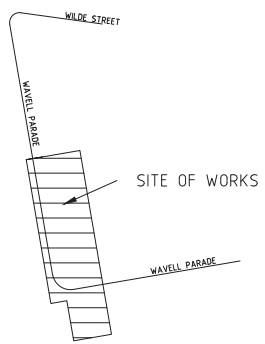
- IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM CO-ORDINATES SHOWN.
- WHERE CONCRETE WORKS ABOUT A SEWER ACCESS CHAMBER SURROUND OR SIMILAR STRUCTURE, AN EXPANSION JOINT OF APPROVAL MATERIAL SHALL BE PROVIDED BETWEEN THE TWO FACES.

WARNING

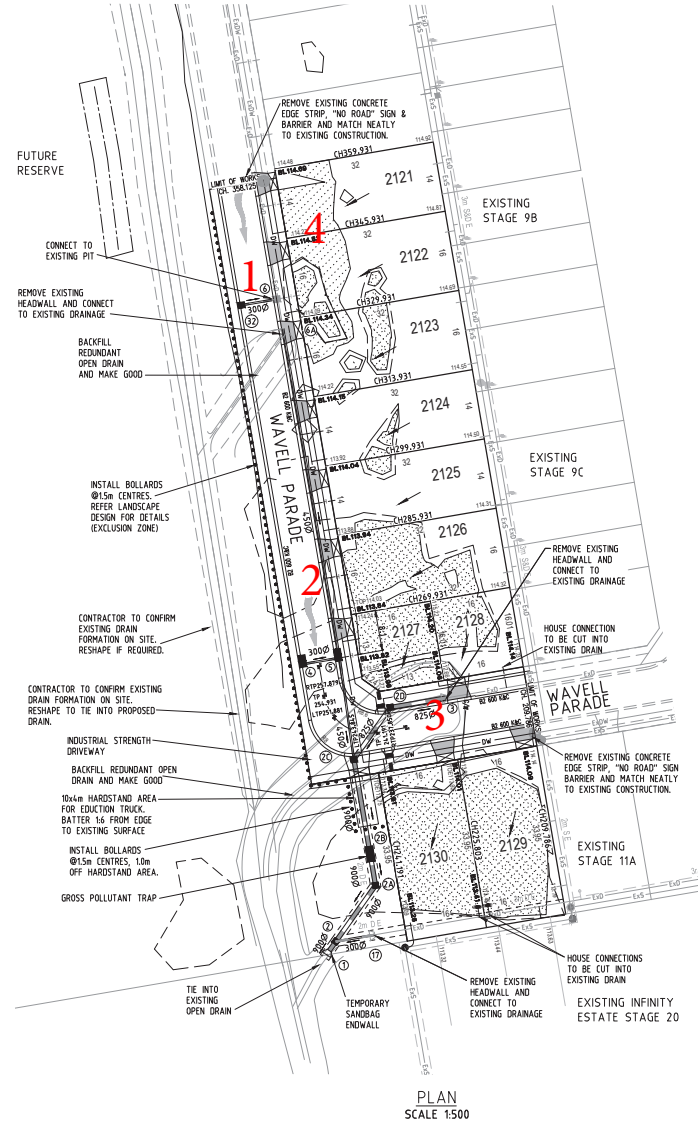
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

SHEET INDEX

SHT No.	VER	DESCRIPTION
1	D	LAYOUT PLAN AND DETAILS
2	A	INTERSECTION DETAILS
3	B	ROAD LONGSECTIONS
4	B	ROAD CROSS SECTIONS
5	B	ROAD CROSS SECTIONS
6	D	DRAINAGE LONGITUDINAL SECTIONS
7	A	TYPICAL CROSS SECTIONS
8	A	SIGNAGE AND LINEMARKING



SITE LOCALITY PLAN
NOT TO SCALE



Approximate field density test location

PLAN
SCALE 1:500



SERVICE OFFSETS AND LOCATION TABLE

ROAD NAME	RESERVE WIDTH	WATER DW	GAS	ELECTRICITY				TELECOMMUNICATIONS				ROK				
				POLE		UG CABLE		SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	
				SIDE	OFFSET	SIDE	OFFSET									
WAVELL PARADE (13.9m ROAD RESERVE)	13.50	2.60 E	2.10 E	W	0.80*	W	0.60	W	0.15	4.05 E	1.55 W					
WAVELL PARADE (16.0m ROAD RESERVE)	16.00	2.60 S	2.10 S	N	0.80*	N	2.30	N	1.80	4.05 N	4.05 S					

NOTE: * OFFSET FROM BACK OF KERB

SYMBOL LEGEND

Drains	—S—	Temporary Bench Mark (TBM)	⊙
Sewer <300	—S—	Ex/Natural/FS Level	36.57
Sewer >300	—S—	FS @ Building Line	81.2657
Water	—W—	Top/Toe of Butler	709.957 / 709.957
House Drain	—H—	Top Ret. Wall Level	706.957
Property Inlet	—P—	Fill Prop/Ex	(0.2m-0.5m depth)
Street Sign	—S—	Fill Prop/Ex	(> 0.5m depth)
PSM	—P—	Out Prop/Ex	(> 0.5m depth)
Retaining Wall	—R—	Threshold Treatment	—T—
Conduits 50mm	—C—		
Conduits 100mm	—C—		
Ex Gas/Elect/Tel	—G—		

REV	DATE	REMARKS	CHECKED	TBA
D	12.11.18	SHEET INDEX AMENDED	MELWAY REF.	356 C2
C	15.10.18	EXISTING INFORMATION AMENDED	SURVEY	BPD
B	04.10.18	SHEET INDEX AMENDED	DESIGN	JSB
A	19.09.18	CONSTRUCTION ISSUE	DRAWN	JSB

breese pitt dixon pty. ltd.
land surveyors civil engineers

1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MUNICIPALITY MELTON

ASPIRE ESTATE
STAGE 21B
ROAD LAYOUT

REFERENCE
8226 - E/21B

SCALE AS SHOWN DATUM AHD DATE FEB '18 SHEET 1 OF 8 D



COMPACTION ASSESSMENT

Job No 18798
 Report No 18798/R001
 Date Issued 18/01/2019

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	WS
Project	ASPIRE - STAGE 21B	Date tested	08/01/19
Location	PLUMPTON	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 10:45
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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 <i>mm</i>	175	175	175	-	-	-
Field wet density <i>t/m³</i>	1.85	1.82	1.79	-	-	-
Field moisture content <i>%</i>	18.8	19.3	19.9	-	-	-

Test procedure AS 1289.5.7.1

Test No	1	2	3	-	-	-
Compactive effort	Standard					
Oversize rock retained on sieve <i>mm</i>	19.0	19.0	19.0	-	-	-
Percent of oversize material <i>wet</i>	0	0	0	-	-	-
Peak Converted Wet Density <i>t/m³</i>	1.87	1.84	1.82	-	-	-
Adjusted Peak Converted Wet Density <i>t/m³</i>	-	-	-	-	-	-
Optimum Moisture Content <i>%</i>	20.5	21.5	22.5	-	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.5% dry	-	-	-
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Density Ratio (R_{HD})	%	98.5	99.0	98.5	-	-
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Material description

No 1 - 3 Clay Fill

AVRLOT HILF V1.10 MAR 13



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards. Accredited for compliance to ISO/IEC 17025. Accreditation No 9909

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 18798
 Report No 18798/R002
 Date Issued 08/05/2019

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	WS
Project	ASPIRE - STAGE 21B	Date tested	11/01/19
Location	PLUMPTON	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 09:15
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	4	-	-	-	-	-
Location	REFER TO FIGURE 1					
Approximate depth below FSL						
Measurement depth	mm	175	-	-	-	-
Field wet density	t/m ³	1.79	-	-	-	-
Field moisture content	%	23.4	-	-	-	-

Test procedure AS 1289.5.7.1

Test No	4	-	-	-	-	-
Compactive effort		Standard				
Oversize rock retained on sieve	mm	19.0	-	-	-	-
Percent of oversize material	wet	0	-	-	-	-
Peak Converted Wet Density	t/m ³	1.84	-	-	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	25.5	-	-	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	-	-	-	-	-
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Density Ratio (R_{HD})	%	97.5	-	-	-	-
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Material description

No 4 - 4 Clay Fill



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards. Accredited for compliance to ISO/IEC 17025. Accreditation No 9909

Approved Signatory : Justin Fry