



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

2nd September 2022

Our Reference: 21796:NB1340

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
TRIJENA – STAGE 15 (MICKLEHAM)

Please find attached our Report No's 21796/R001 to 21796/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 testing was performed in August 2022.

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

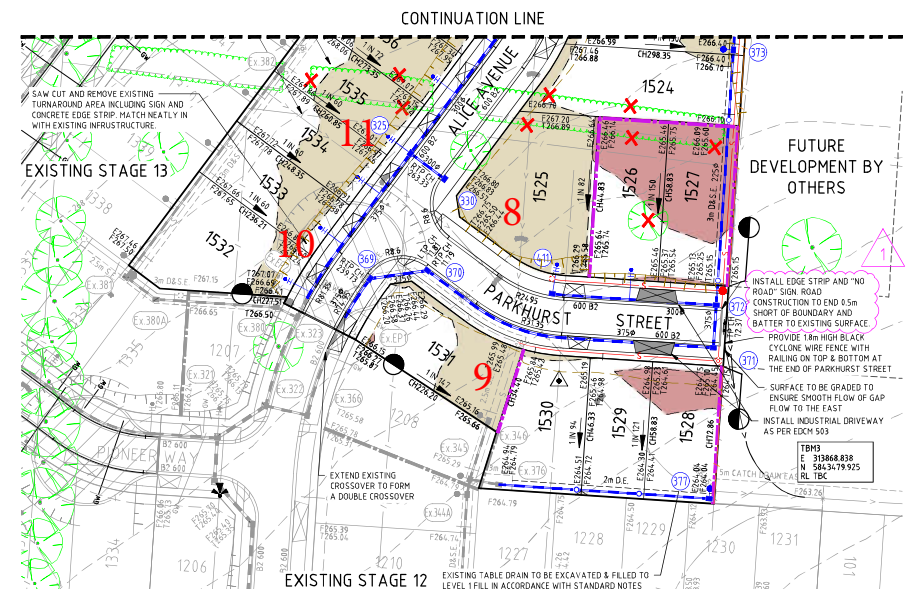
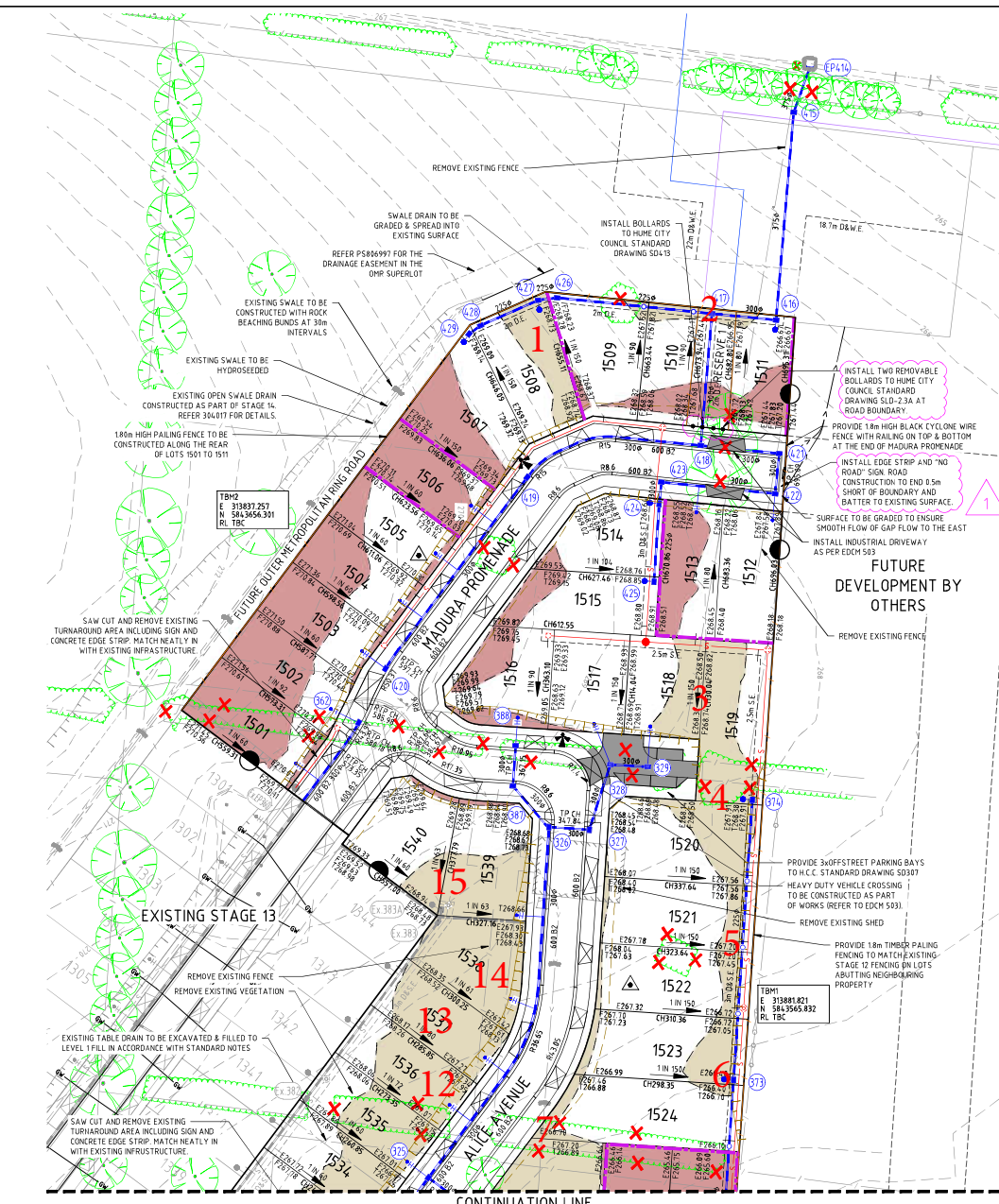
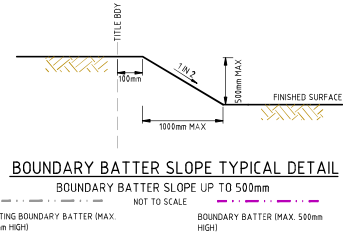
A handwritten signature in blue ink, appearing to be 'Nick Brock', written in a cursive style.

Nick Brock

FIGURE 1

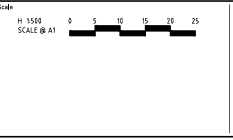


WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.



Approximate field density test location

Rev	Amendments	Approved	Date
1	NOTES AMENDED, BOLLARDS MOVED	R.W.	29/03/22
0	ISSUED FOR CONSTRUCTION	R.W.	03/03/22
D	TREE LOCATIONS & B1 KERB ADDED	R.W.	12/01/22
C	NOTES ADDED, PRAM CROSSING AMENDED	R.W.	08/12/21
B	NOTES ADDED, LEVELS AMENDED	R.W.	12/11/21
A	ISSUED TO COUNCIL	R.W.	08/09/21



© Spiire Australia Pty Ltd All Rights Reserved
This document is prepared by Spiire Australia Pty Ltd on behalf of the client in accordance with the terms of the contract. Spiire Australia Pty Ltd does not and shall not assume any responsibility or liability whatsoever to any third party arising out of any use or reliance by third party on the content of this document.

spiire

16 414 LA TROBE STREET PO BOX 18084 MELBOURNE VICTORIA 3007 AUSTRALIA T 61 3 9990 7888
spiire.com.au ABN 55 050 029 635

Designed
K. AYRES

Checked
J. KOEHLER

Authorised
R. WILSON

Date
08/09/21

POTTER GEORGE

TRIJENA

**TRIJENA ESTATE
STAGE 15
ROAD AND DRAINAGE
ROAD LAYOUT PLANS - FACE PLAN**
HUME CITY COUNCIL
PGG (MICKLEHAM) PTY LTD

CONSTRUCTION 304018CR200

Dwg No 304018CR200

Rev 1

File Name: 20220326_016.ctb
 Plot Date: 2022/03/26 10:35:35 AM
 Plot Sheet: 2 of 20 Sheets
 File Location: C:\Users\jkoehler\OneDrive\Documents\2022\03\26\20220326_016.ctb



COMPACTION ASSESSMENT

Job No 21796
 Report No 21796/R001
 Date Issued 17/08/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	TRIJENA - STAGE 15	Date tested	05/08/22
Location	MICKLEHAM	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 10:26
---------	------------	-----------------	--------	-------------

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	5	6
Location	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
Field wet density	t/m ³	2.03	2.04	2.05	2.05	2.04
Field moisture content	%	20.2	23.2	21.1	21.0	22.6

Test procedure AS 1289.5.7.1

Test No	1	2	3	4	5	6
Compactive effort	Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m ³	2.08	2.08	2.08	2.07	2.07
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	20.5	26.0	23.5	23.5	22.5

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

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 _{HD})	%	98.0	98.5	98.5	98.5	98.5	98.5
-----------------------------------	---	------	------	------	------	------	------

Material description

No 1 - 6 Clay Fill

AVRLOT HILF V1.10 MAR 13



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

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 21796
 Report No 21796/R002
 Date Issued 16/08/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	TRIJENA - STAGE 15	Date tested	08/08/22
Location	MICKLEHAM	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 11:29
---------	------------	-----------------	--------	-------------

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	7	8	9	10	11	12
Location	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
Field wet density	t/m ³	2.06	2.06	2.06	2.04	2.03
Field moisture content	%	19.6	21.4	22.3	18.4	19.5

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
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m ³	2.09	2.07	2.08	2.07	2.05
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	22.0	23.5	24.5	20.0	21.5

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% dry	2.0% dry	1.5% dry	2.0% dry	2.0% 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 _{HD})	%	98.5	99.5	99.0	98.5	99.0	99.0
-----------------------------------	---	------	------	------	------	------	------

Material description

No 7 - 12 Clay Fill

AVRLOT HILF V1.10 MAR 13



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

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 21796
 Report No 21796/R003
 Date Issued 16/08/2022

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	TRIJENA - STAGE 15	Date tested	09/08/22
Location	MICKLEHAM	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:32
---------	------------	-----------------	--------	-------------

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	13	14	15	-	-	-
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/m ³	2.04	2.04	2.04	-	-
Field moisture content	%	20.0	18.4	21.2	-	-

Test procedure AS 1289.5.7.1

Test No	13	14	15	-	-	-
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/m ³	2.03	2.07	2.07	-	-
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	21.5	21.0	22.5	-	-

Moisture Variation From Optimum Moisture Content	1.5% dry	2.5% dry	1.0% 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 _{HD})	%	100.0	99.0	98.5	-	-
----------------------------------	---	-------	------	------	---	---

Material description

No 13 - 15 Clay Fill

AVRLOT HILF V1.10 MAR 13



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

Approved Signatory : Justin Fry