



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

10<sup>th</sup> February 2022

Our Reference: 21307:NB983

Winslow Constructors Pty Ltd  
50 Barry Road  
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING**  
**ALAMORA– STAGE 4 – 6 BEW (TARNEIT)**

Please find attached our Report No's 21307/R001 to 21307/R024 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 commenced in May 2021 and was completed in June 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).

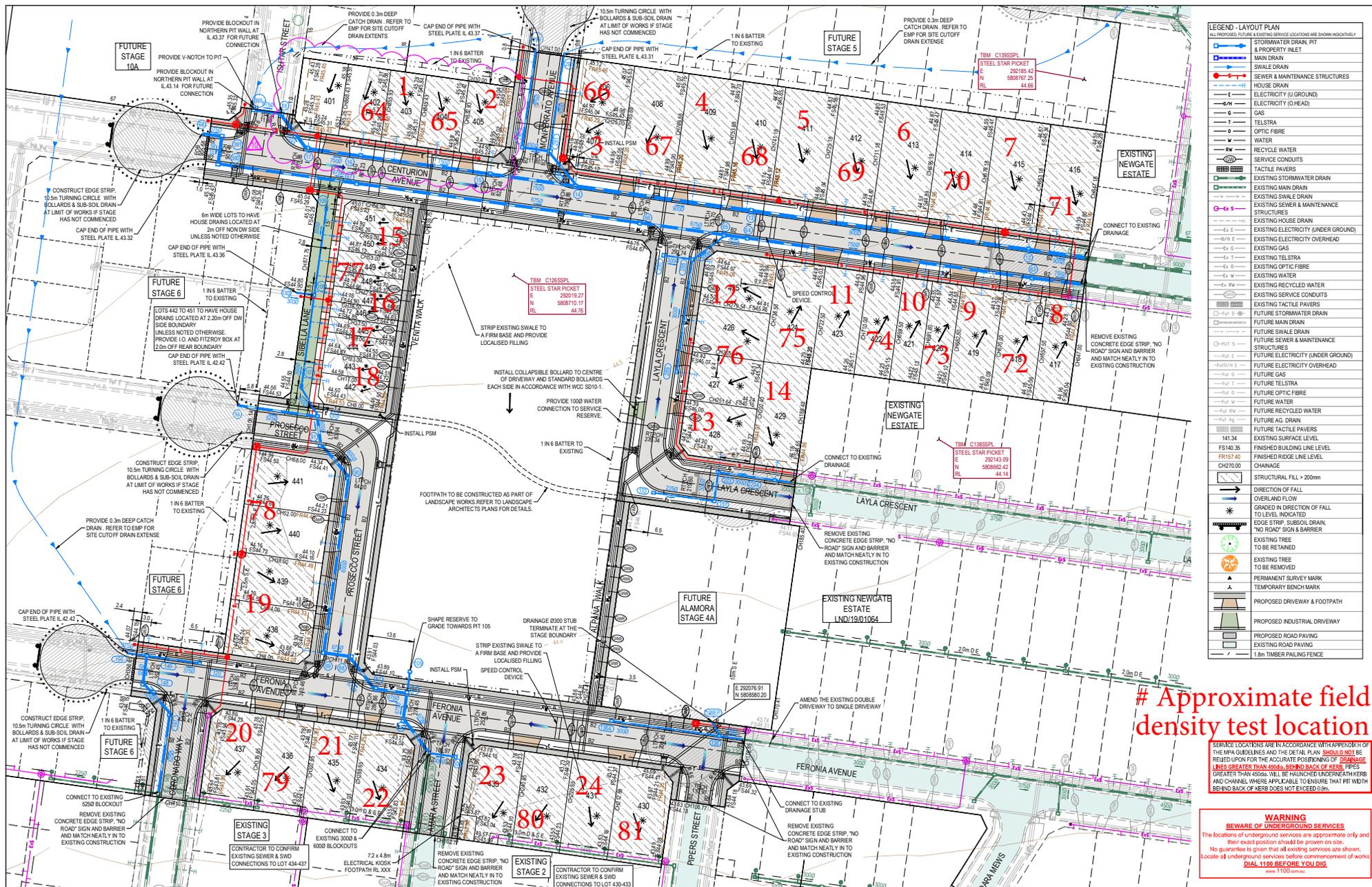
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

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

Nick Brock

# FIGURE 1 (1 of 3)



**LEGEND - LAYOUT PLAN**  
 ALL PROPOSED FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

- STORMWATER DRAIN, PIT & PROPERTY INLET
- MAIN DRAIN
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- ELECTRICITY (U/GROUND)
- ELECTRICITY (OVERHEAD)
- GAS
- TELSTRA
- OPTIC FIBRE
- WATER
- RECYCLE WATER
- SERVICE CONDUITS
- TACTILE PAVERS
- EXISTING STORMWATER DRAIN
- EXISTING MAIN DRAIN
- EXISTING SWALE DRAIN
- EXISTING SEWER & MAINTENANCE STRUCTURES
- EXISTING HOUSE DRAIN
- EXISTING ELECTRICITY (UNDER GROUND)
- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
- EXISTING TELSTRA
- EXISTING OPTIC FIBRE
- EXISTING WATER
- EXISTING RECYCLED WATER
- EXISTING SERVICE CONDUITS
- EXISTING TACTILE PAVERS
- FUTURE STORMWATER DRAIN
- FUTURE MAIN DRAIN
- FUTURE SWALE DRAIN
- FUTURE SEWER & MAINTENANCE STRUCTURES
- FUTURE ELECTRICITY (UNDER GROUND)
- FUTURE ELECTRICITY (OVERHEAD)
- FUTURE GAS
- FUTURE TELSTRA
- FUTURE OPTIC FIBRE
- FUTURE WATER
- FUTURE RECYCLED WATER
- FUTURE AG DRAIN
- FUTURE TACTILE PAVERS
- 141.34 FINISHED SURFACE LEVEL
- PS142.35 FINISHED CURBING LINE LEVEL
- PR157.40 FINISHED RIDGE LINE LEVEL
- CH270.00 CHANGE
- STRUCTURAL FALL > 200mm
- DIRECTION OF FALL
- OVERLAND FLOW
- GRADED IN DIRECTION OF FALL TO LEVEL INDICATED
- EDGE STRIP, SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
- EXISTING TREE TO BE RETAINED
- EXISTING TREE TO BE REMOVED
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- PROPOSED DRIVEWAY & FOOTPATH
- EXISTING ROAD PAVING
- PROPOSED INDUSTRIAL DRIVEWAY
- PROPOSED ROAD PAVING
- EXISTING ROAD PAVING
- 1.8m TIMBER PALING FENCE

# Approximate field density test location

SERVICE LOCATIONS ARE IN ACCORDANCE WITH APPROPRIATE THE MPA GUIDELINES AND THE DETAIL PLAN. SHOULD NOT BE RELIED UPON FOR THE ACCURATE POSITIONING OF DRAINAGE LINES GREATER THAN 500mm BEHIND BACK OF KERB. PIPES AND CHANNEL WHERE APPLICABLE TO ENSURE THAT PIT WIDTH BEHIND BACK OF KERB DOES NOT EXCEED 0.3m.

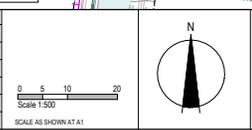
**WARNING**  
**BEWARE OF UNDERGROUND SERVICES**  
 The locations of underground services are approximate only and their exact position should be proven on site.  
 No guarantee is given that all existing services are shown. Locate all services BEFORE YOU DIG.  
 www.1100.com.au

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
5	01.07.21	ALPINA WALK AND DRIVEWAY UPDATED	AF/AF	CS
7	29.07.21	FUTURE STAGE 4A & HOUSE CONNECTION FOR LOTS 442 TO 451 UPDATED	HE	CS
8	10.08.21	FUTURE STAGE 4A AND DRIVEWAYS	HE	CS
9	17.08.21	MINOR DRAINAGE AMENDMENTS AND COUNCIL COMMENTS	HE	CS
10	14.09.21	POS UPDATE	HE	CS

All setting out should be carried out in accordance with MPA/Council's standard drawings or as detailed on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.

TITLE	NAME
DRAFTER	S.Margo
DESIGNER	N.Freeman
CHECKED	C.Sexton
AUTHORISED	D.Powell

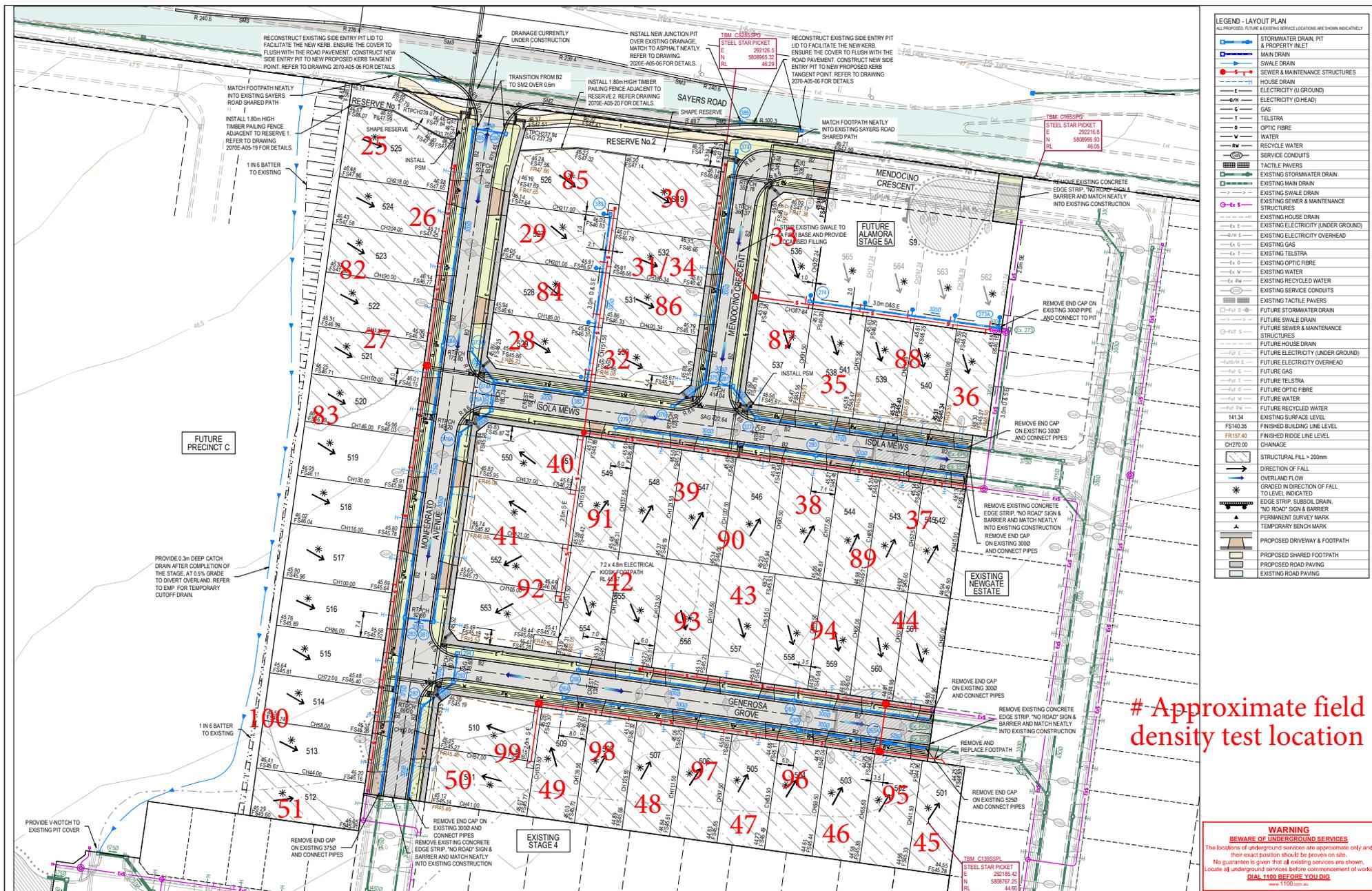
REFERENCE No. 1  
 REFERENCE No. 2



Alameda - Stage 4, Sayers Road, Tarnet  
 Wyndham City Council  
 Road and Drainage  
 Layout Plan

MELBOURNE REF: 234 D5 PROJECT DRAWING No: 2070E-A04-02 SHEET No: 02 of 26 10

# FIGURE 1 (2 of 3)

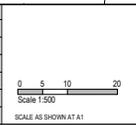


# Approximate field density test location

**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.  
 Locate all underground services before commencement of works  
**DIAL 1100 BEFORE YOU DIG**  
 www.dial1100.com.au

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
0	09.11.21	ISSUED FOR CONSTRUCTION	HE	CS

TITLE	NAME
DRAFTER	K.McCoy
DESIGNER	L.Fang
CHECKED	N.Freeman
AUTHORISED	C.Sexton
REFERENCE No. 1	
REFERENCE No. 2	



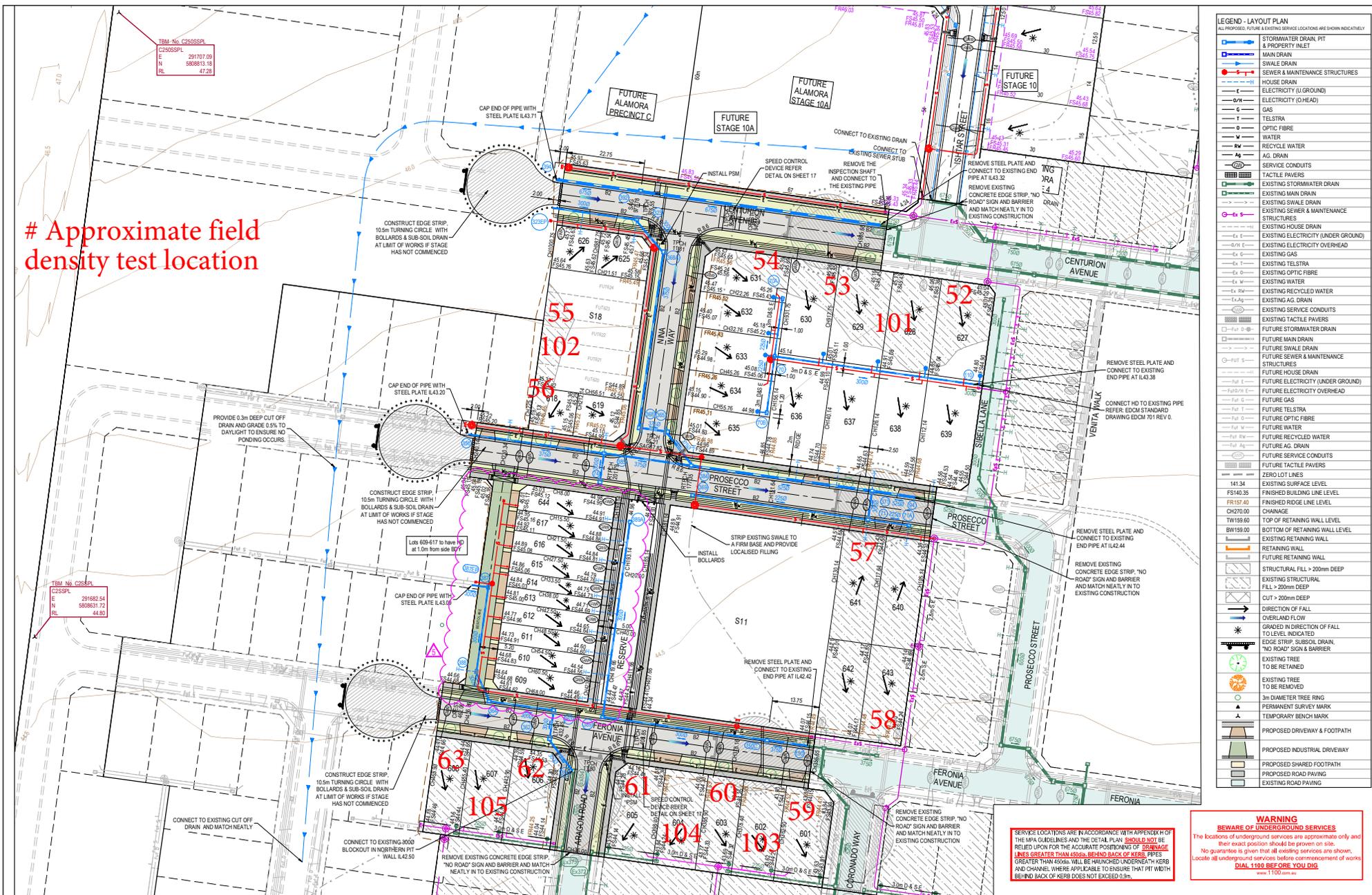
**SMEC**  
 Member of the Surlana Jurong Group  
 AIN 47 905 470 149  
 Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008 Australia  
 Ph: 03 5661 3758

**ALAMORA**  
 Tarnet

MELBOURNE REF: 234 D4	PROJECT DRAWING No: 2070E-A05-02	SHEET No: 02 of 21	REVISION: 0
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# FIGURE 1 (3 of 3)

# Approximate field density test location



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
1	22.06.21	DEVELOPMENT NAME, STAGE NO, ROAD NAME & NOS	HE	CS
2	02.07.21	LOT LEVELS AND DRAINAGE ALIGNMENT AMENDED	HE/SS	CS
3	06.07.21	ISSUED TO COUNCIL FOR APPROVAL	HE/SS	CS
4	23.09.21	COUNCIL COMMENTS	HE/TH	CS
5	27.10.21	LOT LAYOUT, ROAD HATCH & DRAINAGE UPDATED	HE/EM	CS

**SUBJECT TO APPROVAL**

TITLE	NAME
DRAFTER	A.Famili
DESIGNER	N.Freeman
CHECKED	A.Freeman
AUTHORISED	C.Sexton
REFERENCE No. 1	
REFERENCE No. 2	

Scale 1:500  
SCALE AS SHOWN AT A1

Member of the Surbana Jurong Group  
ALAMORA Tarniet  
Tower 4, Level 20, 727 Collins Street  
Melbourne, VIC 3008, Australia  
03 5581 3758

Alamora Estate - Sayers Road, Tarniet - Stage 06  
Wyndham City Council  
Road and Drainage  
Layout Plan

MELBOURNE REF: 234 D5  
PROJECT DRAWING NO: 2070E-A06-02  
SHEET NO: 02 of 19  
JOB NO: 5

**WARNING**  
**BEWARE OF UNDERGROUND SERVICES**  
The locations of underground services are approximate only and their positions indicated on site.  
No guarantee is given that all existing services are shown.  
Locate all underground services before commencement of works  
**DIAL 1198 BEFORE YOU DIG**  
www.1198.com.au

SERVICE LOCATIONS ARE IN ACCORDANCE WITH APPENDIX H OF THE MPA GUIDELINES AND THE DETAIL PLAN. SHOULD NOT BE RELIED UPON FOR THE ACCURATE POSITIONING OF DRAINAGE LINES GREATER THAN 400mm BEHIND BACK OF KERB. PIPES GREATER THAN 400mm WILL BE MAINTAINED UNDERNEATH KERB AND CHANNEL WHERE APPLICABLE TO ENSURE THAT PIT WIDTH BEHIND BACK OF KERB DOES NOT EXCEED 0.3m.



# COMPACTION ASSESSMENT

Job No 21307  
 Report No 21307/R001  
 Date Issued 29/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	10/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	10:00
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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	mm	175	175	175	-	-
Field wet density	t/m <sup>3</sup>	2.01	1.99	1.99	-	-
Field moisture content	%	25.1	25.2	25.8	-	-

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/m <sup>3</sup>	2.05	2.03	2.06	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	25.0	23.5	24.5	-	-

Moisture Variation From Optimum Moisture Content	0.0%	1.5% wet	1.0% wet	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	98.0	98.0	96.5	-	-
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Material description

No 1 - 3 Clay Fill
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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 21307  
 Report No 21307/R002  
 Date Issued 29/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	12/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 10:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	4	5	6	7	8	9
Location	REFER TO FIGURE 1					
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.85	1.97	1.95	1.95	1.89
Field moisture content	%	28.9	29.5	30.9	23.7	33.3

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
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m <sup>3</sup>	1.91	2.01	2.01	2.00	1.91
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	27.0	27.5	31.0	23.5	33.5

Moisture Variation From Optimum Moisture Content	2.0% wet	2.0% wet	0.0%	0.0%	0.0%	0.0%
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Density Ratio ( R <sub>HD</sub> )	%	97.0	98.0	97.0	97.5	99.0	97.0
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Material description

No 4 - 9 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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 ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

Job No 21307  
 Report No 21307/R003  
 Date Issued 29/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	13/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	10	11	12	13	14	15	
Location	REFER TO FIGURE 1						
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	
Field wet density	t/m <sup>3</sup>	2.03	1.98	1.98	2.01	1.97	2.00
Field moisture content	%	22.1	21.8	24.2	23.7	24.2	24.8

Test procedure AS 1289.5.7.1

Test No	10	11	12	13	14	15	
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 <sup>3</sup>	2.06	2.00	2.02	2.03	2.02	2.06
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content	%	20.0	22.5	21.5	24.5	22.0	22.5

Moisture Variation From Optimum Moisture Content	2.0% wet	0.5% dry	2.5% wet	1.0% dry	2.0% wet	2.5% wet
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Density Ratio ( R <sub>HD</sub> )	%	98.0	99.0	97.5	99.0	97.5	97.0
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Material description

No 10 - 15 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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 Accredited for compliance with  
 ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

Job No 21307  
 Report No 21307/R004  
 Date Issued 29/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	14/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	12:01
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	16	17	18	19	20	21
Location	REFER TO FIGURE 1					
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.90	1.99	1.97	1.97	1.94
Field moisture content	%	18.9	26.0	21.0	20.9	24.5

Test procedure AS 1289.5.7.1

Test No	16	17	18	19	20	21
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 <sup>3</sup>	1.96	2.03	2.01	2.01	2.01
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	17.5	23.5	21.0	20.5	25.0

Moisture Variation From Optimum Moisture Content	1.5% wet	2.0% wet	0.0%	0.0%	0.5% dry	0.5% wet
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Density Ratio ( R <sub>HD</sub> )	%	97.0	98.0	98.5	98.0	96.5	98.0
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Material description

No 16 - 21 Clay Fill
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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 21307  
 Report No 21307/R005  
 Date Issued 30/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	15/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 10:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	22	23	24	25	26	27
Location	REFER TO FIGURE 1					
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	2.06	2.08	2.02	1.90	1.85
Field moisture content	%	25.9	24.3	23.1	23.3	26.3

Test procedure AS 1289.5.7.1

Test No	22	23	24	25	26	27
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 <sup>3</sup>	2.11	2.10	2.11	1.95	1.90
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	25.5	22.0	25.0	23.0	24.0

Moisture Variation From Optimum Moisture Content	0.5% wet	2.0% wet	2.0% dry	0.5% wet	2.5% wet	0.5% wet
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Density Ratio ( R <sub>HD</sub> )	%	97.5	99.0	96.0	97.0	97.5	97.0
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Material description

No 22 - 27 Clay Fill
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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 21307  
 Report No 21307/R006  
 Date Issued 30/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	17/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 11:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	28	29	30	31*	32	33	
Location	REFER TO FIGURE 1						
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	
Field wet density	t/m <sup>3</sup>	1.96	1.95	1.97	1.96	2.03	2.04
Field moisture content	%	28.8	36.4	25.6	23.2	26.1	24.0

Test procedure AS 1289.5.7.1

Test No	28	29	30	31*	32	33
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 <sup>3</sup>	2.01	2.01	2.03	2.11	2.06
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	28.5	34.0	25.0	21.5	23.5

Moisture Variation From Optimum Moisture Content	0.5% wet	2.0% wet	0.5% wet	1.5% wet	1.5% wet	0.5% wet
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Density Ratio ( R <sub>HD</sub> )	%	97.5	97.0	97.0	93.5	96.5	99.0
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Material description

No 28 - 33 Clay Fill
* Test 31 retested as test 34 in report 21307/R007

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 21307  
 Report No 21307/R007  
 Date Issued 30/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	18/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No		34*	35	36	37	38	39
Location		REFER TO FIGURE 1					
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.91	2.00	2.01	2.04	2.02	2.02
Field moisture content	%	14.3	18.1	27.7	18.5	13.8	20.5

Test procedure AS 1289.5.7.1

Test No		34*	35	36	37	38	39
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/m <sup>3</sup>	1.94	2.01	2.09	2.10	2.08	2.04
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content	%	16.0	17.5	27.0	18.5	16.0	18.5

Moisture Variation From Optimum Moisture Content	2.0% dry	0.5% wet	1.0% wet	0.0%	2.0% dry	2.0% wet
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Density Ratio ( R <sub>HD</sub> )	%	98.5	99.5	96.5	97.0	97.0	99.0
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Material description

No 34 - 39 Clay Fill
* Retest of test 31

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 21307  
 Report No 21307/R008  
 Date Issued 30/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	19/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	40	41	42	43	44	45
Location	REFER TO FIGURE 1					
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.98	1.98	1.98	1.97	1.95
Field moisture content	%	23.5	24.8	23.5	25.3	24.1

Test procedure AS 1289.5.7.1

Test No	40	41	42	43	44	45
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 <sup>3</sup>	2.00	2.02	2.04	2.01	2.00
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	26.0	27.0	26.0	23.0	23.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	2.0% wet	1.5% wet	2.5% wet
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Density Ratio ( R <sub>HD</sub> )	%	99.0	98.0	97.0	98.5	97.5	97.5
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Material description

No 40 - 45 Clay Fill

AVRLOT HILF V1.10 MAR 13



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# COMPACTION ASSESSMENT

Job No 21307  
 Report No 21307/R009  
 Date Issued 30/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	20/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	46	47	48	49	50	51
Location	REFER TO FIGURE 1					
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.85	1.85	1.89	1.91	1.85
Field moisture content	%	34.5	32.1	35.6	29.6	32.4

Test procedure AS 1289.5.7.1

Test No	46	47	48	49	50	51
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 <sup>3</sup>	1.91	1.91	1.96	1.91	1.91
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	32.5	30.0	33.0	29.5	30.0

Moisture Variation From Optimum Moisture Content	2.0% wet	2.0% wet	2.0% wet	0.0%	2.0% wet	1.0% wet
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Density Ratio ( R <sub>HD</sub> )	%	97.5	97.0	96.5	100.0	97.0	97.0
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Material description

No 46 - 51 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21307  
Report No 21307/R010  
Date Issued 30/06/2021

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	21/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:58
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	52	53	54	55	56	57
Location	REFER TO FIGURE 1					
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.83	1.87	1.84	1.83	1.87
Field moisture content	%	28.5	27.9	28.4	26.9	33.3

Test procedure AS 1289.5.7.1

Test No	52	53	54	55	56	57
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 <sup>3</sup>	1.90	1.91	1.91	1.91	1.90
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	31.0	30.5	30.5	25.0	31.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	1.5% wet	1.5% wet	2.0% dry
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Density Ratio ( R <sub>HD</sub> )	%	96.0	98.0	96.5	96.0	98.0	98.0
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Material description

No 52 - 57 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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# COMPACTION ASSESSMENT

Job No 21307  
 Report No 21307/R011  
 Date Issued 01/07/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	BGG
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	24/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 06:12
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	58	59	60	61	62	63
Location	REFER TO FIGURE 1					
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.87	1.87	1.86	1.86	1.86
Field moisture content	%	28.0	26.8	22.1	29.5	23.4

Test procedure AS 1289.5.7.1

Test No	58	59	60	61	62	63
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 <sup>3</sup>	1.90	1.96	1.90	1.95	1.92
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	26.0	26.5	21.5	27.0	21.0

Moisture Variation From Optimum Moisture Content	2.0% wet	0.0%	0.5% wet	2.0% wet	2.5% wet	2.0% wet
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Density Ratio ( R <sub>HD</sub> )	%	98.0	95.5	98.0	95.5	97.0	96.5
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Material description

No 58 - 63 Clay Fill

AVRLOT HILF V1.10 MAR 13



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# COMPACTION ASSESSMENT

Job No 21307  
 Report No 21307/R012  
 Date Issued 01/07/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	24/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	64	65	66	67	68	69
Location	REFER TO FIGURE 1					
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.98	2.02	1.95	1.98	1.93
Field moisture content	%	27.0	27.3	28.7	23.9	35.6

Test procedure AS 1289.5.7.1

Test No	64	65	66	67	68	69
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 <sup>3</sup>	2.01	2.08	2.01	2.00	1.95
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	29.0	25.0	27.0	21.5	33.5

Moisture Variation From Optimum Moisture Content	1.5% dry	2.0% wet	1.5% wet	2.5% wet	1.5% wet	2.0% dry
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Density Ratio ( R <sub>HD</sub> )	%	98.5	97.0	97.5	98.5	98.5	98.0
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Material description

No 64 - 69 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21307  
Report No 21307/R013  
Date Issued 01/07/2021

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	25/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	13:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	70	71	72	-	-	-
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 <sup>3</sup>	1.92	1.97	1.96	-	-
Field moisture content	%	23.4	25.3	19.7	-	-

Test procedure AS 1289.5.7.1

Test No	70	71	72	-	-	-
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 <sup>3</sup>	1.98	2.01	2.01	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	23.0	24.5	19.0	-	-

Moisture Variation From Optimum Moisture Content	0.0%	0.5% wet	0.5% wet	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	96.5	98.0	98.0	-	-
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Material description

No 70 - 72 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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# COMPACTION ASSESSMENT

Job No 21307  
 Report No 21307/R014  
 Date Issued 01/07/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	26/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	73	74	75	-	-	-
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 <sup>3</sup>	1.96	1.94	1.94	-	-
Field moisture content	%	35.5	32.8	31.5	-	-

Test procedure AS 1289.5.7.1

Test No	73	74	75	-	-	-
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 <sup>3</sup>	2.00	2.01	2.01	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	33.0	35.0	34.0	-	-

Moisture Variation From Optimum Moisture Content	2.0% wet	2.0% dry	2.0% dry	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	97.5	96.5	97.0	-	-
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Material description

No 73 - 75 Clay Fill

AVRLOT HILF V1.10 MAR 13



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# COMPACTION ASSESSMENT

Job No 21307  
 Report No 21307/R015  
 Date Issued 04/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	27/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	76	77	78	-	-	-
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 <sup>3</sup>	1.78	1.82	1.89	-	-
Field moisture content	%	31.6	27.3	27.6	-	-

Test procedure AS 1289.5.7.1

Test No	76	77	78	-	-	-
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 <sup>3</sup>	1.81	1.83	1.87	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	33.0	29.5	27.0	-	-

Moisture Variation From Optimum Moisture Content	1.5% dry	2.0% dry	0.5% wet	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	98.5	99.5	101.0	-	-
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Material description

No 76 - 78 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry



## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21307  
 Report No 21307/R016  
 Date Issued 25/06/2021

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	28/05/21
Location	TARNEIT	Checked by	JHF

<b>Feature</b>	<b>EARTHWORKS</b>	Layer thickness	200 mm	Time: 13:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	79	80	81	-	-	-
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL						
Measurement depth <span style="float: right;">mm</span>	175	175	175	-	-	-
Field wet density <span style="float: right;">t/m<sup>3</sup></span>	1.85	1.87	1.78	-	-	-
Field moisture content <span style="float: right;">%</span>	16.3	16.0	15.0	-	-	-

Test procedure AS 1289.5.7.1

Test No	79	80	81	-	-	-
Compactive effort	Standard					
Oversize rock retained on sieve <span style="float: right;">mm</span>	19.0	19.0	19.0	-	-	-
Percent of oversize material <span style="float: right;">wet</span>	0	0	0	-	-	-
Peak Converted Wet Density <span style="float: right;">t/m<sup>3</sup></span>	1.87	1.86	1.84	-	-	-
Adjusted Peak Converted Wet Density <span style="float: right;">t/m<sup>3</sup></span>	-	-	-	-	-	-
Optimum Moisture Content <span style="float: right;">%</span>	18.5	18.0	17.5	-	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.5% dry	-	-	-
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<b>Density Ratio ( R<sub>HD</sub> )</b>	<b>%</b>	<b>98.5</b>	<b>100.0</b>	<b>96.5</b>	-	-	-
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Material description

No 79 - 81 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21307  
Report No 21307/R017  
Date Issued 30/06/2021

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	BGG
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	29/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 11:04
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	82	83	84	-	-	-
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 <sup>3</sup>	1.88	1.88	1.88	-	-
Field moisture content	%	25.2	24.0	27.5	-	-

Test procedure AS 1289.5.7.1

Test No	82	83	84	-	-	-
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 <sup>3</sup>	1.95	1.94	1.96	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	27.5	22.0	29.5	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% wet	2.0% dry	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	96.0	97.0	96.0	-	-
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Material description

No 82 - 84 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21307  
Report No 21307/R018  
Date Issued 22/06/2021

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	31/05/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	85	86	87	-	-	-
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 <sup>3</sup>	1.80	1.78	1.78	-	-
Field moisture content	%	29.4	29.1	30.2	-	-

Test procedure AS 1289.5.7.1

Test No	85	86	87	-	-	-
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 <sup>3</sup>	1.83	1.83	1.81	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	31.5	31.0	32.0	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	98.0	97.5	98.0	-	-
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Material description

No 85 - 87 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

Job No 21307  
 Report No 21307/R019  
 Date Issued 17/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	01/06/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	88	89	90	-	-	-
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 <sup>3</sup>	1.72	1.85	1.87	-	-
Field moisture content	%	27.6	28.7	27.4	-	-

Test procedure AS 1289.5.7.1

Test No	88	89	90	-	-	-
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 <sup>3</sup>	1.71	1.94	1.85	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	29.5	29.0	25.5	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	0.0%	2.0% wet	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	100.5	95.0	101.0	-	-
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Material description

No 88 - 90 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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 ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21307  
Report No 21307/R020  
Date Issued 18/06/2021

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	02/06/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	14:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	91	92	93	-	-	-
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 <sup>3</sup>	1.85	1.86	1.88	-	-
Field moisture content	%	22.8	21.9	23.0	-	-

Test procedure AS 1289.5.7.1

Test No	91	92	93	-	-	-
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 <sup>3</sup>	1.88	1.87	1.87	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	25.0	24.5	25.5	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	2.5% dry	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	98.5	99.5	100.5	-	-
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Material description

No 91 - 93 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

Job No 21307  
 Report No 21307/R021  
 Date Issued 19/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	03/06/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	94	95	96	-	-	-
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 <sup>3</sup>	1.90	1.92	1.85	-	-
Field moisture content	%	24.4	22.5	21.3	-	-

Test procedure AS 1289.5.7.1

Test No	94	95	96	-	-	-
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 <sup>3</sup>	1.93	1.96	1.90	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	26.5	22.5	23.5	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	0.0%	2.0% dry	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	98.5	98.0	97.0	-	-
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Material description

No 94 - 96 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

Job No 21307  
 Report No 21307/R022  
 Date Issued 23/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	04/06/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	12:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	97	98	99	-	-	-
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 <sup>3</sup>	1.87	1.87	1.89	-	-
Field moisture content	%	26.7	26.9	26.9	-	-

Test procedure AS 1289.5.7.1

Test No	97	98	99	-	-	-
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 <sup>3</sup>	1.88	1.91	1.90	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	29.0	27.0	28.0	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	0.0%	1.0% dry	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	99.0	97.5	99.5	-	-
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Material description

No 97 - 99 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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# COMPACTION ASSESSMENT

Job No 21307  
 Report No 21307/R023  
 Date Issued 30/06/2021

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	05/06/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	11:30
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	100	101	102	-	-	-
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 <sup>3</sup>	1.83	1.82	1.82	-	-
Field moisture content	%	26.9	25.2	27.9	-	-

Test procedure AS 1289.5.7.1

Test No	100	101	102	-	-	-
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 <sup>3</sup>	1.89	1.85	1.90	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	29.0	27.0	30.0	-	-

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	97.0	98.0	96.0	-	-
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Material description

No 100 - 102 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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# COMPACTION ASSESSMENT

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21307  
Report No 21307/R024  
Date Issued 19/06/2021

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALAMORA - STAGES 4 - 6 BULK EARTHWORKS	Date tested	07/06/21
Location	TARNEIT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	12:00
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	103	104	105	-	-	-
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 <sup>3</sup>	1.74	1.72	1.67	-	-
Field moisture content	%	19.7	21.9	24.4	-	-

Test procedure AS 1289.5.7.1

Test No	103	104	105	-	-	-
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 <sup>3</sup>	1.74	1.73	1.67	-	-
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	22.0	24.5	26.5	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% dry	2.0% dry	-	-	-
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Density Ratio ( R <sub>HD</sub> )	%	100.5	99.5	100.0	-	-
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Material description

No 103 - 105 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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