



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

16th October 2023

Our Reference: 23636:NB1718

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
NEWBRIDGE – STAGE 12 (WALLAN)**

Please find attached our Report No's 23636/R001 to 23636/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 July 2023 and was completed in September 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).

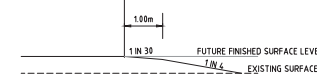
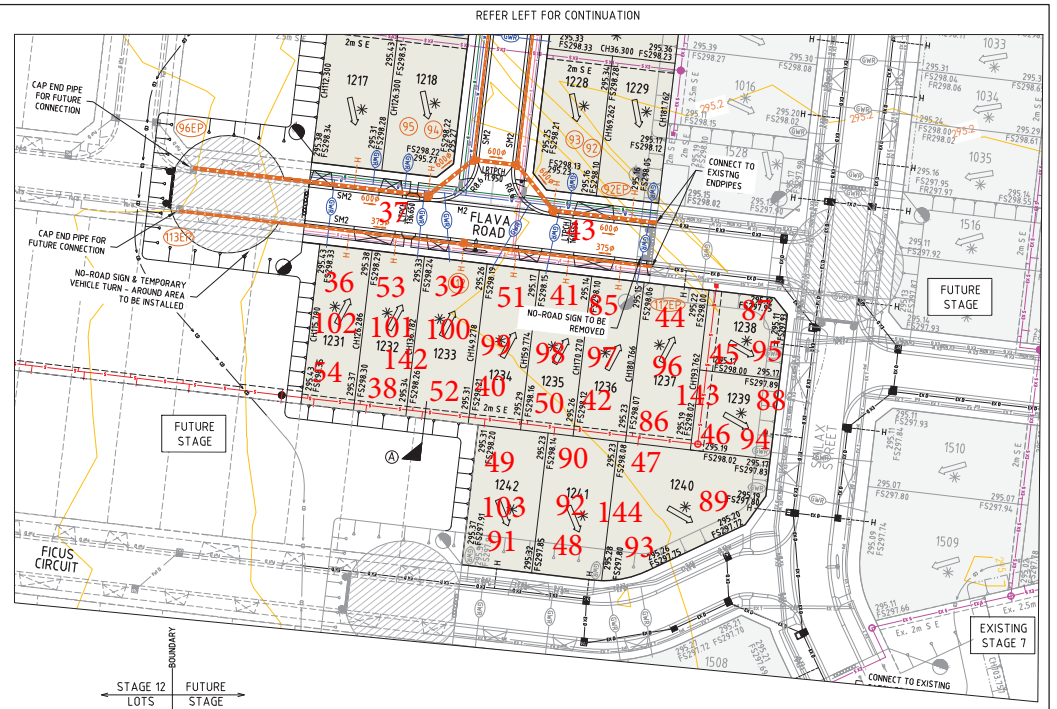
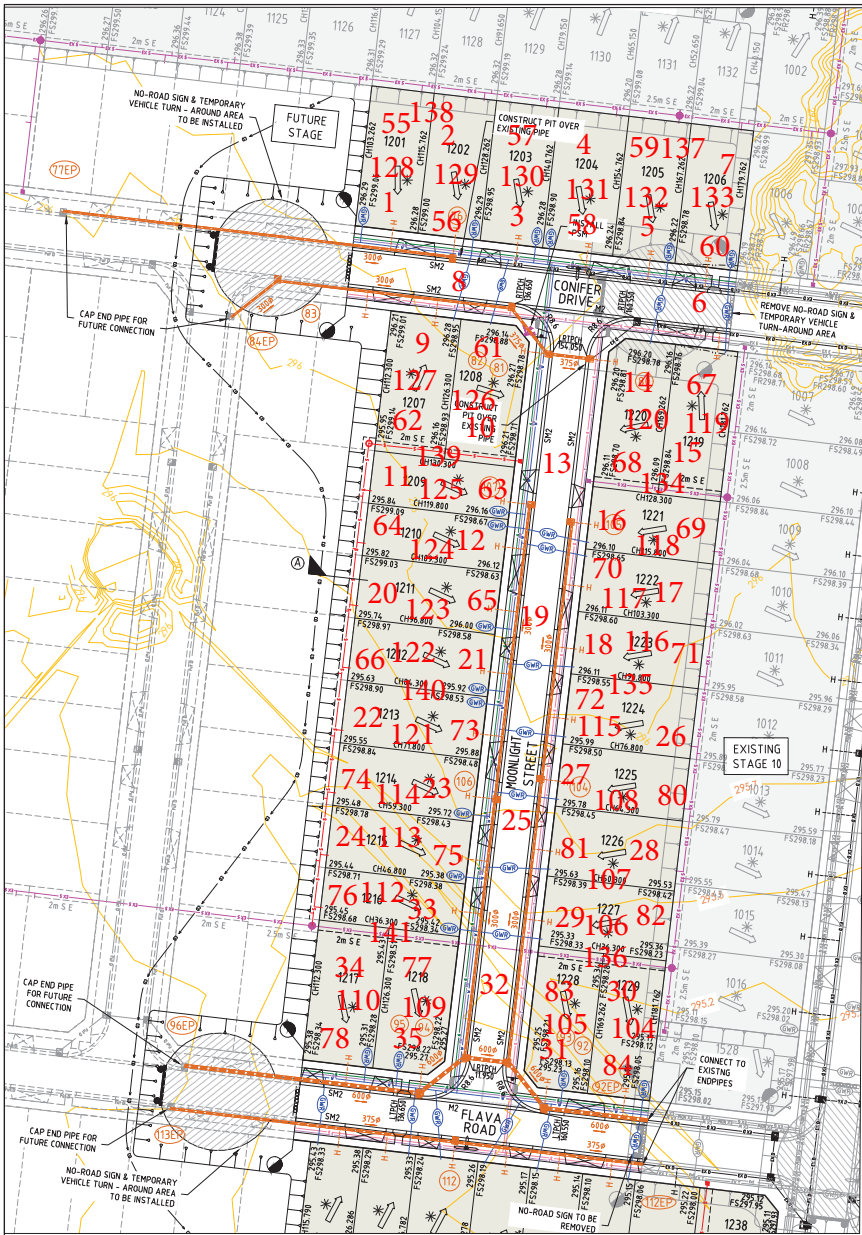
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

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

Nick Brock

FIGURE 1



TYPICAL SECTION A
BATTER TO FUTURE STAGES
N.T.S.

TEMPORARY BENCH MARKS			
Reference	North	East	Elevation
C17	2483.10	2140.89	296.32
C18	2388.04	2130.35	295.87
C21	2344.44	2294.01	295.35

Approximate field density test location

LEGEND - LAYOUT PLAN

- STORMWATER DRAIN, PIT & PROPERTY INLET
- SEWER & MAINTENANCE STRUCTURES
- EXISTING SEWER
- RETAINING WALL
- STRUCTURAL FILL + 200mm DEEP
- SWALE DRAIN
- HOUSE DRAIN
- EXISTING WATER
- WATER
- EX. STRUCTURAL FILL + 200mm DEEP
- SERVICE CONDUITS
- EXISTING ELECTRICITY (UNDERGROUND)
- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
- EXISTING TELSTRA
- EXISTING WATER
- EXISTING STORMWATER DRAIN
- GAS
- TELSTRA
- ELECTRICITY (UNDERGROUND)
- RECYCLED WATER
- EXISTING SURFACE LEVEL
- FINISHED BUILDING LINE LEVEL
- FINISHED RIDGE LINE LEVEL
- TOP OF RETAINING WALL
- FALL
- OVERLAND FLOW
- DIRECTION OF FLOW
- ALLOTMENT TO BE GRADED EVENLY IN
- DIRECTION OF FLOW TO LEVELS INDICATED
- CONCRETE EDGE STRIP WITH SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
- LIMIT OF WORKS
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- PROPOSED DRIVEWAY

NO.	REVISION	DATE	DESIGN	APPROVED
E	STAGE EXTENTS AMENDED	22.05.23	MR	TP
D	LOT NUMBERS UPDATED	10.02.22	MR	TP
C	LOT 1234 DRIVEWAY RELOCATED	10.12.21	MR	TP
B	UPDATED TO COUNCIL COMMENTS	30.11.21	MR	TP
A	ISSUED TO COUNCIL	30.09.21	MR	TP

RESIMAX GROUP
MITCHELL SHIRE COUNCIL

Approved for Construction

Melway Reference: 665 E4

Principal: RESIMAX GROUP PTY LTD
2 DREWERY PLACE
MELBOURNE VIC 3000

UrbanDesign and management

Urban Design and Management Pty Ltd
PO Box 468 Sunbury 3420
Phone: +61 3 9971 6300 | Fax: +61 3 9971 6399
Office 1, Level 1, 114 Evans Street, Sunbury, VIC, 3429

Designed: M.ROSSITTO
Checked: T.PHILLIPS
Approved: T.MILINKOVIC
Date: SEPTEMBER 2021

NEWBRIDGE SOUTH ESTATE
STAGE 12
MITCHELL SHIRE COUNCIL
DETAIL PLAN

Drawing No: 18040-12-02

Revision: 02

Sheet No: 02 of 11

Scale @ A1: 0 5 10 20
1:500

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ABN 62 525 443 166



COMPACTION ASSESSMENT

Job No 23636
 Report No 23636/R001
 Date Issued 04/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	31/07/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:25
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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	1.98	2.02	2.04	2.00	1.98
Field moisture content	%	19.1	18.5	19.9	21.4	19.3

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	1.99	2.04	2.05	2.01	1.98
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	21.5	20.0	20.5	23.0	21.5

Moisture Variation From Optimum Moisture Content	2.0% dry	1.5% dry	1.0% dry	1.5% dry	2.0% dry	2.0% dry
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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})	%	99.5	99.5	99.5	99.5	100.0	100.0
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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 23636
 Report No 23636/R002
 Date Issued 29/08/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	02/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 08:27
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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	2.09	2.14	2.07	1.99	2.00
Field moisture content	%	22.8	19.5	20.4	21.9	20.3

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	2.06	2.15	2.07	1.97	2.00
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	25.0	21.5	22.5	24.5	22.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry
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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})	%	101.5	99.5	100.5	100.5	100.0	99.0
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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 23636
 Report No 23636/R003
 Date Issued 29/08/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	02/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	09:32
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	13	14	15	16	17	18	
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	2.00	2.00	2.07	2.12	2.06	2.00
Field moisture content	%	21.1	20.6	20.9	17.1	15.7	20.0

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	
Percent of oversize material	wet	0	0	0	0	0	
Peak Converted Wet Density	t/m ³	2.00	1.98	2.07	2.10	2.09	2.02
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-	-
Optimum Moisture Content	%	23.0	20.0	23.0	18.5	18.0	22.5

Moisture Variation From Optimum Moisture Content	2.0% dry	0.5% wet	2.0% dry	1.5% dry	2.0% dry	2.5% dry
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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})	%	99.5	101.5	100.5	101.0	98.5	99.0
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Material description

No 13 - 18 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 23636
 Report No 23636/R004
 Date Issued 04/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	03/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:35
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	19	20	21	22	23	24	
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	2.13	2.10	2.09	2.01	2.00	2.13
Field moisture content	%	24.1	19.3	15.3	21.8	24.5	17.1

Test procedure AS 1289.5.7.1

Test No	19	20	21	22	23	24	
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	2.10	2.09	2.10	2.00	2.00	2.14
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-	-
Optimum Moisture Content	%	24.0	21.5	17.5	21.5	24.0	18.5

Moisture Variation From Optimum Moisture Content	0.0%	2.0% dry	2.0% dry	0.5% wet	0.5% wet	1.5% dry
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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})	%	101.5	100.5	99.5	100.5	100.0	99.5
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Material description

No 19 - 24 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 23636
 Report No 23636/R005
 Date Issued 04/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	09/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:29
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	25	26	27	28	29	30	
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	2.02	2.04	2.12	2.11	2.14	2.13
Field moisture content	%	20.1	22.6	19.3	22.0	19.9	20.4

Test procedure AS 1289.5.7.1

Test No	25	26	27	28	29	30	
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	2.04	2.09	2.12	2.11	2.15	2.16
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-	
Optimum Moisture Content	%	20.5	24.5	19.0	22.0	22.0	22.0

Moisture Variation From Optimum Moisture Content	0.0%	2.0% dry	0.0%	0.0%	2.0% dry	1.5% dry
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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})	%	99.0	97.5	100.5	100.0	100.0	99.0
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Material description

No 25 - 30 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 23636
 Report No 23636/R006
 Date Issued 04/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	11/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:26
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	31	32	33	34	35	36	
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	2.02	2.04	2.13	2.12	2.13
Field moisture content	%	19.5	20.2	23.3	21.7	20.1	22.4

Test procedure AS 1289.5.7.1

Test No	31	32	33	34	35	36	
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	2.05	2.03	2.09	2.14	2.10	
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-	
Optimum Moisture Content	%	21.0	22.5	26.0	23.5	22.5	24.5

Moisture Variation From Optimum Moisture Content	1.5% dry	2.5% dry	2.0% dry	1.5% dry	2.0% dry	2.0% dry
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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	97.5	99.5	101.0	101.5
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Material description

No 31 - 36 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 23636
 Report No 23636/R007
 Date Issued 04/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	14/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	08:32
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	37	38	39	40	41	42
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	2.01	2.03	2.03	2.03	2.02
Field moisture content	%	24.4	18.9	21.7	21.7	20.6

Test procedure AS 1289.5.7.1

Test No	37	38	39	40	41	42
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	2.00	2.06	2.07	2.06	2.04
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	26.5	21.0	22.0	21.5	23.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	0.5% dry	0.0%	2.0% dry	0.0%
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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})	%	100.5	98.5	98.0	98.5	99.0	99.5
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Material description

No 37 - 42 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 23636
 Report No 23636/R008
 Date Issued 04/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	17/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:25
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	43	44	45	46	47	48
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	1.92	1.91	1.91	1.94	1.93
Field moisture content	%	21.5	21.2	20.1	19.3	21.5

Test procedure AS 1289.5.7.1

Test No	43	44	45	46	47	48
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	1.95	1.94	1.95	2.00	1.94
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	21.5	23.5	20.0	19.0	23.0

Moisture Variation From Optimum Moisture Content	0.0%	2.0% dry	0.0%	0.0%	1.5% dry	2.0% dry
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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	98.5	98.0	96.5	99.0	99.0
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Material description

No 43 - 48 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 23636
 Report No 23636/R009
 Date Issued 04/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	18/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	08:34
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	49	50	51	52	53	54
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	1.91	1.84	1.86	1.84	1.84
Field moisture content	%	22.2	21.8	21.2	21.6	23.2

Test procedure AS 1289.5.7.1

Test No	49	50	51	52	53	54
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	1.93	1.91	1.86	1.87	1.91
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	22.0	22.0	22.0	22.0	24.0

Moisture Variation From Optimum Moisture Content	0.0%	0.0%	1.0% dry	0.0%	2.5% dry	2.0% dry
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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})	%	99.0	96.5	100.0	99.0	96.5	100.0
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Material description

No 49 - 54 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 23636
 Report No 23636/R010
 Date Issued 04/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	21/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	09:31
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	55	56	57	58	59	60
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	1.92	1.92	1.91	1.92	1.93
Field moisture content	%	25.3	20.9	23.3	18.2	21.4

Test procedure AS 1289.5.7.1

Test No	55	56	57	58	59	60
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	1.96	1.94	1.91	1.95	1.93
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	27.5	23.0	26.0	18.0	21.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.5% dry	0.0%	0.0%	0.5% dry
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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	99.0	99.5	98.5	99.0	99.5
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Material description

No 55 - 60 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 23636
 Report No 23636/R011
 Date Issued 06/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	22/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:25
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	61	62	63	64	65	66
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	1.89	1.90	1.89	1.90	1.91
Field moisture content	%	17.1	20.0	20.6	19.8	21.8

Test procedure AS 1289.5.7.1

Test No	61	62	63	64	65	66
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	1.86	1.93	1.93	1.92	1.92
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	17.0	19.0	20.0	20.5	23.5

Moisture Variation From Optimum Moisture Content	0.0%	1.0% wet	0.5% wet	0.5% dry	1.5% dry	2.0% dry
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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})	%	101.5	98.5	98.0	99.0	99.5	98.0
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Material description

No 61 - 66 Clay Fill

AVRLOT HILF V1.10 MAR 13



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 ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 23636
 Report No 23636/R012
 Date Issued 06/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	23/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 08:31
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	67	68	69	70	71	72
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	1.90	1.91	1.91	1.91	1.89
Field moisture content	%	19.5	22.6	20.7	17.5	22.0

Test procedure AS 1289.5.7.1

Test No	67	68	69	70	71	72
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	1.92	1.95	1.96	1.94	1.92
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	21.5	25.0	23.5	20.0	24.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.5% dry	2.5% dry	2.5% dry	2.5% dry
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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})	%	99.0	97.5	97.5	98.5	99.0	100.0
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Material description

No 67 - 72 Clay Fill

AVRLOT HILF V1.10 MAR 13



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 ISO/IEC 17025 - Testing

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 23636
 Report No 23636/R013
 Date Issued 06/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	24/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 09:26
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	73	74	75	76	77	78
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	1.93	1.91	1.92	1.93	1.92
Field moisture content	%	22.9	22.0	21.6	20.6	20.3

Test procedure AS 1289.5.7.1

Test No	73	74	75	76	77	78
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	1.97	1.91	1.91	1.98	1.94
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	25.0	24.5	24.0	23.0	22.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	2.5% dry	2.0% dry	2.5% dry	2.0% dry
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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	100.0	100.5	97.5	99.0	98.0
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Material description

No 73 - 78 Clay Fill

AVRLOT HILF V1.10 MAR 13



NATA Accredited Laboratory No 9909
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Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 23636
 Report No 23636/R014
 Date Issued 15/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	28/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:28
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	79	80	81	82	83	84	
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	1.88	1.87	1.88	1.90	1.88	1.89
Field moisture content	%	22.2	22.5	22.3	23.1	21.3	19.7

Test procedure AS 1289.5.7.1

Test No	79	80	81	82	83	84	
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	1.92	1.93	1.96	2.00	1.91	1.93
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-	-
Optimum Moisture Content	%	24.5	25.0	24.5	25.0	24.0	22.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	2.0% dry	2.0% dry	2.5% dry	2.5% dry
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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	97.0	96.0	95.0	98.0	98.0
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Material description

No 79 - 84 Clay Fill

AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 23636
 Report No 23636/R015
 Date Issued 15/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	25/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	08:31
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	85	86	87	88	89	90
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	1.92	1.91	1.89	1.88	1.89
Field moisture content	%	22.6	20.4	21.9	19.3	19.9

Test procedure AS 1289.5.7.1

Test No	85	86	87	88	89	90
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	1.97	2.00	1.96	1.89	1.98
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	24.5	22.5	22.0	19.0	22.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	0.0%	0.5% wet	2.0% dry	2.0% dry
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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})	%	97.5	95.5	96.5	99.5	96.0	96.5
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Material description

No 85 - 90 Clay Fill

AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 23636
 Report No 23636/R016
 Date Issued 14/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	29/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:33
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	91	92	93	94	95	96
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	1.87	1.89	1.90	1.90	1.89
Field moisture content	%	19.3	19.8	20.5	24.7	20.0

Test procedure AS 1289.5.7.1

Test No	91	92	93	94	95	96
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	1.92	1.91	1.99	1.96	1.95
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	21.5	22.0	23.0	27.0	22.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry
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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})	%	97.5	98.5	95.5	96.5	96.5	97.0
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Material description

No 91 - 96 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 23636
 Report No 23636/R017
 Date Issued 18/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	30/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:34
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	97	98	99	100	101	102
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	1.91	1.91	1.90	1.90	1.89
Field moisture content	%	18.3	18.5	20.4	20.1	21.1

Test procedure AS 1289.5.7.1

Test No	97	98	99	100	101	102
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	1.99	1.97	1.95	1.92	1.91
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	20.5	21.0	20.0	22.0	23.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	0.5% wet	2.0% dry	2.0% dry	2.0% dry
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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})	%	96.0	97.0	97.5	98.5	99.0	96.5
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Material description

No 97 - 102 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 23636
 Report No 23636/R018
 Date Issued 14/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	31/08/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	08:35
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	103	104	105	106	107	108
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	1.90	1.90	1.91	1.89	1.91
Field moisture content	%	18.7	18.1	19.0	19.8	21.6

Test procedure AS 1289.5.7.1

Test No	103	104	105	106	107	108
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	1.96	1.96	1.99	1.92	1.97
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	21.0	20.5	21.0	22.0	23.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.5% dry
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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})	%	97.0	97.0	96.0	98.5	97.0	96.5
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Material description

No 103 - 108 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 23636
 Report No 23636/R019
 Date Issued 14/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	01/09/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 09:27
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	109	110	111	112	113	114
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	1.89	1.89	1.90	1.91	1.92
Field moisture content	%	19.3	20.3	20.1	20.5	20.0

Test procedure AS 1289.5.7.1

Test No	109	110	111	112	113	114
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	1.93	1.95	1.99	1.97	2.00
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	21.5	20.5	22.5	22.5	22.0

Moisture Variation From Optimum Moisture Content	2.0% dry	0.0%	2.0% dry	2.0% dry	2.0% dry	2.0% dry
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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})	%	97.5	97.0	95.5	97.0	96.0	96.0
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Material description

No 109 - 114 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 23636
 Report No 23636/R020
 Date Issued 21/09/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	07/09/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:33
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	115	116	117	118	119	120
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	1.91	1.91	1.84	1.84	1.89
Field moisture content	%	20.1	25.0	30.4	29.6	27.9

Test procedure AS 1289.5.7.1

Test No	115	116	117	118	119	120
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	1.94	1.93	1.90	1.88	1.89
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	22.0	27.0	32.5	29.5	30.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	0.0%	2.0% dry	2.0% dry
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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	99.0	97.0	97.5	100.5	96.5
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Material description

No 115 - 120 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 23636
 Report No 23636/R021
 Date Issued 16/10/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	08/09/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 08:27
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	121	122	123	124	125	126
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	1.91	1.91	1.90	1.89	1.90
Field moisture content	%	20.7	20.7	24.9	18.5	28.7

Test procedure AS 1289.5.7.1

Test No	121	122	123	124	125	126
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	1.94	1.96	1.90	1.88	1.91
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	23.0	23.0	27.0	20.5	31.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry
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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	97.5	100.0	101.0	99.5	98.5
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Material description

No 121 - 126 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 23636
 Report No 23636/R022
 Date Issued 13/10/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	11/09/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	09:35
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	127	128	129	130	131	132	
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	1.80	1.82	1.84	1.90	1.83	1.90
Field moisture content	%	21.4	23.2	26.7	18.5	21.6	19.2

Test procedure AS 1289.5.7.1

Test No	127	128	129	130	131	132	
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	1.87	1.85	1.88	1.91	1.88	1.92
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-	-
Optimum Moisture Content	%	23.5	25.5	29.0	21.0	21.0	21.5

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% dry	2.0% dry	2.0% dry	0.5% wet	2.0% dry
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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})	%	96.5	99.0	97.5	99.5	97.5	99.0
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Material description

No 127 - 132 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 23636
 Report No 23636/R023
 Date Issued 16/10/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	15/09/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 07:30
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	133	134	135	136	137	138
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	1.93	1.92	1.90	1.92	1.94
Field moisture content	%	22.2	18.7	24.5	24.1	20.5

Test procedure AS 1289.5.7.1

Test No	133	134	135	136	137	138
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	1.98	1.95	1.91	1.95	2.02
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	22.5	19.5	26.5	26.5	22.5

Moisture Variation From Optimum Moisture Content	0.5% dry	0.5% dry	2.0% dry	2.0% dry	1.5% dry	1.5% dry
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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})	%	97.5	98.5	99.5	98.5	96.0	99.0
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Material description

No 133 - 138 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 23636
 Report No 23636/R024
 Date Issued 16/10/23

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 12	Date tested	18/09/23
Location	WALLAN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 08:27
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	139	140	141	142	143	144
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	1.93	1.92	1.91	1.91	1.92
Field moisture content	%	17.7	17.6	16.5	18.6	21.4

Test procedure AS 1289.5.7.1

Test No	139	140	141	142	143	144
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	1.98	1.97	1.89	1.92	1.98
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	20.0	19.5	18.5	21.0	23.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry
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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	97.5	101.0	100.0	97.5	97.0
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Material description

No 139 - 144 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