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

12th December 2023

Our Reference: 23319:NB1761

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
NEWBRIDGE – STAGE 13 (WALLAN)

Please find attached our Report No's 23319/R001 to 23319/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 April 2023 and was completed in August 2023.

The inspections and testing of the earthworks was undertaken in general accordance with the Level 1 requirements of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments.

The site inspection and testing was performed by experienced geotechnicians from this office. Any areas that were deemed unsatisfactory were reworked and retested under their supervision. The testing was performed to the relevant Australian Standards and the accompanying test reports carry NATA endorsement. The attached compaction results, which were located randomly throughout the fill profile, are considered to be representative of the bulk fill materials that were placed across the reported allotments by Winslow Constructors during the aforementioned period. The approximate locations of the field density tests can be seen on the attached plan (Figure 1).

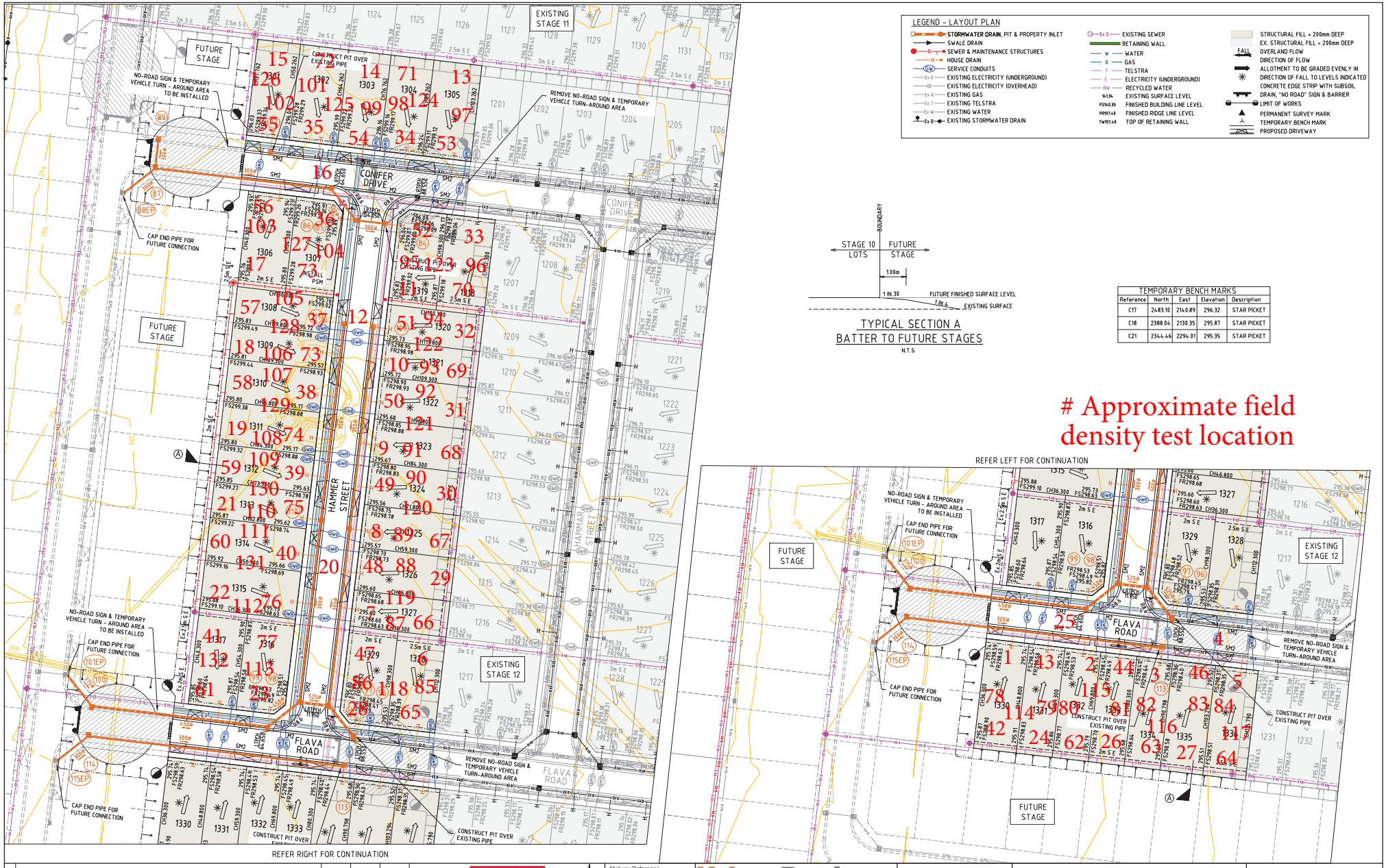
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

FIGURE 1



LEGEND - LAYOUT PLAN

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

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

TEMPORARY BENCH MARKS

Reference	North	East	Elevation	Description
C17	2483.10	2140.89	296.32	STAR PICKET
C18	2388.04	2130.35	295.87	STAR PICKET
C21	2344.46	2294.01	295.35	STAR PICKET

Approximate field density test location

No.	REVISION	DATE	DES/DFT	APPROVED
A	ISSUED TO COUNCIL	25.10.21	MR	TP

RESIMAX GROUP
MITCHELL SHIRE COUNCIL

Issued for Approval
Not to be used 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 3429
Phone: +61 3 9971 6300 | Fax: +61 3 9971 6399
Office 1, Level 1, 114 Evans Street, Sunbury, VIC, 3429
Project Management | Land Development | Civil Engineering | Traffic and Transport Engineering | Urban Design

Designed
M.ROSSITTO

Checked
T.PHILLIPS

Approved
T. MILINKOVIC

Date
OCTOBER 2021

NEWBRIDGE SOUTH ESTATE
STAGE 13
MITCHELL SHIRE COUNCIL
DETAIL PLAN

Drawing No: 18040-13-02
Revision: A
Sheet No: 02 of 11
Scale @ A1 1:500 (0 5 10 20)

© Urban Design and Management Pty Ltd
ABN 62 525 443 156

file name 18040-13-02.dwg layout name 02 file location L:\Work\End\18040 Newbridge Estate\Stage 13\Drawings

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R001
		Date Issued	22/06/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	13/04/23
Location	WALLAN	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 07:29

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	175
Field wet density	*t/m³*	1.86	1.86	1.81	1.82	1.85	1.86
Field moisture content	*%*	25.7	23.9	25.2	22.5	25.4	22.5

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.89	1.89	1.86	1.91	1.88
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	28.5	26.5	27.5	24.5	27.5	25.0

Moisture Variation From Optimum Moisture Content		2.5% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.5% 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})	*%*	**97.5**	**98.5**	**96.0**	**98.0**	**97.0**	**99.0**

Material description

No 1 - 6 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R002
		Date Issued	22/06/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 13	Date tested	14/04/23
Location	WALLAN	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	08:30

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	175
Field wet density	*t/m³*	1.85	1.83	1.81	1.83	1.84	1.85
Field moisture content	*%*	19.9	18.2	19.1	21.2	19.3	21.3

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.92	1.86	1.89	1.89	1.90	1.89
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	22.5	20.5	20.5	23.0	21.5	23.5

Moisture Variation From Optimum Moisture Content		2.5% dry	2.0% dry	1.5% dry	1.5% dry	2.5% 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})	*%*	**96.5**	**98.0**	**95.5**	**97.0**	**96.5**	**98.0**

Material description

No 7 - 12 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R003
		Date Issued	22/06/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	18/04/23
Location	WALLAN	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	09:30

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	175
Field wet density	*t/m³*	1.86	1.85	1.87	1.88	1.87	1.86
Field moisture content	*%*	21.7	23.3	24.6	22.1	22.8	21.2

Test procedure AS 1289.5.7.1

Test No		13	14	15	16	17	18
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.92	1.94	1.91	1.92	1.93
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.5	25.5	27.0	24.5	25.5	23.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	2.5% dry	2.5% dry	2.5% 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})	*%*	**97.5**	**96.5**	**96.5**	**98.5**	**97.5**	**96.5**

Material description

No 13 - 18 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R004
		Date Issued	22/06/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	19/04/23
Location	WALLAN	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 07:32

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	175
Field wet density	*t/m³*	1.89	1.90	1.88	1.89	1.85	1.89
Field moisture content	*%*	19.4	20.1	22.0	20.7	19.3	22.1

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.87	1.91	1.89	1.91	1.86	1.91
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	22.0	22.5	24.0	23.5	21.5	24.5

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.0% dry	2.5% dry	2.0% dry	2.5% 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})	*%*	**101.0**	**99.5**	**99.5**	**99.0**	**99.5**	**99.0**

Material description

No 19 - 24 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R005
		Date Issued	21/07/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	21/04/23
Location	WALLAN	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	11:01

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	175
Field wet density	*t/m³*	1.90	1.88	1.90	1.90	1.90	1.89
Field moisture content	*%*	20.8	19.4	20.4	20.1	19.1	22.1

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.86	1.91	1.92	1.92	1.89
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.0	22.0	23.0	22.5	21.5	23.5

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.5% dry	2.5% dry	2.5% dry	1.5% 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})	**%**	**99.5**	**101.5**	**99.5**	**99.0**	**98.5**	**99.5**

Material description

No 25 - 30 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R006
		Date Issued	21/07/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 13	Date tested	26/04/23
Location	WALLAN	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	07:34

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	175
Field wet density	*t/m³*	1.90	1.88	1.88	1.90	1.89	1.88
Field moisture content	*%*	17.5	17.9	19.9	18.0	20.3	17.7

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.92	1.90	1.87	1.93	1.92	1.91
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	19.5	20.0	22.0	20.5	22.5	20.5

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.0% dry	2.5% dry	2.0% dry	2.5% 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})	*%*	**99.0**	**99.0**	**100.5**	**98.0**	**98.5**	**99.0**

Material description

No 31 - 36 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R007
		Date Issued	30/08/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	22/05/23
Location	WALLAN	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	07:22

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	175
Field wet density	*t/m³*	1.90	1.82	1.83	1.85	1.81	1.83
Field moisture content	*%*	20.9	19.8	19.6	18.7	17.8	19.7

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.92	1.89	1.88	1.86	1.89	1.88
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.5	22.0	21.5	20.5	20.0	22.0

Moisture Variation From Optimum Moisture Content		2.5% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry	2.5% 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})	*%*	**99.0**	**96.5**	**97.0**	**99.5**	**96.0**	**97.5**

Material description

No 37 - 42 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R008
		Date Issued	07/08/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	30/05/23
Location	WALLAN	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 07:26

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	175
Field wet density	*t/m³*	1.89	1.90	1.85	1.91	1.91	1.89
Field moisture content	*%*	22.0	20.3	18.2	21.1	22.1	23.1

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.93	1.89	1.97	1.94	1.92
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	24.5	23.0	20.5	23.0	24.5	25.5

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.0% dry	2.0% dry	2.5% dry	2.5% 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**	**98.0**	**98.0**	**97.0**	**98.5**	**98.5**

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

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R009
		Date Issued	27/07/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	07/06/23
Location	WALLAN	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:34

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	175
Field wet density	*t/m³*	1.91	1.86	1.91	1.88	1.90	1.89
Field moisture content	*%*	19.3	18.7	19.9	23.6	21.1	20.3

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.89	1.94	1.89	1.92	1.89
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.0	21.0	21.0	26.5	23.5	23.0

Moisture Variation From Optimum Moisture Content		2.0% dry	2.5% dry	1.5% dry	2.5% dry	2.5% dry	2.5% 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**	**98.5**	**98.5**	**99.5**	**99.0**	**100.0**

Material description

No 49 - 54 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R010
		Date Issued	14/08/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AC
Project	NEWBRIDGE - STAGE 13	Date tested	09/06/23
Location	WALLAN	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	07:28

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	175
Field wet density	t/m³	1.86	1.87	1.89	1.88	1.88	1.90
Field moisture content	%	30.2	27.4	29.3	30.1	29.8	30.2

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	19.0
Percent of oversize material	wet	0	0	0	0	0	0
Peak Converted Wet Density	t/m³	1.91	1.88	1.92	1.93	1.89	1.91
Adjusted Peak Converted Wet Density	t/m³	-	-	-	-	-	-
Optimum Moisture Content	%	32.5	30.5	31.5	32.5	32.0	33.0

Moisture Variation From Optimum Moisture Content		2.0% dry	2.5% dry	2.0% dry	2.0% dry	2.0% dry	2.5% 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})	%	**97.5**	**99.5**	**98.5**	**97.5**	**99.5**	**99.5**

Material description

No 55 - 60 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R011
		Date Issued	07/08/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	14/06/23
Location	WALLAN	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:31

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	175
Field wet density	*t/m³*	1.89	1.88	1.89	1.90	1.90	1.89
Field moisture content	*%*	16.3	18.9	17.8	17.1	18.4	18.7

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.90	1.93	1.94	2.00	1.92
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	18.5	21.0	20.0	19.5	20.5	21.0

Moisture Variation From Optimum Moisture Content		2.5% dry	2.0% dry	2.5% dry	2.0% dry	2.0% dry	2.5% 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**	**99.0**	**98.0**	**98.0**	**95.0**	**98.5**

Material description

No 61 - 66 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R012
		Date Issued	01/08/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	20/06/23
Location	WALLLAN	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:03

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	175
Field wet density	*t/m³*	1.89	1.88	1.85	1.86	1.88	1.88
Field moisture content	*%*	28.3	28.8	29.9	28.6	26.4	30.4

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.97	1.93	1.87	1.91	1.96	1.93
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	31.0	31.0	32.5	31.0	29.5	33.0

Moisture Variation From Optimum Moisture Content		2.5% dry	2.0% dry	2.5% dry	2.5% dry	2.5% 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})	*%*	**96.0**	**97.5**	**99.0**	**97.5**	**96.0**	**97.5**

Material description

No 67 - 72 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R013
		Date Issued	31/07/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	26/06/23
Location	WALLAN	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	07:29

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	175
Field wet density	*t/m³*	1.86	1.86	1.85	1.86	1.87	1.86
Field moisture content	*%*	23.5	27.8	26.1	27.2	25.9	27.8

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.91	1.89	1.93	1.94	1.88
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	26.0	28.0	29.0	29.5	26.5	29.5

Moisture Variation From Optimum Moisture Content	2.5% dry	0.0%	2.5% dry	2.0% dry	0.5% 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})	*%*	**97.0**	**97.0**	**98.0**	**97.0**	**96.5**	**98.5**

Material description

No 73 - 78 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R014
		Date Issued	01/08/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	30/06/23
Location	WALLAN	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:32

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	175
Field wet density	*t/m³*	1.89	1.90	1.90	1.89	1.88	1.88
Field moisture content	*%*	20.9	25.4	18.1	19.5	18.9	19.3

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.90	1.94	1.93	1.91	1.91	1.92
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.0	28.0	20.5	21.5	21.5	22.0

Moisture Variation From Optimum Moisture Content	0.0%	2.5% dry	2.5% dry	2.0% dry	2.5% dry	2.5% 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})	*%*	**99.5**	**97.5**	**98.0**	**99.0**	**98.5**	**98.5**

Material description

No 79 - 84 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R015
		Date Issued	15/08/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	10/07/23
Location	WALLAN	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:39

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	175
Field wet density	*t/m³*	1.90	1.89	1.91	1.90	1.89	1.89
Field moisture content	*%*	20.7	21.0	17.5	18.0	21.4	19.8

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.93	1.95	1.92	1.91	1.89	1.92
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	20.5	23.0	19.5	20.0	23.5	22.0

Moisture Variation From Optimum Moisture Content		0.0%	2.0% dry	2.0% dry	2.0% 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**	**97.0**	**99.5**	**99.5**	**100.0**	**98.5**

Material description

No 85 - 90 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R016
		Date Issued	30/08/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	12/07/23
Location	WALLAN	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 07:30

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	175
Field wet density	*t/m³*	1.88	1.77	1.89	1.90	1.84	1.89
Field moisture content	*%*	19.2	21.0	23.4	22.2	20.2	21.1

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.86	1.84	1.91	1.92	1.90	1.89
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.5	23.5	25.0	24.5	20.5	23.5

Moisture Variation From Optimum Moisture Content		2.0% dry	2.5% dry	1.5% dry	2.0% dry	0.0%	2.5% dry

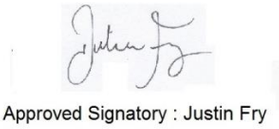
density and moisture ratio results relate only to the soil to the depth of test and not to the full depth of the layer

Density Ratio (R_{HD})	*%*	**101.0**	**96.5**	**99.0**	**98.5**	**97.0**	**100.0**

Material description

No 91 - 96 Clay Fill

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



Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R017
		Date Issued	30/08/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	18/07/23
Location	WALLAN	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:28

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	175
Field wet density	*t/m³*	1.90	1.86	1.89	1.88	1.88	1.86
Field moisture content	*%*	25.2	25.3	25.3	22.6	24.5	23.4

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.91	1.93	1.94	1.93	1.89
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	28.0	28.0	28.0	25.0	27.0	25.5

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

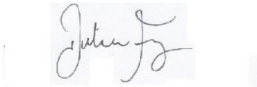
Density Ratio (R_{HD})	*%*	**99.5**	**97.5**	**97.5**	**97.0**	**97.0**	**98.5**

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

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R018
		Date Issued	06/09/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	24/07/23
Location	WALLAN	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	07:31

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	175
Field wet density	*t/m³*	1.90	1.91	1.90	1.91	1.89	1.88
Field moisture content	*%*	22.6	24.1	23.2	23.0	23.0	23.7

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.94	1.92	1.95	1.89	1.89
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	25.0	26.5	25.5	25.5	25.5	26.0

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.0% dry	2.5% dry	2.5% 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})	**%**	**99.5**	**98.5**	**99.0**	**97.5**	**100.0**	**99.5**

Material description

No 103 - 108 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R019
		Date Issued	06/09/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	02/08/23
Location	WALLAN	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	07:30

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	175
Field wet density	*t/m³*	1.88	1.87	1.89	1.89	1.87	1.88
Field moisture content	*%*	22.1	20.9	21.6	21.6	21.7	21.3

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.90	1.89	1.91	1.90	1.90	1.92
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	22.0	23.5	24.0	23.5	21.5	21.5

Moisture Variation From Optimum Moisture Content	0.0%	2.5% dry	2.5% dry	2.0% dry	0.5% wet	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})	*%*	**99.5**	**99.0**	**99.0**	**99.5**	**98.5**	**98.0**

Material description

No 109 - 114 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R020
		Date Issued	30/08/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	03/08/23
Location	WALLAN	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:02

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	175
Field wet density	*t/m³*	1.88	1.89	1.86	1.90	1.83	1.87
Field moisture content	*%*	18.7	19.8	20.6	19.6	19.7	20.1

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.86	1.91	1.91	1.91	1.91	1.92
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.5	22.5	23.0	22.0	22.0	22.5

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

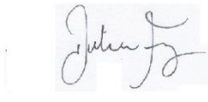
Density Ratio (R_{HD})	*%*	**101.0**	**98.5**	**97.5**	**99.0**	**95.5**	**97.5**

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

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R021
		Date Issued	31/08/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	04/08/23
Location	WALLAN	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:01

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	175
Field wet density	*t/m³*	1.90	1.88	1.90	1.89	1.90	1.90
Field moisture content	*%*	17.7	18.6	20.1	18.5	19.6	18.8

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.91	1.91	1.92	1.92	1.92
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	20.0	21.0	22.5	21.0	21.5	21.0

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.5% dry	2.5% 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})	*%*	**99.0**	**98.5**	**99.0**	**98.5**	**98.5**	**99.0**

Material description

No 121 - 126 Clay Fill

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

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	23319
		Report No	23319/R022
		Date Issued	31/08/23
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AC
Project	NEWBRIDGE - STAGE 13	*Date tested*	07/08/23
Location	WALLAN	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:59

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	175
Field wet density	*t/m³*	1.89	1.88	1.90	1.89	1.88	1.88
Field moisture content	*%*	22.6	23.3	23.0	23.6	24.8	22.3

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.88	1.93	1.93	1.86	1.91
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	25.5	25.5	25.5	25.5	27.5	24.0

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.5% dry	2.0% dry	2.5% dry	1.5% 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})	*%*	**99.0**	**100.0**	**98.0**	**98.5**	**101.0**	**98.5**

Material description

No 127 - 132 Clay Fill

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

Approved Signatory : Justin Fry