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

26th February 2021

Our Reference: 19770:NB896

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
ARMSTRONG – STAGES 46C & 46D (MOUNT DUNEED)

Please find attached our Report No's 19770/R013 to 19770/R022 which relate to the field density testing that was conducted within the filled allotments at the above subdivision. The level 1 inspections and associated field density testing commenced in December 2019 and was completed in September 2020.

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).

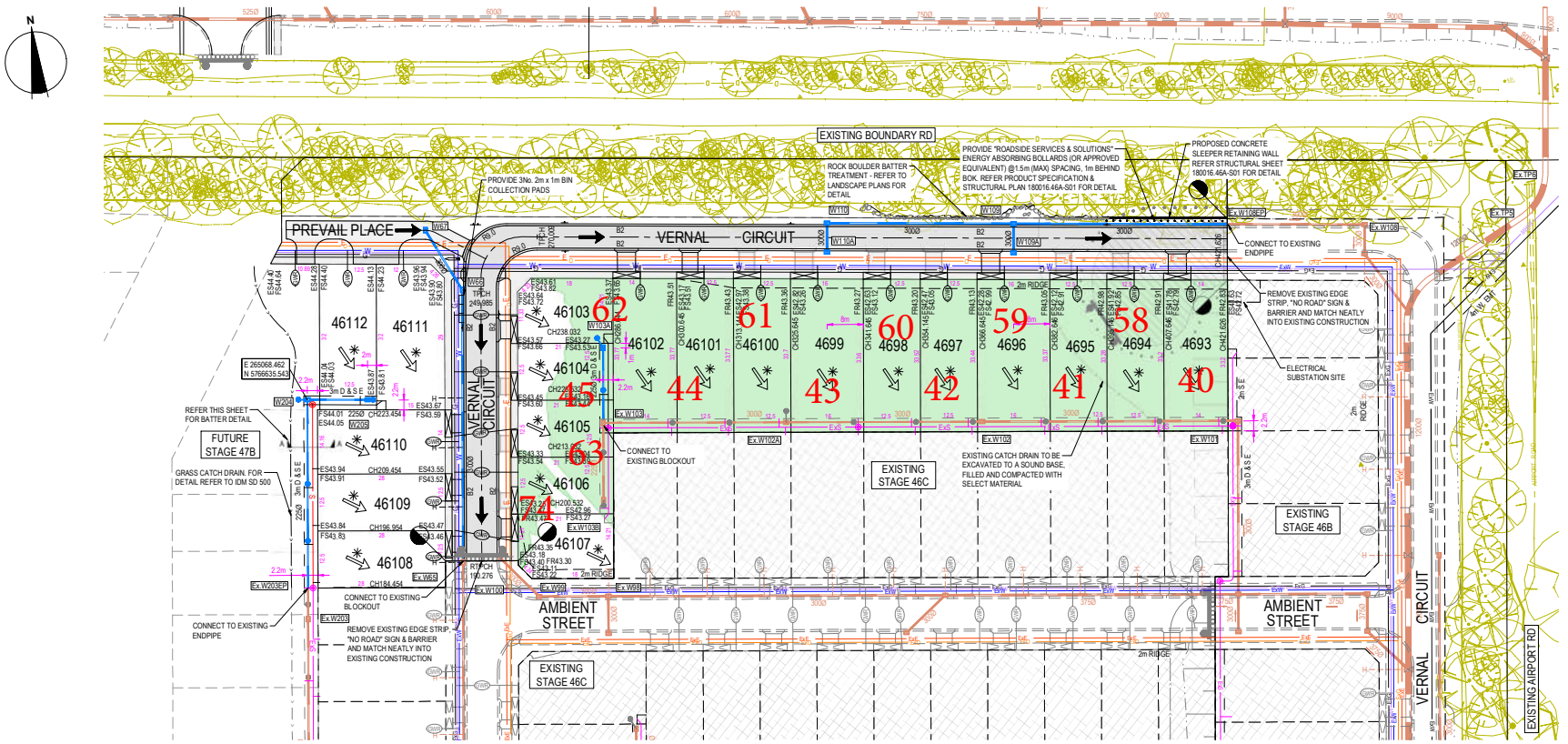
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

FIGURE 1 (1 of 2)



1:500 10 5 0 10 20 A1
1:1000 A3

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

LEGEND - LAYOUT PLAN

- STORMWATER DRAIN, PIT & PROPERTY INLET
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- SERVICE CONDUITS
- TACTILE PAVERS
- EXISTING ELECTRICITY (UNDERGROUND)
- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
- EXISTING OPTIC FIBRE
- EXISTING TELSTRA
- EXISTING WATER
- EXISTING RECYCLED WATER
- EXISTING STORMWATER DRAIN
- EXISTING SEWER
- EXISTING HOUSE DRAIN
- EXISTING SWALE DRAIN
- EXISTING SURFACE LEVEL
- FINISHED BUILDING LINE LEVEL
- FINISHED RIDGE LINE LEVEL
- TOP OF RETAINING WALL
- BOTTOM OF RETAINING WALL
- RETAINING WALL
- BUILDING ENVELOPE
- PAVEMENT TREATMENT
- STRUCTURAL FILL > 200mm DEEP
- EX. STRUCTURAL FILL > 200mm DEEP
- DIRECTION OF FALL
- OVERLAND 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
- EXISTING TREE TO BE REMOVED
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- PROPOSED DRIVEWAY

NOTES:

1. ALL VEHICLE AND PRAM CROSSING LAYBACKS, TO BE MINIMUM OF 1.0m FROM PITS.
2. ALL PRAM CROSSINGS TO BE A MINIMUM 2.0m FROM VEHICLE CROSSINGS.
3. ALL PRAM CROSSINGS TO BE DDA COMPLIANT.
4. VEHICLE EXCLUSION MEASURES BETWEEN ROAD RESERVE AND RESERVE TO FORM PART OF LANDSCAPE WORKS.
5. THE USE OF DIRECTIONAL AND HAZARD TACTILE PAVERS MUST ACCORD WITH SECTION 2.2.3.1 OF AS/NZS 1428.4:2002
6. SEWER MAINTENANCE HOLE CONVERTER SLAB OR CONE, TO BE ROTATED TO ENSURE COVER POSITION IS CENTRALLY LOCATED WITHIN FOOTPATH
7. CHAINAGES FOR SETOUT OF PROPERTY INLET POINTS, SERVICING FUTURE LOTS, ARE MEASURED FROM THE DOWNSTREAM PIT.
8. CONTRACTOR TO LOCATE ALL EXISTING ASSETS PRIOR TO COMMENCEMENT OF WORKS. ANY DAMAGE TO EXISTING ASSETS TO BE RECTIFIED AT CONTRACTORS EXPENSE.
9. CONTRACTOR TO VERIFY DEPTH OF EXISTING SERVICES, PRIOR TO COMMENCEMENT OF CONSTRUCTION
10. CROSSOVERS FOR LOTS WITH FRONTAGES 12.5m OR LESS ARE TO BE MAX 3.5m WIDTH - REFER SHEET R700 FOR DETAILS.

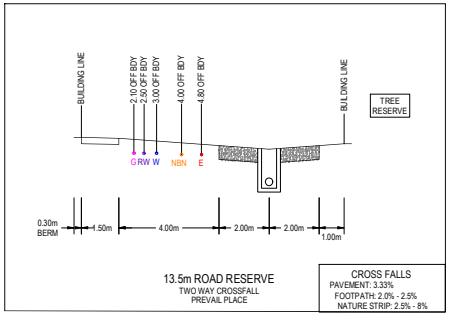
SERVICES OFFSET SCHEDULE

ROAD NAME	GAS		RECYCLED WATER		POTABLE WATER		OPTIC FIBRE		ELECTRICITY		PUBLIC LIGHTING	
	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET
VERNAL CIRCUIT (CH190.276 - CH249.985)	W	2.10	W	2.50	W	3.00	E	1.80	E	2.60	E	1.00*
VERNAL CIRCUIT (CH270.009 - CH421.626)	S	2.10	S	2.50	S	3.00	S	4.00	S	4.80	S	1.00*
PREVAIL PLACE	S	2.10	S	2.50	S	3.00	S	4.00	S	4.80	S	1.00*

1. * DENOTES OFFSET FROM BACK OF KERB.

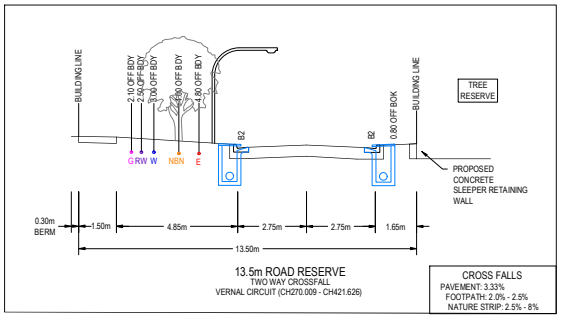
WARNING
BEWARE OF UNDERGROUND & OVERHEAD SERVICES
The locations of underground & overhead services are approximate only & their exact position should be proven on site. No guarantee is given that all existing services are shown. Locate all underground services before commencement of works
DIAL 1100 BEFORE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

Approximate field density test location



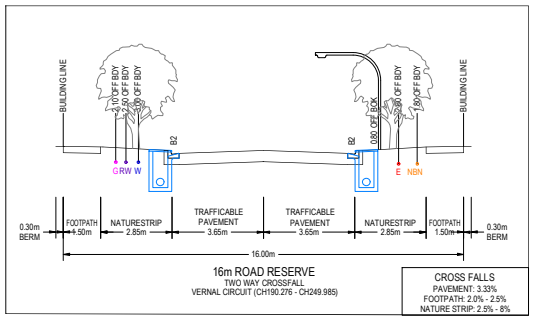
13.5m ROAD RESERVE
TWO WAY CROSSFALL
PREVAIL PLACE

CROSS FALLS
PAVEMENT: 3.33%
FOOTPATH: 2.0% - 2.5%
NATURE STRIP: 2.5% - 8%



13.5m ROAD RESERVE
TWO WAY CROSSFALL
VERNAL CIRCUIT (CH270.009 - CH421.626)

CROSS FALLS
PAVEMENT: 3.33%
FOOTPATH: 2.0% - 2.5%
NATURE STRIP: 2.5% - 8%



16m ROAD RESERVE
TWO WAY CROSSFALL
VERNAL CIRCUIT (CH190.276 - CH249.985)

CROSS FALLS
PAVEMENT: 3.33%
FOOTPATH: 2.0% - 2.5%
NATURE STRIP: 2.5% - 8%

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	19/08/20	CONSTRUCTION ISSUE	K.MCKELVIE	M.TROUNCE	T.PALIOS
A	26/06/20	ISSUED FOR APPROVAL	K.MCKELVIE	M.TROUNCE	T.PALIOS

CLIENT: villawood properties — Communities Designed for Living

creo CONSULTANTS
Level 7, 176 Wellington Parade
East Melbourne, VIC, Australia 3002

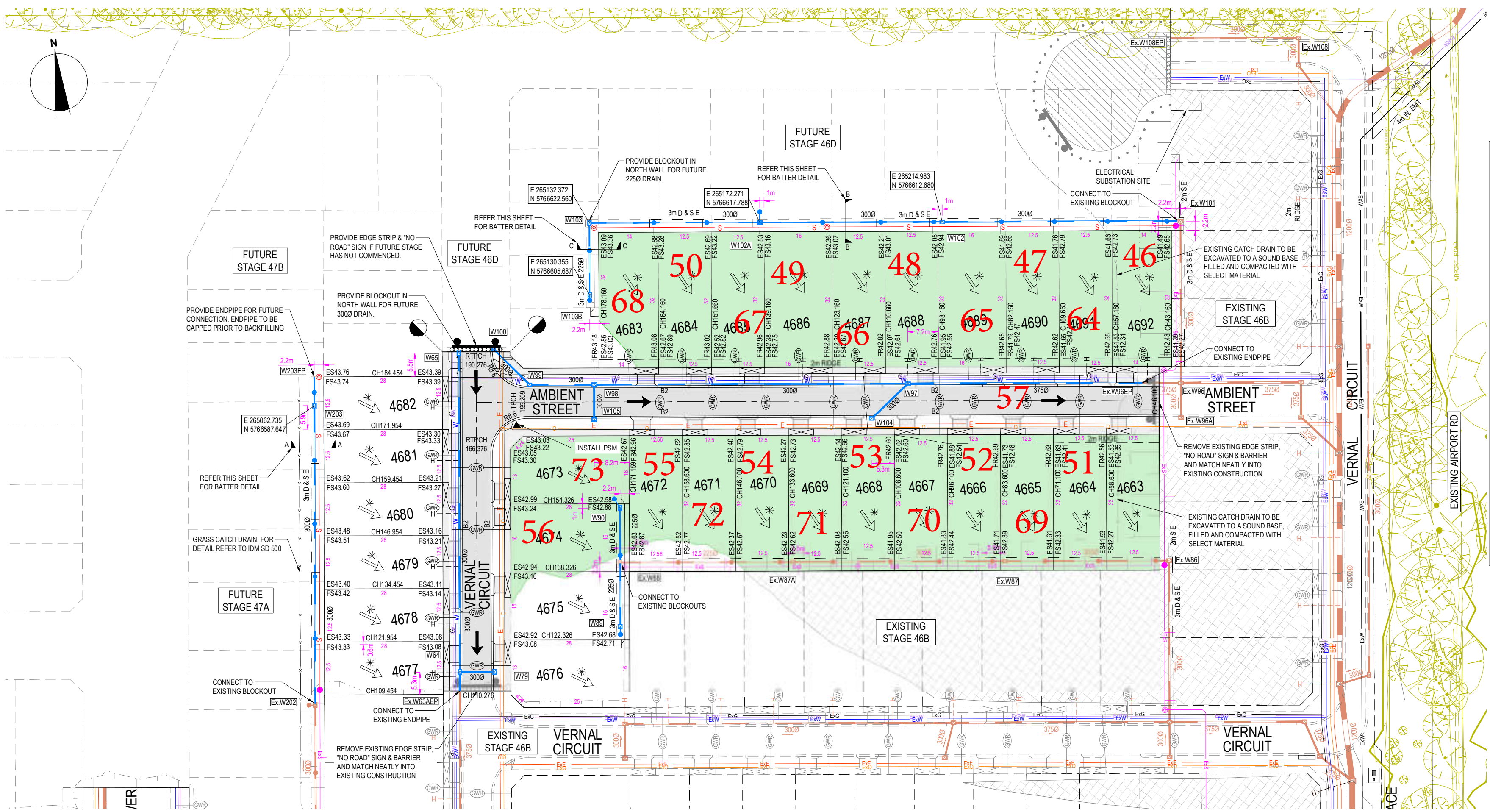
PROJECT: ARMSTRONG

DRAWING TITLE: ARMSTRONG - STAGE 46D
LAYOUT PLAN & TYPICAL SECTIONS

STATUS: ISSUED FOR CONSTRUCTION

SCALE AT A1	DRAWN	DESIGNED
1:500 @ A1	K.MCKELVIE	K.MCKELVIE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JUNE 2020
PROJECT No.	DRAWING No.	REVISION
180016.46D	R200	0

FIGURE 1 (2 of 2)



CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

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- HOUSE DRAIN
- SERVICE CONDUITS
- TACTILE PAVERS
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- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
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- EXISTING TELSTRA
- EXISTING WATER
- EXISTING RECYCLED WATER
- EXISTING STORMWATER DRAIN
- EXISTING SEWER
- EXISTING HOUSE DRAIN
- EXISTING SWALE DRAIN
- ES141.34 EXISTING SURFACE LEVEL
- FS140.35 FINISHED BUILDING LINE LEVEL
- FR157.40 FINISHED RIDGE LINE LEVEL
- TW159.30 TOP OF RETAINING WALL
- BW159.30 BOTTOM OF RETAINING WALL
- RETAINING WALL
- BUILDING ENVELOPE
- PAVEMENT TREATMENT
- STRUCTURAL FILL > 200mm DEEP
- EX. STRUCTURAL FILL > 200mm DEEP
- DIRECTION OF FALL
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DIAL 1100 BEFORE YOU DIG
www.1100.com.au

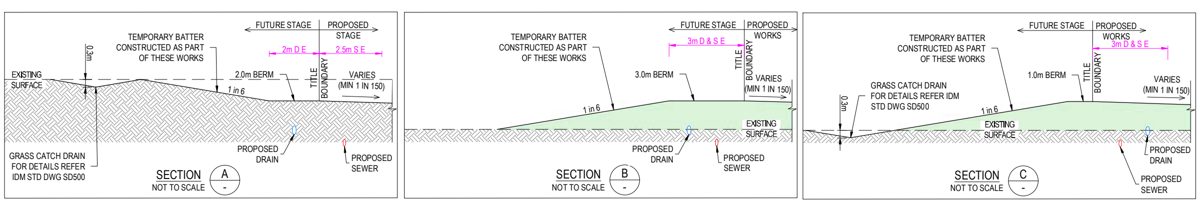
SERVICES OFFSET SCHEDULE

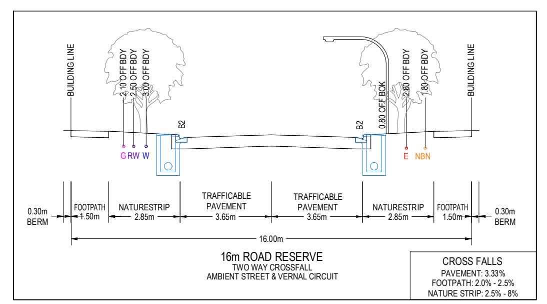
ROAD NAME	GAS		RECYCLED WATER		POTABLE WATER		OPTIC FIBRE		ELECTRICITY		PUBLIC LIGHTING	
	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET
VERNAL CIRCUIT (CH109.454 - CH190.276)	W	2.10	W	2.50	W	3.00	E	1.80	E	2.60	E	1.00*
AMBIENT STREET (CH46.100 - CH195.209)	N	2.10	N	2.50	N	3.00	S	1.80	S	2.60	S	1.00*

1. * DENOTES OFFSET FROM BACK OF KERB.

1:500 10 5 0 10 20 A1
1:1000 A3

Approximate field density test location





REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
0	19/08/20	CONSTRUCTION ISSUE	K.MCKELVIE	M.TROUNCE	T.PALIOS
A	19/06/20	ISSUED FOR APPROVAL	K.MCKELVIE	M.TROUNCE	T.PALIOS

CLIENT: villawood properties — Communities Designed for Living

creo CONSULTANTS
Level 7, 176 Wellington Parade
East Melbourne, VIC, Australia 3002

PROJECT: ARMSTRONG

DRAWING TITLE: **ARMSTRONG - STAGE 46C LAYOUT PLAN & TYPICAL SECTION**

STATUS: **ISSUED FOR CONSTRUCTION**

SCALE AT A1	DRAWN	DESIGNED
1:500 @ A1	K.MCKELVIE	K.MCKELVIE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	JUNE 2020
PROJECT No.	DRAWING No.	REVISION
180016.46C	R200	0

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	19770
		Report No	19770/R013
		Date Issued	11/09/2020
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BGG
Project	ARMSTRONG - STAGE 46	*Date tested*	14/08/20
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:32

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**40**	**41**	**42**	**-**	**-**	**-**
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/m³*	1.97	1.97	1.97	-	-	-
Field moisture content	*%*	25.2	24.1	26.3	-	-	-

Test procedure AS 1289.5.7.1

Test No		40	41	42	-	-	-
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/m³*	2.00	2.00	2.00	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.0	21.5	24.0	-	-	-

Moisture Variation From Optimum Moisture Content		2.0% wet	2.5% wet	2.5% wet	-	-	-

Density Ratio (R_{HD})	*%*	**98.5**	**98.5**	**98.5**	**-**	**-**	**-**

Material description

No 40 - 42 Clay Fill

AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	19770
		Report No	19770/R014
		Date Issued	03/09/2020
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BGG
Project	ARMSTRONG - STAGE 46	*Date tested*	14/08/20
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 12:12

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**43**	**44**	**45**	**-**	**-**	**-**
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/m³*	1.94	1.94	1.94	-	-	-
Field moisture content	*%*	16.9	15.0	18.5	-	-	-

Test procedure AS 1289.5.7.1

Test No		43	44	45	-	-	-
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/m³*	1.99	1.99	1.99	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	19.5	17.5	21.0	-	-	-

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

Density Ratio (R_{HD})	*%*	**97.5**	**97.5**	**97.5**	**-**	**-**	**-**

Material description

No 43 - 45 Clay Fill

AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	19770
		Report No	19770/R015
		Date Issued	03/09/2020
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BGG
Project	ARMSTRONG - STAGE 46	*Date tested*	15/08/20
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 12:15

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**46**	**47**	**48**	**-**	**-**	**-**
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/m³*	1.94	1.94	1.94	-	-	-
Field moisture content	*%*	21.4	21.0	16.4	-	-	-

Test procedure AS 1289.5.7.1

Test No		46	47	48	-	-	-
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/m³*	1.99	2.00	1.99	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	19.0	18.5	19.0	-	-	-

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

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

Material description

No 46 - 48 Clay Fill

AVRLOT HILF V1.10 MAR 13

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	19770
		Report No	19770/R016
		Date Issued	03/09/2020
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BGG
Project	ARMSTRONG - STAGE 46	*Date tested*	17/08/20
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 12:57

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**49**	**50**	**51**	**-**	**-**	**-**
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/m³*	1.89	1.91	1.89	-	-	-
Field moisture content	*%*	17.6	16.5	19.2	-	-	-

Test procedure AS 1289.5.7.1

Test No		49	50	51	-	-	-
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/m³*	1.96	1.96	1.96	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	20.0	19.0	19.0	-	-	-

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

Density Ratio (R_{HD})	*%*	**96.5**	**97.5**	**96.5**	**-**	**-**	**-**

Material description

No 49 - 51 Clay Fill

AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	19770
		Report No	19770/R017
		Date Issued	27/08/2020
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BGG
Project	ARMSTRONG - STAGE 46	*Date tested*	18/08/20
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:41

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**52**	**53**	**54**	**-**	**-**	**-**
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/m³*	1.94	1.97	1.97	-	-	-
Field moisture content	*%*	21.0	20.6	20.3	-	-	-

Test procedure AS 1289.5.7.1

Test No		52	53	54	-	-	-
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/m³*	2.04	1.99	1.98	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.0	21.5	22.0	-	-	-

Moisture Variation From Optimum Moisture Content		0.0%	1.0% dry	1.5% dry	-	-	-

Density Ratio (R_{HD})	*%*	**95.0**	**99.5**	**99.5**	**-**	**-**	**-**

Material description

No 52 - 54 Clay Fill

AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	19770
		Report No	19770/R018
		Date Issued	27/08/2020
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BGG
Project	ARMSTRONG - STAGE 46	*Date tested*	20/08/20
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:09

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**55**	**56**	**57**	**-**	**-**	**-**
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/m³*	2.02	2.02	2.03	-	-	-
Field moisture content	*%*	17.2	18.6	19.0	-	-	-

Test procedure AS 1289.5.7.1

Test No		55	56	57	-	-	-
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/m³*	2.05	2.03	2.07	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	18.5	18.5	19.5	-	-	-

Moisture Variation From Optimum Moisture Content		1.5% dry	0.0%	0.5% dry	-	-	-

Density Ratio (R_{HD})	*%*	**98.5**	**99.0**	**98.0**	**-**	**-**	**-**

Material description

No 55 - 57 Clay Fill

AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	19770
		Report No	19770/R019
		Date Issued	03/09/2020
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BGG
Project	ARMSTRONG - STAGE 46	*Date tested*	20/08/20
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:55

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**55**	**56**	**57**	**-**	**-**	**-**
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/m³*	2.02	2.09	2.04	-	-	-
Field moisture content	*%*	17.8	19.0	19.9	-	-	-

Test procedure AS 1289.5.7.1

Test No		55	56	57	-	-	-
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/m³*	2.12	2.12	2.12	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	20.5	21.5	22.5	-	-	-

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

Density Ratio (R_{HD})	*%*	**95.5**	**98.5**	**96.0**	**-**	**-**	**-**

Material description

No 55 - 57 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	19770
		Report No	19770/R020
		Date Issued	03/09/2020
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BGG
Project	ARMSTRONG - STAGE 46	*Date tested*	21/08/20
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:19

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**61**	**62**	**63**	**-**	**-**	**-**
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/m³*	1.98	1.98	2.01	-	-	-
Field moisture content	*%*	27.0	30.0	26.4	-	-	-

Test procedure AS 1289.5.7.1

Test No		61	62	63	-	-	-
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/m³*	2.01	2.02	2.05	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	29.5	32.5	29.0	-	-	-

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

Density Ratio (R_{HD})	*%*	**98.5**	**98.0**	**98.0**	**-**	**-**	**-**

Material description

No 61 - 63 Clay Fill

AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	19770
		Report No	19770/R021
		Date Issued	26/01/2021
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BGG
Project	ARMSTRONG - STAGE 46	*Date tested*	09/09/20
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:45

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**64**	**65**	**66**	**67**	**68**	**69**
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*	1.87	1.88	1.87	1.87	1.91	1.95
Field moisture content	*%*	23.1	20.7	24.8	24.6	20.8	23.5

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	19.0
Percent of oversize material	*wet*	0	0	0	0	0	0
Peak Converted Wet Density	*t/m³*	1.91	1.95	1.96	1.90	2.00	2.05
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	25.5	23.0	27.5	26.5	23.5	26.0

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

Density Ratio (R_{HD})	*%*	**98.0**	**96.0**	**95.5**	**98.5**	**95.5**	**95.0**

Material description

No 64 - 69 Clay Fill

AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	19770
		Report No	19770/R022
		Date Issued	26/02/2021
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BGG
Project	ARMSTRONG - STAGE 46	*Date tested*	09/09/20
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 14:49

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**70**	**71**	**72**	**73**	**74**	**-**
Location		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/m³*	1.90	1.92	1.89	1.90	1.88	-
Field moisture content	*%*	19.0	20.7	16.9	15.2	14.8	-

Test procedure AS 1289.5.7.1

Test No		70	71	72	73	74	-
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/m³*	2.00	2.01	1.97	1.97	1.97	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	21.5	22.5	19.5	17.5	17.5	-

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

Density Ratio (R_{HD})	*%*	**95.5**	**95.5**	**96.0**	**96.5**	**95.5**	**-**

Material description

No 70 - 74 Clay Fill

AVRLOT HILF V1.10 MAR 13

NATA

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.
Accredited for compliance with ISO/IEC 17025 - Testing

Accreditation No 9909

Approved Signatory : Justin Fry