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

1st July 2019

Our Reference: 16019:NB516 Rev.1

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
ARMSTRONG – PRECINCT 10 (MOUNT DUNEED)

Please find attached our Report No's 16019/R001 to 16019/R025 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 January 2016 and was completed in June 2019.

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).

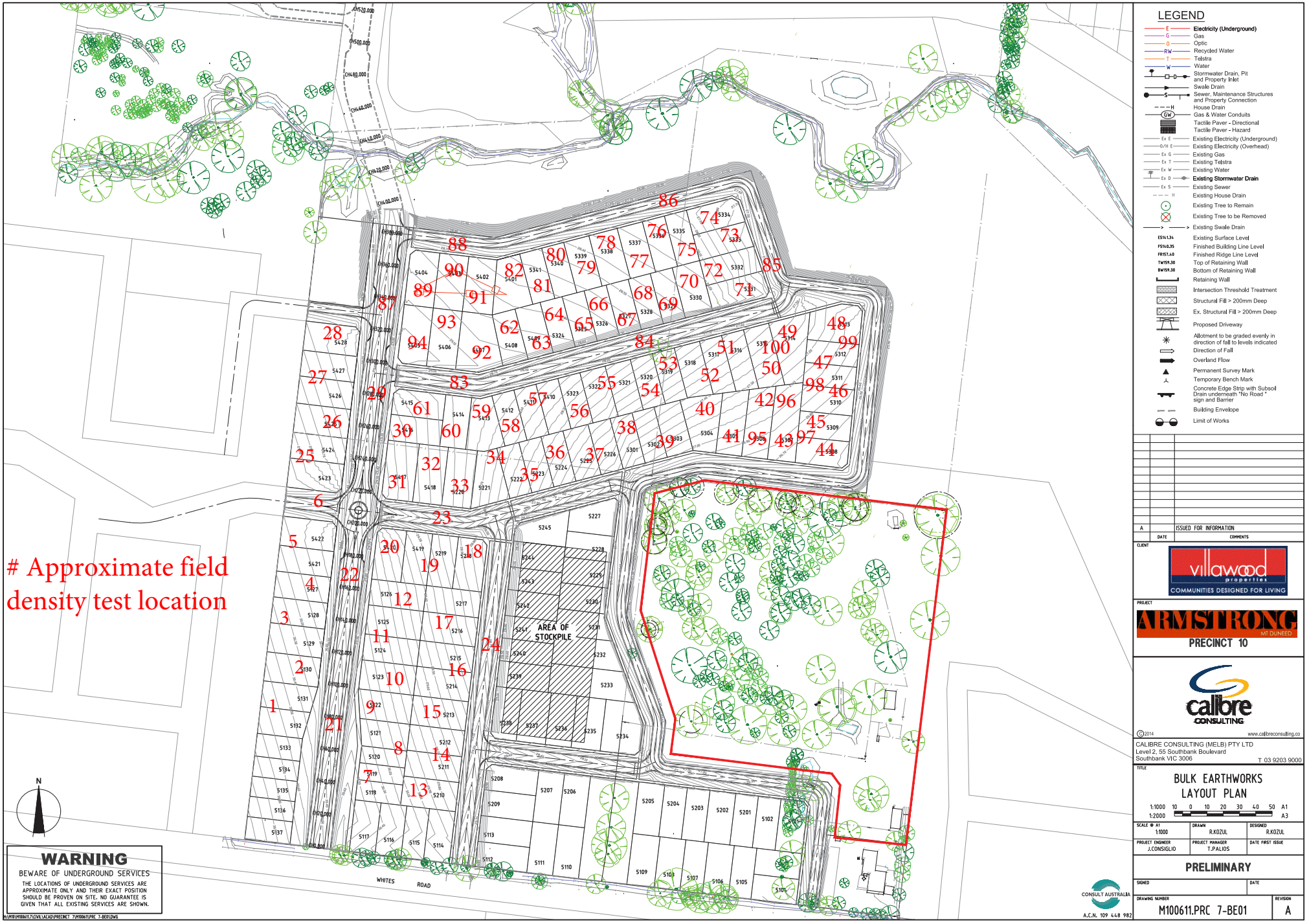
We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

FIGURE 1


Approximate field density test location
AREA OF STOCKPILE
WHITES ROAD
N
WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.
LEGEND
Electricity (Underground)
Gas
Optic
Recycled Water
Telstra
Water
Stormwater Drain, Pit and Property Inlet
Swale Drain
Sewer, Maintenance Structures and Property Connection
House Drain
Gas & Water Conduits
Tactile Paver - Directional
Tactile Paver - Hazard
Existing Electricity (Underground)
Existing Electricity (Overhead)
Existing Gas
Existing Telstra
Existing Water
Existing Stormwater Drain
Existing Sewer
Existing House Drain
Existing Tree to Remain
Existing Tree to be Removed
Existing Swale Drain
Existing Surface Level
Finished Building Line Level
Finished Ridge Line Level
Top of Retaining Wall
Bottom of Retaining Wall
Retaining Wall
Intersection Threshold Treatment
Structural Fill > 200mm Deep
Ex. Structural Fill > 200mm Deep
Proposed Driveway
Allotment to be graded evenly in direction of fall to levels indicated
Direction of Fall
Overland Flow
Permanent Survey Mark
Temporary Bench Mark
Concrete Edge Strip with Subsoil Drain underneath "No Road" sign and Barrier
Building Envelope
Limit of Works
A ISSUED FOR INFORMATION
DATE COMMENTS
CLIENT
villawood properties
COMMUNITIES DESIGNED FOR LIVING
PROJECT
ARMSTRONG MT DUNEED
PRECINCT 10
calibre CONSULTING
©2014 www.calibreconsulting.co
CALIBRE CONSULTING (MELB) PTY LTD
Level 2, 55 Southbank Boulevard
Southbank VIC 3006
T 03 9203 9000
TITLE
BULK EARTHWORKS LAYOUT PLAN
1:1000 10 0 10 20 30 40 50 A1
1:2000 A3
SCALE @ A1 1:1000
DRAWN R.KOZUL
DESIGNED R.KOZUL
PROJECT ENGINEER J.CONSIGLIO
PROJECT MANAGER T.PALIOS
DATE FIRST ISSUE
PRELIMINARY
SIGNED
DATE
DRAWING NUMBER M100611.PRC 7-BE01
REVISION A
CONSULT AUSTRALIA
A.C.N. 109 448 982

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R001
		Date Issued	22/01/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	19/01/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:33

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**1**	**2**	**3**	**4**	**5**	**6**
		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	1.79	1.86	1.87	1.76	1.86
Field moisture content	*%*	17.2	19.2	18.8	20.6	20.1	20.9

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*	1.85	1.86	1.87	1.86	1.84	1.88
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	19.5	21.5	20.5	23.0	22.5	23.0

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 Ratio (R_{HD})	*%*	**100.0**	**96.0**	**99.0**	**100.5**	**96.0**	**99.0**

Material description

No 1 - 6 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R002
		Date Issued	21/01/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	Date tested	19/01/16
Location	MOUNT DUNEED	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:29

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**7**	**8**	**9**	**-**	**-**	**-**
		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*	1.90	1.93	1.90	-	-	-
Field moisture content	*%*	20.4	21.4	21.1	-	-	-

Test procedure AS 1289.5.7.1

Test No		7	8	9	-	-	-
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*	1.92	1.90	1.92	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	1.91	-	-	-	-
Optimum Moisture Content	*%*	22.0	23.0	23.0	-	-	-

Moisture Variation From Optimum Moisture Content		1.5% dry	2.0% dry	2.0% dry	-	-	-

Density Ratio (R_{HD})	*%*	**99.0**	**101.0**	**99.0**	**-**	**-**	**-**

Material description

No 7 - 9 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R003
		Date Issued	22/01/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	20/01/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:06

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**10**	**11**	**12**	**-**	**-**	**-**
		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*	1.91	1.89	1.97	-	-	-
Field moisture content	*%*	13.1	16.5	17.8	-	-	-

Test procedure AS 1289.5.7.1

Test No		10	11	12	-	-	-
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*	1.95	1.95	1.99	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	15.0	17.5	20.0	-	-	-

Moisture Variation From Optimum Moisture Content		2.0% dry	1.0% dry	2.0% dry	-	-	-

Density Ratio (R_{HD})	***%***	**98.0**	**96.5**	**99.0**	**-**	**-**	**-**

Material description

No 10 - 12 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R004
		Date Issued	28/01/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	21/01/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:45

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**13**	**14**	**15**	**16**	**17**	**18**
		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*	1.94	1.94	1.94	1.94	1.98	1.97
Field moisture content	*%*	16.5	17.0	14.3	14.2	15.2	13.1

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*	1.97	1.99	1.96	1.97	1.97	1.96
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	19.0	19.0	16.0	16.5	17.5	15.0

Moisture Variation From Optimum Moisture Content		2.5% dry	2.0% dry	2.0% dry	2.5% dry	2.5% dry	2.0% dry
Density Ratio (R_{HD})	*%*	**98.5**	**97.5**	**99.0**	**98.5**	**100.5**	**100.0**

Material description

No 13 - 18 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R005
		Date Issued	29/01/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	27/01/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:01

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**19**	**20**	**21**	**-**	**-**	**-**
		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	1.89	1.98	-	-	-
Field moisture content	*%*	12.5	13.1	12.2	-	-	-

Test procedure AS 1289.5.7.1

Test No		19	20	21	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	3	1	7	-	-	-
Peak Converted Wet Density	*t/m³*	2.00	1.96	2.05	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	2.01	1.99	2.07	-	-	-
Optimum Moisture Content	*%*	14.0	15.5	14.0	-	-	-

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

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

Material description

No 19 - 21 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R006
		Date Issued	08/02/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	01/02/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:18

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**22**	**23**	**24**	**-**	**-**	**-**
		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*	1.90	2.01	2.06	-	-	-
Field moisture content	*%*	17.2	12.9	17.4	-	-	-

Test procedure AS 1289.5.7.1

Test No		22	23	24	-	-	-
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	2.03	2.07	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	20.0	15.5	18.0	-	-	-

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	0.5% dry	-	-	-

Density Ratio (R_{HD})	***%***	**95.5**	**99.0**	**99.5**	**-**	**-**	**-**

Material description

No 22 - 24 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R007
		Date Issued	09/02/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	02/02/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:37

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**25**	**26**	**27**	**28**	**29**	**-**
		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*	1.98	2.00	1.97	1.97	2.01	-
Field moisture content	*%*	12.5	11.8	13.1	12.3	13.2	-

Test procedure AS 1289.5.7.1

Test No		25	26	27	28	29	-
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	2.02	2.03	2.02	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	15.0	14.0	14.5	14.0	15.0	-

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

Density Ratio (R_{HD})	*%*	**99.5**	**99.5**	**97.5**	**97.5**	**99.0**	**-**

Material description

No 25 - 29 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R008
		Date Issued	09/02/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	03/02/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:23

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**30**	**31**	**32**	**-**	**-**	**-**
		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*	2.00	1.99	2.06	-	-	-
Field moisture content	*%*	18.3	17.1	18.9	-	-	-

Test procedure AS 1289.5.7.1

Test No		30	31	32	-	-	-
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*	2.03	2.00	2.05	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	19.0	19.0	19.0	-	-	-

Moisture Variation From Optimum Moisture Content		1.0% dry	2.0% dry	0.0%	-	-	-

Density Ratio (R_{HD})	*%*	**98.5**	**99.5**	**100.5**	**-**	**-**	**-**

Material description

No 30 - 32 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R009
		Date Issued	10/02/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	Date tested	04/02/16
Location	MOUNT DUNEED	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:20

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**33**	**34**	**35**	**36**	**37**	**38**
		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*	2.00	1.96	2.02	1.98	1.98	1.98
Field moisture content	*%*	12.8	13.7	13.2	13.3	12.9	13.4

Test procedure AS 1289.5.7.1

Test No		33	34	35	36	37	38
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	1	0	0
Peak Converted Wet Density	*t/m³*	1.98	1.95	2.05	1.99	1.98	1.99
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	2.01	-	-
Optimum Moisture Content	*%*	15.0	16.0	15.5	15.0	15.0	15.5

Moisture Variation From Optimum Moisture Content		2.5% dry	2.5% dry	2.0% dry	2.0% dry	2.0% dry	2.0% dry
Density Ratio (R_{HD})	*%*	**100.5**	**100.5**	**98.5**	**99.0**	**100.0**	**99.5**

Material description

No 33 - 38 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R010
		Date Issued	17/02/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	08/02/16
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		**39**	**40**	**41**	**-**	**-**	**-**
		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*	1.99	1.95	1.98	-	-	-
Field moisture content	*%*	11.7	11.3	6.7	-	-	-

Test procedure AS 1289.5.7.1

Test No		39	40	41	-	-	-
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	1.97	2.01	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	14.0	13.0	8.5	-	-	-

Moisture Variation From Optimum Moisture Content		2.0% dry	1.5% dry	1.5% dry	-	-	-

Density Ratio (R_{HD})	***%***	**100.0**	**99.0**	**98.5**	**-**	**-**	**-**

Material description

No 39 - 41 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R011
		Date Issued	17/02/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	09/02/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	08:51

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**42**	**43**	**44**	**-**	**-**	**-**
		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	1.96	2.02	-	-	-
Field moisture content	*%*	17.2	15.2	13.2	-	-	-

Test procedure AS 1289.5.7.1

Test No		42	43	44	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	1	-	-	-
Peak Converted Wet Density	*t/m³*	2.02	1.97	1.97	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	1.99	-	-	-
Optimum Moisture Content	*%*	18.5	18.0	15.5	-	-	-

Moisture Variation From Optimum Moisture Content		1.5% dry	2.5% dry	2.5% dry	-	-	-

Density Ratio (R_{HD})	***%***	**98.0**	**99.5**	**102.0**	**-**	**-**	**-**

Material description

No 42 - 44 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R012
		Date Issued	17/02/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	11/02/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	09:46

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**45**	**46**	**47**	**48**	**49**	**50**
		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*	1.93	1.92	1.89	1.94	1.95	1.94
Field moisture content	*%*	11.1	19.2	17.8	13.8	14.4	14.3

Test procedure AS 1289.5.7.1

Test No		45	46	47	48	49	50
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*	1.96	1.95	1.94	1.96	2.00	1.98
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	13.5	21.5	20.0	16.0	16.5	16.5

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 Ratio (R_{HD})	*%*	**98.5**	**98.5**	**98.0**	**99.0**	**97.5**	**98.0**

Material description

No 45 - 50 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R013
		Date Issued	25/02/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	18/02/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:18

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**51**	**52**	**53**	**54**	**55**	**56**
		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					0		
Measurement depth	*mm*	175	175	175	175	175	175
Field wet density	*t/m³*	2.00	1.87	1.95	1.65	1.87	1.79
Field moisture content	*%*	12.8	18.2	16.0	19.6	14.9	16.6

Test procedure AS 1289.5.7.1

Test No		51	52	53	54	55	56
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*	2.03	1.89	1.95	1.67	1.88	1.80
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	15.0	20.5	18.5	21.0	17.0	18.5

Moisture Variation From Optimum Moisture Content		2.5% dry	2.0% dry	2.5% dry	2.0% dry	2.5% dry	2.0% dry
Density Ratio (R_{HD})	*%*	**98.0**	**99.0**	**100.5**	**99.0**	**99.0**	**99.5**

Material description

No 51 - 56 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R014
		Date Issued	12/04/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	16/03/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	09:50

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**57**	**58**	**-**	**-**	**-**	**-**
		REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate depth below FSL							
Measurement depth	*mm*	175	175	-	-	-	-
Field wet density	*t/m³*	1.84	1.83	-	-	-	-
Field moisture content	*%*	10.1	7.7	-	-	-	-

Test procedure AS 1289.5.7.1

Test No		57	58	-	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	-	-	-	-
Percent of oversize material	*wet*	0	0	-	-	-	-
Peak Converted Wet Density	*t/m³*	1.90	1.91	-	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	12.0	10.0	-	-	-	-

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

Density Ratio (R_{HD})	*%*	**97.0**	**96.0**	**-**	**-**	**-**	**-**

Material description

No 57 - 58 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R015
		Date Issued	12/04/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	17/03/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	08:38

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**59**	**60**	**61**	**-**	**-**	**-**
		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*	1.75	1.81	1.77	-	-	-
Field moisture content	*%*	6.4	6.4	12.2	-	-	-

Test procedure AS 1289.5.7.1

Test No		59	60	61	-	-	-
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*	1.83	1.87	1.87	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	8.5	8.0	14.0	-	-	-

Moisture Variation From Optimum Moisture Content		2.0% dry	1.5% dry	1.5% dry	-	-	-

Density Ratio (R_{HD})	***%***	**96.0**	**96.5**	**95.0**	**-**	**-**	**-**

Material description

No 59 - 61 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R016
		Date Issued	18/04/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	11/04/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:45

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**62**	**63**	**64**	**65**	**-**	**-**
		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	-	-
Field wet density	*t/m³*	1.88	1.87	1.94	1.91	-	-
Field moisture content	*%*	9.4	12.8	11.8	11.0	-	-

Test procedure AS 1289.5.7.1

Test No		62	63	64	65	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	*wet*	0	0	0	0	-	-
Peak Converted Wet Density	*t/m³*	1.89	1.91	1.95	1.91	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	11.5	14.5	13.0	13.0	-	-

Moisture Variation From Optimum Moisture Content		2.0% dry	1.5% dry	1.5% dry	2.0% dry	-	-

Density Ratio (R_{HD})	*%*	**99.0**	**98.0**	**99.5**	**100.0**	**-**	**-**

Material description

No 62 - 65 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R017
		Date Issued	18/04/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	11/04/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	15:42

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**66**	**67**	**68**	**69**	**-**	**-**
		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	-	-
Field wet density	*t/m³*	1.78	1.84	1.80	1.84	-	-
Field moisture content	*%*	16.4	16.2	17.0	16.8	-	-

Test procedure AS 1289.5.7.1

Test No		66	67	68	69	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	*wet*	0	0	0	0	-	-
Peak Converted Wet Density	*t/m³*	1.82	1.91	1.85	1.87	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	18.5	18.5	18.5	19.0	-	-

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

Density Ratio (R_{HD})	*%*	**97.5**	**96.5**	**97.5**	**98.0**	**-**	**-**

Material description

No 66 - 69 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R018
		Date Issued	18/04/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	13/04/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	08:39

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**70**	**71**	**72**	**-**	**-**	**-**
		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*	1.91	1.98	1.97	-	-	-
Field moisture content	*%*	22.1	17.8	18.1	-	-	-

Test procedure AS 1289.5.7.1

Test No		70	71	72	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.92	2.07	2.06	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	24.0	18.0	18.5	-	-	-

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

Density Ratio (R_{HD})	***%***	**99.0**	**96.0**	**95.5**	**-**	**-**	**-**

Material description

No 70 - 72 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R019
		Date Issued	27/04/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	14/04/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	00:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**73**	**74**	**75**	**-**	**-**	**-**
		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*	1.87	1.91	1.88	-	-	-
Field moisture content	*%*	10.9	11.8	12.4	-	-	-

Test procedure AS 1289.5.7.1

Test No		73	74	75	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	4	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.93	1.92	1.95	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	1.94	-	-	-	-	-
Optimum Moisture Content	*%*	13.0	14.0	14.5	-	-	-

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

Density Ratio (R_{HD})	*%*	**96.5**	**99.5**	**96.5**	**-**	**-**	**-**

Material description

No 73 - 75 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R020
		Date Issued	07/07/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	NB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	18/04/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	16:09

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**76**	**77**	**78**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1			
Approximate depth below FSL							
Measurement depth	*mm*	175	175	175	-	-	-
Field wet density	*t/m³*	1.87	1.84	1.88	-	-	-
Field moisture content	*%*	19.6	21.5	20.0	-	-	-

Test procedure AS 1289.5.7.1

Test No		76	77	78	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	-	-	-
Percent of oversize material	*wet*	0	0	0	-	-	-
Peak Converted Wet Density	*t/m³*	1.89	1.92	1.90	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	22.0	22.5	22.5	-	-	-

Moisture Variation From Optimum Moisture Content		2.5% dry	1.0% dry	2.5% dry	-	-	-

Density Ratio (R_{HD})	*%*	**99.0**	**96.0**	**98.5**	**-**	**-**	**-**

Material description

No 76 - 78 Clay Fill

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R021
		Date Issued	07/07/16
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	AG
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	Date tested	16/06/16
Location	MOUNT DUNEED	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	12:42

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**79**	**80**	**81**	**82**	**-**	**-**
Location		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	-	-
Field wet density	*t/m³*	1.88	1.95	1.86	1.94	-	-
Field moisture content	*%*	22.6	21.1	21.1	19.7	-	-

Test procedure AS 1289.5.7.1

Test No		79	80	81	82	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	*wet*	1	0	0	0	-	-
Peak Converted Wet Density	*t/m³*	1.88	2.01	1.92	1.97	-	-
Adjusted Peak Converted Wet Density	*t/m³*	1.91	-	-	-	-	-
Optimum Moisture Content	*%*	25.0	21.5	24.0	21.5	-	-

Moisture Variation From Optimum Moisture Content		2.5% dry	0.5% dry	2.5% dry	1.5% dry	-	-

Density Ratio (R_{HD})	*%*	**98.5**	**97.0**	**96.5**	**98.5**	**-**	**-**

Material description

No 79 - 82 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R022
		Date Issued	05/01/17
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	JB
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	15/11/16
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	09:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**83**	**84**	**85**	**86**	**-**	**-**
Location		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	-	-
Field wet density	*t/m³*	2.05	1.84	1.93	1.93	-	-
Field moisture content	*%*	26.0	25.1	20.0	19.9	-	-

Test procedure AS 1289.5.7.1

Test No		83	84	85	86	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	*wet*	0	0	0	0	-	-
Peak Converted Wet Density	*t/m³*	2.12	1.90	1.93	1.94	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	23.5	27.0	22.0	21.5	-	-

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

Density Ratio (R_{HD})	***%***	**96.5**	**96.5**	**99.5**	**99.5**	**-**	**-**

Material description

No 83 - 86 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R023
		Date Issued	31/01/2018
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AG
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	03/11/17
Location	MOUNT DUNEED	*Checked by*	JHF

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

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**87**	**88**	**89**	**90**	**-**	**-**
Location		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	-	-
Field wet density	*t/m³*	1.94	1.94	1.94	1.93	-	-
Field moisture content	*%*	12.7	13.5	13.2	12.9	-	-

Test procedure AS 1289.5.7.1

Test No		87	88	89	90	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	*wet*	14	2	9	10	-	-
Peak Converted Wet Density	*t/m³*	1.91	1.91	1.95	1.91	-	-
Adjusted Peak Converted Wet Density	*t/m³*	1.95	1.96	1.98	1.96	-	-
Optimum Moisture Content	*%*	14.5	16.0	15.5	15.0	-	-

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

Density Ratio (R_{HD})	*%*	**99.5**	**99.0**	**98.0**	**98.5**	**-**	**-**

Material description

No 87 - 90 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R024
		Date Issued	02/01/2018
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	AG
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	03/11/17
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:36

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**91**	**92**	**93**	**94**	**-**	**-**
Location		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	-	-
Field wet density	*t/m³*	1.88	1.94	1.97	1.99	-	-
Field moisture content	*%*	14.2	15.9	13.8	20.1	-	-

Test procedure AS 1289.5.7.1

Test No		91	92	93	94	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	*wet*	4	0	9	8	-	-
Peak Converted Wet Density	*t/m³*	1.87	1.93	1.91	2.02	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	-	1.96	2.05	-	-
Optimum Moisture Content	*%*	17.0	18.0	16.0	22.5	-	-

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

Density Ratio (R_{HD})	*%*	**101.0**	**100.5**	**100.5**	**97.0**	**-**	**-**

Material description

No 91 - 94 Clay Fill

Approved Signatory : Justin Fry

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

		Job No	16019
		Report No	16019/R025
		Date Issued	01/07/2019
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	*Tested by*	BGG
Project	ARMSTRONG, MT DUNEED - PRECINCT 10	*Date tested*	28/06/19
Location	MOUNT DUNEED	*Checked by*	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	15:13

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**95**	**96**	**97**	**98**	**99**	**100**
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*	1.98	1.97	1.98	1.99	1.99	1.98
Field moisture content	*%*	18.3	24.5	22.4	18.4	24.6	24.1

Test procedure AS 1289.5.7.1

Test No		95	96	97	98	99	100
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*	2.08	2.06	2.06	2.09	2.07	2.06
Adjusted Peak Converted Wet Density	*t/m³*	-	-	-	-	-	-
Optimum Moisture Content	*%*	16.0	22.5	20.0	18.0	22.0	21.5

Moisture Variation From Optimum Moisture Content		2.5% wet	2.0% wet	2.5% wet	0.0%	2.5% wet	2.5% wet
Density Ratio (R_{HD})	*%*	**95.5**	**95.5**	**96.0**	**95.0**	**96.0**	**96.0**

Material description

No 95 - 100 Clay Fill

AVRLOT HILF V1.10 MAR 13

Approved Signatory : Justin Fry