



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

29th July 2020

Our Reference: 19604:NB777

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
ALBRIGHT – STAGE 8B (TRUGANINA)

Please find attached our Report No's 19604/R001 to 19604/R004 which relate to the field density testing that was conducted within the filled allotments of the above subdivision. The level 1 inspections and associated field density testing was performed in September 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

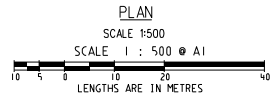
FIGURE 1 (1 of 2)



SHEET INDEX		
SHT No.	VER	DESCRIPTION
1	C	DETAIL & PLAN
2	B	DETAIL & PLAN - 2
3	A	NOTES, SERVICES OFFSETS & LOCALITY PLAN
4	A	INTERSECTION DETAILS
5	A	INTERSECTION DETAILS - 2
6	A	INTERSECTION DETAILS - 3
7	A	INTERSECTION DETAILS - 4
8	B	INTERSECTION DETAILS - 5
9	A	INTERSECTION DETAILS - 6
10	A	INTERSECTION DETAILS - 7
11	A	INTERSECTION DETAILS - 8
12	A	ALCOCK ROAD (NORTH) - LONGITUDINAL SECTIONS
13	A	ALCOCK ROAD (NORTH) - CROSS SECTIONS
14	A	ALCOCK ROAD (NORTH) - CROSS SECTIONS 2
15	A	ALCOCK ROAD (SOUTH) - LONGITUDINAL SECTIONS
16	A	ALCOCK ROAD (SOUTH) - CROSS SECTIONS
17	A	ALCOCK ROAD (SOUTH) - CROSS SECTIONS 2
18	A	ALCOCK ROAD (SOUTH) - CROSS SECTIONS 1
19	A	EVANDALE DRIVE - LONGITUDINAL SECTIONS

SHEET INDEX		
SHT No.	VER	DESCRIPTION
20	A	EVANDALE DRIVE - CROSS SECTIONS
21	A	EVANDALE DRIVE - CROSS SECTIONS 2
22	B	ISHALANA STREET - LONGITUDINAL SECTIONS
23	B	ISHALANA STREET - CROSS SECTIONS
24	A	SCORPIO CRESCENT - LONGITUDINAL SECTIONS & CROSS SECTIONS
25	A	WINDSOR WAY - LONGITUDINAL SECTIONS & CROSS SECTIONS
26	A	PERCY STREET - LONGITUDINAL SECTIONS & CROSS SECTIONS
27	A	NARADA STREET - LONGITUDINAL SECTIONS & CROSS SECTIONS
28	A	FIELDING DRIVE - LONGITUDINAL SECTIONS & CROSS SECTIONS
29	A	DRAINAGE LONGITUDINAL SECTIONS 1
30	A	DRAINAGE LONGITUDINAL SECTIONS 2
31	A	DRAINAGE LONGITUDINAL SECTIONS 3
32	B	DRAINAGE LONGITUDINAL SECTIONS 4
33	A	DRAINAGE LONGITUDINAL SECTIONS 5
34	A	DRAINAGE PIT SCHEDULE
35	A	SIGNAGE & LINE MARKING PLAN
36	B	SIGNAGE & LINE MARKING PLAN - 2

Approximate field density test location



ATTENTION TO CONTRACTOR

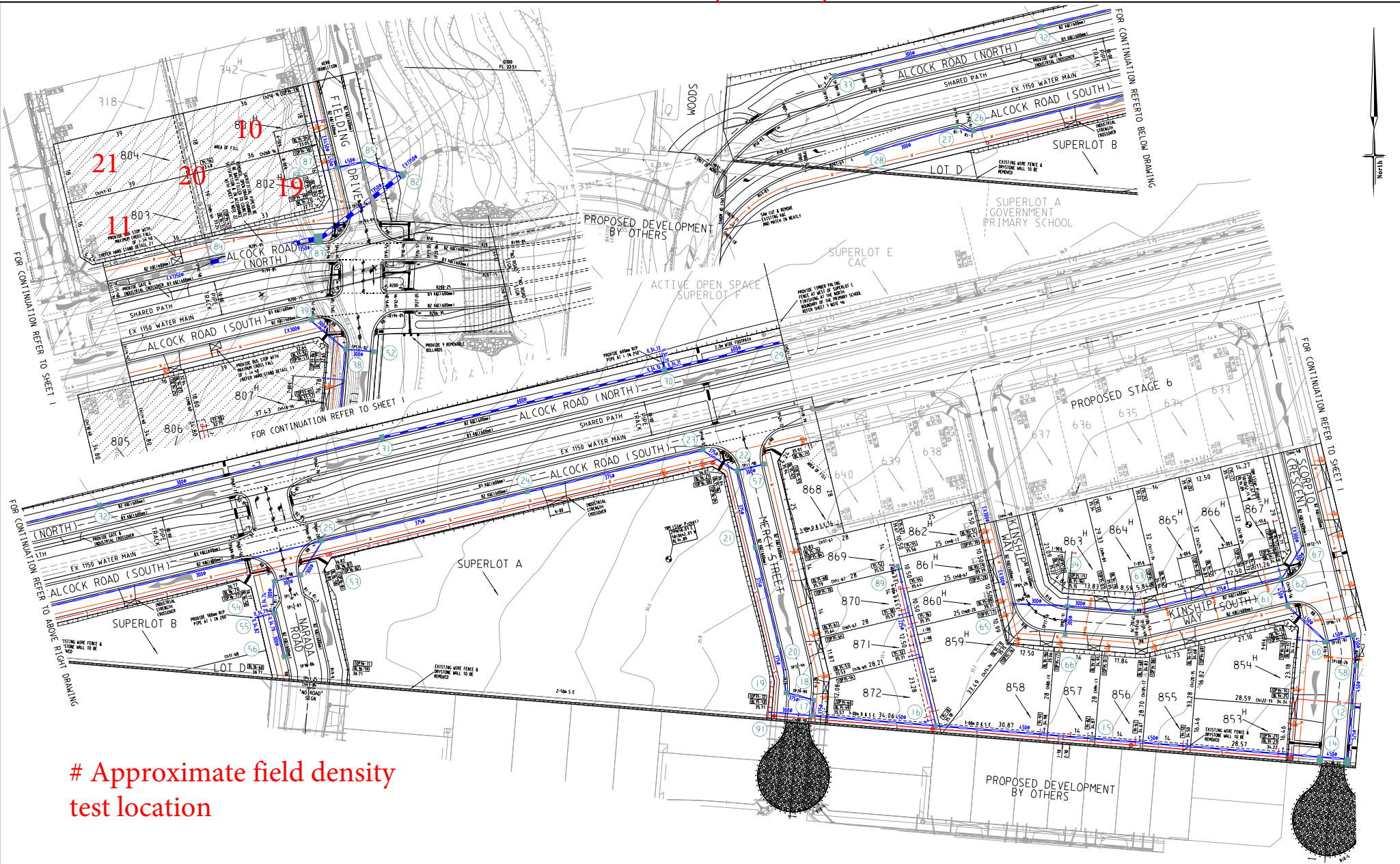
- IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM COORDINATES SHOWN.
- Contractor to ensure that the site is pegged and/or set out checked by the licensed surveyor responsible for certifying the Plan of Subdivision prior to underground infrastructure being installed.
- Where concrete works about a sewer access chamber surround or similar structure, an expansion joint of approved material shall be provided between the two faces.

SYMBOL LEGEND	
Drains	Prop/Exist
Sewer <300	Prop/Exist
Sewer >300	Prop/Exist
Water	Prop/Exist
House Drain	Prop/Exist
Property Inlet	Prop/Exist
Street Sign	Prop/Exist
FSM	Prop/Exist
Retaining Wall	Prop/Exist
Conduits 50mm	Prop/Exist
Conduits 100mm	Prop/Exist
Ex Gas/Elect/Tel	Prop/Exist
TBM	Prop/Exist
Ex/Natural/FS Level	Prop/Exist
FS @ Building Line	Prop/Exist
Top/Toe of Batter	Prop/Exist
Top Ret. Wall Level	Prop/Exist
100yr Flood Level	Prop/Exist
Fill Prop/Ex	Prop/Exist
Cut Prop/Ex	Prop/Exist
> 0.15m depth	Prop/Exist
KERB TRANSITION	Prop/Exist

VER	DATE	REMARKS
C	30/08/19	SHEET INDEX AMENDMENTS
B	23/07/19	SHEET INDEX AMENDMENTS
A	17/06/19	ISSUE FOR CONSTRUCTION

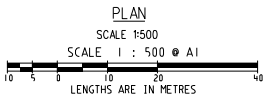
<p>breese pitt dixon pty ltd. land surveyors civil engineers</p>	<p>MELWAY REF. 360-E-111</p> <p>SURVEY BPD</p> <p>DESIGN D, P</p> <p>DRAWN D, P</p> <p>CHECKED</p>	<p>1/19 colo street howthorn east, 3123 telephone 8823 2300 fax no. 8823 2310</p>
	<p>ALBRIGHT ESTATE STAGE 8B</p>	<p>MUNICIPALITY WYNDHAM</p> <p>REFERENCE 9354 E/88</p>
<p>SCALE AS SHOWN DATUM AHD DATE SEP 18</p>	<p>SHEET 1 OF 36</p>	<p>C</p>

FIGURE 1 (2 of 2)



Approximate field density
test location

- ATTENTION TO CONTRACTOR**
1. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM COORDINATES SHOWN.
 2. Contractor to ensure that the site is pegged and/or set out checked by the Licensed surveyor responsible for certifying the Plan of Subdivision prior to underground Infrastructure being Installed.
 3. Where concrete works at a sewer access chamber surround or similar structure, an expansion joint of approved material shall be provided between the two faces.



SYMBOL LEGEND

Prop	Exist
Drains	FS @ Building Line
Sewer <300	Top/Toe of Batter
Sewer >300	Top Ret. Wall Level
Water	100yr Flood Level
House Drain	Fill Prop/Ex
Property Inlet	Cut Prop/Ex
Street Sign	Kerb Transition
FSM	
Retaining Wall	
Conduits >50mm	
Conduits 100mm	
Ex Gas/Elect/Tel	
TBM	

NO.	DATE	REMARKS
B	23/07/19	CROSSOVER AT LOT 858 AMENDED TO EAST
A	17/06/19	ISSUE FOR CONSTRUCTION
VER		

breese pitt dixon pty ltd.
land surveyors civil engineers

1/19 calo street
howthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

**ALBRIGHT ESTATE
STAGE 8B**

MUNICIPALITY
WYNDHAM

REFERENCE
9354 E/88

MELWAY REF. 360-E-11
SURVEY BPD
DESIGN D, P
DRAWN D, P
CHECKED

SCALE AS SHOWN DATUM AHD DATE SEP 18 SHEET 2 OF 36



COMPACTION ASSESSMENT

Job No 19604
 Report No 19604/R001
 Date Issued 25/11/2019

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	SB
Project	ALBRIGHT - ESTATE STAGE 8B	Date tested	12/09/19
Location	TRUGANINA	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	13:30
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	5	6
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m ³	2.00	1.96	1.96	1.95	1.98
Field moisture content	%	23.4	26.6	25.0	25.2	26.4

Test procedure AS 1289.5.7.1

Test No	1	2	3	4	5	6
Compactive effort	Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m ³	2.05	2.00	1.99	2.01	2.04
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	21.0	24.5	22.5	23.0	25.0

Moisture Variation From Optimum Moisture Content	2.5% wet	2.0% wet	2.5% wet	2.0% wet	1.5% wet	1.0% wet
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Density Ratio (R _{HD})	%	97.5	98.0	98.0	97.0	97.0	97.5
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Material description

No 1 - 6 Clay Fill

AVRLOT HILF V1.10 MAR 13



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



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 19604
 Report No 19604/R002
 Date Issued 20/09/2019

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	WS
Project	ALBRIGHT - ESTATE STAGE 8B	Date tested	17/09/19
Location	TRUGANINA	Checked by	JHF

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

Test No	7	8	9	-	-	-
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	1.85	1.91	-	-	-
Field moisture content %	22.8	19.6	23.2	-	-	-

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	1.96	1.94	1.96	-	-	-
Adjusted Peak Converted Wet Density t/m³	-	-	-	-	-	-
Optimum Moisture Content %	21.0	18.0	20.0	-	-	-

Moisture Variation From Optimum Moisture Content	2.0% wet	2.0% wet	2.0% wet	-	-	-
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Density Ratio (R_{HD})	95.5	95.5	97.5	-	-	-
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Material description

No 7 - 9 Clay Fill						
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AVRLOT HILF V1.10 MAR 13



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Accreditation No 9909

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 19604
Report No 19604/R003
Date Issued 26/09/2019

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALBRIGHT - ESTATE STAGE 8B	Date tested	18/09/19
Location	TRUGANINA	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:03
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	10	11	12	13	14	15
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m ³	1.87	1.91	1.92	1.91	1.88
Field moisture content	%	21.0	21.6	22.2	21.1	20.9

Test procedure AS 1289.5.7.1

Test No	10	11	12	13	14	15
Compactive effort	Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m ³	1.91	1.94	1.96	1.95	1.92
Adjusted Peak Converted Wet Density	t/m ³	-	-	-	-	-
Optimum Moisture Content	%	23.5	23.5	24.0	23.5	23.0

Moisture Variation From Optimum Moisture Content	2.5% dry	2.0% dry	2.0% dry	2.5% dry	2.0% dry	2.0% dry
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Density Ratio (R _{HD})	%	98.0	98.0	98.0	98.0	98.0
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Material description

No 10 - 15 Clay Fill

AVRLOT HILF V1.10 MAR 13



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Accreditation No 9909

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 19604
 Report No 19604/R004
 Date Issued 16/10/2019

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	ALBRIGHT - ESTATE STAGE 8B	Date tested	19/09/19
Location	TARNEIT	Checked by	JHF

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

Test No	16	17	18	19	20	21	
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	
Field wet density	t/m ³	1.88	1.94	1.96	1.97	2.03	1.97
Field moisture content	%	23.2	20.6	23.4	21.8	20.5	22.1

Test procedure AS 1289.5.7.1

Test No	16	17	18	19	20	21	
Compactive effort	Standard						
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	
Percent of oversize material	wet	0	12	6	7	14	9
Peak Converted Wet Density	t/m ³	1.90	1.98	2.00	1.95	1.98	1.97
Adjusted Peak Converted Wet Density	t/m ³	-	2.02	2.02	1.97	2.03	2.00
Optimum Moisture Content	%	26.0	22.0	23.5	22.0	21.5	22.5

Moisture Variation From Optimum Moisture Content	2.5% dry	1.5% dry	0.0%	0.5% dry	1.0% dry	0.5% dry
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Density Ratio (R _{HD})	%	98.5	96.0	97.0	100.0	100.0	99.0
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Material description

No 16 - 21 Clay Fill

AVRLOT HILF V1.10 MAR 13



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