

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

21<sup>st</sup> July 2017

Our Reference: 17247:NB004

Winslow Constructors Pty Ltd 50 Barry Road CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

### RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING NEWHAVEN ESTATE – STAGE 1, TARNEIT

Please find attached our Report Nos 17247/R001 to 17247/R009 that 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 early May 2017 were completed in early late May 2017.

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.

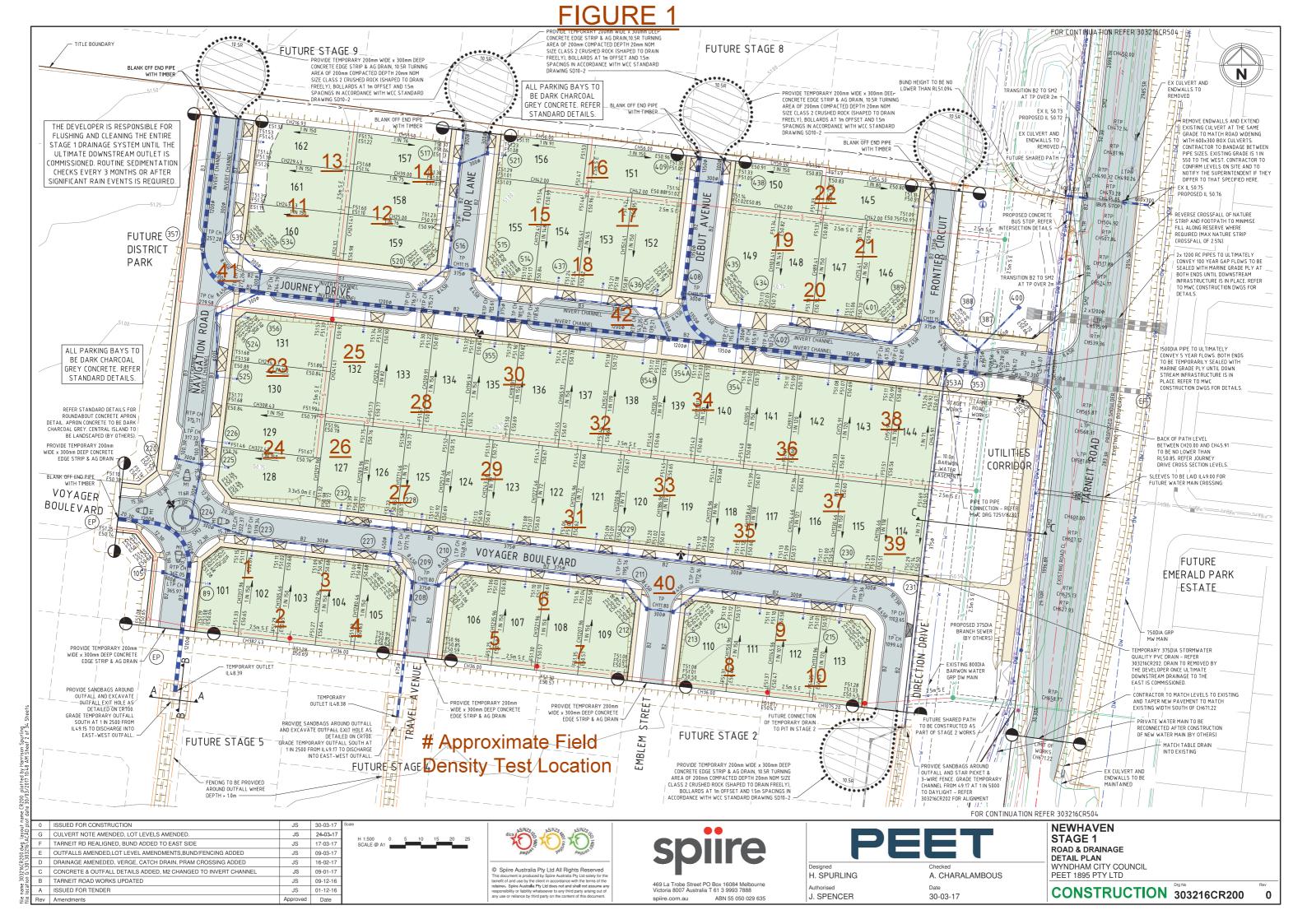
The site inspection and testing was performed by experienced geotechnicians from this office. Any areas that were deemed unsatisfactory were reworked and retested under their supervision. The testing was performed to the relevant Australian Standards and the accompanying test reports carry NATA endorsement. 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 17247 : NB004 : July 2017





CIVIL GEOTECHI	NICAL SERVICES	Job No Report No	17247 17247/R001
6 - 8 Rose Avenue,	Croydon 3136	Date Issued	15/07/2017
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	NB
Project	NEW HAVEN - STAGE 1	Date tested	09/05/17
Location	TARNEIT	Checked by	JHF

Feature

EARTHWORKS

Layer thickness

200 mm

*Time:* 08:09

Test procedure AS 1289.2.1.1 & 5.8.1
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Test No		1	2	3	4	5	6
Location							
		REFER	REFER	REFER	REFER	REFER	REFER
		то	то	то	то	то	то
		FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1
Approximate depth below FSL							
Measurement depth	тт	175	175	175	175	175	175
Field wet density	t∕m³	2.00	1.86	1.85	1.83	1.83	1.87
Field moisture content	%	25.6	26.8	26.6	27.0	26.6	18.5
Field moisture content	,,,						
	,,,						
Test procedure AS 1289.5.7.1		1	2	2	4	5	6
Test procedure AS 1289.5.7.1 Test No		1	2	3 Stor	4	5	6
Test procedure AS 1289.5.7.1 Test No Compactive effort				Star	dard	-	
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve	mm	19.0	19.0	Stan 19.0	dard 19.0	19.0	19.0
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material	mm wet	19.0 11	19.0 3	Stan 19.0 2	dard 19.0 0	19.0 0	19.0 4
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	mm wet t/m³	19.0 11 1.92	19.0 3 1.86	Stan 19.0 2 1.84	dard 19.0 0 1.84	19.0 0 1.85	19.0 4 1.96
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	mm wet t/m <sup>3</sup>	19.0 11 1.92 1.96	19.0 3 1.86 1.87	Stan 19.0 2 1.84 1.89	dard 19.0 0 1.84 -	19.0 0 1.85 -	19.0 4 1.96 1.97
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	mm wet t/m³	19.0 11 1.92	19.0 3 1.86	Stan 19.0 2 1.84	dard 19.0 0 1.84	19.0 0 1.85	19.0 4 1.96
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	mm wet t/m <sup>3</sup>	19.0 11 1.92 1.96	19.0 3 1.86 1.87	Stan 19.0 2 1.84 1.89	dard 19.0 0 1.84 -	19.0 0 1.85 -	19.0 4 1.96 1.97
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	mm wet t/m <sup>3</sup>	19.0 11 1.92 1.96	19.0 3 1.86 1.87	Stan 19.0 2 1.84 1.89	dard 19.0 0 1.84 -	19.0 0 1.85 -	19.0 4 1.96 1.97
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density Optimum Moisture Content	mm wet t/m <sup>3</sup>	19.0 11 1.92 1.96 25.0	19.0 3 1.86 1.87 28.0	Stan 19.0 2 1.84 1.89 27.0 0.5%	dard 19.0 0 1.84 - 29.0 2.0%	19.0 0 1.85 - 28.5 2.0%	19.0 4 1.96 1.97 21.0 2.5%
Test procedure AS 1289.5.7.1 Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density Optimum Moisture Content Moisture Variation From	mm wet t/m <sup>3</sup>	19.0 11 1.92 1.96 25.0 0.5%	19.0 3 1.86 1.87 28.0	Stan 19.0 2 1.84 1.89 27.0	dard 19.0 0 1.84 - 29.0	19.0 0 1.85 - 28.5	19.0 4 1.96 1.97 21.0

#### Material description

No 1 - 6 Clay Fill



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards. Accredited for compliance to ISO/IEC 17025. Accreditation No 9909

AVRLOT HILF V1.10 MAR 13



VIL GEOTECHNICAL SERVICES 8 Rose Avenue, Croydon 3136 Client WINSLOW CONSTRUC	TORS	PTY LTD (CA		LD)	Re Da	b No eport No ate Issued ested by	17247 17247/R00 22/05/2017 JB
Project NEWHAVEN - STAGE 1 Location TARNEIT					Da	ate tested necked by	10/05/17 JHF
Feature EARTHWORKS		Lay	er thickness	200	mm	Time:	07:50
Test procedure AS 1289.2.1.1 & 5.8	8.1						
Test No		7	8	9	10	11	12
Location		REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density Field moisture content	<u>t/m³</u> %	1.88 25.4	1.86 25.0	1.94 23.7	1.92 25.7	1.95 23.1	1.95 23.0
Test procedure AS 1289.5.7.1 Test No		7	8	9	10	11	12
Compactive effort Oversize rock retained on sieve	mm	19.0	19.0	Star 19.0	dard 19.0	19.0	19.0
Percent of oversize material	mm wet	0	0	0	0	0	0
Peak Converted Wet Density	t/m <sup>3</sup>	1.88	1.88	1.97	1.96	1.98	1.99
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content	%	25.5	26.5	23.5	25.5	22.0	22.5
Moisture Variation From Optimum Moisture Content		0.0%	1.5% dry	0.0%	0.0%	1.0% wet	0.5% wet
Density Ratio(R <sub>HD</sub> )	%	99.5	98.5	98.5	98.0	98.0	98.0
Material description No 7 - 12 Clay Fill							



and/or measurements included in this document are traceable to Australian/National standards. Accredited for compliance to ISO/IEC 17025. Accreditation No 9909

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CIVIL GEOTECH	NICAL SERVICES	Job No Report No	17247 17247/R003
6 - 8 Rose Avenue,	Croydon 3136	Date Issued	20/07/2016
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	NB
Project	NEW HAVEN - STAGE 1	Date tested	11/05/17
Location	TARNEIT	Checked by	JHF

Feature

EARTHWORKS

Layer thickness

200 mm

*Time:* 09:30

Test procedure AS 1289.2.1.1 & 5.8.1

—	13	14	15	16	-	-
	·	·	1 7	1		
P	REFER	REFER	REFER	REFER		
P	то	то	то	то		
P	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1		
ľ	1 '	1	'			
P	1 '	1	'	1		
!	<b> </b> '	<b> </b> '	<b> </b> '			
	175	175	175	175		-
				_		-
						-
70	28.4	20.0	2ŏ.ɔ	20.0	-	-
'	13	14	15	16	-	-
<u> </u>			Star	ndard		
тт	19.0	19.0	19.0	19.0	-	-
wet	2	0	0	0	-	-
t∕m³	1.90	1.91	1.88	1.93	-	-
t∕m³	1.93	· · ·	-	-	-	-
%	28.5	27.0	26.5	24.5	-	-
,	0.0%	0.5%	2.0%	1.0%	-	-
,	1 '	dry	wet	wet		
		i Giy				L
	L		4			
	wet t/m³ t/m³	REFER TO FIGURE 1       mm     175       t/m³     1.85       %     28.4       13     13       mm     19.0       wet     2       t/m³     1.90       t/m³     1.93       %     28.5	$\begin{array}{c c} REFER \\ TO \\ FIGURE 1 \\ \hline TO \\ FIGURE 1$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $



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6 - 8 Rose Avenue, Croydon 3136 Date Issued 19/07/2017   Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by JB   Project NEW HAVEN - STAGE 1 Date tested 12/05/17   I section TADNET Checked by ULE	CIVIL GEOTE	CHNICAL SERVICES	Job No Report No	17247 17247/R004
Project NEW HAVEN - STAGE 1 Date tested 12/05/17	6 - 8 Rose Aven	ue, Croydon 3136	Date Issued	19/07/2017
	Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Leasting TADNET Checked by ULE	Project	NEW HAVEN - STAGE 1	Date tested	12/05/17
Location TARNETI Checked by JHF	Location	TARNEIT	Checked by	JHF

Feature

EARTHWORKS

Layer thickness

200 mm

Time: 09:23

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		17	18	19	20	-	-
Location							
		REFER	REFER	REFER	REFER		
		то	то	то	то		
		FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1		
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	-	-
Field wet density	t∕m³	1.82	1.83	1.83	1.84	-	-
Field moisture content	%	22.2	21.3	25.3	25.7	-	-
Test procedure AS 1289.5.7.1		47	40	40	00		1
Test No		17	18	19	20	-	-
Test No Compactive effort				Star	dard		1
Test No Compactive effort Oversize rock retained on sieve	mm	19.0	19.0	Stan 19.0	idard 19.0	-	-
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material	wet	19.0 1	19.0 1	Stan 19.0 0	dard 19.0 0		1
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density	wet t/m³	19.0 1 1.88	19.0 1 1.91	Stan 19.0	idard 19.0		1
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	wet t/m³ t/m³	19.0 1 1.88 1.90	19.0 1 1.91 1.93	Stan 19.0 0 1.87 -	idard 19.0 0 1.86 -	-	-
· · · · · · · · · · · · · · · · · · ·	wet t/m³	19.0 1 1.88	19.0 1 1.91	Stan 19.0 0	dard 19.0 0	- - -	
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	wet t/m³ t/m³	19.0 1 1.88 1.90	19.0 1 1.91 1.93	Stan 19.0 0 1.87 -	idard 19.0 0 1.86 -	- - - -	- - - -
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density	wet t/m³ t/m³	19.0 1 1.88 1.90	19.0 1 1.91 1.93	Stan 19.0 0 1.87 -	idard 19.0 0 1.86 -	- - - -	- - - -
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density Optimum Moisture Content Moisture Variation From	wet t/m³ t/m³	19.0 1 1.88 1.90 25.0 2.5%	19.0 1 1.91 1.93 23.5 2.0%	Stan 19.0 0 1.87 - 27.5 2.0%	dard 19.0 0 1.86 - 27.5 1.5%	- - - - -	- - - -
Test No Compactive effort Oversize rock retained on sieve Percent of oversize material Peak Converted Wet Density Adjusted Peak Converted Wet Density Optimum Moisture Content	wet t/m³ t/m³	19.0 1 1.88 1.90 25.0	19.0 1 1.91 1.93 23.5	Stan 19.0 0 1.87 - 27.5	idard 19.0 0 1.86 - 27.5	- - - - -	- - - -

No 17 - 20 Clay Fill



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AVRLOT HILF V1.10 MAR 13



6 - 8 Rose Avenue, Croydon 3136Date Issued15/0ClientWINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)Tested byJWN	07/2017
Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Tested by JWN	
	М
Project NEW HAVEN - STAGE 1 Date tested 13/0	05/17
Location TARNEIT Checked by JHF	-

Feature

EARTHWORKS

Layer thickness

200 mm

Time: 10:31

Test procedure AS 1289.2.1.1 & 5.8.1

	21	22	23	24	25	26
I	REFER	REFER	REFER	REFER	REFER	REFER
1	то	то	то	то	то	то
	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1
I	'					
1	'	1				
	!					
mm	175	175	175	175	175	175
t∕m³	1.83	1.84	1.75	1.84	1.82	1.80
%	28.5	28.6	29.2	28.8	29.7	30.3
	<del></del>	<del></del>	<del>,                                    </del>	<del></del>		
'	21	22	-		25	26
	<u> </u>		1			<u> </u>
тт	19.0	19.0	19.0		19.0	19.0
wet	0	0	0	1	0	3
t∕m³	1.88	1.85	1.81	1.80	1.83	1.80
t∕m³	-	-	-	1.82	-	1.81
%	26.5	29.0	31.5	30.0	30.5	31.0
	2.0%	0.0%	2.0%	1.0%	0.5%	0.5%
I		0.070				dry
		<u>ــــــــــــــــــــــــــــــــــــ</u>			,	,
%	97.0	100.0	97.0	101.0	99.5	99.0
70	0110	10010	0110	10110	0010	0010
	t/m <sup>3</sup> % 	TO FIGURE 1       mm     175       t/m³     1.83       %     28.5       21     -       mm     19.0       wet     0       t/m³     1.88       t/m³     -       %     26.5       2.0%     wet	$\begin{array}{c cccc} REFER \\ TO \\ FIGURE 1 \\ \hline TO \\ FIGUR$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $



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AVRLOT HILF V1.10 MAR 13



CIVIL GEOTE	CHNICAL SERVICES	Job No Report No	17247 17247/R006
6 - 8 Rose Aven	ue, Croydon 3136	Date Issued	21/07/2017
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	NEW HAVEN - STAGE 1	Date tested	16/05/17
Location	TARNEIT	Checked by	JHF
			••••

Feature

EARTHWORKS

Layer thickness

200 mm

Time: 12:24

Test procedure AS 1289.2.1.1 & 5.8.1

	27	28	29	30	-	-
	1	·				
ļ	REFER	REFER	REFER	REFER		
ŀ	то	то	то	то	1	
P	FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1		
P	'	1 '		1		
P	1	1		1		
mm	175	175	175	175	-	-
t/m³	1.89	1.90	1.96	1.86	-	-
%	27.6	26.9	27.1	26.9	-	-
			ļ			
	27	28	29	30	-	-
			Stan			
тт	19.0	19.0	19.0	19.0	-	-
wet	0	0	0	0	-	-
t∕m³	1.87	1.88	1.87	1.86	-	-
t∕m³	<u> </u>	-	-	<u> </u>	-	-
%	28.0	27.5	27.5	27.5	-	-
	0.0%	0.5%	0.5%	0.5%	-	-
,	1					
	۱, I	dry	ary	ury	1	
		dry	dry	dry	L	
	t/m <sup>3</sup> % mm wet t/m <sup>3</sup> t/m <sup>3</sup>	TO       FIGURE 1       mm       175       t/m³       27.6       27       mm       27       mm       27       1.89       %       27       1.87       t/m³       %       28.0	$\begin{array}{c c c c c c c c c } TO & TO \\ FIGURE 1 & FIGURE 1 \\ \hline \\ FIGURE 1 & FIGURE 1 \\ \hline \\ FIGURE 1 & FIGURE 1 \\ \hline \\ \hline \\ mm & 175 & 175 \\ 1.89 & 1.90 \\ \hline \\ \% & 27.6 & 26.9 \\ \hline \\ \hline \\ 700 & 27.6 & 26.9 \\ \hline \\ 700 & 27.6 & 26.9 \\ \hline \\ \hline \\ \hline \\ 700 & 27.6 & 26.9 \\ \hline \\ $	$\begin{array}{c ccccc} TO \\ FIGURE 1 \\ \hline TO \\ TO \\$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $



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AVRLOT HILF V1.10 MAR 13



CIVIL GEOTECHNICAL SERVICES	Report No	17247/R007
6 - 8 Rose Avenue, Croydon 3136	Date Issued	15/07/2017
Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project NEW HAVEN - STAGE 1	Date tested	18/05/17
Location TARNEIT	Checked by	JHF

Feature

EARTHWORKS

Layer thickness

200 mm

*Time:* 08:09

Test procedure AS 1289.2.1.1 & 5.8.1

REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1		
то	то	то	то		
	-	_			
FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1		
			1		
		1			l
າ 175	175	175	175	-	-
<sup>3</sup> 1.80	1.81	1.88	1.84	-	-
26.3	26.1	27.7	28.8	-	-
	<u>.</u>				
31	32	33	34	-	-
	<u>.</u>	Stan	dard		
n 19.0	19.0	19.0	19.0	-	-
t 0	0	0	0	-	-
<sup>3</sup> 1.85	1.85	1.89	1.87	-	-
<sup>3</sup> 1.86	-	-	-	-	-
28.0	28.0	28.0	28.0	-	-
1.5%	2.0%	0.0%	0.5%	-	
dry	dry		wet		L
97.0	98.0	99.5	98.5	-	-
r	<sup>3</sup> 1.80 26.3 31 n 19.0 t 0 <sup>3</sup> 1.85 <sup>3</sup> 1.86 5 28.0 1.5% dry	3   1.80   1.81     26.3   26.1     31   32     n   19.0     19.0   19.0     n   19.0     3   1.85     3   1.85     3   1.86     -   28.0     28.0   28.0     1.5%   2.0%     dry   dry	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3   1.80   1.81   1.88   1.84     3   26.3   26.1   27.7   28.8     31   32   33   34     Standard     n   19.0   19.0   19.0     1.85   1.85   1.89   1.87     3   1.86   -   -     28.0   28.0   28.0   28.0     1.5%   2.0%   0.0%   0.5%     dry   dry   wet	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$



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AVRLOT HILF V1.10 MAR 13



CIVIL GEOTE	CHNICAL SERVICES	Job No Report No	17247 17247/R008
6 - 8 Rose Aven	ue, Croydon 3136	Date Issued	15/07/2017
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	NEW HAVEN - STAGE 1	Date tested	19/05/17
Location	TARNEIT	Checked by	JHF
Looddon		enconca by	0111

Feature

EARTHWORKS

Layer thickness

200 mm

Time: 12:04

Test procedure AS 1289.2.1.1 & 5.8.1

	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO	REFER TO		
	то	то	то			
				то	٩	
	FIGURE 1	FIGURE 1		10	1	
			FIGURE 1	FIGURE 1	1	
I		1			l	
i	1	1			l	
	'	<u> </u>	<u> </u>		L	<u> </u>
тт	175	175	175	175	<u> </u>	-
t∕m³	1.86	1.94	1.88	1.85	<u> </u>	-
%	29.0	25.4	28.4	27.7	-	-
	• <u>·</u>	<del></del>	<del></del>	<b>-</b>		<b>.</b>
	35	36			-	-
	L	<del>.</del>	1			
mm					-	-
wet	-	-	-	-	-	-
	1.88	2.02	1.92	1.92	-	-
-	-	<u> </u>	<u> </u>	<u> </u>	-	-
%	29.0	23.5	28.5	28.0	-	-
	0.0%	2.0%	0.0%	0.0%	-	-
I	0.072		0.072	0.072	l	
		<u> </u>	<u> </u>	<u> </u>		L
%	99.0	96.0	98.0	96.5		<u> </u>
70	30.0	30.0	30.0	30.0		<u> </u>
	t/m³ % mm	t/m³   1.86     %   29.0     35     mm   19.0     wet   0     t/m³   1.88     t/m³   -     %   29.0	t/m³   1.86   1.94     %   29.0   25.4     35   36     mm   19.0   19.0     wet   0   0     t/m³   1.88   2.02     t/m³   -   -     %   29.0   23.5     0.0%   2.0%   wet	$t/m^3$ 1.86   1.94   1.88     %   29.0   25.4   28.4     35   36   37     Stan     mm   19.0   19.0   19.0 $wet$ 0   0   0   0 $t/m^3$ 1.88   2.02   1.92   1.92 $t/m^3$ -   -   -   -     %   29.0   23.5   28.5   0.0%     0.0%   2.0%   0.0%   0.0%	$t/m^3$ 1.86   1.94   1.88   1.85     %   29.0   25.4   28.4   27.7     35   36   37   38     Standard     mm   19.0   19.0   19.0   19.0 $wet$ 0   0   0   0   0 $t/m^3$ 1.88   2.02   1.92   1.92 $t/m^3$ -   -   -   -     %   29.0   23.5   28.5   28.0     0.0%   2.0%   0.0%   0.0%	$t/m^3$ 1.86   1.94   1.88   1.85   -     %   29.0   25.4   28.4   27.7   -     35   36   37   38   -     Standard     mm   19.0   19.0   19.0   19.0   -     wet   0   0   0   0   -   - $t/m^3$ -   -   -   -   -   -     %   29.0   23.5   28.5   28.0   -     0.0%   2.0%   0.0%   0.0%   -   -



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards. Accredited for compliance to ISO/IEC 17025. Accreditation No 9909

AVRLOT HILF V1.10 MAR 13



CIVIL GEOTE	CHNICAL SERVICES	Job No Report No	17247 17247/R009
6 - 8 Rose Aven	ue, Croydon 3136	Date Issued	15/07/2017
Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JB
Project	NEW HAVEN - STAGE 1	Date tested	22/05/17
Location	TARNEIT	Checked by	JHF
			-

Feature

EARTHWORKS

Layer thickness

200 mm

Time: 13:30

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	39	40	41	42	-	-
Location	······						
		REFER	REFER	REFER	REFER		
		то	то	то	то		
		FIGURE 1	FIGURE 1	FIGURE 1	FIGURE 1		
			l				
Approximate depth below FSL		ļ'	<b></b> '	<u> </u>			
Measurement depth	тт	175	175	175	175	-	-
Field wet density	t∕m³	1.89	1.90	1.79	1.82	-	-
Field moisture content	%	20.9	24.1	27.8	25.6	-	-
Test procedure AS 1289.5.7.1				<u> </u>		1	1
Test No		39	40	41	42	-	-
Compactive effort		L			ndard	<del> </del>	1
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	-	-
Percent of oversize material	wet	5	3	0	0	-	-
Peak Converted Wet Density	t/m <sup>3</sup>	1.95	1.90	1.81	1.83	-	-
Adjusted Peak Converted Wet Density	t/m³	1.97	1.95	-	-	-	-
Optimum Moisture Content	%	21.0	21.5	30.5	28.0	-	-
Moisture Variation From		0.0%	2.5%	2.5%	2.5%	-	-
Optimum Moisture Content			wet	dry	dry		
Density Ratio (R <sub>HD</sub> )	%	95.5	97.0	99.0	99.5	-	-
	,	•••	••••	••••	•••	۱	
Material description							
No 39 - 42 Clay Fill	_						
NO 39 - 42 Glay Fill							



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