



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

27th April 2016

Our Reference: 16166:DK160

Peets Funds Management Pty Ltd
Level 3, 492 St Kilda Road
MELBOURNE VIC 3004

Dear Sirs,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
HAVEN ESTATE (STAGE 1) – TARNEIT**

Please find attached our Report Nos 16166/R001 to 16166/R02 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 was performed in early April 2016.

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 inspections and testing was performed by an experienced geotechnician 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 filled 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 filled 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

A handwritten signature in red ink, appearing to read 'Dino Kondzic', is written over a faint circular stamp.

Dino Kondzic

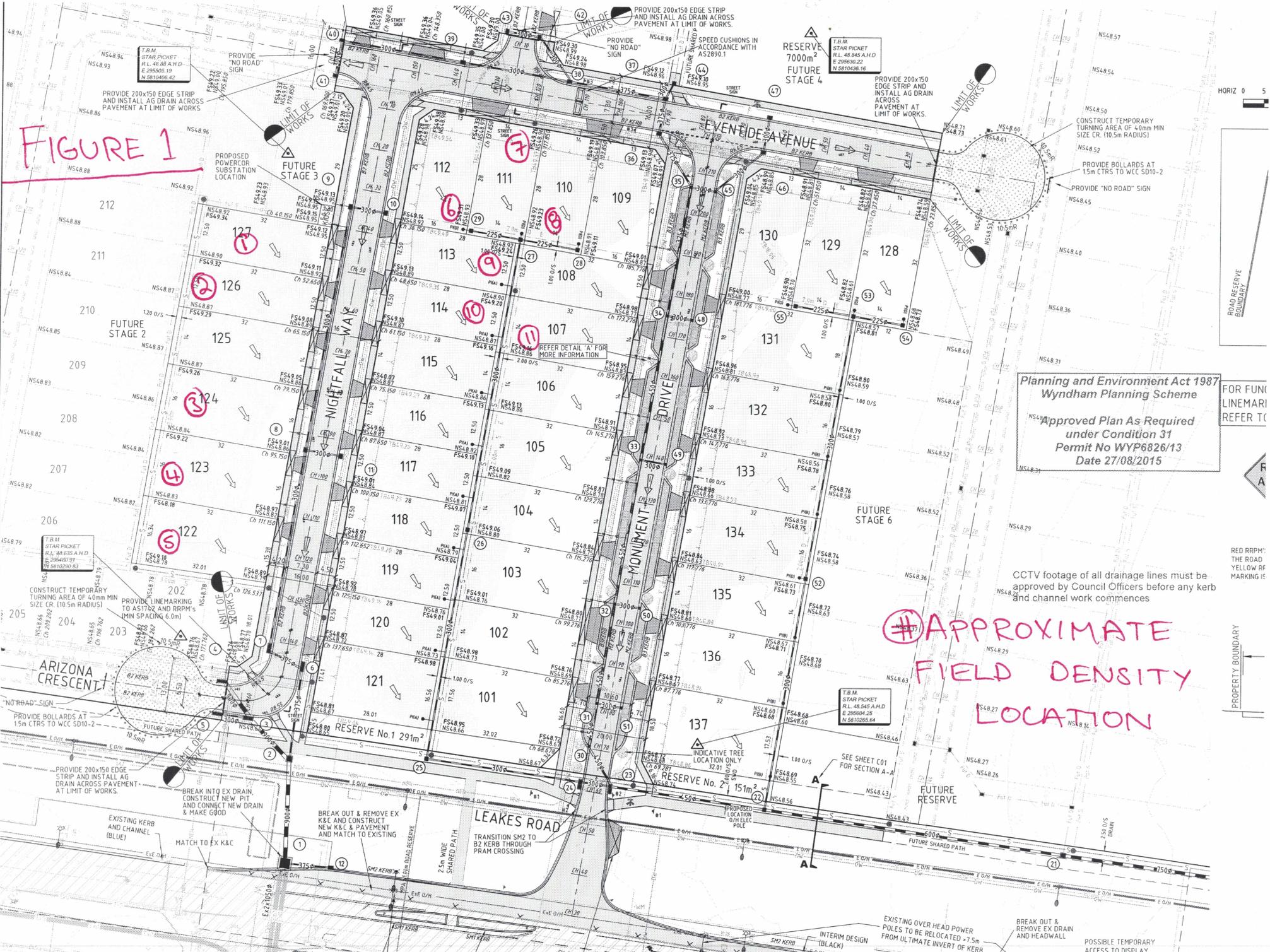


FIGURE 1

Planning and Environment Act 1987
 Wyndham Planning Scheme
 Approved Plan As Required
 under Condition 31
 Permit No WYP6826/13
 Date 27/08/2015

**⑩ APPROXIMATE
 FIELD DENSITY
 LOCATION**

HORIZ 0 5

ROAD RESERVE
 BOUNDARY

FOR FUNC
 LINEMARI
 REFER TO

F
 A

RED RRPM
 THE ROAD
 YELLOW RR
 MARKING IS

PROPERTY BOUNDARY

CCTV footage of all drainage lines must be approved by Council Officers before any kerb and channel work commences

F.B.M. STAR PICKET
 R.L. 48.845 A.H.D.
 E. 208604.28
 N. 5810286.64

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 R.L. 48.845 A.H.D.
 E. 208604.28
 N. 5810286.64

EXISTING OVER HEAD POWER
 POLES TO BE RELOCATED ~7.5m
 FROM ULTIMATE INVERT OF KERB.

BREAK OUT &
 REMOVE EX DRAIN
 AND HEADWALL

POSSIBLE TEMPORARY
 ACCESS TO DISPLAY
 VILLAGE CARPARK



COMPACTION ASSESSMENT

Job No 16166
 Report No 16166/R001
 Date Issued 27/04/16

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Tested by GB
 Date tested 08/04/16
 Checked by JHF

Client PEETS FUNDS MANAGEMENT
 Project HAVEN ESTATE - STAGE 1
 Location TARNEIT

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 10:20
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	5	6
	REFER TO FIGURE 1					
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m ³	1.77	1.87	1.83	1.92	1.96	1.91
Field moisture content %	19.8	16.7	20.3	22.6	21.6	19.1

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	1	2	5	15	4	5
Peak Converted Wet Density t/m ³	1.85	1.93	1.91	1.97	1.89	1.88
Adjusted Peak Converted Wet Density t/m ³	1.87	1.94	1.93	2.03	1.90	1.91
Optimum Moisture Content %	22.0	19.0	22.5	23.0	23.5	20.5

Moisture Variation From Optimum Moisture Content	2.5% dry	2.5% dry	2.0% dry	0.5% dry	2.0% dry	1.5% dry
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Density Ratio (R_{HD})	%	95.0	96.5	95.0	95.0	103.0	100.0
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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

Approved Signatory : Justin Fry



COMPACTION ASSESSMENT

Job No 16166
 Report No 16166/R002
 Date Issued 27/04/16

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Tested by GB
 Date tested 08/04/16
 Checked by JHF

Client PEETS FUNDS MANAGEMENT
 Project HAVEN ESTATE - STAGE 1
 Location TARNEIT

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 10:57
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	7	8	9	10	11	-
	REFER TO FIGURE 1					
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	-
Field wet density t/m ³	1.87	1.88	1.93	1.85	1.89	-
Field moisture content %	15.2	12.8	20.0	21.8	14.8	-

Test procedure AS 1289.5.7.1

Test No	7	8	9	10	11	-
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	-
Percent of oversize material wet	13	11	3	7	4	-
Peak Converted Wet Density t/m ³	1.89	1.88	1.86	1.90	1.95	-
Adjusted Peak Converted Wet Density t/m ³	1.95	1.92	1.87	1.92	1.97	-
Optimum Moisture Content %	17.5	15.0	21.5	24.0	17.0	-

Moisture Variation From Optimum Moisture Content	2.0% dry	2.5% dry	1.5% dry	2.0% dry	2.0% dry	-
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Density Ratio (R_{HD})	%	96.0	98.0	103.0	96.0	96.5	-
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Material description

No 7 - 11 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

Approved Signatory : Justin Fry