



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

6th March 2021

Our Reference: 21036:NB893

Rokon Pty Ltd
1 / 75 River Street
RICHMOND VIC 3121

Dear Sirs/Madams,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
ROTHWELL – STAGE 17 (TARNEIT)

Please find attached our Report No's 21036/R001 and 21036/R002 which relate to the field density testing that was conducted at the filled allotments of the above subdivision. The level 1 inspections and associated field density testing commenced in January 2021 and was completed in March 2021.

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 Rokon during the aforementioned period. The approximate locations of the field density tests can be seen on the attached plan (Figure 1).

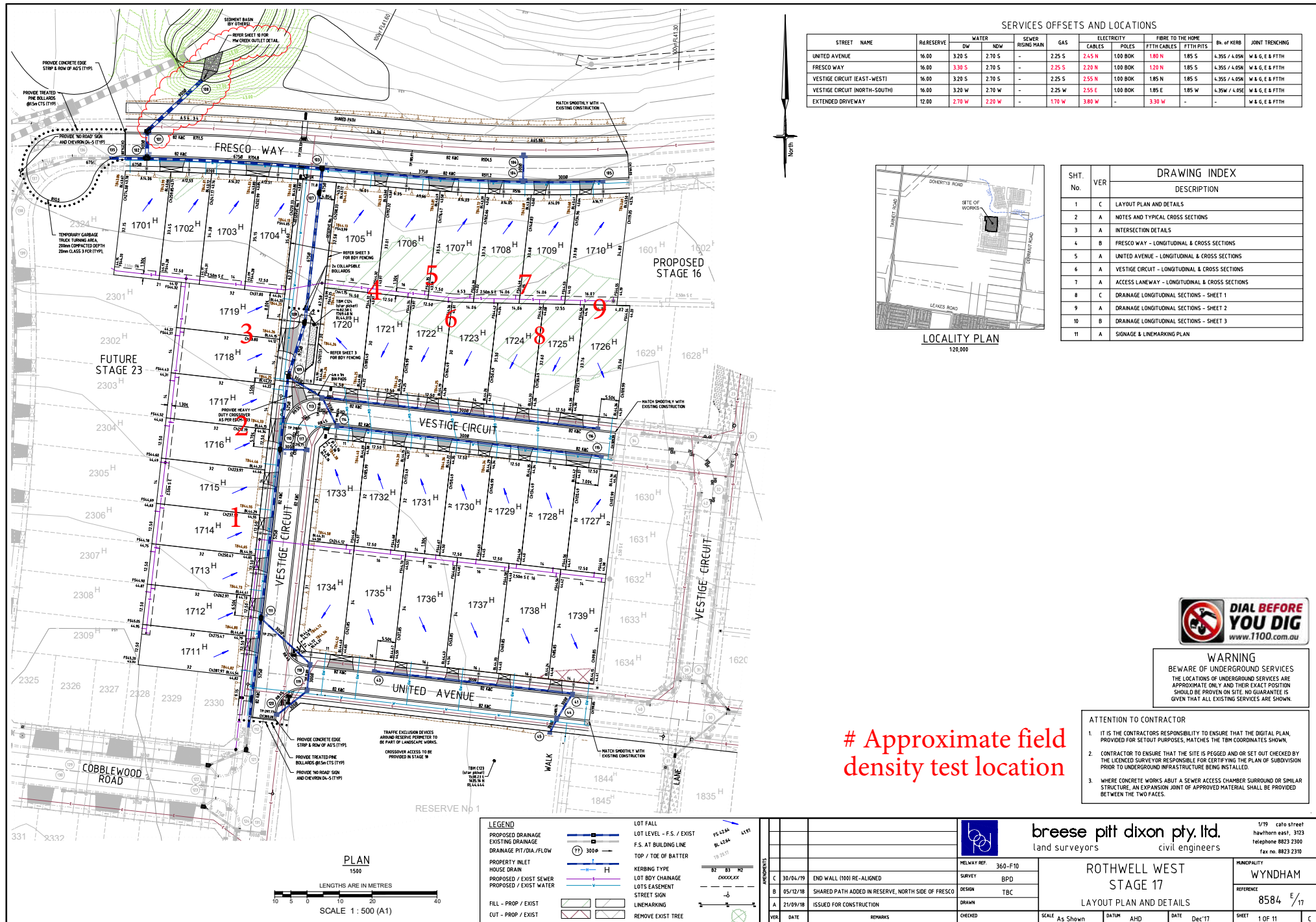
We are of the view that the bulk fill materials that have been placed across the filled allotments by Rokon during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Nick Brock

FIGURE 1



Approximate field density test location



COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Job No 21036
Report No 21036/R001
Date Issued 24/02/2021

Client ROKON (RICHMOND)
Project ROTHWELL ESTATE - STAGE 17
Location TARNEIT

Tested by JB
Date tested 22/01/21
Checked by JHF

Feature EARTHWORKS

Layer thickness

200 mm

Time: 13:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	-	-	-
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/m ³	1.84	1.89	1.86	-	-	-
Field moisture content %	24.2	22.6	24.6	-	-	-

Test procedure AS 1289.5.7.1

Test No	1	2	3	-	-	-
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/m ³	1.90	1.91	1.90	-	-	-
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	26.5	23.5	26.5	-	-	-

Moisture Variation From Optimum Moisture Content	2.5% dry	1.0% dry	2.0% dry	-	-	-
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Density Ratio (R_{HD})	%	96.5	99.0	98.0	-	-	-
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Material description

No 1 - 3 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 21036
Report No 21036/R002
Date Issued 06/03/2021

Client ROKON (RICHMOND)
Project ROTHWELL ESTATE - STAGE 17
Location TARNEIT

Tested by JB
Date tested 01/03/21
Checked by JHF

Feature EARTHWORKS

Layer thickness

200 mm

Time: 10:00

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	4	5	6	7	8	9
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/m ³	1.95	1.87	1.84	1.85	1.86	1.84
Field moisture content %	25.1	22.9	22.6	23.6	23.7	20.7

Test procedure AS 1289.5.7.1

Test No	4	5	6	7	8	9
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/m ³	2.01	1.95	1.91	1.85	1.87	1.91
Adjusted Peak Converted Wet Density t/m ³	-	-	-	-	-	-
Optimum Moisture Content %	27.0	25.5	25.0	25.5	25.5	23.0

Moisture Variation From Optimum Moisture Content	2.0% dry	2.0% dry	2.5% dry	2.0% dry	2.0% dry	2.5% dry
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Density Ratio (R_{HD})	%	97.5	96.0	96.5	99.5	100.0	96.5
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Material description

No 4 - 9 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.
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