



GeoEnviro Consultancy Pty Ltd

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11th March 2015

Our Reference: JT14758B-r1

RPS Australia Asia Pacific
Suite 2, 55 East Parade
SUTHERLAND NSW 2232

Attention: Ms Katrina Griffin

Dear Madam

**Re Proposed Subdivision Lot 1 DP 1144668 – Andromeda Drive, Cranebrook
Site Fill Testing**

Please find attached field density test results for work performed at Lot 1 DP 1144668 – Andromeda Drive, Cranebrook from the 27th November 2014 to 17th January 2015.

The approximated test locations are shown on the attached Drawing No 1. If you have any queries regarding the above, please contact the undersigned.

Yours faithfully
GeoEnviro Consultancy Pty Ltd

Allan Fong
Laboratory Manager

Attachment: Density Test Results – Test Nos 1 to 16
Drawing No 1 – Density Test Location Plan

CA14JOB758VT14758B-r1.DOC



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FIELD DENSITY REPORT

Client / Address: RPS Australia Asia Pacific / Suite 2, 668 Princess Highway, Sutherland, NSW, 2232	Job No: JT14758B
Project: Proposed Subdivision Lot 1 DP 1144668	Date: 07/03/15
Location: Andromeda Drive, Cranebrook	Report No: R 01A

Test Results

Test Number	1	2	3	4	5
Date Tested	27-Nov-14	28-Nov-14	28-Nov-14	28-Nov-14	28-Nov-14
Time of Test	9:44	8:22	8:25	8:34	8:40
Lab No.	758B / 1	758B / 2	758B / 3	758B / 4	758B / 5
Depth Tested	150 mm	150 mm	150 mm	150 mm	150 mm
Location of Test	Refer to drawing No. 1 Reworked	Refer to drawing No. 1	Refer to drawing No. 1 Retested by test No. 3	Refer to drawing No. 1	Refer to drawing No. 1 Retested by test No. 8
Depth of Density Test RL (m)	56.68	55.25	54.72	55.72	55.29
Material Type	Silty Clay brown	Silty Clay brown. Some gravel.	Silty Clay brown. Some gravel.	Silty Clay brown. Some gravel.	Silty Clay brown. Some gravel.
Density Ratio %	106.5	96.0	95.0	96.0	95.0
Moisture Variation %	4.0 drier	4.0 drier	5.0 drier	4.5 drier	5.0 drier
Compaction Requirement %	95 Standard	95 Standard	95 Standard	95 Standard	95 Standard
Moisture Requirement %	-	-	-	-	-

Field and Laboratory Data

AS 1289 2.1.1, 5.8.1

	t/m ³	2.01	1.88	1.90	1.87	1.93
Field Wet Density	t/m ³	2.01	1.88	1.90	1.87	1.93
Field Dry Density	t/m ³	1.70	1.63	1.67	1.63	1.71
Field Moisture Content	%	18.0	15.5	13.5	14.5	12.5

AS 1289 5.4.1

Sieve Size	mm	19	19	19	19	19
Wet Oversize	%	-	-	-	-	-
Dry Oversize	%	-	-	-	-	-

Laboratory Procedure	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	
Lab Compaction ex test No.	1	2	3	4	5	
Maximum Dry Density	t/m ³	1.60	1.69	1.76	1.70	1.80
Optimum Moisture Content	%	22.0	19.5	18.5	19.0	17.5
Adjusted Maximum Dry Density	t/m ³	-	-	-	-	-
Adjusted Optimum Moisture Content	%	-	-	-	-	-

Remarks

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Form No. R001-A/Ver 09/07/13



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Authorised Signatory

Allan Fong Date 07/03/2015



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FIELD DENSITY REPORT

Client / Address: RPS Australia Asia Pacific / Suite 2, 668 Princess Highway, Sutherland, NSW, 2232	Job No: JT14758B
Project: Proposed Subdivision Lot 1 DP 1144668	Date: 07/03/15
Location: Andromeda Drive, Cranebrook	Report No: R 02A

Test Results

Test Number	6	7	8	9	10
Date Tested	28-Nov-14	29-Nov-14	29-Nov-14	16-Jan-15	16-Jan-15
Time of Test	8:57	8:34	10:35	14:35	14:56
Lab No.	758B / 6	758B / 7	758B / 8	758B / 9	758B / 10
Depth Tested	150 mm	150 mm	150 mm	150 mm	150 mm
Location of Test	Refer to drawing No. 1	Refer to drawing No. 1 Retest of test No. 3	Refer to drawing No. 1 Retest of test No. 5	Refer to drawing No. 1	Refer to drawing No. 1
Depth of Density Test RL (m)	57.01	54.87	55.33	55.57	56.32
Material Type	Silty Clay brown	Silty Clay brown. Some gravel.	Silty Clay brown. Some gravel.	Silty Clay brown. Some gravel.	Silty Clay brown. Some gravel.
Density Ratio %	102.0	107.5	107.0	106.5	107.5
Moisture Variation %	3.0 drier	2.5 drier	1.0 drier	Nil	0.5 wetter
Compaction Requirement %	95 Standard	95 Standard	95 Standard	95 Standard	95 Standard
Moisture Requirement %	-	-	-	-	-

Field and Laboratory Data

AS 1289 2.1.1, 5.8.1

	t/m ³	2.08	2.11	2.13	2.17	2.21
Field Wet Density	t/m ³	2.08	2.11	2.13	2.17	2.21
Field Dry Density	t/m ³	1.83	1.82	1.80	1.85	1.87
Field Moisture Content	%	13.0	16.0	19.0	17.5	18.0

AS 1289 5.4.1

Sieve Size	mm	19	19	19	19	19
Wet Oversize	%	-	-	-	-	-
Dry Oversize	%	-	-	-	-	-

Laboratory Procedure	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)
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Lab Compaction ex test No.	6	7	8	9	10	
Maximum Dry Density	t/m ³	1.80	1.69	1.68	1.74	1.74
Optimum Moisture Content	%	16.5	18.5	20.0	17.0	18.0
Adjusted Maximum Dry Density	t/m ³	-	-	-	-	-
Adjusted Optimum Moisture Content	%	-	-	-	-	-

Remarks

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FIELD DENSITY REPORT

Client / Address: RPS Australia Asia Pacific / Suite 2, 668 Princess Highway, Sutherland, NSW, 2232	Job No: JT14758B
Project: Proposed Subdivision Lot 1 DP 1144668	Date: 07/03/15
Location: Andromeda Drive, Cranebrook	Report No: R 03A

Test Results

Test Number	11	12	13	14	15
Date Tested	16-Jan-15	16-Jan-15	16-Jan-15	16-Jan-15	17-Jan-15
Time of Test	15:15	15:23	16:00	16:10	11:28
Lab No.	758B / 11	758B / 12	758B / 13	758B / 14	758B / 15
Depth Tested	150 mm	150 mm	150 mm	150 mm	150 mm
Location of Test	Refer to drawing No. 1	Refer to drawing No. 1	Refer to drawing No. 1	Refer to drawing No. 1	Refer to drawing No. 1
Depth of Density Test RL (m)	56.38	55.93	54.66	54.22	55.76
Material Type	Silty Clay brown. Some gravel.	Silty Clay brown. Some gravel.	Silty Clay brown. Some gravel.	Silty Clay brown. Some gravel.	Silty Clay brown. Some gravel.
Density Ratio %	103.5	99.0	102.0	99.5	106.0
Moisture Variation %	0.5 drier	1.5 wetter	3.0 wetter	1.5 wetter	3.5 drier
Compaction Requirement %	95 Standard	95 Standard	95 Standard	95 Standard	95 Standard
Moisture Requirement %	-	-	-	-	-

Field and Laboratory Data

AS 1289 2.1.1, 5.8.1

	t/m ³	2.11	2.07	2.11	2.04	2.09
Field Wet Density	t/m ³	1.82	1.76	1.76	1.68	1.81
Field Dry Density	%	16.0	17.0	20.0	21.5	15.5
Field Moisture Content						

AS 1289 5.4.1

Sieve Size	mm	19	19	19	19	19
Wet Oversize	%	-	-	-	-	-
Dry Oversize	%	-	-	-	-	-

Laboratory Procedure	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)	AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)
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Lab Compaction ex test No.		11	12	13	14	15
Maximum Dry Density	t/m ³	1.76	1.78	1.72	1.69	1.71
Optimum Moisture Content	%	16.5	15.5	17.0	20.0	19.0
Adjusted Maximum Dry Density	t/m ³	-	-	-	-	-
Adjusted Optimum Moisture Content	%	-	-	-	-	-

Remarks

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FIELD DENSITY REPORT

Client / Address: RPS Australia Asia Pacific / Suite 2, 668 Princess Highway, Sutherland, NSW, 2232	Job No: JT14758B
Project: Proposed Subdivision Lot 1 DP 1144668	Date: 07/03/15
Location: Andromeda Drive, Cranebrook	Report No: R 04A

Test Results					
Test Number		16			
Date Tested		17-Jan-15			
Time of Test		11:32			
Lab No.		758B / 16			
Depth Tested		150 mm			
Location of Test		Refer to drawing No. 1			
Depth of Density Test	RL (m)	55.01			
Material Type		Silty Clay brown. Some gravel.			
Density Ratio	%	99.5			
Moisture Variation	%	4.0 drier			
Compaction Requirement	%	95 Standard			
Moisture Requirement	%	-			

Field and Laboratory Data

AS 1289 2.1.1, 5.8.1					
Field Wet Density	t/m ³	1.95			
Field Dry Density	t/m ³	1.72			
Field Moisture Content	%	13.5			
AS 1289 5.4.1					
Sieve Size	mm	19			
Wet Oversize	%	-			
Dry Oversize	%	-			
Laboratory Procedure		AS 1289 1.1, 1.2.1 (6.4 (b)) 5.1.1 (A Mould)			
Lab Compaction ex test No.		16			
Maximum Dry Density	t/m ³	1.73			
Optimum Moisture Content	%	17.5			
Adjusted Maximum Dry Density	t/m ³	-			
Adjusted Optimum Moisture Content	%	-			

Remarks					
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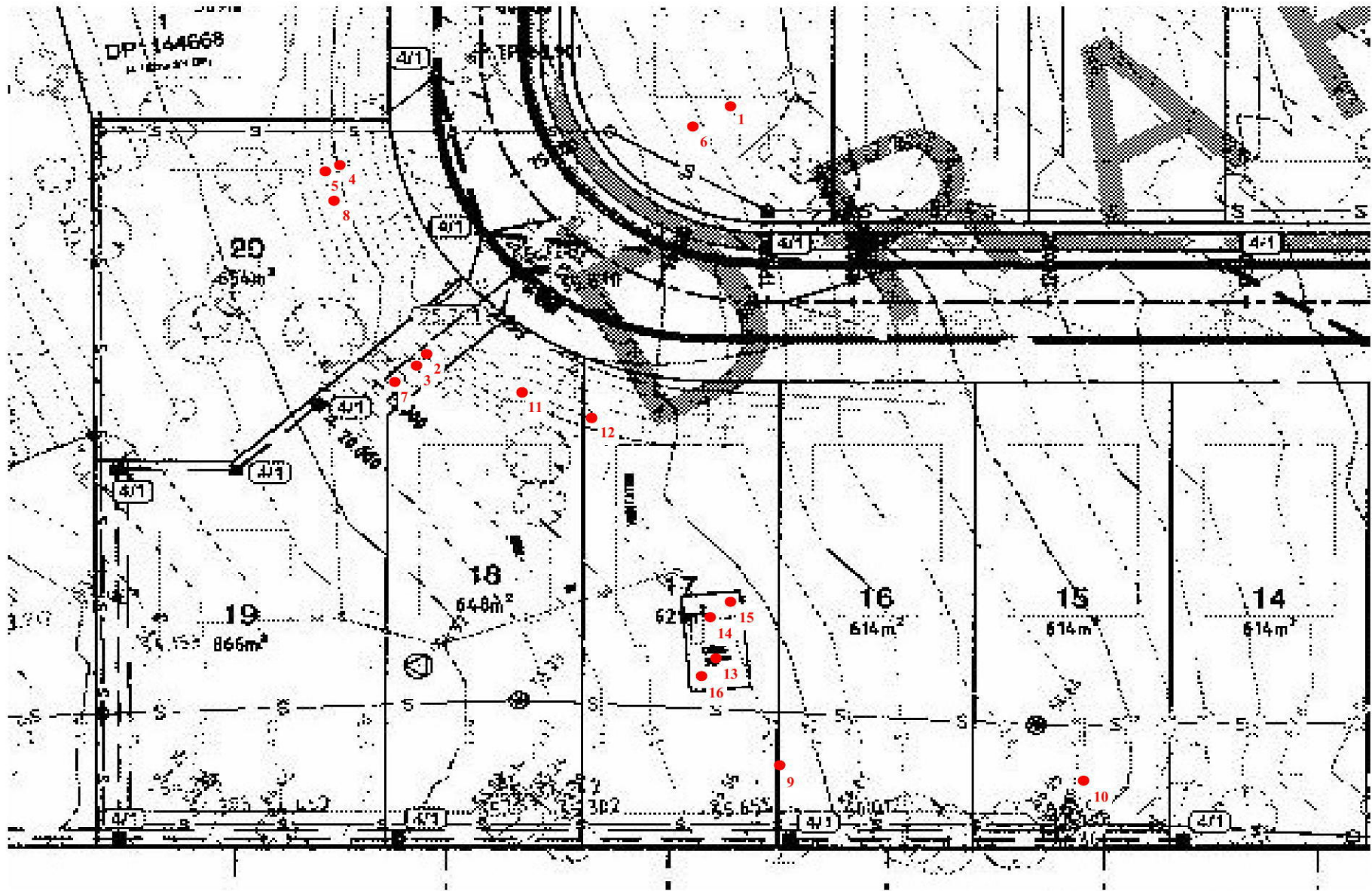


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Legend
 ● Density Test Location



GeoEnviro Consultancy
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Drawn By:	AF	Date:	07/03/15
Checked By:	SL	Date:	07/03/15
Revision By:		Date:	
Scale:	N.T.S.		A3

RPS Australia Asia Pacific
 Lot 1 DP 1144668 - Andromeda Drive, Cranebrook
 Density Test Location Plan

Project No: JT14758B Drawing No: 1