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Gold Coast Office
Job No: GL11/057
30th September, 2011

Mirvac Pty Ltd
PO Box 5121
West End, QLD, 4101

Attention: Richard Laws

Richard,

**RE: LEVEL ONE SUPERVISION
GREEN PARK
STAGES 6.1 AND 6.2
YAWALPAH ROAD, PIMPAMA**

Level One Supervision was carried out on bulk fill earthworks constructed to form the fill allotments and road embankments between June and August, 2011 at this project.

The depth of filling at this project ranges up to approximately 2.0m.

Our representative observed all the relevant earthworks operations including the stripped ground surface and carried out proof rolling and field density tests in accordance with the required standard (AS 3798). The required specification of 95% of the Standard Maximum Dry Density ratio was achieved.

We confirm that Level One Supervision and testing has been carried out on the roadworks described in this report for this project. The fill is controlled fill (AS 2870.1.7.13) and was observed to be placed and compacted in accordance with AS3798.

This statement does not include any topsoil, which may be placed as lot dressing, slope stability assessment, trench backfill or any subsequent work after our engagement.

Attached is a copy of the Earthworks Level One Report for the above project dated 30th September, 2011.

If there are any queries concerning the above please do not hesitate to contact Ian Masman at this office, or alternatively by email at imasman@morrisongeo.com.au

Yours faithfully,

IAN MASMAN

For and on behalf of

MORRISON GEOTECHNIC PTY LIMITED



*MIRVAC PACIFIC
PTY LTD*

*GREEN PARK
STAGES 6.1 & 6.2
YAWALPAH ROAD
PIMPAMA*

LEVEL ONE REPORT

GL11/057



Work Performed By

Morrison Geotechnic Pty Limited

30th September, 2011

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1.0 Introduction

This report summarises results of the Level 1 Supervision and Quality Control Testing performed by Morrison Geotechnic Pty Ltd for bulk fill earthworks carried out to form the fill allotments and road embankments at Green Park, Stages 6.1 and 6.2, Yawalpah Road, Pimpama.

Our involvement for this work was carried out between June and August, 2011.

The work was commissioned by Mr Richard Laws of Mirvac Pacific Pty Ltd, and the earthworks were carried out by Civil Contractors

Our brief from the Client was limited to: -

- Level One Supervision of the placement and compaction of fill materials in accordance with AS3798 1996 – “Guidelines on Earthworks for Commercial and Residential Developments” and Gold Coast City Council Project Specifications.
- Relative Density Control Testing in accordance with AS1289 – Testing of Soils for Engineering Purposes and at frequencies required in AS3798 Table 8.1.

Any other requirements of the earthworks specifications such as CBR, Quality of Materials, and trench backfill testing were not included.

Our on site representatives for this project was Mr. Anthony Halloran and Mr. Aaron Neal and based at our Gold Coast office.

Picture 1



2.0 Existing Surface Assessment

The site had been cleared of all debris, trees and topsoil. Any organic matter, uncompacted or loose soil, silty soil, and any over wet areas were removed to a natural surface.

The stripped surface was proof rolled, and any movement observed beneath the wheels of the plant was removed to a suitable base or tined, air dried to approximate optimum moisture content and re – compacted. After the above treatments were carried out, the proof rolling process was repeated.

When no movement or vertical deflection was achieved, the stripped surface was assessed to be suitable for the placement of fill.

Picture 2



3.0 Fill Placement and Testing

The site was filled with onsite cut material typically comprising: -

- (SC) Sandy CLAY
- (GC) Sandy Gravelly Clay

Placement of fill was carried out using the following plant

- 1 x 815 Compactor
- 2 x Excavators
- 3 x Scrapers
- 3 x Dump Trucks
- 1 x Water Truck
- 1 x Pad Foot Roller

All fill was placed in thin layers and moisture conditioned, mixed to achieve moisture contents suitable for compaction. Excessively wet materials were excluded from use. Materials containing excessive amounts of silts or deleterious materials such as sticks, rocks greater than 200mm or construction debris were then sorted to remove contaminants prior to placement, or rejected for use on site. Sloping areas requiring filling were benched and keyed prior to placement.

The maximum depth of fill was approximately 2.0m and this method of placement and compaction was consistent for the entire depth of fill.

Field density tests and laboratory compactions were carried out on the fill materials in accordance with Table 5.1 of AS3798 1996 (Guidelines on Earthworks for Commercial and Residential Developments) and tested to AS1289 test methods (Testing of Soils for Engineering Purposes). Testing achieved the required specification.

Refer to attached Appendix 'A' for the Field Density Summary sheet and reports.

Refer to attached Appendix 'B' for the photo gallery.

Refer to attached Appendix 'C' for the Site Plan.

4.0 General Statement of Compliance

Our representative observed all the relevant earthworks operations and field density tests in accordance with the required standard (AS3798).

It is confirmed that Level 1 Supervision has been carried out on the roadworks described in this report for this project. The placed and compacted fill described herein for this project is controlled fill (AS 2870 1.7.13) which has been observed to be placed and compacted in accordance with AS3798.

This statement does not include batter slope stability assessment, any top soil, which may be placed for use as lot dressing, assessments of material quality such as soaked CBR testing results and interpretations, or any other subsequent earthworks work after August, 2011.

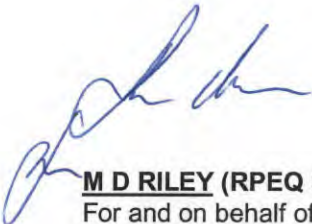
5.0 Limit of Liability

This report has been produced for, and is the property of our Client, Mirvac Pacific Pty Ltd.

Morrison Geotechnic Pty Limited accepts no liability to any third party, and will not enter into any communication with a third party regarding this report.

Morrison Geotechnic Pty Limited will not release this report to any third party without the written permission of our Client.

If you have any queries regarding the above, please contact Ian Masman at our Gold Coast office.



M D RILEY (RPEQ 5641)

For and on behalf of

MORRISON GEOTECHNIC PTY LIMITED

Job No: GL11/057

APPENDIX 'A'

(Field Density Test Reports)

Test Summary :

FD (Nuclear Meter)

Client : MIRVAC

Project : GAINSBOROUGH GREENS (LEVEL 1)

Job Number : GL13/057

Location : PRECINCT 6 STAGES 1 & 2

Suburb : PTM PAMA

Item Number : All

Lab Number : 171479

Date Sampled : 2/06/2011

Date Completed : 30/09/2011

Lab Number	Date Sampled	ID Number	Location	Density Ratio(%)	MOB(1/m ³)	OMC(%)	Corr. EMC(%)	Spec(%)	MC	Var(%)
171479	2/06/2011	7	LOT 446,0/5 CENTRE OF LOT, 8m EAST, 1m BELOW FL	95.05	1.698	17	17.3	95	0.3 % wet of am	
171480	2/06/2011	8	LOT 388,0/5 CENTRE OF LOT, 2m SOUTHEAST, 1.3m BELOW FL	100	1.611	20.8	21.8	95	1 % wet of am	
171481	2/06/2011	9	GREENMOUNT STREET, CH 130,0m CENTRELINE, 1.0m BELOW FL	100.38	1.581	18.9	20.3	95	1.4 % wet of am	
171485	3/06/2011	10	LOT 340,0/5 CENTRE OF LOT, 7m SOUTHWEST, 1.1m BELOW FL	99.81	1.714	19.6	19.3	95	0.3 % dry of am	
171486	3/06/2011	11	LOT 350,0/5 SW CORNER, 8m NORTHEAST, 1.4m BELOW FL	97.37	1.556	25	28.1	95	3.1 % wet of am	
171487	3/06/2011	12	LOT 368,0/5 CENTRE OF LOT, 10m NORTHWEST, 1.2m BELOW FL	97.73	1.809	15.8	14.5	95	1.3 % dry of am	
171488	3/06/2011	13	LOT 439,0/5 CENTRE OF LOT, 12m SOUTH, 1.4m BELOW FL	96.43	1.731	18.1	18	95	0.1 % dry of am	
171489	3/06/2011	14	LOT 439,0/5 CENTRE OF LOT, 5m NORTHWEST, 1.3m BELOW FL	99.16	1.667	21	18.2	95	2.8 % dry of am	
171493	4/06/2011	15	LOT 343,0/5 NW CORNER, 8m SOUTHEAST, 0.9m BELOW FL	96.14	1.735	18.5	19.6	95	1.1 % wet of am	
171494	4/06/2011	16	GAINSBOROUGH DRIVE, CH 160.5m RIGHT OF CL, 1.1m BELOW FL	105.85	1.693	18.7	19.9	95	3.8 % dry of am	
171495	4/06/2011	17	LOT 394,0/5 SE CORNER, 6m NORTH, 5m WEST, 1.2m BELOW FL	97.65	1.699	17.2	18.7	95	1.5 % wet of am	
171496	4/06/2011	18	LOT 352,0/5 CENTRE OF LOT, 8m EAST, 1m BELOW FL	98.38	1.854	15.2	12.6	95	2.4 % dry of am	
171497	4/06/2011	19	LOT 397,0/5 CENTRE OF LOT, 1.1m SOUTHEAST, 1.4m BELOW FL	96.8	1.779	16.1	17.0	95	1.7 % wet of am	
171498	4/06/2011	20	LAMINGTON LANE, CH 50.0m CENTRELINE, 1m BELOW FL	99.34	1.846	15.1	12.4	95	2.7 % dry of am	
171499	4/06/2011	21	LOT 410,0/5 SE CORNER, 19m WEST, 8m NORTH, 1.1m BELOW FL	97.17	1.803	16.5	15.6	95	0.9 % dry of am	
171470	4/06/2011	22	LOT 437,0/5 SE CORNER, 8m NORTHWEST, 1.8m BELOW FL	99.14	1.851	13.9	12.7	95	1.2 % dry of am	
171511	5/06/2011	23	LOT 339,0/5 CENTRE OF LOT, 13m SOUTHEAST, 0.3m BELOW FL	96.72	1.862	13.1	11.6	95	1.5 % dry of am	
171512	5/06/2011	24	GAINSBOROUGH DRIVE, CH 108.7m LEFT OF CL, 0.6m BELOW FL	100.38	1.865	13.2	11.6	95	1.6 % dry of am	
171513	5/06/2011	25	LOT 365,0/5 CENTRE OF LOT, 8m NORTH, FINISHED LEVEL	95.92	1.84	14.4	11.6	95	2.8 % dry of am	
171514	5/06/2011	26	LOT 354,0/5 CENTRE OF LOT, 9m NORTH, 0.2m BELOW FL	95.22	1.884	13.8	11.4	95	1.4 % dry of am	
171515	5/06/2011	27	LOT 370,0/5 CENTRE OF LOT, 8m WEST, 0.5m BELOW FL	95.86	1.846	13.9	12.5	95	1.4 % dry of am	
171516	5/06/2011	28	LOT 388,0/5 CENTRE OF LOT, 12m NORTH, 0.3m BELOW FL	96.67	1.681	20.7	22.8	95	2.1 % wet of am	
171517	5/06/2011	29	LOT 441,0/5 CENTRE OF LOT, 10m NORTHWEST, 0.6m BELOW FL	97.58	1.858	13	12.6	95	0.4 % dry of am	
171518	5/06/2011	30	UNDARRA STREET, CH 220.0m CENTRELINE, 0.4m BELOW FL	98.62	1.883	13.6	11.4	95	2.2 % dry of am	
171544	7/06/2011	31	LOT 343,0/5 CENTRE OF LOT, 8m SOUTH, 1.9m BELOW FL	98.32	1.849	12.4	13.5	95	2.1 % wet of am	
171545	7/06/2011	32	LOT 345,0/5 CENTRE OF LOT, 13m SOUTH, 1.8m BELOW FL	97.97	1.819	16.1	12.7	95	3.4 % dry of am	
171546	7/06/2011	33	LOT 347,0/5 CENTRE OF LOT, 5m SOUTH, 2m BELOW FL	95.49	1.841	12.6	9.8	95	2.9 % dry of am	
171547	7/06/2011	34	LOT 349,0/5 CENTRE OF LOT, 9m SOUTH, 1.7m BELOW FL	102.38	1.762	16.6	13.7	95	2.9 % dry of am	
171548	7/06/2011	35	GAINSBOROUGH DRIVE, CH 170.11m LEFT OF CL, 1.2m BELOW FL	98.25	1.939	10.4	8.6	95	0.8 % dry of am	
171549	7/06/2011	36	GAINSBOROUGH DRIVE, CH 200.12m RIGHT OF CL, 2m BELOW FL	95.32	1.837	15.2	15.6	95	0.4 % wet of am	
171550	7/06/2011	37	GAINSBOROUGH DRIVE, CH 220.5m LEFT OF CL, 1m BELOW FL	97.51	1.825	15.2	15.7	95	0.5 % wet of am	
171551	7/06/2011	38	GAINSBOROUGH DRIVE, CH 270.8m RIGHT OF CL, 1.4m BELOW FL	95.07	1.867	13.8	14.3	95	0.5 % wet of am	

Test Summary :

Hiif Ratio (Nuclear Meter)

Client : MIRVAC

Project : GAINSBOROUGH GREENS (LEVEL 1)

Job Number : GL11/057

Location : PRECINCT 6 STAGES 3 & 2

Suburb : PIMPANA

Location Filter : All

Date Completed: 30/09/2011

Lot Number : All

Item Number : All

Date Filter : All

Lab Number	Date Sampled	ID Number	Location	Maximum Size(mm)	Oversize (%)	Real Density (t/m ³)	Moisture Content (%)	Hiif Ratio
171263	27/05/2011	1	LOT 264055 NE CORNER OF LOT 100 WEST 0.6m BELOW FL.	19.0	0.0	2.04	0.1	98.1
171264	27/05/2011	2	LOT 264055 SE CORNER OF LOT 100 WEST 0.7m BELOW FL.	19.0	0.0	1.97	0.5	104.1
171265	27/05/2011	3	LOT 264055 CENTRE OF LOT 100 NORTH 0.6m BELOW FL.	19.0	0.0	1.99	0.7	98.6
171267	28/05/2011	4	LOT 264055 CENTRE OF LOT 120 NORTH 1.1m BELOW FL.	19.0	0.0	2.04	1.7	101.3
171268	28/05/2011	5	WALLFOOTING BETWEEN LOTS 100 & 120 CENTRELINE 1.1m BELOW FL.	19.0	0.0	1.97	-1.7	97.8
171269	28/05/2011	6	LOT 100 NE CORNER OF LOT 100 NORTH WEST 1.1m BELOW FL.	19.0	0.0	1.97	0.4	97.8
171588	8/06/2011	39	LOT 264055 CENTRE OF LOT 120 NORTH 0.2m BELOW FL.	19.0	0.0	2.05	-0.1	95.0
171589	8/06/2011	40	LOT 264055 CENTRE OF LOT 120 NORTH 1.1m BELOW FL.	19.0	0.0	2.08	-0.1	95.2
171590	8/06/2011	41	LOT 264055 CENTRE OF LOT 100 SOUTH 1.1m BELOW FL.	19.0	0.0	2.09	0.2	96.2
171591	8/06/2011	42	LOT 264055 CENTRE OF LOT 120 NORTH 0.2m BELOW FL.	19.0	0.0	2.11	-1.0	96.8
171592	8/06/2011	43	LOT 264055 CENTRE OF LOT 100 SOUTH 1.1m BELOW FL.	19.0	0.0	2.08	-0.2	96.0
171593	8/06/2011	44	LOT 264055 CENTRE OF LOT 120 NORTH 1.1m BELOW FL.	19.0	0.0	2.05	0.2	96.1
171594	8/06/2011	45	LOT 264055 CENTRE OF LOT 100 SOUTH 1.1m BELOW FL.	19.0	0.0	2.08	1.2	96.5
171595	8/06/2011	46	WALLFOOTING BETWEEN LOTS 100 & 120 SOUTH 1.1m BELOW FL.	19.0	0.0	2.10	-1.3	96.0
171676	9/06/2011	47	LOT 100 NE CORNER OF LOT 100 NORTH 1.1m BELOW FL.	19.0	0.0	2.08	-0.7	95.5
171677	9/06/2011	48	LOT 264055 CENTRE OF LOT 100 NORTH 1.1m BELOW FL.	19.0	0.0	2.01	-0.8	97.1
171678	9/06/2011	49	LOT 264055 CENTRE OF LOT 120 SOUTH 1.1m BELOW FL.	19.0	0.0	2.04	1.1	98.2
171679	9/06/2011	50	LOT 264055 CENTRE OF LOT 100 SOUTH 1.1m BELOW FL.	19.0	0.0	2.02	-1.3	98.8
171680	9/06/2011	51	LOT 264055 CENTRE OF LOT 120 NORTH 1.1m BELOW FL.	19.0	0.0	2.04	0.1	101.0
171681	9/06/2011	52	LOT 264055 CENTRE OF LOT 100 NORTH 1.1m BELOW FL.	19.0	0.0	2.06	-0.2	98.5
171682	9/06/2011	53	LOT 264055 CENTRE OF LOT 120 SOUTH 1.1m BELOW FL.	19.0	0.0	2.10	-1.2	94.8
171683	9/06/2011	54	WALLFOOTING BETWEEN LOTS 100 & 120 SOUTH 1.1m BELOW FL.	19.0	0.0	2.08	0.2	98.6
171786	10/06/2011	75	LOT 264055 CENTRE OF LOT 100 SOUTH 1.1m BELOW FL.	19.0	0.0	2.06	1.0	97.0
171787	10/06/2011	76	LOT 264055 CENTRE OF LOT 120 SOUTH 1.1m BELOW FL.	19.0	0.0	2.06	1.3	94.9
171788	10/06/2011	77	LOT 264055 CENTRE OF LOT 100 SOUTH 1.1m BELOW FL.	19.0	0.0	2.05	2.1	101.3
171789	10/06/2011	78	LOT 264055 CENTRE OF LOT 120 NORTH 1.1m BELOW FL.	19.0	0.0	2.02	-0.8	98.3
171790	10/06/2011	79	WALLFOOTING BETWEEN LOTS 100 & 120 CENTRELINE 1.1m BELOW FL.	19.0	0.0	2.04	-0.5	97.6
171791	10/06/2011	80	LOT 264055 CENTRE OF LOT 100 WEST 1.1m BELOW FL.	19.0	0.0	2.01	-0.5	100.0
171792	10/06/2011	81	WALLFOOTING BETWEEN LOTS 100 & 120 NORTH 1.1m BELOW FL.	19.0	0.0	2.03	1.1	103.5
171793	10/06/2011	82	LOT 264055 CENTRE OF LOT 100 WEST 1.1m BELOW FL.	19.0	0.0	2.06	-0.2	96.5
171806	11/06/2011	67	WALLFOOTING BETWEEN LOTS 100 & 120 WEST 1.1m BELOW FL.	19.0	0.0	2.01	-0.2	96.7
171807	11/06/2011	68	LOT 264055 NE CORNER OF LOT 100 NORTH 1.1m BELOW FL.	19.0	0.0	2.03	-0.3	101.0
171808	11/06/2011	69	LOT 264055 CENTRE OF LOT 100 WEST 1.1m BELOW FL.	19.0	0.0	2.02	0.0	98.8
171809	11/06/2011	70	WALLFOOTING BETWEEN LOTS 100 & 120 CENTRELINE 1.1m BELOW FL.	19.0	0.0	2.03	-0.1	100.3
171810	11/06/2011	71	WALLFOOTING BETWEEN LOTS 100 & 120 WEST 1.1m BELOW FL.	19.0	0.0	2.03	-0.3	100.1
171811	11/06/2011	72	LOT 264055 CENTRE OF LOT 100 SOUTH 1.1m BELOW FL.	19.0	0.0	2.03	0.0	98.8
171812	11/06/2011	73	LOT 264055 CENTRE OF LOT 120 NORTH 1.1m BELOW FL.	19.0	0.0	2.03	0.0	102.8
171813	11/06/2011	74	LOT 264055 CENTRE OF LOT 100 NORTH 1.1m BELOW FL.	19.0	0.0	2.03	0.0	98.3
171822	14/06/2011	58	LOT 264055 CENTRE OF LOT 100 WEST 1.1m BELOW FL.	19.0	0.0	2.07	-1.4	95.6
171824	14/06/2011	56	LOT 264055 CENTRE OF LOT 120 SOUTH 1.1m BELOW FL.	19.0	0.0	2.10	0.1	97.7

Test Summary :

Date Compiled: 30/09/2011

HLIF Ratio (Nuclear Meter)

Client : MIRVAC
 Project : GAINSBOROUGH GREENS (LEVEL 1)
 Location : PRECINCT 6 STAGES 1 & 2
 Suburb : PIMPARRA
 Location Filter : All
 Job Number : GL11/057
 Lot Number : All
 Item Number : All
 Date Filter : All

Lab Number	Date Sampled	ID Number	Location	Maximum Size(mm)	Oversize (%)	Peak converted Wet Density (t/m ³)	Moisture Content - Variation (%)	HLIF Ratio (%)
171826	14/06/2011	57	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.06	-0.6	97.8
171826	14/06/2011	58	SAVESBOROUGH DRIVE, LOT 219, 101 NORTH WEST BELOW FC	19.0	0.0	2.07	-1.2	98.1
171866	15/06/2011	59	LOT 344,015 CENTRE OF LOT 1,001 SOUTH WEST BELOW FC	19.0	0.0	2.04	-0.7	102.1
171867	15/06/2011	60	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.04	-0.6	100.7
171866	15/06/2011	61	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.03	-1.2	101.4
171868	15/06/2011	62	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.04	-0.6	98.5
171870	15/06/2011	63	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.04	-0.6	98.1
171871	15/06/2011	64	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.03	-0.2	98.0
171872	15/06/2011	65	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.04	-2.3	97.6
171873	15/06/2011	66	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.04	-2.6	99.0
171927	16/06/2011	67	SAVESBOROUGH DRIVE, LOT 219, 101 NORTH WEST BELOW FC	19.0	0.0	2.05	-1.2	97.5
171928	16/06/2011	68	SAVESBOROUGH DRIVE, LOT 219, 101 NORTH WEST BELOW FC	19.0	0.0	2.05	-0.7	99.9
171929	16/06/2011	69	SAVESBOROUGH DRIVE, LOT 219, 101 NORTH WEST BELOW FC	19.0	0.0	2.06	-0.6	95.5
171930	16/06/2011	70	SAVESBOROUGH DRIVE, LOT 219, 101 NORTH WEST BELOW FC	19.0	0.0	2.10	-1.2	98.5
171931	16/06/2011	71	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.03	1.6	98.5
171932	16/06/2011	72	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	1.91	1.8	98.5
171933	16/06/2011	73	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.05	1.6	95.8
171934	16/06/2011	74	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.10	-3.1	95.1
171935	16/06/2011	75	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	1.92	0.2	103.8
171936	16/06/2011	76	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	1.97	-0.0	100.8
171937	17/06/2011	77	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.04	-0.1	95.3
171938	17/06/2011	78	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.00	1.4	98.5
171939	17/06/2011	79	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	1.98	0.7	99.2
171940	17/06/2011	80	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	1.96	-0.4	99.9
171991	17/06/2011	81	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.03	-3.6	94.8
171992	17/06/2011	82	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.04	-0.5	95.3
171993	17/06/2011	83	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.01	0.8	96.0
171994	17/06/2011	84	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.05	0.2	97.6
171995	17/06/2011	85	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.02	0.8	100.7
171996	17/06/2011	86	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	1.99	-0.1	103.5
171997	17/06/2011	87	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.02	-0.1	97.2
171998	17/06/2011	88	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.02	-2.8	102.2
172008	18/06/2011	105	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	17.1	3.34	1.1	96.0
172009	18/06/2011	106	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	14.8	2.17	1.8	95.1
172010	18/06/2011	107	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	7.3	3.05	-0.3	94.0
172011	18/06/2011	108	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	18.3	2.17	1.5	95.5
172012	18/06/2011	109	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	0.0	2.02	-0.6	95.4
172013	18/06/2011	110	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	8.1	2.42	1.0	97.3
172014	18/06/2011	111	LOT 344,015 CENTRE OF LOT 1,001 NORTH WEST BELOW FC	19.0	8.9	2.08	1.8	99.2
172015	18/06/2011	112	SAVESBOROUGH DRIVE, LOT 219, 101 NORTH WEST BELOW FC	19.0	6.8	2.04	-0.7	100.5

Test Summary :

Date Completed: 30/09/2011

Hiif Ratio (Nuclear Meter)

Client : MIRVAC
 Project : GAINSBOROUGH GREENS (LEVEL 1)
 Suburb : PIMPAMA
 Location : PRECINCT 6 STAGES 1 & 2
 Lot Number : 5113/957
 Lot Number : All
 Location Filter : All
 Date Filter : All

Lab Number	Date Sampled	ID Number	Location	Maximum Size(mm)	Oversize (%)	Peak Density (t/m ³)	Moisture Content - Variation (%)	Hiif Ratio (%)
172016	18/06/2011	113	LOT 1410.00 CENTRE OF LOT 1410.00 WEST SIDE BELOW FL.	19.0	15.3	2.12	1.7	97.5
172017	18/06/2011	114	LOT 1410.00 CENTRE OF LOT 1410.00 EAST SIDE BELOW FL.	19.0	15.6	2.11	1.4	96.7
172018	18/06/2011	115	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH SIDE BELOW FL.	19.0	5.1	2.16	1.1	98.1
172019	18/06/2011	116	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	17.3	2.12	1.4	95.1
172022	20/06/2011	188	LOT 1410.00 CENTRE OF LOT 1410.00 WEST SIDE BELOW FL.	19.0	0.0	1.98	-0.1	101.3
172073	20/06/2011	189	LOT 1410.00 CENTRE OF LOT 1410.00 WEST PHASED LEVEL.	19.0	0.0	2.03	0.0	98.5
172074	20/06/2011	190	LOT 1410.00 CENTRE OF LOT 1410.00 EAST PHASED LEVEL.	19.0	0.0	2.04	-0.2	101.2
172075	20/06/2011	191	LOT 1410.00 CENTRE OF LOT 1410.00 WEST PHASED LEVEL.	19.0	0.0	1.97	0.0	100.3
172076	20/06/2011	192	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH SIDE BELOW FL.	19.0	0.0	2.02	-0.4	100.4
172077	20/06/2011	193	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.02	-0.5	101.4
172078	20/06/2011	194	LOT 1410.00 CENTRE OF LOT 1410.00 EAST PHASED LEVEL.	19.0	0.0	1.99	0.2	97.9
172079	20/06/2011	195	LOT 1410.00 CENTRE OF LOT 1410.00 WEST PHASED LEVEL.	19.0	0.0	2.00	0.3	103.9
172186	21/06/2011	196	LOT 1410.00 CENTRE OF LOT 1410.00 WEST PHASED LEVEL.	19.0	0.0	2.06	-0.1	99.2
172187	21/06/2011	197	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.05	-1.2	98.9
172188	21/06/2011	198	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH SIDE BELOW FL.	19.0	0.0	2.09	-2.4	99.0
172189	21/06/2011	199	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.07	1.8	96.0
172190	21/06/2011	200	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.03	0.0	97.6
172191	21/06/2011	201	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.07	-1.2	95.2
172192	21/06/2011	202	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.00	0.2	100.7
172193	21/06/2011	203	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.03	0.3	97.2
172249	22/06/2011	351	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.05	0.0	101.4
172250	22/06/2011	352	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.03	-0.1	100.3
172251	22/06/2011	353	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.05	0.3	98.3
172252	22/06/2011	354	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.06	0.0	95.4
172253	22/06/2011	355	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.03	0.5	99.0
172254	22/06/2011	356	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.00	0.2	100.4
172360	23/06/2011	317	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	1.98	0.6	101.6
172361	23/06/2011	318	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.05	0.1	98.1
172362	23/06/2011	319	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.05	-0.5	98.0
172363	23/06/2011	320	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.05	0.0	97.2
172364	23/06/2011	321	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.09	-0.2	98.9
172365	23/06/2011	322	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.05	0.0	98.2
172366	23/06/2011	323	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.07	0.0	98.7
172367	23/06/2011	324	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.08	-0.3	98.8
172418	24/06/2011	325	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	1.99	-2.6	95.3
172419	24/06/2011	326	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	1.91	-2.8	95.7
172420	24/06/2011	327	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	1.86	0.0	100.2
172421	24/06/2011	328	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	1.96	0.7	98.9
172422	24/06/2011	329	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.03	0.0	95.4
172423	24/06/2011	330	LOT 1410.00 CENTRE OF LOT 1410.00 SOUTH PHASED LEVEL.	19.0	0.0	2.04	-0.2	95.4

Test Summary :

Date Compiled: 30/09/2011

HIIF Ratio (Nuclear Meter)

Client : MIRVAC

Project : GAINSBOROUGH GREENS (LEVEL 1)

Location : PRECINCT 6 STAGES 1 & 2

Job Number : GL11/057

Suburb : PIMPANA

Lot Number : All

Location Filter : All

Item Number : All

Date Filter : All

Lab Number	Date Sampled	ID Number	Location	Maximum Size(mm)	Oversize (%)	Peak Density (t/m ³)	Moisture Content - Variation (%)	HIIF Ratio (%)
172424	24/06/2011	131	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	2.05	-0.6	96.9
172425	24/06/2011	132	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	2.05	0.3	97.7
172426	24/06/2011	133	LOT 41 (0.00 CENTRE OF LOT 41) (NORTH FINISHED LEVEL)	19.0	0.0	2.05	-0.7	99.5
172427	24/06/2011	134	LOT 41 (0.00 CENTRE OF LOT 41) (FINISHED LEVEL)	19.0	0.0	1.99	-2.7	101.6
172428	24/06/2011	135	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	3.02	0.1	99.1
172429	24/06/2011	136	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	3.02	0.1	100.8
172430	24/06/2011	137	LOT 40 (0.00 CENTRE OF LOT 40) (NORTH FINISHED LEVEL)	19.0	0.0	2.04	0.0	97.1
172431	24/06/2011	138	LOT 40 (0.00 CENTRE OF LOT 40) (NORTH FINISHED LEVEL)	19.0	0.0	2.04	0.0	93.2
172432	24/06/2011	139	LOT 40 (0.00 CENTRE OF LOT 40) (NORTH FINISHED LEVEL)	19.0	0.0	2.06	-0.7	95.6
172433	24/06/2011	140	LOT 40 (0.00 CENTRE OF LOT 40) (NORTH FINISHED LEVEL)	19.0	0.0	2.06	-0.1	97.9
172506	27/06/2011	204	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	3.02	-0.2	98.7
172509	27/06/2011	205	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	3.03	1.9	94.1
172510	27/06/2011	206	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	3.03	0.3	93.8
172511	27/06/2011	207	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	2.04	-2.1	96.3
172512	27/06/2011	208	LOT 40 (0.00 CENTRE OF LOT 40) (NORTH FINISHED LEVEL)	19.0	0.0	2.00	0.2	103.7
172513	27/06/2011	209	LOT 40 (0.00 CENTRE OF LOT 40) (NORTH FINISHED LEVEL)	19.0	0.0	3.02	0.0	100.1
172514	27/06/2011	210	LOT 40 (0.00 CENTRE OF LOT 40) (NORTH FINISHED LEVEL)	19.0	0.0	1.98	0.0	103.6
172515	27/06/2011	211	LOT 40 (0.00 CENTRE OF LOT 40) (NORTH FINISHED LEVEL)	19.0	0.0	3.01	0.0	100.7
172516	27/06/2011	212	MILLSTREAM PLAZA ON THE EAST SIDE OF LOT 40 (NORTH FINISHED LEVEL)	19.0	0.0	3.06	1.9	98.5
172517	27/06/2011	213	MILLSTREAM PLAZA ON THE EAST SIDE OF LOT 40 (NORTH FINISHED LEVEL)	19.0	0.0	2.04	0.0	93.2
172518	27/06/2011	214	MILLSTREAM PLAZA ON THE EAST SIDE OF LOT 40 (NORTH FINISHED LEVEL)	19.0	0.0	1.97	0.2	101.1
172519	27/06/2011	215	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	18.0	0.0	3.03	-1.8	99.7
172520	27/06/2011	216	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	3.00	0.3	103.1
172521	27/06/2011	217	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	1.96	-2.2	102.0
172522	27/06/2011	218	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	3.06	1.4	100.5
172523	27/06/2011	219	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	1.96	0.2	102.8
172524	27/06/2011	220	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	1.99	0.2	103.8
172525	27/06/2011	221	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	1.92	0.1	105.1
172526	27/06/2011	222	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	1.99	0.2	100.6
172527	27/06/2011	223	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	3.07	-2.1	94.9
172528	27/06/2011	224	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	2.00	0.1	103.0
172529	27/06/2011	225	MILLSTREAM PLAZA ON THE EAST SIDE OF LOT 40 (NORTH FINISHED LEVEL)	19.0	0.0	2.00	-0.2	103.3
172530	27/06/2011	226	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	3.06	1.2	95.3
172531	27/06/2011	227	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	2.07	-1.0	96.0
172634	28/06/2011	141	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	2.01	-0.5	99.4
172635	28/06/2011	142	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	2.04	-1.7	97.0
172636	28/06/2011	143	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	2.06	-0.7	98.1
172637	28/06/2011	144	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	2.06	-0.1	98.0
172638	28/06/2011	145	LOT 104 (0.00 CENTRE OF LOT 104) (NORTH FINISHED LEVEL)	19.0	0.0	2.01	1.8	99.1
172639	28/06/2011	146	MILLSTREAM PLAZA ON THE EAST SIDE OF LOT 40 (NORTH FINISHED LEVEL)	19.0	3.7	2.10	1.6	99.8

Test Summary :

Hiif Ratio (Nuclear Meter)

Client : MIRVAC

Project : GAINSBOROUGH GREENS (LEVEL 1)

Job Number : GL11/057

Location : PRECINCT 6 STAGES 1 & 2

Suburb : PIMPAMA

Lot Number : All

Date Compiled: 30/09/2011

Lab Number	Date Sampled	ID Number	Location	Maximum Size(mm)	Oversize (%)	Peak Converted Wet Density (t/m ³)	Moisture Content Variation (%)	Hiif Ratio (%)
172640	29/06/2011	147	WESTERN FACE OF ROAD ON LEFT OF C, FINISHED LEVEL.	19.0	0.0	2.03	0.2	98.4
172641	29/06/2011	149	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.05	0.6	98.1
172642	29/06/2011	149	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.06	0.0	98.0
172643	29/06/2011	150	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.07	0.2	98.4
172749	4/07/2011	151	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.08	-1.2	98.1
172750	4/07/2011	152	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.03	0.1	101.4
172751	4/07/2011	153	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.01	-0.4	96.4
172752	4/07/2011	154	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.05	-1.2	98.1
172753	4/07/2011	155	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.08	0.9	95.4
172754	4/07/2011	156	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.08	0.0	97.0
172755	4/07/2011	157	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.02	-0.2	101.8
172756	4/07/2011	158	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	1.95	0.0	102.9
172757	4/07/2011	159	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	1.98	0.2	101.1
172758	4/07/2011	160	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.04	-0.2	100.1
172759	4/07/2011	161	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.08	3.3	97.7
172760	4/07/2011	162	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.05	1.9	102.0
172761	4/07/2011	163	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.03	-1.4	103.0
172762	4/07/2011	164	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.02	1.4	98.3
172763	4/07/2011	165	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.07	-2.5	100.3
172764	4/07/2011	166	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.03	1.7	100.6
172765	4/07/2011	167	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.05	0.0	100.0
172766	4/07/2011	168	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.04	1.8	102.5
172767	4/07/2011	169	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.06	-0.9	102.5
172768	4/07/2011	170	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.12	1.2	97.7
172769	4/07/2011	171	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.02	-0.9	99.5
172770	4/07/2011	172	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.10	-1.3	96.3
172771	4/07/2011	173	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.03	1.8	103.7
172772	4/07/2011	174	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.05	-0.1	99.6
172773	4/07/2011	175	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.08	3.0	97.1
172774	4/07/2011	176	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.11	3.1	97.1
172775	4/07/2011	177	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.00	1.2	101.7
172776	4/07/2011	178	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.05	-0.9	98.0
172853	5/07/2011	179	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.12	3.0	98.7
174854	5/07/2011	180	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.10	3.0	97.9
172855	5/07/2011	181	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.11	1.1	99.1
172856	5/07/2011	182	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.12	-0.3	96.7
172857	5/07/2011	183	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.04	-0.9	101.2
172858	5/07/2011	184	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.06	-0.7	99.7
172859	5/07/2011	185	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.04	-0.6	100.4
172860	5/07/2011	186	LOT 440'S CENTRE OF LOT 111 ON WEST SIDE OF ROAD.	19.0	0.0	2.05	0.0	99.9

Test Summary :

HLIF Ratio (Nuclear Meter)

Client : MIRVAC

Project : GAINSBOROUGH GREENS (LEVEL 1)

Job Number : GL13/097

Lot Number : All

Location : PRECINCT 6 STAGES 1 & 2

Suburb : PIMPANA

Item Number : All

Location Filter : All

Date Compiled: 30/09/2011

Lab Number	Date Sampled	ID Number	Location	Maximum Size(mm)	Oversize (%)	Density (g/m ³)	Moisture Content (%)	HLIF Ratio
172861	5/07/2011	187	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	19.1	2.16	-0.4	98.4
172861	6/07/2011	278	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	2.11	1.9	98.1
172862	6/07/2011	239	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	2.14	0.0	98.5
172863	6/07/2011	240	HILBERT ROAD PLACE 0114012M (COMMERCIAL) STAGE 02	19.0	0.0	2.12	1.3	98.0
172864	6/07/2011	241	DAWSONS PASSION PALM CONTROLLING AND BELOW SG	19.0	0.0	2.14	2.1	97.4
172865	6/07/2011	242	DAWSONS PASSION PALM CONTROLLING AND BELOW SG	19.0	0.0	2.11	-1.0	98.3
172866	6/07/2011	243	DAWSONS PASSION PALM CONTROLLING AND BELOW SG	19.0	0.0	2.14	1.8	95.0
172924	7/07/2011	228	DAWSONS PASSION PALM CONTROLLING AND BELOW SG	19.0	0.0	2.07	1.6	98.5
172925	7/07/2011	229	DAWSONS PASSION PALM CONTROLLING AND BELOW SG	19.0	0.0	2.10	0.1	97.7
173047	6/07/2011	230	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	2.06	1.0	95.0
173048	6/07/2011	231	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	2.07	1.2	98.6
173049	6/07/2011	232	WATERLOO ST. CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	2.05	2.1	103.4
173050	6/07/2011	233	WATERLOO ST. CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	2.06	2.1	101.5
173051	6/07/2011	234	WATERLOO ST. CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	2.07	0.6	98.2
173052	6/07/2011	235	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	2.12	0.3	95.9
173053	6/07/2011	236	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	15.4	2.13	3.3	94.0
173054	6/07/2011	237	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	2.11	0.0	95.6
173144	11/07/2011	251	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	1.88	3.0	98.4
173145	11/07/2011	252	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	2.01	-0.7	100.4
173146	11/07/2011	253	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	2.06	-0.1	102.9
173147	11/07/2011	254	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	1.99	0.4	97.0
173148	11/07/2011	255	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	1.99	-4.0	97.1
173149	11/07/2011	256	LOT 438 015 CORNER OF LOT 1301 NORTH OF AND BELOW R...	19.0	0.0	2.04	0.1	103.7
173180	11/07/2011	297	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-0.4	97.0
173181	11/07/2011	258	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173182	11/07/2011	259	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173183	11/07/2011	260	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173184	11/07/2011	261	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173185	11/07/2011	262	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173186	11/07/2011	263	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173187	11/07/2011	264	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173188	11/07/2011	265	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173189	11/07/2011	266	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173190	11/07/2011	267	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173191	11/07/2011	268	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173192	11/07/2011	269	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173193	11/07/2011	270	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173194	11/07/2011	271	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173195	11/07/2011	272	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1
173196	11/07/2011	273	WATERLOO ROAD WALL E 104341N 13444 10110100 LEVEL	19.0	0.0	1.99	-4.0	97.1

Test Summary :

Half Ratio (Nuclear Meter)

Date Compiled: 30/09/2011

Client : MIRVAC

Project : GAINSBOROUGH GREENS (LEVEL 1)

Job Number : G111/057

Location : PRECINCT 6 STAGES 1 & 2

Suburb : PIMPAMA

Item Number : All

Date Filter : All

Lab Number	Date Sampled	ID Number	Location	Maximum Size(mm)	Oversize (%)	Peak Converted Wet Density (t/m ³)	Moisture Content Variation (%)	Half Ratio (%)
173385	13/07/2011	274	LOT 424.0/5 SW CORNER, 1.0m EAST, 1.0m NORTH FINISHED LEVEL.	19.0	0.0	1.98	0.0	100.4
173385	14/07/2011	244	PARADEGROUND, 1.0m SW AND 5m RIGHT OF C/O, 7m BELOW SO	19.0	0.0	2.10	-0.5	97.7
173386	14/07/2011	245	GAINSBOROUGH DRIVE, 1.0m LEFT OF C/O, 7m BELOW SO	19.0	0.0	2.02	-0.9	102.7
173398	15/07/2011	246	LOT 438.0/5 SW CORNER, 1m EAST, 10m NORTH FINISHED LEVEL.	19.0	0.0	2.05	0.5	97.3
173399	15/07/2011	247	LOT 437.0/5 SW CORNER, 1m EAST, 1.0m NORTH FINISHED LEVEL.	19.0	0.0	2.06	0.5	98.8
173400	15/07/2011	248	LOT 436.0/5 SW CORNER, 1m EAST, 7m NORTH FINISHED LEVEL.	19.0	0.0	2.02	2.5	99.6
173401	15/07/2011	249	LOT 435.0/5 SW CORNER, 1m EAST, 14m NORTH FINISHED LEVEL.	19.0	0.0	2.03	2.1	100.6
173402	15/07/2011	250	LOT 434.0/5 SW CORNER, 1.5m EAST, 20m NORTH FINISHED LEVEL.	19.0	0.0	2.02	-0.2	97.7
175365	8/09/2011	275	LOT 433.0/5 SW CORNER, 1.0m EAST, 10m NORTH FINISHED LEVEL.	19.0	4.4	2.12	-0.8	96.9
175366	8/09/2011	276	LOT 432.0/5 SW CORNER, 20m EAST, 14m NORTH FINISHED LEVEL.	19.0	3.1	2.12	-0.9	100.4
175367	8/09/2011	277	LOT 431.0/5 SW CORNER, 1.0m EAST, 8m NORTH FINISHED LEVEL.	19.0	6.0	2.14	-1.1	95.9
175368	8/09/2011	278	LOT 430.0/5 SW CORNER, 1.0m EAST, 10m NORTH FINISHED LEVEL.	19.0	7.9	2.13	-0.1	99.1
175369	8/09/2011	279	LOT 429.0/5 SW CORNER, 1.0m EAST, 10m NORTH FINISHED LEVEL.	19.0	8.2	2.16	-0.7	97.5
175370	8/09/2011	280	LOT 428.0/5 NW CORNER, 1.0m EAST, 10m SOUTH FINISHED LEVEL.	19.0	7.7	2.14	-0.7	96.7
175371	8/09/2011	281	LOT 427.0/5 SW CORNER, 1.0m EAST, 10m NORTH FINISHED LEVEL.	19.0	3.7	2.14	-0.8	97.4
175372	8/09/2011	282	LOT 426.0/5 CORNER, 1.0m EAST, 3m NORTH FINISHED LEVEL.	19.0	1.4	2.11	-0.6	99.2
175373	8/09/2011	283	LOT 425.0/5 NW CORNER, 1.0m EAST, 20m SOUTH FINISHED LEVEL.	19.0	6.9	2.13	-0.3	99.4
175374	8/09/2011	284	LOT 424.0/5 SE CORNER, 1.0m WEST, 10m NORTH FINISHED LEVEL.	19.0	5.5	2.13	-1.1	100.0
175375	8/09/2011	285	LOT 423.0/5 SE CORNER, 1.0m WEST, 10m NORTH FINISHED LEVEL.	19.0	7.0	2.13	-1.0	97.8
175376	8/09/2011	286	LOT 422.0/5 SE CORNER, 1.0m WEST, 8m NORTH FINISHED LEVEL.	19.0	10.2	2.12	-0.2	98.6
175377	8/09/2011	287	LOT 421.0/5 SE CORNER, 1.0m WEST, 1.0m NORTH FINISHED LEVEL.	19.0	7.3	2.09	1.8	100.1
175378	8/09/2011	288	LOT 420.0/5 SE CORNER, 1.0m WEST, 10m NORTH FINISHED LEVEL.	19.0	5.0	2.09	1.0	100.9

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ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	71977
Job Number :	GL11/057	Report Date:	01/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171263	171264	171265
ID No :	1	2	3
Lot No :	355	366	338
Item No :	-	-	-
Date Sampled :	27/5/2011	27/5/2011	27/5/2011
Date Tested :	27/5/2011	27/5/2011	27/5/2011
Material Source :	-	-	-
For Use As :	FILL	FILL	FILL
Sample Location :	LOT 355 O/S NE CORNER 10m SOUTH WEST 0.4m BELOW FL	LOT 366 O/S SE CORNER 10m NORTH, 8m WEST 0.7m BELOW FL	LOT 338 O/S CENTRE OF LOT 6m NORTH 0.8m BELOW FL
Test Depth (mm) :	150	150	150
Max Size (mm) :	19	19	19
Oversize Wet (%) :	0	0	0
Field Wet Density (t/m ³):	2.00	2.05	1.96
Field Moisture Cont (%):	15.6	19.6	18.6
PCWD (t/m ³) :	2.04	1.97	1.99
Moisture Variation (%):	0.3	0.4	0.6
Compactive Effort :	Standard	Standard	Standard
Hilf Density Ratio (%) :	98.0	104.0	98.5
Min Hilf Dens Ratio (%)	95	95	95

Remarks:

Lab Number:	Soil Description
171263	
171264	
171265	



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APPROVED SIGNATORY

Gary Taylor

GARY TAYLOR (Gold Coast)
NATA Accred No:1169

FORM NUMBER

REP AHNUC-1-2

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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	71978
Job Number :	GL11/057	Report Date:	01/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171267	171268	171269
ID No :	4	5	6
Lot No :	339	-	367
Item No :	-	-	-
Date Sampled :	28/5/2011	28/5/2011	28/5/2011
Date Tested :	28/5/2011	28/5/2011	28/5/2011
Material Source :	-	-	-
For Use As :	FILL	FILL	FILL
Sample Location :	LOT 339 O/S CENTRE OF LOT 12m NORTH 1.4m BELOW FL	GAINSBOROUGH DRIVE CH 288 ON CENTRELINE 1.2m BELOW FL	LOT 367 O/S CENTRE OF LOT 8m NORTH WEST 1.3m BELOW FL
Test Depth (mm) :	150	150	150
Max Size (mm) :	19	19	19
Oversize Wet (%) :	0	0	0
Field Wet Density (t/m ³):	2.08	1.92	1.92
Field Moisture Cont (%) :	12.8	26.5	24.5
PCWD (t/m ³) :	2.04	1.97	1.97
Moisture Variation (%) :	1.5	-1.4	0.3
Compactive Effort :	Standard	Standard	Standard
Hilf Density Ratio (%) :	102.0	97.5	97.5
Min Hilf Dens Ratio (%)	95	95	95

Remarks:

Lab Number:	Soil Description
171267	
171268	
171269	



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MORRISON
GEOTECHNIC
ABN 51 009 878 899
RPEUQ 2241

Dry Density Ratio Report

Client :	MIRVAC	Report Number:	72116
Job Number :	GL11/057	Report Date :	08/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.4.1

Lab No :	171429	171430	171431
ID No :	7	8	9
Lot No :	446	383	-
Item No :	-	-	-
Sampling Method :	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4
Date Sampled :	2/6/2011	2/6/2011	2/6/2011
Date/Time Tested :	2/6/2011 / -	2/6/2011 / -	2/6/2011 / -
Material Source :	-	-	-
For Use As :	GENERAL FILL	GENERAL FILL	GENERAL FILL
Sample Location :	LOT 446 O/S CENTRE OF LOT 8m EAST 1m BELOW FL	LOT 383 O/S CENTRE OF LOT 7m SOUTHEAST 1.3m BELOW FL	GREENMOUNT STREET CH 130 ON CENTRELINE 1.6m BELOW FL
Test/Layer Depth (mm)	150 / -	150 / -	150 / -
Max Size (mm) :	19.0	19.0	19.0
Oversize Wet (%) :	-	-	-
Oversize Dry (%) :	-	-	-
Field Dry Density (t/m ³) :	1.614	1.611	1.587
Field Moisture (%) :	17.3	21.8	20.4
MDR No :	171429	171430	171431
Assigned MDR :	No	No	No
MDR Tested :	06/06/2011	06/06/2011	06/06/2011
MDD (t/m ³) :	1.70	1.61	1.58
OMC (%) :	17.0	21.0	19.0
Variation from OMC	0.5% wet of omc	1% wet of omc	1.5% wet of omc
Field Density Method :	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1
MC Method :	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Compactive Effort :	Standard	Standard	Standard
MDR Method :	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1
Moisture Ratio / Spec(%) :	102 / -	105 / -	107.5 / -
Dry Density Ratio (%) :	95.0	100.0	100.5
Min Dry Dens Ratio (%)	95	95	95

Remarks :



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Dry Density Ratio Report

Client :	MIRVAC	Report Number:	72134
Job Number :	GL11/057	Report Date :	09/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.4.1

Lab No :	171455	171456	171457	171458
ID No :	10	11	12	13
Lot No :	340	350	368	439
Item No :	-	-	-	-
Sampling Method :	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4
Date Sampled :	3/6/2011	3/6/2011	3/6/2011	3/6/2011
Date/Time Tested :	3/6/2011 / -	3/6/2011 / -	3/6/2011 / -	3/6/2011 / -
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 340 O/S CENTRE OF LOT 7m SOUTHWEST 1.1m BELOW FL	LOT 350 O/S SW CORNER 8m NORTHEAST 1.4m BELOW FL	LOT 368 O/S CENTRE OF LOT 10m NORTHWEST 1.2m BELOW FL	LOT 439 O/S CENTRE OF LOT 12m SOUTH 1.4m BELOW FL
Test/Layer Depth (mm)	150 /	150 /	150 /	150 /
Max Size (mm) :	19.0	19.0	19.0	19.0
Oversize Wet (%) :	-	-	-	-
Oversize Dry (%) :	-	-	-	-
Field Dry Density (t/m ³) :	1.625	1.515	1.768	1.669
Field Moisture (%) :	19.3	28.2	14.5	18.0
MDR No :	171455	171456	171457	171458
Assigned MDR :	No	No	No	No
MDR Tested :	06/06/2011	07/06/2011	06/06/2011	06/06/2011
MDD (t/m ³) :	1.71	1.56	1.81	1.73
OMC (%) :	19.5	25.0	16.0	18.0
Variation from OMC	0.5% dry of omc	3% wet of omc	1.5% dry of omc	0% dry of omc
Field Density Method :	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1
MC Method :	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Compactive Effort :	Standard	Standard	Standard	Standard
MDR Method :	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1
Moisture Ratio / Spec(%) :	98.5 / -	112.5 / -	92 / -	99.5 / -
Dry Density Ratio (%) :	95.0	97.5	97.5	96.5
Min Dry Dens Ratio (%)	95	95	95	95

Remarks :



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NATA Accred No:1169

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Dry Density Ratio Report

Client :	MIRVAC	Report Number:	72135
Job Number :	GL11/057	Report Date :	09/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.4.1

Lab No :	171459		
ID No :	14		
Lot No :	385		
Item No :	-		
Sampling Method :	AS1289.1.2.1 CL. 6.4		
Date Sampled :	3/6/2011		
Date/Time Tested :	3/6/2011 / -		
Material Source :	ONSITE		
For Use As :	LOT FILL		
Sample Location :	LOT 439 O/S CENTRE OF LOT 5m NORTHWEST 1.3m BELOW FL		
Test/Layer Depth (mm)	150 /		
Max Size (mm) :	19.0		
Oversize Wet (%) :	-		
Oversize Dry (%) :	-		
Field Dry Density (t/m ³) :	1.653		
Field Moisture (%) :	18.2		
MDR No :	171459		
Assigned MDR :	No		
MDR Tested :	07/06/2011		
MDD (t/m ³) :	1.67		
OMC (%) :	21.0		
Variation from OMC	3% dry of omc		
Field Density Method :	AS1289.5.8.1		
MC Method :	AS 1289.2.1.1		
Compactive Effort :	Standard		
MDR Method :	AS1289.5.1.1		
Moisture Ratio / Spec(%) :	86.5 / -		
Dry Density Ratio (%) :	99.0		
Min Dry Dens Ratio (%)	95		

Remarks :



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MORRISON
GEOTECHNIC
ABN 51 009 878 899
RPEUQ 2241

Dry Density Ratio Report

Client :	MIRVAC	Report Number:	72154
Job Number :	GL11/057	Report Date :	09/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.4.1

Lab No :	171463	171464	171465	171466
ID No :	15	16	17	18
Lot No :	341	-	394	352
Item No :	-	-	-	-
Sampling Method :	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4
Date Sampled :	4/6/2011	4/6/2011	4/6/2011	4/6/2011
Date/Time Tested :	4/6/2011 / -	4/6/2011 / -	4/6/2011 / -	4/6/2011 / -
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	-	LOT FILL	LOT FILL
Sample Location :	LOT 341 O/S NW CORNER 8m SOUTHEAST 0.9m BELOW FL	GAINSBOROUGH DRIVE CH 160 5m RIGHT OF CL 1.1m BELOW FL	LOT 394 O/S SE CORNER 6m NORTH, 6m WEST 1.2m BELOW FL	LOT 352 O/S CENTRE OF LOT 8m EAST 1m BELOW FL
Test/Layer Depth (mm)	150 /	150 /	150 /	150 /
Max Size (mm) :	19.0	19.0	19.0	19.0
Oversize Wet (%) :	-	-	-	-
Oversize Dry (%) :	-	-	-	-
Field Dry Density (t/m ³) :	1.668	1.792	1.659	1.824
Field Moisture (%) :	19.6	14.9	18.7	12.8
MDR No :	171463	171464	171465	171466
Assigned MDR :	No	No	No	No
MDR Tested :	08/06/2011	07/06/2011	07/06/2011	08/06/2011
MDD (t/m ³) :	1.74	1.69	1.70	1.85
OMC (%) :	18.5	18.5	17.0	15.0
Variation from OMC	1% wet of omc	4% dry of omc	1.5% wet of omc	2.5% dry of omc
Field Density Method :	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1
MC Method :	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Compactive Effort :	Standard	Standard	Standard	Standard
MDR Method :	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1
Moisture Ratio / Spec(%) :	106 / -	79.5 / -	108.5 / -	84 / -
Dry Density Ratio (%) :	96.0	106.0	97.5	98.5
Min Dry Denis Ratio (%)	95	95	95	95

Remarks :



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MORRISON
GEOTECHNIC
ABN 51 009 878 899
RPEUQ 2241

Dry Density Ratio Report

Client :	MIRVAC	Report Number:	72155
Job Number :	GL11/057	Report Date :	09/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.4.1

Lab No :	171467	171468	171469	171470
ID No :	19	20	21	22
Lot No :	397	-	912	437
Item No :	-	-	-	-
Sampling Method :	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4
Date Sampled :	4/6/2011	4/6/2011	4/6/2011	4/6/2011
Date/Time Tested :	4/6/2011 / -	4/6/2011 / -	4/6/2011 / -	4/6/2011 / -
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	-	LOT FILL	LOT FILL
Sample Location :	LOT 397 O/S CENTRE OF LOT 11m SOUTHEAST 1.4m BELOW FL	LAMINGTON LANE CH 50 ON CENTRELINE 1m BELOW FL	LOT 912 O/S SE CORNER 19m WEST, 8m NORTH 1.1m BELOW FL	LOT 437 O/S SE CORNER 8m NORTHWEST 1.8m BELOW FL
Test/Layer Depth (mm)	150 /	150 /	150 /	150 /
Max Size (mm) :	19.0	19.0	19.0	19.0
Oversize Wet (%) :	-	-	-	-
Oversize Dry (%) :	-	-	-	-
Field Dry Density (t/m ³) :	1.722	1.832	1.752	1.835
Field Moisture (%) :	17.8	12.4	15.6	12.7
MDR No :	171467	171468	171469	171470
Assigned MDR :	No	No	No	No
MDR Tested :	08/06/2011	07/06/2011	07/06/2011	06/06/2011
MDD (t/m ³) :	1.78	1.85	1.80	1.85
OMC (%) :	16.0	15.0	16.5	14.0
Variation from OMC	1.5% wet of omc	2.5% dry of omc	1% dry of omc	1% dry of omc
Field Density Method :	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1
MC Method :	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Compactive Effort :	Standard	Standard	Standard	Standard
MDR Method :	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1
Moisture Ratio / Spec(%) :	110.5 / -	82 / -	94.5 / -	91.5 / -
Dry Density Ratio (%) :	97.0	99.0	97.0	99.0
Min Dry Dens Ratio (%)	95	95	95	95

Remarks :



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Dry Density Ratio Report

Client :	MIRVAC	Report Number:	72191
Job Number :	GL11/057	Report Date :	14/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.4.1

Lab No :	171511	171512	171513	171514
ID No :	23	24	25	26
Lot No :	339	-	365	354
Item No :	-	-	-	-
Sampling Method :	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4
Date Sampled :	6/6/2011	6/6/2011	6/6/2011	6/6/2011
Date/Time Tested :	6/6/2011 / -	6/6/2011 / -	6/6/2011 / -	6/6/2011 / -
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	GENERAL FILL	LOT FILL	LOT FILL
Sample Location :	LOT 339 O/S CENTRE OF LOT 13m SOUTHEAST 0.3m BELOW FL	GAINSBOROUGH DRIVE CH 108 7m LEFT OF CL 0.6m BELOW FL	LOT 365 O/S CENTRE OF LOT 8m NORTH FINISHED LEVEL	LOT 354 O/S CENTRE OF LOT 9m NORTH 0.2m BELOW FL
Test/Layer Depth (mm)	150 /	150 /	150 /	150 /
Max Size (mm) :	19.0	19.0	19.0	19.0
Oversize Wet (%) :	-	-	-	-
Oversize Dry (%) :	-	-	-	-
Field Dry Density (t/m ³) :	1.801	1.872	1.765	1.794
Field Moisture (%) :	11.6	11.6	11.6	11.4
MDR No :	171511	171512	171513	171514
Assigned MDR :	No	No	No	No
MDR Tested :	09/06/2011	09/06/2011	10/06/2011	09/06/2011
MDD (t/m ³) :	1.86	1.87	1.84	1.88
OMC (%) :	13.0	13.0	14.5	13.0
Variation from OMC	1.5% dry of omc	1.5% dry of omc	3% dry of omc	1.5% dry of omc
Field Density Method :	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1
MC Method :	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Compactive Effort :	Standard	Standard	Standard	Standard
MDR Method :	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1
Moisture Ratio / Spec(%) :	88.5 / -	88 / -	80.5 / -	89 / -
Dry Density Ratio (%) :	96.5	100.5	96.0	95.0
Min Dry Dens Ratio (%)	95	95	95	95

Remarks :



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MORRISON
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RPEUQ 2241

Dry Density Ratio Report

Client :	MIRVAC	Report Number:	72192
Job Number :	GL11/057	Report Date :	14/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.4.1

Lab No :	171515	171516	171517	171518
ID No :	27	28	29	30
Lot No :	370	383	444	-
Item No :	-	-	-	-
Sampling Method :	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4
Date Sampled :	6/6/2011	6/6/2011	6/6/2011	6/6/2011
Date/Time Tested :	6/6/2011 / -	6/6/2011 / -	6/6/2011 / -	6/6/2011 / -
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	GENERAL FILL
Sample Location :	LOT 370 O/S CENTRE OF LOT 8m WEST 0.5m BELOW FL	LOT 383 O/S CENTRE OF LOT 12m NORTH 0.3m BELOW FL	LOT 444 O/S CENTRE OF LOT 10m NORTHWEST 0.6m BELOW FL	UNDARRA STREET CH 220 ON CENTRELINE 0.4m BELOW FL
Test/Layer Depth (mm)	150 /	150 /	150 /	150 /
Max Size (mm) :	19.0	19.0	19.0	19.0
Oversize Wet (%) :	-	-	-	-
Oversize Dry (%) :	-	-	-	-
Field Dry Density (t/m ³) :	1.770	1.625	1.813	1.857
Field Moisture (%) :	12.5	22.8	12.6	11.4
MDR No :	171515	171516	171517	171518
Assigned MDR :	No	No	No	No
MDR Tested :	09/06/2011	09/06/2011	10/06/2011	10/06/2011
MDD (t/m ³) :	1.85	1.68	1.86	1.88
OMC (%) :	14.0	20.5	13.0	13.5
Variation from OMC	1.5% dry of omc	2% wet of omc	0.5% dry of omc	2% dry of omc
Field Density Method :	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1
MC Method :	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Compactive Effort :	Standard	Standard	Standard	Standard
MDR Method :	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1
Moisture Ratio / Spec(%) :	90 / -	110 / -	97 / -	84 / -
Dry Density Ratio (%) :	96.0	96.5	97.5	98.5
Min Dry Dens Ratio (%)	95	95	95	95

Remarks :



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Dry Density Ratio Report

Client :	MIRVAC	Report Number:	72266
Job Number :	GL11/057	Report Date :	17/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.4.1

Lab No :	171544	171545	171546	171547
ID No :	31	32	33	34
Lot No :	343	345	347	349
Item No :	-	-	-	-
Sampling Method :	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4
Date Sampled :	7/6/2011	7/6/2011	7/6/2011	7/6/2011
Date/Time Tested :	7/6/2011 / -	7/6/2011 / -	7/6/2011 / -	7/6/2011 / -
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 343 O/S CENTRE OF LOT 8m SOUTH 1.9m BELOW FL	LOT 345 O/S CENTRE OF LOT 13m SOUTH 1.8m BELOW FL	LOT 347 O/S CENTRE OF LOT 5m SOUTH 2m BELOW FL	LOT 349 O/S CENTRE OF LOT 9m SOUTH 1.7m BELOW FL
Test/Layer Depth (mm)	150 /	150 /	150 /	150 /
Max Size (mm) :	19.0	19.0	19.0	19.0
Oversize Wet (%) :	-	-	-	-
Oversize Dry (%) :	-	-	-	-
Field Dry Density (t/m ³) :	1.818	1.782	1.758	1.804
Field Moisture (%) :	14.5	12.7	9.8	13.7
MDR No :	171544	171545	171546	171547
Assigned MDR :	No	No	No	No
MDR Tested :	15/06/2011	15/06/2011	15/06/2011	15/06/2011
MDD (t/m ³) :	1.85	1.82	1.84	1.76
OMC (%) :	12.5	16.0	12.5	16.5
Variation from OMC	2% wet of omc	3.5% dry of omc	3% dry of omc	3% dry of omc
Field Density Method :	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1
MC Method :	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Compactive Effort :	Standard	Standard	Standard	Standard
MDR Method :	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1
Moisture Ratio / Spec(%) :	117 / -	79 / -	78 / -	82.5 / -
Dry Density Ratio (%) :	98.5	98.0	95.5	102.5
Min Dry Dens Ratio (%)	95	95	95	95

Remarks :



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MORRISON
GEOTECHNIC
ABN 51 009 878 899
RPEUQ 2241

Dry Density Ratio Report

Client :	MIRVAC	Report Number:	72267
Job Number :	GL11/057	Report Date :	17/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.4.1

Lab No :	171548	171549	171550	171551
ID No :	35	36	37	38
Lot No :	-	-	-	-
Item No :	-	-	-	-
Sampling Method :	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4	AS1289.1.2.1 CL. 6.4
Date Sampled :	7/6/2011	7/6/2011	7/6/2011	7/6/2011
Date/Time Tested :	7/6/2011 / -	7/6/2011 / -	7/6/2011 / -	7/6/2011 / -
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	GENERAL FILL	GENERAL FILL	GENERAL FILL	GENERAL FILL
Sample Location :	GAINSBOROUGH DRIVE CH 170 11m LEFT OF CL 2.2m BELOW FL	GAINSBOROUGH DRIVE CH 200 12m RIGHT OF CL 2m BELOW FL	GAINSBOROUGH DRIVE CH 220 5m LEFT OF CL 1m BELOW FL	GAINSBOROUGH DRIVE CH 270 8m RIGHT OF CL 1.4m BELOW FL
Test/Layer Depth (mm)	150 /	150 /	150 /	150 /
Max Size (mm) :	19.0	19.0	19.0	19.0
Oversize Wet (%) :	14	-	-	-
Oversize Dry (%) :	15	-	-	-
Field Dry Density (t/m ³) :	1.905	1.751	1.780	1.775
Field Moisture (%) :	9.6	15.6	15.7	14.3
MDR No :	171548	171549	171550	171551
Assigned MDR :	No	No	No	No
MDR Tested :	15/06/2011	15/06/2011	15/06/2011	15/06/2011
MDD (t/m ³) :	1.94*	1.84	1.83	1.87
OMC (%) :	10.5	15.0	15.0	14.0
Variation from OMC	1% dry of omc	0.5% wet of omc	0.5% wet of omc	0.5% wet of omc
Field Density Method :	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1	AS1289.5.8.1
MC Method :	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Compactive Effort :	Standard	Standard	Standard	Standard
MDR Method :	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1	AS1289.5.1.1
Moisture Ratio / Spec(%) :	92.5 / -	102.5 / -	103.5 / -	103.5 / -
Dry Density Ratio (%) :	98.5	95.5	97.5	95.0
Min Dry Dens Ratio (%)	95	95	95	95

Remarks :



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**MORRISON
GEOTECHNIC**

ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72239
Job Number :	GL11/057	Report Date:	16/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171588	171589	171590	171591
ID No :	39	40	41	42
Lot No :	342	344	346	-
Item No :	-	-	-	-
Date Sampled :	8/6/2011	8/6/2011	8/6/2011	8/6/2011
Date Tested :	8/6/2011	8/6/2011	8/6/2011	8/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	GENERAL FILL
Sample Location :	LOT 342 O/S CENTRE OF LOT 7m NORTH 0.7m BELOW FL	LOT 344 O/S CENTRE OF LOT 10m NORTH 1.2m BELOW FL	LOT 346 O/S CENTRE OF LOT 9m SOUTH 1m BELOW FL	GAINSBOROUGH DRIVE CH 270 6m RIGHT OF CL 0.4m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.94	1.98	2.01	2.04
Field Moisture Cont (%) :	18.1	17.1	16.9	17.2
PCWD (t/m ³) :	2.05	2.08	2.09	2.11
Moisture Variation (%) :	-0.1	-0.1	0.3	-0.9
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	95.0	95.0	96.0	96.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171588	
171589	
171590	
171591	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72240
Job Number :	GL11/057	Report Date:	16/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171592	171593	171594	171595
ID No :	43	44	45	46
Lot No :	390	392	348	-
Item No :	-	-	-	-
Date Sampled :	8/6/2011	8/6/2011	8/6/2011	8/6/2011
Date Tested :	8/6/2011	8/6/2011	8/6/2011	8/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	GENERAL FILL
Sample Location :	LOT 390 O/S CENTRE OF LOT 13m SOUTH 1.6m BELOW FL	LOT 392 O/S CENTRE OF LOT 7m EAST 1.7m BELOW FL	LOT 348 O/S CENTRE OF LOT 15m SOUTH 1.2m BELOW FL	GAINSBOROUGH DRIVE ON CENTRELIN CH 140 0.9m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.04	2.01	2.01	2.07
Field Moisture Cont (%):	16.9	17.5	18.0	17.9
PCWD (t/m ³) :	2.08	2.05	2.08	2.10
Moisture Variation (%):	-0.2	0.2	-1.0	-1.0
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	98.0	98.0	96.5	99.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171592	
171593	
171594	
171595	



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**MORRISON
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ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72552
Job Number :	GL11/057	Report Date:	01/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	172418	172419	172420	172421
ID No :	125	126	127	128
Lot No :	-	-	-	-
Item No :	-	-	-	-
Date Sampled :	24/6/2011	24/6/2011	24/6/2011	24/6/2011
Date Tested :	24/6/2011	24/6/2011	24/6/2011	24/6/2011
Material Source :	-	-	-	-
For Use As :	GENERAL FILL	GENERAL FILL	GENERAL FILL	GENERAL FILL
Sample Location :	WETLANDS REFER TO SITE PLAN 0.5m BELOW FL	WETLANDS REFER TO SITE PLAN 0.6m BELOW FL	WETLANDS REFER TO SITE PLAN 0.5m BELOW FL	WETLANDS REFER TO SITE PLAN 0.4m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.90	1.83	1.88	1.88
Field Moisture Cont (%) :	20.7	19.4	23.6	20.9
PCWD (t/m ³) :	1.99	1.91	1.88	1.96
Moisture Variation (%) :	-2.1	-2.2	0.0	-0.6
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	95.5	96.0	100.0	96.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172418	
172419	
172420	
172421	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72553
Job Number :	GL11/057	Report Date:	01/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172422	172423	172424	172425
ID No :	129	130	131	132
Lot No :	-	371	369	-
Item No :	-	-	-	-
Date Sampled :	24/6/2011	24/6/2011	24/6/2011	24/6/2011
Date Tested :	24/6/2011	24/6/2011	24/6/2011	24/6/2011
Material Source :	-	ONSITE	ONSITE	-
For Use As :	GENERAL FILL	LOT FILL	LOT FILL	GENERAL FILL
Sample Location :	WETLANDS REFER TO SITE PLAN 0.6m BELOW FL	LOT 371 O/S CENTRE OF LOT 6m NORTH FINISHED LEVEL	LOT 369 O/S CENTRE OF LOT 11m SOUTH FINISHED LEVEL	LAMINGTON LANE CH 33 ON CENTRELINE FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.94	1.95	1.99	2.01
Field Moisture Cont (%) :	24.5	20.2	19.9	20.5
PCWD (t/m ³) :	2.03	2.04	2.05	2.05
Moisture Variation (%) :	0.0	-0.2	-0.5	-0.3
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	95.5	95.5	97.0	97.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172422	
172423	
172424	
172425	



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**MORRISON
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ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72554
Job Number :	GL11/057	Report Date:	01/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172426	172427	172428	172429
ID No :	133	134	135	136
Lot No :	413	413	398	397
Item No :	-	-	-	-
Date Sampled :	24/6/2011	24/6/2011	24/6/2011	24/6/2011
Date Tested :	24/6/2011	24/6/2011	24/6/2011	24/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 413 O/S CENTRE OF LOT 14m NORTH 0.6m BELOW FL	LOT 413 CENTRE OF LOT FINISHED LEVEL	LOT 398 O/S CENTRE OF LOT 8m SOUTHWEST FINISHED LEVEL	LOT 397 O/S CENTRE OF LOT 11m WEST 0.4m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.04	2.02	2.01	2.03
Field Moisture Cont (%) :	20.4	19.1	19.3	19.5
PCWD (t/m ³) :	2.05	1.99	2.02	2.02
Moisture Variation (%) :	-0.2	-2.2	-0.1	0.1
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	99.5	101.5	99.0	101.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172426	
172427	
172428	
172429	



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**MORRISON
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ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72555
Job Number :	GL11/057	Report Date:	01/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2, PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172430	172431	172432	172433
ID No :	137	138	139	140
Lot No :	411	401	403	384
Item No :	-	-	-	-
Date Sampled :	24/6/2011	24/6/2011	24/6/2011	24/6/2011
Date Tested :	24/6/2011	24/6/2011	24/6/2011	24/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 411 O/S CENTRE OF LOT 12m NORTH 0.5m BELOW FL	LOT 401 O/S CENTRE OF LOT 8m SOUTH 1m BELOW FL	LOT 403 O/S CENTRE OF LOT 9m NORTHEAST 1.1m BELOW FL	LOT 384 O/S CENTRE OF LOT 2m NORTH 0.7m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.98	2.02	1.97	2.01
Field Moisture Cont (%) :	19.9	20.1	18.5	18.1
PCWD (t/m ³) :	2.04	2.04	2.06	2.06
Moisture Variation (%) :	0.0	0.0	-0.2	-0.1
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	97.0	99.0	95.5	97.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172430	
172431	
172432	
172433	



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**MORRISON
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ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72536
Job Number :	GL11/057	Report Date:	30/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172634	172635	172636	172637
ID No :	141	142	143	144
Lot No :	368	412	410	409
Item No :	-	-	-	-
Date Sampled :	28/6/2011	28/6/2011	28/6/2011	28/6/2011
Date Tested :	28/6/2011	28/6/2011	28/6/2011	28/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 368 O/S CENTRE OF LOT 9m NORTH, 9m EAST FINISHED LEVEL	LOT 412 CENTRE OF LOT FINISHED LEVEL	LOT 410 O/S CENTRE OF LOT 11m NORTH FINISHED LEVEL	LOT 409 O/S CENTRE OF LOT 9m NORTHWEST FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.01	1.98	2.05	2.05
Field Moisture Cont (%):	17.8	17.0	17.4	17.2
PCWD (t/m ³) :	2.03	2.04	2.09	2.08
Moisture Variation (%):	-0.4	-1.4	-0.6	-0.1
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	99.5	97.0	98.0	98.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172634	
172635	
172636	
172637	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72537
Job Number :	GL11/057	Report Date:	30/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172638	172639	
ID No :	145	146	
Lot No :	408	-	
Item No :	-	-	
Date Sampled :	28/6/2011	28/6/2011	
Date Tested :	28/6/2011	28/6/2011	
Material Source :	ONSITE	ONSITE	
For Use As :	LOT FILL	GENERAL FILL	
Sample Location :	LOT 408 O/S CENTRE OF LOT 9m WEST FINISHED LEVEL	MILLSTREAM PLACE CH 245 ON CENTRELINE FINISHED LEVEL	
Test Depth (mm) :	150	150	
Max Size (mm) :	19	19	
Oversize Wet (%) :	0	3.7	
Field Wet Density (t/m ³):	2.08	2.10	
Field Moisture Cont (%) :	12.7	11.6	
PCWD (t/m ³) :	2.10	2.10*	
Moisture Variation (%) :	1.6	1.6*	
Compactive Effort :	Standard	Standard	
Hilf Density Ratio (%) :	99.0	100.0	
Min Hilf Dens Ratio (%) :	95	95	

Remarks:

Lab Number:	Soil Description
172638	
172639	



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MORRISON
GEOTECHNIC

ABN 51 009 878 899

RPEUQ-2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72551
Job Number :	GL11/057	Report Date:	01/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172640	172641	172642	172643
ID No :	147	148	149	150
Lot No :	-	407	406	405
Item No :	-	-	-	-
Date Sampled :	29/6/2011	29/6/2011	29/6/2011	29/6/2011
Date Tested :	29/6/2011	29/6/2011	29/6/2011	29/6/2011
Material Source :	-	-	-	-
For Use As :	GENERAL FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	MILLSTREAM PLACE CH 200 1m LEFT OF CL FINISHED LEVEL	LOT 407 O/S CENTRE OF LOT 11m NORTHWEST 0.3m BELOW FL	LOT 406 O/S CENTRE OF LOT 9m SOUTH FINISHED LEVEL	LOT 405 O/S CENTRE OF LOT 11m SOUTH FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.99	2.03	2.02	2.04
Field Moisture Cont (%):	15.7	12.3	16.7	19.3
PCWD (t/m ³) :	2.03	2.05	2.06	2.07
Moisture Variation (%):	0.2	0.5	0.0	0.2
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	98.5	99.0	98.0	98.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172640	
172641	
172642	
172643	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72566
Job Number :	GL11/057	Report Date:	01/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172249	172250	172251	172252
ID No :	151	152	153	154
Lot No :	398	412	410	-
Item No :	-	-	-	-
Date Sampled :	22/6/2011	22/6/2011	22/6/2011	22/6/2011
Date Tested :	22/6/2011	22/6/2011	22/6/2011	22/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	FILL
Sample Location :	LOT 398 O/S CENTRE OF LOT 14m EAST 0.4m BELOW FL	LOT 412 O/S CENTRE OF LOT 8m NORTH 1.4m BELOW FL	LOT 410 CENTRE OF LOT 1.3m BELOW FL	MILLSTREAM PLACE CH 130 ON CENTRELINE 0.2m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.08	2.04	2.03	1.97
Field Moisture Cont (%) :	19.0	20.1	18.5	19.1
PCWD (t/m ³) :	2.05	2.03	2.06	2.06
Molsture Variation (%) :	0.0	-0.1	0.3	0.0
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	101.5	100.5	98.5	95.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172249	
172250	
172251	
172252	



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**MORRISON
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ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72700
Job Number :	GL11/057	Report Date:	07/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172749	172750	172751	172752
ID No :	151	152	153	154
Lot No :	411	447	446	-
Item No :	-	-	-	-
Date Sampled :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Date Tested :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	GENERAL FILL
Sample Location :	LOT 411 O/S CENTRE OF LOT 8m EAST FINISHED LEVEL	LOT 447 CENTRE OF LOT FINISHED LEVEL	LOT 446 CENTRE OF LOT FINISHED LEVEL	UNDARRA STREET CH 160 2m RIGHT OF CL 0.3m BELOW SG
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.00	2.06	1.99	2.01
Field Moisture Cont (%) :	20.6	16.6	24.6	21.7
PCWD (t/m ³) :	2.08	2.03	2.01	2.05
Moisture Variation (%) :	-1.0	0.1	-0.3	-1.0
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	96.0	101.5	99.5	98.0
Min Hilf Dens Ratio (%) :	95	95	95	95

Remarks:

Lab Number:	Soil Description
172749	
172750	
172751	
172752	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72567
Job Number :	GL11/057	Report Date:	01/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172253	172254	
ID No :	155	156	
Lot No :	411	408	
Item No :	-	-	
Date Sampled :	22/6/2011	22/6/2011	
Date Tested :	22/6/2011	22/6/2011	
Material Source :	ONSITE	ONSITE	
For Use As :	LOT FILL	LOT FILL	
Sample Location :	LOT 411 O/S CENTRE OF LOT 12m NORTH 0.8m BELOW FL	LOT 408 O/S CENTRE OF LOT 6m EAST 0.6m BELOW FL	
Test Depth (mm) :	150	150	
Max Size (mm) :	19	19	
Oversize Wet (%) :	0	0	
Field Wet Density (t/m ³):	2.03	2.01	
Field Moisture Cont (%) :	17.6	17.4	
PCWD (t/m ³) :	2.03	2.00	
Moisture Variation (%) :	0.4	-0.2	
Compactive Effort :	Standard	Standard	
Hilf Density Ratio (%) :	100.0	100.5	
Min Hilf Dens Ratio (%)	95	95	
Remarks:			

Lab Number:	Soil Description
172253	
172254	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72701
Job Number :	GL11/057	Report Date:	07/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172753	172754	172755	172756
ID No :	155	156	157	158
Lot No :	434	443	-	-
Item No :	-	-	-	-
Date Sampled :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Date Tested :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	GENERAL FILL	GENERAL FILL
Sample Location :	LOT 434 O/S CENTRE OF LOT 9m NORTH 0.4m BELOW FL	LOT 443 CENTRE OF LOT 0.6m BELOW FL	MOONDARRA STREET CH 350 ON CENTRELINE 0.4m BELOW SG	MOONDARRA STREET CH 270 4m LEFT OF CL 0.6m BELOW SG
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.98	2.03	2.06	2.05
Field Moisture Cont (%) :	16.1	17.4	17.7	22.3
PCWD (t/m ³) :	2.08	2.09	2.02	1.99
Moisture Variation (%) :	-0.8	-0.8	-0.2	0.0
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	95.5	97.0	102.0	103.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172753	
172754	
172755	
172756	



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**MORRISON
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RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72702
Job Number :	GL11/057	Report Date:	07/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172757	172758	172759	172760
ID No :	159	160	161	162
Lot No :	-	-	439	440
Item No :	-	-	-	-
Date Sampled :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Date Tested :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	GENERAL FILL	GENERAL FILL	LOT FILL	LOT FILL
Sample Location :	MILLSTREAM PLACE CH 130 ON CENTRELINE 0.3m BELOW SG	MOONDARRA STREET CH 320 ON CENTRELINE 0.3m BELOW SG	LOT 439 O/S CENTRE OF LOT 7m NORTH 0.8m BELOW FL	LOT 440 CENTRE OF LOT 0.5m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	8.9	5.1
Field Wet Density (t/m ³):	2.00	2.04	2.01	2.09
Field Moisture Cont (%) :	19.9	17.4	8.9	10.3
PCWD (t/m ³) :	1.98	2.04	2.06*	2.05*
Moisture Variation (%) :	0.2	-0.1	3.3*	1.9*
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	101.0	100.0	97.5	102.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172757	
172758	
172759	
172760	



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**MORRISON
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ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72703
Job Number :	GL11/057	Report Date:	07/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172761	172762	172763	172764
ID No :	163	164	165	166
Lot No :	442	-	-	403
Item No :	-	-	-	-
Date Sampled :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Date Tested :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	GENERAL FILL	GENERAL FILL	LOT FILL
Sample Location :	LOT 442 O/S CENTRE OF LOT 11m SOUTH 0.4m BELOW FL	OSSA LANE CH 15 ON CENTRELINE 0.4m BELOW SG	YOORIGAN LANE CH 30 ON CENTRELINE 0.5m BELOW SG	LOT 403 O/S CENTRE OF LOT 8m EAST FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	8.8	0
Field Wet Density (t/m ³):	2.09	1.98	2.08	2.02
Field Moisture Cont (%) :	17.5	17.0	9.2	17.6
PCWD (t/m ³) :	2.03	2.02	2.07*	2.01
Moisture Variation (%) :	1.2	1.2	2.5*	1.5
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	103.0	98.5	100.5	100.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172761	
172762	
172763	
172764	



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MORRISON
GEOTECHNIC
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72704
Job Number :	GL11/057	Report Date:	07/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	172765	172766	172767	172768
ID No :	167	168	169	170
Lot No :	401	-	912	439
Item No :	-	-	-	-
Date Sampled :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Date Tested :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	GENERAL FILL	LOT FILL	LOT FILL
Sample Location :	LOT 401 O/S CENTRE OF LOT 6m SOUTHEAST FINISHED LEVEL	MILLSTREAM PLACE CH 46 ON CENTRELINE 0.3m BELOW SG	LOT 912 O/S CENTRE OF LOT 15m EAST FINISHED LEVEL	LOT 439 CENTRE OF LOT FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	3.5	0	5.8
Field Wet Density (t/m ³):	2.06	2.09	2.11	2.07
Field Moisture Cont (%) :	13.9	14.8	15.3	13.2
PCWD (t/m ³) :	2.05	2.04*	2.06	2.12*
Moisture Variation (%) :	0.0	1.8*	-0.8	1.2*
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	101.0	102.5	102.5	97.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172765	
172766	
172767	
172768	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72705
Job Number :	GL11/057	Report Date:	07/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	172769	172770	172771	172772
ID No :	171	172	173	174
Lot No :	912	-	404	405
Item No :	-	-	-	-
Date Sampled :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Date Tested :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	GENERAL FILL	LOT FILL	LOT FILL
Sample Location :	LOT 912 O/S CENTRE OF LOT 20m WEST FINISHED LEVEL	MOONDARRA STREET CH 320 2m LEFT OF CL 0.3m BELOW SG	LOT 404 CENTRE OF LOT FINISHED LEVEL	LOT 405 O/S CENTRE OF LOT 8m NORTH FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.01	2.03	2.07	2.08
Field Moisture Cont (%) :	18.0	15.2	14.2	12.3
PCWD (t/m ³) :	2.02	2.10	2.03	2.09
Moisture Variation (%) :	-0.4	-1.1	1.3	-0.1
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	99.5	96.5	101.5	99.5
Min Hilf Dens Ratio (%) :	95	95	95	95

Remarks:

Lab Number:	Soil Description
172769	
172770	
172771	
172772	



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**MORRISON
GEOTECHNIC**

ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72274
Job Number :	GL11/057	Report Date:	17/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	171676	171677	171678	171679
ID No :	47	48	49	50
Lot No :	391	395	413	398
Item No :	-	-	-	-
Date Sampled :	9/6/2011	9/6/2011	9/6/2011	9/6/2011
Date Tested :	9/6/2011	9/6/2011	9/6/2011	9/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 391 O/S CENTRE OF LOT 6m NORTH 1.8m BELOW FL	LOT 395 O/S CENTRE OF LOT 14m WEST 1.3m BELOW FL	LOT 413 O/S CENTRE OF LOT 12m SOUTH 1.8m BELOW FL	LOT 398 O/S CENTRE OF LOT 11m NORTH 1.3m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.98	1.95	2.01	2.00
Field Moisture Cont (%) :	15.8	19.0	15.2	18.4
PCWD (t/m ³) :	2.08	2.01	2.04	2.02
Moisture Variation (%) :	-0.6	-0.5	1.0	-1.1
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	95.5	97.0	98.0	99.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171676	
171677	
171678	
171679	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72275
Job Number :	GL11/057	Report Date:	17/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	171680	171681	171682	171683
ID No :	51	52	53	54
Lot No :	400	912	440	-
Item No :	-	-	-	-
Date Sampled :	9/6/2011	9/6/2011	9/6/2011	9/6/2011
Date Tested :	9/6/2011	9/6/2011	9/6/2011	9/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	GENERAL FILL
Sample Location :	LOT 400 O/S CENTRE OF LOT 16m NORTH 1.5m BELOW FL	LOT 912 O/S CENTRE OF LOT 10m EAST 1.6m BELOW FL	LOT 440 O/S CENTRE OF LOT 8m SOUTH 1.7m BELOW FL	MOONDARRA STREET CH 205 1.5m LEFT OF CL 1m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.06	2.03	1.99	2.06
Field Moisture Cont (%) :	14.8	16.3	14.9	16.9
PCWD (t/m ³) :	2.04	2.06	2.10	2.08
Moisture Variation (%) :	0.1	-0.2	-1.0	0.2
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	101.0	98.5	95.0	98.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171680	
171681	
171682	
171683	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72265
Job Number :	GL11/057	Report Date:	17/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	171823	171824	171825	171826
ID No :	55	56	57	58
Lot No :	340	344	348	-
Item No :	-	-	-	-
Date Sampled :	14/6/2011	14/6/2011	14/6/2011	14/6/2011
Date Tested :	14/6/2011	14/6/2011	14/6/2011	14/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	FILL
Sample Location :	LOT 340 O/S CENTRE OF LOT 12m NORTH 0.3m BELOW FL	LOT 344 O/S CENTRE OF LOT 6m SOUTH 0.3m BELOW FL	LOT 348 O/S CENTRE OF LOT 12m NORTH 0.5m BELOW FL	GAINSBOROUGH DRIVE CH 210 5m RIGHT OF CL 0.3m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.04	2.05	2.01	2.03
Field Moisture Cont (%) :	20.2	14.9	21.0	20.8
PCWD (t/m ³) :	2.07	2.10	2.06	2.07
Moisture Variation (%) :	-2.8	0.3	-0.5	-2.7
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	98.5	97.5	98.0	98.0
Min Hilf Dens Ratio (%) :	-	-	-	-

Remarks:

Lab Number:	Soil Description
171823	
171824	
171825	
171826	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72371
Job Number :	GL11/057	Report Date:	23/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	171866	171867	171868	171869
ID No :	59	60	61	62
Lot No :	349	347	345	343
Item No :	-	-	-	-
Date Sampled :	15/6/2011	15/6/2011	15/6/2011	15/6/2011
Date Tested :	15/6/2011	15/6/2011	15/6/2011	15/6/2011
Material Source :	-	-	-	-
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 349 O/S CENTRE OF LOT 16m SOUTH FINISHED LEVEL	LOT 347 O/S CENTRE OF LOT 12m NORTH FINISHED LEVEL	LOT 345 O/S CENTRE OF LOT 6m NORTH FINISHED LEVEL	LOT 343 O/S CENTRE OF LOT 15m NORTH FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.08	2.06	2.05	2.03
Field Moisture Cont (%) :	18.9	21.3	21.5	20.6
PCWD (t/m ³) :	2.04	2.04	2.03	2.04
Moisture Variation (%) :	-0.6	-0.5	-2.6	-0.5
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	102.0	100.5	101.5	99.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171866	
171867	
171868	
171869	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72372
Job Number :	GL11/057	Report Date:	23/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171870	171871	171872	171873
ID No :	63	64	65	66
Lot No :	342	341	339	337
Item No :	-	-	-	-
Date Sampled :	15/6/2011	15/6/2011	15/6/2011	15/6/2011
Date Tested :	15/6/2011	15/6/2011	15/6/2011	15/6/2011
Material Source :	-	-	-	-
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 342 O/S CENTRE OF LOT 10m SOUTH FINISHED LEVEL	LOT 341 O/S CENTRE OF LOT 5m NORTH FINISHED LEVEL	LOT 339 O/S CENTRE OF LOT 5m SOUTHEAST FINISHED LEVEL	LOT 337 O/S NW CORNER 12m EAST, 1m SOUTH FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.96	1.99	1.99	2.02
Field Moisture Cont (%) :	21.1	20.9	21.0	21.4
PCWD (t/m ³) :	2.04	2.03	2.04	2.04
Moisture Variation (%) :	-0.5	-0.2	-1.9	-2.3
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	96.0	98.0	97.5	99.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171870	
171871	
171872	
171873	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72375
Job Number :	GL11/057	Report Date:	23/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171806	171807	171808	171809
ID No :	67	68	69	70
Lot No :	-	912	442	-
Item No :	-	-	-	-
Date Sampled :	11/6/2011	11/6/2011	11/6/2011	11/6/2011
Date Tested :	11/6/2011	11/6/2011	11/6/2011	11/6/2011
Material Source :	-	-	-	-
For Use As :	GENERAL FILL	LOT FILL	LOT FILL	GENERAL FILL
Sample Location :	MILLSTREAM PLACE CH 60 ON CENTRELINE 1.1m BELOW FL	LOT 912 O/S SW CORNER 11m NORTHEAST 0.8m BELOW FL	LOT 442 O/S CENTRE OF LOT 10m WEST 1.4m BELOW FL	MOONDARRA STREET CH 300 ON CENTRELINE 1.7m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.00	2.05	2.02	2.04
Field Moisture Cont (%) :	21.6	20.4	19.5	21.4
PCWD (t/m ³) :	2.01	2.03	2.02	2.03
Moisture Variation (%) :	-0.2	-0.1	0.0	-0.1
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	99.5	101.0	100.0	100.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171806	
171807	
171808	
171809	



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MORRISON
GEOTECHNIC

ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72376
Job Number :	GL11/057	Report Date:	23/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2, PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171810	171811	171812	171813
ID No :	71	72	73	74
Lot No :	-	341	343	346
Item No :	-	-	-	-
Date Sampled :	11/6/2011	11/6/2011	11/6/2011	11/6/2011
Date Tested :	11/6/2011	11/6/2011	11/6/2011	11/6/2011
Material Source :	-	-	-	-
For Use As :	GENERAL FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	MOONDARRA STREET CH 250 ON CENTRELINE 1.2m BELOW FL	LOT 341 O/S CENTRE OF LOT 9m SOUTH 0.5m BELOW FL	LOT 343 O/S CENTRE OF LOT 12m NORTH 0.4m BELOW FL	LOT 346 O/S CENTRE OF LOT 18m NORTH 0.4m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.03	2.00	2.08	2.02
Field Moisture Cont (%) :	21.6	21.7	21.7	21.2
PCWD (t/m ³) :	2.03	2.03	2.03	2.03
Moisture Variation (%) :	-0.4	0.0	0.0	0.0
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	100.0	99.0	102.5	99.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171810	
171811	
171812	
171813	



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**MORRISON
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ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72413
Job Number :	GL11/057	Report Date:	27/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171786	171787	171788	171789
ID No :	75	76	77	78
Lot No :	393	394	396	414
Item No :	-	-	-	-
Date Sampled :	10/6/2011	10/6/2011	10/6/2011	10/6/2011
Date Tested :	10/6/2011	10/6/2011	10/6/2011	10/6/2011
Material Source :	-	-	-	-
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 393 O/S CENTRE OF LOT 11m SOUTH 1m BELOW FL	LOT 394 O/S CENTRE OF LOT 10m SOUTH 0.9m BELOW FL	LOT 396 O/S CENTRE OF LOT 8m SOUTH 1.3m BELOW FL	LOT 414 CENTRE OF LOT 1.6m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.00	1.95	2.07	2.01
Field Moisture Cont (%) :	13.8	14.1	15.3	19.7
PCWD (t/m ³) :	2.06	2.06	2.05	2.02
Molsture Variation (%) :	0.9	1.7	1.9	-0.5
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	97.0	95.0	101.0	99.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171786	
171787	
171788	
171789	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72414
Job Number :	GL11/057	Report Date:	27/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2, PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171790	171791	171792	171793
ID No :	79	80	81	82
Lot No :	-	402	-	435
Item No :	-	-	-	-
Date Sampled :	10/6/2011	10/6/2011	10/6/2011	10/6/2011
Date Tested :	10/6/2011	10/6/2011	10/6/2011	10/6/2011
Material Source :	-	-	-	-
For Use As :	GENERAL FILL	LOT FILL	GENERAL FILL	LOT FILL
Sample Location :	MILLSTREAM PLACE CH 346 ON CENTRELINE 1m BELOW FL	LOT 402 O/S CENTRE OF LOT 6m WEST 1.6m BELOW FL	YOORIGAN LANE CH 20 ON CENTRELINE 1.3m BELOW FL	LOT 435 O/S CENTRE OF LOT 10m WEST 1.7m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.99	2.03	2.08	2.05
Field Moisture Cont (%) :	20.2	20.8	15.2	20.4
PCWD (t/m ³) :	2.04	2.01	2.03	2.06
Moisture Variation (%) :	-0.4	-0.4	1.0	-0.2
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	97.5	100.5	102.5	99.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171790	
171791	
171792	
171793	



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**MORRISON
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ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72410
Job Number :	GL11/057	Report Date:	27/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2, PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171927	171928	171929	171930
ID No :	83	84	85	86
Lot No :	-	-	-	-
Item No :	-	-	-	-
Date Sampled :	16/6/2011	16/6/2011	16/6/2011	16/6/2011
Date Tested :	16/6/2011	16/6/2011	16/6/2011	16/6/2011
Material Source :	-	-	-	-
For Use As :	GENERAL FILL	GENERAL FILL	GENERAL FILL	GENERAL FILL
Sample Location :	GAINSBOROUGH DRIVE CH 130 6m LEFT OF CL FINISHED LEVEL	GAINSBOROUGH DRIVE CH 160 ON CENTRELINE 0.2m BELOW FL	GAINSBOROUGH DRIVE CH 195 4m LEFT OF CL FINISHED LEVEL	GAINSBOROUGH DRIVE CH 240 5m RIGHT OF CL FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.01	2.04	1.99	2.03
Field Moisture Cont (%) :	15.1	18.7	15.3	19.5
PCWD (t/m ³) :	2.06	2.07	2.08	2.10
Moisture Variation (%) :	1.1	-0.6	-0.5	-1.0
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	97.5	99.0	95.5	96.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171927	
171928	
171929	
171930	



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MORRISON
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ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72411
Job Number :	GL11/057	Report Date:	27/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171931	171932	171933	171934
ID No :	87	88	89	90
Lot No :	367	330	-	389
Item No :	-	-	-	-
Date Sampled :	16/6/2011	16/6/2011	16/6/2011	16/6/2011
Date Tested :	16/6/2011	16/6/2011	16/6/2011	16/6/2011
Material Source :	-	-	-	-
For Use As :	LOT FILL	LOT FILL	GENERAL FILL	LOT FILL
Sample Location :	LOT 367 O/S CENTRE OF LOT 9m SOUTH FINISHED LEVEL	LOT 330 O/S CENTRE OF LOT 9m NORTH 0.5m BELOW FL	GREENMOUNT STREET CH 200 4m LEFT OF CL 0.7m BELOW FL	LOT 389 O/S CENTRE OF LOT 5m SOUTH 1m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.00	1.90	1.99	2.00
Field Moisture Cont (%) :	20.1	20.5	14.1	17.5
PCWD (t/m ³) :	2.03	1.93	2.05	2.10
Moisture Variation (%) :	1.4	1.5	1.4	-2.6
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	98.5	98.5	97.0	95.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171931	
171932	
171933	
171934	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72412
Job Number :	GL11/057	Report Date:	27/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171935	171936	
ID No :	91	92	
Lot No :	355	353	
Item No :	-	-	
Date Sampled :	16/6/2011	16/6/2011	
Date Tested :	16/6/2011	16/6/2011	
Material Source :	-	-	
For Use As :	LOT FILL	LOT FILL	
Sample Location :	LOT 355 O/S CENTRE OF LOT 9m SOUTH FINISHED LEVEL	LOT 353 CENTRE OF LOT FINISHED LEVEL	
Test Depth (mm) :	150	150	
Max Size (mm) :	19	19	
Oversize Wet (%) :	0	0	
Field Wet Density (t/m ³):	1.99	1.98	
Field Moisture Cont (%):	24.2	23.8	
PCWD (t/m ³) :	1.92	1.97	
Moisture Variation (%):	0.2	-0.7	
Compactive Effort :	Standard	Standard	
Hilf Density Ratio (%) :	103.5	100.5	
Min Hilf Dens Ratio (%)	95	95	

Remarks:

Lab Number:	Soil Description
171935	
171936	



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MORRISON
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RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72422
Job Number :	GL11/057	Report Date:	27/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171987	171988	171989	171990
ID No :	93	94	95	96
Lot No :	388	415	386	418
Item No :	-	-	-	-
Date Sampled :	17/6/2011	17/6/2011	17/6/2011	17/6/2011
Date Tested :	17/6/2011	17/6/2011	17/6/2011	17/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 388 O/S CENTRE OF LOT 9m NORTH 1.3m BELOW FL	LOT 415 O/S CENTRE OF LOT 9m NORTHEAST 1.5m BELOW FL	LOT 386 O/S CENTRE OF LOT 7m NORTH 0.7m BELOW FL	LOT 418 O/S CENTRE OF LOT 6m NORTH 0.9m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.95	1.97	1.97	1.98
Field Moisture Cont (%):	18.6	19.5	22.9	25.3
PCWD (t/m ³) :	2.04	2.00	1.98	1.98
Moisture Variation (%) :	-2.6	-1.2	-0.6	-0.3
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	95.5	98.5	99.0	100.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171987	
171988	
171989	
171990	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72423
Job Number :	GL11/057	Report Date:	27/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171991	171992	171993	171994
ID No :	97	98	99	100
Lot No :	416	-	387	417
Item No :	-	-	-	-
Date Sampled :	17/6/2011	17/6/2011	17/6/2011	17/6/2011
Date Tested :	17/6/2011	17/6/2011	17/6/2011	17/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	FILL	LOT FILL	LOT FILL
Sample Location :	LOT 416 O/S CENTRE OF LOT 5m SOUTH 1.2m BELOW FL	MILLSTREAM PLACE CH 310 ON CENTRELINE 1.3m BELOW FL	LOT 387 O/S CENTRE OF LOT 11m SOUTH 0.8m BELOW FL	LOT 417 CENTRE OF LOT 1.1m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.92	1.95	1.99	2.00
Field Moisture Cont (%):	21.6	21.6	15.9	15.8
PCWD (t/m ³) :	2.03	2.04	2.03	2.05
Moisture Variation (%):	-1.3	-0.4	0.5	0.2
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	95.0	95.5	98.0	98.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171991	
171992	
171993	
171994	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72424
Job Number :	GL11/057	Report Date:	27/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	171995	171996	171997	171998
ID No :	101	102	103	104
Lot No :	415	419	-	-
Item No :	-	-	-	-
Date Sampled :	17/6/2011	17/6/2011	17/6/2011	17/6/2011
Date Tested :	17/6/2011	17/6/2011	17/6/2011	17/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	FILL	FILL
Sample Location :	LOT 415 O/S CENTRE OF LOT 12m SOUTHEAST 0.5m BELOW FL	LOT 419 O/S CENTRE OF LOT 14m NORTH 1m BELOW FL	MILLSTREAM PLACE CH 260 ON CENTRELINE 0.6m BELOW FL	MILLSTREAM PLACE CH 290 ON CENTRELINE 1m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.10	2.06	1.97	2.06
Field Moisture Cont (%):	15.3	15.4	21.3	21.7
PCWD (t/m ³) :	2.02	1.99	2.02	2.02
Moisture Variation (%):	0.7	-0.1	-0.1	-2.3
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	103.5	103.5	97.0	102.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
171995	
171996	
171997	
171998	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72496
Job Number :	GL11/057	Report Date:	29/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2, PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172008	172009	172010	172011
ID No :	105	106	107	108
Lot No :	350	351	-	392
Item No :	-	-	-	-
Date Sampled :	18/6/2011	18/6/2011	18/6/2011	18/6/2011
Date Tested :	18/6/2011	18/6/2011	18/6/2011	18/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	GENERAL FILL	LOT FILL
Sample Location :	LOT 350 O/S CENTRE OF LOT 8m SOUTHEAST FINISHED LEVEL	LOT 351 O/S CENTRE OF LOT 8m WEST 0.6m BELOW FL	GREENMOUNT STREET CH 220 ON CENTRELINE 0.3m BELOW FL	LOT 392 O/S CENTRE OF LOT 12m WEST 0.3m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	17.1	14.8	7.3	18.3
Field Wet Density (t/m ³):	2.06	2.03	1.98	2.07
Field Moisture Cont (%) :	11.7	12.7	18.6	11.9
PCWD (t/m ³) :	2.14*	2.14*	2.06*	2.17*
Moisture Variation (%) :	1.1*	1.8*	-0.3*	1.5*
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	96.0	95.0	96.0	95.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

* - Denotes adjusted for oversize

Lab Number:	Soil Description
172008	
172009	
172010	
172011	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72497
Job Number :	GL11/057	Report Date:	29/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172012	172013	172014	172015
ID No :	109	110	111	112
Lot No :	391	390	389	-
Item No :	-	-	-	-
Date Sampled :	18/6/2011	18/6/2011	18/6/2011	18/6/2011
Date Tested :	18/6/2011	18/6/2011	18/6/2011	18/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	GENERAL FILL
Sample Location :	LOT 391 O/S CENTRE OF LOT 10m SOUTH 0.6m BELOW FL	LOT 390 O/S CENTRE OF LOT 13m NORTH 0.2m BELOW FL	LOT 389 O/S CENTRE OF LOT 10m NORTH FINISHED LEVEL	GAINSBOROUGH DRIVE CH 280 1m RIGHT OF CL FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	8.1	8.5	6.6
Field Wet Density (t/m ³):	2.00	2.06	2.06	2.05
Field Moisture Cont (%) :	22.9	13.8	13.9	19.0
PCWD (t/m ³) :	2.02	2.12*	2.08*	2.04*
Moisture Variation (%) :	-0.8	1.0*	1.8*	-0.7*
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	99.5	97.5	99.0	100.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172012	
172013	
172014	
172015	



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**MORRISON
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ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72498
Job Number :	GL11/057	Report Date:	29/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	172016	172017	172018	172019
ID No :	113	114	115	116
Lot No :	382	393	414	418
Item No :	-	-	-	-
Date Sampled :	18/6/2011	18/6/2011	18/6/2011	18/6/2011
Date Tested :	18/6/2011	18/6/2011	18/6/2011	18/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 382 O/S CENTRE OF LOT 13m NORTHWEST 0.3m BELOW FL	LOT 393 O/S CENTRE OF LOT 10m EAST 0.3m BELOW FL	LOT 414 O/S CENTRE OF LOT 9m SOUTH 0.2m BELOW FL	LOT 418 O/S CENTRE OF LOT 10m SOUTH FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	15.3	15.6	5.1	17.3
Field Wet Density (t/m ³):	2.07	2.04	2.02	2.02
Field Moisture Cont (%):	11.7	12.8	13.5	13.9
PCWD (t/m ³) :	2.12*	2.11*	2.06*	2.12*
Moisture Variation (%):	1.7*	1.4*	1.1*	1.4*
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	97.5	96.5	98.0	95.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

* - Denotes adjusted for oversize

Lab Number:	Soil Description
172016	
172017	
172018	
172019	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72538
Job Number :	GL11/057	Report Date:	30/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2, PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	172360	172361	172362	172363
ID No :	117	118	119	120
Lot No :	-	-	912	-
Item No :	-	-	-	-
Date Sampled :	23/6/2011	23/6/2011	23/6/2011	23/6/2011
Date Tested :	23/6/2011	23/6/2011	23/6/2011	23/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	GENERAL FILL	GENERAL FILL	LOT FILL	GENERAL FILL
Sample Location :	SWAN ROAD CH 320 1m RIGHT OF CL 0.3m BELOW FL	UNDARRA STREET CH 140 ON CENTRELINE 0.3m BELOW FL	LOT 912 O/S CENTRE OF LOT 8m NORTH 0.4m BELOW FL	MILLSTREAM PLACE CH 30 ON CENTRELINE 0.6m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.01	2.02	2.03	1.99
Field Moisture Cont (%) :	19.7	19.4	18.0	18.6
PCWD (t/m ³) :	1.98	2.06	2.06	2.05
Moisture Variation (%) :	0.5	0.1	-0.4	0.0
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	101.5	98.0	98.5	97.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172360	
172361	
172362	
172363	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72539
Job Number :	GL11/057	Report Date:	30/06/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172364	172365	172366	172367
ID No :	121	122	123	124
Lot No :	-	-	-	441
Item No :	-	-	-	-
Date Sampled :	23/6/2011	23/6/2011	23/6/2011	23/6/2011
Date Tested :	23/6/2011	23/6/2011	23/6/2011	23/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	GENERAL FILL	GENERAL FILL	GENERAL FILL	LOT FILL
Sample Location :	MILLSTREAM PLACE CH 100 ON CENTRELINE 0.7m BELOW FL	UNDARRA STREET CH 190 3m LEFT OF CL 0.5m BELOW FL	OSSA LANE CH 25 ON CENTRELINE 0.9m BELOW FL	LOT 441 O/S CENTRE OF LOT 9m WEST 1m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.03	2.03	2.04	2.06
Field Moisture Cont (%) :	20.1	19.8	15.9	16.4
PCWD (t/m ³) :	2.05	2.05	2.07	2.08
Moisture Variation (%) :	-0.2	0.0	0.0	-0.3
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	99.0	99.0	98.5	99.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172364	
172365	
172366	
172367	



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MORRISON
GEOTECHNIC

ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72706
Job Number :	GL11/057	Report Date:	07/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2, PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172773	172774	172775	172776
ID No :	175	176	177	178
Lot No :	406	-	441	443
Item No :	-	-	-	-
Date Sampled :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Date Tested :	4/7/2011	4/7/2011	4/7/2011	4/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	GENERAL FILL	LOT FILL	LOT FILL
Sample Location :	LOT 406 CENTRE OF LOT FINISHED LEVEL	UNDARRA STREET CH 200 ON CENTRELINE 0.3m BELOW SG	LOT 441 O/S CENTRE OF LOT 9m NORTH FINISHED LEVEL	LOT 443 O/S CENTRE OF LOT 12m SOUTHEAST FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	3.8	0	0
Field Wet Density (t/m ³):	2.02	2.05	2.04	2.03
Field Moisture Cont (%) :	16.9	13.2	15.0	15.0
PCWD (t/m ³) :	2.08	2.11*	2.00	2.05
Moisture Variation (%) :	0.9	1.1*	1.0	-0.8
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	97.5	97.0	101.5	99.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172773	
172774	
172775	
172776	



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RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72707
Job Number :	GL11/057	Report Date:	07/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172853	172854	172855	172856
ID No :	179	180	181	182
Lot No :	-	-	-	442
Item No :	-	-	-	-
Date Sampled :	5/7/2011	5/7/2011	5/7/2011	5/7/2011
Date Tested :	5/7/2011	5/7/2011	5/7/2011	5/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	GENERAL FILL	GENERAL FILL	GENERAL FILL	LOT FILL
Sample Location :	MILLSTREAM PLACE CH 80 ON CENTRELINE SUBGRADE	OSSA LANE CH 30 2m RIGHT OF CL SUBGRADE	YOORIGAN LANE CH 10 ON CENTRELINE SUBGRADE	LOT 442 CENTRE OF LOT FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	6.2	7.6	7.1	11.1
Field Wet Density (t/m ³):	2.09	2.06	2.07	2.05
Field Moisture Cont (%) :	14.6	11.7	13.2	13.5
PCWD (t/m ³) :	2.12*	2.10*	2.11*	2.12*
Moisture Variation (%) :	1.6*	1.7*	1.1*	-0.3*
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	98.5	98.0	98.0	96.5
Min Hilf Dens Ratio (%)	98	98	98	95

Remarks:

* - Denotes adjusted for oversize

Lab Number:	Soil Description
172853	
172854	
172855	
172856	



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RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72708
Job Number :	GL11/057	Report Date:	07/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172857	172858	172859	172860
ID No :	183	184	185	186
Lot No :	443	-	-	435
Item No :	-	-	-	-
Date Sampled :	5/7/2011	5/7/2011	5/7/2011	5/7/2011
Date Tested :	5/7/2011	5/7/2011	5/7/2011	5/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	GENERAL FILL	GENERAL FILL	LOT FILL
Sample Location :	LOT 443 O/S CENTRE OF LOT 11m NORTHEAST FINISHED LEVEL	MOONDARRA STREET CH 230 ON CENTRELINE 0.3m BELOW SG	MOONDARRA STREET CH 190 1m RIGHT OF CL SUBGRADE	LOT 435 O/S CENTRE OF LOT 11m SOUTHEAST 0.3m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	2.6	4.2	0	0
Field Wet Density (t/m ³):	2.06	2.04	2.10	2.04
Field Moisture Cont (%):	21.9	17.4	18.5	15.2
PCWD (t/m ³) :	2.04*	2.05*	2.09	2.06
Moisture Variation (%):	-0.9*	-0.7*	-0.7	0.7
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	101.0	99.5	100.5	99.0
Min Hilf Dens Ratio (%)	95	98	98	95

Remarks:

* - Denotes adjusted for oversize

Lab Number:	Soil Description
172857	
172858	
172859	
172860	



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**MORRISON
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ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72709
Job Number :	GL11/057	Report Date:	07/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172861		
ID No :	187		
Lot No :	438		
Item No :	-		
Date Sampled :	5/7/2011		
Date Tested :	5/7/2011		
Material Source :	ONSITE		
For Use As :	LOT FILL		
Sample Location :	LOT 438 O/S CENTRE OF LOT 12m NORTH 0.5m BELOW FL		
Test Depth (mm) :	150		
Max Size (mm) :	19		
Oversize Wet (%) :	19.1		
Field Wet Density (t/m ³):	2.13		
Field Moisture Cont (%) :	14.3		
PCWD (t/m ³) :	2.16*		
Moisture Variation (%) :	-0.4*		
Compactive Effort :	Standard		
Hilf Density Ratio (%) :	98.5		
Min Hilf Dens Ratio (%) :	95		

Remarks:

* - Denotes adjusted for oversize

Lab Number:	Soil Description
172861	



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**MORRISON
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ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72761
Job Number :	GL11/057	Report Date:	13/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172072	172073	172074	172075
ID No :	188	189	190	191
Lot No :	-	354	353	416
Item No :	-	-	-	-
Date Sampled :	20/6/2011	20/6/2011	20/6/2011	20/6/2011
Date Tested :	20/7/2011	20/7/2011	20/7/2011	20/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	GENERAL FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	GREENMOUNT STREET CH 175 3m LEFT OF CL 1.3m BELOW FL	LOT 354 O/S CENTRE DF LOT 11m SOUTHWEST FINISHED LEVEL	LOT 353 O/S CENTRE OF LOT 11m EAST FINISHED LEVEL	LOT 416 CENTRE OF LOT FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.00	2.00	2.06	1.98
Field Moisture Cont (%) :	21.3	20.0	20.7	24.1
PCWD (t/m ³) :	1.98	2.03	2.04	1.97
Moisture Variation (%) :	-0.1	0.0	-0.2	0.0
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	101.5	98.5	101.0	100.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172072	
172073	
172074	
172075	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72762
Job Number :	GL11/057	Report Date:	13/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172076	172077	172078	172079
ID No :	192	193	194	195
Lot No :	417	416	415	395
Item No :	-	-	-	-
Date Sampled :	20/6/2011	20/6/2011	20/6/2011	20/6/2011
Date Tested :	20/7/2011	20/7/2011	20/7/2011	20/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 417 O/S CENTRE OF LOT 13m SOUTH 0.4m BELOW FL	LOT 416 O/S CENTRE OF LOT 9m SOUTH FINISHED LEVEL	LOT 415 O/S CENTRE OF LOT 5m EAST FINISHED LEVEL	LOT 395 O/S CENTRE OF LOT 12m NORTHEAST 0.5m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.03	2.05	1.94	2.08
Field Moisture Cont (%) :	20.7	22.4	18.8	19.8
PCWD (t/m ³) :	2.02	2.02	1.99	2.00
Moisture Variation (%) :	-0.3	-0.4	0.2	0.3
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	100.5	101.5	98.0	104.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172076	
172077	
172078	
172079	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72763
Job Number :	GL11/057	Report Date:	13/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	172186	172187	172188	172189
ID No :	196	197	198	199
Lot No :	399	-	369	368
Item No :	-	-	-	-
Date Sampled :	21/6/2011	21/6/2011	21/6/2011	21/6/2011
Date Tested :	21/6/2011	21/6/2011	21/6/2011	21/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	GENERAL FILL	LOT FILL	LOT FILL
Sample Location :	LOT 399 CENTRE OF LOT 0.5m BELOW FL	GREENMOUNT STREET CH 50 ON CENTRELINE FINISHED LEVEL	LOT 369 O/S CENTRE OF LOT 8m NORTH 0.5m BELOW FL	LOT 368 O/S CENTRE OF LOT 11m SOUTHEAST 0.3m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.04	2.04	2.07	2.00
Field Moisture Cont (%) :	21.2	20.6	20.6	19.1
PCWD (t/m ³) :	2.06	2.06	2.09	2.07
Moisture Variation (%) :	-0.9	-1.0	-2.0	-1.5
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	99.0	99.0	99.0	97.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172186	
172187	
172188	
172189	



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RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72764
Job Number :	GL11/057	Report Date:	13/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	172190	172191	172192	172193
ID No :	200	201	202	203
Lot No :	-	396	394	396
Item No :	-	-	-	-
Date Sampled :	21/6/2011	21/6/2011	21/6/2011	21/6/2011
Date Tested :	21/6/2011	21/6/2011	21/6/2011	21/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	GENERAL FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LAMINGTON LANE CH 20 ON CENTRELINE 0.4m BELOW FL	LOT 396 O/S CENTRE OF LOT 14m SOUTHEAST 0.4m BELOW FL	LOT 394 CENTRE OF LOT FINISHED LEVEL	LOT 396 O/S CENTRE OF LOT 14m EAST FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.97	1.97	2.02	1.97
Field Moisture Cont (%):	20.4	18.8	19.0	18.3
PCWD (t/m ³) :	2.02	2.07	2.00	2.02
Moisture Variation (%):	0.0	-1.0	0.2	0.3
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	97.5	95.0	100.5	97.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172190	
172191	
172192	
172193	



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**MORRISON
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ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72765
Job Number :	GL11/057	Report Date:	13/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172508	172509	172510	172511
ID No :	204	205	206	207
Lot No :	409	402	403	404
Item No :	-	-	-	-
Date Sampled :	27/6/2011	27/6/2011	27/6/2011	27/6/2011
Date Tested :	27/6/2011	27/6/2011	27/6/2011	27/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 409 O/S CENTRE OF LOT 11m SOUTH 1m BELOW FL	LOT 402 CENTRE OF LOT 1.3m BELOW FL	LOT 403 O/S CENTRE OF LOT 12m SOUTH 1.2m BELOW FL	LOT 404 CENTRE OF LOT 1.1m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.00	2.02	2.00	2.02
Field Moisture Cont (%) :	15.8	15.4	18.3	19.3
PCWD (t/m ³) :	2.02	2.03	2.03	2.04
Moisture Variation (%) :	-0.2	1.7	0.3	-1.8
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	98.5	99.0	98.5	99.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172508	
172509	
172510	
172511	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72766
Job Number :	GL11/057	Report Date:	13/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2, PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172512	172513	172514	172515
ID No :	208	209	210	211
Lot No :	405	406	407	-
Item No :	-	-	-	-
Date Sampled :	27/6/2011	27/6/2011	27/6/2011	27/6/2011
Date Tested :	27/6/2011	27/6/2011	27/6/2011	27/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	GENERAL FILL
Sample Location :	LOT 405 CENTRE OF LOT 1m BELOW FL	LOT 406 CENTRE OF LOT 1.3m BELOW FL	LOT 407 O/S CENTRE OF LOT 14m SOUTHEAST 1.2m BELOW FL	MILLSTREAM PLACE CH 230 ON CENTRELIN 0.6m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.06	2.03	2.05	2.02
Field Moisture Cont (%) :	21.4	18.3	20.9	20.6
PCWD (t/m ³) :	2.00	2.02	1.98	2.01
Molsture Variation (%) :	0.2	0.0	0.0	0.0
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	103.0	100.0	103.5	100.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172512	
172513	
172514	
172515	



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**MORRISON
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ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72767
Job Number :	GL11/057	Report Date:	13/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172516	172517	172518	172519
ID No :	212	213	214	215
Lot No :	-	-	-	382
Item No :	-	-	-	-
Date Sampled :	27/6/2011	27/6/2011	27/6/2011	27/6/2011
Date Tested :	27/6/2011	27/6/2011	27/6/2011	27/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	GENERAL FILL	GENERAL FILL	GENERAL FILL	LOT FILL
Sample Location :	MILLSTREAM PLACE CH 166 3m LEFT OF CL 0.5m BELOW FL	MILLSTREAM PLACE CH 116 ON CENTRELINE 0.7m BELOW FL	MILLSTREAM PLACE CH 80 2m RIGHT OF CL 0.8m BELOW FL	LOT 382 CENTRE OF LOT FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.03	2.02	1.99	2.02
Field Moisture Cont (%) :	21.6	17.4	17.0	19.4
PCWD (t/m ³) :	2.06	2.04	1.97	2.03
Moisture Variation (%) :	-1.6	0.0	0.2	-1.2
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	98.5	99.0	101.0	99.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172516	
172517	
172518	
172519	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72768
Job Number :	GL11/057	Report Date:	13/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2, PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172520	172521	172522	172523
ID No :	216	217	218	219
Lot No :	384	385	385	399
Item No :	-	-	-	-
Date Sampled :	27/6/2011	27/6/2011	27/6/2011	27/6/2011
Date Tested :	27/6/2011	27/6/2011	27/6/2011	27/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 384 O/S CENTRE OF LOT 6m SOUTH FINISHED LEVEL	LOT 385 O/S CENTRE OF LOT 10m NORTHEAST 0.5m BELOW FL	LOT 385 O/S CENTRE OF LOT 8m SOUTH FINISHED LEVEL	LOT 399 O/S CENTRE OF LOT 8m EAST FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.06	2.02	2.07	2.01
Field Moisture Cont (%) :	19.2	19.6	19.5	19.4
PCWD (t/m ³) :	2.00	1.96	2.06	1.96
Moisture Variation (%) :	0.3	1.9	-1.2	0.2
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	103.0	102.5	100.5	103.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172520	
172521	
172522	
172523	



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MORRISON
GEOTECHNIC

ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72769
Job Number :	GL11/057	Report Date:	13/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172524	172525	172526	172527
ID No :	220	221	222	223
Lot No :	400	401	454	444
Item No :	-	-	-	-
Date Sampled :	27/6/2011	27/6/2011	27/6/2011	27/6/2011
Date Tested :	27/6/2011	27/6/2011	27/6/2011	27/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 400 O/S CENTRE OF LOT 9m NORTHEAST 0.4m BELOW FL	LOT 401 O/S CENTRE OF LOT 9m NORTHWEST 0.6m BELOW FL	LOT 454 CENTRE OF LOT FINISHED LEVEL	LOT 444 O/S CENTRE OF LOT 9m WEST FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.06	2.02	2.00	1.97
Field Moisture Cont (%) :	18.0	21.1	17.7	21.5
PCWD (t/m ³) :	1.99	1.92	1.99	2.07
Moisture Variation (%) :	0.2	0.1	0.2	-1.8
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	103.5	105.0	100.5	95.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172524	
172525	
172526	
172527	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72770
Job Number :	GL11/057	Report Date:	13/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172528	172529	172530	172531
ID No :	224	225	226	227
Lot No :	445	-	348	486
Item No :	-	-	-	-
Date Sampled :	27/6/2011	27/6/2011	27/6/2011	27/6/2011
Date Tested :	27/6/2011	27/6/2011	27/6/2011	27/6/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	GENERAL FILL	LOT FILL	LOT FILL
Sample Location :	LOT 445 O/S CENTRE OF LOT 11m NORTHWEST 0.3m BELOW FL	MOONDARRA STREET CH 180 ON CENTRELINE 0.3m BELOW FL	LOT 348 CENTRE OF LOT 1.1m BELOW FL	LOT 486 O/S CENTRE OF LOT 12m NORTH 1.3m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.02	2.03	1.98	1.99
Field Moisture Cont (%) :	21.2	20.4	19.3	18.9
PCWD (t/m ³) :	2.00	2.00	2.08	2.07
Moisture Variation (%) :	0.1	-0.2	-1.0	-0.9
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	101.0	101.0	95.5	96.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
172528	
172529	
172530	
172531	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72771
Job Number :	GL11/057	Report Date:	13/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172924	172925	
ID No :	228	229	
Lot No :	-	-	
Item No :	-	-	
Date Sampled :	7/7/2011	7/7/2011	
Date Tested :	7/7/2011	7/7/2011	
Material Source :	ONSITE	ONSITE	
For Use As :	GENERAL FILL	GENERAL FILL	
Sample Location :	YOORIGAN LANE CH 20 ON CENTRELINE FINISHED LEVEL	OSSA LANE CH 8 ON CENTRELINE FINISHED LEVEL	
Test Depth (mm) :	150	150	
Max Size (mm) :	19	19	
Oversize Wet (%) :	0	0	
Field Wet Density (t/m ³):	2.04	2.05	
Field Moisture Cont (%) :	12.3	14.4	
PCWD (t/m ³) :	2.07	2.10	
Moisture Variation (%) :	1.4	0.1	
Compactive Effort :	Standard	Standard	
Hilf Density Ratio (%) :	98.5	97.5	
Min Hilf Dens Ratio (%) :	95	95	

Remarks:

Lab Number:	Soil Description
172924	
172925	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72811
Job Number :	GL11/057	Report Date:	14/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1

Page 1 of 1

Lab No :	173047	173048	173049	173050
ID No :	230	231	232	233
Lot No :	430	424		
Item No :	-	-	-	-
Date Sampled :	8/7/2011	8/7/2011	8/7/2011	8/7/2011
Date Tested :	8/7/2011	8/7/2011	8/7/2011	8/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	GENERAL FILL	GENERAL FILL
Sample Location :	LOT 430 20m FROM ROAD 8m FROM LOT 429 1.5m BELOW FL	LOT 424 15m FROM ROAD 10m FROM LOT 423 0.8m BELOW FL	WOONDARRA ST CH 260 ON CENTRELINE FINISHED LEVEL	WOONDARRA ST CH 290 1m LEFT OF CL FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.96	2.00	2.12	2.11
Field Moisture Cont (%) :	20.0	11.8	10.8	9.9
PCWD (t/m ³) :	2.06	2.07	2.05	2.08
Moisture Variation (%) :	-0.9	1.1	1.9	2.1
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	95.0	97.0	103.5	101.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
173047	
173048	
173049	
173050	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72812
Job Number :	GL11/057	Report Date:	14/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	173051	173052	173053	173054
ID No :	234	235	236	237
Lot No :	426	422	432	420
Item No :	-	-	-	-
Date Sampled :	8/7/2011	8/7/2011	8/7/2011	8/7/2011
Date Tested :	8/7/2011	8/7/2011	8/7/2011	8/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 426 10m FROM ROAD 6m FROM LOT 425 1m BELOW FL	LOT 422 15m FROM ROAD 6m FROM LOT 423 1.3m BELOW FL	LOT 432 20m FROM ROAD 8m FROM LOT 433 1m BELOW FL	LOT 420 10m FROM LOT 421 10m FROM LOT 433 1m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	15.4	0
Field Wet Density (t/m ³):	2.04	2.04	2.02	2.03
Field Moisture Cont (%) :	12.4	12.6	11.5	11.5
PCWD (t/m ³) :	2.07	2.12	2.13*	2.13
Moisture Variation (%) :	0.5	0.3	1.3*	0.5
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	98.5	96.0	95.0	95.5
Min Hilf Dens Ratio (%) :	95	95	95	95

Remarks:

Lab Number:	Soil Description
173051	
173052	
173053	
173054	



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**MORRISON
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ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72848
Job Number :	GL11/057	Report Date:	15/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172881	172882	172883	172884
ID No :	238	239	240	241
Lot No :	436	445	-	-
Item No :	-	-	-	-
Date Sampled :	6/7/2011	6/7/2011	6/7/2011	6/7/2011
Date Tested :	6/7/2011	6/7/2011	6/7/2011	6/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	GENERAL FILL	GENERAL FILL
Sample Location :	LOT 436 O/S CENTRE OF LOT 10m SOUTH 0.7m BELOW FL	LOT 445 O/S CENTRE OF LOT 12m NORTHEAST FINISHED LEVEL	MILLSTREAM PLACE CH 140 ON CENTRELINE SUBGRADE	DAVENPORT PLACE CH 30 ON CENTRELINE 1.3m BELOW SG
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	2.02	2.07	2.08	2.08
Field Moisture Cont (%) :	12.4	11.1	16.0	12.8
PCWD (t/m ³) :	2.11	2.14	2.12	2.14
Moisture Variation (%) :	1.7	0.0	1.2	1.9
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	96.0	96.5	98.0	97.5
Min Hilf Dens Ratio (%)	95	95	98	95

Remarks:

Lab Number:	Soil Description
172881	
172882	
172883	
172884	



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**MORRISON
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ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72849
Job Number :	GL11/057	Report Date:	15/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	172885	172886	
ID No :	242	243	
Lot No :	-	-	
Item No :	-	-	
Date Sampled :	6/7/2011	6/7/2011	
Date Tested :	6/7/2011	6/7/2011	
Material Source :	ONSITE	ONSITE	
For Use As :	GENERAL FILL	GENERAL FILL	
Sample Location :	DAVENPORT PLACE CH 55 ON CENTRELINE 0.8m BELOW SG	DAVENPORT PLACE CH 90 3m RIGHT OF CL 0.5m BELOW SG	
Test Depth (mm) :	150	150	
Max Size (mm) :	19	19	
Oversize Wet (%) :	0	0	
Field Wet Density (t/m ³):	2.07	2.05	
Field Moisture Cont (%) :	13.6	12.9	
PCWD (t/m ³) :	2.11	2.14	
Moisture Variation (%) :	0.9	1.6	
Compactive Effort :	Standard	Standard	
Hilf Density Ratio (%) :	98.5	96.0	
Min Hilf Dens Ratio (%)	95	95	

Remarks:

Lab Number:	Soil Description
172885	
172886	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72910
Job Number :	GL11/057	Report Date:	19/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	173385	173386	
ID No :	244	245	
Lot No :	-	-	
Item No :	-	-	
Date Sampled :	14/7/2011	14/7/2011	
Date Tested :	14/7/2011	14/7/2011	
Material Source :	ONSITE	ONSITE	
For Use As :	EMBANKMENT FILL	EMBANKMENT FILL	
Sample Location :	GAINSBOROUGH DRIVE CH 160 5m RIGHT OF CL 0.7m BELOW SG	GAINSBOROUGH DRIVE CH 120 5m LEFT OF CL 0.7m BELOW SG	
Test Depth (mm) :	150	150	
Max Size (mm) :	19	19	
Oversize Wet (%) :	0	0	
Field Wet Density (t/m ³):	2.06	2.08	
Field Moisture Cont (%) :	15.0	23.0	
PCWD (t/m ³) :	2.10	2.02	
Moisture Variation (%) :	-0.4	-0.8	
Compactive Effort :	Standard	Standard	
Hilf Density Ratio (%) :	97.5	102.5	
Min Hilf Dens Ratio (%) :	95	95	

Remarks:

Lab Number:	Soil Description
173385	
173386	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72855
Job Number :	GL11/057	Report Date:	18/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	173398	173399	173400	173401
ID No :	246	247	248	249
Lot No :	438	437	436	435
Item No :	-	-	-	-
Date Sampled :	15/7/2011	15/7/2011	15/7/2011	15/7/2011
Date Tested :	15/7/2011	15/7/2011	15/7/2011	15/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 438 O/S SW CORNER 4m EAST, 10m NORTH FINISHED LEVEL	LOT 437 O/S SW CORNER 8m EAST, 13m NORTH FINISHED LEVEL	LOT 436 O/S SW CORNER 6m EAST, 7m NORTH FINISHED LEVEL	LOT 435 O/S SW CORNER 11m EAST, 14m NORTH FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.99	2.04	2.01	2.04
Field Moisture Cont (%) :	14.7	15.0	15.8	16.0
PCWD (t/m ³) :	2.05	2.06	2.02	2.03
Moisture Variation (%) :	0.4	0.4	2.2	1.9
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	97.5	99.0	99.5	100.5
Min Hilf Dens Ratio (%) :	95	95	95	95

Remarks:

Lab Number:	Soil Description
173398	
173399	
173400	
173401	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	72856
Job Number :	GL11/057	Report Date:	18/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	173402		
ID No :	250		
Lot No :	434		
Item No :	-		
Date Sampled :	15/7/2011		
Date Tested :	15/7/2011		
Material Source :	ONSITE		
For Use As :	LOT FILL		
Sample Location :	LOT 434 O/S SW CORNER 15m EAST, 20m NORTH FINISHED LEVEL		
Test Depth (mm) :	150		
Max Size (mm) :	19		
Oversize Wet (%) :	0		
Field Wet Density (t/m ³):	1.97		
Field Moisture Cont (%):	17.0		
PCWD (t/m ³) :	2.02		
Moisture Variation (%):	-0.2		
Compactive Effort :	Standard		
Hilf Density Ratio (%) :	97.5		
Min Hilf Dens Ratio (%)	95		

Remarks:

Lab Number:	Soil Description
173402	



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GEOTECHNIC

ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	73095
Job Number :	GL11/057	Report Date:	29/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	173144	173145	173146	173147
ID No :	251	252	253	254
Lot No :	422	420	433	432
Item No :	-	-	-	-
Date Sampled :	11/7/2011	11/7/2011	11/7/2011	11/7/2011
Date Tested :	11/7/2011	11/7/2011	11/7/2011	11/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 422 O/S SW CORNER 7m EAST, 11m NORTH 1.5m BELOW FL	LOT 420 O/S SE CORNER 11m WEST, 9m NORTH 1.4m BELOW FL	LOT 433 O/S SE CORNER 18m WEST, 10m NORTH 1.5m BELOW FL	LOT 432 O/S NE CORNER 13m WEST, 9m SOUTH 1m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.96	2.02	2.03	2.12
Field Moisture Cont (%) :	20.5	22.3	17.5	15.2
PCWD (t/m ³) :	1.99	2.01	2.01	2.06
Moisture Variation (%) :	0.9	-0.6	0.0	-0.1
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	98.5	100.5	101.0	103.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
173144	
173145	
173146	
173147	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	73096
Job Number :	GL11/057	Report Date:	29/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

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Lab No :	173148	173149	173150	173151
ID No :	255	256	257	258
Lot No :	431	-	-	-
Item No :	-	-	-	-
Date Sampled :	11/7/2011	11/7/2011	11/7/2011	11/7/2011
Date Tested :	11/7/2011	11/7/2011	11/7/2011	11/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	GENERAL FILL	GENERAL FILL	GENERAL FILL
Sample Location :	LOT 431 O/S NE CORNER 5m WEST, 11m SOUTH 1.4m BELOW FL	WETLANDS BUND WALL E 78042 N 73844 FINISHED LEVEL	WETLANDS BUND WALL E 78071 N 73834 FINISHED LEVEL	WETLANDS BUND WALL E 78107 N 73818 FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.96	1.94	1.98	1.96
Field Moisture Cont (%):	24.5	25.6	31.0	25.3
PCWD (t/m ³) :	1.99	1.99	2.04	1.89
Moisture Variation (%):	-0.9	-0.3	-3.3	0.1
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	98.5	98.0	97.0	103.5
MIn Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
173148	
173149	
173150	
173151	



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**MORRISON
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ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	73097
Job Number :	GL11/057	Report Date:	29/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	173152	173153	173154	173155
ID No :	259	260	261	262
Lot No :	-	-	-	425
Item No :	-	-	-	-
Date Sampled :	11/7/2011	11/7/2011	11/7/2011	11/7/2011
Date Tested :	11/7/2011	11/7/2011	11/7/2011	11/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	GENERAL FILL	GENERAL FILL	GENERAL FILL	LOT FILL
Sample Location :	WETLANDS BUND WALL E 78105 N 73783 FINISHED LEVEL	WETLANDS BUND WALL E 78066 N 73786 FINISHED LEVEL	WETLANDS BUND WALL E 78030 N 73865 FINISHED LEVEL	LOT 425 O/S SE CORNER 6m WEST, 17m NORTH 0.8m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.87	2.07	1.98	1.97
Field Moisture Cont (%) :	32.7	18.5	19.1	18.4
PCWD (t/m ³) :	1.93	2.08	2.08	1.99
Moisture Variation (%) :	-0.2	-1.6	-0.6	-0.9
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	97.0	99.0	95.5	98.5
Min Hilf Dens Ratio (%) :	95	95	95	95

Remarks:

Lab Number:	Soil Description
173152	
173153	
173154	
173155	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	73098
Job Number :	GL11/057	Report Date:	29/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	173156		
ID No :	263		
Lot No :	428		
Item No :	-		
Date Sampled :	11/7/2011		
Date Tested :	11/7/2011		
Material Source :	ONSITE		
For Use As :	LOT FILL		
Sample Location :	LOT 428 O/S SW CORNER 13m EAST, 21m NORTH 0.4m BELOW FL		
Test Depth (mm) :	150		
Max Size (mm) :	19		
Oversize Wet (%) :	0		
Field Wet Density (t/m ³):	1.98		
Field Moisture Cont (%):	21.1		
PCWD (t/m ³) :	2.02		
Moisture Variation (%):	-1.4		
Compactive Effort :	Standard		
Hilf Density Ratio (%) :	97.5		
Min Hilf Dens Ratio (%)	95		

Remarks:

Lab Number:	Soil Description
173156	



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RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	73086
Job Number :	GL11/057	Report Date:	28/07/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2, PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	173178	173179	173180	173181
ID No :	264	265	266	267
Lot No :	426	424	423	422
Item No :	-	-	-	-
Date Sampled :	12/7/2011	12/7/2011	12/7/2011	12/7/2011
Date Tested :	12/7/2011	12/7/2011	12/7/2011	12/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 426 O/S SW CORNER 10m EAST, 25m NORTH FINISHED LEVEL	LOT 424 O/S NE CORNER 20m WEST, 8m SOUTH 0.4m BELOW FL	LOT 423 O/S NE CORNER 16m WEST, 14m SOUTH 0.3m BELOW FL	LOT 422 O/S NE CORNER 9m WEST, 11m SOUTH 0.4m BELOW FL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.98	2.01	2.03	2.01
Field Moisture Cont (%):	20.2	20.4	18.9	17.2
PCWD (t/m ³) :	2.01	2.01	2.08	1.99
Moisture Variation (%):	-0.9	-0.5	-2.1	-1.5
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	98.5	100.0	97.5	101.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

Lab Number:	Soil Description
173178	
173179	
173180	
173181	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	73539
Job Number :	GL11/057	Report Date:	19/08/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	173279	173280	173281	173282
ID No :	268	269	270	271
Lot No :	442	434	443	442
Item No :	-	-	-	-
Date Sampled :	13/7/2011	13/7/2011	13/7/2011	13/7/2011
Date Tested :	13/7/2011	13/7/2011	13/7/2011	13/7/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 442 O/S SW CORNER 10m EAST, 19m NORTH 0.4m BELOW FL	LOT 434 O/S SE CORNER 11m WEST, 17m NORTH 0.4m BELOW FL	LOT 443 O/S SE CORNER 8m WEST, 13m NORTH FINISHED LEVEL	LOT 442 O/S SW CORNER 12m EAST, 12m NORTH FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	0	0	0	0
Field Wet Density (t/m ³):	1.97	1.88	1.97	1.94
Field Moisture Cont (%) :	16.6	18.4	25.6	25.4
PCWD (t/m ³) :	2.05	1.84	1.98	1.92
Moisture Variation (%) :	0.2	0.4	-0.4	1.5
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	96.0	102.0	100.0	101.0
Min Hilf Dens Ratio (%) :	95	95	95	95

Remarks:

Lab Number:	Soil Description
173279	
173280	
173281	
173282	



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NATA Accred No:1169

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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	73540
Job Number :	GL11/057	Report Date:	19/08/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2, PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	173283	173284	173285	
ID No :	272	273	274	
Lot No :	441	440	439	
Item No :	-	-	-	
Date Sampled :	13/7/2011	13/7/2011	13/7/2011	
Date Tested :	13/7/2011	13/7/2011	13/7/2011	
Material Source :	ONSITE	ONSITE	ONSITE	
For Use As :	LOT FILL	LOT FILL	LOT FILL	
Sample Location :	LOT 441 O/S SW CORNER 11m EAST, 14m NORTH FINISHED LEVEL	LOT 440 O/S SW CORNER 9m EAST, 21m NORTH FINISHED LEVEL	LOT 439 O/S SW CORNER 12m EAST, 17m NORTH FINISHED LEVEL	
Test Depth (mm) :	150	150	150	
Max Size (mm) :	19	19	19	
Oversize Wet (%) :	0	0	0	
Field Wet Density (t/m ³):	1.96	1.98	1.98	
Field Moisture Cont (%):	19.6	14.1	18.0	
PCWD (t/m ³) :	1.93	2.04	1.98	
Moisture Variation (%):	1.1	-0.3	0.0	
Compactive Effort :	Standard	Standard	Standard	
Hilf Density Ratio (%) :	101.5	97.0	100.5	
Min Hilf Dens Ratio (%)	95	95	95	

Remarks:

Lab Number:	Soil Description
173283	
173284	
173285	



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**MORRISON
GEOTECHNIC**
ABN 51 009 878 899
RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	73985
Job Number :	GL11/057	Report Date:	20/09/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	175365	175366	175367	175368
ID No :	275	276	277	278
Lot No :	433	432	431	430
Item No :	-	-	-	-
Date Sampled :	8/9/2011	8/9/2011	8/9/2011	8/9/2011
Date Tested :	8/9/2011	8/9/2011	8/9/2011	8/9/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 433 O/S SW CNR 10m EAST, 10m NORTH FINISHED LEVEL	LOT 432 O/S SW CNR 20m EAST, 14m NORTH FINISHED LEVEL	LOT 431 O/S SW CNR 22m EAST, 6m NORTH FINISHED LEVEL	LOT 430 O/S SW CNR 16m EAST, 10m NORTH FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	4.4	3.1	6	7.9
Field Wet Density (t/m ³):	2.06	2.12	2.05	2.12
Field Moisture Cont (%) :	14.4	15.5	15.3	14.6
PCWD (t/m ³) :	2.13*	2.12*	2.14*	2.13*
Molsture Variation (%) :	-0.8*	-0.9*	-1.1*	-0.1*
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	97.0	100.5	96.0	99.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

* - Denotes adjusted for oversize

Lab Number:	Soil Description
175365	
175366	
175367	
175368	



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MORRISON
GEOTECHNIC

ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	73986
Job Number :	GL11/057	Report Date:	20/09/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	175369	175370	175371	175372
ID No :	279	280	281	282
Lot No :	429	428	427	426
Item No :	-	-	-	-
Date Sampled :	8/9/2011	8/9/2011	8/9/2011	8/9/2011
Date Tested :	8/9/2011	8/9/2011	8/9/2011	8/9/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 429 O/S SW CNR 20m EAST, 10m NORTH FINISHED LEVEL	LOT 428 O/S NW CNR 10m EAST, 10m SOUTH FINISHED LEVEL	LOT 427 O/S SW CNR 6m EAST, 18m NORTH FINISHED LEVEL	LOT 426 O/S CNR 8m EAST, 3m NORTH FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	8.2	7.7	3.7	1.4
Field Wet Density (t/m ³):	2.10	2.07	2.08	2.10
Field Moisture Cont (%):	15.8	14.8	17.2	14.3
PCWD (t/m ³) :	2.16*	2.14*	2.14*	2.11*
Moisture Variation (%):	-0.7*	-0.7*	-0.8*	-0.6*
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	97.5	96.5	97.5	99.0
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

* - Denotes adjusted for oversize

Lab Number:	Soil Description
175369	
175370	
175371	
175372	



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MORRISON
GEOTECHNIC

ABN 51 009 878 899

RPEUQ 2241

Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	73987
Job Number :	GL11/057	Report Date:	20/09/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	175373	175374	175375	175376
ID No :	283	284	285	286
Lot No :	425	424	423	422
Item No :	-	-	-	-
Date Sampled :	8/9/2011	8/9/2011	8/9/2011	8/9/2011
Date Tested :	8/9/2011	8/9/2011	8/9/2011	8/9/2011
Material Source :	ONSITE	ONSITE	ONSITE	ONSITE
For Use As :	LOT FILL	LOT FILL	LOT FILL	LOT FILL
Sample Location :	LOT 426 O/S NW CNR 5m EAST, 20m SOUTH FINISHED LEVEL	LOT 424 O/S SE CNR 10m WEST, 10m NORTH FINISHED LEVEL	LOT 423 O/S SE CNR 21m WEST, 15m NORTH FINISHED LEVEL	LOT 422 O/S SE CNR 18m WEST, 6m NORTH FINISHED LEVEL
Test Depth (mm) :	150	150	150	150
Max Size (mm) :	19	19	19	19
Oversize Wet (%) :	6.9	5.5	7	10.2
Field Wet Density (t/m ³):	2.11	2.13	2.08	2.09
Field Moisture Cont (%):	13.8	14.7	14.6	15.8
PCWD (t/m ³) :	2.13*	2.13*	2.13*	2.12*
Moisture Variation (%):	-0.3*	-1.1*	-1.0*	-0.2*
Compactive Effort :	Standard	Standard	Standard	Standard
Hilf Density Ratio (%) :	99.5	100.0	98.0	98.5
Min Hilf Dens Ratio (%)	95	95	95	95

Remarks:

* - Denotes adjusted for oversize

Lab Number:	Soil Description
175373	
175374	
175375	
175376	



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Hilf Density Ratio Report

Client :	MIRVAC	Report Number:	73988
Job Number :	GL11/057	Report Date:	20/09/2011
Project :	GAINSBOROUGH GREENS (LEVEL 1)	Order Number:	
Location :	PRECINCT 6 STAGES 1 & 2 , PIMPAMA	Test Method:	AS1289.5.8.1 & 5.7.1

Page 1 of 1

Lab No :	175377	175378	
ID No :	287	288	
Lot No :	421	420	
Item No :	-	-	
Date Sampled :	8/9/2011	8/9/2011	
Date Tested :	8/9/2011	8/9/2011	
Material Source :	ONSITE	ONSITE	
For Use As :	LOT FILL	LOT FILL	
Sample Location :	LOT 421 O/S SE CNR 16m WEST, 11m NORTH FINISHED LEVEL	LOT 420 O/S SE CNR 5m WEST, 10m NORTH FINISHED LEVEL	
Test Depth (mm) :	150	150	
Max Size (mm) :	19	19	
Oversize Wet (%) :	7.3	5	
Field Wet Density (t/m ³):	2.09	2.11	
Field Moisture Cont (%):	14.6	14.6	
PCWD (t/m ³) :	2.09*	2.09*	
Moisture Variation (%):	1.8*	1.0*	
Compactive Effort :	Standard	Standard	
Hilf Density Ratio (%) :	100.0	101.0	
Min Hilf Dens Ratio (%)	95	95	

Remarks:

* - Denotes adjusted for oversize

Lab Number:	Soil Description
175377	
175378	



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Job No: GL11/057

APPENDIX 'B'

(Photo Gallery)











Job No: GL11/057

APPENDIX 'C'

(Site Plan)

PROJECT NO. 1000000000
 DATE: 10/10/2011
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]

WISAVA CONSULTING
 FORMI
 RANGSIRI
 MIRVAC

1000000000
 RECEIVED 23.8.62
 YAWALPAI BRAMI
 PIMPANNA

KN GROWTH PLAN
 (PHASE 2) (2011-2015)
 (CONTRIBUTOR)
 (SUBDIVISION AREA 10)
 (SUBDIVISION AREA 11)
 (SUBDIVISION AREA 12)
 (SUBDIVISION AREA 13)
 (SUBDIVISION AREA 14)
 (SUBDIVISION AREA 15)
 (SUBDIVISION AREA 16)
 (SUBDIVISION AREA 17)
 (SUBDIVISION AREA 18)
 (SUBDIVISION AREA 19)
 (SUBDIVISION AREA 20)

PARTWORKS CONTROL PLAN
 SHEET 1 OF 4



CHS RINGON E 10-102-1
 1000000000
 1000000000

