



# **REPORT**

## **Level 1 Geotechnical Inspection and Testing Authority Services**

**Riverfield Square Estate Stage 28  
Lots 2801 to Lot 2829**

**Prepared for:**

**Greenridge Properties Pty Ltd**

**11.05.2026**

**Our Ref: 1091938.028.v1**

## Table of contents

<b>1</b>	<b>Introduction</b>	<b>4</b>
<b>2</b>	<b>Project details</b>	<b>4</b>
	2.1 Location	4
	2.2 Roles	5
	2.3 Dates on Site	5
	2.4 Included Areas	6
	2.5 Excluded Areas	6
<b>3</b>	<b>Specification</b>	<b>7</b>
<b>4</b>	<b>Inspection and Testing</b>	<b>8</b>
	4.1 Earthworks	8
	4.2 Fill material	8
	4.3 Subgrade Assessment / Proof Roll	9
	4.4 Engineered Fill Construction	10
	4.5 Density and Moisture testing	12
<b>5</b>	<b>Conclusion</b>	<b>13</b>
<b>6</b>	<b>Applicability</b>	<b>14</b>

<b>Appendix A</b>	<b>Test location plan</b>
<b>Appendix B</b>	<b>Density and moisture test summary</b>
<b>Appendix C</b>	<b>NATA compaction laboratory reports</b>
<b>Appendix D</b>	<b>NATA compliance laboratory report</b>
<b>Appendix E</b>	<b>Controlled fill certificate</b>

## Document Control

<b>Title: Level One Inspection and Testing Services.</b>					
<b>Date</b>	<b>Version</b>	<b>Description</b>	<b>Prepared by:</b>	<b>Reviewed by:</b>	<b>Authorised by</b>
11 May 2026	1	Final	S. Park / R Barden	R. McKenzie	M. Di Meglio

### Distribution:

Greenridge Properties Pty Ltd

1 PDF copy

Chadwick Geotechnics Pty Ltd (File)

1 PDF copy

# 1 Introduction

Chadwick Geotechnics Pty Ltd (Chadwick Geotechnics), was engaged by Greenridge Properties Pty Ltd, to provide Level 1 Geotechnical Inspection and Testing Authority (GITA) services for the earthworks conducted within Stage 28 of the Riverfield Square Estate in Clyde North between 23 August 2024 and 9 April 2026.

Level 1 GITA services as defined in AS3798-2007 “Guidelines on Earthworks for Commercial and Residential Development,” requires full time inspection and field and laboratory testing of earthworks in accordance with AS1289 “Methods of Testing Soils for Engineering Purposes.”

## 2 Project details

### 2.1 Location

The Stage 28 site is located north of Stages 26 and 29.

The included works area is shown on the Site Plan in Appendix A and within Figure 2.1 below is an extract from Metromap.

**Figure 2.1: Extract from Metromap Jan 2026**



## 2.2 Roles

The organisations and their roles are presented in Table 2.1

**Table 2.1: Roles on the Project**

Role	Organisation
Developer	Greenridge Properties Pty Ltd
Geotechnical Inspection and Testing Authority (GITA)	Chadwick Geotechnics Pty Ltd
Designer / Superintendent	Beveridge Williams Pty Ltd
Earthworks Contractor	Brown Property Group Pty Ltd

Chadwick Geotechnics undertook the field density testing, and the compaction control laboratory testing was conducted in our NATA accredited laboratories.

## 2.3 Dates on Site

Geotechnical technical and engineering staff from Chadwick Geotechnics were onsite for the duration of the earthworks program on the days shown in Table 2.2 below.

**Table 2.2: Level 1 GITA – Onsite Presence**

Month	Dates on site
<b>August 2024</b>	23, 24, 26, 30.
<b>January 2025</b>	16.
<b>May 2025</b>	13, 14, 15.
<b>June 2025</b>	30.
<b>July 2025</b>	7, 9.
<b>September 2025</b>	15, 16, 17, 19.
<b>November 2025</b>	13, 14, 19.
<b>December 2025</b>	15, 18.
<b>January 2026</b>	13, 15.
<b>March 2026</b>	4, 5, 19.
<b>April 2026</b>	9.

## **2.4 Included Areas**

This report is applicable to material placed by the contractor on the residential lots within the Riverfield Square Estate Stage 28, as shown on Figure 2.1 and on the Site Plan in Appendix A, with reference to Section 2.5 (Excluded Areas) of this report.

The following Lots were filled (or partially filled) during the Level 1 GITA supervision:

- Lots 2801 to Lot 2829.

## **2.5 Excluded Areas**

This report does not include fill outside the general boundary of the filled lots as shown in Figure 2.1. No fill was placed on the lots not mentioned in Section 2.4 of this report.

Backfill of trenches for the underground services, fill on footpaths, driveways and roads, or placement of topsoil, were not part of the scope for the works supervised by Chadwick Geotechnics.

### 3 Specification

The works were to be conducted in general accordance with the 'Guidelines on earthworks for commercial and residential developments' of AS3798-2007.

The following items were adopted as part of the project earthworks specifications:

- All Filling, in excess, of 200mm depth within the residential lots shall be undertaken to specifications satisfying the requirements of AS3798-2007 "Guidelines on Earthworks for Commercial and Residential Development".
- The fill soils to comply with the 'Suitable Material' in accordance with Section 4.4 of the AS3798-2007, and the following:
  - Maximum particle size of 150mm.
  - Particles over 37.5mm diameter not to exceed 20% of the material.
- Organic soils, topsoil, silts, or soils containing organic matter, wood, plastics, metal, or other deleterious materials are not acceptable.
- Subgrade to be proof rolled prior to placement of an engineered fill.
- Fill to be compacted in near horizontal layers not exceeding 250mm loose thickness.
- Compaction to achieve a ratio of at least 95% Standard Maximum Dry Density (SMDD).
- Frequency of testing to be in accordance with Table 8.1 of AS3798-2007.

## 4 Inspection and Testing

The inspection and testing of earthworks have been carried out in accordance with AS3798-2007, 'Guidelines on earthworks for commercial and residential developments', with a frequency of field density tests as per Table 8.1 (explained in Section 4.5 of this report). Compaction control laboratory testing was performed in a Chadwick Geotechnics NATA accredited laboratory in accordance with AS1289 'Methods of Testing Soils for Engineering Purposes'.

### 4.1 Earthworks

The earthworks for the project comprised of the following phases:

- Stripping of topsoil from the proposed fill areas.
- Assessment, remediation, and proof rolling of subgrade.
- Placement and compaction of engineered fill.

### 4.2 Fill material

Fill material used for the construction of the fill comprised of local gravelly and sandy clays won from the road boxing and trench excavations on this and the surrounding sites.

A bulk sample was taken from the stage 28 site during earthworks construction. The sample was taken for geotechnical compliance testing. The material compliance test results are summarised in **Table 4.1 below**. The laboratory test certificate is attached in **Appendix C**.

**Table 4.1: Compliance test Result Summary**

Sample #	Particle Size Distribution (PSD)						Liquid Limit %	Plastic Limit %	Plasticity Index %
	37.5 mm	13.2 mm	4.75 mm	1.18 mm	425 µm	0.75 µm			
S25DS-05689/1	100	98	93	87	83	57	53	17	36
S25DS-08745/1	92	90	83	77	70	47	45	17	28

The laboratory test results indicated that the fill material is a sandy CLAY with gravel of medium to high plasticity and satisfied the requirements of the specification.

The material was deemed as being derived from natural soils. The soil is considered as 'Suitable Material' in accordance with Section 4.4 of the AS3798-2007.

The material imported and placed at the site by Brown Property Group was assessed by the Superintendent as being derived from natural soils and meeting the classification of 'Fill Material' as defined in EPA publication 1828.2-2021 "Waste disposal categories – characteristics and thresholds". Environmental testing of the material was not within Chadwick Geotechnics' scope.

Any observed organic or deleterious matter including any oversize cobbles or boulders were removed from the tested areas during the fill placement.

Photographs of typical materials used during construction are shown below.

**Photograph 4.1: Photographs of the material used on site**



*Photograph 1: Typical clay material used on site*



*Photograph 2: Sandy Clay used*

### **4.3 Subgrade Assessment / Proof Roll**

The Subgrade of the site was progressively assessed during the period Chadwick Geotechnics personnel were on site.

Subgrade assessments were conducted following the removal of natural grasses and topsoil that was present on site.

The subgrade inspection was performed in accordance with the Level 1 guidelines presented in AS3798–2007 Section 5.5. No soft spots or deflections were encountered during the inspections, and the area was found to be firm and free of vegetation and other deleterious material.

Two photographs of the subgrade assessment phase at the project are shown below.

**Photograph 4.2: Subgrade assessment photographs**



*Photograph 3: Subgrade assessed with dump truck.*



*Photograph 4: Subgrade assessment using loaded dump truck.*

**4.4 Engineered Fill Construction**

All fill material was brought by dump trucks from local stockpiles, spread with a bulldozer and compacted with a pad foot roller. A water cart was present onsite during the works.

All fill material was placed in lift sequences comprising horizontal layers. Chadwick Geotechnics verified that the surface of the stripped area, and that of additional lifts, was thoroughly scarified and moisture conditioned prior to placement of additional layers to prevent delamination at the layer interface. Once the placed fill was approved, the layer was compacted accordingly. Chadwick Geotechnics personnel were on site on a fulltime basis during the placement, moisture conditioning, compaction, and testing of the fill on the dates noted in Table 2.2 of this report.

The following machinery was on site during earthworks.

**Table 4.2: Earthworks plant on site**

Equipment type	Model
Dozer	CAT D6
Pad foot roller	BPG 15 T, Vibrating Pad Foot Roller
Water cart	Volvo A25G
Dump Trucks	Volvo A25G
Excavator	CAT 25 T

Photographs of typical machinery on site used during construction are shown below.

**Photograph 4.3: General Earthwork machinery and fill construction photographs**



*Photograph 5: Vibrating pad foot roller used during fill construction.*



*Photograph 6: D6 Dozer spreading clay.*



*Photograph 7: Excavator and vibrating pad foot roller used during construction.*



*Photograph 8: Water truck.*

## 4.5 Density and Moisture testing

Field density and moisture content testing was undertaken progressively during the construction on the compacted fill using a calibrated portable density and moisture gauge in accordance with AS1289.5.8.1. The Hilf rapid compaction test was used for peak converted wet density determinations in accordance with AS1289.5.7.1. Test locations were recorded using a handheld GPS unit. A site plan showing the field density test locations is provided in **Appendix A**.

Testing was undertaken under the frequencies listed below, subject to the area and volume worked on the day of testing:

- 1 test per material type per layer per 2500m<sup>2</sup> or 1 test per 500m<sup>3</sup> distributed reasonably evenly or 3 tests per lot – whichever requires the most tests in accordance with Type 1 Earthworks (large scale operations) as defined in Table 8.1 of the AS3798-2007.

Forty-two (42) tests were performed during the filling process. Six (6) of the tests, did not achieve the required density and or moisture ratio. These areas were moisture conditioned and reworked and retested.

A summary table of Hilf density tests is provided in **Appendix B** and the laboratory test reports are provided in **Appendix C**. Two photographs of field density testing conducted on site are shown below.

### Photograph 4.4: Field Density/Moisture Testing photographs



*Photo 9: Field density/moisture test*



*Photo 10: Field density/moisture test*

## 5 Conclusion

On the basis, of our inspections and after considering all test results relating to the project, it is our opinion, so far as it is to be determined, that:

- The materials, used by the earth-works contractor met the geotechnical property requirements of the specification.
- The sourced fill was, considered to be natural, clean, and suitable for use at the site.
- The fill material placed was tested at a suitable frequency in accordance with AS3798-2007- Table 8.1 and the results indicate the compacted clay achieved the density requirement of the specification.
- Given the consistent construction practices followed by the earthworks contractor and as witnessed by the Chadwick Geotechnics, combined with the satisfactory verification of test results achieved, it is inferred that areas of the site between test locations were performed to the same standard as those areas that have been tested.
- Based on observations made by Chadwick Geotechnics Level 1 personal and the results of field and laboratory tests, we consider that the engineered fill within the site (noted in Section 2.5), as far as we have been able to reasonably determine, have been placed in general accordance with the intent of the specification.
- It is our opinion that the earthworks undertaken have been performed in accordance with the requirements of Section 8.2 – Level 1 Inspection and Testing - AS3798-2007 Guidelines on Earthworks for Commercial and Residential Developments.
- Chadwick Geotechnics completed its Inspection and testing services on, 9 April 2026. After this date, the maintenance of the fill is the sole responsibility of the Contractor. If the fill is not well maintained or protected with a sacrificial layer of topsoil or other fill, the uppermost layers and the exposed faces of the engineered fill may deteriorate, as, a result of exposure to varying weather conditions which can cause cracking or heaving of the fill.
- Any deterioration will need to be remediated prior to further construction on the site. Chadwick Geotechnics has not provided supervision since the above date and is not responsible for any subsequent deterioration that may have occurred or may occur since that date.

## 6 Applicability

This report has been prepared for the exclusive use of our client Greenridge Properties Pty Ltd in good faith and in accordance with the Chadwick Geotechnics quality system for the earthworks filling at the site.

This report is based on the nature of the project and the prevailing conditions between 23 August 2024 and 9 April 2026.

No responsibility or liability will be accepted, and Chadwick Geotechnics is indemnified to the full extent permitted by law in respect of the use of this report where there has been a change in the nature of the project or the conditions on site that may alter or affect the conclusions of this report.

Should you require any further information regarding this report, please do not hesitate to contact the undersigned on (03) 8796 7900.

Chadwick Geotechnics Pty Ltd

Report prepared by:



.....  
Robert Barden  
Project Manager

Authorised for Chadwick Geotechnics Pty Ltd by:



.....  
Michael DiMeglio  
Project Director

Report reviewed by:




.....  
Robert McKenzie  
Principal Geotechnical Engineer  
PE0005222

p:\1091938\workingmaterial\1091938.028 riverfield square stage 28\level 1 report\riverfield sq stage 28 l1 report .docx

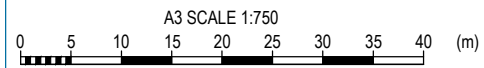
# Appendix A Test location plan

---



**LEGEND**  
 S25DS-XXXX  
 HILF DENSITY TEST LOCATION

**NOTES:**  
 1. AERIAL IMAGE SOURCED FROM METROMAP BY AEROMETREX 2026. COPYRIGHT MAPBOX. COPYRIGHT OPENSTREET MAP. IMAGERY DATE: 06/01/2026.  
 2. BASE PLAN PROVIDED BY GREENRIDGE PROPERTIES PTY LTD DRAWING REFERENCE: 2101578-28-BASE\_20240819.dwg, DATE RECEIVED: 24/03/2026.



PROJECT No. 1091938.028		
DESIGNED	STPA	Mar.26
DRAWN	KMJA	Mar.26
CHECKED	RHB	Apr.26
R. BARDEN		13.04.2026
APPROVED	DATE	

CLIENT	GREENRIDGE PROPERTIES PTY LTD		
PROJECT	RIVERFIELD SQUARE ESTATE - STAGE 28		
TITLE	LEVEL ONE HILF DENSITY TESTING HILF DENSITY TEST LOCATION PLAN		
SCALE (A3)	1:750	FIG No.	1091938.028-F01
REV	1		

## **Appendix B      Density and moisture test summary**

---

Report No	Sample No	Date	Test Number	General Lot No	Easting	Northing	Layer/RL	Density Ratio (≥95 %)	Moisture Variation	Pass / Fail	Comments (Retest No) Compliance test taken ect
HDR:W24DS01397	S24DS-05773	23/08/2024	1	2803 / 1	355339	5778492	19.48	102.5	2.0 Dry	Pass	
HDR:W24DS01399	S24DS-05775	24/08/2024	2	2802 / 2	355335	5778481	19.422	97.5	2.0 Wet	Pass	
HDR:W24DS01414	S24DS-05832	26/08/2024	1	2803 / 3	355347	5778492	19.498	99	2.5 Wet	Pass	
HDR:W24DS01464	S24DS-06106	30/08/2024	1	2801 / -	355340	5778460	19.315	96	1.5 Wet	Pass	
HDR:W25DS00038	S25DS-00100	16/01/2025	1	2818 / 7	355532 (5830.911)	5778390 (78386.533)	16.58	97	OMC	Pass	
HDR:W25DS00971	S25DS-03642	13/05/2025	1	2828 / -	355374 (5377.679)	5778397 (78395.290)	18.982	95	2.0 Dry	Pass	
HDR:W25DS00981	S25DS-03704	14/05/2025	1	2827 / Final	355382 (5383.477)	5778401 (78393.756)	19.255	95.5	0.5 Dry	Pass	
HDR:W25DS00981	S25DS-03705	14/05/2025	2	2829 / 1	355361 (5359.361)	5778418 (78407.894)	17.636	96.5	2.5 Dry	Pass	
HDR:W25DS01005	S25DS-03781	15/05/2025	1	2828 / 2	355379 (5378.261)	5778420 (78411.963)	17.944	99	2.5 Dry	Pass	
HDR:W25DS01005	S25DS-03782	15/05/2025	2	2826 / 3	355402 (5401.879)	5778408 (78402.628)	18.032	96	2.0 Dry	Pass	
HDR:W25DS01356	S25DS-05274	30/06/2025	1	2825 / 1	355417 (5414.777)	5778414 (78408.099)	17.926	100	0.5 Dry	Pass	
HDR:W25DS01395	S25DS-05423	7/07/2025	1	2827 / 3	355392 (5390.470)	5778406 (78403.089)	18.75	98.5	1.5 Wet	Pass	
HDR:W25DS01405	S25DS-05444	9/07/2025	1	2828 / 4	355370 (5368.285)	5778413 (78406.168)	19.071	100	0.5 Dry	Pass	
HDR:W25DS02222	S25DS-08650	15/09/2025	1	2815 / 2	355495 (5496.817)	5778440 (78433.975)	17.751	96.5	2.0 Dry	Pass	
HDR:W25DS02222	S25DS-08651	15/09/2025	2	2816 / 1	355515 (5518.312)	5778435 (78431.687)	16.982	93.5	1.5 Dry	Fail	See Retest S25DS-08694
HDR:W25DS02239	S25DS-08693	16/09/2025	1	2811 / 3	355472 (5472.256)	5778466 (78462.414)	18.968	97.5	0.5 Wet	Pass	
HDR:W25DS02239	S25DS-08694	16/09/2025	2	2816 / 1	355520 (5518.132)	5778435 (78431.975)	16.875	97	OMC	Pass	Retest of S25DS-08651
HDR:W25DS02250	S25DS-08743	17/09/2025	1	2817 / -	355532 (5530.396)	5778436 (78433.29)	17.337	95.5	0.5 Dry	Pass	
HDR:W25DS02250	S25DS-08744	17/09/2025	2	2812 / -	355465 (5464.492)	5778456 (78451.631)	19.098	94.5	1.5 Dry	Fail	See Retest S25DS-10250
HDR:W25DS02279	S25DS-08857	19/09/2025	1	2814 / 6	355490 (5487.677)	5778442 (78438.491)	18.575	103	4.0 Dry	Fail	See Retest S25DS-10253
HDR:W25DS02551	S25DS-10248	13/11/2025	1	2807/1	355406	5778449	19.184	99.5	OMC	Pass	



**Appendix C      NATA compaction laboratory reports**

---



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W24DS01397**


**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing



*K. B. Patel*

Accreditation Number: 12719  
 Site Number: 12712

Approved Signatory: Krushik Patel  
 (Senior Geotechnician)  
 Date of Issue: 2/09/2024

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:** Clyde North  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S24DS-05773		
Field Sample ID	1		
Date Tested	23/08/2024		
Time Tested	12:40		
E:	355339		
N:	5778492		
EL:	19.480		
Lot / Layer:	2803 / 1		

## Field and Laboratory Data

Depth of Test (mm)	175		
Depth of Layer (mm)	200		
AS Sieve Size (mm)	19.0		
Oversize Wet (%)	0		
Field Moisture Content (%)	18.2		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m <sup>3</sup> )	2.04		
Field Dry Density (t/m <sup>3</sup> )	1.72		
Peak Converted Wet Density (t/m <sup>3</sup> )	1.99		
Optimum Moisture Content (%)	20.5		
Compactive Effort	Standard		
Moisture Ratio (%)	89.5		
Moisture Variation (%)	2.0 dry		
Hilf Density Ratio (%)	<b>102.5</b>		

## Comments



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W24DS01399**


**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing



*K. B. Patel*

Accreditation Number: 12719  
 Site Number: 12712

Approved Signatory: Krushik Patel  
 (Senior Geotechnician)  
 Date of Issue: 4/09/2024

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:** Clyde North  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S24DS-05775		
Field Sample ID	1		
Date Tested	24/08/2024		
Time Tested	12:15		
E:	355335		
N:	5778481		
EL:	19.422		
Lot / Layer:	2802 / 2		

## Field and Laboratory Data

Depth of Test (mm)	175		
Depth of Layer (mm)	200		
AS Sieve Size (mm)	19.0		
Oversize Wet (%)	0		
Field Moisture Content (%)	13.4		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m <sup>3</sup> )	2.04		
Field Dry Density (t/m <sup>3</sup> )	1.80		
Peak Converted Wet Density (t/m <sup>3</sup> )	2.10		
Optimum Moisture Content (%)	11.5		
Compactive Effort	Standard		
Moisture Ratio (%)	118.0		
Moisture Variation (%)	2.0 wet		
Hilf Density Ratio (%)	<b>97.5</b>		

## Comments



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W24DS01414**


**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing



*K. B. Patel*

Accreditation Number: 12719  
 Site Number: 12712

Approved Signatory: Krushik Patel  
 (Senior Geotechnician)  
 Date of Issue: 2/09/2024

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:** Clyde North  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S24DS-05832		
Field Sample ID	1		
Date Tested	26/08/2024		
Time Tested	16:00		
E:	355347		
N:	5778492		
EL:	19.498		
Lot / Layer:	2803 / 3		

## Field and Laboratory Data

Depth of Test (mm)	175		
Depth of Layer (mm)	200		
AS Sieve Size (mm)	19.0		
Oversize Wet (%)	0		
Field Moisture Content (%)	20.6		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m <sup>3</sup> )	2.04		
Field Dry Density (t/m <sup>3</sup> )	1.69		
Peak Converted Wet Density (t/m <sup>3</sup> )	2.06		
Optimum Moisture Content (%)	18.0		
Compactive Effort	Standard		
Moisture Ratio (%)	114.5		
Moisture Variation (%)	2.5 wet		
Hilf Density Ratio (%)	<b>99.0</b>		

## Comments



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431


**Report No: HDR:W24DS01464**

**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:** **CG Request No.:**  
**TRN:** **Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing



*K. B. Patel*

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: Krushik Patel  
 (Senior Geotechnician)  
 Date of Issue: 4/09/2024  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:** Clyde North  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S24DS-06106		
Field Sample ID	1		
Date Tested	30/08/2024		
Time Tested	12:10		
E:	355340		
N:	5778460		
EL:	19.315		
Lot / Layer:	2801 / -		

## Field and Laboratory Data

Depth of Test (mm)	175		
Depth of Layer (mm)	200		
AS Sieve Size (mm)	19.0		
Oversize Wet (%)	0		
Field Moisture Content (%)	17.1		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m <sup>3</sup> )	2.02		
Field Dry Density (t/m <sup>3</sup> )	1.72		
Peak Converted Wet Density (t/m <sup>3</sup> )	2.11		
Optimum Moisture Content (%)	15.5		
Compactive Effort	Standard		
Moisture Ratio (%)	109.0		
Moisture Variation (%)	1.5 wet		
Hilf Density Ratio (%)	<b>96.0</b>		

## Comments



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431


**Report No: HDR:W25DS00038**

**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:** **CG Request No.:**  
**TRN:** **Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing



*K. B. Patel*

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: Krushik Patel  
 (Senior Geotechnician)  
 Date of Issue: 22/01/2025  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:** Clyde North  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Imported (Cheltenham)  
**Material:** CLAY

## Sample Data

Sample ID	S25DS-00100		
Field Sample ID	1		
Date Tested	16/01/2025		
Time Tested	15:20		
E:	355532 (5830.911)		
N:	5778390 (78386.533)		
EL:	16.580		
Lot / Layer:	2818 / 7		

## Field and Laboratory Data

Depth of Test (mm)	175		
Depth of Layer (mm)	200		
AS Sieve Size (mm)	19.0		
Field Moisture Content (%)	14.2		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m <sup>3</sup> )	2.07		
Field Dry Density (t/m <sup>3</sup> )	1.81		
Peak Converted Wet Density (t/m <sup>3</sup> )	2.13		
Optimum Moisture Content (%)	14.0		
Compactive Effort	Standard		
Moisture Ratio (%)	100.0		
Moisture Variation (%)	0.0		
Hilf Density Ratio (%)	<b>97.0</b>		

## Comments



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS00971**


**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing



*K. B. Patel*

Accreditation Number: 12719  
 Site Number: 12712

Approved Signatory: Krushik Patel  
 (Senior Geotechnician)  
 Date of Issue: 26/05/2025

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Imported  
**Material:** Clay

## Sample Data

Sample ID	S25DS-03642		
Field Sample ID	1		
Date Tested	13/05/2025		
Time Tested	12:00		
E:	355374 (5377.679)		
N:	5778397 (78395.290)		
EL:	18.982		
Lot / Layer:	2828 / -		

## Field and Laboratory Data

Depth of Test (mm)	175		
Depth of Layer (mm)	200		
AS Sieve Size (mm)	19.0		
Oversize Wet (%)	0		
Field Moisture Content (%)	17.4		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m <sup>3</sup> )	1.88		
Field Dry Density (t/m <sup>3</sup> )	1.60		
Peak Converted Wet Density (t/m <sup>3</sup> )	1.98		
Optimum Moisture Content (%)	19.5		
Compactive Effort	Standard		
Moisture Ratio (%)	90.0		
Moisture Variation (%)	2.0 dry		
Hilf Density Ratio (%)	<b>95.0</b>		

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS00981**


**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing



*K. B. Patel*

Accreditation Number: 12719  
 Site Number: 12712

Approved Signatory: Krushik Patel  
 (Senior Geotechnician)  
 Date of Issue: 26/05/2025

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Imported  
**Material:** Clay

## Sample Data

Sample ID	S25DS-03704	S25DS-03705
Field Sample ID	1	2
Date Tested	14/05/2025	14/05/2025
Time Tested	12:48	13:30
E:	355382 (5383.477)	355361 (5359.361)
N:	577801 (78393.756)	5778418 (78407.894)
EL:	19.255	17.636
Lot / Layer:	2827 / Final	2829 / 1

## Field and Laboratory Data

Depth of Test (mm)	175	175
Depth of Layer (mm)	200	200
AS Sieve Size (mm)	19.0	19.0
Oversize Wet (%)	0	0
Field Moisture Content (%)	15.4	19.6
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m <sup>3</sup> )	1.94	1.81
Field Dry Density (t/m <sup>3</sup> )	1.68	1.51
Peak Converted Wet Density (t/m <sup>3</sup> )	2.04	1.87
Optimum Moisture Content (%)	16.0	22.5
Compactive Effort	Standard	Standard
Moisture Ratio (%)	97.0	88.0
Moisture Variation (%)	0.5 dry	2.5 dry
Hilf Density Ratio (%)	<b>95.5</b>	<b>96.5</b>

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS01005**


**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing



*K. B. Patel*

Accreditation Number: 12719  
 Site Number: 12712

Approved Signatory: Krushik Patel  
 (Senior Geotechnician)  
 Date of Issue: 26/05/2025

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S25DS-03781	S25DS-03782
Field Sample ID	1	2
Date Tested	15/05/2025	15/05/2025
Time Tested	09:00	12:30
E:	355379 (5378.261)	355402 (5401.879)
N:	5778420 (78411.963)	5778408 (78402.628)
EL:	17.944	18.032
Lot / Layer:	2828 / 2	2826 / 3

## Field and Laboratory Data

Depth of Test (mm)	175	175
Depth of Layer (mm)	200	200
AS Sieve Size (mm)	19.0	19.0
Oversize Wet (%)	0	0
Field Moisture Content (%)	16.3	18.3
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m <sup>3</sup> )	1.93	1.91
Field Dry Density (t/m <sup>3</sup> )	1.66	1.61
Peak Converted Wet Density (t/m <sup>3</sup> )	1.95	1.99
Optimum Moisture Content (%)	19.0	20.5
Compactive Effort	Standard	Standard
Moisture Ratio (%)	86.0	89.0
Moisture Variation (%)	2.5 dry	2.0 dry
Hilf Density Ratio (%)	<b>99.0</b>	<b>96.0</b>

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS01356**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 30/07/2025  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Site Derived  
**Material:** Clay

## Sample Data

Sample ID	S25DS-05274				
Field Sample ID	1				
Date Tested	30/06/2025				
Time Tested	14:45				
E:	5414.777				
N:	78408.099				
EL:	17.926				
Lot / Layer:	2825 / 1				

## Field and Laboratory Data

Depth of Test (mm)	175				
Depth of Layer (mm)	200				
Field Moisture Content (%)	16.0				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m <sup>3</sup> )	2.03				
Field Dry Density (t/m <sup>3</sup> )	1.75				
Peak Converted Wet Density (t/m <sup>3</sup> )	2.03				
Optimum Moisture Content (%)	16.5				
Compactive Effort	Standard				
Moisture Ratio (%)	97.5				
Moisture Variation (%)	0.5 dry				
Hilf Density Ratio (%)	<b>100.0</b>				

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS01395**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 30/07/2025  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Site Won  
**Material:** CLAY

## Sample Data

Sample ID	S25DS-05423				
Field Sample ID	1				
Date Tested	7/07/2025				
Time Tested	14:30				
E:	355392 (5390.470)				
N:	5778406 (78403.089)				
EL:	18.750				
Lot / Layer:	2827 / 3				

## Field and Laboratory Data

Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize Wet (%)	0				
Field Moisture Content (%)	21.4				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m <sup>3</sup> )	2.01				
Field Dry Density (t/m <sup>3</sup> )	1.66				
Peak Converted Wet Density (t/m <sup>3</sup> )	2.04				
Optimum Moisture Content (%)	19.5				
Compactive Effort	Standard				
Moisture Ratio (%)	109.0				
Moisture Variation (%)	1.5 wet				
<b>Hilf Density Ratio (%)</b>	<b>98.5</b>				

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS01405**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 30/07/2025  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Site Won  
**Material:** CLAY

## Sample Data

Sample ID	S25DS-05444				
Field Sample ID	1				
Date Tested	9/07/2025				
Time Tested	12:15				
E:	355370 (5368.285)				
N:	5778413 (78406.168)				
EI:	19.071				
Lot / Layer:	2828 / 4				

## Field and Laboratory Data

Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize Wet (%)	0				
Field Moisture Content (%)	23.3				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m <sup>3</sup> )	1.99				
Field Dry Density (t/m <sup>3</sup> )	1.61				
Peak Converted Wet Density (t/m <sup>3</sup> )	1.99				
Optimum Moisture Content (%)	23.5				
Compactive Effort	Standard				
Moisture Ratio (%)	99.0				
Moisture Variation (%)	0.5 dry				
Hilf Density Ratio (%)	<b>100.0</b>				

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS02222**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 9/10/2025  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S25DS-08650	S25DS-08651				
Field Sample ID	1	2				
Date Tested	15/09/2025	15/09/2025				
Time Tested	12:30	12:45				
E:	355495 (5496.817)	355515 (5518.312)				
N:	5778440 (78433.975)	5778435 (78431.687)				
EL:	17.751	16.982				
Lot / Layer:	2815 / 2	2816 / 1				

## Field and Laboratory Data

Depth of Test (mm)	175	175				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Moisture Content (%)	13.4	13.3				
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1				
Field Wet Density (t/m³)	2.00	1.94				
Field Dry Density (t/m³)	1.76	1.71				
Peak Converted Wet Density (t/m³)	2.07	2.07				
Optimum Moisture Content (%)	15.5	15.0				
Compactive Effort	Standard	Standard				
Moisture Ratio (%)	86.5	89.0				
Moisture Variation (%)	2.0 dry	1.5 dry				
<b>Hilf Density Ratio (%)</b>	<b>96.5</b>	<b>93.5</b>				

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS02239**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 9/10/2025  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S25DS-08693	S25DS-08694			
Field Sample ID	1	2			
Date Tested	16/09/2025	16/09/2025			
Time Tested	11:00	12:00			
E:	355472 (5472.256)	355520 (5518.132)			
N:	5778466 (78462.414)	5778435 (78431.975)			
EL:	18.968	16.875			
Lot / Layer:	2811 / 3	2816 / 1			
		Retest of S25DS-08651			

## Field and Laboratory Data

Depth of Test (mm)	175	175			
Depth of Layer (mm)	200	200			
AS Sieve Size (mm)	19.0	19.0			
Oversize Wet (%)	0	0			
Field Moisture Content (%)	18.9	16.7			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1			
Field Wet Density (t/m³)	2.00	2.08			
Field Dry Density (t/m³)	1.68	1.78			
Peak Converted Wet Density (t/m³)	2.05	2.14			
Optimum Moisture Content (%)	18.5	17.0			
Compactive Effort	Standard	Standard			
Moisture Ratio (%)	101.5	99.0			
Moisture Variation (%)	0.5 wet	0.0			
Hilf Density Ratio (%)	<b>97.5</b>	<b>97.0</b>			

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS02250**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 9/10/2025  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S25DS-08743	S25DS-08744				
Field Sample ID	1	2				
Date Tested	17/09/2025	17/09/2025				
Time Tested	10:50	14:45				
E:	355532 (5530.396)	355465 (5464.492)				
N:	5778436 (78433.29)	5778456 (78451.631)				
EL:	17.337	19.098				
Lot / Layer:	2817 / -	2812 / -				

## Field and Laboratory Data

Depth of Test (mm)	175	175				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	4	8				
Field Moisture Content (%)	14.2	11.0				
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1				
Field Wet Density (t/m <sup>3</sup> )	2.03	2.09				
Field Dry Density (t/m <sup>3</sup> )	1.77	1.88				
Peak Converted Wet Density (t/m <sup>3</sup> )	2.12	2.21				
Optimum Moisture Content (%)	14.5	12.5				
Compactive Effort	Standard	Standard				
Moisture Ratio (%)	97.5	88.0				
Moisture Variation (%)	0.5 dry	1.5 dry				
Hilf Density Ratio (%)	<b>95.5</b>	<b>94.5</b>				

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS02279**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 9/10/2025  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S25DS-08857				
Field Sample ID	1				
Date Tested	19/09/2025				
Time Tested	09:00				
E:	355490 (5487.677)				
N:	5778442 (78438.491)				
EL:	18.575				
Lot / Layer:	2814 / 6				

## Field and Laboratory Data

Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize Wet (%)	0				
Field Moisture Content (%)	14.2				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m <sup>3</sup> )	2.04				
Field Dry Density (t/m <sup>3</sup> )	1.79				
Peak Converted Wet Density (t/m <sup>3</sup> )	1.99				
Optimum Moisture Content (%)	18.5				
Compactive Effort	Standard				
Moisture Ratio (%)	78.0				
Moisture Variation (%)	4.0 dry				
Hilf Density Ratio (%)	<b>103.0</b>				

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431



**Report No: HDR:W25DS02551**

**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:** **CG Request No.:**  
**TRN:** **Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 6/03/2026  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Site Derived  
**Material:** CLAY

## Sample Data

Sample ID	S25DS-10248				
Field Sample ID	1				
Date Tested	13/11/2025				
Time Tested	14:45				
E:	355406				
N:	5778449				
EL:	19.184				
Lot / Layer:	2807 / 1				

## Field and Laboratory Data

Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize Wet (%)	0				
Field Moisture Content (%)	20.3				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m <sup>3</sup> )	2.01				
Field Dry Density (t/m <sup>3</sup> )	1.67				
Peak Converted Wet Density (t/m <sup>3</sup> )	2.03				
Optimum Moisture Content (%)	20.5				
Compactive Effort	Standard				
Moisture Ratio (%)	100.0				
Moisture Variation (%)	0.0				
Hilf Density Ratio (%)	<b>99.5</b>				

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS02552**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 6/03/2026  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Site Derived  
**Material:** Clay

## Sample Data

Sample ID	S25DS-10249	S25DS-10250	S25DS-10251	S25DS-10252	S25DS-10253	S25DS-10254
Field Sample ID	1	2	3	4	5	6
Date Tested	14/11/2025	14/11/2025	14/11/2025	14/11/2025	14/11/2025	14/11/2025
Time Tested	13:05	13:15	13:25	13:35	13:50	14:20
E:	355472 (5467.666)	355462 (5464.492)	355463 (5462.298)	355428 (5425.262)	355490 (5487.677)	355397 (5395.511)
N:	5778422 (78479.061)	5778422 (78479.061)	5778441 (78438.768)	5778452 (78447.599)	5778442 (78438.631)	5778460 (78451.353)
EL:	19.858	-	18.916	19.398	-	19.577
Lot / Layer	2810 / FSL	2812	2813 / FSL	2808 / 2	2814	2806 / 2
		Retest of S25DS-08744			Retest of S25DS-08857	

## Field and Laboratory Data

Depth of Test (mm)	175	175	175	175	175	175
Depth of Layer (mm)	200	200	200	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize Wet (%)	0	0	0	0	0	0
Field Moisture Content (%)	15.8	15.3	14.3	22.2	18.9	18.4
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m <sup>3</sup> )	2.05	2.09	2.12	2.01	2.03	2.01
Field Dry Density (t/m <sup>3</sup> )	1.77	1.81	1.85	1.64	1.70	1.70
Peak Converted Wet Density (t/m <sup>3</sup> )	2.11	2.13	2.13	2.02	2.08	2.05
Optimum Moisture Content (%)	15.0	15.5	14.0	22.5	18.5	18.5
Compactive Effort	Standard	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	103.5	99.0	100.5	99.0	103.0	99.0
Moisture Variation (%)	0.5 wet	0.0	0.0	0.0	0.5 wet	0.0
Hilf Density Ratio (%)	<b>97.5</b>	<b>98.0</b>	<b>99.0</b>	<b>99.5</b>	<b>97.5</b>	<b>98.0</b>

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS02575**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 6/03/2026  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S25DS-10341				
Field Sample ID	1				
Date Tested	19/11/2025				
Time Tested	13:45				
E:	355380 (5378.805)				
N:	5778462 (78456.340)				
EL:	19.851				
Lot / Layer:	2805 / 3				

## Field and Laboratory Data

Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize Wet (%)	0				
Field Moisture Content (%)	22.7				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m <sup>3</sup> )	1.98				
Field Dry Density (t/m <sup>3</sup> )	1.61				
Peak Converted Wet Density (t/m <sup>3</sup> )	2.01				
Optimum Moisture Content (%)	22.5				
Compactive Effort	Standard				
Moisture Ratio (%)	101.0				
Moisture Variation (%)	0.0				
<b>Hilf Density Ratio (%)</b>	<b>98.5</b>				

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS02740**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 6/03/2026  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:** Clyde  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S25DS-10972	S25DS-10973	S25DS-10974	S25DS-10975
Field Sample ID	1	2	3	4
Date Tested	15/12/2025	15/12/2025	15/12/2025	15/12/2025
Time Tested	09:10	09:35	14:15	14:30
E:	355466 (5467.973)	355511 (5505.035)	355380 (5379.404)	355421 (5421.197)
N:	5778392 (78390.027)	5778391 (78385.702)	5778455 (78452.219)	5778451 (78448.132)
EL:	17.422	16.980	20.067	20.076
Lot / Layer:	2822 / 2	2819 / 3	2805 / Final	2808 / Final

## Field and Laboratory Data

Depth of Test (mm)	175	175	175	175
Depth of Layer (mm)	200	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0	19.0
Oversize Wet (%)	0	0	0	0
Field Moisture Content (%)	10.4	12.2	12.8	13.9
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m <sup>3</sup> )	2.05	2.01	2.01	2.00
Field Dry Density (t/m <sup>3</sup> )	1.86	1.79	1.78	1.75
Peak Converted Wet Density (t/m <sup>3</sup> )	1.98	1.94	1.91	2.04
Optimum Moisture Content (%)	13.0	15.5	16.5	16.0
Compactive Effort	Standard	Standard	Standard	Standard
Moisture Ratio (%)	80.5	80.0	77.0	87.5
Moisture Variation (%)	2.5 dry	3.0 dry	4.0 dry	2.0 dry
Hilf Density Ratio (%)	<b>103.5</b>	<b>103.5</b>	<b>105.0</b>	<b>98.0</b>

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W25DS02765**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 6/03/2026  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 98%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S25DS-11045	S25DS-11046			
Field Sample ID	1	2			
Date Tested	18/12/2025	18/12/2025			
Time Tested	14:30	14:50			
E:	-	355446 (5439.553)			
N:	-	5778395 (78396.784)			
EL:	-	-			
Lot / Layer:	2808 / -	2098 / -			
	Retest of S25DS-10974				

## Field and Laboratory Data

Depth of Test (mm)	225	225			
Depth of Layer (mm)	250	250			
AS Sieve Size (mm)	19.0	19.0			
Oversize Wet (%)	0	0			
Field Moisture Content (%)	13.9	13.8			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1			
Field Wet Density (t/m³)	1.99	2.10			
Field Dry Density (t/m³)	1.74	1.84			
Peak Converted Wet Density (t/m³)	2.15	2.08			
Optimum Moisture Content (%)	14.0	16.0			
Compactive Effort	Standard	Standard			
Moisture Ratio (%)	98.5	85.5			
Moisture Variation (%)	0.0	2.5 dry			
<b>Hilf Density Ratio (%)</b>	<b>92.5</b>	<b>101.0</b>			

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431



**Report No: HDR:W26DS00026**

**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:** **CG Request No.:**  
**TRN:** **Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 6/03/2026  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S26DS-00124				
Field Sample ID	1				
Date Tested	13/01/2026				
Time Tested	09:00				
E:	355447 (5445.427)				
N:	5778396 (78398.230)				
EL:	18.538				
Lot / Layer:	2823 / -				

## Field and Laboratory Data

Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize Wet (%)	0				
Field Moisture Content (%)	13.0				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m <sup>3</sup> )	1.99				
Field Dry Density (t/m <sup>3</sup> )	1.76				
Peak Converted Wet Density (t/m <sup>3</sup> )	2.03				
Optimum Moisture Content (%)	15.5				
Compactive Effort	Standard				
Moisture Ratio (%)	83.0				
Moisture Variation (%)	2.5 dry				
<b>Hilf Density Ratio (%)</b>	<b>98.0</b>				

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W26DS00037**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 6/03/2026  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S26DS-00154	S26DS-00155			
Field Sample ID	1	2			
Date Tested	15/01/2026	15/01/2026			
Time Tested	09:00	09:30			
E:	355461 (5479.141)	355484 (5491.037)			
N:	5778398 (78395.394)	5778402 (78389.278)			
EL:	18.027	17.916			
Lot / Layer:	2821 / 1	2820 / -			

## Field and Laboratory Data

Depth of Test (mm)	175	175			
Depth of Layer (mm)	200	200			
AS Sieve Size (mm)	19.0	19.0			
Oversize Wet (%)	0	0			
Field Moisture Content (%)	14.3	14.1			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1			
Field Wet Density (t/m <sup>3</sup> )	2.10	2.07			
Field Dry Density (t/m <sup>3</sup> )	1.84	1.82			
Peak Converted Wet Density (t/m <sup>3</sup> )	2.04	2.06			
Optimum Moisture Content (%)	16.5	16.5			
Compactive Effort	Standard	Standard			
Moisture Ratio (%)	86.0	86.5			
Moisture Variation (%)	2.5 dry	2.0 dry			
Hilf Density Ratio (%)	<b>103.0</b>	<b>100.5</b>			

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431



**Report No: HDR:W26DS00514**

**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:** **CG Request No.:**  
**TRN:** **Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 20/03/2026  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S26DS-01923	S26DS-01924				
Field Sample ID	1	2				
Date Tested	4/03/2026	4/03/2026				
Time Tested	15:30	15:40				
E:	355415 (5413.824)	355392 (5390.473)				
N:	5778472 (78472.311)	5778480 (78477.668)				
EL:	20.557	20.781				
Lot / Layer:	2809 / Final	2804 / Final				

## Field and Laboratory Data

Depth of Test (mm)	175	175				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Moisture Content (%)	11.8	10.6				
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1				
Field Wet Density (t/m³)	1.94	1.93				
Field Dry Density (t/m³)	1.73	1.75				
Peak Converted Wet Density (t/m³)	2.02	1.99				
Optimum Moisture Content (%)	14.5	13.0				
Compactive Effort	Standard	Standard				
Moisture Ratio (%)	80.5	82.5				
Moisture Variation (%)	3.0 dry	2.5 dry				
Hilf Density Ratio (%)	<b>96.0</b>	<b>97.0</b>				

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W26DS00565**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 20/03/2026  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S26DS-02078				
Field Sample ID	1				
Date Tested	5/03/2026				
Time Tested	10:10				
E:	355513 (5512.434)				
N:	5778389 (78386.488)				
EL:	17.837				
Lot / Layer:	2819 / Final				

## Field and Laboratory Data

Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize Wet (%)	0				
Field Moisture Content (%)	14.6				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m <sup>3</sup> )	1.97				
Field Dry Density (t/m <sup>3</sup> )	1.71				
Peak Converted Wet Density (t/m <sup>3</sup> )	2.13				
Optimum Moisture Content (%)	14.5				
Compactive Effort	Standard				
Moisture Ratio (%)	99.5				
Moisture Variation (%)	0.0				
<b>Hilf Density Ratio (%)</b>	<b>92.0</b>				

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W26DS00693**


**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing



Accreditation Number: 12719  
 Site Number: 12712

Approved Signatory: J. Lamont  
 (Base Laboratory Manager -  
 Date of Issue: 24/03/2026

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S26DS-02484				
Field Sample ID	1				
Date Tested	19/03/2026				
Time Tested	12:30				
E:	355523 (5521.465)				
N:	5778397 (78390.318)				
EL:	17.677				
Lot / Layer:	2819 / Final				
	Retest of S26DS-02078				

## Field and Laboratory Data

Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize Wet (%)	0				
Field Moisture Content (%)	10.6				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m <sup>3</sup> )	2.00				
Field Dry Density (t/m <sup>3</sup> )	1.80				
Peak Converted Wet Density (t/m <sup>3</sup> )	2.05				
Optimum Moisture Content (%)	13.0				
Compactive Effort	Standard				
Moisture Ratio (%)	83.0				
Moisture Variation (%)	2.0 dry				
Hilf Density Ratio (%)	<b>97.5</b>				

## Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: HDR:W26DS00895**



**Issue No: 1**

# HILF Density Ratio Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:**  
**TRN:**

**CG Request No.:**  
**Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 6/05/2026  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

## Sample Details

**Location:**  
**Client Request ID:**  
**Specification Requirements:** Minimum Hilf Density Ratio of 95%  
**Field Test procedures:** AS 1289.5.8.1  
**Laboratory Test procedures:** AS 1289.2.1.1, AS 1289.5.7.1  
**Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)  
**Source:** Onsite  
**Material:** Clay

## Sample Data

Sample ID	S26DS-03250				
Field Sample ID	1				
Date Tested	9/04/2026				
Time Tested	09:00				
E:	355380				
N:	5778467				
EL:	-				
Lot / Layer:	- / -				

## Field and Laboratory Data

Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize Wet (%)	0				
Field Moisture Content (%)	13.3				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m <sup>3</sup> )	1.98				
Field Dry Density (t/m <sup>3</sup> )	1.74				
Peak Converted Wet Density (t/m <sup>3</sup> )	1.94				
Optimum Moisture Content (%)	17.5				
Compactive Effort	Standard				
Moisture Ratio (%)	76.0				
Moisture Variation (%)	4.0 dry				
Hilf Density Ratio (%)	<b>102.0</b>				

## Comments

Results relate only to the items tested/sampled.

**Appendix D      NATA compliance laboratory report**

---



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431



**Report No: MAT:S25DS-05689/1**

**Issue No: 1**

# Material Test Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:** **CG Request No.:**  
**TRN:** **Lot No.:**

Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 14/08/2025  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

### Sample Details

**Sample Location** E: 355370 (5368.285), N: 5778413 (78406.168), R.L 19.071, Lot 2828 / Layer 4  
**Field Sample ID** 1  
**Date Sampled** 9/07/2025  
**Time Sampled** 12:15  
**Source** Site Won  
**Material** CH Sandy CLAY, trace gravel, orange brown, high plasticity, fine to coarse grained sand  
**Specification** AS Grading  
**Sampling Method** AS1289.1.2.1 Clause 6.4 (b)  
**Sample ID** S25DS-05689

### Particle Size Distribution

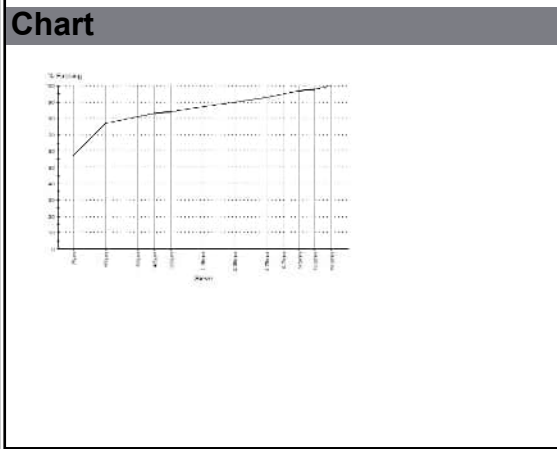
**Method:** AS 1289.3.6.1  
**Drying By:** Oven  
**Date Tested:** 25/07/2025

**Note:** Sample Washed

Sieve Size	% Passing	Limits
19.0mm	100	
13.2mm	98	
9.5mm	97	
6.7mm	95	
4.75mm	93	
2.36mm	90	
1.18mm	87	
600µm	84	
425µm	83	
300µm	81	
150µm	77	
75µm	57	

### Other Test Results

Description	Method	Result	Limits
Moisture Content (%)	AS 1289.2.1.1	24.3	
Date Tested		23/07/2025	
Sample History	AS 1289.1.1	Oven-Dried	
Preparation	AS 1289.1.1	Dry Sieved	
Linear Shrinkage (%)	AS 1289.3.4.1	10.0	
Mould Length (mm)		250	
Crumbling		No	
Curling		No	
Cracking		Yes	
Liquid Limit (%)	AS 1289.3.1.2	53	
Plastic Limit (%)	AS 1289.3.2.1	17	
Plasticity Index (%)	AS 1289.3.3.1	36	
Date Tested		31/07/2025	



### Comments

Results relate only to the items tested/sampled.



**Dandenong South**  
**ACN 143 009 330**  
 25 Metcalf Street  
 DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900  
 Fax: +61 3 9706 9431

**Report No: MAT:S25DS-08745/1**

**Issue No: 1**

# Material Test Report

**Client:** Greenridge Properties Pty Ltd  
**Address:** PO Box 3131  
 AUBURN VIC 3123  
**Project:** Riverfield Square Estate, Stage 28  
**Project No.:** 1091938.028  
**Order No.:** **CG Request No.:**  
**TRN:** **Lot No.:**

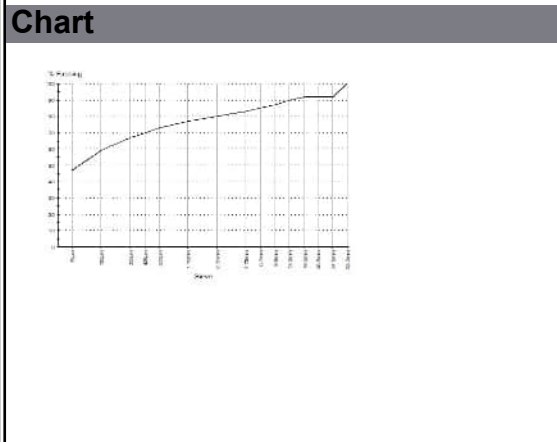
Accredited for compliance with ISO/IEC 17025  
 - Testing

Accreditation Number: 12719  
 Site Number: 12712  
 Approved Signatory: M. Di Meglio  
 (Practice Lead - Technical Services)  
 Date of Issue: 9/10/2025  
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details	
<b>Sample Location</b>	E: 355465 (5464.492), N: 5778456 (78451.631), E:: 19.098, Lot: 2812
<b>Field Sample ID</b>	1
<b>Date Sampled</b>	17/09/2025
<b>Time Sampled</b>	14:45
<b>Source</b>	Onsite
<b>Material</b>	CI Sandy CLAY with gravel, medium plasticity
<b>Specification</b>	AS Grading
<b>Sampling Method</b>	
<b>Sample ID</b>	S25DS-08745

Particle Size Distribution		
<b>Method:</b>	AS 1289.3.6.1	
<b>Drying By:</b>	Oven	
<b>Date Tested:</b>	18/09/2025	
<b>Note:</b>	Sample Washed	
<b>Sieve Size</b>	<b>% Passing</b>	<b>Limits</b>
53.0mm	100	
37.5mm	92	
26.5mm	92	
19.0mm	92	
13.2mm	90	
9.5mm	87	
6.7mm	85	
4.75mm	83	
2.36mm	80	
1.18mm	77	
600µm	73	
425µm	70	
300µm	67	
150µm	59	
75µm	47	

Other Test Results			
Description	Method	Result	Limits
Moisture Content (%)	AS 1289.2.1.1	18.3	
Date Tested		18/09/2025	
Sample History	AS 1289.1.1	Oven-Dried	
Preparation	AS 1289.1.1	Dry Sieved	
Linear Shrinkage (%)	AS 1289.3.4.1	11.0	
Mould Length (mm)		250	
Crumbling		No	
Curling		No	
Cracking		No	
Liquid Limit (%)	AS 1289.3.1.2	45	
Plastic Limit (%)	AS 1289.3.2.1	17	
Plasticity Index (%)	AS 1289.3.3.1	28	
Date Tested		22/09/2025	



**Comments**  
 Results relate only to the items tested/sampled.

**Appendix E      Controlled fill certificate**

---



## CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

**PROJECT** : Riverfield Square Stage 28,  
Lots 3416 to 3448

**Chadwick Geotechnics REF:** 1091938.028.v1

**CLIENT** : Greenridge Properties Pty Ltd  
P.O Box 4136  
Dandenong South VIC 3164

**DATE:** 11 May 2026

### SUMMARY

Chadwick Geotechnics Pty Ltd conducted, Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing AS3798-2007, *Guidelines on earthworks for commercial and residential developments*, during the filling of the site.

So far as can be determined, the fill was placed in accordance with the specification that required a minimum density ratio of 95% of Hilf Density (AS1289.5.7.1) to be achieved.

### LIMITATIONS

This Certificate has been commissioned for the filling of the lots mentioned above and is based on the site conditions present at the time of the inspections (23 August 2024 to 9 April 2026). No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, or where there has been a change in the nature of the project or the site conditions since the site testing.

Chadwick Geotechnics Pty Ltd

A handwritten signature in black ink that reads 'Robert Barden'.

A handwritten signature in black ink that reads 'Michael Di Meglio'.

**Robert Barden**  
**Project Manager**

**Michael Di Meglio**  
**Project Director**

© Chadwick Geotechnics Pty Ltd.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise other than in accordance with the limitations and for the purpose provided for above.

[www.chadwickgeotechnics.com.au](http://www.chadwickgeotechnics.com.au)

