CHADWICK GEOTECHNICS

REPORT

Level 1 Geotechnical Inspection and Testing Authority Services

Riverfield Square Estate Stage 25
Lots 2501 to 2529

Prepared for:

Greenridge Properties Pty Ltd

11 April 2025

Our Ref: 1091938.025.R1.v1

25 Metcalf Street, Dandenong South, Vic 3175, Melbourne, Australia
www.chadwickgeotechnics.com.au

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Document Control

Title:	Level One Inspection and testing Services.				
Date	**Version**	**Description**	**Prepared by:**	**Reviewed by:**	**Authorised by**
11 April 2025	V1	Final	RHB	RWMc	MCDM

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 25 of the Riverfield Square Estate in Clyde North between 28 June 2024 and 11 January 2025.

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

Stage 25 is located to the East of Tuckers Road and North of Ballarto Rd. Stages 22 and 23 are west of stage 25.

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

Figure 2.1: Extract from Nearmap

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
June 2024	28
July 2024	3, 5, 24, 31
August 2024	1, 2
November 2024	1, 28, 29
December 2024	2, 3, 12, 13, 16, 17, 18, 19, 20
January 2025	8, 9, 10, 11

2.4 Included Areas

This report is applicable to material placed by the contractor on the residential lots within Riverfield Square Estate Stage 25, as shown on **Figure 2.1** and on the Site Plan in **Appendix A,** and 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 2501 to 2529

2.5 Excluded Areas

This report does not include fill outside the general boundary of the filled areas 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 Specifications

The works were to be conducted in general accordance with the 'Guidelines on earthworks for commercial and residential developments' of AS 3798-2007.

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 AS 3798-2007 "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).
- Moisture content of the fill material is to be within ±3% of the soils Standard Optimum Moisture Content (SOMC).
- 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.
- Geotechnical compliance testing of the soils used for fill.
- Placement and compaction of engineered fill.

4.2 Fill material

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

Samples taken from the site stockpiles comprising local material used for fill were taken for geotechnical compliance testing during the works. The material compliance test results are summarised in **Table 4.1 below.** The laboratory test certificates are 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			
S24DS-05053	100	100	97	94	88	52	42	13	29
S24DS-09406	100	99	98	97	90	44	32	14	18
S25DS-0011/1	100	95	91	88	82	43	43	18	25

The laboratory test results indicated material is clay of medium 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: Silty 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 AS 3798–2007 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 the local stockpiles, spread with a bulldozer and compacted with a pad foot roller. A water cart was present onsite during the works for moisture conditioning of the materials.

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 Pad Foot Roller
Water cart	Volvo 25 T
Dump Trucks	Volvo A256
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: Dozer used during fill construction

Photograph 6: Water cart used during fill construction

Photograph 7: Compactor used during fill construction

Photograph 8: Moxy trucks used during fill construction

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 AS 1289.5.8.1. The HILF rapid compaction test was used for peak converted wet density determinations in accordance with AS 1289.5.7.1. 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 2500m² or 1 test per 500m³ 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 AS 3798-2007;

Forty Five (45) tests were performed during the filling process. Four (4) of the tests did not achieve the required density and or moisture ratio initially. The failed areas were reworked and retested accordingly. The retests returned passing density and moisture test results.

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 AS 3798-2007- 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, 29 October 2024. 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 28 June 2024 and 11 January 2025. 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:

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Robert Barden

Project Manager

Authorised for Chadwick Geotechnics Pty Ltd by:

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Michael DiMeglio

Project Director

Report reviewed by:

.....

Robert McKenzie

Principal Geotechnical Engineer

PE0005222

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Appendix A Test Location Plan

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CHADWICK GEOTECHNICS
www.chadwickgeotechnics.com.au

NOTES:
1. AERIAL IMAGE SOURCED FROM NEARMAP. COPYRIGHT NEARMAP PTY LTD IMAGERY DATE: 04/03/2025.

A3 SCALE 1:1000
0 5 10 15 20 30 40 50 (m)

ORIGINAL IN COLOUR

PROJECT No.	1091938.025	
DESIGNED	RHB	Apr.25
DRAWN	KMJA	Apr.25
CHECKED	RHB	Apr.25
APPROVED	R. BARDEN	DATE 10.04.2025

CLIENT **GREENRIDGE PROPERTIES PTY LTD**
PROJECT **RIVERFIELD SQUARE ESTATE IN CLYDE**
TITLE LEVEL ONE HILF DENSITY TESTING
HILF DENSITY TEST LOCATION PLAN
SCALE (A3) 1:1000 FIG No. 1091938.025-F01 REV 1

Appendix B Hilf Density Test Summary

CHADWICK GEOTECHNICS

Riverfield Square Estate, 1091938.025 Stage 25

HILF Density Testing - Field Summary

Chadwick Geotechnics
25 Metcalf Street
Dandenong South VIC 3175
Tel : (03) 8796 7900
Fax: (03) 9706 9431

Think Act Safe Be

Report No	Sample No	Date	Test Number	Lot No	Easting	Northing	Layer/RL	Density Ratio (≥95 %)	Moisture Variation	Pass / Fail	Comments (Retest No) Compliance test taken ect
HDR:W24DS01031	S24DS-04313	28/06/2024	1	2506 / 5	355353	5778546	19.45	99	0.5 wet	Pass	
HDR:W24DS01031	S24DS-04314	28/06/2024	2	2506 / 6	355347	5778550	19.526	101.5	0 wet	Pass	
HDR:W24DS01061	S24DS-04453	3/07/2024	1	2505 / 1	355346	5778532	19.457	95	1 wet	Pass	
HDR:W24DS01079	S24DS-04508	5/07/2024	1	2504 / 2	355341	5778516	19.884	97.5	0.5 wet	Pass	
HDR:W24DS01161	S24DS-04827	24/07/2024	1	2504	355335	5778518	20.327	97.5	3.0 Wet	Pass	
DDR:W24DS01201	S24DS-05004	31/07/2024	1	2511	355495	5778549	17.194	93.5	3.5 Wet	Fail	See Retest S24DS-05045
HDR:W24DS01209	S24DS-05044	1/08/2024	1	2508 / 1	355410	5778581	17.546	101	3 wet	Pass	
HDR:W24DS01209	S24DS-05045	1/08/2024	2	2511-2523 / 1	355494	5778549	17.277	98.5	3 wet	Pass	Retest of S24DS-05004
HDR:W24DS01220	S24DS-05077	2/08/2024	1	2510/2	355442	5778576	17.98	98.5	2 wet	Pass	
HDR:W24DS01945	S24DS-08057	1/11/2024	1	2512 / -	355526	5778548	17.01	102	0.5 dry	Pass	
HDR:W24DS01945	S24DS-08058	1/11/2024	2	2523 / -	355487	5778562	17.539	99.5	0.5 dry	Pass	
HDR:W24DS01945	S24DS-08059	1/11/2024	3	2509 / -	355424	5778571	18.223	101.5	0 dry	Pass	
HDR:W24DS01945	S24DS-08060	1/11/2024	4	2521 / -	355426	5778525	20.486	94.5	0 dry	Fail	See Retest S24DS-08883
HDR:W24DS01945	S24DS-08061	1/11/2024	5	2502 / -	355402	5778523	20.771	102	0 dry	Pass	
HDR:W24DS02157	S24DS-08883	28/11/2024	1	2521 / -	355423	5778522	20.439	99.5	3 wet	Pass	Retest of S24DS-08060
HDR:W24DS02157	S24DS-08884	28/11/2024	2	2501 / -	355395	5778539	19.986	99	0.5 wet	Pass	
HDR:W24DS02157	S24DS-08885	28/11/2024	3	2522 / -	355435	5778534	20.081	99.5	2.5 dry	Pass	
HDR:W24DS02161	S24DS-08900	29/11/2024	1	2522 / -	355423	5778533	20.525	99.5	2.5 dry	Pass	
HDR:W24DS02175	S24DS-08941	2/12/2024	1	2507	355399	5778578	18.575	96.5	OMC	Pass	
HDR:W24DS02175	S24DS-08942	2/12/2024	2	2510	355440	5778571	18.254	100	0.5 Wet	Pass	
HDR:W24DS02180	S24DS-08964	3/12/2024	1	2509	355427	5778562	18.80	101	2.5 Dry	Pass	
HDR:W24DS02180	S24DS-08965	3/12/2024	2	2508	355406	5778566	18.073	99.5	2.5 Dry	Pass	
HDR:W24DS02251	S24DS-09307	12/12/2024	1	2524	355477	5778545	18.531	107	4 dry	Fail	See Retest S24DS-09372

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Riverfield Square Estate, 1091938.025 Stage 25

HILF Density Testing - Field Summary

Chadwick Geotechnics
25 Metcalf Street
Dandenong South VIC 3175
Tel : (03) 8796 7900
Fax: (03) 9706 9431

Think Act Safe Be

Report No	Sample No	Date	Test Number	Lot No	Easting	Northing	Layer/RL	Density Ratio (≥95 %)	Moisture Variation	Pass / Fail	Comments (Retest No) Compliance test taken ect
HDR:W24DS02265	S24DS-09369	13/12/2024	1	2527 / 2	355502	5778526	-	102	2 dry	Pass	
HDR:W24DS02265	S24DS-09370	13/12/2024	2	2513 / -	355523	5778523	-	104	2.5 dry	Pass	
HDR:W24DS02265	S24DS-09371	13/12/2024	3	2511 / -	355504	5778549	-	98	2.5 dry	Pass	
HDR:W24DS02265	S24DS-09372	13/12/2024	4	-	355481	5778545	-	104.5	2.5 dry	Pass	Retest of S24DS-09307
HDR:W24DS02272	S24DS-09403	16/12/2024	1	2514 / -	355536	5778510	17.882	105	4.5 dry	Fail	See Retest S24DS-09449
HDR:W24DS02272	S24DS-09404	16/12/2024	2	2525 / -	355477	5778533	19.076	97.5	1 wet	Pass	
HDR:W24DS02272	S24DS-09405	16/12/2024	3	2516 / 1	355563	5778474	16.684	108	3 dry	Pass	Possible oversize
HDR:W24DS02280	S24DS-09419	17/12/2024	4	2528 / 1.267 to FSL	355544	5778424	-	105	3 dry	Pass	
HDR:W24DS02286	S24DS-09435	18/12/2024	1	2520 / 1	355490	5778474	18.685	97	1.5 dry	Pass	
HDR:W24DS02286	S24DS-09436	18/12/2024	2	2515 / 2	355561	5778460	16.855	102	1.5 dry	Pass	
HDR:W24DS02286	S24DS-09437	18/12/2024	3	2529 / 2	355562	5778445	16.614	102	0 dry	Pass	
HDR:W24DS02292	S24DS-09446	19/12/2024	1	2516 / 3	355551	5778471	16.184	101	2.5 dry	Pass	
HDR:W24DS02292	S24DS-09447	19/12/2024	2	2529 / 3	355548	5778439	17.141	99.5	0.5 dry	Pass	
HDR:W24DS02294	S24DS-09449	20/12/2024	1	2514 / -	355539	5778506	17.829	98	0.5 dry	Pass	Retest of S24DS-09403
HDR:W25DS00001	S25DS-00001	8/01/2025	1	2528 / 0.394 to FSL	355552	5778427	17.089	95.5	0.5 dry	Pass	
HDR:W25DS00001	S25DS-00002	8/01/2025	2	2515 / 0.04 to FLS	355553	5778461	17.702	99.5	2 dry	Pass	
HDR:W25DS00003	S25DS-00005	9/01/2024	1	2519 / 0.433m to FSL	355503	5778457	18.164	97	0.5 dry	Pass	
HDR:W25DS00003	S25DS-00006	9/01/2024	2	2528 / 0.170m to FSL	355561	5778420	17.299	98.5	0.5 dry	Pass	
HDR:W25DS00003	S25DS-00007	9/01/2024	3	2518 / 0.377m to FSL	355519	5778457	18.065	99.5	1.5 dry	Pass	
HDR:W25DS00004	S25DS-00008	10/01/2025	1	2517 / 0.129m to FSL Final Lift	355535	5778459	17.925m	100.5	2 dry	Pass	
HDR:W25DS00005	S25DS-00009	11/01/2025	1	2526 / 0.043m to FSL	355474	5778513	19.554	101.5	2.5 dry	Pass	
HDR:W25DS00005	S25DS-00010	11/01/2025	2	2529 / 0.166m to FSL	355553	5778436	17.679	104	3 dry	Pass	

Appendix C NATA endorsed reports

CHADWICK GEOTECHNICS

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:W24DS01031
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 11/04/2025

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	S24DS-04313	S24DS-04314	
Field Sample ID	1	2	
Date Tested	28/06/2024	28/06/2024	
Time Tested	08:40	11:30	
E:	355353	355347	
N:	5778546	5778550	
EL:	19.45	19.526	
Lot / Lift:	2506 / 5	25006 / 6	

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 (%)	18.3	16.5	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.07	2.13	
Field Dry Density (t/m³)	1.75	1.83	
Peak Converted Wet Density (t/m³)	2.10	2.10	
Optimum Moisture Content (%)	17.5	16.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	104.5	101.0	
Moisture Variation (%)	0.5 wet	0.0	
Hilf Density Ratio (%)	**99.0**	**101.5**	

Comments

CHADWICK GEOTECHNICS

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

Ph: + 61 3 8796 7900
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Report No: HDR:W24DS01061
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: B. Taseski (Ravenhall Laboratory Manager)
Date of Issue: 12/07/2024

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	S24DS-04453					
Field Sample ID	1					
Date Tested	3/07/2024					
E:	355346					
N:	5778532					
EL:	19.457					
Lot / Lift:	2505 / 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 (%)	15.4					
Field Moisture Content Method	AS 1289.2.1.1					
Field Wet Density (t/m³)	2.02					
Field Dry Density (t/m³)	1.75					
Peak Converted Wet Density (t/m³)	2.12					
Optimum Moisture Content (%)	14.5					
Compactive Effort	Standard					
Moisture Ratio (%)	106.5					
Moisture Variation (%)	1.0 wet					
Hilf Density Ratio (%)	**95.0**					

Comments

CHADWICK GEOTECHNICS

Dandenong South
ACN 143 009 330
25 Metcalf Street
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Report No: HDR:W24DS01079
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 11/04/2025

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	S24DS-04508		
Field Sample ID	1		
Date Tested	5/07/2024		
Time Tested	14:45		
E:	355341		
N:	5778516		
EL:	19.884		
Lot / Lift:	2504 / 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 (%)	18.5		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m³)	2.00		
Field Dry Density (t/m³)	1.69		
Peak Converted Wet Density (t/m³)	2.06		
Optimum Moisture Content (%)	18.5		
Compactive Effort	Standard		
Moisture Ratio (%)	101.5		
Moisture Variation (%)	0.5 wet		
Hilf Density Ratio (%)	**97.5**		

Comments

CHADWICK GEOTECHNICS

Dandenong South
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25 Metcalf Street
DANDENONG SOUTH, VIC 3175

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Report No: HDR:W24DS01161
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 1/08/2024

Sample Details

Location:	Riverfield Square Estate, Stage 25
Client Request ID:	
Specification Requirements:	Minimum Hilf Density Ratio of 95% (+- 3% of OMC)
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:	

Sample Data

Sample ID	S24DS-04827		
Field Sample ID	1		
Date Tested	24/07/2024		
Time Tested	10:40		
E	355335		
N	5778518		
Elevation	20.327		
Lot	2504		
Soil Description	Clay		

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 (%)	22.4		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m³)	2.02		
Field Dry Density (t/m³)	1.65		
Peak Converted Wet Density (t/m³)	2.06		
Optimum Moisture Content (%)	19.5		
Compactive Effort	Standard		
Moisture Ratio (%)	115.5		
Moisture Variation (%)	3.0 wet		
Hilf Density Ratio (%)	**97.5**		

Comments

CHADWICK GEOTECHNICS

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Report No: DDR:W24DS01201
Issue No: 1

Dry Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 5/08/2024

Sample Details

Location:	Riverfield Square Estate, Stage 25
Client Request ID:	
Specification Requirements:	Minimum Dry Density Ratio of 95% Standard Compaction
Field Test Procedures:	AS 1289.5.8.1
Laboratory Test Procedures:	AS 1289.2.1.1, AS 1289.5.4.1
Sampling Method:	AS1289.1.2.1 Clause 6.4 (b)
Source:	Onsite
Material:	Clay

Sample Data

Sample ID	S24DS-05004		
Field Sample ID	1		
Date Tested	31/07/2024		
Time Tested	15:30		
E:	5503.684		
N:	78562.740		
EL:	17.1939		
Lot	2511		
Layer	1		
Soil Description	Clay		

Field and Laboratory Data

Sample ID	S24DS-05004		
Depth of Test (mm)	175		
Depth of Layer (mm)	200		
AS Sieve Size (mm)	19.0		
Oversize Wet (%)	0		
Oversize Dry (%)	0		
Field Moisture Content (%)	21.4		
Field Wet Density (t/m³)	1.95		
Field Dry Density (t/m³)	1.61		
Lab Result from Test No.	S24DS-05004		
Maximum Dry Density (t/m³)	1.72		
Optimum Moisture Content (%)	18.0		
Compactive Effort	Standard		
Moisture Ratio (%)	119.5		
Moisture Variation	3.5 wet		
Density Ratio (%)	**93.5**		
Compactive Effort	Standard		

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W24DS01209
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 7/08/2024

Sample Details

Location:	Riverfield Square Estate, Stage 25
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-05044	S24DS-05045	
Field Sample ID	1	2	
Date Tested	1/08/2024	1/08/2024	
Time Tested	09:30	11:45	
E:	355410	-	
N:	5778581	-	
EL:	17.546	17.277	
Lot / Layer:	2508 / 1	2523 / 1	
		Retest of S24DS-05004	
Soil Description	Clay	Clay	

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 (%)	25.1	21.1	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.05	2.05	
Field Dry Density (t/m³)	1.64	1.69	
Peak Converted Wet Density (t/m³)	2.04	2.08	
Optimum Moisture Content (%)	22.0	18.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	114.0	118.0	
Moisture Variation (%)	3.0 wet	3.0 wet	
Hilf Density Ratio (%)	**101.0**	**98.5**	

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W24DS01220
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 7/08/2024

Sample Details

Location:	Riverfield Square Estate, Stage 25
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 - Reserve
Material:	Clay

Sample Data

Sample ID	S24DS-05077		
Field Sample ID	1		
Date Tested	2/08/2024		
Time Tested	13:15		
E:	355442		
N:	5778576		
EL:	17.980		
Lot / Layer:	2510 / 2		
Soil Description	Clay		

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 (%)	19.2		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m³)	2.06		
Field Dry Density (t/m³)	1.73		
Peak Converted Wet Density (t/m³)	2.09		
Optimum Moisture Content (%)	17.0		
Compactive Effort	Standard		
Moisture Ratio (%)	113.5		
Moisture Variation (%)	2.0 wet		
Hilf Density Ratio (%)	**98.5**		

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W24DS01945
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 8/11/2024

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: Sandy Clay trace of Gravel

Sample Data

Sample ID	S24DS-08057	S24DS-08058	S24DS-08059	S24DS-08060	S24DS-08061
Field Sample ID	1	2	3	4	5
Date Tested	1/11/2024	1/11/2024	1/11/2024	1/11/2024	1/11/2024
Time Tested	08:37	08:46	08:55	09:22	09:33
E:	355526	355487	355424	355426	355402
N:	5778548	5778562	5778571	5778525	5778523
RL:	17.010	17.539	18.223	20.486	20.771
Lot / Layer:	2512 / -	2523 / -	2509 / -	2521 / -	2502 / -

Field and Laboratory Data

Depth of Test (mm)	175	175	175	175	175
Depth of Layer (mm)	200	200	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	19.0
Oversize Wet (%)	0	0	0	0	0
Field Moisture Content (%)	13.7	13.9	16.6	18.2	21.3
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
Field Wet Density (t/m³)	2.14	2.11	1.94	1.97	1.98
Field Dry Density (t/m³)	1.88	1.85	1.66	1.66	1.63
Peak Converted Wet Density (t/m³)	2.10	2.12	1.91	2.08	1.94
Optimum Moisture Content (%)	14.5	14.0	17.0	18.5	21.5
Compactive Effort	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	95.0	98.0	99.0	100.0	100.0
Moisture Variation (%)	0.5 dry	0.5 dry	0.0	0.0	0.0
Hilf Density Ratio (%)	**102.0**	**99.5**	**101.5**	**94.5**	**102.0**

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W24DS02157
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 3/12/2024

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	S24DS-08883	S24DS-08884	S24DS-08885
Field Sample ID	1	2	3
Date Tested	28/11/2024	28/11/2024	28/11/2024
Time Tested	09:45	11:10	12:40
E:	355423	355395	355435
N:	5778522	5778539	5778534
EL:	20.439	19.986	20.081
Lot / Layer:	2521 / -	2501 / -	2522 / -
	Retest of S24DS-08060		

Field and Laboratory Data

Depth of Test (mm)	175	175	175
Depth of Layer (mm)	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0
Oversize Wet (%)	0	0	0
Field Moisture Content (%)	22.4	15.6	12.9
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m³)	2.04	2.07	2.00
Field Dry Density (t/m³)	1.67	1.79	1.77
Peak Converted Wet Density (t/m³)	2.05	2.10	2.01
Optimum Moisture Content (%)	19.5	15.0	15.5
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	115.0	103.5	82.5
Moisture Variation (%)	3.0 wet	0.5 wet	2.5 dry
Hilf Density Ratio (%)	**99.5**	**99.0**	**99.5**

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W24DS02161
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 3/12/2024

Sample Details

Location:
Client Request ID:
Specification Requirements:
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-08900		
Field Sample ID	1		
Date Tested	29/11/2024		
Time Tested	09:40		
E:	355423		
N:	5778533		
EL:	20.525		
Lot / Layer:	2522 / -		

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 (%)	12.4		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m³)	2.04		
Field Dry Density (t/m³)	1.82		
Peak Converted Wet Density (t/m³)	2.05		
Optimum Moisture Content (%)	14.5		
Compactive Effort	Standard		
Moisture Ratio (%)	84.0		
Moisture Variation (%)	2.5 dry		
Hilf Density Ratio (%)	**99.5**		

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W24DS02175
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 11/04/2025

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	S24DS-08941	S24DS-08942	
Field Sample ID	1	2	
Date Tested	2/12/2024	2/12/2024	
Time Tested	14:20	14:40	
E:	355399	355440	
N:	5778578	5778571	
EL:	18.575	18.254	
Lot / Layer:	2507 / -	2510 / -	

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 (%)	14.9	20.6	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.02	2.02	
Field Dry Density (t/m³)	1.76	1.67	
Peak Converted Wet Density (t/m³)	2.09	2.02	
Optimum Moisture Content (%)	15.0	20.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	99.5	101.5	
Moisture Variation (%)	0.0	0.5 wet	
Hilf Density Ratio (%)	**96.5**	**100.0**	

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W24DS02180
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 11/04/2025

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	S24DS-08964	S24DS-08965	
Field Sample ID	1	2	
Date Tested	3/12/2024	3/12/2024	
Time Tested	11:10	11:20	
E:	355427	3554006	
N:	5778562	5778566	
EL:	18.804	18.073	
Lot / Layer:	2509 / -	2508 / -	

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 (%)	14.1	14.8	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.05	2.02	
Field Dry Density (t/m³)	1.80	1.76	
Peak Converted Wet Density (t/m³)	2.03	2.03	
Optimum Moisture Content (%)	16.5	17.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	85.5	86.0	
Moisture Variation (%)	2.5 dry	2.5 dry	
Hilf Density Ratio (%)	**101.0**	**99.5**	

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W24DS02251
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 16/12/2024

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	S24DS-09307		
Field Sample ID	1		
Date Tested	12/12/2024		
Time Tested	10:50		
E:	355477		
N:	5778545		
EL:	18.531		
Lot / Layer:	2524 / 1		

Field and Laboratory Data

Depth of Test (mm)	175		
Depth of Layer (mm)	200		
AS Sieve Size (mm)	19.0		
Oversize Wet (%)	12		
Field Moisture Content (%)	17.3		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m³)	2.05		
Field Dry Density (t/m³)	1.74		
Peak Converted Wet Density (t/m³)	1.91		
Optimum Moisture Content (%)	22.0		
Compactive Effort	Standard		
Moisture Ratio (%)	79.5		
Moisture Variation (%)	4.0 dry		
Hilf Density Ratio (%)	**107.0**		

Comments

CHADWICK GEOTECHNICS

Think Act Be Safe

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Report No: HDR:W24DS02265
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 11/04/2025

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	S24DS-09369	S24DS-09370	S24DS-09371	S24DS-09372
Field Sample ID	1	2	3	4
Date Tested	13/12/2024	13/12/2024	13/12/2024	13/12/2024
Time Tested	14:00	14:20	14:40	15:00
E:	355502	355523	355504	355481
N:	5778526	5778549	5778549	5778545
EL:	-	-	-	-
Lot / Layer:	2527 / 2	2513 / -	2511 / -	-
				Retest of S-09307

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 (%)	12.6	12.8	14.5	16.6
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/m³)	2.11	2.07	2.00	2.09
Field Dry Density (t/m³)	1.87	1.83	1.74	1.80
Peak Converted Wet Density (t/m³)	2.07	1.99	2.04	2.00
Optimum Moisture Content (%)	15.0	15.5	17.0	19.0
Compactive Effort	Standard	Standard	Standard	Standard
Moisture Ratio (%)	85.5	83.5	86.0	87.5
Moisture Variation (%)	2.0 dry	2.5 dry	2.5 dry	2.5 dry
Hilf Density Ratio (%)	**102.0**	**104.0**	**98.0**	**104.5**

Comments

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Report No: HDR:W24DS02272
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: J. Lamont (Discipline Manager - CMT)
Date of Issue: 7/02/2025

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 / Imported
Material: Clay

Sample Data

Sample ID	S24DS-09403	S24DS-09404	S24DS-09405			
Field Sample ID	1	2	3			
Date Tested	16/12/2024	16/12/2024	16/12/2024			
Time Tested	09:30	10:00	14:00			
E:	355536	355477	355563			
N:	5778510	5778533	5778474			
EL:	17.882	19.076	16.684			
Lot / Layer:	2514 / -	2525 / -	2516 / 1			
Field and Laboratory Data						
Depth of Test (mm)	175	175	175			
Depth of Layer (mm)	200	200	200			
AS Sieve Size (mm)	19.0	19.0	19.0			
Oversize Wet (%)	0	0	0			
Field Moisture Content (%)	12.6	19.4	13.0			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1			
Field Wet Density (t/m³)	2.00	2.00	2.11			
Field Dry Density (t/m³)	1.78	1.68	1.86			
Peak Converted Wet Density (t/m³)	1.91	2.06	1.95			
Optimum Moisture Content (%)	17.0	18.5	16.0			
Compactive Effort	Standard	Standard	Standard			
Moisture Ratio (%)	73.5	105.0	82.0			
Moisture Variation (%)	4.5 dry	1.0 wet	3.0 dry			
Hilf Density Ratio (%)	**105.0**	**97.5**	**108.0**			

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W24DS02280
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: J. Lamont (Discipline Manager - CMT)
Date of Issue: 11/04/2025

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 - Chadstone
Material: Sandy Clay

Sample Data

Sample ID	S24DS-09419					
Field Sample ID	1					
Date Tested	17/12/2024					
Time Tested	14:31					
E:	355544					
N:	5778424					
EL:	-					
Lot / Layer:	2528 / 1.267 to FSL					

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 (%)	18.3					
Field Moisture Content Method	AS 1289.2.1.1					
Field Wet Density (t/m³)	2.03					
Field Dry Density (t/m³)	1.71					
Peak Converted Wet Density (t/m³)	1.93					
Optimum Moisture Content (%)	21.5					
Compactive Effort	Standard					
Moisture Ratio (%)	86.0					
Moisture Variation (%)	3.0 dry					
Hilf Density Ratio (%)	**105.0**					

Comments

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Report No: HDR:W24DS02286
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 21/01/2025

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: Import
Material: Clay

Sample Data

Sample ID	S24DS-09435	S24DS-09436	S24DS-09437
Field Sample ID	1	2	3
Date Tested	18/12/2024	18/12/2024	18/12/2024
Time Tested	09:30	12:00	14:30
E:	355490	355561	355562
N:	5778474	5778460	5778445
EL:	18.685	16.855	16.614
Lot / Layer:	2520 / 1	2515 / 2	2529 / 2

Field and Laboratory Data

Depth of Test (mm)	175	175	175
Depth of Layer (mm)	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0
Oversize Wet (%)	0	0	0
Field Moisture Content (%)	11.8	15.3	14.1
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m³)	1.99	2.11	2.17
Field Dry Density (t/m³)	1.78	1.83	1.90
Peak Converted Wet Density (t/m³)	2.05	2.07	2.13
Optimum Moisture Content (%)	13.5	17.0	14.0
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	87.0	91.0	99.5
Moisture Variation (%)	1.5 dry	1.5 dry	0.0
Hilf Density Ratio (%)	**97.0**	**102.0**	**102.0**

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W24DS02292
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 21/01/2025

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 - Cheltenham
Material: Clay

Sample Data

Sample ID	S24DS-09446	S24DS-09447	
Field Sample ID	1	2	
Date Tested	19/12/2024	19/12/2024	
Time Tested	12:30	15:15	
E:	355551	355548	
N:	5778471	5778439	
EL:	16.184	17.141	
Lot / Layer:	2516 / 3	2529 / 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 (%)	15.2	18.7	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.04	2.07	
Field Dry Density (t/m³)	1.77	1.75	
Peak Converted Wet Density (t/m³)	2.02	2.08	
Optimum Moisture Content (%)	18.0	19.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	85.0	97.5	
Moisture Variation (%)	2.5 dry	0.5 dry	
Hilf Density Ratio (%)	**101.0**	**99.5**	

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W24DS02294
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 21/01/2025

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	S24DS-09449		
Field Sample ID	1		
Date Tested	20/12/2024		
E:	355539		
N:	5778506		
EL:	17.829		
Lot / Layer:	2514 / -		
	Retest of S24DS-09403		

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 (%)	18.3		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m³)	1.98		
Field Dry Density (t/m³)	1.68		
Peak Converted Wet Density (t/m³)	2.02		
Optimum Moisture Content (%)	19.0		
Compactive Effort	Standard		
Moisture Ratio (%)	97.0		
Moisture Variation (%)	0.5 dry		
Hilf Density Ratio (%)	**98.0**		

Comments

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Report No: HDR:W25DS00001
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 11/04/2025

Sample Details

Location:
Client Request ID:
Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction
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: Import
Material: Sandy CLAY

Sample Data

Sample ID	S25DS-00001	S25DS-00002	
Field Sample ID	1	2	
Date Tested	8/01/2025	8/01/2025	
Time Tested	10:58	13:50	
E:	355552	355553	
N:	5778427	5778461	
RL:	17.089	17.702	
Lot / Layer:	2528 / 0.394 to FSL	2515 / 0.04 to FLS	

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 (%)	14.1	12.3	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.98	2.04	
Field Dry Density (t/m³)	1.73	1.82	
Peak Converted Wet Density (t/m³)	2.07	2.06	
Optimum Moisture Content (%)	14.5	14.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	96.5	85.0	
Moisture Variation (%)	0.5 dry	2.0 dry	
Hilf Density Ratio (%)	**95.5**	**99.5**	

Comments

CHADWICK GEOTECHNICS

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Report No: HDR:W25DS00003
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 21/01/2025

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 6.5.4
Source: Imported
Material: Sandy Clay

Sample Data

Sample ID	S25DS-00005	S25DS-00006	S25DS-00007
Field Sample ID	1	2	3
Date Tested	9/01/2024	9/01/2024	9/01/2024
Time Tested	11:10	14:02	15:41
E:	355503	355561	355519
N:	5778457	5778420	5778457
RL:	18.164	17.299	18.065
Lot / Layer:	2519 / 0.433m to FSL	2528 / 0.170m to FSL	2518 / 0.377m to FSL

Field and Laboratory Data

Depth of Test (mm)	175	175	175
Depth of Layer (mm)	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0
Oversize Wet (%)	0	0	0
Field Moisture Content (%)	14.4	14.1	12.9
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m³)	2.01	2.03	2.08
Field Dry Density (t/m³)	1.75	1.78	1.84
Peak Converted Wet Density (t/m³)	2.07	2.07	2.09
Optimum Moisture Content (%)	15.0	14.5	14.5
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	96.0	97.5	88.0
Moisture Variation (%)	0.5 dry	0.5 dry	1.5 dry
Hilf Density Ratio (%)	**97.0**	**98.5**	**99.5**

Comments

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Report No: HDR:W25DS00004
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 21/01/2025

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: Sandy Clay

Sample Data

Sample ID	S25DS-00008		
Field Sample ID	1		
Date Tested	10/01/2025		
Time Tested	13:13		
E:	355535		
N:	5778459		
RL:	17.925m		
Lot / Layer:	2517 / 0.129m to FSL		
	Final Lift		

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/m³)	1.95		
Field Dry Density (t/m³)	1.62		
Peak Converted Wet Density (t/m³)	1.94		
Optimum Moisture Content (%)	22.5		
Compactive Effort	Standard		
Moisture Ratio (%)	89.5		
Moisture Variation (%)	2.0 dry		
Hilf Density Ratio (%)	**100.5**		

Comments

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Report No: HDR:W25DS00005
Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 21/01/2025

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: Sandy Clay

Sample Data

Sample ID	S25DS-00009	S25DS-00010	
Field Sample ID	1	2	
Date Tested	11/01/2025	11/01/2025	
Time Tested	07:50	11:20	
E:	355474	355553	
N:	5778513	5778436	
RL:	19.554	17.679	
Lot / Layer:	2526 / 0.043m to FSL	2529 / 0.166m to FSL	

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	11.4	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.02	2.10	
Field Dry Density (t/m³)	1.74	1.89	
Peak Converted Wet Density (t/m³)	2.00	2.02	
Optimum Moisture Content (%)	18.5	14.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	87.5	79.5	
Moisture Variation (%)	2.5 dry	3.0 dry	
Hilf Density Ratio (%)	**101.5**	**104.0**	

Comments

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Report No: MAT:S24DS-05053/1
Issue No: 1

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 21/08/2024

Sample Details

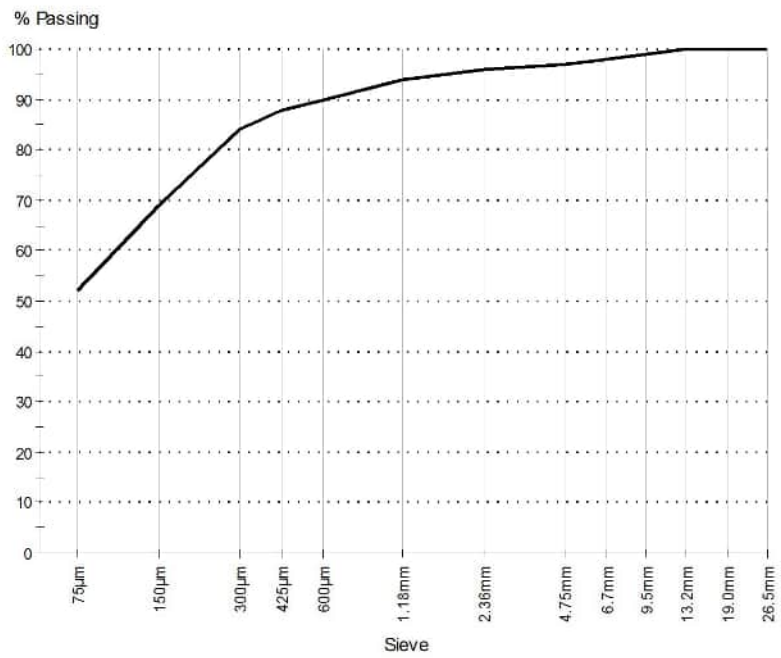
Sample Location	E: 355410, N: 5778581, EL: 17.546, Layer: 1
Field Sample ID	1
Date Sampled	1/08/2024
Time Sampled	09:30
Source	Onsite
Material	Clay
Specification	AS Grading
Sampling Method	AS1289.1.2.1 Clause 6.4 (b)
Sample ID	S24DS-05053

Sample Description:

Atterberg Limit:

Liquid Limit:	42
Plastic Limit:	13
Plasticity Index:	29
Linear Shrinkage (%):	13.5

Particle Size Distribution



FINES (51.6%)		SAND			GRAVEL		COBBLES
Clay	Silt	Fine (36.0%)	Medium (7.9%)	Coarse (1.4%)	Fine (2.5%)	Coarse (0.5%)	(0.0%)

Grading: AS 1289.3.6.1

Drying By: Oven
Date Tested: 12/08/2024

Note: Sample Washed

Sieve Size	% Passing	Limits
26.5mm	100	
19.0mm	100	
13.2mm	100	
9.5mm	99	
6.7mm	98	
4.75mm	97	
2.36mm	96	
1.18mm	94	
600µm	90	
425µm	88	
300µm	84	
150µm	69	
75µm	52	

D85: 0.3273 **D60:** 0.1039 **D50:** N/A
D30: N/A **D15:** N/A **D10:** N/A

CHADWICK GEOTECHNICS

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Report No: MAT:S24DS-05053/1
Issue No: 1

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 21/08/2024

Sample Details

Sample Location	E: 355410, N: 5778581, EL: 17.546, Layer: 1
Field Sample ID	1
Date Sampled	1/08/2024
Time Sampled	09:30
Source	Onsite
Material	Clay
Specification	AS Grading
Sampling Method	AS1289.1.2.1 Clause 6.4 (b)
Sample ID	S24DS-05053

Other Test Results

Description	Method	Limits	Result
Moisture Content (%)	AS 1289.2.1.1		19.7
Sample History	AS 1289.1.1		Oven-dried
Preparation	AS 1289.1.1		Dry Sieved
Linear Shrinkage (%)	AS 1289.3.4.1		13.5
Mould Length (mm)			250
Crumbling			No
Curling			Yes
Cracking			No
Liquid Limit (%)	AS 1289.3.1.2		42
Plastic Limit (%)	AS 1289.3.2.1		13
Plasticity Index (%)	AS 1289.3.3.1		29
Date Tested			14/08/2024

Comments

N/A

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

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Report No: MAT:S24DS-09406/1
Issue No: 1

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 3/02/2025

Sample Details

Sample Location	E: 355563, N: 5778474, EL: 16.684, Lot: 2516, Layer: 1
Field Sample ID	1
Date Sampled	16/12/2024
Time Sampled	14:00
Source	Imported
Material	Clay
Specification	AS Grading
Sampling Method	AS1289.1.2.1 Clause 6.4 (b)
Sample ID	S24DS-09406

Other Test Results

Description	Method	Result	Limits
Moisture Content (%)	AS 1289.2.1.1	8.9	
Date Tested		17/12/2024	
Sample History	AS 1289.1.1	Oven-Dried	
Preparation	AS 1289.1.1	Dry Sieved	
Linear Shrinkage (%)	AS 1289.3.4.1	4.0	
Mould Length (mm)		250	
Crumbling		No	
Curling		No	
Cracking		Yes	
Liquid Limit (%)	AS 1289.3.1.2	32	
Plastic Limit (%)	AS 1289.3.2.1	14	
Plasticity Index (%)	AS 1289.3.3.1	18	
Date Tested		22/01/2025	

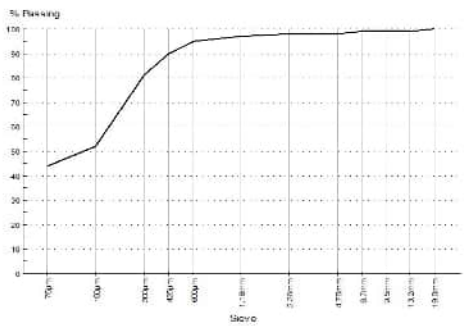
Particle Size Distribution

Method: AS 1289.3.6.1
Drying By: Oven
Date Tested: 13/01/2025

Note: Sample Washed

Sieve Size	% Passing	Limits
19.0mm	100	
13.2mm	99	
9.5mm	99	
6.7mm	99	
4.75mm	98	
2.36mm	98	
1.18mm	97	
600µm	95	
425µm	90	
300µm	81	
150µm	52	
75µm	44	

Chart



Comments

N/A

CHADWICK GEOTECHNICS

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

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Report No: MAT:S25DS-00011/1
Issue No: 1

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 25
Project No.: 1091938.025
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel (Senior Geotechnician)
Date of Issue: 3/02/2025

Sample Details

Sample Location	E: 355519, N: 5778321, RL: 14.148m, Lot: 2918, Layer: 3.528m to FSL
Field Sample ID	1
Date Sampled	11/01/2025
Time Sampled	11:57
Source	Imported
Material	Sandy Clay
Specification	AS Grading
Sampling Method	AS1289.1.2.1 Clause 6.4 (b)
Sample ID	S25DS-00011

Other Test Results

Description	Method	Result	Limits
Moisture Content (%)	AS 1289.2.1.1	13.8	
Date Tested		13/01/2025	
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	43	
Plastic Limit (%)	AS 1289.3.2.1	18	
Plasticity Index (%)	AS 1289.3.3.1	25	
Date Tested		23/01/2025	

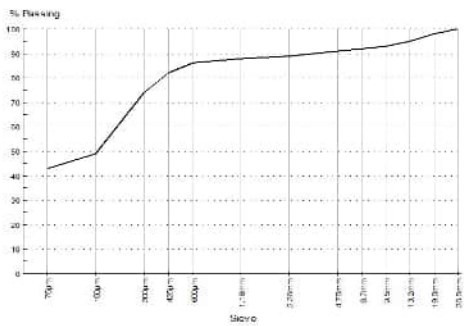
Particle Size Distribution

Method: AS 1289.3.6.1
Drying By: Oven
Date Tested: 14/01/2025

Note: Sample Washed

Sieve Size	% Passing	Limits
26.5mm	100	
19.0mm	98	
13.2mm	95	
9.5mm	93	
6.7mm	92	
4.75mm	91	
2.36mm	89	
1.18mm	88	
600µm	86	
425µm	82	
300µm	74	
150µm	49	
75µm	43	

Chart



Comments

N/A

Appendix D Controlled Fill Certificate

CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT : Riverfield Square Estate Stage 25
Lots 2501 to 2529

Chadwick Geotechnics REF:
1091938.025.R1.v1

DATE: 11 April 2025

CLIENT : Greenridge Properties Pty Ltd
P.O Box 4136
Dandenong South Victoria, 3164

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 area mentioned above. 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, specifically for Level 1 Inspection and Testing of the structural fill (excluding topsoil).

This report is based on the conditions present and factors affecting the soil at the time of inspection (28 June 2024 and was completed on 11 January 2025). No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Robert Barden
Project Manager

Michael DiMeglio
Project Director

CHADWICK
GEOTECHNICS