



REPORT

Level 1 Geotechnical Testing and Inspection Authority Services

**Meridian Central Estate Stage 42
Clyde North
Lots 4201 to 4234**

Prepared for:

Greenridge Properties Pty Ltd.

16 May 2023

Our Ref: 3807351.042.v1

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Document Control

| Title: Level One Inspection and testing Services. | | | | | |
|----------------------------------------------------------|----------------|------------------------------------------|---------------------|---------------------|----------------------|
| Date | Version | Description | Prepared by: | Reviewed by: | Authorised by |
| 16 May 2023 | 1 | 3807351.042.V1 Level One Report Stage 42 | STPA and RHB | RWMC | TJJC |
| | | | | | |

1 Introduction

Chadwick Geotechnics Pty Ltd (Chadwick Geotechnics), was engaged by Greenridge Properties Pty Ltd (Greenridge), to provide Level 1 Geotechnical Inspection and Testing Authority (GITA) services for the earthworks conducted within Stage 42 of the Meridian Central Estate in Clyde North, between 7 September 2022 and 16 March 2023.

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

The Stage 42 site is located North of Hardys Road, Clyde North. The site is to the East of Stage 41, and West of Stage 43.

The included works are shown on the Site Plan in **Appendices A**. Figure 2.1 below is an extract from Nearmap taken at the time of writing this report.

Figure 2: extract from Nearmap



2.2 Roles

The organisations and their roles are presented in Table 2.1 below

Table 2: 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 technicians 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 |
|----------------|-----------------------------------|
| September 2022 | 7, 8, 12, 27, 28, 29, 30 |
| October 2022 | 1, 3, 4, 5, 19, 21, 24 |
| November 2022 | 8, 11, 12, 16, 18, 23, 26, 29, 30 |
| December 2022 | 1, 2, 5, 7, 8, 19, 20, 21 |
| January 2023 | 3, 4, 5, 6, 7, 9, 10, 13 |
| February 2023 | 24, 27 |
| March 2023 | 1, 2, 3, 4, 7, 16 |

2.4 Included Areas

This report is applicable to material placed by the contractor on the residential lots within Stage 42, as shown on the Site Plan in **Appendix A**, and with reference to Section 2.6 (Excluded Areas) of this report.

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

- Lot 4201 to 4234

2.5 Excluded Areas

This report does not include fill outside the general boundary of the filled areas as shown in **Appendix A** 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.

2.6 Specification

Project specifications were prepared by Beveridge Williams Pty Ltd for the project. 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).
- Frequency of testing to be in accordance with Table 8.1 of AS3798-2007.
- Finished fill surface to be surveyed prior to placement of topsoil.

3 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'.

3.1 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, and,
- Placement and compaction of engineered fill.

3.2 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.

Five samples were taken from the site comprising local material used for fill was taken for geotechnical compliance testing during the works. The material compliance test results are summarised in Table 3.1 The laboratory test certificates are attached in **Appendix C**.

Table 3.1: 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 | | | |
| S22DS-08310 | 100 | 99 | 95 | 90 | 84 | 63 | 54 | 22 | 32 |
| S22DS-08769 | 100 | 100 | 94 | 88 | 79 | 43 | 38 | 13 | 25 |
| S22DS-09640 | 100 | 99 | 96 | 91 | 87 | 71 | 72 | 20 | 52 |
| S23DS-00028 | 100 | 100 | 93 | 88 | 79 | 42 | 30 | 12 | 18 |
| S23DS-00115 | 100 | 96 | 87 | 79 | 72 | 43 | 35 | 15 | 20 |

The laboratory test results indicated material is sandy clay of medium to high plasticity.

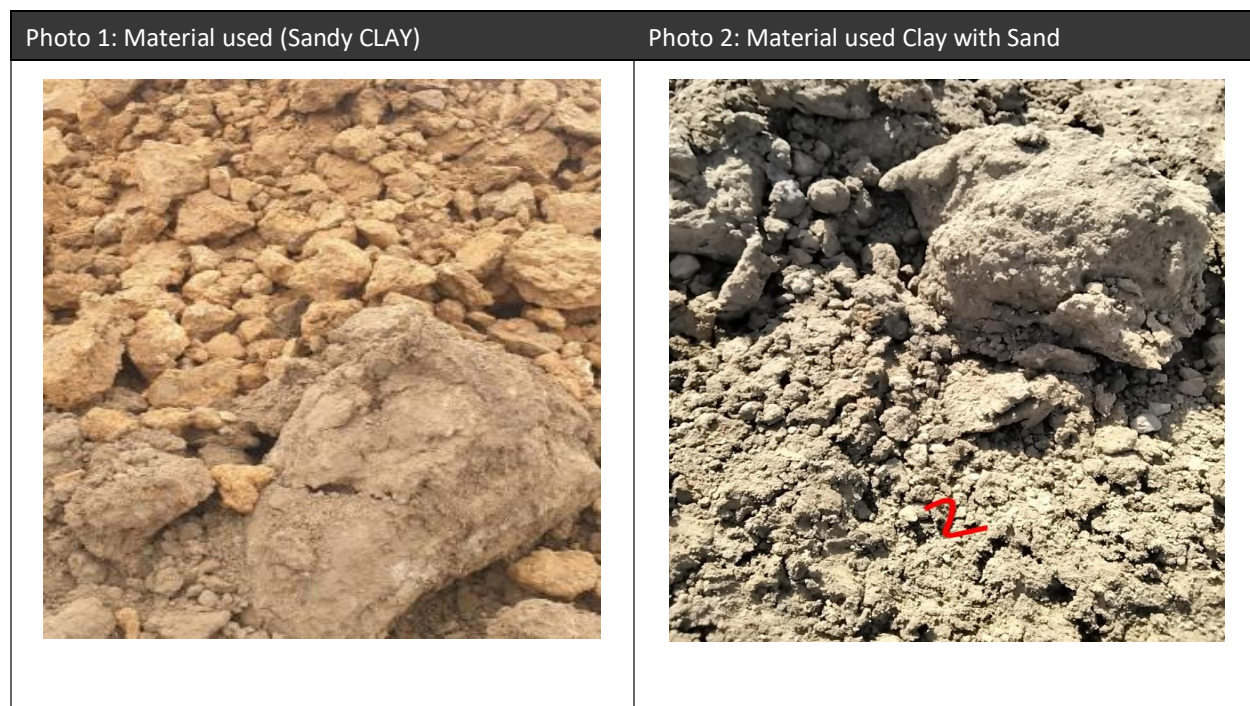
The material was deemed as being derived from natural soils. The soil is considered as 'Suitable Material' in accordance with Section 4.4 of the AS3798-2007.

The fill material was not tested for classification of 'Fill Material' as defined in EPA Publication IWRG621. Environmental testing is not within the 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.

Below are photographs of typical materials used during construction.

Figure 3.1: Photographs of the material used on site



3.3 Subgrade Assessment / Proof Roll

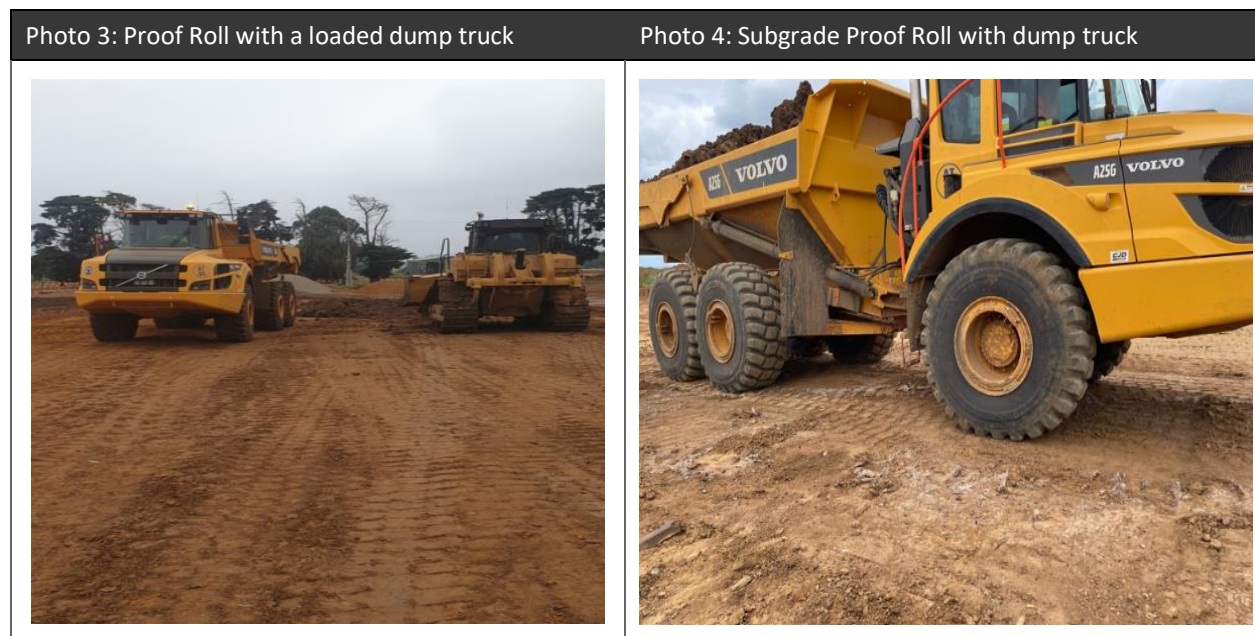
The Subgrade of the site was progressively assessed during the period Chadwick Geotechnics personnel were on site.

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

The subgrade inspections were 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.

Below are photographs of the subgrade assessment phase at the project.

Figure 3.2: Subgrade assessment photographs



3.4 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 3.2: Earthworks plant On-site

| Equipment type | Model |
|-----------------|--------------------------------------------|
| Dozer | Caterpillar D6 Dozer |
| Pad foot roller | Caterpillar compactor B15K Pad-Foot Roller |
| Water cart | Off-Road Water Cart with spray bars |
| Dump Trucks | Volvo Dump Trucks and Road Trucks |
| Excavator | Caterpillar |
| Scraper | |

Below are photographs of typical machinery on site during construction.

Figure 3.3: General Earthwork machinery and fill construction photographs

Photo 5: CAT Dozer



Photo 6: Pad Foot Roller



Photo 7: Water Cart



Photo 8: Scraper



3.5 Density testing

Field density and moisture content testing was undertaken progressively during 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;
- Fill to be compacted in near horizontal layers.
- Compaction to achieve a ratio of at least 95% Standard MDD (maximum dry density).

One hundred and seven (107) tests were performed during the filling process across the works area. Thirteen (13) of the tests did not achieve the required density and or moisture ratio initially. The failed area was 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**.

4 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.

After our last day on site the Contractor is responsible to maintain the engineered fill in satisfactory condition. Should the fill be not maintained or protected with a sacrificial layer of topsoil or other fill, the uppermost layers of the engineered fill may deteriorate from the weather causing shrink/swell cracking and may need to be remediated prior to further construction on the site. Chadwick Geotechnics have not provided supervision since this date and are not responsible for any deterioration that may have occurred.

5 Applicability

This report has been prepared for the exclusive use of our client 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 7 September 2022 and 16 March 2023. 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:



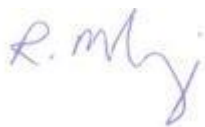
.....
Robert Barden
Project Manager

Authorised for Chadwick Geotechnics Pty Ltd by:



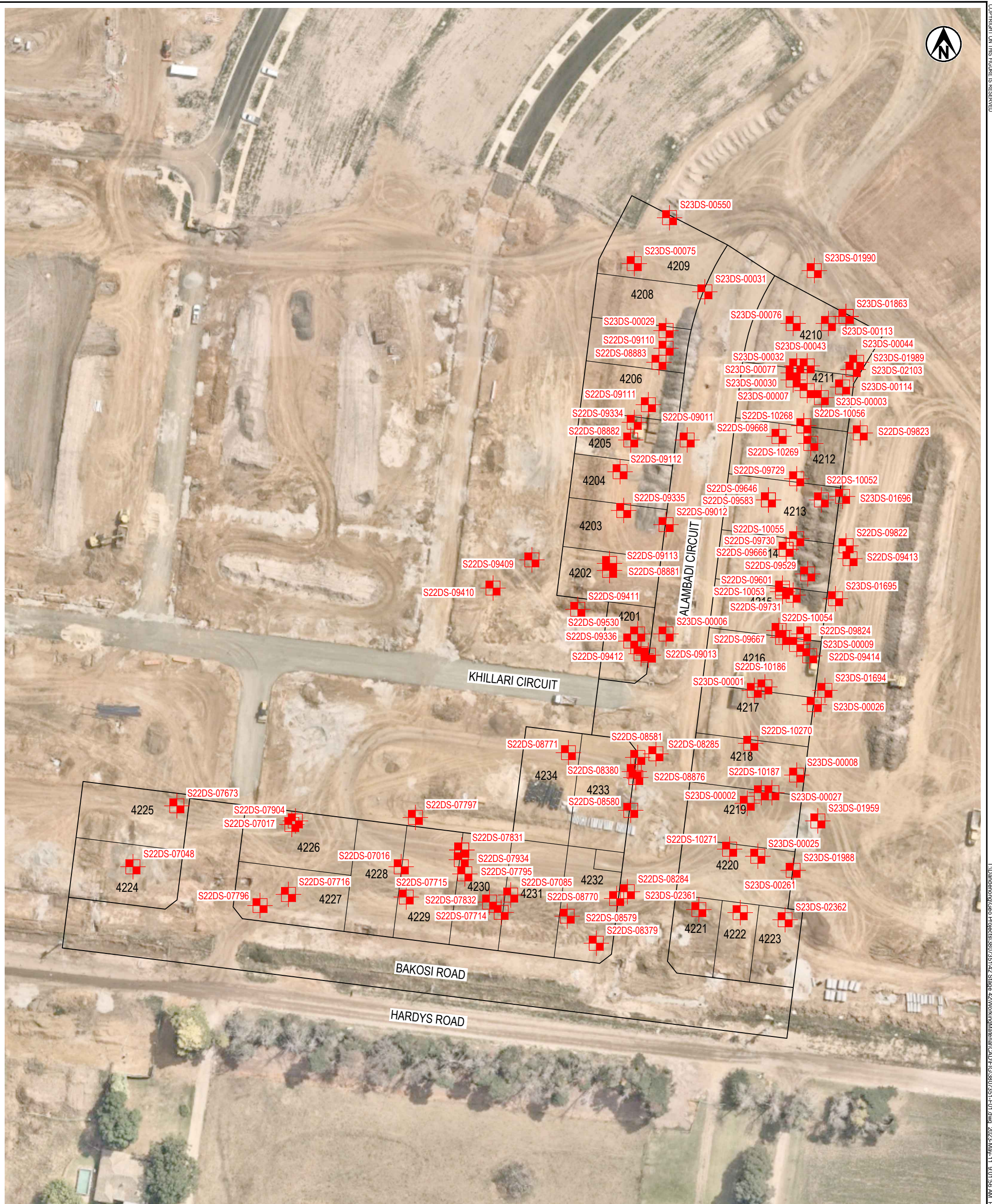
.....
Timothy Chadwick
Project Director

Report reviewed by:




.....
Robert McKenzie
Senior Associate Geotechnical Engineer
PE0005222

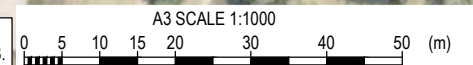
Appendix A : Location Plan



LEGEND

 S22DS-07048
HILF DENSITY TEST LOCATION

NOTES:
1. AERIAL IMAGE SOURCED FROM NEARMAP. COPYRIGHT NEARMAP PTY LTD. IMAGERY DATE: 15/02/2023.



 ORIGINAL IN COLOUR

| | | |
|---------------------------|------|--------|
| PROJECT No. 3807351.042 | | |
| DESIGNED | STPA | May.23 |
| DRAWN | KMJA | May.23 |
| CHECKED | | |
| APPROVED _____ DATE _____ | | |

| | | |
|------------|-------------------------------------------------------------------|-------------------------|
| CLIENT | GROSVENOR LODGE PTY LTD | |
| PROJECT | MERIDIAN ESTATE - STAGE 42 | |
| TITLE | LEVEL ONE HILF DENSITY TESTING HILF DENSITY TEST LOCATION PLAN | |
| SCALE (A3) | 1:1000 | FIG No. 3807351.042-F01 |
| REV | 1 | |

UNDER REVISION 1

Appendix B : Hilf Density Test Summary



Meridian Estate Stage 42, 3807351.042

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



HILF Density Testing - Field Summary

www.chadwickgeotechnics.com.au

| Report No | Sample No | Date | Lot No | Easting | Northing | Layer/RL | Density Ratio | Moisture Variation | Pass / Fail | Comments (Retest No) Compliance test taken ect |
|----------------|-------------|------------|--------|---------|----------|----------|---------------|--------------------|-------------|---------------------------------------------------|
| HDR:W22DS01787 | S22DS-07016 | 7/09/2022 | 4228 | 356350 | 5781052 | 1 | 96.5 | 2 wet | Pass | |
| HDR:W22DS01787 | S22DS-07017 | 7/09/2022 | 4226 | 356319 | 5781064 | 1 | 96 | 1.5 wet | Pass | |
| HDR:W22DS01794 | S22DS-07048 | 8/09/2022 | 4224 | 356274 | 5781052 | 1 | 97.5 | 1.5 wet | Pass | |
| HDR:W22DS01807 | S22DS-07085 | 12/09/2022 | 4230 | 356381 | 5781044 | 1 | 99.5 | 2 wet | Pass | |
| HDR:W22DS01914 | S22DS-07627 | 27/09/2022 | 4225 | 356367 | 5781057 | 40.95 | 93 | 1.5 wet | Fail | See Retest 07794 & 07831 |
| HDR:W22DS01926 | S22DS-07673 | 28/09/2022 | 4225 | 356286 | 5781069 | FSL | 95 | 0.5 dry | Pass | |
| HDR:W22DS01937 | S22DS-07714 | 29/09/2022 | 4230 | 356378 | 5781039 | 2 | 95.5 | OMC | Pass | |
| HDR:W22DS01937 | S22DS-07715 | 29/09/2022 | 4228 | 356351 | 5781043 | 2 | 95 | OMC | Pass | |
| HDR:W22DS01937 | S22DS-07716 | 29/09/2022 | 4227 | 356318 | 5781044 | 2 | 96 | OMC | Pass | |
| HDR:W22DS01961 | S22DS-07794 | 30/09/2022 | 4225 | 356367 | 5781057 | 2 | 96.5 | OMC | Pass | Retest of S22DS-07627 |
| HDR:W22DS01961 | S22DS-07795 | 30/09/2022 | 4225 | 356368 | 5781050 | 3 | 99 | OMC | Pass | |
| HDR:W22DS01961 | S22DS-07796 | 30/09/2022 | 4226 | 356310 | 5781041 | 3 | 98 | OMC | Pass | |
| HDR:W22DS01962 | S22DS-07797 | 1/10/2022 | 4228 | 356354 | 5781066 | | 100.5 | 0.5 dry | Pass | |
| HDR:W22DS01974 | S22DS-07831 | 3/10/2022 | 4229 | 356367 | 5781057 | 2 | 100 | OMC | Pass | Retest of S22DS-07627 |
| HDR:W22DS01974 | S22DS-07832 | 3/10/2022 | 4230 | 356375 | 5781042 | 3 | 96.5 | 0.5 dry | Pass | |
| HDR:W22DS01991 | S22DS-07904 | 4/10/2022 | 4226 | 356320 | 5781065 | 4 | 96.5 | OMC | Pass | |
| HDR:W22DS02001 | S22DS-07934 | 5/10/2022 | 4229 | 356367 | 5781054 | 4 | 100 | OMC | Pass | |
| HDR:W22DS02085 | S22DS-08284 | 19/10/2022 | 4232 | 356414 | 5781045 | | 102.5 | 1 dry | Pass | |
| HDR:W22DS02085 | S22DS-08285 | 19/10/2022 | 4233 | 356422 | 5781084 | | 97.5 | OMC | Pass | |



Meridian Estate Stage 42, 3807351.042

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



HILF Density Testing - Field Summary

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| Report No | Sample No | Date | Lot No | Easting | Northing | Layer/RL | Density Ratio | Moisture Variation | Pass / Fail | Comments (Retest No) Compliance test taken ect |
|----------------|-------------|------------|--------|---------|----------|----------|---------------|--------------------|-------------|---------------------------------------------------|
| HDR:W22DS02111 | S22DS-08379 | 21/10/2022 | 4232 | 356405 | 5781030 | | 98 | OMC | Pass | |
| HDR:W22DS02111 | S22DS-08380 | 21/10/2022 | 4233 | 356416 | 5781077 | | 94.5 | OMC | Fail | See Retest 08581 |
| HDR:W22DS02144 | S22DS-08579 | 24/10/2022 | 4231 | 356397 | 5781038 | 3 | 97 | 0.5 dry | Pass | |
| HDR:W22DS02144 | S22DS-08580 | 24/10/2022 | 4233 | 356415 | 5781068 | 3 | 98.5 | 0.5 dry | Pass | |
| HDR:W22DS02144 | S22DS-08581 | 24/10/2022 | 4233 | 356417 | 5781083 | | 99 | OMC | Pass | Retest of S22DS-08380 |
| HDR:W22DS02198 | S22DS-08770 | 8/11/2022 | 4232 | 356411 | 5781043 | 40.32 | 97 | 2.5 wet | Pass | |
| HDR:W22DS02198 | S22DS-08771 | 8/11/2022 | 4234 | 356397 | 5781084 | 41.16 | 98 | OMC | Pass | |
| HDR:W22DS02220 | S22DS-08881 | 11/11/2022 | 4202 | 356409 | 5781136 | 41.07 | 104 | 1.5 dry | Pass | |
| HDR:W22DS02220 | S22DS-08882 | 11/11/2022 | 4204 | 356415 | 5781173 | 41.74 | 99.5 | 2.5 dry | Pass | |
| HDR:W22DS02220 | S22DS-08883 | 11/11/2022 | | 356423 | 5781195 | 42.7 | 100 | 0.5 dry | Pass | |
| HDR:W22DS02218 | S22DS-08876 | 12/11/2022 | 4233 | 356416 | 5781079 | 43.25 | 101 | 0.5 dry | Pass | |
| HDR:W22DS02254 | S22DS-09011 | 16/11/2022 | 4205 | 356431 | 5781173 | 42.54 | 97.5 | OMC | Pass | |
| HDR:W22DS02254 | S22DS-09012 | 16/11/2022 | 4203 | 356425 | 5781149 | 425.05 | 100 | OMC | Pass | |
| HDR:W22DS02254 | S22DS-09013 | 16/11/2022 | 4201 | 356420 | 5781112 | 41.44 | 96.5 | OMC | Pass | |
| HDR:W22DS02275 | S22DS-09110 | 18/11/2022 | 4207 | 356425 | 5781199 | 43.57 | 99 | 0.5 dry | Pass | |
| HDR:W22DS02275 | S22DS-09111 | 18/11/2022 | 4206 | 356420 | 5781183 | 43.37 | 98.5 | OMC | Pass | |
| HDR:W22DS02275 | S22DS-09112 | 18/11/2022 | 4204 | 356412 | 5781164 | 42.98 | 100.5 | OMC | Pass | |
| HDR:W22DS02275 | S22DS-09113 | 18/11/2022 | 4202 | 356409 | 5781138 | 42.27 | 98.5 | OMC | Pass | |



Meridian Estate Stage 42, 3807351.042

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Tel : (03) 8796 7900



HILF Density Testing - Field Summary

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| Report No | Sample No | Date | Lot No | Easting | Northing | Layer/RL | Density Ratio | Moisture Variation | Pass / Fail | Comments (Retest No) Compliance test taken ect |
|----------------|-------------|------------|----------|---------|----------|----------|---------------|--------------------|-------------|---------------------------------------------------|
| HDR:W22DS02310 | S22DS-09334 | 23/11/2022 | 4205 | 356416 | 5781178 | 43.13 | 103 | 1 dry | Pass | |
| HDR:W22DS02310 | S22DS-09335 | 23/11/2022 | 4203 | 356413 | 5781153 | 42.8 | 102 | 1 dry | Pass | |
| HDR:W22DS02310 | S22DS-09336 | 23/11/2022 | 4201 | 356415 | 5781116 | 41.3 | 102.5 | 2 dry | Pass | |
| HDR:W22DS02334 | S22DS-09409 | 26/11/2022 | 4124 | 356387 | 5781139 | 42.68 | 107.5 | 3 dry | Fail | See Retest 9530 |
| HDR:W22DS02334 | S22DS-09410 | 26/11/2022 | 4125 | 356376 | 5781131 | 42.43 | 107.5 | 3 dry | Fail | See Retest 9529 |
| HDR:W22DS02334 | S22DS-09411 | 26/11/2022 | 4127 | 356400 | 5781125 | 42.24 | 101 | 1 dry | Pass | |
| HDR:W22DS02336 | S22DS-09412 | 26/11/2022 | 4201 | 356418 | 5781112 | 41.42 | 97 | 0.5 dry | Pass | |
| HDR:W22DS02336 | S22DS-09413 | 26/11/2022 | 4214 | 356477 | 5781139 | 41.17 | 94 | OMC | Fail | See Retest S22DS-09601 |
| HDR:W22DS02336 | S22DS-09414 | 26/11/2022 | 4216 | 356466 | 5781112 | 40.63 | 96.5 | OMC | Pass | |
| HDR:W22DS02363 | S22DS-09529 | 29/11/2022 | 4214 | 356465 | 5781135 | 42.43 | 99.5 | 2.5 dry | Pass | Retest of S22DS-09410 |
| HDR:W22DS02363 | S22DS-09530 | 29/11/2022 | 4201 | 356417 | 5781118 | 42.68 | 97 | OMC | Pass | Retest of S22DS-09409 |
| HDR:W22DS02375 | S22DS-09583 | 30/11/2022 | 4213 | 356454 | 5781156 | 42.16 | 106 | 2 dry | Fail | See Retest 9646 |
| HDR:W22DS02381 | S22DS-09601 | 1/12/2022 | 4215 | 356458 | 5781131 | 41.36 | 104.5 | 2.5 dry | Pass | Retest of S22DS-09413 |
| HDR:W22DS02398 | S22DS-09646 | 2/12/2022 | 4213 | 356454 | 5781156 | | 107.5 | 2.5 dry | Fail | Retest of 09583, See Retest 9729 |
| HDR:W22DS02406 | S22DS-09666 | 5/12/2022 | 4214 | 356459 | 5781142 | 41.82 | 107 | 5 dry | Fail | See Retest 9730 |
| HDR:W22DS02406 | S22DS-09667 | 5/12/2022 | 4216 | 356458 | 5781117 | 40.939 | 106.5 | 3 dry | Pass | |
| HDR:W22DS02406 | S22DS-09668 | 5/12/2022 | 4212 | 356457 | 5781174 | 42.541 | 105 | 3 dry | Pass | |
| HDR:W22DS02422 | S22DS-09729 | 7/12/2022 | 4213 / 4 | 356462 | 5781162 | 42.25 | 103.5 | 2.5 dry | Pass | Retest of S22DS-09646 |



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| Report No | Sample No | Date | Lot No | Easting | Northing | Layer/RL | Density Ratio | Moisture Variation | Pass / Fail | Comments (Retest No) Compliance test taken ect |
|----------------|-------------|------------|----------|---------|----------|----------|---------------|--------------------|-------------|---------------------------------------------------|
| HDR:W22DS02422 | S22DS-09730 | 7/12/2022 | 4214 / 3 | 356459 | 5781142 | - | 98 | OMC | Pass | Retest of S22DS-09666 |
| HDR:W22DS02422 | S22DS-09731 | 7/12/2022 | 4215 / 4 | 356461 | 5781129 | 41.63 | 97 | 0.5 dry | Pass | |
| HDR:W22DS02436 | S22DS-09822 | 8/12/2022 | 4214 / 5 | 356476 | 5781143 | 41.687 | 98 | 0.5 dry | Pass | |
| HDR:W22DS02436 | S22DS-09823 | 8/12/2022 | 4212 / 5 | 356480 | 5781175 | 42.092 | 95 | 0.5 dry | Pass | |
| HDR:W22DS02436 | S22DS-09824 | 8/12/2022 | 4216 / 5 | 356464 | 5781118 | 41.379 | 97.5 | 0.5 dry | Pass | |
| HDR:W22DS02514 | S22DS-10052 | 19/12/2022 | 4213 / 6 | 356469 | 5781156 | 42.27 | 98 | 0.5 dry | Pass | |
| HDR:W22DS02514 | S22DS-10053 | 19/12/2022 | 4215 / 6 | 356458 | 5781130 | 41.84 | 102.5 | 0.5 dry | Pass | |
| HDR:W22DS02514 | S22DS-10054 | 19/12/2022 | 4216 / 7 | 356457 | 5781119 | 41.69 | 102 | 1 dry | Pass | |
| HDR:W22DS02514 | S22DS-10055 | 19/12/2022 | 4214 / 7 | 356462 | 5781145 | 42.12 | 102 | 2.5 dry | Pass | |
| HDR:W22DS02514 | S22DS-10056 | 19/12/2022 | 4212 / 7 | 356464 | 5781177 | 42.81 | 106.5 | 4.5 dry | Fail | See Retest areas S22DS-10268 & S23DS-00003 |
| HDR:W22DS02539 | S22DS-10186 | 20/12/2022 | 4217 / 1 | 356453 | 5781103 | 40.61 | 96 | OMC | Pass | |
| HDR:W22DS02539 | S22DS-10187 | 20/12/2022 | 4219 / 1 | 356452 | 5781073 | 39.97 | 97.5 | OMC | Pass | |
| HDR:W22DS02556 | S22DS-10268 | 21/12/2022 | 4212/7 | 356464 | 5781177 | 42.81 | 102 | 2.0 dry | Pass | Retest of area S22DS-10056 |
| HDR:W22DS02556 | S22DS-10269 | 21/12/2022 | 4212/8 | 356466 | 5781172 | 42.86 | 100.5 | 1.0 dry | Pass | |
| HDR:W22DS02556 | S22DS-10270 | 21/12/2022 | 4218/2 | 356449 | 5781087 | 40.52 | 95 | OMC | Pass | |
| HDR:W22DS02556 | S22DS-10271 | 21/12/2022 | 4220/2 | 356443 | 5781057 | 39.88 | 95 | OMC | Pass | |
| HDR:W23DS00001 | S23DS-00001 | 3/01/2023 | 4217 | 356450 | 5781102 | 41.01 | 96 | 2.0 Dry | Pass | |
| HDR:W23DS00001 | S23DS-00002 | 3/01/2023 | 4219 | 356448 | 5781070 | 40.34 | 95.5 | OMC | Pass | |



Meridian Estate Stage 42, 3807351.042

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



HILF Density Testing - Field Summary

www.chadwickgeotechnics.com.au

| Report No | Sample No | Date | Lot No | Easting | Northing | Layer/RL | Density Ratio | Moisture Variation | Pass / Fail | Comments (Retest No) Compliance test taken ect |
|----------------|-------------|-----------|----------|---------|----------|----------|---------------|--------------------|-------------|-------------------------------------------------------|
| HDR:W23DS00001 | S23DS-00003 | 3/01/2023 | 4212 | 356469 | 5781185 | - | 94.5 | 0.5 Dry | Fail | Retest of area S22DS-10056, See Retest S23DS-00007 |
| HDR:W23DS00004 | S23DS-00006 | 4/01/2023 | 4201 | 356425 | 5781118 | 41.68 | 95.5 | OMC | Pass | |
| HDR:W23DS00004 | S23DS-00007 | 4/01/2023 | 4212 | 356465 | 5781187 | 42.8 | 95.5 | OMC | Pass | Retest S23DS-00003 |
| HDR:W23DS00004 | S23DS-00008 | 4/01/2023 | 4218 | 356462 | 5781078 | 40.64 | 98.5 | 0.5 dry | Pass | |
| HDR:W23DS00004 | S23DS-00009 | 4/01/2023 | 4216 | 356462 | 5781115 | 41.37 | 99 | OMC | Pass | |
| HDR:W23DS00009 | S23DS-00025 | 5/01/2023 | 4220 | 356451 | 5781055 | 40.06 | 99.5 | OMC | Pass | |
| HDR:W23DS00009 | S23DS-00026 | 5/01/2023 | 4217 | 356467 | 5781098 | 41.08 | 101 | 0.5 Wet | Pass | |
| HDR:W23DS00009 | S23DS-00027 | 5/01/2023 | 4219 | 356455 | 5781073 | 40.49 | 101.5 | 0.5 Wet | Pass | |
| HDR:W23DS00011 | S23DS-00029 | 6/01/2022 | 4207 | 356425 | 5781204 | 43.56 | 101 | 0.5 wet | Pass | |
| HDR:W23DS00011 | S23DS-00030 | 6/01/2022 | 4211 | 356461 | 5781190 | 42.36 | 101 | 0.5 dry | Pass | |
| HDR:W23DS00011 | S23DS-00031 | 6/01/2022 | 4208 | 356436 | 5781215 | 43.6 | 97 | 0.5 dry | Pass | |
| HDR:W23DS00011 | S23DS-00032 | 6/01/2022 | 4211 | 356462 | 5781194 | 42.73 | 98.5 | 0.5 dry | Pass | |
| HDR:W23DS00015 | S23DS-00043 | 7/01/2023 | 4211 / 3 | 356465 | 5781194 | 42.7 | 103.5 | 2.0 dry | Pass | |
| HDR:W23DS00015 | S23DS-00044 | 7/01/2023 | 4210 / 3 | 356479 | 5781195 | 42.13 | 102.5 | 2.0 dry | Pass | |
| HDR:W23DS00024 | S23DS-00075 | 9/01/2023 | 4208 / 4 | 356416 | 5781223 | 43.99 | 101 | 2.0 dry | Pass | |
| HDR:W23DS00024 | S23DS-00076 | 9/01/2023 | 4210 / 4 | 356461 | 5781206 | 42.9 | 100 | 0.5 dry | Pass | |
| HDR:W23DS00024 | S23DS-00077 | 9/01/2023 | 4211 / 5 | 356461 | 5781192 | 43.16 | 99 | 2.5 dry | Pass | |

Appendix C : NATA Endorsed 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:W22DS01787


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 15/09/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% (1% Dry to 3% Wet 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: Silty Clay with traces of Gravel

Sample Data

| Sample ID | S22DS-07016 | S22DS-07017 | | | |
|------------------|-------------------|-------------------|--|--|--|
| Field Sample ID | 1 | 2 | | | |
| Client Sample ID | 1 | 2 | | | |
| Date Tested | 7/09/2022 | 7/09/2022 | | | |
| Time Tested | 16:00 | 15:50 | | | |
| E: | 2493.355 (356350) | 2527.339 (356319) | | | |
| N: | 218.252 (5781052) | 206.797 (5781064) | | | |
| EL: | 42.064 | 41.495 | | | |
| Lot / Layer: | 4228 / 1 | 4226 / 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 (%) | 18.0 | 17.9 | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | | | |
| Field Wet Density (t/m ³) | 2.02 | 1.99 | | | |
| Field Dry Density (t/m ³) | 1.71 | 1.69 | | | |
| Peak Converted Wet Density (t/m ³) | 2.09 | 2.07 | | | |
| Optimum Moisture Content (%) | 16.0 | 16.0 | | | |
| Compactive Effort | Standard | Standard | | | |
| Moisture Ratio (%) | 111.5 | 110.5 | | | |
| Moisture Variation (%) | 2.0 wet | 1.5 wet | | | |
| Hilf Density Ratio (%) | 96.5 | 96.0 | | | |

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:W22DS01794


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 15/09/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% (1% Dry to 3% Wet 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: Silty Clay with Traces of Gravel

Sample Data

| | | | | | |
|------------------|-------------------|--|--|--|--|
| Sample ID | S22DS-07048 | | | | |
| Field Sample ID | 1 | | | | |
| Client Sample ID | 3 | | | | |
| Date Tested | 8/09/2022 | | | | |
| Time Tested | 13:50 | | | | |
| E: | 2451.895 (356274) | | | | |
| N: | 211.778 (5781052) | | | | |
| EL: | 41.916 | | | | |
| Lot / Layer: | 4224 / 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 (%) | 23.5 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m ³) | 1.99 | | | | |
| Field Dry Density (t/m ³) | 1.61 | | | | |
| Peak Converted Wet Density (t/m ³) | 2.04 | | | | |
| Optimum Moisture Content (%) | 21.5 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 108.0 | | | | |
| Moisture Variation (%) | 1.5 wet | | | | |
| Hilf Density Ratio (%) | 97.5 | | | | |

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:W22DS01807


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 15/09/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% (1% Dry to 3% Wet 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: Silty Clay traces of Gravel

Sample Data

| | | | | | |
|------------------|-------------------|--|--|--|--|
| Sample ID | S22DS-07085 | | | | |
| Field Sample ID | 1 | | | | |
| Client Sample ID | 4 | | | | |
| Date Tested | 12/09/2022 | | | | |
| Time Tested | 15:45 | | | | |
| E: | 2554.661 (356381) | | | | |
| N: | 201.159 (5781044) | | | | |
| EL: | 40.497 | | | | |
| Lot / Layer: | 4230 / 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 (%) | 20.9 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m ³) | 2.07 | | | | |
| Field Dry Density (t/m ³) | 1.71 | | | | |
| Peak Converted Wet Density (t/m ³) | 2.08 | | | | |
| Optimum Moisture Content (%) | 18.5 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 111.5 | | | | |
| Moisture Variation (%) | 2.0 wet | | | | |
| Hilf Density Ratio (%) | 99.5 | | | | |

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:W22DS01914


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate - Stage 40
Project No.: 3807351.040
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. Longfield
 (Senior Technician)
 Date of Issue: 20/10/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% (OMC to 3% Wet)
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: Silty Clay

Sample Data

| Sample ID | S22DS-07625 | S22DS-07626 | S22DS-07627 | S22DS-07628 | S22DS-07629 | S22DS-07630 |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Field Sample ID | 1 | 2 | 3 | 4 | 5 | 6 |
| Client Sample ID | 24 | 25 | 26 | 27 | 28 | 29 |
| Date Tested | 27/09/2022 | 27/09/2022 | 27/09/2022 | 27/09/2022 | 27/09/2022 | 27/09/2022 |
| Time Tested | | 11:30 | 12:15 | | | |
| E: | 2436.500 | 2437.110 | 2543.870 | 2475.164 | 2478.784 | 2446.110 |
| N: | 253.130 | 229.760 | 217.730 | 327.344 | 354.7317 | 290720 |
| EL: | 42.17 | 41.90 | 40.95 | 43.62 | 44.30 | 41.805 |
| Lot / Layer: | 4020 / 2 | 4028 / 2 | 4225 - 2 | 4019 / - | 40.17 / - | 4003 |
| | | | | | | Retest |

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 (%) | 16.7 | 24.5 | 19.4 | 23.4 | 17.5 | 19.6 |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 |
| Field Wet Density (t/m ³) | 2.08 | 2.01 | 1.99 | 1.98 | 2.02 | 2.03 |
| Field Dry Density (t/m ³) | 1.78 | 1.61 | 1.67 | 1.60 | 1.72 | 1.70 |
| Peak Converted Wet Density (t/m ³) | 2.00 | 1.99 | 2.14 | 2.06 | 1.91 | 2.09 |
| Optimum Moisture Content (%) | 17.5 | 22.0 | 17.5 | 20.5 | 22.5 | 19.0 |
| Compactive Effort | Standard | Standard | Standard | Standard | Standard | Standard |
| Moisture Ratio (%) | 95.0 | 111.0 | 110.0 | 113.5 | 78.0 | 103.0 |
| Moisture Variation (%) | 1.0 dry | 2.5 wet | 1.5 wet | 2.5 wet | 4.5 dry | 0.5 wet |
| Hilf Density Ratio (%) | 104.0 | 100.5 | 93.0 | 96.0 | 105.5 | 97.5 |

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:W22DS01926


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/10/2022

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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 | S22DS-07673 | | | | |
| Field Sample ID | 1 | | | | |
| Client Sample ID | 5 | | | | |
| Date Tested | 28/09/2022 | | | | |
| E: | 2465.24 | | | | |
| N: | 235.48 | | | | |
| EL: | 42.30 | | | | |
| Lot / Layer: | 4225 / 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 (%) | 16.0 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m ³) | 2.02 | | | | |
| Field Dry Density (t/m ³) | 1.74 | | | | |
| Peak Converted Wet Density (t/m ³) | 2.13 | | | | |
| Optimum Moisture Content (%) | 16.5 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 97.5 | | | | |
| Moisture Variation (%) | 0.5 dry | | | | |
| Hilf Density Ratio (%) | 95.0 | | | | |

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:W22DS01937


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/10/2022

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Sample Details

Location:
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: Clay

Sample Data

| Sample ID | S22DS-07714 | S22DS-07715 | S22DS-07716 |
|------------------|-------------|-------------|-------------|
| Field Sample ID | 1 | 2 | 3 |
| Client Sample ID | 6 | 7 | 8 |
| Date Tested | 29/09/2022 | 29/09/2022 | 29/09/2022 |
| E: | 2555.03 | 2528.16 | 2494.79 |
| N: | 200.05 | 204.40 | 205.15 |
| RL: | 40.71 | 41.73 | 42.23 |
| Lot / Layer: | 4230 / 2 | 4228 / 2 | 4227 / 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 (%) | 17.5 | 17.7 | 17.4 |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 |
| Field Wet Density (t/m ³) | 2.00 | 1.98 | 2.00 |
| Field Dry Density (t/m ³) | 1.70 | 1.68 | 1.71 |
| Peak Converted Wet Density (t/m ³) | 2.09 | 2.09 | 2.09 |
| Optimum Moisture Content (%) | 17.5 | 17.5 | 17.5 |
| Compactive Effort | Standard | Standard | Standard |
| Moisture Ratio (%) | 101.0 | 101.0 | 100.5 |
| Moisture Variation (%) | 0.0 | 0.0 | 0.0 |
| Hilf Density Ratio (%) | 95.5 | 95.0 | 96.0 |

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:W22DS01961

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/10/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

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: Imported
Material: Clay

Sample Data

| Sample ID | S22DS-07794 | S22DS-07795 | S22DS-07796 | | |
|------------------|--------------------------|-------------|-------------|--|--|
| Field Sample ID | 1 | 2 | 3 | | |
| Client Sample ID | 9 | 10 | 11 | | |
| Date Tested | 30/09/2022 | 30/09/2022 | 30/09/2022 | | |
| E: | 2543.89 | 2465.65 | 2493.23 | | |
| N: | 217.72 | 234.52 | 217.77 | | |
| RL: | 40.98 | 42.32 | 42.32 | | |
| Lot / Layer: | 4225 / 2 | 4225 / 3 | 4226 / 3 | | |
| | Retest of S22DS-07627 | | | | |

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 (%) | 16.7 | 18.3 | 28.4 | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | | |
| Field Wet Density (t/m ³) | 2.06 | 2.06 | 2.09 | | |
| Field Dry Density (t/m ³) | 1.77 | 1.74 | 1.62 | | |
| Peak Converted Wet Density (t/m ³) | 2.14 | 2.08 | 2.13 | | |
| Optimum Moisture Content (%) | 16.5 | 18.5 | 28.5 | | |
| Compactive Effort | Standard | Standard | Standard | | |
| Moisture Ratio (%) | 100.5 | 100.5 | 100.0 | | |
| Moisture Variation (%) | 0.0 | 0.0 | 0.0 | | |
| Hilf Density Ratio (%) | 96.5 | 99.0 | 98.0 | | |

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:W22DS01962

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/10/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Silty Clay

Sample Data

| | | | | | |
|------------------|------------------|--|--|--|--|
| Sample ID | S22DS-07797 | | | | |
| Field Sample ID | 1 | | | | |
| Client Sample ID | 12 | | | | |
| Date Tested | 1/10/2022 | | | | |
| Time Tested | 01:17 | | | | |
| E: | 2528.55 (356354) | | | | |
| N: | 221.42 (5781066) | | | | |
| EL: | 41.69 | | | | |
| Lot: | 4228 | | | | |

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 (%) | 16.7 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m ³) | 2.07 | | | | |
| Field Dry Density (t/m ³) | 1.77 | | | | |
| Peak Converted Wet Density (t/m ³) | 2.06 | | | | |
| Optimum Moisture Content (%) | 17.0 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 98.0 | | | | |
| Moisture Variation (%) | 0.5 dry | | | | |
| Hilf Density Ratio (%) | 100.5 | | | | |

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:W22DS01974

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/10/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Clay with traces of Gravel

Sample Data

| Sample ID | S22DS-07831 | S22DS-07832 | | | | |
|------------------|--------------------------|-------------|--|--|--|--|
| Field Sample ID | 1 | 2 | | | | |
| Client Sample ID | 13 | 14 | | | | |
| Date Tested | 3/10/2022 | 3/10/2022 | | | | |
| Time Tested | 11:45 | 11:30 | | | | |
| E: | - | 2556.789 | | | | |
| N: | - | 215.951 | | | | |
| EL: | - | 40.835 | | | | |
| Lot / Layer: | 4229 / 2 | 4230 / 3 | | | | |
| | Retest of S22DS-07627 | | | | | |

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 (%) | 17.4 | 15.5 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m ³) | 2.07 | 2.05 | | | | |
| Field Dry Density (t/m ³) | 1.76 | 1.78 | | | | |
| Peak Converted Wet Density (t/m ³) | 2.07 | 2.13 | | | | |
| Optimum Moisture Content (%) | 17.5 | 16.0 | | | | |
| Compactive Effort | Standard | Standard | | | | |
| Moisture Ratio (%) | 98.5 | 97.5 | | | | |
| Moisture Variation (%) | 0.0 | 0.5 dry | | | | |
| Hilf Density Ratio (%) | 100.0 | 96.5 | | | | |

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:W22DS01991


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/10/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Silty Clay

Sample Data

| | | | | | |
|------------------|-------------------|--|--|--|--|
| Sample ID | S22DS-07904 | | | | |
| Field Sample ID | 1 | | | | |
| Client Sample ID | 15 | | | | |
| Date Tested | 4/10/2022 | | | | |
| Time Tested | 15:15 | | | | |
| E: | 2498.040 (356320) | | | | |
| N: | 220.025 (5781065) | | | | |
| EL: | 42.360 | | | | |
| Lot / Layer: | 4226 / 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 (%) | 14.0 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m ³) | 2.08 | | | | |
| Field Dry Density (t/m ³) | 1.82 | | | | |
| Peak Converted Wet Density (t/m ³) | 2.15 | | | | |
| Optimum Moisture Content (%) | 14.0 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 100.0 | | | | |
| Moisture Variation (%) | 0.0 | | | | |
| Hilf Density Ratio (%) | 96.5 | | | | |

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:W22DS02001


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/10/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Silty Clay

Sample Data

| | | | | | |
|------------------|-------------------|--|--|--|--|
| Sample ID | S22DS-07934 | | | | |
| Field Sample ID | 1 | | | | |
| Client Sample ID | 16 | | | | |
| Date Tested | 5/10/2022 | | | | |
| Time Tested | 14:11 | | | | |
| E: | 2543.700 (356367) | | | | |
| N: | 210.030 (5781054) | | | | |
| EL: | 41.40 | | | | |
| Lot / Layer: | 4229 / 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 (%) | 15.9 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m ³) | 2.12 | | | | |
| Field Dry Density (t/m ³) | 1.83 | | | | |
| Peak Converted Wet Density (t/m ³) | 2.12 | | | | |
| Optimum Moisture Content (%) | 16.0 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 98.5 | | | | |
| Moisture Variation (%) | 0.0 | | | | |
| Hilf Density Ratio (%) | 100.0 | | | | |

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:W22DS02085


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 25/10/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Silty Clay

Sample Data

| Sample ID | S22DS-08284 | S22DS-08285 | | | |
|------------------|-------------|-------------|--|--|--|
| Field Sample ID | 1 | 2 | | | |
| Client Sample ID | 17 | 18 | | | |
| Date Tested | 19/10/2022 | 19/10/2022 | | | |
| Time Tested | 11:30 | 11:40 | | | |
| E: | 205.920 | 245.014 | | | |
| N: | 2590.810 | 2598.869 | | | |
| EL: | 39.590 | 41.46 | | | |
| Lot / Layer: | 4232 / - | 4233 / - | | | |

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 (%) | 26.1 | 23.6 | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | | | |
| Field Wet Density (t/m ³) | 1.96 | 1.94 | | | |
| Field Dry Density (t/m ³) | 1.55 | 1.57 | | | |
| Peak Converted Wet Density (t/m ³) | 1.90 | 1.99 | | | |
| Optimum Moisture Content (%) | 27.0 | 23.5 | | | |
| Compactive Effort | Standard | Standard | | | |
| Moisture Ratio (%) | 97.0 | 99.5 | | | |
| Moisture Variation (%) | 1.0 dry | 0.0 | | | |
| Hilf Density Ratio (%) | 102.5 | 97.5 | | | |

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:W22DS02111

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 25/10/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Clay

Sample Data

| Sample ID | S22DS-08379 | S22DS-08380 | | | |
|------------------|-------------|-------------|--|--|--|
| Field Sample ID | 1 | 2 | | | |
| Client Sample ID | 18 | 19 | | | |
| Date Tested | 21/10/2022 | 21/10/2022 | | | |
| Time Tested | 10:00 | 10:15 | | | |
| E: | 2581.99 | 2593.18 | | | |
| N: | 191.31 | 238.28 | | | |
| RL: | 39.96 | 40.53 | | | |
| Lot: | 4232 | 4233 | | | |

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 (%) | 20.8 | 17.2 | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | | | |
| Field Wet Density (t/m ³) | 1.99 | 1.99 | | | |
| Field Dry Density (t/m ³) | 1.65 | 1.70 | | | |
| Peak Converted Wet Density (t/m ³) | 2.03 | 2.10 | | | |
| Optimum Moisture Content (%) | 21.0 | 17.0 | | | |
| Compactive Effort | Standard | Standard | | | |
| Moisture Ratio (%) | 99.5 | 101.0 | | | |
| Moisture Variation (%) | 0.0 | 0.0 | | | |
| Hilf Density Ratio (%) | 98.0 | 94.5 | | | |

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:W22DS02144

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 26/10/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Clay with traces of Gravel

Sample Data

| Sample ID | S22DS-08579 | S22DS-08580 | S22DS-08581 | | |
|------------------|------------------|------------------|--------------------------|--|--|
| Field Sample ID | 1 | 2 | 3 | | |
| Client Sample ID | 20 | 21 | 23 | | |
| Date Tested | 24/10/2022 | 24/10/2022 | 24/10/2022 | | |
| Time Tested | 09:45 | 09:57 | 12:58 | | |
| E: | 2572.86 (356397) | 2590.98 (356415) | - (356417) | | |
| N: | 199.37 (5781038) | 229.53 (5781068) | - (5781083) | | |
| EL: | 40.49 | 40.58 | - | | |
| Lot / Layer: | 4231 / 3 | 4233 / 3 | - | | |
| | | | Retest of S22DS-08380 | | |

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 (%) | 16.5 | 16.1 | 14.6 | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | | |
| Field Wet Density (t/m ³) | 2.01 | 2.05 | 2.07 | | |
| Field Dry Density (t/m ³) | 1.72 | 1.77 | 1.80 | | |
| Peak Converted Wet Density (t/m ³) | 2.07 | 2.09 | 2.09 | | |
| Optimum Moisture Content (%) | 17.0 | 16.5 | 15.0 | | |
| Compactive Effort | Standard | Standard | Standard | | |
| Moisture Ratio (%) | 97.5 | 98.5 | 98.5 | | |
| Moisture Variation (%) | 0.5 dry | 0.5 dry | 0.0 | | |
| Hilf Density Ratio (%) | 97.0 | 98.5 | 99.0 | | |

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:W22DS02198


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 15/11/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Silty Clay

Sample Data

| Sample ID | S22DS-08770 | S22DS-08771 | | | |
|------------------|------------------|------------------|--|--|--|
| Field Sample ID | 1 | 2 | | | |
| Client Sample ID | 24 | 25 | | | |
| Date Tested | 8/11/2022 | 8/11/2022 | | | |
| Time Tested | 07:25 | 07:35 | | | |
| E: | 2588.55 (356411) | 2583.77 (356407) | | | |
| N: | 200.61 (5781043) | 242.33 (5781084) | | | |
| EL: | 40.32 | 41.16 | | | |
| Lot / Layer: | 4232 / 4 | 4234 / 4 | | | |

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 (%) | 15.9 | 16.6 | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | | | |
| Field Wet Density (t/m ³) | 2.08 | 2.07 | | | |
| Field Dry Density (t/m ³) | 1.79 | 1.77 | | | |
| Peak Converted Wet Density (t/m ³) | 2.14 | 2.12 | | | |
| Optimum Moisture Content (%) | 13.5 | 16.5 | | | |
| Compactive Effort | Standard | Standard | | | |
| Moisture Ratio (%) | 117.0 | 101.0 | | | |
| Moisture Variation (%) | 2.5 wet | 0.0 | | | |
| Hilf Density Ratio (%) | 97.0 | 98.0 | | | |

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:W22DS02220


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 15/11/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay

Sample Data

| Sample ID | S22DS-08881 | S22DS-08882 | S22DS-08883 | | |
|------------------|-------------------|------------------|------------------|--|--|
| Field Sample ID | 1 | 2 | 3 | | |
| Client Sample ID | 26 | 27 | 28 | | |
| Date Tested | 11/11/2022 | 11/11/2022 | 11/11/2022 | | |
| Time Tested | 13:40 | 13:50 | 14:00 | | |
| E: | 2582.95 (356409) | 2588.55 (356415) | 2597.97 (356423) | | |
| N: | 293.300 (5781136) | 327.79 (5781173) | 351.58 (5871195) | | |
| EL: | 41.74 | 42.70 | 43.25 | | |
| Lot / Layer: | 4202 / 1 | 4204 / 1 | 4206 / 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 (%) | 23.0 | 17.5 | 17.8 | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | | |
| Field Wet Density (t/m ³) | 2.04 | 1.99 | 2.05 | | |
| Field Dry Density (t/m ³) | 1.66 | 1.69 | 1.74 | | |
| Peak Converted Wet Density (t/m ³) | 1.96 | 2.00 | 2.05 | | |
| Optimum Moisture Content (%) | 24.5 | 20.0 | 18.5 | | |
| Compactive Effort | Standard | Standard | Standard | | |
| Moisture Ratio (%) | 94.0 | 88.0 | 97.5 | | |
| Moisture Variation (%) | 1.5 dry | 2.5 dry | 0.5 dry | | |
| Hilf Density Ratio (%) | 104.0 | 99.5 | 100.0 | | |

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:W22DS02218

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 15/11/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Stage 42
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 Clay
Material: Clay Trace Gravel

Sample Data

| | | | | | |
|-----------------|------------------|--|--|--|--|
| Sample ID | S22DS-08876 | | | | |
| Field Sample ID | 1 | | | | |
| Date Tested | 12/11/2022 | | | | |
| Time Tested | 11:57 | | | | |
| E: | 2591.56 (356416) | | | | |
| N: | 236.88 (5781079) | | | | |
| EL: | 41.07 | | | | |
| Lot / Layer: | 4233 / 5 | | | | |

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 (%) | 21.7 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m ³) | 2.00 | | | | |
| Field Dry Density (t/m ³) | 1.64 | | | | |
| Peak Converted Wet Density (t/m ³) | 1.98 | | | | |
| Optimum Moisture Content (%) | 22.0 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 98.0 | | | | |
| Moisture Variation (%) | 0.5 dry | | | | |
| Hilf Density Ratio (%) | 101.0 | | | | |

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:W22DS02254


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 30/11/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay

Sample Data

| Sample ID | S22DS-09011 | S22DS-09012 | S22DS-09013 | | |
|------------------|------------------|------------------|------------------|--|--|
| Field Sample ID | 1 | 2 | 3 | | |
| Client Sample ID | 30 | 31 | 32 | | |
| Date Tested | 16/11/2022 | 16/11/2022 | 16/11/2022 | | |
| Time Tested | 13:57 | 14:14 | 14:23 | | |
| E : | 2609.13 (356431) | 2602.83 (356425) | 2597.18 (356420) | | |
| N: | 329.50 (5781173) | 305.52 (5781149) | 280.18 (5781122) | | |
| EL : | 42.54 | 425.05 | 41.44 | | |
| Lot / Layer : | 4205 / 2 | 4203 / 2 | 4201 / 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 (%) | 24.1 | 24.2 | 22.6 | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | | |
| Field Wet Density (t/m ³) | 1.94 | 2.00 | 1.97 | | |
| Field Dry Density (t/m ³) | 1.56 | 1.61 | 1.61 | | |
| Peak Converted Wet Density (t/m ³) | 1.99 | 2.00 | 2.04 | | |
| Optimum Moisture Content (%) | 24.5 | 24.0 | 22.5 | | |
| Compactive Effort | Standard | Standard | Standard | | |
| Moisture Ratio (%) | 99.5 | 100.5 | 100.5 | | |
| Moisture Variation (%) | 0.0 | 0.0 | 0.0 | | |
| Hilf Density Ratio (%) | 97.5 | 100.0 | 96.5 | | |

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:W22DS02275

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 30/11/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Stage 42
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: Sandy Clay

Sample Data

| Sample ID | S22DS-09110 | S22DS-09111 | S22DS-09112 | S22DS-09113 |
|------------------|------------------|------------------|-------------------|------------------|
| Field Sample ID | 1 | 2 | 3 | 4 |
| Client Sample ID | 32 | 33 | 34 | 35 |
| Date Tested | 18/11/2022 | 18/11/2022 | 18/11/2022 | 18/11/2022 |
| Time Tested | 13:03 | 13:12 | 13:21 | 13:29 |
| E: | 2601.69 (356425) | 2597.18 (356420) | 2590.44 (356412) | 2587.08 (356409) |
| N: | 358.16 (5781183) | 346.36 (5781183) | 324.10 (57811645) | 298.31 (5781138) |
| EL: | 43.57 | 43.37 | 42.98 | 42.27 |
| Lot / Layer | 4207 / 3 | 4206 / 3 | 4204 / 3 | 4202 / 3 |

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 (%) | 13.7 | 15.8 | 20.1 | 21.6 |
| 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/m ³) | 2.10 | 2.06 | 2.04 | 1.97 |
| Field Dry Density (t/m ³) | 1.84 | 1.77 | 1.70 | 1.62 |
| Peak Converted Wet Density (t/m ³) | 2.12 | 2.10 | 2.03 | 2.00 |
| Optimum Moisture Content (%) | 14.5 | 16.0 | 20.0 | 21.5 |
| Compactive Effort | Standard | Standard | Standard | Standard |
| Moisture Ratio (%) | 95.0 | 99.0 | 100.5 | 100.0 |
| Moisture Variation (%) | 0.5 dry | 0.0 | 0.0 | 0.0 |
| Hilf Density Ratio (%) | 99.0 | 98.0 | 100.5 | 98.5 |

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:W22DS02310


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 30/11/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay

Sample Data

| Sample ID | S22DS-09334 | S22DS-09335 | S22DS-09336 | | |
|------------------|------------------|------------------|------------------|--|--|
| Field Sample ID | 1 | 2 | 3 | | |
| Client Sample ID | 36 | 37 | 38 | | |
| Date Tested | 23/11/2022 | 23/11/2022 | 23/11/2022 | | |
| Time Tested | 14:10 | 14:15 | 14:22 | | |
| E: | 2595.41 (356416) | 2592.06 (356413) | 2594.77 (356415) | | |
| N: | 336.42 (5781178) | 311.33 (5781153) | 273.91 (5781116) | | |
| EL: | 43.13 | 42.80 | 41.30 | | |
| Lot / Layer: | 4205 / 4 | 4203 / 4 | 4201 / 4 | | |

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 (%) | 17.9 | 20.5 | 19.5 | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | | |
| Field Wet Density (t/m ³) | 2.06 | 1.97 | 2.01 | | |
| Field Dry Density (t/m ³) | 1.75 | 1.64 | 1.69 | | |
| Peak Converted Wet Density (t/m ³) | 1.99 | 1.93 | 1.97 | | |
| Optimum Moisture Content (%) | 19.0 | 21.5 | 21.5 | | |
| Compactive Effort | Standard | Standard | Standard | | |
| Moisture Ratio (%) | 95.5 | 96.0 | 91.5 | | |
| Moisture Variation (%) | 1.0 dry | 1.0 dry | 2.0 dry | | |
| Hilf Density Ratio (%) | 103.0 | 102.0 | 102.5 | | |

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:W22DS02334


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 30/11/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay, Traces of Silt & Gravel

Sample Data

| Sample ID | S22DS-09409 | S22DS-09410 | S22DS-09411 | | |
|------------------|------------------|------------------|------------------|--|--|
| Field Sample ID | 1 | 2 | 3 | | |
| Client Sample ID | 61 | 62 | 63 | | |
| Date Tested | 26/11/2022 | 26/11/2022 | 26/11/2022 | | |
| Time Tested | 08:35 | 08:45 | 08:55 | | |
| E: | 2564.21 (356387) | 2554.29 (356376) | 2575.53 (356400) | | |
| N: | 296.72 (5781139) | 287.54 (5781131) | 283.04 (5781125) | | |
| EL: | 42.68 | 42.43 | 42.24 | | |
| Lot / Layer: | 4124 / 6 | 4125 / 5 | 4127 / 5 | | |

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 (%) | 20.5 | 22.2 | 23.4 | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | | |
| Field Wet Density (t/m ³) | 2.06 | 2.03 | 2.00 | | |
| Field Dry Density (t/m ³) | 1.71 | 1.66 | 1.62 | | |
| Peak Converted Wet Density (t/m ³) | 1.92 | 1.89 | 1.97 | | |
| Optimum Moisture Content (%) | 23.5 | 25.5 | 24.5 | | |
| Compactive Effort | Standard | Standard | Standard | | |
| Moisture Ratio (%) | 86.5 | 87.5 | 96.0 | | |
| Moisture Variation (%) | 3.0 dry | 3.0 dry | 1.0 dry | | |
| Hilf Density Ratio (%) | 107.5 | 107.5 | 101.0 | | |

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:W22DS02336

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 41
Project No.: 3807351.041
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. Longfield
 (Senior Technician)
 Date of Issue: 30/11/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay

Sample Data

| Sample ID | S22DS-09412 | S22DS-09413 | S22DS-09414 | | |
|------------------|------------------|------------------|------------------|--|--|
| Field Sample ID | 1 | 2 | 3 | | |
| Client Sample ID | 39 | 40 | 41 | | |
| Date Tested | 26/11/2022 | 26/11/2022 | 26/11/2022 | | |
| Time Tested | 09:00 | 11:15 | 11:25 | | |
| E: | 2594.66 (356416) | 2653.84 (356472) | 2642.44 (356460) | | |
| N: | 273.36 (5781114) | 300.33 (5781145) | 272.78 (5781115) | | |
| EL: | 41.42 | 41.17 | 40.63 | | |
| Lot / Layer: | 4201 / 5 | 4214 / 1 | 4216 / 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 (%) | 16.8 | 18.0 | 17.7 | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | | |
| Field Wet Density (t/m ³) | 2.02 | 1.98 | 1.99 | | |
| Field Dry Density (t/m ³) | 1.73 | 1.68 | 1.69 | | |
| Peak Converted Wet Density (t/m ³) | 2.08 | 2.11 | 2.07 | | |
| Optimum Moisture Content (%) | 17.0 | 18.0 | 17.5 | | |
| Compactive Effort | Standard | Standard | Standard | | |
| Moisture Ratio (%) | 97.5 | 99.5 | 101.0 | | |
| Moisture Variation (%) | 0.5 dry | 0.0 | 0.0 | | |
| Hilf Density Ratio (%) | 97.0 | 94.0 | 96.5 | | |

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:W22DS02363

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 2/12/2022
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Sample Details

Location:
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: Clay

Sample Data

| | | | | | |
|------------------|-----------------------|-----------------------|--|--|--|
| Sample ID | S22DS-09529 | S22DS-09530 | | | |
| Field Sample ID | 1 | 2 | | | |
| Client Sample ID | 42 | 3 | | | |
| Date Tested | 29/11/2022 | 29/11/2022 | | | |
| Time Tested | 14:45 | 14:58 | | | |
| Lot / Layer: | 4214 / 1 | 4201 / 5 | | | |
| | Retest of S22DS-09410 | Retest of S22DS-09409 | | | |

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 (%) | 22.3 | 17.6 | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | | | |
| Field Wet Density (t/m³) | 1.90 | 2.02 | | | |
| Field Dry Density (t/m³) | 1.56 | 1.72 | | | |
| Peak Converted Wet Density (t/m³) | 1.92 | 2.09 | | | |
| Optimum Moisture Content (%) | 25.0 | 18.0 | | | |
| Compactive Effort | Standard | Standard | | | |
| Moisture Ratio (%) | 89.5 | 98.5 | | | |
| Moisture Variation (%) | 2.5 dry | 0.0 | | | |
| Hilf Density Ratio (%) | 99.5 | 97.0 | | | |

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:W22DS02375

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 2/12/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

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: Sandy Clay

Sample Data

| Sample ID | S22DS-09582 | S22DS-09583 | | | |
|------------------|------------------|------------------|--|--|--|
| Field Sample ID | 1 | 2 | | | |
| Client Sample ID | 44 | 45 | | | |
| Date Tested | 30/11/2022 | 30/11/2022 | | | |
| Time Tested | 08:00 | 12:26 | | | |
| E: | 2641.89 (356468) | 2629.25 (356454) | | | |
| N: | 324.20 (5781165) | 316.00 (5781156) | | | |
| EL: | 41.75 | 42.16 | | | |
| Lot / Layer: | 4212 / 1 | 4213 / 2 | | | |

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 | 19.6 | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | | | |
| Field Wet Density (t/m ³) | 1.96 | 2.06 | | | |
| Field Dry Density (t/m ³) | 1.69 | 1.72 | | | |
| Peak Converted Wet Density (t/m ³) | 1.96 | 1.94 | | | |
| Optimum Moisture Content (%) | 18.5 | 22.0 | | | |
| Compactive Effort | Standard | Standard | | | |
| Moisture Ratio (%) | 88.5 | 89.5 | | | |
| Moisture Variation (%) | 2.0 dry | 2.0 dry | | | |
| Hilf Density Ratio (%) | 100.0 | 106.0 | | | |

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:W22DS02381

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 19/12/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay

Sample Data

| | | | | | |
|------------------|------------------|--|--|--|--|
| Sample ID | S22DS-09601 | | | | |
| Field Sample ID | 1 | | | | |
| Client Sample ID | 46 | | | | |
| Date Tested | 1/12/2022 | | | | |
| Time Tested | 07:39 | | | | |
| E: | 2634.41 (356458) | | | | |
| N: | 287.76 (5781131) | | | | |
| EL: | 41.36 | | | | |
| Lot / Layer: | 4215 / 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 Wet Density (t/m³) | 1.98 | | | | |
| Peak Converted Wet Density (t/m³) | 1.89 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Variation (%) | 2.5 dry | | | | |
| Hilf Density Ratio (%) | 104.5 | | | | |

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:W22DS02398


Issue No: 2

This report replaces all previous issues of report no 'HDR:W22DS02398'.

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 19/12/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Stage 42
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 Clay
Material:

Sample Data

| | | | | | |
|------------------|---------------|--|--|--|--|
| Sample ID | S22DS-09646 | | | | |
| Field Sample ID | 1 | | | | |
| Client Sample ID | 47 | | | | |
| Date Tested | 2/12/2022 | | | | |
| Time Tested | 07:26 | | | | |
| Location | Lot: 4213 | | | | |
| | Retest 09583 | | | | |
| | from 30/11/22 | | | | |
| Soil Description | Sandy Clay | | | | |

Field and Laboratory Data

| | | | | | |
|------------------------------------------------|---------------|--|--|--|--|
| Depth of Test (mm) | 175 | | | | |
| Depth of Layer (mm) | 200 | | | | |
| Field Moisture Content (%) | 25.7 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m ³) | 2.01 | | | | |
| Field Dry Density (t/m ³) | 1.60 | | | | |
| Peak Converted Wet Density (t/m ³) | 1.88 | | | | |
| Optimum Moisture Content (%) | 28.0 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 91.5 | | | | |
| Moisture Variation (%) | 2.5 dry | | | | |
| Hilf Density Ratio (%) | 107.5 | | | | |

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:W22DS02406


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 19/12/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Stage 42
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 Clay
Material:

Sample Data

| Sample ID | S22DS-09666 | S22DS-09667 | S22DS-09668 | | |
|-----------------|-------------------|-------------------|-------------------|--|--|
| Field Sample ID | 1 | 2 | 3 | | |
| Date Tested | 5/12/2022 | 5/12/2022 | 5/12/2022 | | |
| Time Tested | 09:34 | 09:14 | 15:43 | | |
| E: | 2635.694 (356459) | 2635.614 (356458) | 2631.483 (356457) | | |
| N: | 301.726 (5781142) | 274.613 (5781117) | 333.879 (5781174) | | |
| EL: | 41.820 | 40.939 | 42.541 | | |
| Lot/Layer | 4214/3 | 4216/3 | 4212/3 | | |

Field and Laboratory Data

| | | | | | |
|------------------------------------------------|---------------|---------------|---------------|--|--|
| Depth of Test (mm) | 175 | 175 | 175 | | |
| Depth of Layer (mm) | 200 | 200 | 200 | | |
| Field Moisture Content (%) | 16.6 | 13.9 | 15.9 | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | | |
| Field Wet Density (t/m ³) | 2.04 | 2.12 | 2.09 | | |
| Field Dry Density (t/m ³) | 1.75 | 1.86 | 1.80 | | |
| Peak Converted Wet Density (t/m ³) | 1.91 | 1.99 | 1.99 | | |
| Optimum Moisture Content (%) | 21.5 | 17.0 | 19.0 | | |
| Compactive Effort | Standard | Standard | Standard | | |
| Moisture Ratio (%) | 77.0 | 82.0 | 84.0 | | |
| Moisture Variation (%) | 5.0 dry | 3.0 dry | 3.0 dry | | |
| Hilf Density Ratio (%) | 107.0 | 106.5 | 105.0 | | |

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:W22DS02422

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 19/12/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay

Sample Data

| Sample ID | S22DS-09729 | S22DS-09730 | S22DS-09731 | | | |
|------------------|------------------|--------------------------|------------------|--|--|--|
| Field Sample ID | 1 | 2 | 3 | | | |
| Client Sample ID | 51 | 52 | 53 | | | |
| Date Tested | 7/12/2022 | 7/12/2022 | 7/12/2022 | | | |
| Time Tested | 12:50 | 13:58 | 14:03 | | | |
| E: | 2641.10 (356462) | - | 2638.51 (356461) | | | |
| N: | 316.21 (5781162) | - | 286.73 (5781129) | | | |
| EL: | 42.25 | - | 41.63 | | | |
| Lot / Layer: | 4213 / 4 | 4214 / 3 | 4215 / 4 | | | |
| | | Retest of S22DS-09666 | | | | |

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 Wet Density (t/m³) | 2.05 | 1.99 | 2.05 | | | |
| Peak Converted Wet Density (t/m³) | 1.98 | 2.03 | 2.11 | | | |
| Compactive Effort | Standard | Standard | Standard | | | |
| Moisture Variation (%) | 2.5 dry | 0.0 | 0.5 dry | | | |
| Hilf Density Ratio (%) | 103.5 | 98.0 | 97.0 | | | |

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:W22DS02436


Issue No: 2

This report replaces all previous issues of report no 'HDR:W22DS02436'.

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 19/12/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay

Sample Data

| Sample ID | S22DS-09822 | S22DS-09823 | S22DS-09824 | | |
|------------------|-------------------|-------------------|-------------------|--|--|
| Field Sample ID | 1 | 2 | 3 | | |
| Client Sample ID | 54 | 55 | 56 | | |
| Date Tested | 8/12/2022 | 8/12/2022 | 8/12/2022 | | |
| Time Tested | 14:02 | 14:08 | 15:45 | | |
| E: | 2651.263 (356476) | 2655.938 (356480) | 2641.596 (356464) | | |
| N: | 297.963 (5781143) | 329.035 (5781175) | 273.556 (5781118) | | |
| EL: | 41.687 | 42.092 | 41.379 | | |
| Lot / Layer: | 4214 / 5 | 4212 / 5 | 4216 / 5 | | |

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 (%) | 15.5 | 15.0 | 18.5 | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | | |
| Field Wet Density (t/m ³) | 2.02 | 2.01 | 1.97 | | |
| Field Dry Density (t/m ³) | 1.75 | 1.75 | 1.66 | | |
| Peak Converted Wet Density (t/m ³) | 2.06 | 2.12 | 2.03 | | |
| Optimum Moisture Content (%) | 16.0 | 15.5 | 19.0 | | |
| Compactive Effort | Standard | Standard | Standard | | |
| Moisture Ratio (%) | 98.0 | 97.0 | 97.0 | | |
| Moisture Variation (%) | 0.5 dry | 0.5 dry | 0.5 dry | | |
| Hilf Density Ratio (%) | 98.0 | 95.0 | 97.5 | | |

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:W22DS02514


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 22/12/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Clay

Sample Data

| Sample ID | S22DS-10052 | S22DS-10053 | S22DS-10054 | S22DS-10055 | S22DS-10056 |
|------------------|------------------|------------------|-------------------|------------------|------------------|
| Field Sample ID | 1 | 2 | 3 | 4 | 5 |
| Client Sample ID | 57 | 58 | 59 | 60 | 61 |
| Date Tested | 19/12/2022 | 19/12/2022 | 19/12/2022 | 19/12/2022 | 19/12/2022 |
| Time Tested | 08:34 | 08:45 | 08:55 | 09:21 | 08:29 |
| E: | 2645.42 (356469) | 2636.03 (356458) | 2633.86 (3564757) | 2640.21 (356462) | 2644.28 (356464) |
| N: | 313.11 (5781156) | 287.39 (5781130) | 276.21 (5781119) | 299.38 (5781145) | 329.53 (5781177) |
| EL: | 42.27 | 41.84 | 41.69 | 42.12 | 42.81 |
| Lot / Layer: | 4213 / 6 | 4215 / 6 | 4216 / 7 | 4214 / 7 | 4212 / 7 |

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 (%) | 17.8 | 21.1 | 19.3 | 17.0 | 16.9 |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 |
| Field Wet Density (t/m ³) | 2.01 | 2.07 | 2.07 | 2.07 | 2.04 |
| Field Dry Density (t/m ³) | 1.71 | 1.71 | 1.73 | 1.77 | 1.74 |
| Peak Converted Wet Density (t/m ³) | 2.05 | 2.01 | 2.03 | 2.03 | 1.91 |
| Optimum Moisture Content (%) | 18.0 | 21.5 | 20.0 | 19.5 | 21.5 |
| Compactive Effort | Standard | Standard | Standard | Standard | Standard |
| Moisture Ratio (%) | 98.5 | 98.5 | 96.0 | 86.5 | 79.0 |
| Moisture Variation (%) | 0.5 dry | 0.5 dry | 1.0 dry | 2.5 dry | 4.5 dry |
| Hilf Density Ratio (%) | 98.0 | 102.5 | 102.0 | 102.0 | 106.5 |

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:W22DS02539


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 22/12/2022
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Sample Details

Location:
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: Silty Clay

Sample Data

| Sample ID | S22DS-10186 | S22DS-10187 | | | |
|------------------|------------------|------------------|--|--|--|
| Field Sample ID | 1 | 2 | | | |
| Client Sample ID | 62 | 63 | | | |
| Date Tested | 20/12/2022 | 20/12/2022 | | | |
| Time Tested | 11:55 | 12:01 | | | |
| E: | 2630.23 (356453) | 2629.23 (356452) | | | |
| N: | 256.89 (5781103) | 230.04 (5781073) | | | |
| EL: | 40.61 | 39.97 | | | |
| Lot / Layer: | 4217 / 1 | 4219 / 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 (%) | 14.8 | 15.1 | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | | | |
| Field Wet Density (t/m ³) | 2.07 | 2.08 | | | |
| Field Dry Density (t/m ³) | 1.80 | 1.81 | | | |
| Peak Converted Wet Density (t/m ³) | 2.15 | 2.13 | | | |
| Optimum Moisture Content (%) | 15.0 | 15.0 | | | |
| Compactive Effort | Standard | Standard | | | |
| Moisture Ratio (%) | 99.5 | 99.0 | | | |
| Moisture Variation (%) | 0.0 | 0.0 | | | |
| Hilf Density Ratio (%) | 96.0 | 97.5 | | | |

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:W22DS02556

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 23/12/2022
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy/Silty Clay

Sample Data

| Sample ID | S22DS-10268 | S22DS-10269 | S22DS-10270 | S22DS-10271 |
|------------------|--------------------------|------------------|------------------|------------------|
| Field Sample ID | 1 | 2 | 3 | 4 |
| Client Sample ID | 64 | 65 | 66 | 67 |
| Date Tested | 21/12/2022 | 21/12/2022 | 21/12/2022 | 21/12/2022 |
| Time Tested | 07:25 | 07:33 | 14:55 | 15:00 |
| E: | - | 2643.72 (356466) | 2625.39 (356449) | 2620.69 (356443) |
| N: | - | 329.06 (5781172) | 243.23 (5781087) | 214.22 (5781057) |
| EL: | - | 42.86 | 40.52 | 39.88 |
| Lot / Layer: | - / 7 | 4212 / 8 | 4218 / 2 | 4220 / 2 |
| | Retest of S22DS-10056 | | | |

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 (%) | 18.5 | 17.9 | 17.1 | 13.7 |
| 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 ³) | 2.00 | 2.00 | 1.99 | 1.99 |
| Field Dry Density (t/m ³) | 1.69 | 1.69 | 1.69 | 1.75 |
| Peak Converted Wet Density (t/m ³) | 1.96 | 1.99 | 2.09 | 2.09 |
| Optimum Moisture Content (%) | 20.5 | 18.5 | 17.0 | 13.5 |
| Compactive Effort | Standard | Standard | Standard | Standard |
| Moisture Ratio (%) | 90.5 | 95.5 | 101.0 | 100.5 |
| Moisture Variation (%) | 2.0 dry | 1.0 dry | 0.0 | 0.0 |
| Hilf Density Ratio (%) | 102.0 | 100.5 | 95.0 | 95.0 |

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:W23DS00001

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 9/01/2023
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay

Sample Data

| Sample ID | S23DS-00001 | S23DS-00002 | S23DS-00003 | | |
|-----------------|-------------|-------------|--------------------------|--|--|
| Field Sample ID | 1 | 2 | 3 | | |
| Date Tested | 3/01/2023 | 3/01/2023 | 3/01/2023 | | |
| Time Tested | 14:40 | 15:10 | 11:10 | | |
| E: | 356450 | 356448 | 35469 | | |
| N: | 5781102 | 5781070 | 5781185 | | |
| RL: | 41.01 | 40.34 | - | | |
| Lot / Layer: | 4217 / - | 4219 / - | 4212 / - | | |
| | | | Retest of S22DS-10056 | | |

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 (%) | 13.8 | 14.7 | 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/m ³) | 2.00 | 2.04 | 1.98 | | |
| Field Dry Density (t/m ³) | 1.76 | 1.78 | 1.74 | | |
| Peak Converted Wet Density (t/m ³) | 2.08 | 2.14 | 2.10 | | |
| Optimum Moisture Content (%) | 16.0 | 14.5 | 14.5 | | |
| Compactive Effort | Standard | Standard | Standard | | |
| Moisture Ratio (%) | 86.0 | 100.5 | 97.5 | | |
| Moisture Variation (%) | 2.0 dry | 0.0 | 0.5 dry | | |
| Hilf Density Ratio (%) | 96.0 | 95.5 | 94.5 | | |

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:W23DS00004

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 9/01/2023
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay

Sample Data

| Sample ID | S23DS-00006 | S23DS-00007 | S23DS-00008 | S23DS-00009 |
|-----------------|-------------|--------------|-------------|-------------|
| Field Sample ID | 1 | 2 | 3 | 4 |
| Date Tested | 4/01/2023 | 4/01/2023 | 4/01/2023 | 4/01/2023 |
| Time Tested | 11:30 | 11:00 | 14:45 | 16:00 |
| E: | 356425 | 356465 | 356462 | 356462 |
| N: | 5781118 | 5781187 | 5781078 | 5781115 |
| EL: | 41.68 | 42.80 | 40.64 | 41.37 |
| Lot: | 4201 | 4212 | 4218 | 4216 |
| | | retest 00003 | | |

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 (%) | 13.3 | 11.8 | 14.4 | 15.5 |
| 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 ³) | 2.06 | 2.08 | 2.10 | 2.11 |
| Field Dry Density (t/m ³) | 1.82 | 1.86 | 1.83 | 1.82 |
| Peak Converted Wet Density (t/m ³) | 2.16 | 2.18 | 2.13 | 2.13 |
| Optimum Moisture Content (%) | 13.5 | 12.0 | 15.0 | 15.5 |
| Compactive Effort | Standard | Standard | Standard | Standard |
| Moisture Ratio (%) | 100.0 | 98.5 | 97.5 | 100.0 |
| Moisture Variation (%) | 0.0 | 0.0 | 0.5 dry | 0.0 |
| Hilf Density Ratio (%) | 95.5 | 95.5 | 98.5 | 99.0 |

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:W23DS00009


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 9/01/2023

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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 Clay
Material:

Sample Data

| Sample ID | S23DS-00025 | S23DS-00026 | S23DS-00027 | | |
|------------------|-------------|-------------|-------------|--|--|
| Field Sample ID | 1 | 2 | 3 | | |
| Date Tested | 5/01/2023 | 5/01/2023 | 5/01/2023 | | |
| Time Tested | 13:00 | 13:57 | 14:00 | | |
| E: | 356451 | 356467 | 356455 | | |
| N: | 5781055 | 5781098 | 5781073 | | |
| LOT: | 4220 | 4217 | 4219 | | |
| EL: | 40.06 | 41.08 | 40.49 | | |
| Soil Description | Sandy Clay | Sandy Clay | Sandy Clay | | |

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 (%) | 14.1 | 16.0 | 16.0 | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | | |
| Field Wet Density (t/m ³) | 2.12 | 2.13 | 2.14 | | |
| Field Dry Density (t/m ³) | 1.86 | 1.84 | 1.85 | | |
| Peak Converted Wet Density (t/m ³) | 2.13 | 2.12 | 2.11 | | |
| Optimum Moisture Content (%) | 14.0 | 15.5 | 16.0 | | |
| Compactive Effort | Standard | Standard | Standard | | |
| Moisture Ratio (%) | 101.5 | 101.5 | 101.5 | | |
| Moisture Variation (%) | 0.0 | 0.5 wet | 0.5 wet | | |
| Hilf Density Ratio (%) | 99.5 | 101.0 | 101.5 | | |

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:W23DS00011

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 10/01/2023
 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: Sandy Clay

Sample Data

| Sample ID | S23DS-00029 | S23DS-00030 | S23DS-00031 | S23DS-00032 |
|-----------------|-------------|-------------|-------------|-------------|
| Field Sample ID | 1 | 2 | 3 | 4 |
| Date Tested | 6/01/2023 | 6/01/2023 | 6/01/2023 | 6/01/2023 |
| Time Tested | 11:30 | 11:40 | | |
| E: | 356425 | 356461 | 356436 | 356462 |
| N: | 5781204 | 5781190 | 5781215 | 5781194 |
| EL: | 43.56 | 42.36 | 43.60 | 42.73 |
| Lot / Layer: | 4207 / 1 | 4211 / 1 | 4208 / 2 | 4211 / 2 |

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 (%) | 13.1 | 13.8 | 13.6 | 15.6 |
| 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/m ³) | 2.20 | 2.16 | 2.08 | 2.04 |
| Field Dry Density (t/m ³) | 1.94 | 1.90 | 1.83 | 1.76 |
| Peak Converted Wet Density (t/m ³) | 2.18 | 2.14 | 2.14 | 2.06 |
| Optimum Moisture Content (%) | 13.0 | 14.0 | 14.0 | 16.5 |
| Compactive Effort | Standard | Standard | Standard | Standard |
| Moisture Ratio (%) | 103.0 | 97.5 | 96.5 | 95.5 |
| Moisture Variation (%) | 0.5 wet | 0.5 dry | 0.5 dry | 0.5 dry |
| Hilf Density Ratio (%) | 101.0 | 101.0 | 97.0 | 98.5 |

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:W23DS00015


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 10/01/2023
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay

Sample Data

| Sample ID | S23DS-00043 | S23DS-00044 | | | |
|-----------------|-------------|-------------|--|--|--|
| Field Sample ID | 1 | 2 | | | |
| Date Tested | 7/01/2023 | 7/01/2023 | | | |
| Time Tested | 10:30 | 10:40 | | | |
| E: | 356465 | 356479 | | | |
| N: | 5781194 | 5781195 | | | |
| RL: | 42.70 | 42.13 | | | |
| Lot / Layer: | 4211 / 3 | 4210 / 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 (%) | 13.7 | 13.4 | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | | | |
| Field Wet Density (t/m ³) | 2.14 | 2.14 | | | |
| Field Dry Density (t/m ³) | 1.88 | 1.88 | | | |
| Peak Converted Wet Density (t/m ³) | 2.07 | 2.09 | | | |
| Optimum Moisture Content (%) | 16.0 | 15.5 | | | |
| Compactive Effort | Standard | Standard | | | |
| Moisture Ratio (%) | 86.5 | 86.5 | | | |
| Moisture Variation (%) | 2.0 dry | 2.0 dry | | | |
| Hilf Density Ratio (%) | 103.5 | 102.5 | | | |

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:W23DS00024


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 17/05/2023
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Silty Clay

Sample Data

| Sample ID | S23DS-00075 | S23DS-00076 | S23DS-00077 | | |
|-----------------|-------------|-------------|-------------|--|--|
| Field Sample ID | 1 | 2 | 3 | | |
| Date Tested | 9/01/2023 | 9/01/2023 | 9/01/2023 | | |
| Time Tested | 11:30 | 11:45 | 14:50 | | |
| E: | 356416 | 356461 | 356461 | | |
| N: | 5781223 | 5781206 | 5781192 | | |
| RL: | 43.99 | 42.90 | 43.16 | | |
| Lot / Layer: | 4208 / 4 | 4210 / 4 | 4211 / 5 | | |

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 (%) | 10.5 | 14.0 | 12.4 | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | AS 1289.2.1.1 | | |
| Field Wet Density (t/m ³) | 2.15 | 2.14 | 2.07 | | |
| Field Dry Density (t/m ³) | 1.95 | 1.88 | 1.84 | | |
| Peak Converted Wet Density (t/m ³) | 2.13 | 2.13 | 2.09 | | |
| Optimum Moisture Content (%) | 12.5 | 14.5 | 15.0 | | |
| Compactive Effort | Standard | Standard | Standard | | |
| Moisture Ratio (%) | 83.5 | 97.5 | 82.5 | | |
| Moisture Variation (%) | 2.0 dry | 0.5 dry | 2.5 dry | | |
| Hilf Density Ratio (%) | 101.0 | 100.0 | 99.0 | | |

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:W23DS00034


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/01/2023
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Sample Details

Location:
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: Silty Clay

Sample Data

| Sample ID | S23DS-00113 | S23DS-00114 | | | |
|-----------------|-------------|-------------|--|--|--|
| Field Sample ID | 1 | 2 | | | |
| Date Tested | 10/01/2023 | 10/01/2023 | | | |
| Time Tested | 10:30 | 15:10 | | | |
| E: | 356471 | 356475 | | | |
| N: | 5781206 | 5781188 | | | |
| RL: | 42.96 | 43.12 | | | |
| Lot / Layer: | 4210 / 5 | 4211 / 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 (%) | 14.8 | 18.4 | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | | | |
| Field Wet Density (t/m ³) | 2.16 | 2.17 | | | |
| Field Dry Density (t/m ³) | 1.88 | 1.83 | | | |
| Peak Converted Wet Density (t/m ³) | 2.09 | 2.08 | | | |
| Optimum Moisture Content (%) | 16.5 | 20.5 | | | |
| Compactive Effort | Standard | Standard | | | |
| Moisture Ratio (%) | 90.0 | 90.5 | | | |
| Moisture Variation (%) | 1.5 dry | 2.0 dry | | | |
| Hilf Density Ratio (%) | 103.5 | 104.0 | | | |

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:W23DS00083

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/01/2023
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Silty Clay

Sample Data

| | | | | | |
|-----------------|-------------|--|--|--|--|
| Sample ID | S23DS-00261 | | | | |
| Field Sample ID | 1 | | | | |
| Date Tested | 13/01/2023 | | | | |
| Time Tested | 09:16 | | | | |
| E: | 356446 | | | | |
| N: | 5781039 | | | | |
| RL: | 39.42 | | | | |
| Lot / Layer: | 4222 / - | | | | |

Field and Laboratory Data

| | | | | | |
|------------------------------------------------|---------------|--|--|--|--|
| Depth of Test (mm) | 175 | | | | |
| Depth of Layer (mm) | 200 | | | | |
| AS Sieve Size (mm) | 19.0 | | | | |
| Field Moisture Content (%) | 14.5 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m ³) | 2.08 | | | | |
| Field Dry Density (t/m ³) | 1.81 | | | | |
| Peak Converted Wet Density (t/m ³) | 2.04 | | | | |
| Optimum Moisture Content (%) | 17.0 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 86.0 | | | | |
| Moisture Variation (%) | 2.5 dry | | | | |
| Hilf Density Ratio (%) | 101.5 | | | | |

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:W23DS00171


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 3/02/2023
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay

Sample Data

| | | | | | |
|-----------------|-------------------|--|--|--|--|
| Sample ID | S23DS-00550 | | | | |
| Field Sample ID | 1 | | | | |
| Date Tested | 24/01/2023 | | | | |
| Time Tested | 14:23 | | | | |
| E: | 2605.097 (356426) | | | | |
| N: | 389.846 (5781236) | | | | |
| EL: | 44.209 | | | | |
| Lot / Layer: | 4209 / - | | | | |

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 (%) | 12.0 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m ³) | 2.15 | | | | |
| Field Dry Density (t/m ³) | 1.92 | | | | |
| Peak Converted Wet Density (t/m ³) | 2.16 | | | | |
| Optimum Moisture Content (%) | 12.5 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 96.5 | | | | |
| Moisture Variation (%) | 0.5 dry | | | | |
| Hilf Density Ratio (%) | 99.5 | | | | |

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:W23DS00514


Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 3/03/2023
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay / Silt

Sample Data

| Sample ID | S23DS-01694 | S23DS-01695 | S23DS-01696 | S23DS-01697 |
|-----------------|-------------------|-------------------|-------------------|-------------|
| Field Sample ID | 1 | 2 | 3 | 4 |
| Date Tested | 24/02/2023 | 24/02/2023 | 24/02/2023 | 24/02/2023 |
| Time Tested | 12:47 | 12:56 | 13:07 | 14:07 |
| E: | 2645.794 (356470) | 2648.851 (356473) | 2650.897 (356475) | -(356476) |
| N: | 257.407 (5781102) | 284.436 (5781128) | 314.798 (5781157) | -(5781208) |
| EL: | 41.220 | 41.769 | 42.609 | - |
| Lot / Layer: | 4217 / 7 | 4215 / 8 | 8 | 4210 / 7 |

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 (%) | 13.1 | 19.6 | 18.1 | 15.0 |
| 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 ³) | 2.09 | 2.05 | 2.08 | 1.93 |
| Field Dry Density (t/m ³) | 1.85 | 1.72 | 1.76 | 1.68 |
| Peak Converted Wet Density (t/m ³) | 2.14 | 2.06 | 2.00 | 2.03 |
| Optimum Moisture Content (%) | 13.5 | 19.5 | 20.0 | 17.5 |
| Compactive Effort | Standard | Standard | Standard | Standard |
| Moisture Ratio (%) | 96.5 | 101.5 | 90.5 | 85.0 |
| Moisture Variation (%) | 0.5 dry | 0.5 wet | 2.0 dry | 2.5 dry |
| Hilf Density Ratio (%) | 97.5 | 99.5 | 104.0 | 94.5 |

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:W23DS00537

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 3/03/2023
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Sandy Clay, traces of Gravel

Sample Data

| | | | | | |
|-----------------|--------------------------|--|--|--|--|
| Sample ID | S23DS-01757 | | | | |
| Field Sample ID | 1 | | | | |
| Date Tested | 27/02/2023 | | | | |
| Time Tested | 12:10 | | | | |
| E: | 2652.379 | | | | |
| N: | 364.796 | | | | |
| EL: | 43.103 | | | | |
| Lot / Layer: | 4210 / 7 | | | | |
| | Retest of S23DS-01697 | | | | |

Field and Laboratory Data

| | | | | | |
|-----------------------------------|-------------|--|--|--|--|
| Depth of Test (mm) | 175 | | | | |
| Depth of Layer (mm) | 200 | | | | |
| AS Sieve Size (mm) | 19.0 | | | | |
| Oversize Wet (%) | 0 | | | | |
| Field Wet Density (t/m³) | 1.97 | | | | |
| Peak Converted Wet Density (t/m³) | 1.98 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Variation (%) | 4.0 dry | | | | |
| Hilf Density Ratio (%) | 99.5 | | | | |

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:W23DS00579

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 3/03/2023
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Silty Clay

Sample Data

| | | | | | |
|-----------------|--------------------------|--|--|--|--|
| Sample ID | S23DS-01863 | | | | |
| Field Sample ID | 1 | | | | |
| Date Tested | 1/03/2023 | | | | |
| Time Tested | 12:35 | | | | |
| Lot / Layer: | 4210 / 7 | | | | |
| | Retest of S23DS-01757 | | | | |

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/m³) | 2.06 | | | | |
| Field Dry Density (t/m³) | 1.81 | | | | |
| Peak Converted Wet Density (t/m³) | 2.17 | | | | |
| Optimum Moisture Content (%) | 14.0 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 100.0 | | | | |
| Moisture Variation (%) | 0.0 | | | | |
| Hilf Density Ratio (%) | 95.0 | | | | |

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:W23DS00604

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/03/2023
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Sample Details

Location:
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: Silty Clay

Sample Data

| | | | | | |
|-----------------|-------------------|--|--|--|--|
| Sample ID | S23DS-01959 | | | | |
| Field Sample ID | 1 | | | | |
| Date Tested | 2/03/2023 | | | | |
| Time Tested | 14:15 | | | | |
| E; | 2642.794 (356468) | | | | |
| N: | 226.968 (5781065) | | | | |
| EL: | 40.349 | | | | |
| Lot / Layer: | 4219 / 7 | | | | |

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 ³) | 2.12 | | | | |
| Field Dry Density (t/m ³) | 1.85 | | | | |
| Peak Converted Wet Density (t/m ³) | 2.16 | | | | |
| Optimum Moisture Content (%) | 14.5 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 98.5 | | | | |
| Moisture Variation (%) | 0.0 | | | | |
| Hilf Density Ratio (%) | 98.0 | | | | |

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:W23DS00617

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/03/2023
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location:
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: Silty Clay

Sample Data

| | | | | | |
|-----------------|-------------------|--|--|--|--|
| Sample ID | S23DS-01988 | | | | |
| Field Sample ID | 1 | | | | |
| Date Tested | 3/03/2023 | | | | |
| Time Tested | 12:38 | | | | |
| E: | 2638.690 (356461) | | | | |
| N: | 211.681 (5781051) | | | | |
| EL: | 40.15 | | | | |
| Lot / Layer: | 4220 / 8 | | | | |

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 (%) | 16.5 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m³) | 2.13 | | | | |
| Field Dry Density (t/m³) | 1.83 | | | | |
| Peak Converted Wet Density (t/m³) | 2.11 | | | | |
| Optimum Moisture Content (%) | 16.5 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 101.0 | | | | |
| Moisture Variation (%) | 0.0 | | | | |
| Hilf Density Ratio (%) | 101.0 | | | | |

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:W23DS00619

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/03/2023
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Sample Details

Location:
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: Silty Clay

Sample Data

| Sample ID | S23DS-01989 | S23DS-01990 | | | |
|-----------------|-------------------|-------------------|--|--|--|
| Field Sample ID | 1 | 2 | | | |
| Date Tested | 4/03/2023 | 4/03/2023 | | | |
| Time Tested | 11:03 | 11:16 | | | |
| E: | 2654.503 (356478) | 2642.647 (356467) | | | |
| N: | 348.586 (5781193) | 375.773 (5781221) | | | |
| EL: | 43.178 | 43.367 | | | |
| Lot / Layer: | 4211 / 8 | 4210 / 9 | | | |

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 (%) | 12.3 | 13.2 | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | AS 1289.2.1.1 | | | |
| Field Wet Density (t/m ³) | 2.01 | 2.09 | | | |
| Field Dry Density (t/m ³) | 1.79 | 1.85 | | | |
| Peak Converted Wet Density (t/m ³) | 2.02 | 2.15 | | | |
| Optimum Moisture Content (%) | 16.0 | 13.5 | | | |
| Compactive Effort | Standard | Standard | | | |
| Moisture Ratio (%) | 76.0 | 98.5 | | | |
| Moisture Variation (%) | 4.0 dry | 0.0 | | | |
| Hilf Density Ratio (%) | 99.5 | 97.0 | | | |

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:W23DS00650

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/03/2023
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Sample Details

Location:
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: Sandy Clay

Sample Data

| | | | | | |
|-----------------|--------------------------|--|--|--|--|
| Sample ID | S23DS-02103 | | | | |
| Field Sample ID | 1 | | | | |
| Date Tested | 7/03/2023 | | | | |
| Time Tested | 07:39 | | | | |
| Lot / Layer: | 4211 / 8 | | | | |
| | Retest of S23DS-01989 | | | | |

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 (%) | 14.1 | | | | |
| Field Moisture Content Method | AS 1289.2.1.1 | | | | |
| Field Wet Density (t/m³) | 2.11 | | | | |
| Field Dry Density (t/m³) | 1.85 | | | | |
| Peak Converted Wet Density (t/m³) | 2.07 | | | | |
| Optimum Moisture Content (%) | 16.5 | | | | |
| Compactive Effort | Standard | | | | |
| Moisture Ratio (%) | 85.0 | | | | |
| Moisture Variation (%) | 2.5 dry | | | | |
| Hilf Density Ratio (%) | 102.0 | | | | |

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:W23DS00742

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 20/03/2023
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Sample Details

Location:
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: Silty Clay, traces of Gravel

Sample Data

| Sample ID | S23DS-02361 | S23DS-02362 | | | |
|-----------------|-------------------|------------------|--|--|--|
| Field Sample ID | 1 | 2 | | | |
| Date Tested | 16/03/2023 | 16/03/2023 | | | |
| Time Tested | 15:30 | 15:38 | | | |
| E: | 2621.798 (356446) | 264.807 (356465) | | | |
| N: | 198.007 (5781041) | 14.435 (5781038) | | | |
| EL: | 39.917 | 39.475 | | | |
| Lot / Layer: | 4221 / 4 | 4223 / 4 | | | |

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 Wet Density (t/m³) | 2.04 | 2.14 | | | |
| Peak Converted Wet Density (t/m³) | 2.06 | 2.09 | | | |
| Compactive Effort | Standard | Standard | | | |
| Moisture Variation (%) | 2.5 dry | 2.0 dry | | | |
| Hilf Density Ratio (%) | 99.0 | 102.5 | | | |

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: MAT:S22DS-08310/1

Issue No: 1

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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
 (Dandenong Laboratory Manager)
 Date of Issue: 11/11/2022
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Sample Details

Sample Location E 245.014, N 2598.869, EL: 41.46, Lot 4233
Field Sample ID 1
Date Sampled 19/10/2022
Source Onsite
Material CH CLAY with sand trace gravel
Specification AS Grading
Sampling Method AS1289.1.2.1 Clause 6.4 (b)
Sample ID S22DS-08310

Particle Size Distribution

Method: AS 1289.3.6.1
Drying By: Oven
Date Tested: 24/10/2022

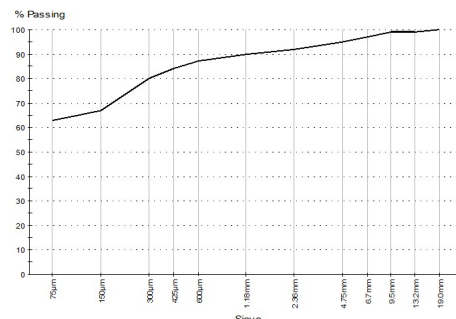
Note: Sample Washed

| Sieve Size | % Passing | Limits |
|------------|-----------|--------|
| 19.0mm | 100 | |
| 13.2mm | 99 | |
| 9.5mm | 99 | |
| 6.7mm | 97 | |
| 4.75mm | 95 | |
| 2.36mm | 92 | |
| 1.18mm | 90 | |
| 600µm | 87 | |
| 425µm | 84 | |
| 300µm | 80 | |
| 150µm | 67 | |
| 75µm | 63 | |

Other Test Results

| Description | Method | Result | Limits |
|----------------------|---------------|------------|--------|
| Moisture Content (%) | AS 1289.2.1.1 | 21.6 | |
| Sample History | AS 1289.1.1 | Oven-dried | |
| Preparation | AS 1289.1.1 | Dry Sieved | |
| Linear Shrinkage (%) | AS 1289.3.4.1 | 20.5 | |
| Mould Length (mm) | | 250 | |
| Crumbling | | No | |
| Curling | | No | |
| Cracking | | Yes | |
| Liquid Limit (%) | AS 1289.3.1.2 | 54 | |
| Plastic Limit (%) | AS 1289.3.2.1 | 22 | |
| Plasticity Index (%) | AS 1289.3.3.1 | 32 | |
| Date Tested | | 25/10/2022 | |

Chart




Comments

N/A

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
(Senior Technician)
Date of Issue: 17/11/2022
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Sample Details

Sample Location
Field Sample ID 1
Date Sampled 8/11/2022
Time Sampled 07:25
Source Onsite
Material Silty Clay
Specification AS Grading
Sampling Method AS1289.1.2.1 Clause 6.4 (b)
Sample ID S22DS-08769

Particle Size Distribution

Method: AS 1289.3.6.1
Drying By: Oven
Date Tested: 9/11/2022

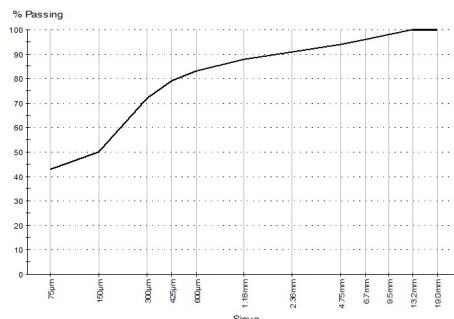
Note: Sample Washed

| Sieve Size | % Passing | Limits |
|------------|-----------|--------|
| 19.0mm | 100 | |
| 13.2mm | 100 | |
| 9.5mm | 98 | |
| 6.7mm | 96 | |
| 4.75mm | 94 | |
| 2.36mm | 91 | |
| 1.18mm | 88 | |
| 600µm | 83 | |
| 425µm | 79 | |
| 300µm | 72 | |
| 150µm | 50 | |
| 75µm | 43 | |

Other Test Results

| Description | Method | Result | Limits |
|----------------------|---------------|------------|--------|
| Moisture Content (%) | AS 1289.2.1.1 | 14.6 | |
| 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 | | Yes | |
| Cracking | | No | |
| Liquid Limit (%) | AS 1289.3.1.2 | 38 | |
| Plastic Limit (%) | AS 1289.3.2.1 | 13 | |
| Plasticity Index (%) | AS 1289.3.3.1 | 25 | |
| Date Tested | | 11/11/2022 | |

Chart



Comments

N/A



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:S22DS-09640/1

Issue No: 1

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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
 (Dandenong Laboratory Manager)
 Date of Issue: 12/12/2022
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Sample Details

Sample Location E 356451, N 5781142, Layer 3
Field Sample ID 1
Date Sampled 1/12/2022
Source Onsite
Material CH; CLAY with sand trace gravel, red, high plasticity.
Specification AS Grading
Sampling Method AS1289.1.2.1 Clause 6.4 (b)
Sample ID S22DS-09640

Particle Size Distribution

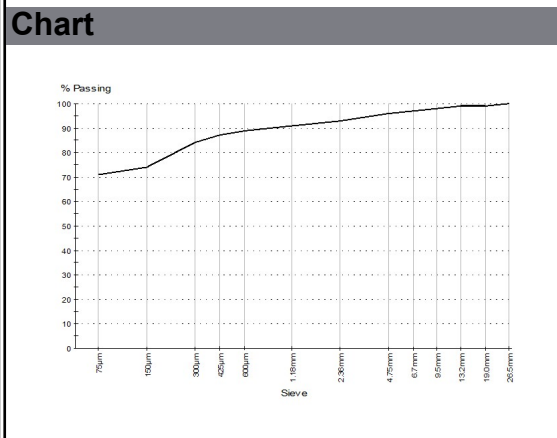
Method: AS 1289.3.6.1
Drying By: Oven
Date Tested: 6/12/2022

Note: Sample Washed

| Sieve Size | % Passing | Limits |
|------------|-----------|--------|
| 26.5mm | 100 | |
| 19.0mm | 99 | |
| 13.2mm | 99 | |
| 9.5mm | 98 | |
| 6.7mm | 97 | |
| 4.75mm | 96 | |
| 2.36mm | 93 | |
| 1.18mm | 91 | |
| 600µm | 89 | |
| 425µm | 87 | |
| 300µm | 84 | |
| 150µm | 74 | |
| 75µm | 71 | |

Other Test Results

| Description | Method | Result | Limits |
|----------------------|---------------|------------|--------|
| Moisture Content (%) | AS 1289.2.1.1 | 24.3 | |
| Sample History | AS 1289.1.1 | Oven-dried | |
| Preparation | AS 1289.1.1 | Dry Sieved | |
| Linear Shrinkage (%) | AS 1289.3.4.1 | 17.5 | |
| Mould Length (mm) | | 250 | |
| Crumbling | | No | |
| Curling | | Yes | |
| Cracking | | No | |
| Liquid Limit (%) | AS 1289.3.1.2 | 72 | |
| Plastic Limit (%) | AS 1289.3.2.1 | 20 | |
| Plasticity Index (%) | AS 1289.3.3.1 | 52 | |
| Date Tested | | 6/12/2022 | |



Comments
 N/A



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:S23DS-00028/1

Issue No: 1

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 23/01/2023
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Sample Details

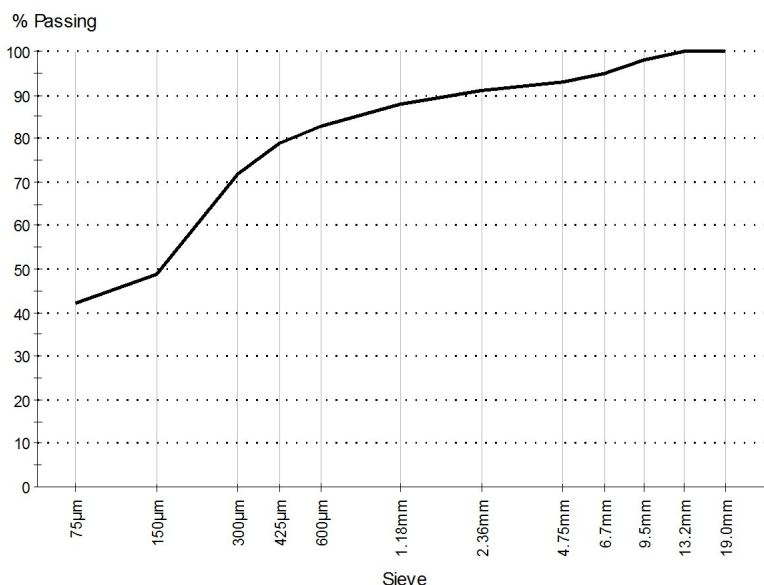
Sample Location
Field Sample ID 1
Date Sampled
Source Onsite
Material Clay
Specification AS Grading
Sampling Method
Sample ID S23DS-00028

Other Test Results

| Description | Method | Result | Limits |
|----------------------|---------------|------------|--------|
| Moisture Content (%) | AS 1289.2.1.1 | 14.6 | |
| Sample History | AS 1289.1.1 | Oven-dried | |
| Preparation | AS 1289.1.1 | Dry Sieved | |
| Linear Shrinkage (%) | AS 1289.3.4.1 | 7.5 | |
| Mould Length (mm) | | 250 | |
| Crumbling | | No | |

Particle Size Distribution

AS 1289.3.6.1



Drying By: Oven
Date Tested: 16/01/2023

Note: Sample Washed

| Sieve Size | % Passing | Limits |
|------------|-----------|--------|
| 19.0mm | 100 | |
| 13.2mm | 100 | |
| 9.5mm | 98 | |
| 6.7mm | 95 | |
| 4.75mm | 93 | |
| 2.36mm | 91 | |
| 1.18mm | 88 | |
| 600µm | 83 | |
| 425µm | 79 | |
| 300µm | 72 | |
| 150µm | 49 | |
| 75µm | 42 | |

Comments

N/A



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:S23DS-00028/1


Issue No: 1

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 23/01/2023

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Other Test Results

| Description | Method | Result | Limits |
|----------------------|---------------|------------|--------|
| Curling | | Yes | |
| Cracking | | No | |
| Liquid Limit (%) | AS 1289.3.1.2 | 30 | |
| Plastic Limit (%) | AS 1289.3.2.1 | 12 | |
| Plasticity Index (%) | AS 1289.3.3.1 | 18 | |
| Date Tested | | 17/01/2023 | |

Comments

N/A



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:S23DS-00115/1

Issue No: 1

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
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. Longfield
 (Senior Technician)
 Date of Issue: 3/02/2023
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Sample Details

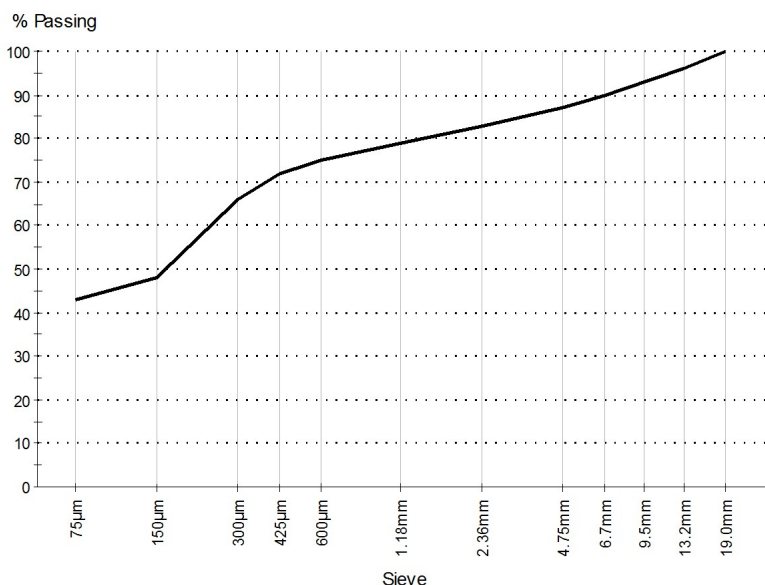
Sample Location E: 356475, N: 5781188, RL: 43.12, Lot: 4211, Layer: 1
Field Sample ID 1
Date Sampled 10/01/2023
Source Onsite
Material Silty Clay
Specification AS Grading
Sampling Method AS1289.1.2.1 Clause 6.4 (b)
Sample ID S23DS-00115

Other Test Results

| Description | Method | Result | Limits |
|----------------------|---------------|------------|--------|
| Moisture Content (%) | AS 1289.2.1.1 | 14.9 | |
| Sample History | AS 1289.1.1 | Oven-dried | |
| Preparation | AS 1289.1.1 | Dry Sieved | |
| Linear Shrinkage (%) | AS 1289.3.4.1 | 7.5 | |
| Mould Length (mm) | | 250 | |
| Crumbling | | No | |

Particle Size Distribution

AS 1289.3.6.1



Drying By: Oven
Date Tested: 16/01/2023

Note: Sample Washed

| Sieve Size | % Passing | Limits |
|------------|-----------|--------|
| 19.0mm | 100 | |
| 13.2mm | 96 | |
| 9.5mm | 93 | |
| 6.7mm | 90 | |
| 4.75mm | 87 | |
| 2.36mm | 83 | |
| 1.18mm | 79 | |
| 600µm | 75 | |
| 425µm | 72 | |
| 300µm | 66 | |
| 150µm | 48 | |
| 75µm | 43 | |

Comments

N/A



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:S23DS-00115/1

Issue No: 1

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
 AUBURN VIC 3123
Project: Meridian Estate, Stage 42
Project No.: 3807351.042
Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025
 – Testing

Accreditation Number: 12719 Approved Signatory: M. Longfield
 (Senior Technician)
 Site Number: 12712 Date of Issue: 3/02/2023
 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Other Test Results

| Description | Method | Result | Limits |
|----------------------|---------------|------------|--------|
| Curling | | No | |
| Cracking | | No | |
| Liquid Limit (%) | AS 1289.3.1.2 | 35 | |
| Plastic Limit (%) | AS 1289.3.2.1 | 15 | |
| Plasticity Index (%) | AS 1289.3.3.1 | 20 | |
| Date Tested | | 20/01/2023 | |

Comments

N/A

Appendix D : Controlled Fill Certificate



CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT : Meridian Central Estate Stage 42
Lots 4201 to 4234

Chadwick Geotechnics REF: 3807351.042v1

CLIENT : Greenridge Properties Pty Ltd
PO Box 4136
Dandenong South VIC 3164

DATE: 16 May 2023

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 (7 September 2022 and was completed on 16 March 2023). 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

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

Robert Barden
Project Manager

A handwritten signature in blue ink that reads 'Timothy Chadwick'.

Timothy Chadwick
Project Director

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www.chadwickgeotechnics.com.au

