ABN 31 105 704 078
13 Brock Street, Thomastown
Victoria 3074
(P) +61 3 9464 4617
(F) +61 3 9464 4618

LEVEL 1 INSPECTION & TESTING
MERRIFIELD LIVING STAGES 35, 36 & 39

Prepared for Ascotown Pastoral Company Pty Ltd c/- Verve Projects Pty Ltd

Report Reference: GS4472.1 AA

Date: 8 May 2018

ABN 31 105 704 078

13 Brock Street, Thomastown

Victoria 3074

(P) +61 3 9464 4617

(F) +61 3 9464 4618

PROJECT DETAILS

Project Reference	GS4472.1	Rev	AA
Project Title	Merrifield Living Stages 35, 36 & 39		
Project Location	Donnybrook	State	VIC
Date	8 May 2018		

CLIENT DETAILS

Prepared For (Client)	Ascotown Pastoral Company Pty Ltd		
Project Facilitator	Verve Projects Pty Ltd		
Client Address	441 St Kilda Road	Suburb	Melbourne

DISTRIBUTION

Original Held By	Ground Science Pty Ltd
One (1) Electronic Copy	Ascotown Pastoral Company Pty Ltd
One (1) Electronic Copy	Verve Projects Pty Ltd

This document summarises the Level 1 Inspection and Testing performed by Ground Science (nominated GITA) for the aforementioned project and is detailed for the sole use of the intended recipient. Should you have any questions related to this report please do not hesitate to contact the undersigned.

AUTHOR:

Ennis Soldin
Graduate Geotechnical Engineer

REVIEWED:

Gee Singh
Senior Geotechnical Engineer

Table of Contents

FIGURES

APPENDICES

1. INTRODUCTION

This report presents the results of the inspection activities, compaction control and laboratory testing services performed by Ground Science Pty Ltd for the project identified as Merrifield Living, Stages 35, 36 & 39, located in Donnybrook, Victoria (the site).

2. PROJECT UNDERSTANDING

It is understood that the project involves the construction of a residential development including building allotment pads, internal access roads, reserves and associated service assets. Ground Science was engaged to provide Level 1 Inspection and Testing services for the construction of fill platforms to support the residential allotments and access pavements. Authorisation to proceed was provided by Ascotown Pastoral Pty Ltd (the 'Client'). Verve Projects Pty Ltd (project facilitators) prepared the civil drawings for the project.

Level 1 Inspection & Testing, as defined in AS3798 (2007) 'Guidelines on Earthworks for Commercial and Residential Developments' provides for full time inspection of the construction of controlled fill and compaction testing in accordance with AS1289 'Methods of Testing Soils for Engineering Purposes' and AS1726 (1993) 'Geotechnical Site Investigations'.

Ground Science performed the role of the project Geotechnical Inspection & Testing Authority (GITA) with all Level 1 Inspection and Testing services described in this report undertaken by an experienced GITA site representative.

3. SCOPE OF WORK

3.1 AREAS OF WORK

Ground Science provided Level 1 Inspection and Testing services for the controlled fill placed on allotments and roads. The areas requiring Level 1 Inspection & Testing are shown on the site plan, Figures 1.1 – 3.5, in Appendix A, which is based on plans prepared by Verve Projects Pty Ltd; Drawing No. EW202 dated 30/8/17. It should be noted that site plans have been delineated by stage and layer number (refer to footnotes on drawings).

This report details the Level 1 earthworks process performed on site which commenced on 1st November 2017 and was completed on 17th April 2018; comprising a total of 85 full days and 5 half days of filling operations.

3.2 PLACEMENT METHODOLOGY

The placement of controlled fill within stage 35, 36 and 39 were carried out in accordance with a project technical specification prepared by Ground Science (ref: G3545.1 AA dated 30 October 2017) which was based on guidelines detailed in AS3798 (2007) 'Guidelines on Earthworks for Commercial and Residential Developments'. The following fill placement guideline was adopted for the works:

- Prior to filing, the area shall be proof rolled using a fully loaded water cart or similar plant with any areas of significant deflections, rutting, soft spots or similar to be further stripped until a suitable base is achieved. The prepared subgrade throughout the bulk earthworks phase must be approved by the GITA;
- Suitable fill material shall be placed in loose horizontal layers not exceeding 250mm in thickness;
- The level of compaction achieved in the field shall be checked by field density testing using a nuclear density gauge and laboratory HILF compaction to ensure the target density has been achieved (refer to Table 1);
- It is recommended that the fill be suitably moisture conditioned to within 85% to 115% of standard optimum moisture content (AS1289 5.1.1, 5.4.1 or 5.7.1);
- The frequency of field density testing shall be undertaken in accordance with Type 1 'Large Scale

Operations' as defined in Table 8.1 of AS3798 (2007) which nominates a frequency of not less than:

- 1 test per layer or 200mm per 2500m^2;
- 1 test per 500m^3 distributed reasonably evenly throughout the full depth and area; or
- 3 tests per site visit; whichever requires the most tests.

4. INSPECTION AND TESTING

4.1 SUBGRADE PREPARATION

Site stripping was conducted with the use of scrapers and excavators prior to the placement of fill material. Stage 35, 36 and 39 involved stripping between 200mm and 300mm across the site. This involved the removal of unsuitable material consisting of loose silts and vegetation until a suitable natural subgrade was achieved. At various stages throughout the project, the prepared subgrade was proof rolled. Generally, no soft spots were observed and the prepared base considered suitable for subsequent fill placement.

The above stripped subgrade was visually assessed using tactile methods described in AS1726 (1993) and approved by the GITA representative throughout the project. Typically, the natural subgrade soils across the site were found to comprise of clay, high plasticity and brown. The moisture at subgrade level was assessed to range from being in a dry to moist condition. On occasion, the subgrade soils were found to be wet due to rainfall events which resulted in ponding water. In such cases, the aforementioned areas were allowed to dry out, or further stripped, with a reassessment by the GITA conducted prior to fill placement.

4.2 CONSTRUCTION MATERIALS

Fill for the project is understood to have been sourced from onsite stockpiles comprised of localised excavations around the site and road boxing excavations. The nominated fill sources were inspected by a Ground Science technician prior to its application.

The material from the onsite stockpiles generally consisted of a silty/gravelly clay, medium to high plasticity, brown and in a dry to damp condition. A stockpile consisting of low reactive soft rock material was also used in the later stages of the earthworks. This material generally consisted of a clayey gravel/gravely clay, low to medium plasticity, light brown and dry. Sections of this stockpile were found to consist of clay, high plasticity, brown and dry which was mixed with the low reactive soft rock material.

Material that was excavated from road boxing and drainage works was also utilised and generally consisted of clay/silty clay, high plasticity, brown and in a dry to damp moisture condition.

All fill materials were hauled and stockpiled adjacent to the fill area. The fill material used in this project was nominated by the on-site contractor. Ground Science performed an assessment of the fill source to identify the following material characteristics:

- Material suitability as an engineering property;
- Cohesiveness;
- Free from building debris and vegetative matter;
- Oversize rock particles.

Visual assessments on the above-mentioned properties were conducted on-site and the fill material used was considered acceptable for use on this project. It should be noted that no chemical analysis was conducted on the fill material. Oversize particles from the soft rock material were found to be measuring up to 400mm which were broken down and crushed during the placement and compaction of the material. Any oversize material that could not be broken down were raised with the contractors and subsequently removed from the fill placement zones.

Material sourced from onsite stockpiles that consisted of gravelly clay material included oversize particles measuring up to 150mm. Particles found to be oversize were moved aside prior to placement of the layer and removed from the fill placement zones. Moisture conditioning was carried out throughout the project, and in particular areas/fill material found to be dry.

4.3 FILL CONSTRUCTION

The contractor had the following plant available on site during the construction period for use in the fill placement;

- Excavators;
- Padfoot Roller;
- Scrapers;
- Tractor;
- Dozers;
- Grader;
- Backhoe;
- Dump Truck and Trailers;
- Moxies;
- Water Carts.

During fill placement, the weather conditions typically ranged from cool/wet conditions to sunny. Showers and rainfall events were encountered throughout the earlier stages of the project, with all areas assessed for any fill damage prior to the placement of subsequent layers of fill.

The filling process was generally consistent throughout the project and involved the approved fill sources being transported onto and adjacent to the placement zones. A water truck was used to moisture condition any dry fill material that was placed. The material was spread into thin loose layers, which were moisture conditioned and compacted. The thin layer were placed to form a composite 250mm to 300mm layers, followed by field density testing. Each layer was compacted with the use of a padfoot roller, applying a minimum of 6-8 passes, performed per layer observed.

Within Stage 36, generally up to 7 layers were placed and compacted within the deepest areas to achieve the required finished surface levels. Stage 39 also consisted of up to 7 layers placed and compacted in the deepest and western section, with the remainder of the stage consisting of generally up to 6 layers. Up to 5 Layers were placed and compacted within the northern and deepest areas of Stage 35, with the remainder of the stage generally consisting of up to 3 layers.

Throughout the filling process and/or at the completion of the day's production, compaction testing was performed to assess the achieved density ratio of each layer. Figures 1.1 – 3.5 provide a guide to the fill placement and is limited to the areas described in this report. Any fill placed as part of newly constructed drainage, sewer works or similar does not form part of this Level 1 report.

4.4 RESULTS OF COMPACTION CONTROL TESTING

Level 1 Inspection and Testing was undertaken by experienced technicians from Ground Science who attended the site for the duration of the construction phase and nominated the location of the in-situ density tests. Testing comprised a total of 433 in-situ density tests using a nuclear moisture-density gauge in accordance with Australian Standard (AS1289 5.8.1) together with 433 "Rapid HILF" Compaction tests (AS1289 5.7.1) which

included associated re-tests of areas that did not achieve the target density ratio of 95% Standard Compaction and 98% Standard compaction within the upper 300mm of the road subgrade.

A summary of the field density tests performed for the project, including failed tests and re-tests, is presented in Appendix B. Field density and compaction control testing report sheets are presented in Appendix C. It should be noted that the tests are a representation of the fill placed and support the visual assessment of the works completed. Tests #9, #41, #42, #61, #170, #171, #180, #195, #208, #222, #271, #278, #357, #416 and #434 failed to meet the required target density ratio. The areas of these tests were subsequently reworked, recompacted and retested with compliant test results achieved. Tests #33, #59, #60, #59, #60, #161, #268, #272, #411, #425 and #430 were found to have achieved target density ratios of 94.5% (0.5% below required target), were re-rolled and visually deemed acceptable prior to the next layer of fill placed. The HILF rapid compaction testing was undertaken in our NATA accredited Thomastown laboratory

4.5 FINAL SURFACE LEVELS

Observations were made by a Ground Science staff member that filling had been complete up to the nominated finished levels as per confirmation provided from the contractor's site foreman that controlled fill operations were complete. The observed final levels are the constructed finished surface levels of the controlled fill.

It should be noted that even though the final fill layer was moisture conditioned and compacted to meet the specification requirements, over time this material may be subjected to adverse weather conditions resulting in either surface softening or drying and cracking. The integrity of the top 200mm – 300mm of the fill will deteriorate with time and should be taken into account by the foundation engineer prior to the construction of a dwelling.

The levels nominated in this report are a guide to amounts of fill placed and do not necessarily reflect accurate survey of the fill levels.

5. COMPLIANCE

Ground Science Staff have undertaken Level 1 Inspection and Testing services of the construction of the controlled fill in the areas designated on Figures 1.1 – 3.5. Ground Science field staff have also observed that the prepared subgrade provided an adequate base for the subsequent placement of controlled fill.

Based on observations made by Ground Science staff and the results of density tests, we consider that the controlled fill placed has been constructed in accordance with the stated intent of the project technical specification (ref: G3545.1 AA dated 30/10/17) , AS3798 (2007) and AS2870 (2011).

6. UNDERSTANDING LEVEL 1 INSPECTION & TESTING

The purpose of performing Level 1 Inspection and Testing is to ensure compliance of the fill with the specification. The engagement of a Geotechnical Inspection Testing Authority (GITA) allows the contractor to perform his role in the construction of the filling operation while the GITA monitors the quality control process of the fill placement. The visual observations of thorough processes and work practices by the contractor allows the GITA to approve the subsequent placement of fill without having to wait for the completion of testing and the extended time it takes to get a test result back. The GITA will however, carry out random spot checks of the filling operations throughout the day's production as confirmation that the placement procedures and the fill moisture content is appropriate. At the end of a day's production the GITA will sign off the completed works as satisfactory. Any failed tests will result in that particular area of operation requiring rectification in the following mornings activities. This may be as simple as extra rolling with compaction plant if moisture conditioning is suitable. Sometimes these areas may be retested if the GITA feels it is necessary.

Level 1 Inspection & Testing requires full time inspection and testing of the fill placement undertaken on a site. Ground Science (project GITA), are notified daily (or at the completion of each days work) by the project foreman where subsequent days of fill placement under Level 1 is to occur. On projects that rely upon the importation of a

fill source, there can be delays in the receipt of sufficient materials to warrant fill placement works which may result in periods of time where a GITA representative is not required on site. It is the contractors responsibility to notify the GITA when works proceed and their attendance on site is required again. A GITA relies upon the integrity of the contractor to advise when site attendance is required and makes all reasonable visual attempts to assess if the works are the same as the previous days attendance.

While the code AS3798 2007 is a guideline on the minimum requirements of filling on commercial and residential developments, some projects require a more detailed project specification to deal with site specific issues. While moisture conditioning of fill sources aids in the ease with which compaction is achieved, it is not necessarily a physical characteristic that determines if the placed fill is acceptable. In some situations the moisture requirement is an extremely important function of the final constructed product. In these situations a specific project specification should apply to the project as detailed by the designing geotechnical engineer. These are typical of clay liners for wet lands, dams, landfill liners and caps and an array of other engineering situations. Creating a consolidated platform of which is similar to equivalent surrounding natural conditions is the primary aim of level one processes, preventing the occurrence of differential ground movements to footing structures.

For & on behalf of
Ground Science Pty Ltd

AUTHOR:

Ennis Soldin
Graduate Geotechnical Engineer

REVIEWED:

Gee Singh
Senior Geotechnical Engineer

7. LIMITATIONS

This type of investigation (as per our commission) is not designed or capable of locating all soil conditions, (which can vary even over short distances). The advice given in this report is based on the assumption that the test results are representative of the overall soil conditions. However, it should be noted that actual conditions in some parts of the Site might differ from those found. If further sampling reveals soil conditions significantly different from those shown in our findings, Ground Science must be consulted. Maintenance and upkeep of finished fill placement must be regularly monitored as exposure to extended weather periods/other elements may cause surface drying which may lead to cracking. Conversely, excessive exposure to moisture may cause heaving/softening in the soils.

It is recognised that the passage of time affects the information and assessment provided in this document. Ground Science's assessment is based on information that existed at the time of the preparation of this document. It is understood that the services provided allowed Ground Science to form no more than an opinion of the actual site conditions observed during sampling and observations of the site visit and cannot be used to assess the affects of any subsequent changes in the quality of the site, or its surroundings, or any laws or regulations.

The scope and the period of Ground Science services are described in the proposal and are subject to restrictions and limitations. Ground Science did not perform a complete assessment of all possible conditions or circumstances that may exist at the Site. If a service is not expressly indicated, do not assume it has been provided. If a matter is not addressed, do not assume that any determination has been made by Ground Science in regards to it.

Where data has been supplied by the client or a third party, it is assumed that the information is correct unless otherwise stated. No responsibility is accepted by Ground Science for incomplete or inaccurate data supplied by others.

Any drawings or figures presented in this report should be considered only as pictorial evidence of our work. Therefore, unless otherwise stated, any dimensions should not be used for accurate calculations or dimensioning.

8. REFERENCES

- AS3798 (2007) Guidelines on Earthworks for Residential and Commercial Developments.
- AS1289 Methods of Testing Soils for Engineering Purposes.
- AS1726 (1993): Geotechnical Site Investigations

APPENDIX A

Site Plans

Stage 35

Figure 1.1: Layer 1

Figure 1.2: Layer 2

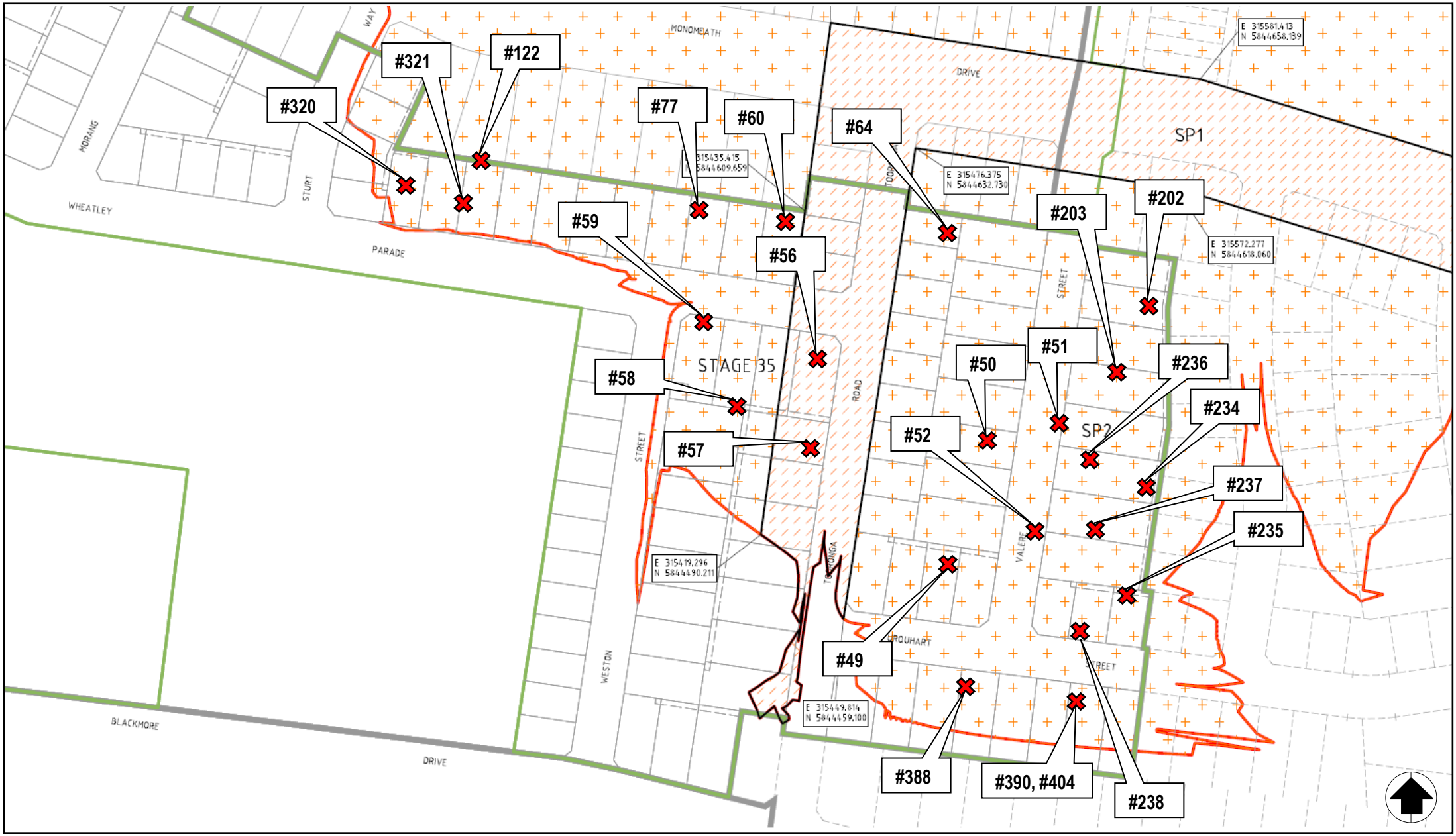
Figure 1.3: Layer 3

Figure 1.4: Layer 4

Figure 1.5: Layer 5

Figure 1.6: Layer 6

Figure 1.7: Layer 7



Rev		Drawn	Date	Checked	Scale
0	Figure 1.1: Stage 35 - Layer 1	ES	30.04.18	GS	NTS

Legend

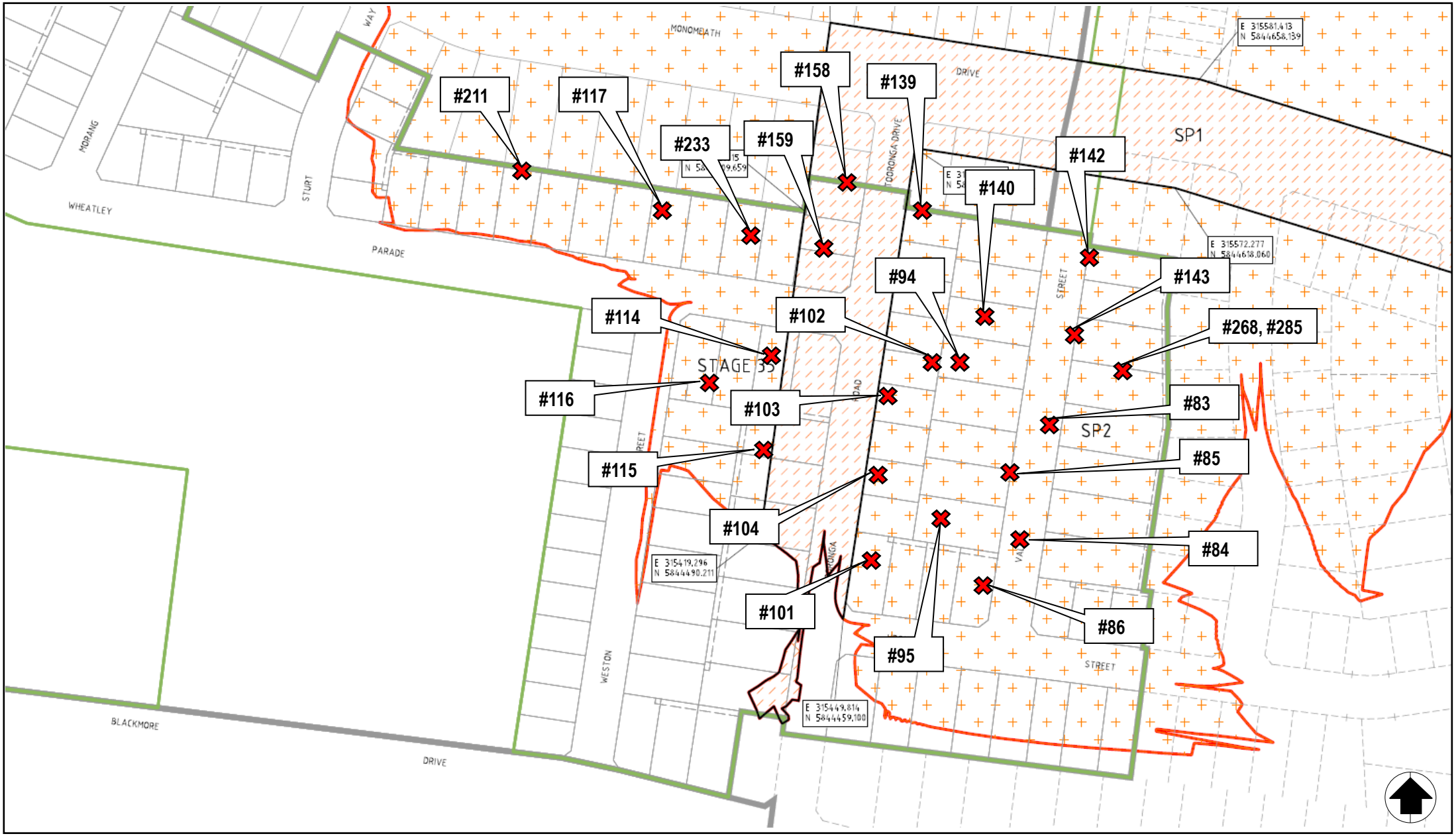
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 35
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 1.2: Stage 35 - Layer 2	ES	30.04.18	GS	NTS

Legend

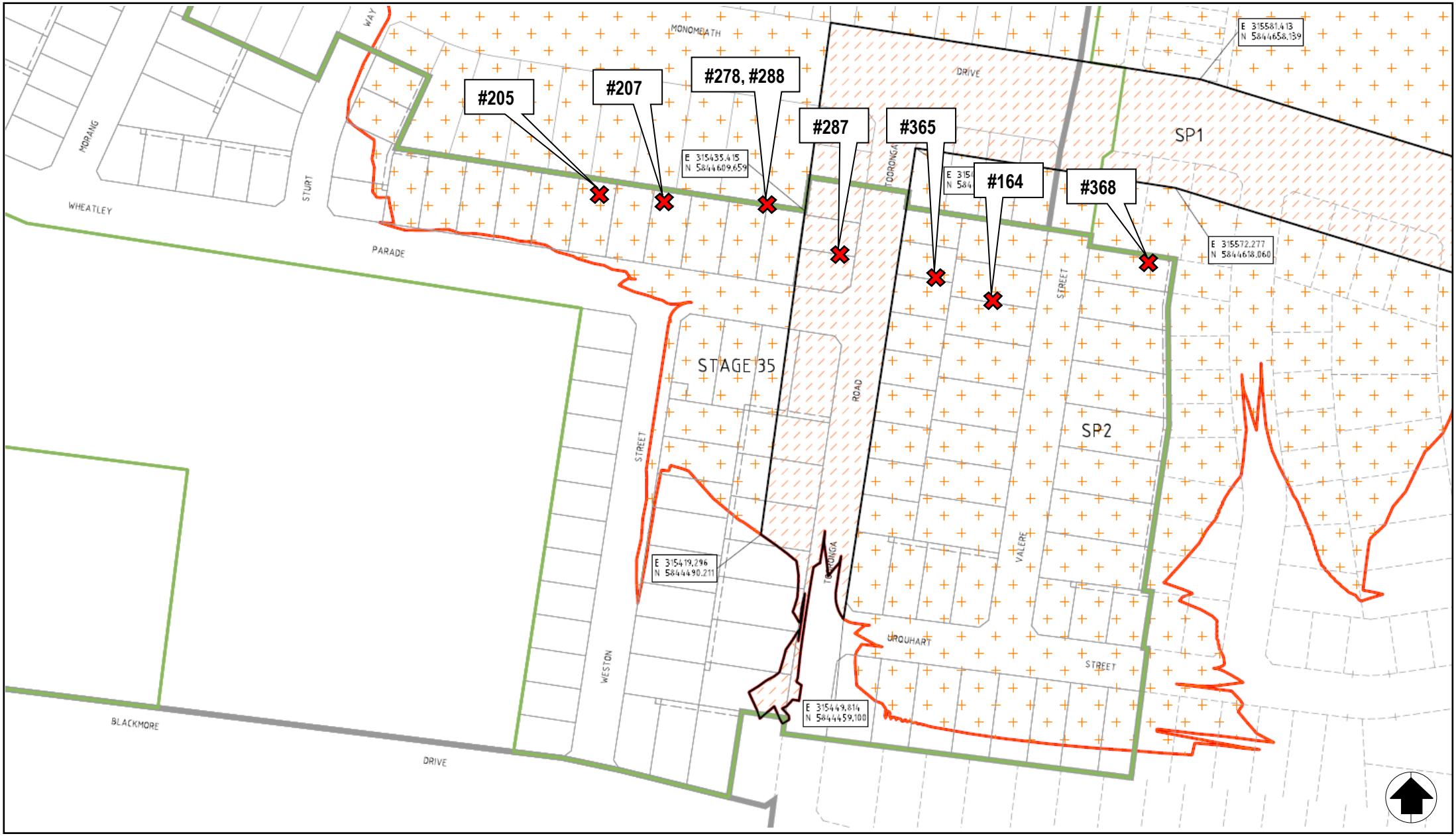
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 35
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 1.3: Stage 35 - Layer 3	ES	30.04.18	GS	NTS

Legend

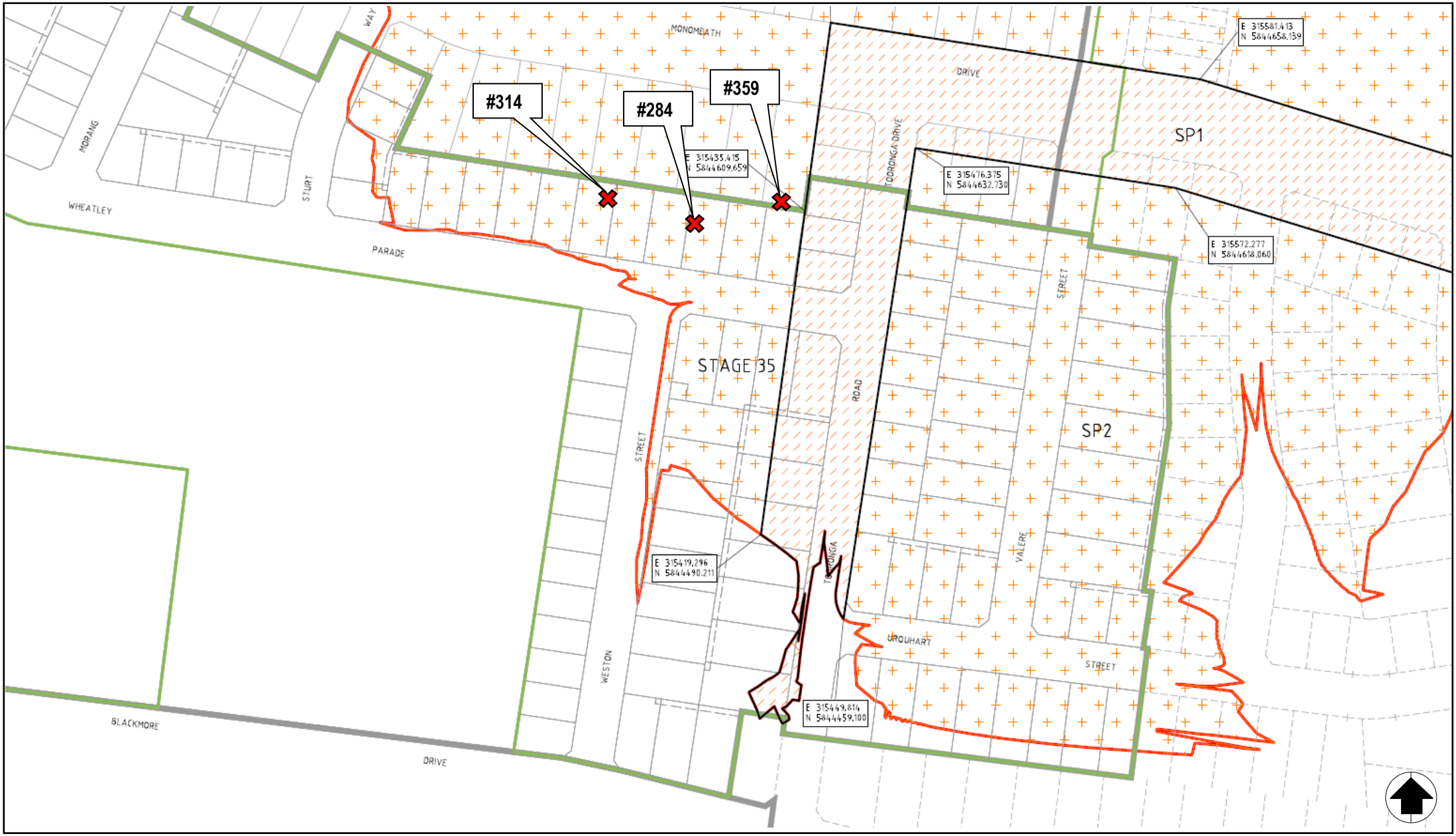
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 35
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 1.4: Stage 35 - Layer 4	ES	30.04.18	GS	NTS

Legend

✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 35
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience

Rev		Drawn	Date	Checked	Scale
0	Figure 1.5: Stage 35 - Layer 5	ES	30.04.18	GS	NTS

Legend

✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 35
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience

Stage 36

Figure 2.1: Layer 1

Figure 2.2: Layer 2

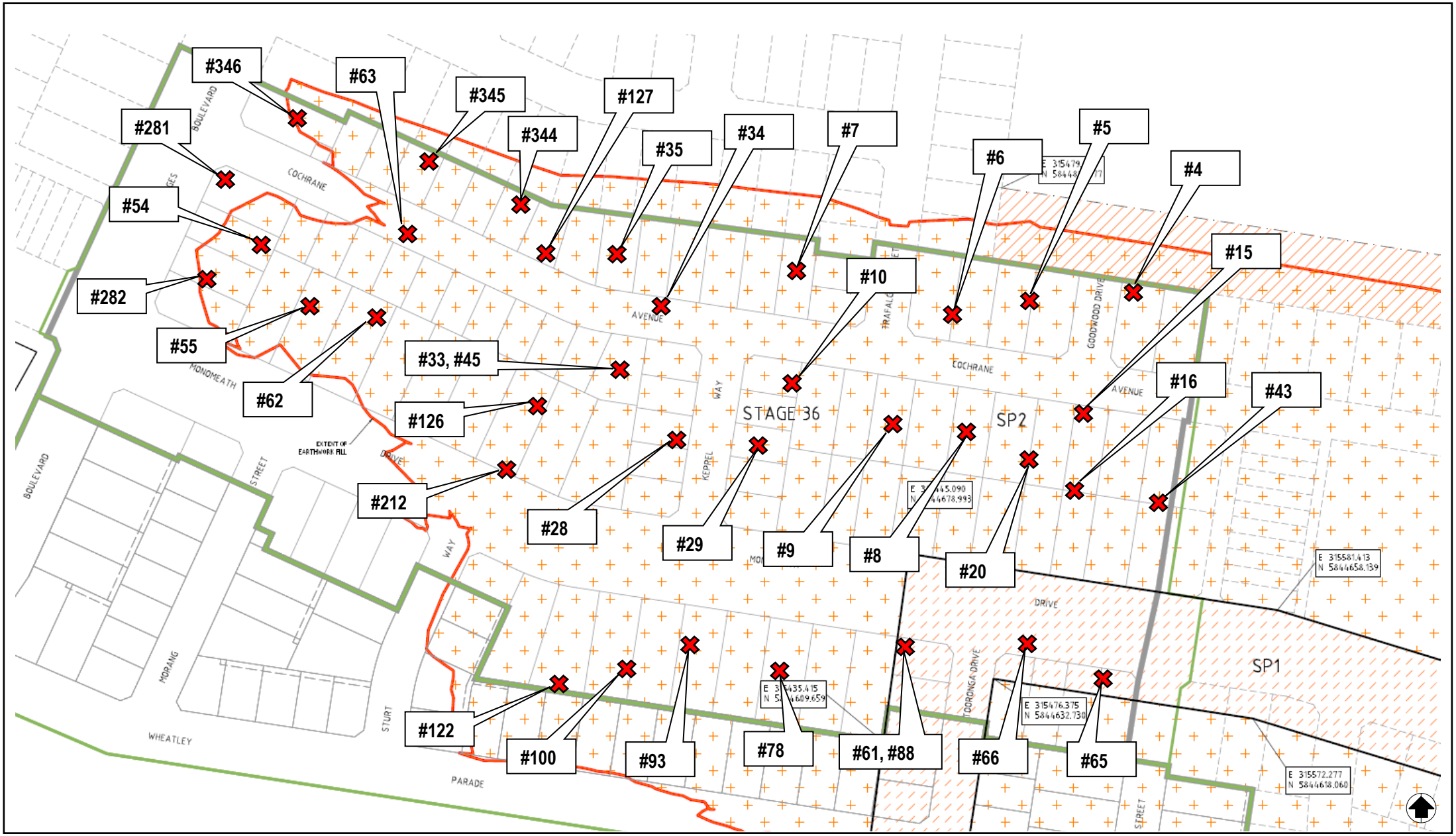
Figure 2.3: Layer 3

Figure 2.4: Layer 4

Figure 2.5: Layer 5

Figure 2.6: Layer 6

Figure 2.7: Layer 7



Rev		Drawn	Date	Checked	Scale
0	Figure 2.1: Stage 36 - Layer 1	ES	30.04.18	GS	NTS

Legend

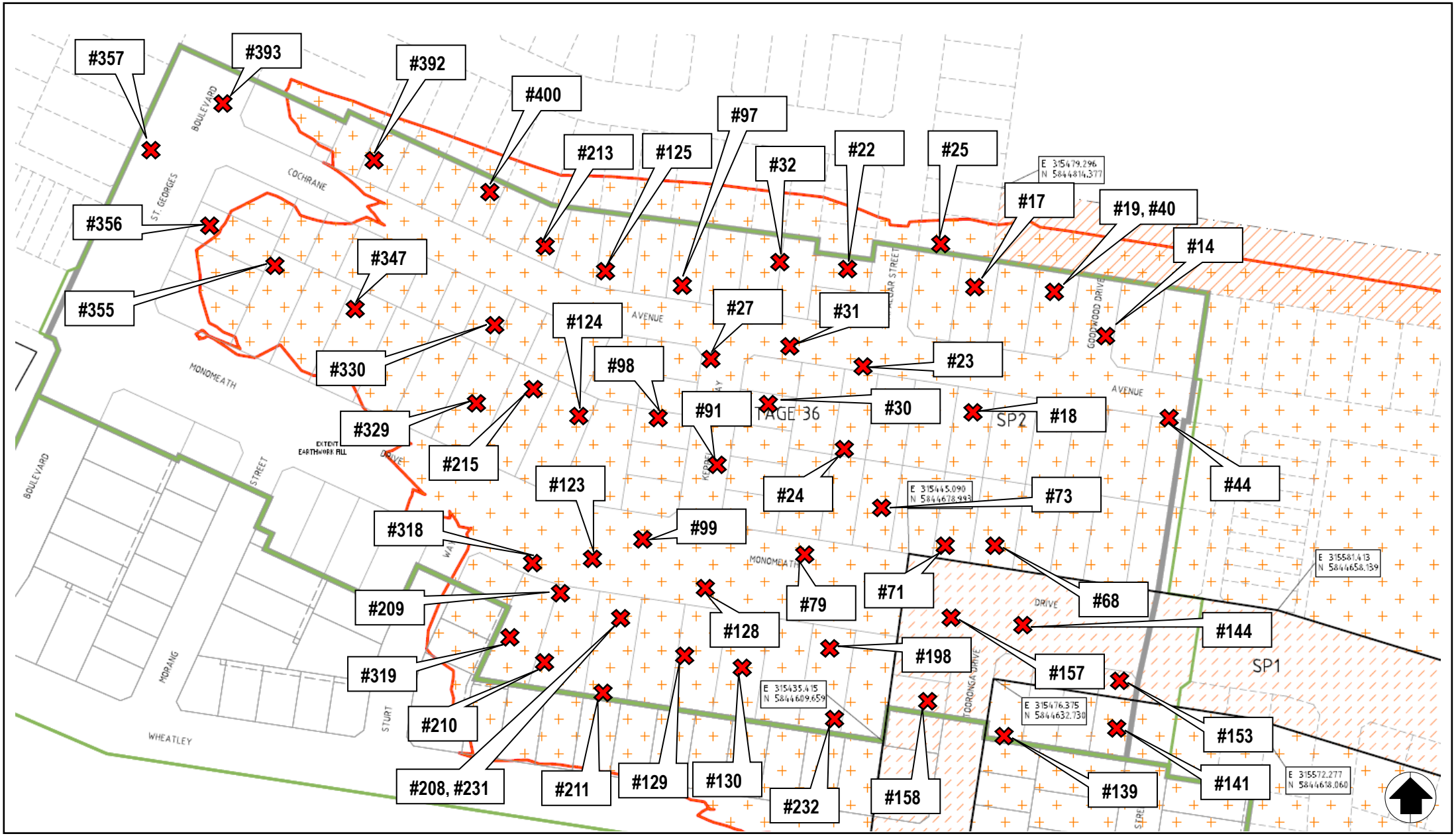
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 36
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 2.2: Stage 36 - Layer 2	ES	30.04.18	GS	NTS

Legend

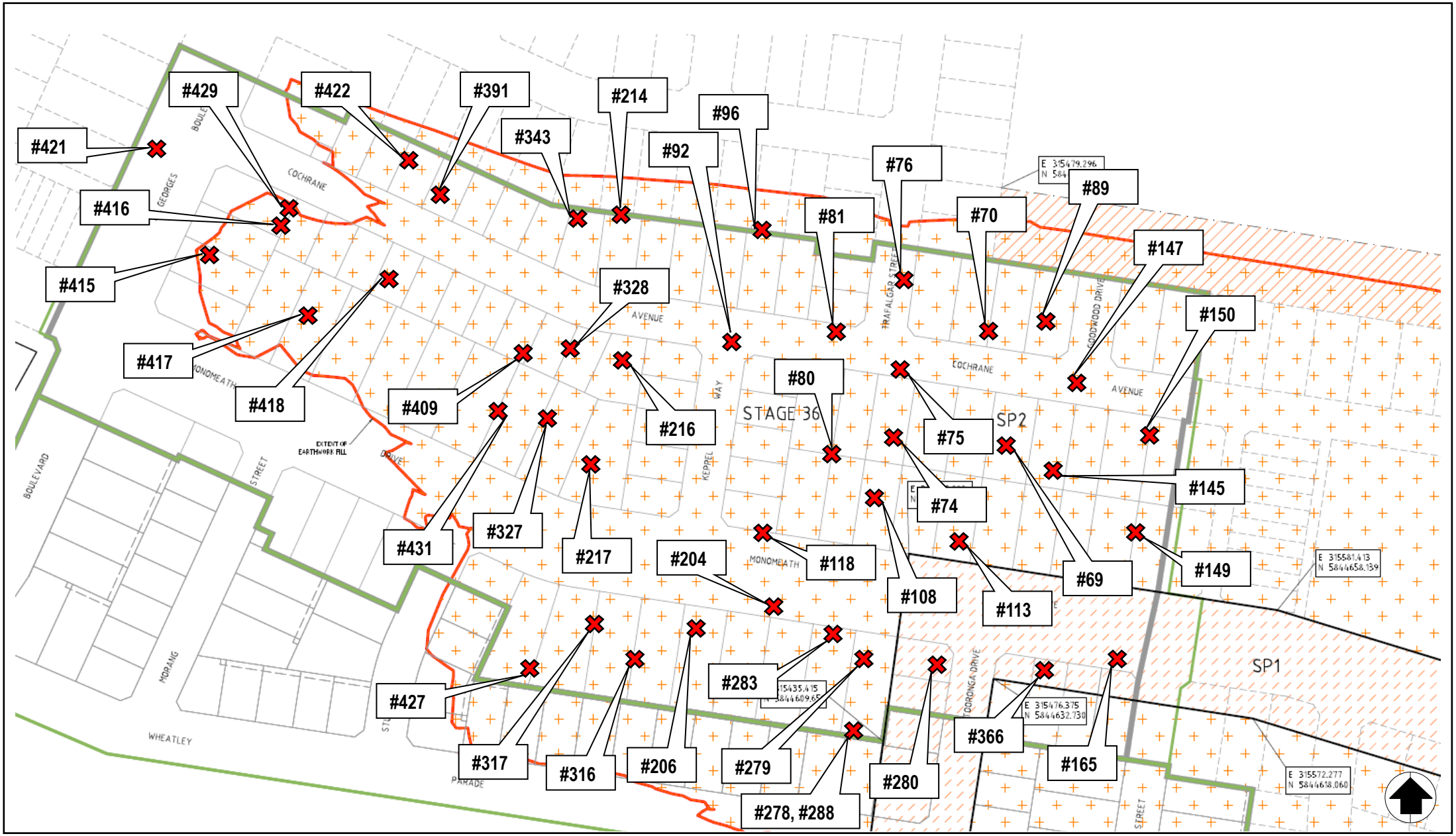
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 36
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 2.3: Stage 36 - Layer 3	ES	30.04.18	GS	NTS

Legend

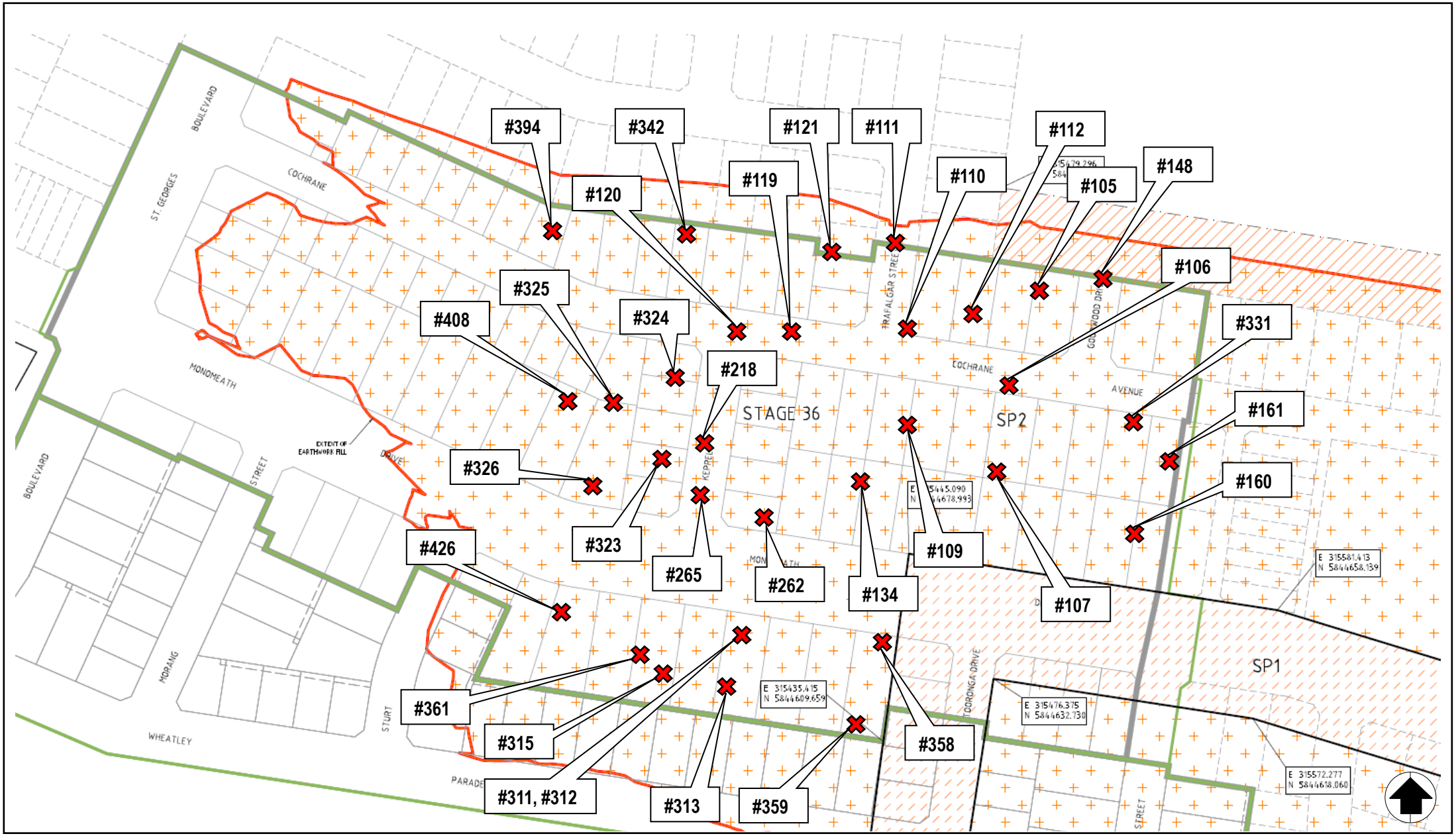
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 36
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 2.4: Stage 36 - Layer 4	ES	30.04.18	GS	NTS

Legend

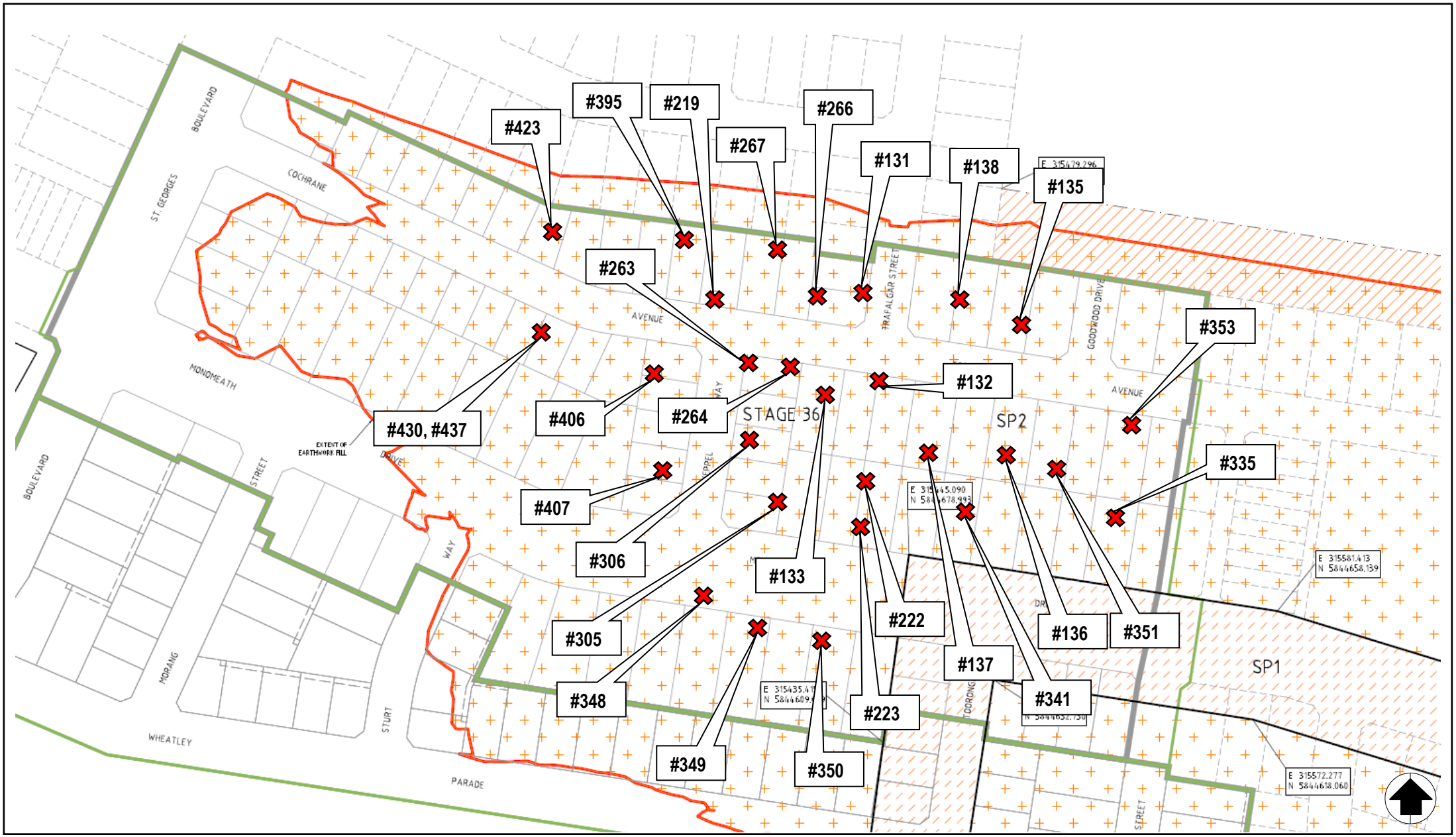
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 36
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 2.5: Stage 36 - Layer 5	ES	30.04.18	GS	NTS

Legend

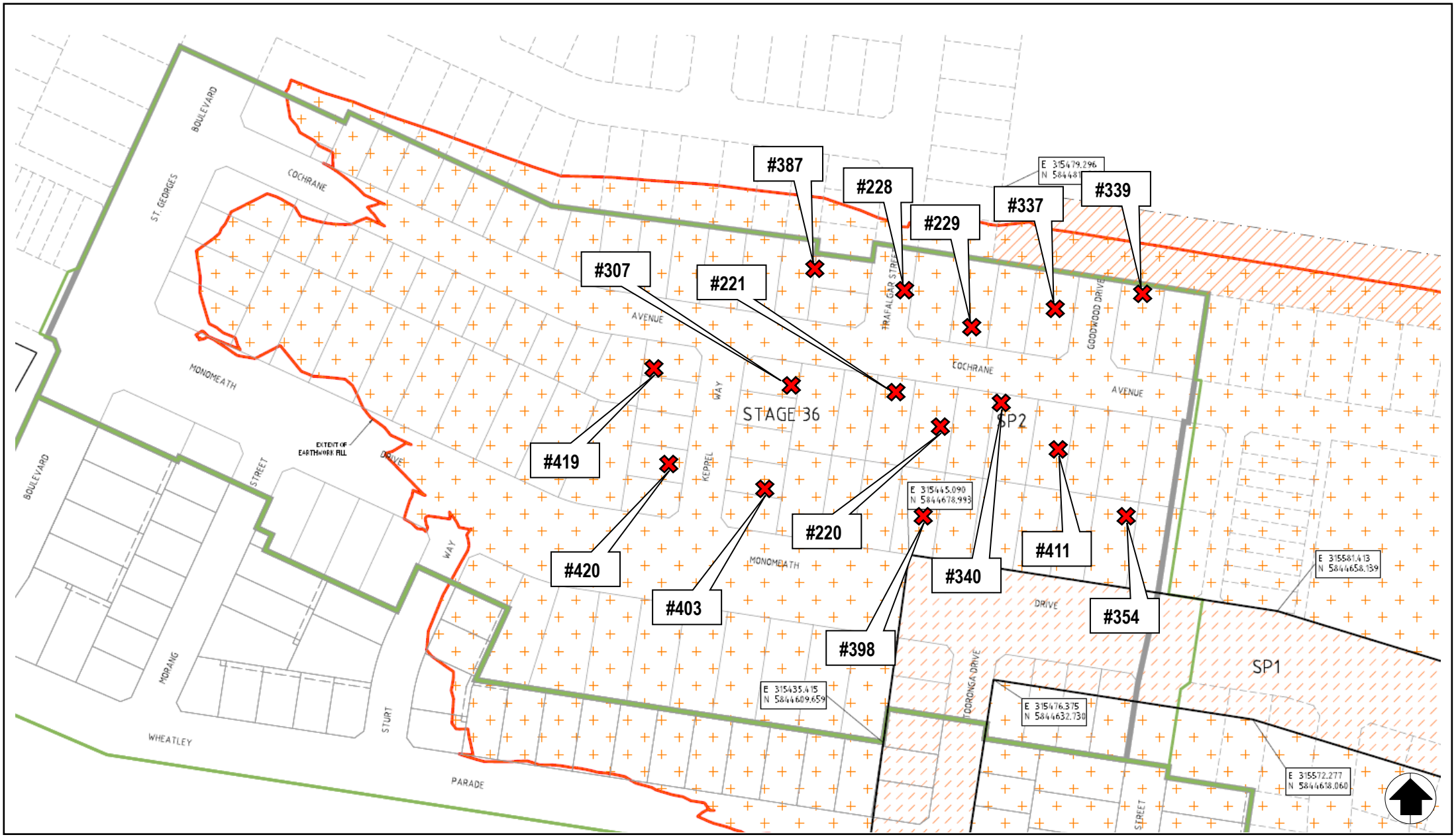
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 36
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 2.6: Stage 36 - Layer 6	ES	30.04.18	GS	NTS

Legend

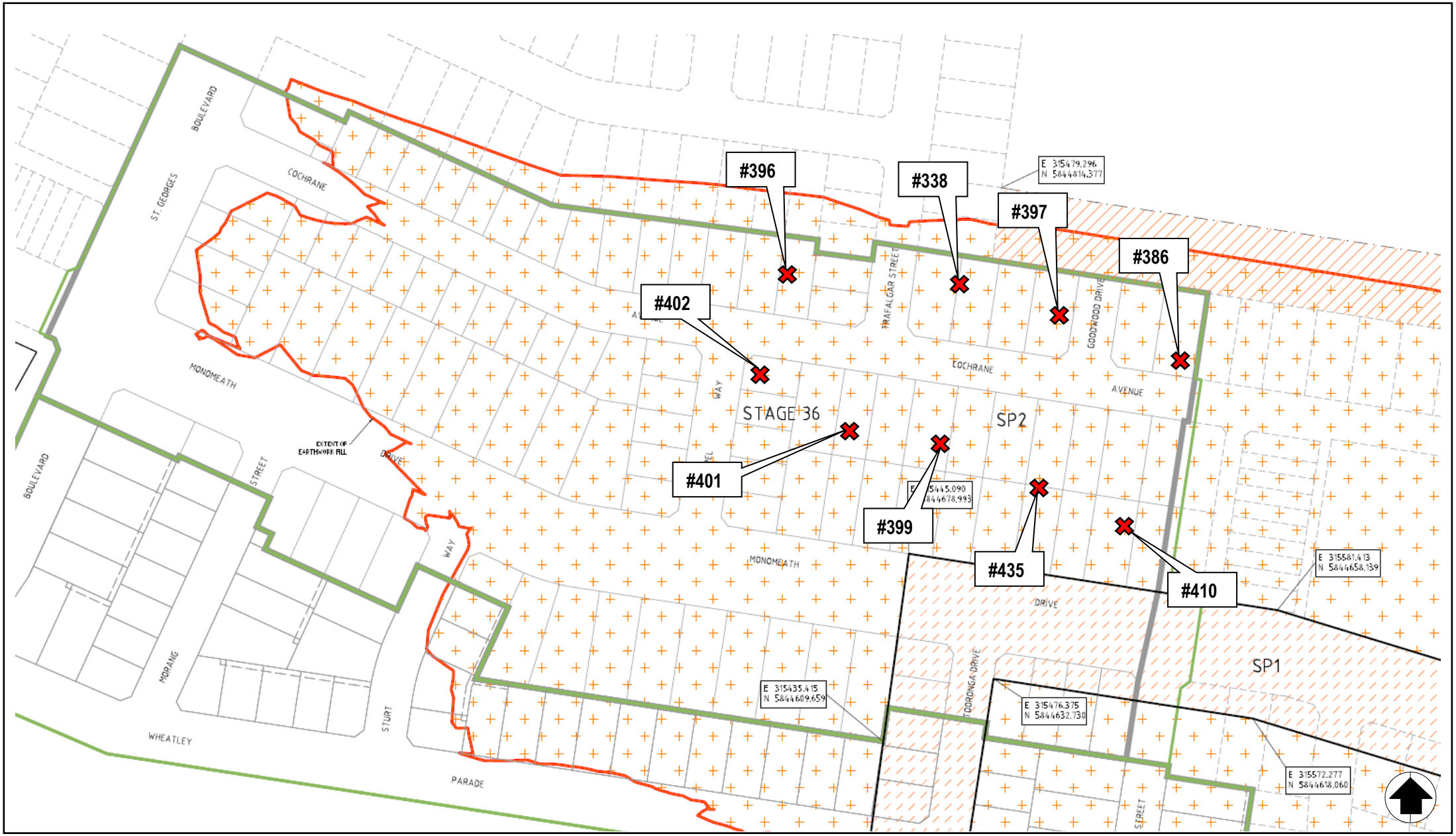
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 36
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 2.7: Stage 36 - Layer 7	ES	30.04.18	GS	NTS

Legend

✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 36
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience

Stage 39

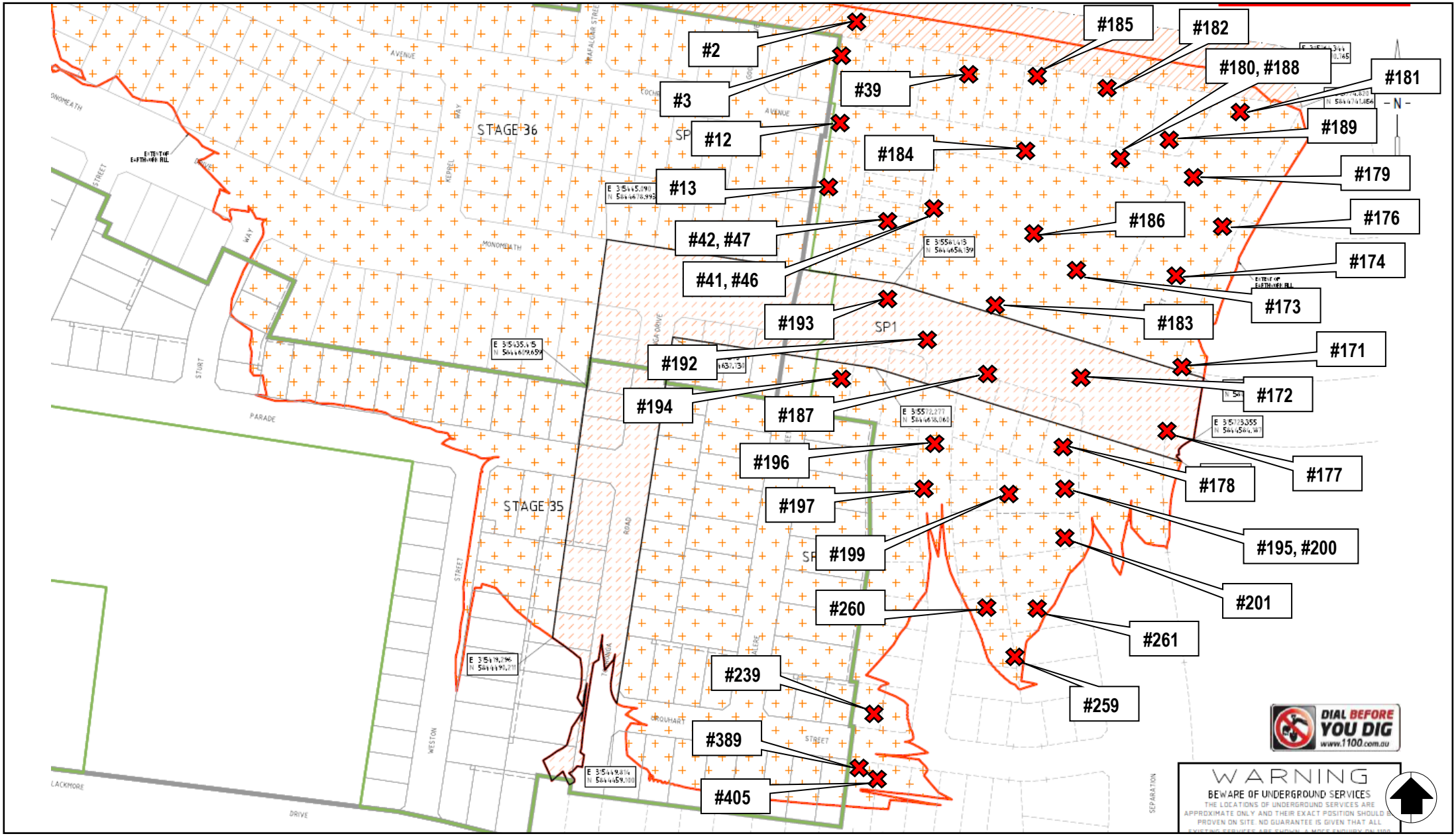
Figure 3.1: Layer 1

Figure 3.2: Layer 2

Figure 3.3: Layer 3

Figure 3.4: Layer 4

Figure 3.5: Layer 5



Rev		Drawn	Date	Checked	Scale
0	Figure 3.1: Stage 39 - Layer 1	ES	30.04.18	GS	NTS

Legend

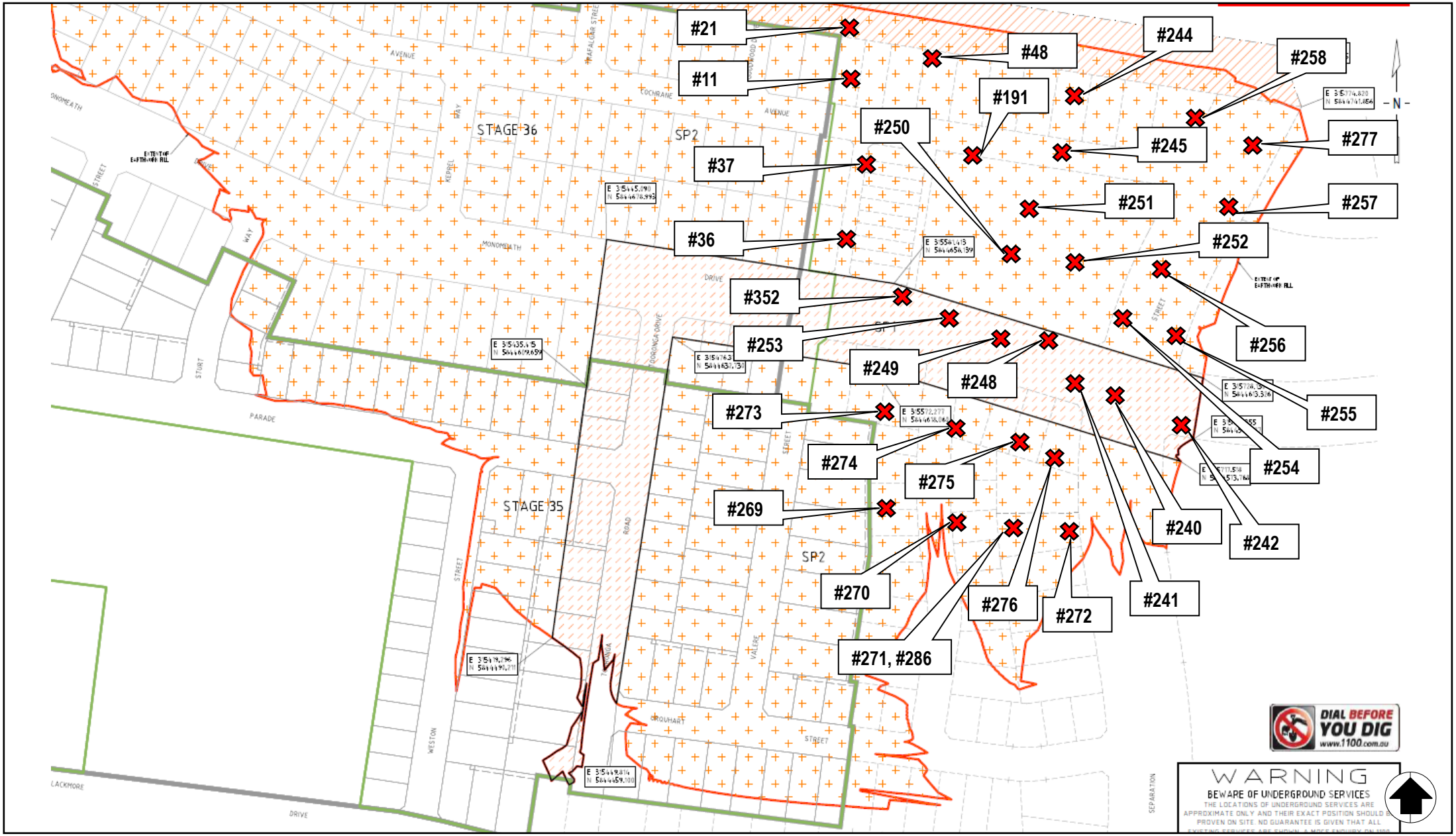
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 39
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 3.2: Stage 39 - Layer 2	ES	30.04.18	GS	NTS

Legend

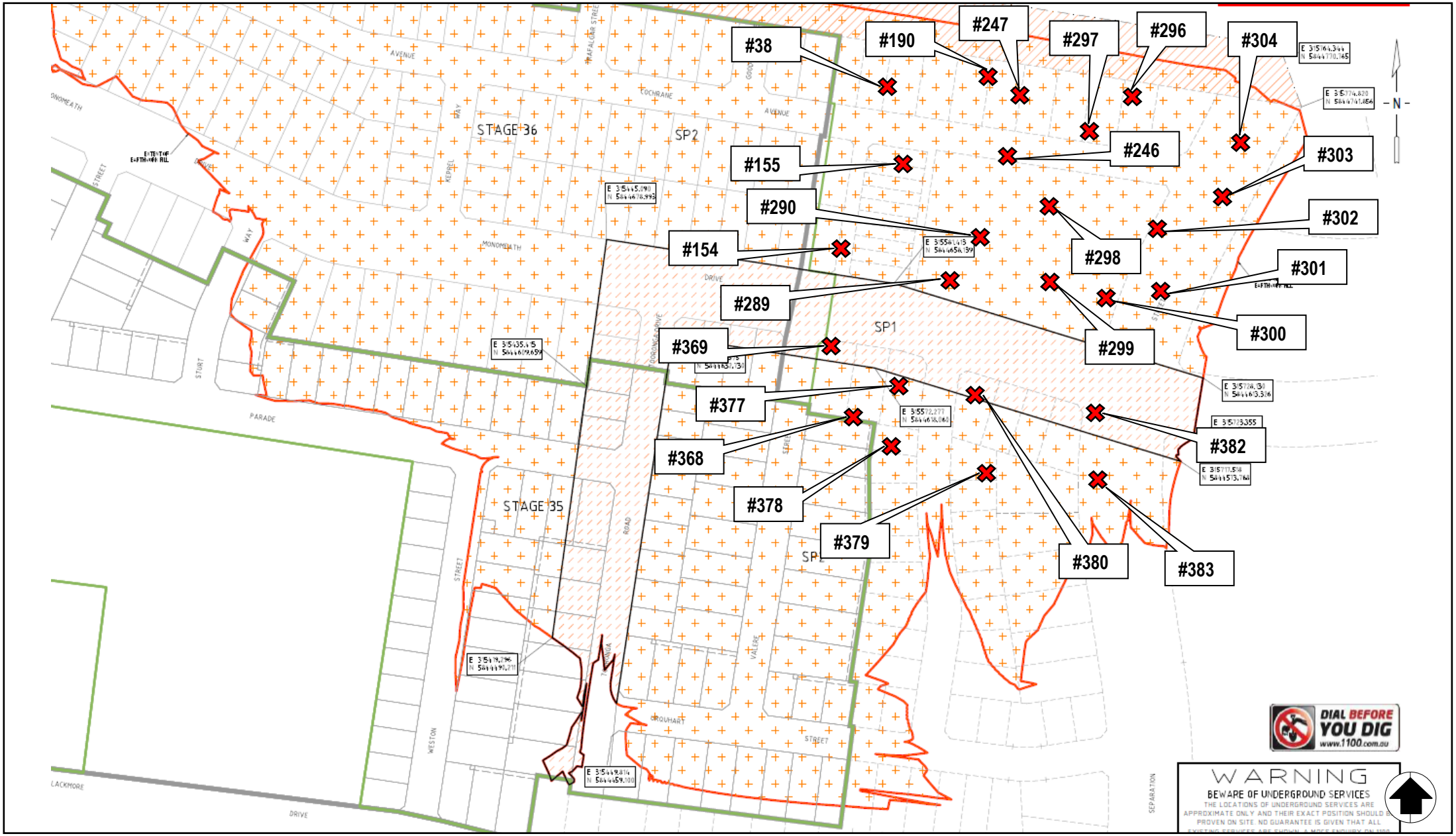
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 39
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 3.3: Stage 39 - Layer 3	ES	30.04.18	GS	NTS

Legend

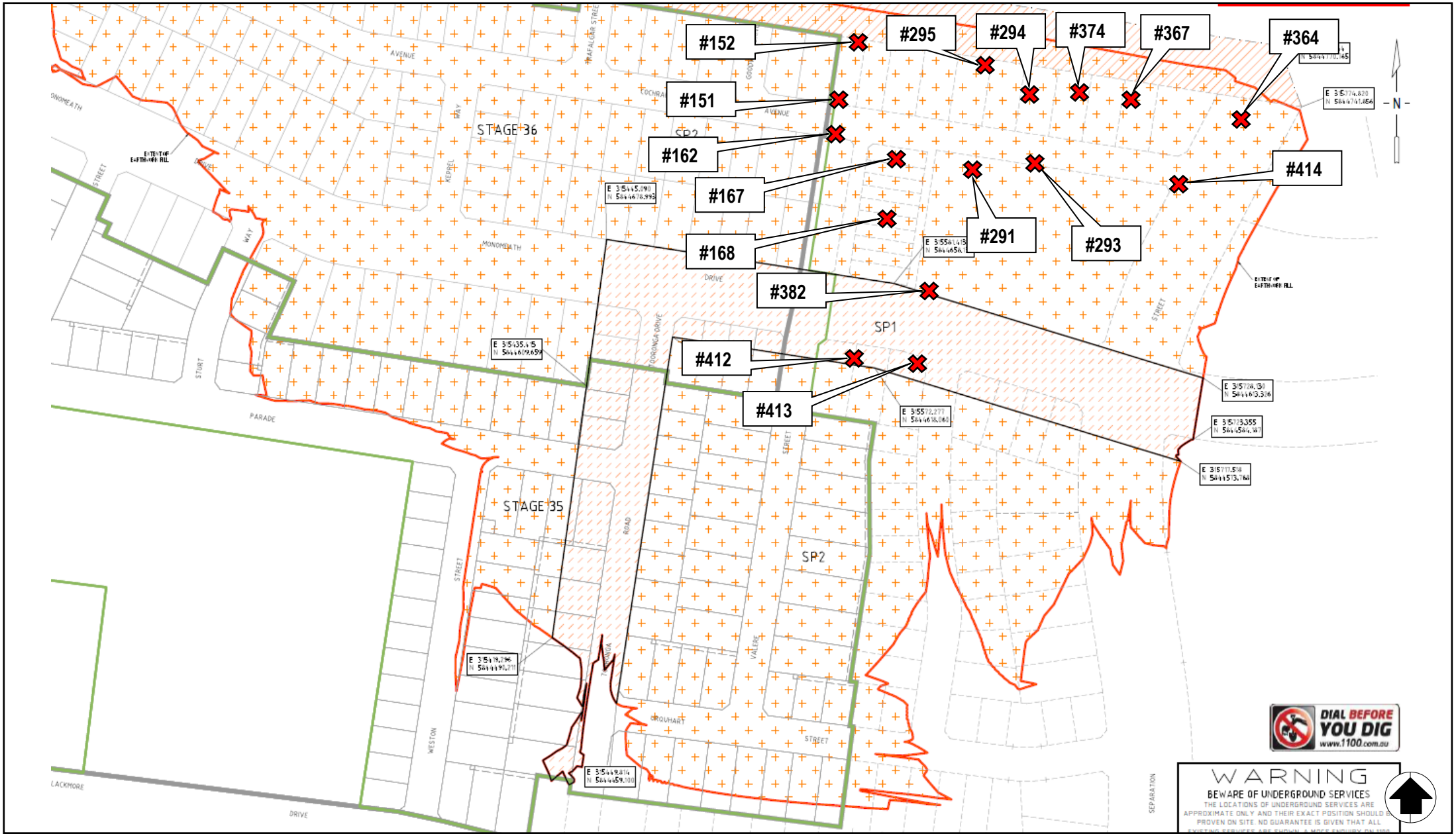
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 39
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 3.4: Stage 39 - Layer 4	ES	30.04.18	GS	NTS

Legend

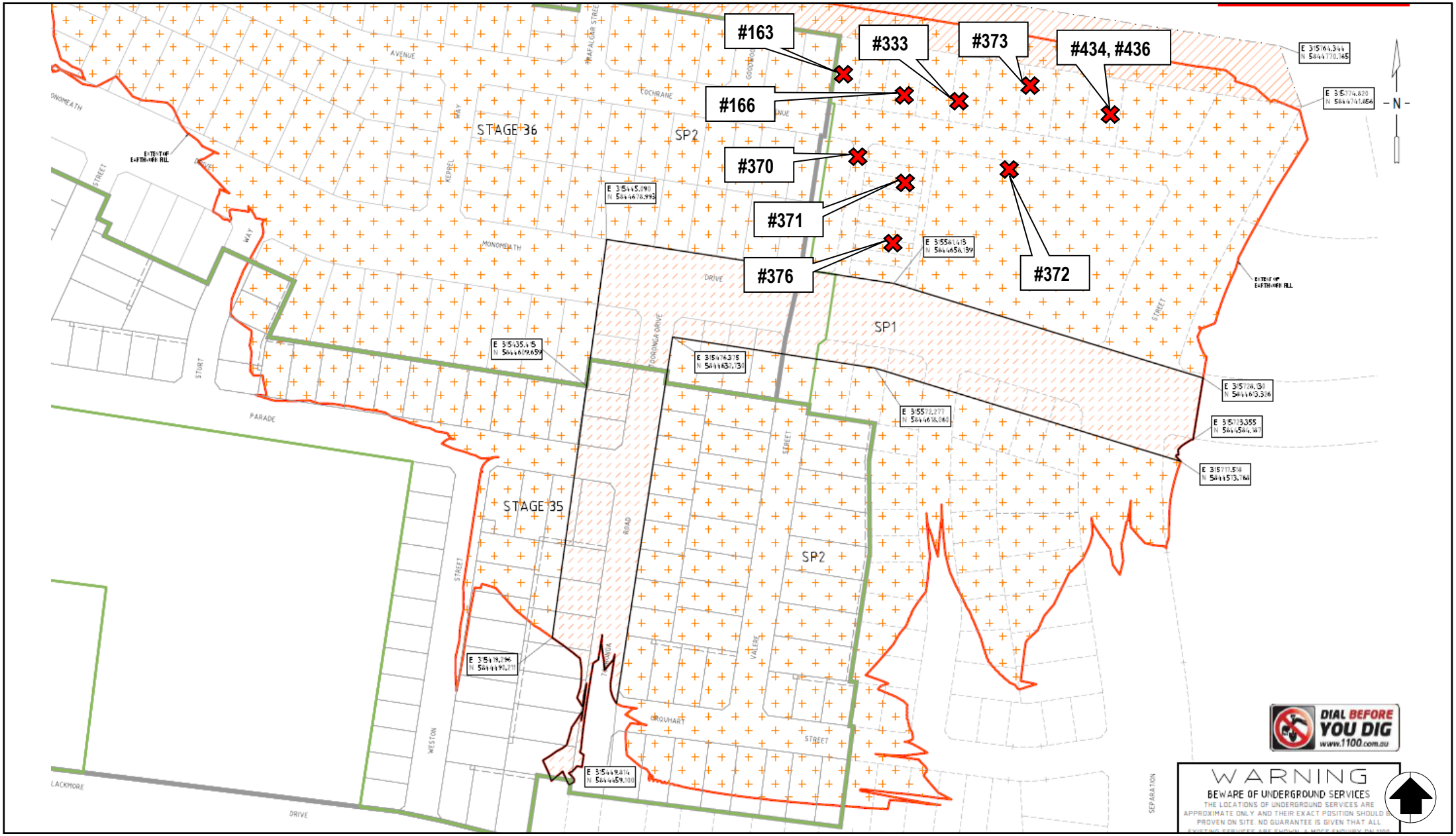
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 39
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 3.5: Stage 39 - Layer 5	ES	30.04.18	GS	NTS

Legend

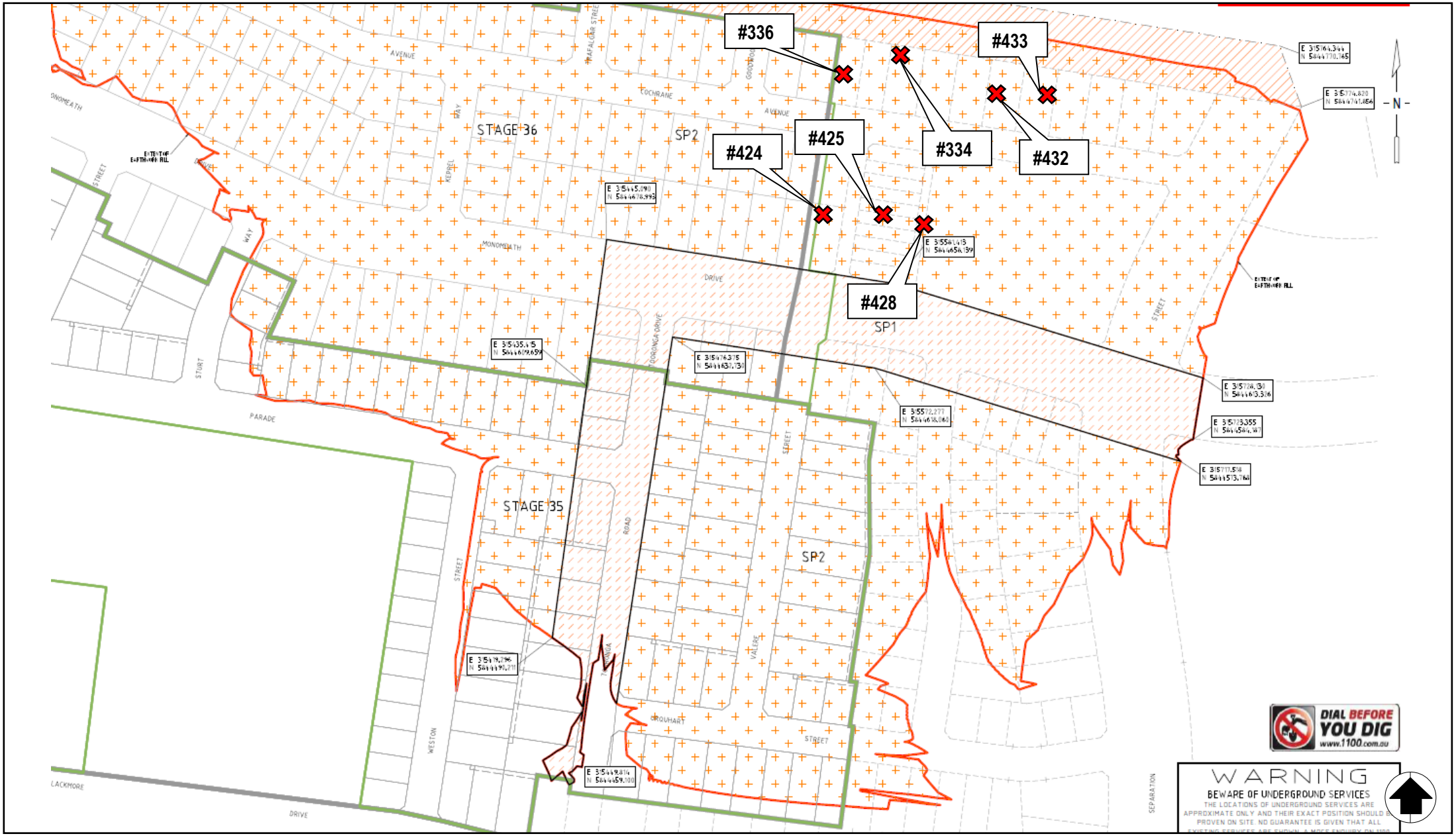
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 39
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 3.6: Stage 39 - Layer 6	ES	30.04.18	GS	NTS

Legend

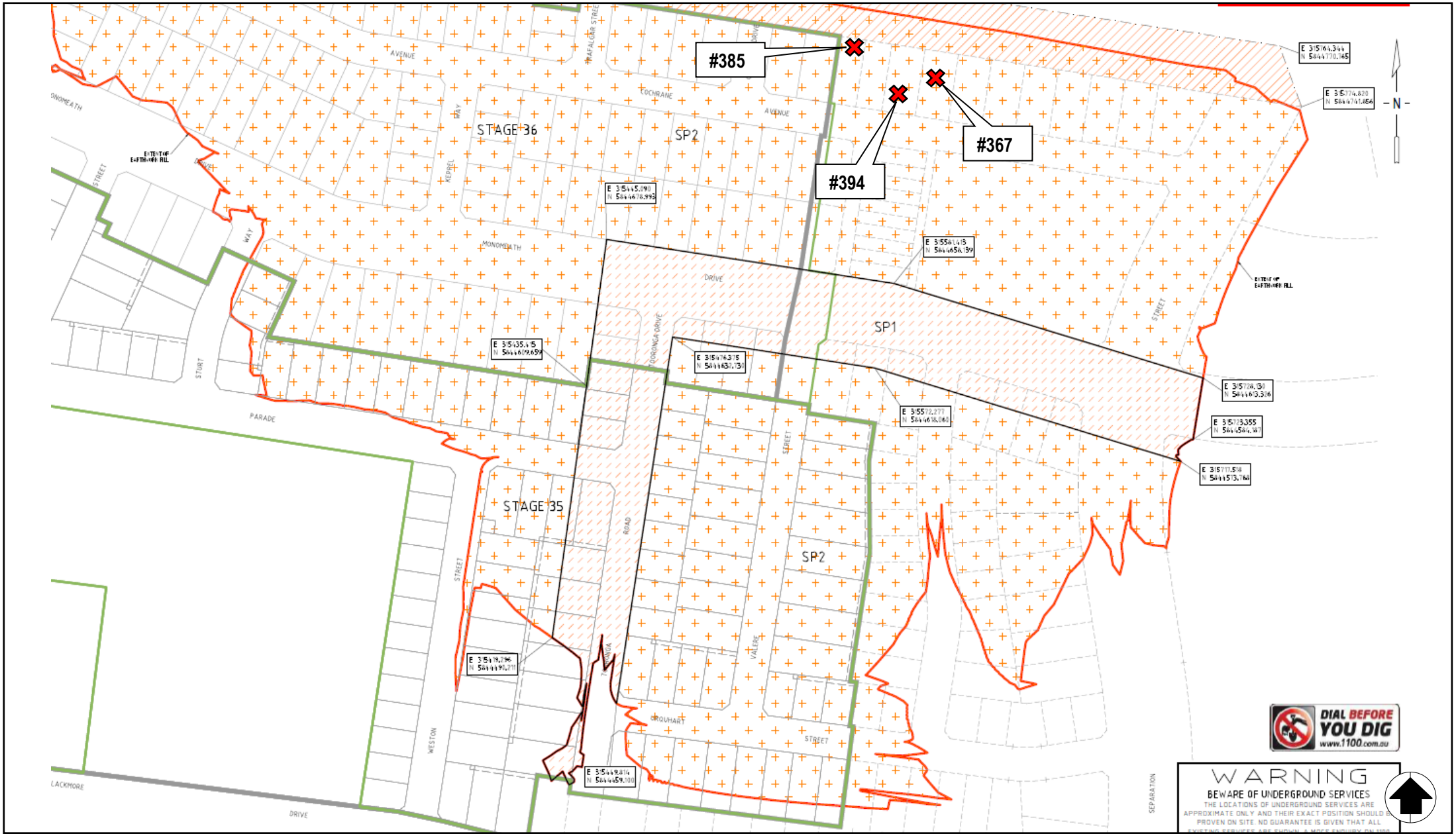
✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 39
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience



Rev		Drawn	Date	Checked	Scale
0	Figure 3.7: Stage 39 - Layer 7	ES	30.04.18	GS	NTS

Legend

✖ Density Test Location (Approx.)

MERRIFIELD LIVING STAGE 39
DONNYBROOK, VICTORIA

Prepared For: Ascotown Pastoral Pty Ltd c/- Verve Projects Pty Ltd

Job No: GS4472.1 AA

GroundScience

APPENDIX B

Summary of Field Density Tests

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	**Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd**	**Job No:**	**GS4472/1**
Project:	**Merrified Living - Stages 35, 36 & 39**	**Tech:**	**BR**
Location:	**Donnybrook**		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
1/11/2017	1	PSD, PI, CBR & Perm Sample						
20/11/2017	2	Easting- 315554 Northing- 5844778	1	95.0	89.0	-2.0	P	
20/11/2017	3	Easting- 315553 Northing- 5844767	1	102.0	94.0	-1.0	P	
20/11/2017	4	Easting- 315524 Northing-5844774	1	100.5	85.0	-3.0	P	
20/11/2017	5	Easting-315485 Northing-5844775	1	101.0	92.0	-1.5	P	
21/11/2017	6	Easting-315458 Northing-5844767	1	103.0	89.0	-2.0	P	
21/11/2017	7	Easting-315404 Northing-5844785	1	103.5	97.0	-0.5	P	
22/11/2017	8	Easting-315462 Northing-5844726	1	98.0	103.0	0.5	P	
22/11/2017	9	Easting-315432 Northing-5844728	1	94.0	91.0	-1.5	F	
22/11/2017	10	Easting-315405 Northing-5844741	1	98.0	95.0	-1.0	P	
22/11/2017	11	Easting-315554 Northing-5844757	2	102.0	90.0	-2.0	P	
22/11/2017	12	Easting-315545 Northing-5844735	1	100.5	88.0	-2.0	P	
22/11/2017	13	Easting-315546 Northing-5844700	1	98.0	95.0	-1.0	P	
23/11/2017	14	Easting-315512 Northing-5844762	2	100.5	94.0	-1.0	P	
23/11/2017	15	Easting-315503 Northing-5844731	1	104.0	95.0	-1.0	P	
23/11/2017	16	Easting-315500 Northing-5844701	1	96.0	84.0	-3.0	P	
23/11/2017	17	Easting-315465 Northing-5844711	2	102.5	97.0	-0.5	P	
23/11/2017	18	Easting-315466 Northing-5844730	2	101.5	98.0	-0.5	P	
23/11/2017	19	Easting-315497 Northing-5844774	2	101.0	91.0	-3.0	P	
23/11/2017	20	Easting-315490 Northing-5844711	1	98.0	90.0	-2.0	P	
23/11/2017	21	Easting-315544 Northing-5844783	2	102.0	88.0	-2.5	P	
24/11/2017	22	Easting-315431 Northing-5844785	2	100.5	100.0	0.0	P	
24/11/2017	23	Easting-315424 Northing-5844249	2	99.5	103.0	0.5	P	
24/11/2017	24	Easting-315415 Northing-5844718	2	97.5	83.0	-3.0	P	
24/11/2017	25	Easting-315455 Northing-5844790	2	102.0	103.0	0.5	P	
24/11/2017	26	Retest of #9	1	97.0	88.0	-2.0	P	
24/11/2017	27	Easting-315367 Northing-5844752	2	97.0	100.0	0.0	P	
24/11/2017	28	Easting-315357 Northing-5844723	1	97.0	103.0	0.5	P	
24/11/2017	29	Easting-315390 Northing-5844714	1.0	97.5	100.0	0.0	P	
24/11/2017	30	Easting-315396 Northing-5844728	2.0	97.0	92.0	-1.5	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd	Job No:	GS4472/1
Project:	Merrified Living - Stages 35, 36 & 39	Tech:	BR
Location:	Donnybrook		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
24/11/2017	31	Easting-315401 Northing-5844758	2	98.0	97.0	-0.5	P	
24/11/2017	32	Easting-315398 Northing-5844786	2	102.0	103.0	0.5	P	
27/11/2017	33	Easting-315333 Northing-5844754	1	94.5	103.0	0.5	P	
27/11/2017	34	Easting-315351 Northing-5844765	1	103.0	102.0	0.5	P	
27/11/2017	35	Easting-315339 Northing-5844790	1	97.5	98.0	-0.5	P	
27/11/2017	36	Easting-31556 Northing-5844680	2	103.0	87.0	-2.5	P	
27/11/2017	37	Easting-315565 Northing-5844713	2	108.0	87.0	-3.0	P	
27/11/2017	38	Easitng-315575 Northing-5844747	3	98.0	98.0	-0.5	P	
27/11/2017	39	Easting-315614 Northing-5844756	1	101.5	102.0	0.5	P	
28/11/2017	40	Retest of #19	2	104.5	95.0	-1.0	P	
28/11/2017	41	Easting-315599 Northing-5844693	1	94.0	100.0	0.0	F	
28/11/2017	42	Easting-315576 Northing-5844689	1	93.0	87.0	-3.0	F	
28/11/2017	43	Easting-315535 Northing-5844697	1	98.5	100.0	0.0	P	
28/11/2017	44	Easting-315537 Northing-5844730	2	100.0	98.0	-0.5	P	
29/11/2017	45	Retest of #33	1	100.0	89.0	-2.0	P	
29/11/2017	46	Retest of #41	1	101.0	100.0	0.0	P	
29/11/2017	47	Retest of #42	1	104.5	83.0	-4.0	P	
29/11/2017	48	Easting-315594 Northing-5844761	2	100.0	100.0	0.0	P	
11/12/2017	49	Easting- 315489 Northing-5844480	1	103.0	92.0	-1.5	P	
11/12/2017	50	Easting-315498 Northing-5844526	1	101.0	100.0	0.0	P	
11/12/2017	51	Easting-315535 Northing-5844536	1	100.5	103.0	0.5	P	
11/12/2017	52	Easting-315518 Northing-5844490	1	100.5	95.0	-1.0	P	
11/12/2017	53	Old Well / Easting-315129 Northing-5844608	1	102.0	85.0	-3.5	P	
11/12/2017	54	Easting-315201 Northing-5844790	1	100.5	80.0	-2.5	P	
11/12/2017	55	Easting-315218 Northing-5844778	1	97.5	86.0	-2.0	P	
11/12/2017	56	Easting-315441 Northing-5844548	1	104.0	88.0	-3.0	P	
11/12/2017	57	Easting-315438 Northing-5844518	1	103.5	93.0	-1.5	P	
13/12/2017	58	Easting-315408 Northing-5844527	1	99.0	97.0	-0.5	P	
13/01/2017	59	Easting-315400 Northing-5844564	1	94.5	100.0	0.0	P	
13/12/2017	60	Easting-315425 Northing-5844602	1	94.5	103.0	0.5	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	**Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd**	**Job No:**	**GS4472/1**
Project:	**Merrified Living - Stages 35, 36 & 39**	**Tech:**	**BR**
Location:	**Donnybrook**		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
13/12/2017	61	Easting-315439 Northing-5844647	1	94.0	103.0	0.5	F	
13/12/2017	62	Easting-315244 Northing-5844762	1	95.5	91.0	-1.0	P	
13/12/2017	63	Easting-315255 Northing-5844794	1	97.0	117.0	2.0	P	
13/12/2017	64	Easting-315490 Northing-5844602	1	95.0	100.0	0.0	P	
13/12/2017	65	Easting-315516 Northing-5844627	1	95.0	103.0	0.5	P	
13/12/2017	66	Easting-315488 Northing-5844647	1	100.0	103.0	0.5	P	
13/12/2017	67	Old Well / Easting-315127 Northing-5844605	3	97.0	86.0	-2.5	P	
13/12/2017	68	Easting-315474 Northing-5844677	2	98.5	103.0	0.5	P	
13/12/2017	69	Easting-315477 Northing-5844720	3	100.5	86.0	-2.5	P	
13/12/2017	70	Easting-315467 Northing-5844761	3	101.5	91.0	-1.5	P	
13/12/2017	71	Easting-315450 Northing-5844675	2	99.0	104.0	0.5	P	
13/12/2017	72	Old Well / Easting-315124 Northing-5844606	5	99.5	100.0	0.0	P	
13/12/2017	73	Easting-315437 Northing-5844694	2	100.5	100.0	0.0	P	
13/12/2017	74	Easting-315443 Northing-5844716	3	100.0	104.0	0.5	P	
13/12/2017	75	Easting-315442 Northing-5844741	3	102.0	95.0	-1.0	P	
13/12/2017	76	Easting-315437 Northing-5844783	3	102.0	104.0	0.5	P	
14/12/2017	77	Easting-315397 Northing-5844609	1	99.5	92.0	-1.5	P	
14/12/2017	78	Easting-315403 Northing-5844631	1	101.0	92.0	-1.5	P	
14/12/2017	79	Easting-315407 Northing-5844673	2	100.0	95.0	-1.0	P	
14/12/2017	80	Easting-315409 Northing-5844710	3	97.0	100.0	0.0	P	
14/12/2017	81	Easting-315418 Northing-5844759	3	99.5	87.0	-2.5	P	
14/12/2017	82	Old Well / Easting-315128 Northing-5844608	7	98.0	97.0	-0.5	P	
14/12/2017	83	Easting-315523 Northing-5844522	2	104.5	88.0	-3.0	P	
14/12/2017	84	Easting-315516 Northing-5844487	2	100.5	102.0	0.5	P	
14/12/2017	85	Easting-315507 Northing-5844507	2	98.5	100.0	0.0	P	
14/12/2017	86	Easting-315500 Northing-5844474	2	98.5	95.0	-1.0	P	
14/12/2017	87	Old Well / Easting-315125 Northing-5844608	9	100.0	100.0	0.0	P	
14/12/2017	88	Retest of #61 / Easting-315436 Northing-5844648	3	106.5	86.0	-3.0	P	
14/12/2017	89	Fixed Wet Spot / Easting-315490 Northing-5844762	3	99.5	90.0	-2.0	P	
15/12/2017	90	Easting-315374 Northing-5844676	2	103.0	88.0	-2.5	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd	Job No:	GS4472/1
Project:	Merrified Living - Stages 35, 36 & 39	Tech:	BR
Location:	Donnybrook		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
15/12/2017	91	Easting-315372 Northing-5844710	2	98.5	100.0	0.0	P	
15/12/2017	92	Easting-315375 Northing-5844748	3	98.0	92.0	-1.5	P	
15/12/2017	93	Easting-315365 Northing-5844646	1	101.5	89.0	-2.0	P	
15/12/2017	94	Easting-315496 Northing-5844545	2	97.5	100.0	0.0	P	
15/12/2017	95	Easting-315484 Northing-5844496	2	95.5	103.0	0.5	P	
15/12/2017	96	Easting-315376 Northing-5844803	3	99.0	92.0	-1.5	P	
15/12/2017	97	Easting-315360 Northing-5844774	2	100.0	98.0	-0.5	P	
15/12/2017	98	Easting-315355 Northing-5844727	2	101.0	97.0	-0.5	P	
15/12/2017	99	Easting-315346 Norhting-5844689	2	103.5	100.0	0.0	P	
15/12/2017	100	Easting-315338 Northing-5844635	1	97.5	95.0	-1.0	P	
15/12/2017	101	Easting-315462 Northing-5844482	2	100.0	90.0	-2.5	P	
18/12/2017	102	Easting-315477 Northing-5844549	2	106.5	94.0	-1.5	P	
18/12/2017	103	Easting-315463 Northing-5844537	2	101.0	95.0	-1.0	P	
18/12/2017	104	Easting-315458 Northing-5844513	2	102.0	88.0	-3.5	P	
18/12/2017	105	Easting-315490 Northing-5844778	4	99.5	97.0	-0.5	P	
18/12/2017	106	Easting-315482 Northing-5844740	4	101.5	100.0	0.0	P	
18/12/2017	107	Easting-315473 Northing-5844709	4	101.0	96.0	-0.5	P	
19/12/2017	108	Easting-315429 Northing-5844700	3	99.0	103.0	0.5	P	
19/12/2017	109	Easting-315436 Norhting-5844727	4	102.5	100.0	0.0	P	
19/12/2017	110	Easting-315440 Northing-5844761	4	100.0	95.0	-1.0	P	
19/12/2017	111	Easting-315439 Northing-5844794	4	97.0	90.0	-2.0	P	
19/12/2017	112	Easting-315471 Northing-5844773	4	98.5	112.0	2.0	P	
19/12/2017	113	Easting-315457 Norhting-5844684	3	101.0	89.0	-3.0	P	
19/12/2017	114	Easting-315412 Northing-5844548	2	103.5	83.0	-4.0	P	
19/12/2017	115	Easting-3157411 Northing-5844515	2	106.0	87.0	-2.5	P	
19/12/2017	116	Easting-315400 Northing-5844546	2	96.0	98.0	-0.5	P	
20/12/2017	117	Easting-315384 Northing-5844616	2	101.5	99.0	-0.5	P	
20/12/2017	118	Easting-315393 Northing-5844688	3	99.0	87.0	-2.5	P	
20/12/2017	119	Easting-315397 Northing-5844763	4	98.0	97.0	-0.5	P	
20/12/2017	120	Easting-315379 Northing-5844760	4	96.5	100.0	0.0	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd	Job No:	GS4472/1
Project:	Merrified Living - Stages 35, 36 & 39	Tech:	BR
Location:	Donnybrook		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
20/12/2017	121	Easting-315409 Northing-5844787	4	96.0	100.0	0.0	P	
20/12/2017	122	Easting-315318 Northing-5844624	1	98.0	90.0	-2.0	P	
20/12/2017	123	Easting-315325 Northing-5844685	2	98.5	100.0	0.0	P	
20/12/2017	124	Easting-315326 Northing-5844732	2	102.0	91.0	-2.0	P	
20/12/2017	125	Easting-315330 Northing-5844786	2	98.5	100.0	0.0	P	
20/12/2017	126	Easting-315307 Northing-5844728	1	100.5	100.0	0.0	P	
20/12/2017	27	Easting-315313 Northing-5844787	1	100.0	102.0	0.5	P	
20/12/2017	128	Easting-315373 Northing-5844664	2	97.5	100.0	0.0	P	
20/12/2017	129	Easting-315370 Northing-5844644	2	101.5	109.0	2.0	P	
20/12/2017	130	Easting-315380 Northing-5844632	2	96.5	98.0	-0.5	P	
21/12/2017	131	Easting-315435 Northing-5844772	5	101.0	103.0	0.5	P	
21/12/2017	132	Easting-315432 Northing-5844744	5	101.0	96.0	-1.0	P	
21/12/2017	133	Easting-315419 Northing-5844732	5	102.5	100.0	0.0	P	
21/12/2017	134	Easting-315435 Northing-5844703	4	103.0	100.0	0.0	P	
21/12/2017	135	Easting-315487 Northing-5844759	5	101.5	92.0	-2.0	P	
21/12/2017	136	Easting-315477 Northing-5844719	5	100.0	100.0	0.0	P	
21/12/2017	137	Easting-315452 Northing-5844715	5	101.5	98.0	-0.5	P	
21/12/2017	138	Easting-315462 Northing-5844768	5	102.5	100.0	0.0	P	
21/12/2017	139	Easting-315746 Northing-5844602	2	102.0	100.0	0.0	P	
21/12/2017	140	Easting-315505 Northing-5844576	2	100.5	98.0	-0.5	P	
21/12/2017	141	Easting-315511 Northing-5844608	2	101.5	106.0	1.5	P	
21/12/2017	142	Easting-315530 Northing-5844595	2	102.0	96.0	-1.0	P	
21/12/2017	143	Easting-315520 Northing-5844561	2	100.0	105.0	1.0	P	
8/01/2018	144	Easting-315483 Northing-584647	2	100.0	87.0	-2.5	P	
8/01/2018	145	Easting-315497 Northing-5844712	2	98.5	100.0	0.0	P	
8/01/2018	146	Easting-315488 Northing-5844673	3	102.0	104.0	1.0	P	
8/01/2018	147	Easting-315503 Northing-5844738	3	96.5	103.0	0.5	P	
8/01/2018	148	Easting-315516 Northing-5844779	4	100.5	106.0	1.0	P	
9/01/2018	149	Easting-315527 Northing-5844684	3	100.5	109.0	2.0	P	
9/01/2018	150	Easting-315538 Northing-5844715	3	104.0	98.0	-0.5	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd	Job No:	GS4472/1
Project:	Merrified Living - Stages 35, 36 & 39	Tech:	BR
Location:	Donnybrook		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
9/01/2018	151	Easting-315551 Northing-5844746	4	100.0	100.0	0.0	P	
9/01/2018	152	Easting-648897 Northing-5844772	4	100.5	96.0	-1.0	P	
9/01/2018	153	Easting-315521 Northing-5844626	2	104.5	100.0	0.0	P	
9/01/2018	154	Easting-315551 Northing-5844669	3	108.0	93.0	-1.5	P	
9/01/2018	155	Easting-315576 Northing-5844710	3	107.0	94.0	-1.5	P	
9/01/2018	156	Easting-315605 Northing-5844717	2	101.5	103.0	0.5	P	
9/01/2018	157	Easting-315464 Northing-5844659	2	102.5	100.0	0.0	P	
9/01/2018	158	Easting-315451 Northing-5844620	2	100.5	86.0	-3.0	P	
9/01/2018	159	Easting-315439 Northing-5844601	2	102.0	88.0	-2.5	P	
10/01/2018	160	Easting-315533 Northing-5844688	4	98.0	89.0	-2.0	P	
10/01/2018	161	Easting-315546 Northing-5844713	4	94.5	100.0	0.0	P	
10/01/2018	162	Easting-315553 Northing-5844734	4	97.5	100.0	0.0	P	
10/01/2018	163	Easting-315553 Northing-5844755	5	96.5	100.0	0.0	P	
10/01/2018	164	Easting-315500 Northing-5844576	2	99.5	100.0	0.0	P	
10/01/2018	165	Easting-315520 Northing-5844634	2	99.5	93.0	-1.5	P	
11/01/2018	166	Easting-315590 Northing-5844750	5	96.5	90.0	-2.0	P	
11/01/2018	167	Easting-315578 Northing-5844720	4	97.5	103.0	0.5	P	
11/01/2018	168	Easting-315572 Northing-5844690	4	98.0	95.0	-1.0	P	
15/01/2018	169	Easting-315705 Northing-5844579	1	104.0	93.0	-2.0	P	
15/01/2018	170	Easting-315662 Northing-5844581	1	92.0	93.0	-1.5	F	
15/01/2018	171	Easting-315709 Northing-5844612	1	90.5	100.0	0.0	F	
15/01/2018	172	Easting-315666 Northing-5844613	1	98.0	102.0	0.5	P	
15/01/2018	173	Easting-315663 Northing-5844663	1	99.5	104.0	1.0	P	
15/01/2018	174	Easting-315704 Northing-5844654	1	98.5	100.0	0.0	P	
16/01/2018	175	Easting-315694 Northing-5844684	1	97.5	109.0	2.0	P	
16/01/2018	176	Easting-315723 Northing-5844676	1	101.5	100.0	0.0	P	
16/01/2018	177	Retest of #171 / Easting-315709 Northing-5844613	1	98.5	94.0	-1.5	P	
16/01/2018	178	Retest of #170 / Easting-315662 Northing-5844581	1	95.0	100.0	0.0	P	
17/01/2018	179	Easting-315714 Northing-5844705	1	98.5	107.0	1.5	P	
17/01/2018	180	Easting-315687 Northing-5844712	1	93.0	89.0	-2.0	F	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd	Job No:	GS4472/1
Project:	Merrified Living - Stages 35, 36 & 39	Tech:	BR
Location:	Donnybrook		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
18/01/2018	181	Easting-315743 Northing-5844780	1	96.5	100.0	0.0	P	
18/01/2018	182	Easting-315692 Northing-5844749	1	102.5	90.0	-2.0	P	
18/01/2018	183	Easting-315621 Northing-5844654	1	97.5	90.0	-2.0	P	
18/01/2018	184	Easting-315641 Northing-5844718	1	100.0	103.0	0.5	P	
18/01/2018	185	Easting-315650 Northing-5844752	1	100.5	98.0	-5.0	P	
18/01/2018	186	Easting-315644 Northing-5844679	1	107.5	91.0	-2.0	P	
18/01/2018	187	Easting-315628 Northing-5844610	1	102.0	103.0	0.5	P	
19/01/2018	188	Retest of #180 / Easting-315688 Northing-5844713	1	99.0	96.0	-1.0	P	
19/01/2018	189	Easting-315712 Northing-5844718	1	98.0	98.0	-0.5	P	
19/01/2018	190	Easting-315622 Northing-5844753	3	104.5	90.0	-2.0	P	
19/01/2018	191	Easting-315615 Northing-5844720	2	100.0	103.0	0.5	P	
19/01/2018	192	Easting-315595 Northing-5844630	1	101.5	87.0	-3.0	P	
19/01/2018	193	Easting-315581 Northing-5844640	1	96.0	102.0	0.5	P	
19/01/2018	194	Easting-315558 Northing-5844609	1	96.5	85.0	-3.0	P	
19/01/2018	195	Easting-315659 Northing-5844567	1	92.0	98.0	-0.5	F	
22/01/2018	196	Easting-315601 Northing-5844580	1	98.0	103.0	0.5	P	
22/01/2018	197	Easting-315594 Northing-5844557	1	102.5	82.0	-4.0	P	
22/01/2018	198	Easting-315412 Northing-5844645	2	96.0	100.0	0.0	P	
23/01/2018	199	Easting-315631 Northing-5844558	1	101.0	93.0	-1.5	P	
23/01/2018	200	Retest of #195 / Easting-315663 Northing-5844561	1	101.0	103.0	0.5	P	
23/01/2018	201	Easting-315164 Northing-5844538	1	96.5	107.0	1.5	P	
23/01/2018	202	Easting-315565 Northing-5844580	1	96.0	98.0	-0.5	P	
23/01/2018	203	Easting-315548 Northing-5844559	1	97.0	103.0	0.5	P	
23/01/2018	204	Easting-315395 Northing-5844653	3	99.0	103.0	0.5	P	
23/01/2018	205	Easting-315360 Northing-5844616	3	99.0	95.0	-1.0	P	
23/01/2018	206	Easting-315365 Northing-5844650	3	102.0	100.0	0.0	P	
23/01/2018	207	Easting-315381 Northing-5844613	3	98.5	93.0	-1.5	P	
24/04/2018	208	Easting-315337 Northing-5844652	2	92.5	100.0	0.0	F	
24/01/2018	209	Easting-315309 Northing-5844675	2	98.0	100.0	0.0	P	
24/01/2018	210	Easting-315308 Northing-5844640	2	96.0	105.0	1.0	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd	Job No:	GS4472/1
Project:	Merrified Living - Stages 35, 36 & 39	Tech:	BR
Location:	Donnybrook		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
24/01/2018	211	Easting-315331 Northing-5844624	2	95.5	98.0	-0.5	P	
25/01/2018	212	Easting-315297 Northing-5844710	1	98.5	97.0	-0.5	P	
25/01/2018	213	Easting-315360 Northing-5844790	2	98.5	108.0	1.5	P	
25/01/2018	214	Easting-315341 Northing-5844801	3	95.0	110.0	2.0	P	
25/01/2018	215	Easting-315305 Northing-5844739	2	105.5	100.0	0.0	P	
25/01/2018	216	Easting-315330 Northing-5844751	3	100.5	112.0	2.5	P	
25/01/2018	217	Easting-315322 Northing-5844705	3	97.5	113.0	2.5	P	
25/01/2018	218	Easting-315362 Northing-5844726	4	97.5	110.0	2.0	P	
25/01/2018	219	Easting-315369 Northing-5844720	5	96.0	100.0	0.0	P	
29/01/2018	220	Easting-315449 Northing-5844725	6	96.0	106.0	1.0	P	
29/01/2018	221	Easting-315438 Northing-5844740	6	98.5	98.0	-0.5	P	
29/01/2018	222	Easting-315430 Northing-5844709	5	92.0	109.0	1.5	F	
29/01/2018	223	Easting-315427 Northing-5844683	5	104.5	93.0	-1.5	P	
31/01/2018	224	Easting- 315273 Northing-584436	1	102.5	100.0	0.0	P	
31/01/2018	225	Easting-315288 Northing-5844751	1	98.5	100.0	0.0	P	
31/01/2018	226	Easting-315283 Northing-5844778	1	100.5	103.0	0.5	P	
31/01/2018	227	Easting-315278 Northing-584494	1	103.5	104.0	0.5	P	
31/01/2018	228	Easting-315438 Northing-5844772	6	95.0	105.0	1.0	P	
31/01/2018	229	Easting-315464 Northiing-5844767	6	95.5	106.0	1.0	P	
31/01/2018	230	Retest of #222 / Easting-315430 Northing-5844741	5	97.5	110.0	2.0	P	
1/02/2018	231	Retest of #208 / Easting-315335 Northing-5844653	2	98.0	100.0	0.0	P	
1/02/2018	232	Easting-315419 Northing-5844618	2	96.0	98.0	-0.5	P	
1/02/2018	233	Easting-315413 Northing-5844600	2	101.5	98.0	-0.5	P	
1/02/2018	234	Easting-315554 Northing-5844507	1	98.5	100.0	0.0	P	
1/02/2018	235	Easting- 315546 Northing-5844475	1	99.5	100.0	0.0	P	
1/02/2018	236	Easting-315534 Northing-5844524	1	98.0	98.0	-0.5	P	
1/02/2018	237	Easting-315530 Northing-5844500	1	104.5	98.0	-0.5	P	
1/02/2018	238	Easting-315522 Northing-5844458	1	99.5	98.0	-0.5	P	
1/02/2018	239	Easting-315564 Northing-5844461	1	97.5	100.0	0.0	P	
1/02/2018	240	Easting-315681 Northing-5844605	2	99.0	100.0	0.0	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd	Job No:	GS4472/1
Project:	Merrified Living - Stages 35, 36 & 39	Tech:	BR
Location:	Donnybrook		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
1/02/2018	241	Easting-315665 Northing-5844612	2	99.0	98.0	-0.5	P	
1/02/2018	242	Easting-315710 Northing-5844593	2	101.0	113.0	2.5	P	
1/02/2018	243	Easting-315692 Northing-5844758	2	97.0	110.0	2.0	P	
1/02/2018	244	Easting-315666 Northing-5844744	2	96.0	100.0	0.0	P	
1/02/2018	245	Easting-315652 Northing-5844716	2	103.0	86.0	-3.0	P	
1/02/2018	246	Easting-315633 Northing-5844724	3	98.0	88.0	-2.5	P	
1/02/2018	247	Easting-315641 Northing-5844756	3	101.5	96.0	-1.0	P	
2/02/2018	248	Easting-315646 Northing-5844637	2	97.5	98.0	-0.5	P	
2/02/2018	249	Easting-315621 Northing-5844633	2	96.5	115.0	3.0	P	
2/02/2018	250	Easting-315632 Northing-5844670	2	99.5	120.0	3.5	P	
2/02/2018	251	Easting-315649 Northing-5844694	2	97.5	105.0	1.0	P	
2/02/2018	252	Easting-315657 Northing-5844663	2	101.0	103.0	0.5	P	
2/02/2018	253	Easting-315602 Northing-5844645	2	96.5	100.0	0.0	P	
2/02/2018	254	Easting-315690 Northing-5844640	2	97.0	103.0	0.5	P	
2/02/2018	255	Easting-315712 Northing-5844634	2	97.0	103.0	0.5	P	
2/02/2018	256	Easting-315706 Northing-5844665	2	98.5	107.0	1.5	P	
2/02/2018	257	Easting-315740 Northing-5844695	2	99.0	112.0	2.5	P	
2/02/2018	258	Easting-315723 Northing-5844731	2	97.0	100.0	0.0	P	
2/02/2018	259	Easting-315640 Northing-5844477	1	100.0	87.0	-2.5	P	
2/02/2018	260	Easting-315620 Northing-5844505	1	97.5	97.0	-0.5	P	
2/02/2018	261	Easting-315651 Northing-5844501	1	97.5	98.0	-0.5	P	
3/02/2018	262	Easting-315396 Northing-5844697	4	96.0	100.0	0.0	P	
3/02/2018	263	Easting-315390 Northing-5844753	5	97.5	103.0	0.5	P	
3/02/2018	264	Easting-315406 Northing-5844746	5	102.0	103.0	5.0	P	
3/02/2018	265	Easting-315368 Northing-5844701	4	101.5	103.0	0.5	P	
3/02/2018	266	Easting-315405 Northing-5844772	5	98.0	110.0	2.0	P	
3/02/2018	267	Easting-315398 Northing-5844770	5	99.5	100.0	0.0	P	
3/02/2018	268	Easting-315546 Northing-5844555	2	94.5	103.0	0.5	P	
3/02/2018	269	Easting-315574 Northing-5844549	2	97.5	114.0	2.5	P	
3/02/2018	270	Easting-315601 Northing-5844544	2	96.5	107.0	1.5	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd	Job No:	GS4472/1
Project:	Merrified Living - Stages 35, 36 & 39	Tech:	BR
Location:	Donnybrook		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
3/02/2018	271	Easting-315626 Northing-5844541	2	94.0	100.0	0.0	F	
3/02/2018	272	Easting-315656 Northing-5844540	2	94.5	103.0	0.5	P	
5/02/2018	273	Easting-315572 Northing-5844597	2	95.0	95.0	-1.0	P	
5/02/2018	274	Easting-315602 Northing-5844590	2	96.0	103.0	0.5	P	
5/02/2018	275	Easting-31633 Northing-5844546	2	100.5	92.0	-1.5	P	
5/02/2018	276	Easting-315650 Northing-5844580	2	97.0	91.0	-2.0	P	
5/02/2018	277	Easting-315747 Northing-5844726	2	101.0	100.0	0.0	P	
5/02/2018	278	Easting-315419 Northing-5844616	3	93.5	107.0	1.0	F	
5/02/2018	279	Easting-315421 Northing-5844640	3	95.5	98.0	-0.5	P	
5/02/2018	280	Easting-315450 Northing-5844635	3	97.5	88.0	-2.5	P	
6/02/2018	281	Easting-315190 Northing-5844814	1	100.0	95.0	-1.0	P	
6/02/2018	282	Easting-315184 Northing-5844776	1	99.5	88.0	-2.5	P	
6/02/2018	283	Easting-315411 Northing-5844648	3	100.0	105.0	1.0	P	
6/02/2018	284	Easting-315391 Northing-5844607	4	96.0	100.0	0.0	P	
6/02/2018	285	Retest of #268 / Easting-315548 Northing-5844553	2	102.0	98.0	-0.5	P	
6/02/2018	286	Retest of #271 / Easting-315628 Northing-5844539	2	103.0	90.0	-2.0	P	
7/02/2018	287	Easting-315441 Northing-5844596	3	96.0	111.0	2.5	P	
7/02/2018	288	Retest of #278 / Easting-315417 Northing-5844613	3	103.0	88.0	-2.5	P	
7/02/2018	289	Easting-315600 Northing-5844653	3	102.0	107.0	1.5	P	
7/02/2018	290	Easting-315608 Northing-5844680	3	98.5	108.0	1.5	P	
7/02/2018	291	Easting-315616 Northing-5844711	4	99.5	106.0	1.0	P	
8/02/2018	292	Easting-315621 Northing-5844676	3	100.5	100.0	0.0	P	
8/02/2018	293	Easting-315634 Northing-5844712	4	98.5	105.0	1.0	P	
8/02/2018	294	Easting-315643 Northing-5844746	4	98.0	91.0	-2.0	P	
8/02/2018	295	Easting-315632 Norhting-5844760	4	99.0	87.0	-2.5	P	
10/02/2018	296	Easting-315683 Northing-5844748	3	103.0	103.0	0.5	P	
10/02/2018	297	Easting-315670 Northing-5844735	3	99.5	113.0	2.5	P	
10/02/2018	298	Easting-315646 Northing-5844692	3	103.5	103.0	0.5	P	
10/02/2018	299	Easting-315650 Northing-5844657	3	99.5	94.0	-1.5	P	
10/02/2018	300	Easting-315699 Northing-5844655	3	104.5	90.0	-2.5	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd	Job No:	GS4472/1
Project:	Merrified Living - Stages 35, 36 & 39	Tech:	BR
Location:	Donnybrook		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
10/02/2018	301	Easting-315704 Northing-5844649	3	98.0	103.0	0.5	P	
10/02/2018	302	Easting-315702 Northing-5844683	3	95.5	103.0	0.5	P	
10/02/2018	303	Easting-315731 Northing-5844695	3	98.0	84.0	-3.0	P	
10/02/2018	304	Easting-315735 Northing-5844727	3	98.5	90.0	-2.0	P	
12/02/2018	305	Easting-315399 Northing-5844698	5	98.5	100.0	0.0	P	
12/02/2018	306	Easting-315386 Northing-5844717	5	97.0	110.0	2.0	P	
12/02/2018	307	Easting-315401 Northing-5844739	6	97.5	103.0	0.5	P	
	308	PSD PI, Hydro Sampling						
	309	PSD PI, Hydro Sampling						
	310	PSD PI, Hydro Sampling						
13/02/2018	311	Easting-315378 Northing-5844654	4	97.5	112.0	2.5	P	
13/02/2018	312	Easting-315378 Northing-5844654	4	100.5	115.0	3.0	P	
13/02/2018	313	Easting-315375 Northing-5844631	4	98.0	103.0	0.5	P	
13/02/2018	314	Easting-315360 Northing-5844614	4	99.0	103.0	0.5	P	
13/02/2018	315	Easting-315352 Northing-5844630	4	O/S	O/S	O/S	P	
13/02/2018	316	Easting-315341 Northing-5844648	3	99.0	100.0	0.0	P	
14/02/2018	317	Easting-315324 Northing-5844663	3	98.0	118.0	3.5	P	
14/02/2018	318	Easting-315295 Northing-5844673	2	97.0	100.0	0.0	P	
14/02/2018	319	Easting-315288 Northing-5844648	2	102.0	105.0	1.0	P	
14/02/2018	320	Easting-315287 Northing-5844618	1	96.0	100.0	0.0	P	
14/02/2018	321	Easting-315308 Northing-5844611	1	96.0	92.0	-1.5	P	
14/02/2018	322	Easting-315319 Northing-5844618	2	97.5	92.0	-1.5	P	
14/02/2018	323	Easting-315353 Northing-5844710	4	98.0	100.0	0.0	P	
14/02/2018	324	Easting-315357 Northing-5844741	4	103.0	92.0	-2.0	P	
14/02/2018	325	Easting-315335 Northing-5844328	4	99.5	103.0	0.5	P	
14/02/2018	326	Easting-315329 Northing-5844701	4	99.0	100.0	0.0	P	
14/02/2018	327	Easting-315305 Northing-5844727	3	100.0	98.0	-0.5	P	
14/02/2018	328	Easting-315319 Northing-5844756	3	96.5	96.0	-1.0	P	
15/02/2018	329	Easting-315279 Northing-5844725	2	99.5	98.0	-0.5	P	
15/02/2018	330	Easting-315390 Northing-5844761	2	98.5	103.0	0.5	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd	Job No:	GS4472/1
Project:	Merrified Living - Stages 35, 36 & 39	Tech:	BR
Location:	Donnybrook		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
15/02/2018	331	Easting-315526 Northing-5844722	4	102.0	93.0	-1.5	P	
15/02/2018	332	Easting-315581 Northing-5844651	2	96.5	103.0	0.5	P	
15/02/2018	333	Easting-315606 Northing-5844745	5	102.5	98.0	-0.5	P	
15/02/2018	334	Easting-315778 Northing-5844769	6	97.5	95.0	-1.0	P	
15/02/2018	335	Easting-315521 Northing-5844686	5	99.0	105.0	1.0	P	
15/02/2018	336	Easting-315550 Northing-5844751	6	102.0	104.0	1.0	P	
15/02/2018	337	Easting-315490 Northing-5844765	6	98.5	100.0	0.0	P	
15/02/2018	338	Easting-315460 Northing-5844784	7	97.0	88.0	-2.5	P	
15/02/2018	339	Easting-315524 Northing-5844775	6	102.0	84.0	-3.0	P	
15/02/2018	340	Easting-315474 Northing-5844726	6	99.0	103.0	0.5	P	
15/02/2018	341	Easting-315466 Northing-5844696	5	98.5	98.0	-0.5	P	
16/02/2018	342	Easting-315359 Northing-5844800	4	99.0	107.0	1.5	P	
16/02/2018	343	Easting-315326 Northing-5844804	3	99.5	110.0	2.5	P	
16/02/2018	344	Easting-315296 Northing-5844803	1	99.5	105.0	1.0	P	
16/02/2018	345	Easting-315259 Northing-5844828	1	105.5	89.0	-2.5	P	
16/02/2018	346	Easting-315207 Northing-5844843	1	103.5	111.0	2.5	P	
16/02/2018	347	Easting-315237 Northing-5844763	2	96.5	103.0	0.5	P	
16/02/2018	348	Easting-315369 Northing-5844665	5	95.5	88.0	-2.5	P	
16/02/2018	349	Easting-315384 Northing-5844654	5	99.0	93.0	-1.5	P	
16/02/2018	350	Easting-315411 Northing-5844649	5	98.5	93.0	-1.5	P	
16/02/2018	351	Easting-315496 Northing-5844711	5	98.5	86.0	-3.0	P	
16/02/2018	352	Easting-315585 Northing-5844651	4	102.0	103.0	0.5	P	
16/02/2018	353	Easting-315523 Northing-5844720	5	97.0	100.0	0.0	P	
16/02/2018	354	Easting-315521 Northing-5844690	6	102.0	91.0	-2.0	P	
17/02/2018	355	Easting-315205 Northing-5844783	2	102.0	100.0	0.0	P	
17/02/2018	356	Easting-315185 Northing-5844797	2	93.5	98.0	-0.5	F	
17/02/2018	357	Easting-315167 Northing-5844821	2	100.0	96.0	-1.0	P	
17/02/2018	358	Easting-315438 Northing-5844648	4	102.5	93.0	-1.5	P	
17/02/2018	359	Easting-315421 Northing-5844609	4	99.5	86.0	-3.0	P	
17/02/2018	360	Easting-315384 Northing-5844607	5	100.5	111.0	2.0	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd	Job No:	GS4472/1
Project:	Merrified Living - Stages 35, 36 & 39	Tech:	BR
Location:	Donnybrook		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
17/02/2018	361	Easting-315348 Northing-5844635	4	95.5	88.0	-2.5	P	
19/02/2018	362	Easting-315688 Northing-5844747	4	100.5	106.0	1.5	P	
19/02/2018	363	Easting-315468 Northing-5844770	8	98.5	91.0	-2.0	P	
19/02/2018	364	Easting-315739 Northing-5844735	4	97.0	84.0	-3.0	P	
19/02/2018	365	Easting-315484 Northing-5844567	3	98.5	103.0	0.5	P	
19/02/2018	366	Easting-315488 Northing-5844628	3	95.5	98.0	-0.5	P	
20/02/2018	367	Easting-315600 Northing-5844755	7	100.0	81.0	-3.5	P	
20/02/2018	368	Easting-315660 Northing-5844590	3	97.5	100.0	0.0	P	
20/02/2018	369	Easting-315553 Northing-5844623	3	97.0	96.0	-1.0	P	
20/02/2018	370	Easting-315567 Northing-5844714	5	96.0	100.0	0.0	P	
21/02/2018	371	Easting-315588 Northing-5844704	5	98.0	100.0	0.0	P	
21/02/2018	372	Easting-315627 Northing-5844708	5	98.0	98.0	-0.5	P	
21/02/2018	373	Easting-315639 Northing-5844752	5	95.5	103.0	0.5	P	
21/02/2018	374	Easting-315663 Northing-5844749	4	97.5	88.0	-2.5	P	
21/02/2018	375	Retest of #356 / Easting-315187 Northing-5844798	2	99.5	86.0	-3.0	P	
21/02/2018	376	Easting-315572 Northing-5844674	5	100.5	98.0	-0.5	P	
21/02/2018	377	Easting-315579 Northing-5844610	3	99.5	96.0	-1.0	P	
21/02/2018	378	Easting-315575 Northing-5844584	3	100.5	100.0	0.0	P	
21/02/2018	379	Easting-315623 Northing-5844571	3	100.0	98.0	-0.5	P	
21/02/2018	380	Easting-315612 Northing-5844606	3	99.5	100.0	0.0	P	
21/02/2018	381	Easting-315606 Northing-5844622	2	98.5	98.0	-0.5	P	
23/02/2018	382	Easting-315669 Northing-5844598	3	104.0	93.0	-1.5	P	
23/02/2018	383	Easting-315663 Northing-5844562	3	99.0	100.0	0.0	P	
23/02/2018	384	Easting-315580 Northing-5844749	7	97.0	87.0	-2.5	P	
23/02/2018	385	Easting-315559 Northing-5844766	7	101.0	103.0	0.5	P	
23/02/2018	386	Easting-315547 Northing-5844751	7	99.5	87.0	-3.0	P	
23/02/2018	387	Easting-315414 Northing-5844780	6	103.5	91.0	-2.0	P	
27/02/2018	388	Easting-315495 Northing-5844438	1	95.0	97.0	-0.5	P	
27/02/2018	389	Easting-315562 Northing-5844430	1	96.5	72.0	-5.0	P	
27/02/2018	390	Easting-315539 Northing-5844432	1	98.0	75.0	-4.0	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd	Job No:	GS4472/1
Project:	Merrified Living - Stages 35, 36 & 39	Tech:	BR
Location:	Donnybrook		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
28/02/2018	391	Easting-315270 Northing-5844810	3	95.0	103.0	0.5	P	
28/02/2018	392	Easting-315243 Northing-5844824	2	99.5	100.0	0.0	P	
28/02/2018	393	Easting-315189 Northing-5844842	2	100.0	107.0	1.0	P	
1/03/2018	394	Easting-315311 Northing-5844797	4	98.5	97.0	-0.5	P	
1/03/2018	395	Easting-315364 Northing-5844795	5	98.5	100.0	0.0	P	
1/03/2018	396	Easting-315402 Northing-5844786	7	100.5	98.0	-0.5	P	
2/03/2018	397	Easting-315499 Northing-5844761	7	101.5	98.0	-0.5	P	
5/03/2018	398	Easting-315447 Northing-5844693	6	95.5	113.0	2.0	P	
5/03/2018	399	Easting-215451 Northing-5844720	7	102.0	144.0	7.0	P	
5/03/2018	400	Easting-315283 Northing-5844810	2	97.0	127.0	4.5	P	
5/03/2018	401	Easting-315422 Northing-5844724	7	96.5	94.0	-1.0	P	
5/03/2018	402	Easting-315394 Northing-5844740	7	96.5	103.0	0.5	P	
5/03/2018	403	Easting-315390 Northing-5844700	6	99.5	100.0	0.0	P	
6/03/2018	404	Easting-315530 Northing-5844428	1	102.5	100.0	0.0	P	
6/03/2018	405	Easting-315573 Northing-5844427	1	101.5	110.0	2.0	P	
7/03/2018	406	Easting-315349 Northing-5844745	5	99.5	100.0	0.0	P	
7/03/2018	407	Easting-315355 Northing-5844705	5	99.5	98.0	-0.5	P	
7/03/2018	408	Easting-315321 Northing-5844736	4	96.0	97.0	-0.5	P	
7/03/2018	409	Easting-315303 Northing-5844759	2	96.5	118.0	3.0	P	
8/03/2018	410	Easting-315525 Northing-5844687	7	97.5	114.0	2.5	P	
8/03/2018	411	Easting-315500 Northing-5844717	6	94.5	97.0	-0.5	P	
8/03/2018	412	Easting-315563 Northing-5844622	4	96.0	121.0	4.0	P	
8/03/2018	413	Easting-315589 Northing-5844617	4	102.0	108.0	1.5	P	
8/03/2018	414	Easting-315713 Northing-5844703	4	97.5	97.0	-0.5	P	
6/04/2018	415	Easting-315185 Northing-5844785	3	97.0	97.0	-0.5	P	
6/04/2018	416	Easting-315215 Northing-5844800	3	93.5	103.0	0.5	F	
6/04/2018	417	Easting-315223 Northing-5844764	3	97.0	100.0	0.0	P	
6/04/2018	418	Easting-315251 Northing-5844781	3	96.5	103.0	0.5	P	
6/04/2018	419	Easting-315353 Northing-5844747	6	97.0	103.0	0.5	P	
6/04/2018	420	Easting-315359 Northing-5844711	6	98.5	97.0	-0.5	P	

LEVEL 1 - COMPACTION TEST SUMMARY

Client:	**Ascotown Pastoral Pty Ltd C/- Verve Projects Pty Ltd**	**Job No:**	**GS4472/1**
Project:	**Merrified Living - Stages 35, 36 & 39**	**Tech:**	**BR**
Location:	**Donnybrook**		

Date	Test No.	Location	Layer No.	Density Ratio (%)	Moisture Ratio (%)	Moisture variation	(P) Pass (F) Fail	Comments
9/04/2018	421	Easting-315163 Northing-5844829	3	97.5	106.0	1.0	P	
10/04/2018	422	Easting-315264 Northing-5844820	3	98.5	100.0	0.0	P	
10/04/2018	423	Easting-315312 Northing-5844800	5	100.0	87.0	-2.0	P	
10/04/2018	424	Easting-315537 Northing-5844687	6	95.5	98.0	-0.5	P	
10/04/2018	425	Easting-315572 Northing-5844690	6	94.5	110.0	1.5	P	
11/04/2018	426	Easting-315315 Northing-5844663	4	97.0	103.0	0.5	P	
11/04/2018	427	Easting-315303 Northing-5844625	3	97.0	106.0	1.0	P	
11/04/2018	428	Easting-315594 Northing-5844682	6	95.5	81.0	-4.5	P	
12/04/2018	429	Retest of #416 / Easting-315210 Northing-5844798	3	98.0	112.0	2.0	P	
12/04/2018	430	Easting-315305 Northing-5844760	5	94.5	103.0	0.5	P	
12/04/2018	431	Easting-315286 Northing-5844719	3	95.5	107.0	1.0	P	
13/04/2018	432	Easting-315627 Northing-5844750	6	99.5	103.0	0.5	P	
13/04/2018	433	Easting-315654 Northing-5844745	6	100.0	108.0	1.5	P	
13/04/2018	434	Easting-315680 Northing-5844737	5	93.5	112.0	2.0	F	
13/04/2018	435	Easting-315494 Northing-5844700	7	96.5	108.0	1.5	P	
17/04/2018	436	Retest of #434 / Easting-315680 Northing-5844740	5	98.5	103.0	0.5	P	
17/04/2018	437	Retest of #437 / Easting-315302 Northing-5844756	5	102.0	106.0	1.0	P	

APPENDIX C

Field Density Test Report Sheets

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DD**
location :	**DONNYBROOK**	test date:	**16-Feb-18**

Test Number		354					
Test location taken from							
Easting		315521					
Northing		5844690					
Layer Number		6					
Time of tests		15:00:00					
Depth of Layer	mm	250					
Depth of Test	mm	225					
Field Wet Density	t/m^3	1.98					
*Field Moisture Content	%	20.5					
Oversize Material	Wet %	0					
Sieve Size	mm	19.0					
Peak Converted Wet Density	t/m^3	1.942					
*Optimum Moisture Content	%	22.5					
Compactive Effort Used	std / mod	STD					
Moisture Ratio	%	**91**					
Moisture Variation	%	**-2.0**					
Moisture Variation		**DRY**					
Density Ratio	%	**102.0**					

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DE**
location :	**DONNYBROOK**	test date:	**17-Feb-18**

Test Number		355	356	357	358	359	360
Test location taken from							
Easting		315205	315185	315167	315438	315421	315384
Northing		5844783	5844797	5844821	5844648	5844609	5844607
Layer Number		2	2	2	4	4	5
Time of tests		10:05:00	10:15:00	10:30:00	12:30:00	12:40:00	13:00:00
Depth of Layer	mm	250	250	250	200	200	200
Depth of Test	mm	225	225	225	175	175	175
Field Wet Density	t/m^3	2.00	1.89	1.94	2.01	1.93	2.00
*Field Moisture Content	%	23.0	20.0	21.5	19.5	18.5	21.0
Oversize Material	Wet %	0	0	0	5	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.966	2.030	1.946	1.962	1.937	1.993
*Optimum Moisture Content	%	23.0	20.5	22.5	21.0	21.5	19.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**100**	**98**	**96**	**93**	**86**	**111**
Moisture Variation	%	**0.0**	**-0.5**	**-1.0**	**-1.5**	**-3.0**	**2.0**
Moisture Variation		**-**	**DRY**	**DRY**	**DRY**	**DRY**	**WET**
Density Ratio	%	**102.0**	**93.5**	**100.0**	**102.5**	**99.5**	**100.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DF**
location :	**DONNYBROOK**	test date:	**17-Feb-18**

Test Number		361					
Test location taken from							
Easting		315348					
Northing		5844635					
Layer Number		4					
Time of tests		13:45:00					
Depth of Layer	mm	150					
Depth of Test	mm	125					
Field Wet Density	t/m^3	1.86					
*Field Moisture Content	%	17.5					
Oversize Material	Wet %	0					
Sieve Size	mm	19.0					
Peak Converted Wet Density	t/m^3	1.951					
*Optimum Moisture Content	%	20.0					
Compactive Effort Used	std / mod	STD					
Moisture Ratio	%	**88**					
Moisture Variation	%	**-2.5**					
Moisture Variation		**DRY**					
Density Ratio	%	**95.5**					

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DG**
location :	**DONNYBROOK**	test date:	**19-Feb-18**

Test Number		362	363	364	365	366	
Test location taken from							
Easting		315688	315468	315739	315484	315488	
Northing		5844747	5844770	5844735	5844567	5844628	
Layer Number		4	8	4	3	3	
Time of tests		9:00:00	9:50:00	12:30:00	14:45:00	15:15:00	
Depth of Layer	mm	300	200	250	150	300	
Depth of Test	mm	225	225	225	225	225	
Field Wet Density	t/m^3	1.96	1.94	1.94	1.97	1.90	
*Field Moisture Content	%	27.0	19.5	15.5	21.5	23.0	
Oversize Material	Wet %	0	3	2	5	0	
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	
Peak Converted Wet Density	t/m^3	1.952	1.968	1.995	1.997	1.988	
*Optimum Moisture Content	%	25.5	21.5	18.5	21.0	23.5	
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	
Moisture Ratio	%	**106**	**91**	**84**	**103**	**98**	
Moisture Variation	%	**1.5**	**-2.0**	**-3.0**	**0.5**	**-0.5**	
Moisture Variation		**WET**	**DRY**	**DRY**	**WET**	**DRY**	
Density Ratio	%	**100.5**	**98.5**	**97.0**	**98.5**	**95.5**	

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DH**
location :	**DONNYBROOK**	test date:	**20-Feb-18**

Test Number		367	368	369	370		
Test location taken from							
Easting		315600	315660	315553	315567		
Northing		5844755	5844590	5844623	5844714		
Layer Number		7	3	3	5		
Time of tests		9:30:00	10:30:00	10:45:00	13:50:00		
Depth of Layer	mm	300	200	200	200		
Depth of Test	mm	275	125	125	175		
Field Wet Density	t/m^3	1.97	1.99	1.95	1.98		
*Field Moisture Content	%	15.0	17.5	21.5	20.5		
Oversize Material	Wet %	4	0	0	6		
Sieve Size	mm	19.0	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	1.974	2.035	2.013	2.059		
*Optimum Moisture Content	%	18.5	17.5	22.5	20.5		
Compactive Effort Used	std / mod	STD	STD	STD	STD		
Moisture Ratio	%	**81**	**100**	**96**	**100**		
Moisture Variation	%	**-3.5**	**0.0**	**-1.0**	**0.0**		
Moisture Variation		**DRY**	**-**	**DRY**	**-**		
Density Ratio	%	**100.0**	**97.5**	**97.0**	**96.0**		

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DI**
location :	**DONNYBROOK**	test date:	**21-Feb-18**

Test Number		371	372	373	374	375	376
Test location taken from						Retest of #356	
Easting		315588	315627	615639	315663	315187	315572
Northing		5844704	5844708	5844752	5844749	5844798	5844674
Layer Number		5	5	5	4	2	5
Time of tests		10:10:00	10:30:00	10:45:00	10:55:00	12:50:00	13:45:00
Depth of Layer	mm	200	200	200	250	250	200
Depth of Test	mm	175	175	175	225	225	175
Field Wet Density	t/m^3	1.95	1.96	1.95	1.95	1.98	2.02
*Field Moisture Content	%	21.0	18.5	17.0	17.5	17.5	18.0
Oversize Material	Wet %	0	9	5	3	0	4
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.984	2.000	2.039	1.995	1.996	2.015
*Optimum Moisture Content	%	21.0	19.0	16.5	20.0	20.5	18.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**100**	**98**	**103**	**88**	**86**	**98**
Moisture Variation	%	**0.0**	**-0.5**	**0.5**	**-2.5**	**-3.0**	**-0.5**
Moisture Variation		**-**	**DRY**	**WET**	**DRY**	**DRY**	**DRY**
Density Ratio	%	**98.0**	**98.0**	**95.5**	**97.5**	**99.5**	**100.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DJ**
location :	**DONNYBROOK**	test date:	**21-Feb-18**

Test Number		377	378	379	380	381	
Test location taken from							
Easting		315579	315575	315623	315612	315606	
Northing		5844610	5844584	5844571	5844606	5844622	
Layer Number		3	3	3	3	2	
Time of tests		14:00:00	14:15:00	14:25:00	14:35:00	14:45:00	
Depth of Layer	mm	200	150	150	200	200	
Depth of Test	mm	175	125	125	175	175	
Field Wet Density	t/m^3	1.92	1.98	2.00	1.97	1.98	
*Field Moisture Content	%	20.5	22.0	19.0	20.0	20.5	
Oversize Material	Wet %	11	1	0	0	0	
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	
Peak Converted Wet Density	t/m^3	1.935	1.972	2.000	1.982	2.011	
*Optimum Moisture Content	%	21.5	22.0	19.5	20.0	21.0	
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	
Moisture Ratio	%	**96**	**100**	**98**	**100**	**98**	
Moisture Variation	%	**-1.0**	**0.0**	**-0.5**	**0.0**	**-0.5**	
Moisture Variation		**DRY**	**-**	**DRY**	**-**	**DRY**	
Density Ratio	%	**99.5**	**100.5**	**100.0**	**99.5**	**98.5**	

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DK**
location :	**DONNYBROOK**	test date:	**23-Feb-18**

Test Number		382	383	384	385	386	387
Test location taken from							
Easting		315669	315663	315580	315559	315547	315414
Northing		5844598	5844562	5844749	5844766	5844751	5844780
Layer Number		3	3	7	7	7	6
Time of tests		8:45:00	9:05:00	10:50:00	11:20:00	11:35:00	12:20:00
Depth of Layer	mm	200	200	300	300	300	200
Depth of Test	mm	175	175	275	275	275	175
Field Wet Density	t/m^3	2.05	2.00	1.95	2.04	1.97	2.03
*Field Moisture Content	%	19.5	22.5	17.0	20.0	19.5	20.0
Oversize Material	Wet %	0	7	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.972	2.020	2.008	2.015	1.983	1.961
*Optimum Moisture Content	%	21.0	22.5	19.5	19.5	22.5	22.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**93**	**100**	**87**	**103**	**87**	**91**
Moisture Variation	%	**-1.5**	**0.0**	**-2.5**	**0.5**	**-3.0**	**-2.0**
Moisture Variation		**DRY**	**-**	**DRY**	**WET**	**DRY**	**DRY**
Density Ratio	%	**104.0**	**99.0**	**97.0**	**101.0**	**99.5**	**103.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DL**
location :	**DONNYBROOK**	test date:	**27-Feb-18**

Test Number		388	389	390		
Test location taken from						
Easting		315495	315562	315539		
Northing		5844438	5844430	5844432		
Layer Number		1	1	1		
Time of tests		13:00:00	13:25:00	14:00:00		
Depth of Layer	mm	300	300	300		
Depth of Test	mm	275	275	275		
Field Wet Density	t/m^3	1.96	1.83	1.95		
*Field Moisture Content	%	16.5	12.5	12.0		
Oversize Material	Wet %	0	0	2		
Sieve Size	mm	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.061	1.898	1.987		
*Optimum Moisture Content	%	17.0	17.5	16.0		
Compactive Effort Used	std / mod	STD	STD	STD		
Moisture Ratio	%	**97**	**72**	**75**		
Moisture Variation	%	**-0.5**	**-5.0**	**-4.0**		
Moisture Variation		**DRY**	**DRY**	**DRY**		
Density Ratio	%	**95.0**	**96.5**	**98.0**		

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DM**
location :	**DONNYBROOK**	test date:	**28-Feb-18**

Test Number		391	392	393			
Test location taken from							
Easting		315270	315243	315189			
Northing		5844810	5844824	5844842			
Layer Number		3	2	2			
Time of tests		9:00:00	9:15:00	9:35:00			
Depth of Layer	mm	200	200	250			
Depth of Test	mm	175	175	225			
Field Wet Density	t/m³	1.99	2.10	2.12			
*Field Moisture Content	%	17.0	17.0	16.5			
Oversize Material	Wet %	10	2	0			
Sieve Size	mm	19.0	19.0	19.0			
Peak Converted Wet Density	t/m³	2.101	2.108	2.120			
*Optimum Moisture Content	%	16.5	17.0	15.5			
Compactive Effort Used	std / mod	STD	STD	STD			
Moisture Ratio	%	**103**	**100**	**107**			
Moisture Variation	%	**0.5**	**0.0**	**1.0**			
Moisture Variation		**WET**	**-**	**Wet**			
Density Ratio	%	**95.0**	**99.5**	**100.0**			

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DN**
location :	**DONNYBROOK**	test date:	**1-Mar-18**

Test Number		394	395	396		
Test location taken from						
Easting		315311	315364	315402		
Northing		5844797	5844795	5844786		
Layer Number		4	5	7		
Time of tests		13:50:00	14:05:00	14:20:00		
Depth of Layer	mm	200	200	200		
Depth of Test	mm	175	175	175		
Field Wet Density	t/m^3	2.02	2.01	2.00		
*Field Moisture Content	%	17.0	19.5	21.0		
Oversize Material	Wet %	9	0	1		
Sieve Size	mm	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.056	2.035	1.985		
*Optimum Moisture Content	%	17.5	19.5	21.5		
Compactive Effort Used	std / mod	STD	STD	STD		
Moisture Ratio	%	**97**	**100**	**98**		
Moisture Variation	%	**-0.5**	**0.0**	**-0.5**		
Moisture Variation		**DRY**	**-**	**DRY**		
Density Ratio	%	**98.5**	**98.5**	**100.5**		

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DO**
location :	**DONNYBROOK**	test date:	**2-Mar-18**

Test Number		1					
Test location taken from							
Easting		315499					
Northing		5844761					
Layer Number		7					
Time of tests		11:00:00					
Depth of Layer	mm	300					
Depth of Test	mm	275					
Field Wet Density	t/m^3	1.95					
*Field Moisture Content	%	23.0					
Oversize Material	Wet %	0					
Sieve Size	mm	19.0					
Peak Converted Wet Density	t/m^3	1.925					
*Optimum Moisture Content	%	23.5					
Compactive Effort Used	std / mod	STD					
Moisture Ratio	%	**98**					
Moisture Variation	%	**-0.5**					
Moisture Variation		**DRY**					
Density Ratio	%	**101.5**					

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DP**
location :	**DONNYBROOK**	test date:	**5-Mar-18**

Test Number		398	399	400	401	402	403
Test location taken from							
Easting		315447	315451	315283	315422	315394	315390
Northing		5844693	5844720	5844810	5844724	5844740	5844700
Layer Number		6	7	2	7	7	6
Time of tests		8:55:00	9:10:00	9:25:00	14:50:00	15:00:00	15:05:00
Depth of Layer	mm	250	300	200	200	200	200
Depth of Test	mm	225	275	175	175	175	175
Field Wet Density	t/m^3	2.02	2.02	2.02	1.95	2.03	2.06
*Field Moisture Content	%	18.0	23.0	21.5	15.0	19.5	18.5
Oversize Material	Wet %	1	0	0	0	7	2
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.109	1.979	2.084	2.026	2.096	2.068
*Optimum Moisture Content	%	16.0	16.0	17.0	16.0	19.0	18.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**113**	**144**	**127**	**94**	**103**	**100**
Moisture Variation	%	**2.0**	**7.0**	**4.5**	**-1.0**	**0.5**	**0.0**
Moisture Variation		**WET**	**WET**	**WET**	**DRY**	**WET**	**-**
Density Ratio	%	**95.5**	**102.0**	**97.0**	**96.5**	**96.5**	**99.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DR**
location :	**DONNYBROOK**	test date:	**6-Mar-18**

Test Number		404	405				
Test location taken from							
Easting		315530	315573				
Northing		5844428	5844427				
Layer Number		1	1				
Time of tests		10:00:00	10:15:00				
Depth of Layer	mm	300	300				
Depth of Test	mm	275	275				
Field Wet Density	t/m^3	2.10	2.04				
*Field Moisture Content	%	18.5	23.0				
Oversize Material	Wet %	10	0				
Sieve Size	mm	19.0	19.0				
Peak Converted Wet Density	t/m^3	2.048	2.014				
*Optimum Moisture Content	%	18.5	21.0				
Compactive Effort Used	std / mod	STD	STD				
Moisture Ratio	%	**100**	**110**				
Moisture Variation	%	**0.0**	**2.0**				
Moisture Variation		**-**	**WET**				
Density Ratio	%	**102.5**	**101.5**				

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DR**
location :	**DONNYBROOK**	test date:	**7-Mar-18**

Test Number		406	407	408	409		
Test location taken from							
Easting		315349	315355	315321	315303		
Northing		5844745	5844705	5844736	5844759		
Layer Number		5	5	4	2		
Time of tests		8:35:00	8:50:00	12:40:00	14:25:00		
Depth of Layer	mm	200	200	250	250		
Depth of Test	mm	175	175	225	225		
Field Wet Density	t/m^3	2.01	2.04	2.00	2.01		
*Field Moisture Content	%	21.0	18.0	17.5	20.0		
Oversize Material	Wet %	0	2	5	7		
Sieve Size	mm	19.0	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.014	2.053	2.089	2.088		
*Optimum Moisture Content	%	21.0	18.5	18.0	17.0		
Compactive Effort Used	std / mod	STD	STD	STD	STD		
Moisture Ratio	%	**100**	**98**	**97**	**118**		
Moisture Variation	%	**0.0**	**-0.5**	**-0.5**	**3.0**		
Moisture Variation		**-**	**DRY**	**DRY**	**WET**		
Density Ratio	%	**99.5**	**99.5**	**96.0**	**96.5**		

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DS**
location :	**DONNYBROOK**	test date:	**8-Mar-18**

Test Number		410	411	412	413	414	
Test location taken from							
Easting		315525	315500	315563	315589	315713	
Northing		5844687	5844717	5844622	5844617	5844703	
Layer Number		7	6	4	4	4	
Time of tests		11:55:00	12:25:00	14:00:00	14:15:00	15:00:00	
Depth of Layer	mm	300	200	250	250	200	
Depth of Test	mm	275	175	225	225	175	
Field Wet Density	t/m^3	2.02	1.93	1.95	1.96	1.92	
*Field Moisture Content	%	21.0	15.5	23.0	20.5	17.5	
Oversize Material	Wet %	2	0	0	0	0	
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	
Peak Converted Wet Density	t/m^3	2.072	2.040	2.027	1.922	1.972	
*Optimum Moisture Content	%	18.5	16.0	19.0	19.0	18.0	
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	
Moisture Ratio	%	**114**	**97**	**121**	**108**	**97**	
Moisture Variation	%	**2.5**	**-0.5**	**4.0**	**1.5**	**-0.5**	
Moisture Variation		**WET**	**DRY**	**WET**	**WET**	**DRY**	
Density Ratio	%	**97.5**	**94.5**	**96.0**	**102.0**	**97.5**	

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DT**
location :	**DONNYBROOK**	test date:	**6-Apr-18**

Test Number		415	416	417	418	419	420
Test location taken from							
Easting		315185	315215	315223	315251	315353	315359
Northing		5844785	5844800	5844764	5844781	5844747	5844711
Layer Number		3	3	3	3	6	6
Time of tests		13:55:00	14:10:00	14:20:00	14:25:00	14:55:00	15:10:00
Depth of Layer	mm	250	200	200	200	200	200
Depth of Test	mm	225	175	175	175	175	175
Field Wet Density	t/m^3	1.98	1.97	2.05	1.99	2.02	2.09
*Field Moisture Content	%	15.0	17.0	19.5	20.0	21.5	14.5
Oversize Material	Wet %	4	2	3	0	2	3
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.044	2.111	2.112	2.061	2.088	2.120
*Optimum Moisture Content	%	15.5	16.5	19.5	19.5	21.0	15.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**97**	**103**	**100**	**103**	**103**	**97**
Moisture Variation	%	**-0.5**	**0.5**	**0.0**	**0.5**	**0.5**	**-0.5**
Moisture Variation		**DRY**	**WET**	**-**	**WET**	**WET**	**DRY**
Density Ratio	%	**97.0**	**93.5**	**97.0**	**96.5**	**97.0**	**98.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DU**
location :	**DONNYBROOK**	test date:	**9-Apr-18**

Test Number		421					
Test location taken from							
Easting		315163					
Northing		5844829					
Layer Number		3					
Time of tests		14:20:00					
Depth of Layer	mm	300					
Depth of Test	mm	275					
Field Wet Density	t/m^3	2.02					
*Field Moisture Content	%	18.0					
Oversize Material	Wet %	0					
Sieve Size	mm	19.0					
Peak Converted Wet Density	t/m^3	2.076					
*Optimum Moisture Content	%	17.0					
Compactive Effort Used	std / mod	STD					
Moisture Ratio	%	**106**					
Moisture Variation	%	**1.0**					
Moisture Variation		**WET**					
Density Ratio	%	**97.5**					

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DV**
location :	**DONNYBROOK**	test date:	**10-Apr-18**

Test Number		422	423	424	425		
Test location taken from							
Easting		315264	315312	315537	315572		
Northing		5844820	5844800	5844687	5844690		
Layer Number		3	5	6	6		
Time of tests		8:50:00	9:00:00	9:40:00	14:50:00		
Depth of Layer	mm	200	200	300	300		
Depth of Test	mm	175	175	275	275		
Field Wet Density	t/m^3	2.03	2.00	2.00	2.08		
*Field Moisture Content	%	18.0	13.5	18.0	16.5		
Oversize Material	Wet %	0	0	3	0		
Sieve Size	mm	19.0	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.061	2.002	2.093	2.207		
*Optimum Moisture Content	%	18.0	15.5	18.5	15.0		
Compactive Effort Used	std / mod	STD	STD	STD	STD		
Moisture Ratio	%	**100**	**87**	**98**	**110**		
Moisture Variation	%	**0.0**	**-2.0**	**-0.5**	**1.5**		
Moisture Variation		**-**	**DRY**	**DRY**	**WET**		
Density Ratio	%	**98.5**	**100.0**	**95.5**	**94.5**		

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DW**
location :	**DONNYBROOK**	test date:	**11-Apr-18**

Test Number		426	427	428		
Test location taken from						
Easting		315315	315303	315594		
Northing		5844663	5844625	5844682		
Layer Number		4	3	6		
Time of tests		10:00:00	10:15:00	10:50:00		
Depth of Layer	mm	200	200	300		
Depth of Test	mm	175	175	275		
Field Wet Density	t/m^3	1.98	1.98	1.96		
*Field Moisture Content	%	19.0	19.5	19.0		
Oversize Material	Wet %	0	0	4		
Sieve Size	mm	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.038	2.039	2.051		
*Optimum Moisture Content	%	18.5	18.5	23.5		
Compactive Effort Used	std / mod	STD	STD	STD		
Moisture Ratio	%	**103**	**106**	**81**		
Moisture Variation	%	**0.5**	**1.0**	**-4.5**		
Moisture Variation		**WET**	**WET**	**DRY**		
Density Ratio	%	**97.0**	**97.0**	**95.5**		

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DX**
location :	**DONNYBROOK**	test date:	**12-Apr-18**

Test Number		429	430	431		
Test location taken from		Retest of #416				
Easting		315210	315305	315286		
Northing		5844798	5844760	5844719		
Layer Number		3	5	3		
Time of tests		13:00:00	13:10:00	13:20:00		
Depth of Layer	mm	200	200	200		
Depth of Test	mm	175	175	175		
Field Wet Density	t/m^3	2.05	2.00	2.00		
*Field Moisture Content	%	19.5	17.5	17.0		
Oversize Material	Wet %	0	0	0		
Sieve Size	mm	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.086	2.117	2.097		
*Optimum Moisture Content	%	17.5	17.0	16.0		
Compactive Effort Used	std / mod	STD	STD	STD		
Moisture Ratio	%	**112**	**103**	**107**		
Moisture Variation	%	**2.0**	**0.5**	**1.0**		
Moisture Variation		**WET**	**WET**	**WET**		
Density Ratio	%	**98.0**	**94.5**	**95.5**		

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DY**
location :	**DONNYBROOK**	test date:	**13-Apr-18**

Test Number		432	433	434	435		
Test location taken from							
Easting		315627	315654	315680	315494		
Northing		5844750	5844745	5844737	5844700		
Layer Number		6	6	5	7		
Time of tests		11:30:00	11:45:00	12:00:00	12:15:00		
Depth of Layer	mm	300	300	300	200		
Depth of Test	mm	275	275	275	175		
Field Wet Density	t/m^3	2.12	2.03	1.99	2.02		
*Field Moisture Content	%	19.0	20.5	19.0	20.0		
Oversize Material	Wet %	0	0	0	0		
Sieve Size	mm	19.0	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.125	2.030	2.126	2.090		
*Optimum Moisture Content	%	18.5	19.0	17.0	18.5		
Compactive Effort Used	std / mod	STD	STD	STD	STD		
Moisture Ratio	%	**103**	**108**	**112**	**108**		
Moisture Variation	%	**0.5**	**1.5**	**2.0**	**1.5**		
Moisture Variation		**WET**	**WET**	**WET**	**WET**		
Density Ratio	%	**99.5**	**100.0**	**93.5**	**96.5**		

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DZ**
location :	**DONNYBROOK**	test date:	**17-Apr-18**

Test Number		436	437				
Test location taken from		Retest of #434	Retest of #430				
Easting		315680	315302				
Northing		5844740	5844756				
Layer Number		5	5				
Time of tests		9:35:00	10:05:00				
Depth of Layer	mm	300	200				
Depth of Test	mm	275	175				
Field Wet Density	t/m^3	2.04	2.12				
*Field Moisture Content	%	19.5	17.5				
Oversize Material	Wet %	3	0				
Sieve Size	mm	19.0	19.0				
Peak Converted Wet Density	t/m^3	2.072	2.086				
*Optimum Moisture Content	%	19.0	16.5				
Compactive Effort Used	std / mod	STD	STD				
Moisture Ratio	%	**103**	**106**				
Moisture Variation	%	**0.5**	**1.0**				
Moisture Variation		**WET**	**WET**				
Density Ratio	%	**98.5**	**102.0**				

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AB**

location : **DONNYBROOK** test date: **20-Nov-17**

Test Number		2	3	4	5		
Test location taken from							
Easting		315554	315553	315524	315485		
Northing		5844778	5844767	5844774	5844775		
Layer Number		1	1	1	1		
Time of tests		13:05:00	13:15:00	13:30:00	13:40:00		
Depth of Layer	mm	200	200	200	200		
Depth of Test	mm	175	175	175	175		
Field Wet Density	t/m^3	1.92	2.05	2.04	2.02		
*Field Moisture Content	%	16.0	15.5	16.5	16.5		
Oversize Material	Wet %	0	0	0	0		
Sieve Size	mm	19.0	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.021	2.010	2.031	2.001		
*Optimum Moisture Content	%	18.0	16.5	19.5	18.0		
Compactive Effort Used	std / mod	STD	STD	STD	STD		
Moisture Ratio	%	**89**	**94**	**85**	**92**		
Moisture Variation	%	**-2.0**	**-1.0**	**-3.0**	**-1.5**		
Moisture Variation		**DRY**	**DRY**	**DRY**	**DRY**		
Density Ratio	%	**95.0**	**102.0**	**100.5**	**101.0**		

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description CLAY, medium to high plasticity, light brown, with gravel.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AC**

location : **DONNYBROOK** test date: **21-Nov-17**

Test Number		6	7				
Test location taken from							
Easting		315458	315404				
Northing		5844767	5844785				
Layer Number		1	1				
Time of tests		13:00:00	13:10:00				
Depth of Layer	mm	200	200				
Depth of Test	mm	175	175				
Field Wet Density	t/m^3	2.07	2.07				
*Field Moisture Content	%	15.5	14.0				
Oversize Material	Wet %	0	0				
Sieve Size	mm	19.0	19.0				
Peak Converted Wet Density	t/m^3	2.014	1.996				
*Optimum Moisture Content	%	17.5	14.5				
Compactive Effort Used	std / mod	STD	STD				
Moisture Ratio	%	**89**	**97**				
Moisture Variation	%	**-2.0**	**-0.5**				
Moisture Variation		**DRY**	**DRY**				
Density Ratio	%	**103.0**	**103.5**				

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Silty CLAY, medium to high, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AD**

location : **DONNYBROOK** test date: **22-Nov-17**

Test Number		8	9	10	11	12	13
Test location taken from							
Easting		315462	315432	315405	315554	315545	315546
Northing		5844726	5844728	5844741	5844757	5844735	5844700
Layer Number		1	1	1	2	1	1
Time of tests		9:00:00	9:20:00	9:30:00	15:00:00	15:10:00	15:25:00
Depth of Layer	mm	200	200	150	300	300	250
Depth of Test	mm	175	175	125	275	275	225
Field Wet Density	t/m^3	1.99	1.92	2.00	2.06	2.00	2.00
*Field Moisture Content	%	17.5	14.5	18.0	18.0	14.0	17.5
Oversize Material	Wet %	0	0	2	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.028	2.052	2.036	2.015	1.983	2.039
*Optimum Moisture Content	%	17.0	16.0	19.0	20.0	16.0	18.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**103**	**91**	**95**	**90**	**88**	**95**
Moisture Variation	%	**0.5**	**-1.5**	**-1.0**	**-2.0**	**-2.0**	**-1.0**
Moisture Variation		**WET**	**DRY**	**DRY**	**DRY**	**DRY**	**DRY**
Density Ratio	%	**98.0**	**94.0**	**98.0**	**102.0**	**100.5**	**98.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY, medium to high plasticity, brown, fine to coarse.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AE**

location : **DONNYBROOK** test date: **23-Nov-17**

Test Number		14	15	16	17	18	19
Test location taken from							
Easting		315512	315503	315500	315465	315466	315497
Northing		5844762	5844731	5844701	5844711	5844730	5844774
Layer Number		2	1	1	2	2	2
Time of tests		8:10:00	8:25:00	8:35:00	13:35:00	13:45:00	14:00:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	2.03	2.09	1.93	2.05	2.02	1.98
*Field Moisture Content	%	15.0	17.5	15.5	17.5	18.0	29.5
Oversize Material	Wet %	0	0	0	0	3	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.024	2.011	2.007	1.994	1.990	1.962
*Optimum Moisture Content	%	16.0	18.5	18.5	18.0	18.5	32.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**94**	**95**	**84**	**97**	**98**	**91**
Moisture Variation	%	**-1.0**	**-1.0**	**-3.0**	**-0.5**	**-0.5**	**-3.0**
Moisture Variation		**DRY**	**DRY**	**DRY**	**DRY**	**DRY**	**DRY**
Density Ratio	%	**100.5**	**104.0**	**96.0**	**102.5**	**101.5**	**101.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet. Sample #19 was dried back, wet to optimum and cured due to being excessively wet.

Material description Gravelly CLAY / Silty CLAY, fine to coarse, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AF**

location : **DONNYBROOK** test date: **23-Nov-17**

Test Number		20	21				
Test location taken from							
Easting		315490	315544				
Northing		5844711	5844783				
Layer Number		1	2				
Time of tests		14:25:00	14:35:00				
Depth of Layer	mm	300	300				
Depth of Test	mm	275	275				
Field Wet Density	t/m^3	1.93	1.99				
*Field Moisture Content	%	18.5	18.0				
Oversize Material	Wet %	2	0				
Sieve Size	mm	19.0	19.0				
Peak Converted Wet Density	t/m^3	1.965	1.946				
*Optimum Moisture Content	%	20.5	20.5				
Compactive Effort Used	std / mod	STD	STD				
Moisture Ratio	%	**90**	**88**				
Moisture Variation	%	**-2.0**	**-2.5**				
Moisture Variation		**DRY**	**DRY**				
Density Ratio	%	**98.0**	**102.0**				

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY / Silty CLAY, fine to coarse, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AG**

location : **DONNYBROOK** test date: **24-Nov-17**

Test Number		22	23	24	25	26	27
Test location taken from						Retest of #9	
Easting		315431	315424	315415	315455	315433	315367
Northing		5844785	5844249	5844718	5844790	5844727	5844752
Layer Number		2	2	2	2	1	2
Time of tests		8:45:00	9:00:00	9:07:00	9:20:00	11:00:00	13:10:00
Depth of Layer	mm	300	300	300	300	200	300
Depth of Test	mm	275	275	275	275	175	275
Field Wet Density	t/m^3	2.02	2.05	1.95	2.03	2.01	1.95
*Field Moisture Content	%	22.0	18.0	14.5	22.0	14.5	21.5
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.013	2.065	1.999	1.988	2.070	2.013
*Optimum Moisture Content	%	22.0	17.5	17.5	21.5	16.5	21.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**100**	**103**	**83**	**103**	**88**	**100**
Moisture Variation	%	**0.0**	**0.5**	**-3.0**	**0.5**	**-2.0**	**0.0**
Moisture Variation		**-**	**WET**	**DRY**	**WET**	**DRY**	**-**
Density Ratio	%	**100.5**	**99.5**	**97.5**	**102.0**	**97.0**	**97.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY / Silty CLAY, fine to coarse, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AH**

location : **DONNYBROOK** test date: **24-Nov-17**

Test Number		28	29	30	31	32	
Test location taken from							
Easting		315357	315390	315396	315401	315398	
Northing		5844723	5844714	5844728	5844758	5844786	
Layer Number		1	1	2	2	2	
Time of tests		13:35:00	13:45:00	13:55:00	14:10:00	14:25:00	
Depth of Layer	mm	250	250	300	300	300	
Depth of Test	mm	225	225	275	275	275	
Field Wet Density	t/m^3	1.99	2.01	1.97	2.00	2.00	
*Field Moisture Content	%	18.0	17.0	17.5	15.5	22.5	
Oversize Material	Wet %	0	0	0	0	0	
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	
Peak Converted Wet Density	t/m^3	2.053	2.061	2.032	2.043	1.968	
*Optimum Moisture Content	%	17.5	17.0	19.0	16.0	22.0	
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	
Moisture Ratio	%	**103**	**100**	**92**	**97**	**103**	
Moisture Variation	%	**0.5**	**0.0**	**-1.5**	**-0.5**	**0.5**	
Moisture Variation		**WET**	**-**	**DRY**	**DRY**	**WET**	
Density Ratio	%	**97.0**	**97.5**	**97.0**	**98.0**	**102.0**	

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY / Silty CLAY, fine to coarse, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AI**

location : **DONNYBROOK** test date: **27-Nov-17**

Test Number		33	34	35	36	37	38
Test location taken from							
Easting		315333	315351	315339	31556	315565	315575
Northing		5844754	5844765	5844790	5844680	5844713	5844747
Layer Number		1	1	1	2	2	3
Time of tests		11:00:00	11:10:00	11:25:00	11:04:00	11:55:00	12:10:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	1.93	2.06	1.96	2.03	2.02	1.97
*Field Moisture Content	%	18.5	23.5	19.0	17.0	20.0	20.5
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.038	2.000	2.007	1.971	1.877	2.010
*Optimum Moisture Content	%	18.0	23.0	19.5	19.5	23.0	21.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**103**	**102**	**98**	**87**	**87**	**98**
Moisture Variation	%	**0.5**	**0.5**	**-0.5**	**-2.5**	**-3.0**	**-0.5**
Moisture Variation		**WET**	**WET**	**DRY**	**DRY**	**DRY**	**DRY**
Density Ratio	%	**94.5**	**103.0**	**97.5**	**103.0**	**108.0**	**98.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY / Silty CLAY with gravel, brown, fine to coarse.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AJ**

location : **DONNYBROOK** test date: **27-Nov-17**

Test Number		39					
Test location taken from							
Easting		315614					
Northing		5844756					
Layer Number		1					
Time of tests		12:30:00					
Depth of Layer	mm	300					
Depth of Test	mm	275					
Field Wet Density	t/m^3	1.95					
*Field Moisture Content	%	27.5					
Oversize Material	Wet %	0					
Sieve Size	mm	19.0					
Peak Converted Wet Density	t/m^3	1.923					
*Optimum Moisture Content	%	27.0					
Compactive Effort Used	std / mod	STD					
Moisture Ratio	%	**102**					
Moisture Variation	%	**0.5**					
Moisture Variation		**WET**					
Density Ratio	%	**101.5**					

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY / Silty CLAY with gravel, brown, fine to coarse.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AK**

location : **DONNYBROOK** test date: **28-Nov-17**

Test Number		40	41	42	43	44	
Test location taken from		Retest of #19					
Easting		315496	315599	315576	315535	315537	
Northing		5844772	5844693	5844689	5844697	5844730	
Layer Number		2	1	1	1	2	
Time of tests		8:55:00	10:15:00	11:50:00	14:50:00	15:00:00	
Depth of Layer	mm	300	300	200	300	300	
Depth of Test	mm	275	275	175	275	275	
Field Wet Density	t/m^3	2.04	1.83	1.72	2.04	2.03	
*Field Moisture Content	%	19.0	24.5	19.0	18.0	20.0	
Oversize Material	Wet %	0	0	0	0	0	
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	
Peak Converted Wet Density	t/m^3	1.955	1.945	1.849	2.068	2.031	
*Optimum Moisture Content	%	20.0	24.5	22.0	18.0	20.5	
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	
Moisture Ratio	%	**95**	**100**	**87**	**100**	**98**	
Moisture Variation	%	**-1.0**	**0.0**	**-3.0**	**0.0**	**-0.5**	
Moisture Variation		**DRY**	**-**	**DRY**	**-**	**DRY**	
Density Ratio	%	**104.5**	**94.0**	**93.0**	**98.5**	**100.0**	

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY, brown mottled grey.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AL**

location : **DONNYBROOK** test date: **29-Nov-17**

Test Number		45	46	47	48		
Test location taken from		Retest of #33	Retest of #41	Retest of #42			
Easting		315334	315598	315580	315594		
Northing		5844753	5844691	5844692	5844761		
Layer Number		1	1	1	2		
Time of tests		8:20:00	12:25:00	12:40:00	13:10:00		
Depth of Layer	mm	300	300	200	300		
Depth of Test	mm	275	275	175	275		
Field Wet Density	t/m^3	2.06	1.99	1.94	2.01		
*Field Moisture Content	%	15.5	22.0	19.0	18.5		
Oversize Material	Wet %	0	0	0	0		
Sieve Size	mm	19.0	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.056	1.966	1.849	2.011		
*Optimum Moisture Content	%	17.5	22.0	23.0	18.5		
Compactive Effort Used	std / mod	STD	STD	STD	STD		
Moisture Ratio	%	**89**	**100**	**83**	**100**		
Moisture Variation	%	**-2.0**	**0.0**	**-4.0**	**0.0**		
Moisture Variation		**DRY**	**-**	**DRY**	**-**		
Density Ratio	%	**100.0**	**101.0**	**104.5**	**100.0**		

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description CLAY / Gravelly CLAY / Soft rock SILTSTONE

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AM**

location : **DONNYBROOK** test date: **11-Dec-17**

Test Number		49	50	51	52	53	54
Test location taken from						Old Well	
Easting		315489	315498	315535	315518	315129	315201
Northing		5844480	5844526	5844536	5844490	5844608	5844790
Layer Number		1	1	1	1	1	1
Time of tests		8:30:00	8:45:00	9:00:00	9:10:00	10:55:00	12:10:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	2.06	2.05	2.05	2.01	1.97	2.10
*Field Moisture Content	%	17.5	27.0	19.0	18.5	19.5	10.0
Oversize Material	Wet %	0	0	0	0	0	11
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.999	2.029	2.045	2.002	1.928	2.088
*Optimum Moisture Content	%	19.0	27.0	18.5	19.5	23.0	12.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**92**	**100**	**103**	**95**	**85**	**80**
Moisture Variation	%	**-1.5**	**0.0**	**0.5**	**-1.0**	**-3.5**	**-2.5**
Moisture Variation		**DRY**	**-**	**WET**	**DRY**	**DRY**	**DRY**
Density Ratio	%	**103.0**	**101.0**	**100.5**	**100.5**	**102.0**	**100.5**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY, medium to high plasticity, fine to coarse, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AN**

location : **DONNYBROOK** test date: **11-Dec-17**

Test Number		55	56	57		
Test location taken from						
Easting		315218	315441	315438		
Northing		5844778	5844548	5844518		
Layer Number		1	1	1		
Time of tests		12:25:00	14:10:00	14:30:00		
Depth of Layer	mm	300	300	300		
Depth of Test	mm	275	275	275		
Field Wet Density	t/m^3	2.09	2.04	2.12		
*Field Moisture Content	%	12.0	22.5	19.5		
Oversize Material	Wet %	4	0	5		
Sieve Size	mm	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.146	1.969	2.044		
*Optimum Moisture Content	%	14.0	25.5	21.0		
Compactive Effort Used	std / mod	STD	STD	STD		
Moisture Ratio	%	**86**	**88**	**93**		
Moisture Variation	%	**-2.0**	**-3.0**	**-1.5**		
Moisture Variation		**DRY**	**DRY**	**DRY**		
Density Ratio	%	**97.5**	**104.0**	**103.5**		

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description #55 - Soft Rock Mudstone, fine to coarse, light brown.

#56 - #57 - Gravelly silty CLAY, fine to coarse, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AO**

location : **DONNYBROOK** test date: **13-Dec-17**

Test Number		58	59	60	61	62	63
Test location taken from							
Easting		315408	315400	315425	315439	315244	315255
Northing		5844527	5844564	5844602	5844647	5844762	5844794
Layer Number		1	1	1	1	1	1
Time of tests		8:55:00	9:10:00	9:30:00	9:45:00	10:35:00	10:50:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	2.08	2.01	1.99	1.97	2.00	2.09
*Field Moisture Content	%	16.5	17.0	17.0	17.0	9.5	14.0
Oversize Material	Wet %	0	0	0	0	18	7
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.109	2.128	2.107	2.097	2.091	2.158
*Optimum Moisture Content	%	17.0	17.0	16.5	16.5	10.5	12.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**97**	**100**	**103**	**103**	**91**	**117**
Moisture Variation	%	**-0.5**	**0.0**	**0.5**	**0.5**	**-1.0**	**2.0**
Moisture Variation		**DRY**	**-**	**WET**	**WET**	**DRY**	**WET**
Density Ratio	%	**99.0**	**94.5**	**94.5**	**94.0**	**95.5**	**97.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AP**

location : **DONNYBROOK** test date: **13-Dec-17**

Test Number		64	65	66		
Test location taken from						
Easting		315490	315516	315488		
Northing		5844602	5844627	5844647		
Layer Number		1	1	1		
Time of tests		14:05:00	14:15:00	14:30:00		
Depth of Layer	mm	200	300	300		
Depth of Test	mm	175	275	275		
Field Wet Density	t/m^3	2.03	1.99	2.12		
*Field Moisture Content	%	15.5	17.5	17.0		
Oversize Material	Wet %	0	0	0		
Sieve Size	mm	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.145	2.096	2.119		
*Optimum Moisture Content	%	15.5	17.0	16.5		
Compactive Effort Used	std / mod	STD	STD	STD		
Moisture Ratio	%	**100**	**103**	**103**		
Moisture Variation	%	**0.0**	**0.5**	**0.5**		
Moisture Variation		**-**	**WET**	**WET**		
Density Ratio	%	**95.0**	**95.0**	**100.0**		

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AQ**

location : **DONNYBROOK** test date: **13-Dec-17**

Test Number		67	68	69	70	71	72
Test location taken from		Old Well					Old Well
Easting		315127	315474	315477	315467	315450	315124
Northing		5844605	5844677	5844720	5844761	5844675	5844606
Layer Number		3	2	3	3	2	5
Time of tests		8:30:00	9:35:00	9:55:00	10:15:00	10:30:00	12:10:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	1.97	2.06	2.01	2.07	2.07	2.03
*Field Moisture Content	%	14.5	16.0	15.0	15.5	15.5	18.0
Oversize Material	Wet %	0	0	3	0	3	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.035	2.091	1.994	2.036	2.085	2.040
*Optimum Moisture Content	%	17.0	15.5	17.5	17.0	15.0	18.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**86**	**103**	**86**	**91**	**104**	**100**
Moisture Variation	%	**-2.5**	**0.5**	**-2.5**	**-1.5**	**0.5**	**0.0**
Moisture Variation		**DRY**	**WET**	**DRY**	**DRY**	**WET**	**-**
Density Ratio	%	**97.0**	**98.5**	**100.5**	**101.5**	**99.0**	**99.5**

Specification Requirements 96% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly silty CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AR**

location : **DONNYBROOK** test date: **13-Dec-17**

Test Number		73	74	75	76		
Test location taken from							
Easting		315437	315443	315442	315437		
Northing		5844694	5844716	5844741	5844783		
Layer Number		2	3	3	3		
Time of tests		13:45:00	14:00:00	14:10:00	14:25:00		
Depth of Layer	mm	300	300	300	300		
Depth of Test	mm	275	275	275	275		
Field Wet Density	t/m^3	2.09	2.01	2.00	2.05		
*Field Moisture Content	%	16.5	14.5	17.0	14.5		
Oversize Material	Wet %	0	0	0	0		
Sieve Size	mm	19.0	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.083	2.014	1.958	2.014		
*Optimum Moisture Content	%	16.5	14.0	18.0	14.0		
Compactive Effort Used	std / mod	STD	STD	STD	STD		
Moisture Ratio	%	**100**	**104**	**95**	**104**		
Moisture Variation	%	**0.0**	**0.5**	**-1.0**	**0.5**		
Moisture Variation		**-**	**WET**	**DRY**	**WET**		
Density Ratio	%	**100.5**	**100.0**	**102.0**	**102.0**		

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly silty CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AS**

location : **DONNYBROOK** test date: **14-Dec-17**

Test Number		77	78	79	80	81	82
Test location taken from							Old Well
Easting		315397	315403	315407	315409	315418	315128
Northing		5844609	5844631	5844673	5844710	5844759	5844608
Layer Number		1	1	2	3	3	7
Time of tests		8:40:00	8:50:00	8:59:00	9:20:00	9:55:00	11:20:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	2.03	2.03	2.03	2.04	2.03	2.08
*Field Moisture Content	%	17.0	17.5	20.0	15.0	16.0	14.5
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.040	2.010	2.027	2.100	2.038	2.122
*Optimum Moisture Content	%	18.5	19.0	21.0	15.0	18.5	15.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**92**	**92**	**95**	**100**	**87**	**97**
Moisture Variation	%	**-1.5**	**-1.5**	**-1.0**	**0.0**	**-2.5**	**-0.5**
Moisture Variation		**DRY**	**DRY**	**DRY**	**-**	**DRY**	**DRY**
Density Ratio	%	**99.5**	**101.0**	**100.0**	**97.0**	**99.5**	**98.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly silty CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AT**

location : **DONNYBROOK** test date: **14-Dec-17**

Test Number		83	84	85	86	87	88
Test location taken from						Old Well	Retest of #61
Easting		315523	315516	315507	315500	315125	315436
Northing		5844522	5844487	5844507	5844474	5844608	5844648
Layer Number		2	2	2	2	9	3
Time of tests		13:20:00	14:00:00	14:15:00	14:25:00	14:45:00	15:05:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	2.02	2.01	2.00	2.02	2.03	2.13
*Field Moisture Content	%	21.5	23.0	21.5	18.5	20.0	18.0
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.933	2.002	2.032	2.046	2.033	1.999
*Optimum Moisture Content	%	24.5	22.5	21.5	19.5	20.0	21.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**88**	**102**	**100**	**95**	**100**	**86**
Moisture Variation	%	**-3.0**	**0.5**	**0.0**	**-1.0**	**0.0**	**-3.0**
Moisture Variation		**DRY**	**WET**	**-**	**DRY**	**-**	**DRY**
Density Ratio	%	**104.5**	**100.5**	**98.5**	**98.5**	**100.0**	**106.5**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly silty CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AU**

location : **DONNYBROOK** test date: **14-Dec-17**

Test Number		89					
Test location taken from		Fixed Wet Spot					
Easting		315490					
Northing		5844762					
Layer Number		3					
Time of tests		15:30:00					
Depth of Layer	mm	300					
Depth of Test	mm	275					
Field Wet Density	t/m^3	2.01					
*Field Moisture Content	%	18.0					
Oversize Material	Wet %	0					
Sieve Size	mm	19.0					
Peak Converted Wet Density	t/m^3	2.017					
*Optimum Moisture Content	%	20.0					
Compactive Effort Used	std / mod	STD					
Moisture Ratio	%	**90**					
Moisture Variation	%	**-2.0**					
Moisture Variation		**DRY**					
Density Ratio	%	**99.5**					

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description CLAY, low to medium plasticity, brown

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AV**

location : **DONNYBROOK** test date: **15-Dec-17**

Test Number		90	91	92	93	94	95
Test location taken from							
Easting		315374	315372	315375	315365	315496	315484
Northing		5844676	5844710	5844748	5844646	5844545	5844496
Layer Number		2	2	3	1	2	2
Time of tests		8:45:00	9:10:00	9:30:00	10:00:00	11:30:00	11:45:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	2.09	2.05	1.95	2.08	1.97	1.97
*Field Moisture Content	%	17.5	18.5	16.0	16.5	20.5	17.0
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.032	2.077	1.997	2.041	2.024	2.065
*Optimum Moisture Content	%	20.0	18.5	17.5	18.5	20.5	16.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**88**	**100**	**92**	**89**	**100**	**103**
Moisture Variation	%	**-2.5**	**0.0**	**-1.5**	**-2.0**	**0.0**	**0.5**
Moisture Variation		**DRY**	**-**	**DRY**	**DRY**	**-**	**WET**
Density Ratio	%	**103.0**	**98.5**	**98.0**	**101.5**	**97.5**	**95.5**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly silty CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AW**

location : **DONNYBROOK** test date: **15-Dec-17**

Test Number		96	97	98	99	100	101
Test location taken from							
Easting		315376	315360	315355	315346	315338	315462
Northing		5844803	5844774	5844727	5844689	5844635	5844482
Layer Number		3	2	2	2	1	2
Time of tests		13:05:00	13:15:00	13:30:00	13:45:00	14:05:00	14:55:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	2.02	2.05	2.05	2.06	1.96	1.99
*Field Moisture Content	%	17.5	19.5	17.5	20.0	17.5	22.0
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.040	2.051	2.022	1.995	2.012	1.984
*Optimum Moisture Content	%	19.0	20.0	18.0	20.0	18.5	24.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**92**	**98**	**97**	**100**	**95**	**90**
Moisture Variation	%	**-1.5**	**-0.5**	**-0.5**	**0.0**	**-1.0**	**-2.5**
Moisture Variation		**DRY**	**DRY**	**DRY**	**-**	**DRY**	**DRY**
Density Ratio	%	**99.0**	**100.0**	**101.0**	**103.5**	**97.5**	**100.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly silty CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AX**

location : **DONNYBROOK** test date: **18-Dec-17**

Test Number		102	103	104	105	106	107
Test location taken from							
Easting		315477	315463	315458	315490	315482	315473
Northing		5844549	5844537	5844513	5844778	5844740	5844709
Layer Number		2	2	2	4	4	4
Time of tests		12:30:00	12:45:00	13:00:00	14:50:00	15:10:00	15:20:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	2.06	1.98	1.98	1.99	2.10	2.07
*Field Moisture Content	%	21.0	17.5	25.0	13.0	17.0	11.0
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.926	1.954	1.942	2.004	2.061	2.049
*Optimum Moisture Content	%	22.5	18.5	28.5	13.5	17.0	11.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**94**	**95**	**88**	**97**	**100**	**96**
Moisture Variation	%	**-1.5**	**-1.0**	**-3.5**	**-0.5**	**0.0**	**-0.5**
Moisture Variation		**DRY**	**DRY**	**DRY**	**DRY**	**-**	**DRY**
Density Ratio	%	**106.5**	**101.0**	**102.0**	**99.5**	**101.5**	**101.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly silty CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AY**

location : **DONNYBROOK** test date: **19-Dec-17**

Test Number		108	109	110	111	112	113
Test location taken from							
Easting		315429	315436	315440	315439	315471	315457
Northing		5844700	5844727	5844761	5844794	5844773	5844684
Layer Number		3	4	4	4	4	3
Time of tests		11:30:00	11:40:00	11:50:00	12:10:00	12:25:00	12:40:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	2.02	2.09	1.98	1.97	2.09	1.96
*Field Moisture Content	%	21.0	20.0	17.0	17.0	19.5	23.0
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.041	2.037	1.976	2.030	2.121	1.935
*Optimum Moisture Content	%	20.5	20.0	18.0	19.0	17.5	26.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**103**	**100**	**95**	**90**	**112**	**89**
Moisture Variation	%	**0.5**	**0.0**	**-1.0**	**-2.0**	**2.0**	**-3.0**
Moisture Variation		**WET**	**-**	**DRY**	**DRY**	**WET**	**DRY**
Density Ratio	%	**99.0**	**102.5**	**100.0**	**97.0**	**98.5**	**101.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **AZ**

location : **DONNYBROOK** test date: **19-Dec-17**

Test Number		114	115	116		
Test location taken from						
Easting		315412	3157411	315400		
Northing		5844548	5844515	5844546		
Layer Number		2	2	2		
Time of tests		13:00:00	13:15:00	13:30:00		
Depth of Layer	mm	300	300	300		
Depth of Test	mm	275	275	275		
Field Wet Density	t/m^3	2.01	2.07	1.92		
*Field Moisture Content	%	19.0	16.5	18.0		
Oversize Material	Wet %	0	0	0		
Sieve Size	mm	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	1.939	1.949	2.007		
*Optimum Moisture Content	%	23.0	19.0	18.5		
Compactive Effort Used	std / mod	STD	STD	STD		
Moisture Ratio	%	**83**	**87**	**98**		
Moisture Variation	%	**-4.0**	**-2.5**	**-0.5**		
Moisture Variation		**DRY**	**DRY**	**DRY**		
Density Ratio	%	**103.5**	**106.0**	**96.0**		

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BA**

location : **DONNYBROOK** test date: **20-Dec-17**

Test Number		117	118	119	120	121	122
Test location taken from							
Easting		315384	315393	315397	315379	315409	315318
Northing		5844616	5844688	5844763	5844760	5844787	5844624
Layer Number		2	3	4	4	4	1
Time of tests		8:40:00	9:20:00	10:00:00	10:10:00	10:30:00	11:30:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	2.08	1.96	1.97	1.96	1.98	1.97
*Field Moisture Content	%	31.5	16.0	16.0	21.0	16.5	17.5
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.052	1.978	2.006	2.028	2.060	2.001
*Optimum Moisture Content	%	32.0	18.5	16.5	21.0	16.5	19.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**99**	**87**	**97**	**100**	**100**	**90**
Moisture Variation	%	**-0.5**	**-2.5**	**-0.5**	**0.0**	**0.0**	**-2.0**
Moisture Variation		**DRY**	**DRY**	**DRY**	**-**	**-**	**DRY**
Density Ratio	%	**101.5**	**99.0**	**98.0**	**96.5**	**96.0**	**98.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY with mudstone, fine to coarse, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BB**

location : **DONNYBROOK** test date: **20-Dec-17**

Test Number		123	124	125	126	127	128
Test location taken from							
Easting		315325	315326	315330	315307	315313	315373
Northing		5844685	5844732	5844786	5844728	5844787	5844664
Layer Number		2	2	2	1	1	2
Time of tests		11:45:00	12:15:00	12:35:00	15:00:00	15:10:00	15:25:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	1.99	2.04	1.96	2.02	2.01	1.93
*Field Moisture Content	%	19.5	19.0	18.5	24.0	23.0	22.5
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.024	1.997	1.990	2.011	2.008	1.982
*Optimum Moisture Content	%	19.5	21.0	18.5	24.0	22.5	22.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**100**	**91**	**100**	**100**	**102**	**100**
Moisture Variation	%	**0.0**	**-2.0**	**0.0**	**0.0**	**0.5**	**0.0**
Moisture Variation		**-**	**DRY**	**-**	**-**	**WET**	**-**
Density Ratio	%	**98.5**	**102.0**	**98.5**	**100.5**	**100.0**	**97.5**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly SILT/CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BC**

location : **DONNYBROOK** test date: **20-Dec-17**

Test Number		129	130				
Test location taken from							
Easting		315370	315380				
Northing		5844644	5844632				
Layer Number		2	2				
Time of tests		15:30:00	15:50:00				
Depth of Layer	mm	300	300				
Depth of Test	mm	275	275				
Field Wet Density	t/m^3	2.01	1.98				
*Field Moisture Content	%	26.0	20.5				
Oversize Material	Wet %	0	0				
Sieve Size	mm	19.0	19.0				
Peak Converted Wet Density	t/m^3	1.981	2.053				
*Optimum Moisture Content	%	24.0	21.0				
Compactive Effort Used	std / mod	STD	STD				
Moisture Ratio	%	**109**	**98**				
Moisture Variation	%	**2.0**	**-0.5**				
Moisture Variation		**WET**	**DRY**				
Density Ratio	%	**101.5**	**96.5**				

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY/SILT, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BD**

location : **DONNYBROOK** test date: **21-Dec-17**

Test Number		131	132	133	134	135	136
Test location taken from							
Easting		315435	315432	315419	315435	315487	315477
Northing		5844772	5844744	5844732	5844703	5844759	5844719
Layer Number		5	5	5	4	5	5
Time of tests		11:30:00	11:45:00	12:05:00	12:30:00	13:00:00	13:10:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	2.09	2.00	2.07	2.07	1.97	2.02
*Field Moisture Content	%	20.0	22.0	22.5	23.0	21.0	23.0
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.067	1.980	2.015	2.009	1.938	2.017
*Optimum Moisture Content	%	19.5	23.0	22.5	23.0	23.0	23.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**103**	**96**	**100**	**100**	**92**	**100**
Moisture Variation	%	**0.5**	**-1.0**	**0.0**	**0.0**	**-2.0**	**0.0**
Moisture Variation		**WET**	**DRY**	**-**	**-**	**DRY**	**-**
Density Ratio	%	**101.0**	**101.0**	**102.5**	**103.0**	**101.5**	**100.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY/SILT, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BE**

location : **DONNYBROOK** test date: **21-Dec-17**

Test Number		137	138	139	140	141	142
Test location taken from							
Easting		315452	315462	315476	315505	315511	315530
Northing		5844715	5844768	5844602	5844576	5844608	5844595
Layer Number		5	5	2	2	2	2
Time of tests		13:25:00	13:40:00	15:10:00	15:20:00	15:30:00	15:40:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	1.96	2.04	2.10	1.98	1.97	1.98
*Field Moisture Content	%	22.0	22.5	19.5	21.0	26.5	21.5
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.931	1.996	2.056	1.977	1.942	1.941
*Optimum Moisture Content	%	22.5	22.5	19.5	21.5	25.0	22.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**98**	**100**	**100**	**98**	**106**	**96**
Moisture Variation	%	**-0.5**	**0.0**	**0.0**	**-0.5**	**1.5**	**-1.0**
Moisture Variation		**DRY**	**-**	**-**	**DRY**	**WET**	**DRY**
Density Ratio	%	**101.5**	**102.5**	**102.0**	**100.5**	**101.5**	**102.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY/SILT, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BF**

location : **DONNYBROOK** test date: **21-Dec-17**

Test Number		143					
Test location taken from							
Easting		315520					
Northing		5844561					
Layer Number		2					
Time of tests		15:50:00					
Depth of Layer	mm	300					
Depth of Test	mm	275					
Field Wet Density	t/m^3	1.99					
*Field Moisture Content	%	24.5					
Oversize Material	Wet %	0					
Sieve Size	mm	19.0					
Peak Converted Wet Density	t/m^3	1.995					
*Optimum Moisture Content	%	23.5					
Compactive Effort Used	std / mod	STD					
Moisture Ratio	%	**105**					
Moisture Variation	%	**1.0**					
Moisture Variation		**WET**					
Density Ratio	%	**100.0**					

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description CLAY (fill)

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BG**

location : **DONNYBROOK** test date: **8-Jan-18**

Test Number		144	145	146	147	148	
Test location taken from							
Easting		315483	315497	315488	315503	315516	
Northing		5844647	5844712	5844673	5844738	5844779	
Layer Number		2	2	3	3	4	
Time of tests		9:50:00	10:05:00	10:15:00	10:25:00	10:35:00	
Depth of Layer	mm	300	300	300	300	300	
Depth of Test	mm	275	275	275	275	275	
Field Wet Density	t/m^3	1.99	1.97	2.02	1.96	2.03	
*Field Moisture Content	%	17.0	21.0	26.0	22.0	19.5	
Oversize Material	Wet %	0	0	0	0	0	
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	
Peak Converted Wet Density	t/m^3	1.986	1.999	1.978	2.027	2.020	
*Optimum Moisture Content	%	19.5	21.0	25.0	21.5	18.5	
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	
Moisture Ratio	%	**87**	**100**	**104**	**103**	**106**	
Moisture Variation	%	**-2.5**	**0.0**	**1.0**	**0.5**	**1.0**	
Moisture Variation		**DRY**	**-**	**WET**	**WET**	**WET**	
Density Ratio	%	**100.0**	**98.5**	**102.0**	**96.5**	**100.5**	

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Silty CLAY, low to medium plasticity, brown, with gravel.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BH**

location : **DONNYBROOK** test date: **9-Jan-18**

Test Number		149	150	151	152	153	154
Test location taken from							
Easting		315527	315538	315551	315564	315521	315551
Northing		5844684	5844715	5844746	5844772	5844626	5844669
Layer Number		3	3	4	4	2	3
Time of tests		8:00:00	8:10:00	8:25:00	8:35:00	8:45:00	9:00:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	2.00	2.03	1.99	1.97	2.03	2.13
*Field Moisture Content	%	24.0	18.5	21.5	22.0	26.5	18.0
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.994	1.949	1.989	1.963	1.936	1.967
*Optimum Moisture Content	%	22.0	19.0	21.5	23.0	26.5	19.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**109**	**98**	**100**	**96**	**100**	**93**
Moisture Variation	%	**2.0**	**-0.5**	**0.0**	**-1.0**	**0.0**	**-1.5**
Moisture Variation		**WET**	**DRY**	**-**	**DRY**	**-**	**DRY**
Density Ratio	%	**100.5**	**104.0**	**100.0**	**100.5**	**104.5**	**108.0**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BI**

location : **DONNYBROOK** test date: **9-Jan-18**

Test Number		155	156	157	158	159	
Test location taken from							
Easting		315576	315605	315464	315451	315439	
Northing		5844710	5844717	5844659	5844620	5844601	
Layer Number		3	2	2	2	2	
Time of tests		9:20:00	9:50:00	14:40:00	14:55:00	13:10:00	
Depth of Layer	mm	300	300	300	300	300	
Depth of Test	mm	275	275	275	275	275	
Field Wet Density	t/m^3	2.10	2.02	1.97	2.01	1.96	
*Field Moisture Content	%	21.5	21.0	23.5	17.5	18.0	
Oversize Material	Wet %	0	0	0	0	0	
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	
Peak Converted Wet Density	t/m^3	1.959	1.992	1.924	1.996	1.923	
*Optimum Moisture Content	%	23.0	20.5	23.5	20.5	20.5	
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	
Moisture Ratio	%	**94**	**103**	**100**	**86**	**88**	
Moisture Variation	%	**-1.5**	**0.5**	**0.0**	**-3.0**	**-2.5**	
Moisture Variation		**DRY**	**WET**	**-**	**DRY**	**DRY**	
Density Ratio	%	**107.0**	**101.5**	**102.5**	**100.5**	**102.0**	

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Gravelly CLAY/SILT, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BJ**

location : **DONNYBROOK** test date: **10-Jan-18**

Test Number		160	161	162	163	164	165
Test location taken from							
Easting		315533	315546	315553	315553	315500	315520
Northing		5844688	5844713	5844734	5844755	5844576	5844634
Layer Number		4	4	4	5	2	2
Time of tests		8:50:00	8:55:00	9:05:00	9:15:00	14:00:00	14:15:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	1.96	1.93	1.97	1.94	1.95	1.94
*Field Moisture Content	%	16.5	19.0	21.0	18.0	23.0	18.5
Oversize Material	Wet %	0	0	0	2	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.003	2.042	2.014	2.009	1.958	1.953
*Optimum Moisture Content	%	18.5	19.0	21.0	18.0	23.0	20.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**89**	**100**	**100**	**100**	**100**	**93**
Moisture Variation	%	**-2.0**	**0.0**	**0.0**	**0.0**	**0.0**	**-1.5**
Moisture Variation		**DRY**	**-**	**-**	**-**	**-**	**DRY**
Density Ratio	%	**98.0**	**94.5**	**97.5**	**96.5**	**99.5**	**99.5**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Silty gravelly CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BK**

location : **DONNYBROOK** test date: **11-Jan-18**

Test Number		166	167	168		
Test location taken from						
Easting		315590	315578	315572		
Northing		5844750	5844720	5844690		
Layer Number		5	4	4		
Time of tests		9:35:00	9:50:00	10:00:00		
Depth of Layer	mm	300	300	300		
Depth of Test	mm	275	275	275		
Field Wet Density	t/m^3	1.92	1.97	1.93		
*Field Moisture Content	%	17.5	19.5	20.0		
Oversize Material	Wet %	0	0	0		
Sieve Size	mm	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	1.991	2.024	1.967		
*Optimum Moisture Content	%	19.5	19.0	21.0		
Compactive Effort Used	std / mod	STD	STD	STD		
Moisture Ratio	%	**90**	**103**	**95**		
Moisture Variation	%	**-2.0**	**0.5**	**-1.0**		
Moisture Variation		**DRY**	**WET**	**DRY**		
Density Ratio	%	**96.5**	**97.5**	**98.0**		

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Silty gravelly CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BL**

location : **DONNYBROOK** test date: **15-Jan-18**

Test Number		169	170	171	172	173	174
Test location taken from							
Easting		315705	315662	315709	315666	315663	315704
Northing		5844579	5844581	5844612	5844613	5844663	5844654
Layer Number		1	1	1	1	1	1
Time of tests		10:00:00	10:25:00	13:05:00	13:15:00	13:25:00	13:40:00
Depth of Layer	mm	300	350	200	300	300	300
Depth of Test	mm	275	325	175	275	275	275
Field Wet Density	t/m^3	1.83	1.81	1.79	1.90	1.91	1.97
*Field Moisture Content	%	26.0	20.0	19.5	24.0	27.5	16.5
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.762	1.968	1.977	1.937	1.922	1.999
*Optimum Moisture Content	%	28.0	21.5	19.5	23.5	26.5	16.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**93**	**93**	**100**	**102**	**104**	**100**
Moisture Variation	%	**-2.0**	**-1.5**	**0.0**	**0.5**	**1.0**	**0.0**
Moisture Variation		**DRY**	**DRY**	**-**	**WET**	**WET**	**-**
Density Ratio	%	**104.0**	**92.0**	**90.5**	**98.0**	**99.5**	**98.5**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Silty CLAY, low to medium plasticity, mottled brown and grey.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BM**

location : **DONNYBROOK** test date: **16-Jan-18**

Test Number		175	176	177	178		
Test location taken from				Retest of #171	Retest of #170		
Easting		315694	315723	315709	315662		
Northing		5844684	5844676	5844613	5844581		
Layer Number		1	1	1	1		
Time of tests		10:10:00	10:20:00	13:20:00	13:30:00		
Depth of Layer	mm	300	300	200	350		
Depth of Test	mm	275	275	175	300		
Field Wet Density	t/m^3	1.95	1.97	1.88	1.89		
*Field Moisture Content	%	25.0	26.5	22.0	22.0		
Oversize Material	Wet %	0	0	0	0		
Sieve Size	mm	19.0	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.002	1.941	1.913	1.988		
*Optimum Moisture Content	%	23.0	26.5	23.5	22.0		
Compactive Effort Used	std / mod	STD	STD	STD	STD		
Moisture Ratio	%	**109**	**100**	**94**	**100**		
Moisture Variation	%	**2.0**	**0.0**	**-1.5**	**0.0**		
Moisture Variation		**WET**	**-**	**DRY**	**-**		
Density Ratio	%	**97.5**	**101.5**	**98.5**	**95.0**		

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Silty CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BN**

location : **DONNYBROOK** test date: **17-Jan-18**

Test Number		179	180				
Test location taken from							
Easting		315714	315687				
Northing		5844705	5844712				
Layer Number		1	1				
Time of tests		8:45:00	9:00:00				
Depth of Layer	mm	200	200				
Depth of Test	mm	175	175				
Field Wet Density	t/m^3	1.90	1.82				
*Field Moisture Content	%	25.0	16.5				
Oversize Material	Wet %	0	0				
Sieve Size	mm	19.0	19.0				
Peak Converted Wet Density	t/m^3	1.931	1.953				
*Optimum Moisture Content	%	23.5	18.5				
Compactive Effort Used	std / mod	STD	STD				
Moisture Ratio	%	**107**	**89**				
Moisture Variation	%	**1.5**	**-2.0**				
Moisture Variation		**WET**	**DRY**				
Density Ratio	%	**98.5**	**93.0**				

Specification Requirements 96% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Silty CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BO**

location : **DONNYBROOK** test date: **18-Jan-18**

Test Number		181	182	183	184	185	186
Test location taken from							
Easting		315743	315692	315621	315641	315650	315644
Northing		5844780	5844749	5844654	5844718	5844752	5844679
Layer Number		1	1	1	1	1	1
Time of tests		9:05:00	9:15:00	10:05:00	10:15:00	13:40:00	14:00:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	1.95	2.05	1.95	1.98	1.97	2.03
*Field Moisture Content	%	21.0	17.0	17.5	18.0	23.0	19.5
Oversize Material	Wet %	4	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.024	1.999	2.007	1.988	1.962	1.882
*Optimum Moisture Content	%	21.0	19.0	19.5	17.5	23.5	21.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**100**	**90**	**90**	**103**	**98**	**91**
Moisture Variation	%	**0.0**	**-2.0**	**-2.0**	**0.5**	**-0.5**	**-2.0**
Moisture Variation		**-**	**DRY**	**DRY**	**WET**	**DRY**	**DRY**
Density Ratio	%	**96.5**	**102.5**	**97.5**	**100.0**	**100.5**	**107.5**

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Silty CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BP**

location : **DONNYBROOK** test date: **18-Jan-18**

Test Number		187					
Test location taken from							
Easting		315628					
Northing		5844610					
Layer Number		1					
Time of tests		14:15:00					
Depth of Layer	mm	300					
Depth of Test	mm	275					
Field Wet Density	t/m^3	1.95					
*Field Moisture Content	%	21.0					
Oversize Material	Wet %	0					
Sieve Size	mm	19.0					
Peak Converted Wet Density	t/m^3	1.914					
*Optimum Moisture Content	%	20.5					
Compactive Effort Used	std / mod	STD					
Moisture Ratio	%	**103**					
Moisture Variation	%	**0.5**					
Moisture Variation		**WET**					
Density Ratio	%	**102.0**					

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Silty CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078

13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client : **ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS** job No: **GS4472/1**

project : **MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)** report No. **BQ**

location : **DONNYBROOK** test date: **19-Jan-18**

Test Number		188	189	190	191	192	
Test location taken from		Retest of #180					
Easting		315688	315712	315622	315615	315595	
Northing		5844713	5844718	5844753	5844720	5844630	
Layer Number		1	1	3	2	1	
Time of tests		11:20:00	11:30:00	12:30:00	12:45:00	13:50:00	
Depth of Layer	mm	200	300	300	300	300	
Depth of Test	mm	175	275	275	275	275	
Field Wet Density	t/m^3	1.95	1.98	2.06	2.04	1.95	
*Field Moisture Content	%	20.5	19.5	18.0	21.0	19.0	
Oversize Material	Wet %	0	0	0	0	0	
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	
Peak Converted Wet Density	t/m^3	1.964	2.021	1.972	2.039	1.918	
*Optimum Moisture Content	%	21.5	20.0	20.0	20.5	22.0	
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	
Moisture Ratio	%	**96**	**98**	**90**	**103**	**87**	
Moisture Variation	%	**-1.0**	**-0.5**	**-2.0**	**0.5**	**-3.0**	
Moisture Variation		**DRY**	**DRY**	**DRY**	**WET**	**DRY**	
Density Ratio	%	**99.0**	**98.0**	**104.5**	**100.0**	**101.5**	

Specification Requirements 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description Silty CLAY, low to medium plasticity, brown.

Test Methods AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Chris Senserrick
Approved Signatory
Date 14-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**BR**
location :	**DONNYBROOK**	test date:	**19-Jan-18**

Test Number		193	194	195			
Test location taken from							
Easting		315581	315558	315659			
Northing		5844640	5844609	5844567			
Layer Number		1	1	1			
Time of tests		10:10:00	11:30:00	15:05:00			
Depth of Layer	mm	300	300	300			
Depth of Test	mm	275	275	275			
Field Wet Density	t/m³	1.91	1.88	1.87			
*Field Moisture Content	%	23.5	17.0	19.5			
Oversize Material	Wet %	0	0	1			
Sieve Size	mm	19.0	19.0	19.0			
Peak Converted Wet Density	t/m³	1.986	1.952	2.034			
*Optimum Moisture Content	%	23.0	20.0	20.0			
Compactive Effort Used	std / mod	STD	STD	STD			
Moisture Ratio	%	**102**	**85**	**98**			
Moisture Variation	%	**0.5**	**-3.0**	**-0.5**			
Moisture Variation		**WET**	**DRY**	**DRY**			
Density Ratio	%	**96.0**	**96.5**	**92.0**			

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**BS**
location :	**DONNYBROOK**	test date:	**22/1/1/18**

Test Number		196	197	198			
Test location taken from							
Easting		315601	315594	315412			
Norhting		5844580	5844557	5844645			
Layer Number		1	1	2			
Time of tests		10:20:00	10:30:00	13:00:00			
Depth of Layer	mm	300	300	300			
Depth of Test	mm	275	275	200			
Field Wet Density	t/m^3	1.96	1.93	1.94			
*Field Moisture Content	%	18.0	18.5	20.0			
Oversize Material	Wet %	0	0	0			
Sieve Size	mm	19.0	19.0	19.0			
Peak Converted Wet Density	t/m^3	1.996	1.889	2.016			
*Optimum Moisture Content	%	17.5	22.5	20.0			
Compactive Effort Used	std / mod	STD	STD	STD			
Moisture Ratio	%	**103**	**82**	**100**			
Moisture Variation	%	**0.5**	**-4.0**	**0.0**			
Moisture Variation		**WET**	**DRY**	**-**			
Density Ratio	%	**98.0**	**102.5**	**96.0**			

Specification Requirements: 98% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**BT**
location :	**DONNYBROOK**	test date:	**23-Jan-18**

Test Number		199	200	201	202	203	204
Test location taken from			Retest of #195				
Easting		315631	315663	315164	315565	315548	315395
Northing		5844558	5844561	5844538	5844580	5844559	5844653
Layer Number		1	1	1	1	1	3
Time of tests		8:45:00	8:55:00	9:15:00	9:35:00	9:50:00	11:30:00
Depth of Layer	mm	300	300	200	200	200	200
Depth of Test	mm	275	275	175	275	275	275
Field Wet Density	t/m^3	1.95	2.00	1.94	1.91	1.99	2.07
*Field Moisture Content	%	18.5	20.0	22.5	20.5	20.0	20.5
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.929	1.981	2.008	1.985	2.056	2.088
*Optimum Moisture Content	%	20.0	19.5	21.0	21.0	19.5	20.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**93**	**103**	**107**	**98**	**103**	**103**
Moisture Variation	%	**-1.5**	**0.5**	**1.5**	**-0.5**	**0.5**	**0.5**
Moisture Variation		**DRY**	**WET**	**WET**	**DRY**	**WET**	**WET**
Density Ratio	%	**101.0**	**101.0**	**96.5**	**96.0**	**97.0**	**99.0**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**BU**
location :	**DONNYBROOK**	test date:	**23-Jan-18**

Test Number		205	206	207		
Test location taken from						
Easting		315360	315365	315381		
Northing		5844616	5844650	65844613		
Layer Number		3	3	3		
Time of tests		12:00:00	12:10:00	12:30:00		
Depth of Layer	mm	300	300	300		
Depth of Test	mm	275	275	275		
Field Wet Density	t/m^3	1.93	2.02	1.97		
*Field Moisture Content	%	18.0	22.0	19.0		
Oversize Material	Wet %	0	0	0		
Sieve Size	mm	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	1.945	1.980	2.007		
*Optimum Moisture Content	%	19.0	22.0	20.5		
Compactive Effort Used	std / mod	STD	STD	STD		
Moisture Ratio	%	**95**	**100**	**93**		
Moisture Variation	%	**-1.0**	**0.0**	**-1.5**		
Moisture Variation		**DRY**	**-**	**DRY**		
Density Ratio	%	**99.0**	**102.0**	**98.5**		

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**BW**
location :	**DONNYBROOK**	test date:	**25-Jan-18**

Test Number		212	213	214	215	216	217
Test location taken from							
Easting		315297	315360	315341	315305	315330	315322
Northing		5844710	5844790	5844801	5844739	5844751	5844705
Layer Number		1	2	3	2	3	3
Time of tests		10:55:00	11:15:00	11:30:00	11:45:00	11:55:00	12:05:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	1.95	2.03	1.94	2.06	2.01	1.99
*Field Moisture Content	%	16.5	20.5	23.0	24.5	23.5	22.5
Oversize Material	Wet %	0	2	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.975	2.058	2.041	1.951	1.993	2.045
*Optimum Moisture Content	%	17.0	19.0	21.0	24.5	21.0	20.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**97**	**108**	**110**	**100**	**112**	**113**
Moisture Variation	%	**-0.5**	**1.5**	**2.0**	**0.0**	**2.5**	**2.5**
Moisture Variation		**DRY**	**WET**	**WET**	**-**	**WET**	**WET**
Density Ratio	%	**98.5**	**98.5**	**95.0**	**105.5**	**100.5**	**97.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**BX**
location :	**DONNYBROOK**	test date:	**25-Jan-18**

Test Number		218	219				
Test location taken from							
Easting		315362	315369				
Northing		5844726	5844720				
Layer Number		4	5				
Time of tests		14:00:00	14:10:00				
Depth of Layer	mm	300	300				
Depth of Test	mm	275	275				
Field Wet Density	t/m^3	2.00	1.94				
*Field Moisture Content	%	22.5	21.0				
Oversize Material	Wet %	0	0				
Sieve Size	mm	19.0	19.0				
Peak Converted Wet Density	t/m^3	2.055	2.019				
*Optimum Moisture Content	%	20.5	21.0				
Compactive Effort Used	std / mod	STD	STD				
Moisture Ratio	%	**110**	**100**				
Moisture Variation	%	**2.0**	**0.0**				
Moisture Variation		**WET**	**-**				
Density Ratio	%	**97.5**	**96.0**				

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**BY**
location :	**DONNYBROOK**	test date:	**29-Jan-18**

Test Number		220	221	222	223		
Test location taken from							
Easting		315449	315438	315430	315427		
Northing		5844725	5844740	5844709	5844683		
Layer Number		6	6	5	5		
Time of tests		11:10:00	11:30:00	11:50:00	12:05:00		
Depth of Layer	mm	250	200	200	200		
Depth of Test	mm	225	175	175	175		
Field Wet Density	t/m^3	1.93	1.95	1.89	1.92		
*Field Moisture Content	%	19.0	22.0	18.0	18.5		
Oversize Material	Wet %	0	0	4	0		
Sieve Size	mm	19.0	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.009	1.986	2.052	1.838		
*Optimum Moisture Content	%	18.0	22.5	16.5	20.0		
Compactive Effort Used	std / mod	STD	STD	STD	STD		
Moisture Ratio	%	**106**	**98**	**109**	**93**		
Moisture Variation	%	**1.0**	**-0.5**	**1.5**	**-1.5**		
Moisture Variation		**WET**	**DRY**	**WET**	**DRY**		
Density Ratio	%	**96.0**	**98.5**	**92.0**	**104.5**		

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**BZ**
location :	**DONNYBROOK**	test date:	**31-Jan-18**

Test Number		224	225	226	227	228	229
Test location taken from							
Easting		315273	315288	315283	315278	315438	315464
Northing		5844736	5844751	5844778	584494	5844772	5844767
Layer Number		1	1	1	1	6	6
Time of tests		9:30:00	9:40:00	9:55:00	10:05:00	11:55:00	12:10:00
Depth of Layer	mm	300	300	300	300	200	200
Depth of Test	mm	275	275	275	275	175	175
Field Wet Density	t/m^3	2.13	2.08	2.14	2.21	1.95	1.94
*Field Moisture Content	%	13.5	13.5	18.5	15.0	21.5	19.5
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.075	2.104	2.133	2.136	2.059	2.032
*Optimum Moisture Content	%	13.5	13.5	18.0	14.5	20.5	18.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**100**	**100**	**103**	**104**	**105**	**106**
Moisture Variation	%	**0.0**	**0.0**	**0.5**	**0.5**	**1.0**	**1.0**
Moisture Variation		**-**	**-**	**WET**	**WET**	**WET**	**WET**
Density Ratio	%	**102.5**	**98.5**	**100.5**	**103.5**	**95.0**	**95.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: #224 - #227 - Mudstone

#228 - #229 - gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CA**
location :	**DONNYBROOK**	test date:	**31-Jan-18**

Test Number		230					
Test location taken from		Retest of #222					
Easting		315430					
Northing		5844741					
Layer Number		5					
Time of tests		12:30:00					
Depth of Layer	mm	200					
Depth of Test	mm	175					
Field Wet Density	t/m^3	1.96					
*Field Moisture Content	%	22.5					
Oversize Material	Wet %	0					
Sieve Size	mm	19.0					
Peak Converted Wet Density	t/m^3	2.005					
*Optimum Moisture Content	%	20.5					
Compactive Effort Used	std / mod	STD					
Moisture Ratio	%	**110**					
Moisture Variation	%	**2.0**					
Moisture Variation		**WET**					
Density Ratio	%	**97.5**					

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CB**
location :	**DONNYBROOK**	test date:	**1-Feb-18**

Test Number		231	232	233	234	235	236
Test location taken from		Retest of #208					
Easting		315335	315419	315413	31554	315546	315534
Northing		5844653	5844618	5844600	5844507	5844475	5844524
Layer Number		2	2	2	1	1	1
Time of tests		8:30:00	8:50:00	9:05:00	9:35:00	9:50:00	10:05:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m³	1.97	1.94	2.03	2.00	1.92	1.99
*Field Moisture Content	%	19.0	19.0	20.0	20.5	26.0	20.0
Oversize Material	Wet %	1	2	4	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m³	2.008	2.014	2.000	2.024	1.927	2.032
*Optimum Moisture Content	%	19.0	19.5	20.5	20.5	26.0	20.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**100**	**98**	**98**	**100**	**100**	**98**
Moisture Variation	%	**0.0**	**-0.5**	**-0.5**	**0.0**	**0.0**	**-0.5**
Moisture Variation		**-**	**DRY**	**DRY**	**-**	**-**	**DRY**
Density Ratio	%	**98.0**	**96.0**	**101.5**	**98.5**	**99.5**	**98.0**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CC**
location :	**DONNYBROOK**	test date:	**1-Feb-18**

Test Number		237	238	239	240	241	242
Test location taken from							
Easting		315530	315522	315564	315681	315665	315710
Northing		5844500	5844458	5844461	5844605	5844612	5844593
Layer Number		1	1	1	2	2	2
Time of tests		10:15:00	10:30:00	10:45:00	12:05:00	12:15:00	12:25:00
Depth of Layer	mm	350	300	300	300	300	300
Depth of Test	mm	300	275	275	275	275	275
Field Wet Density	t/m^3	2.10	1.99	1.95	1.96	1.96	1.96
*Field Moisture Content	%	21.0	20.5	23.0	23.0	22.0	21.5
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.001	1.999	1.993	1.975	1.984	1.939
*Optimum Moisture Content	%	21.5	21.0	23.0	23.0	22.5	19.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**98**	**98**	**100**	**100**	**98**	**113**
Moisture Variation	%	**-0.5**	**-0.5**	**0.0**	**0.0**	**-0.5**	**2.5**
Moisture Variation		**DRY**	**DRY**	**-**	**-**	**DRY**	**WET**
Density Ratio	%	**104.5**	**99.5**	**97.5**	**99.0**	**99.0**	**101.0**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CD**
location :	**DONNYBROOK**	test date:	**1-Feb-18**

Test Number		243	244	245	246	247	
Test location taken from							
Easting		315692	315666	315652	315633	315641	
Northing		5844758	5844744	5844716	5844724	5844756	
Layer Number		2	2	2	3	3	
Time of tests		12:50:00	13:05:00	13:30:00	13:45:00	14:00:00	
Depth of Layer	mm	200	300	300	300	300	
Depth of Test	mm	175	275	275	275	275	
Field Wet Density	t/m³	1.96	1.96	2.03	1.95	2.01	
*Field Moisture Content	%	23.5	21.0	18.5	18.5	20.5	
Oversize Material	Wet %	0	0	0	0	0	
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	
Peak Converted Wet Density	t/m³	2.019	2.034	1.971	1.991	1.982	
*Optimum Moisture Content	%	21.5	21.0	21.5	21.0	21.5	
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	
Moisture Ratio	%	**110**	**100**	**86**	**88**	**96**	
Moisture Variation	%	**2.0**	**0.0**	**-3.0**	**-2.5**	**-1.0**	
Moisture Variation		**WET**	**-**	**DRY**	**DRY**	**DRY**	
Density Ratio	%	**97.0**	**96.0**	**103.0**	**98.0**	**101.5**	

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CE**
location :	**DONNYBROOK**	test date:	**2-Feb-18**

Test Number		248	249	250	251	252	253
Test location taken from							
Easting		315646	315621	315632	315649	315657	315602
Northing		5844637	5844633	5844670	5844694	5844663	5844645
Layer Number		2	2	2	2	2	2
Time of tests		8:50:00	9:10:00	9:25:00	9:40:00	9:50:00	10:10:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	1.98	1.95	2.00	1.99	2.03	1.95
*Field Moisture Content	%	21.5	24.0	21.5	22.0	22.0	19.0
Oversize Material	Wet %	0	0	4	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.030	2.015	2.011	2.043	2.007	2.017
*Optimum Moisture Content	%	22.0	21.0	18.0	21.0	21.5	19.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**98**	**115**	**120**	**105**	**103**	**100**
Moisture Variation	%	**-0.5**	**3.0**	**3.5**	**1.0**	**0.5**	**0.0**
Moisture Variation		**DRY**	**WET**	**WET**	**WET**	**WET**	**-**
Density Ratio	%	**97.5**	**96.5**	**99.5**	**97.5**	**101.0**	**96.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CF**
location :	**DONNYBROOK**	test date:	**2-Feb-18**

Test Number		254	255	256	257	258	259
Test location taken from							
Easting		315690	315712	315706	315740	315723	315640
Northing		5844640	5844634	5844665	5844695	5844731	5844477
Layer Number		2	2	2	2	2	1
Time of tests		12:20:00	12:30:00	12:55:00	13:10:00	13:40:00	14:30:00
Depth of Layer	mm	300	300	300	250	300	300
Depth of Test	mm	275	275	275	225	275	275
Field Wet Density	t/m^3	2.00	1.98	1.98	1.99	1.91	1.97
*Field Moisture Content	%	21.5	19.0	24.0	23.0	20.0	17.0
Oversize Material	Wet %	4	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.058	2.041	2.013	2.006	1.974	1.970
*Optimum Moisture Content	%	21.0	18.5	22.5	20.5	20.0	19.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**103**	**103**	**107**	**112**	**100**	**87**
Moisture Variation	%	**0.5**	**0.5**	**1.5**	**2.5**	**0.0**	**-2.5**
Moisture Variation		**WET**	**WET**	**WET**	**WET**	**-**	**DRY**
Density Ratio	%	**97.0**	**97.0**	**98.5**	**99.0**	**97.0**	**100.0**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CG**
location :	**DONNYBROOK**	test date:	**2-Feb-18**

Test Number		260	261				
Test location taken from							
Easting		315620	315651				
Northing		5844505	5844501				
Layer Number		1	1				
Time of tests		14:45:00	15:00:00				
Depth of Layer	mm	300	300				
Depth of Test	mm	275	275				
Field Wet Density	t/m^3	1.95	1.95				
*Field Moisture Content	%	17.5	18.5				
Oversize Material	Wet %	1	0				
Sieve Size	mm	19.0	19.0				
Peak Converted Wet Density	t/m^3	2.003	2.003				
*Optimum Moisture Content	%	18.0	19.0				
Compactive Effort Used	std / mod	STD	STD				
Moisture Ratio	%	**97**	**98**				
Moisture Variation	%	**-0.5**	**-0.5**				
Moisture Variation		**DRY**	**DRY**				
Density Ratio	%	**97.5**	**97.5**				

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CH**
location :	**DONNYBROOK**	test date:	**3-Feb-18**

Test Number		262	263	264	265	266	267
Test location taken from							
Easting		315396	315390	315406	315368	315405	315398
Northing		5844697	5844753	5844746	5844701	5844772	5844770
Layer Number		4	5	5	4	5	5
Time of tests		9:25:00	9:35:00	9:50:00	10:00:00	10:10:00	10:25:00
Depth of Layer	mm	300	300	300	300	300	300
Depth of Test	mm	275	275	275	275	275	275
Field Wet Density	t/m^3	1.95	1.96	2.05	2.02	1.95	1.96
*Field Moisture Content	%	19.5	21.5	20.0	20.5	23.0	22.5
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.028	2.005	2.008	1.989	1.985	1.970
*Optimum Moisture Content	%	19.5	21.0	19.5	20.0	21.0	22.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**100**	**103**	**103**	**103**	**110**	**100**
Moisture Variation	%	**0.0**	**0.5**	**0.5**	**0.5**	**2.0**	**0.0**
Moisture Variation		**-**	**WET**	**WET**	**WET**	**WET**	**-**
Density Ratio	%	**96.0**	**97.5**	**102.0**	**101.5**	**98.0**	**99.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CI**
location :	**DONNYBROOK**	test date:	**3-Feb-18**

Test Number		268	269	270	271	272	
Test location taken from							
Easting		315546	315574	315601	315626	315656	
Northing		5844555	5844549	5444544	5444541	5844540	
Layer Number		2	2	2	2	2	
Time of tests		13:05:00	13:15:00	13:25:00	13:35:00	13:55:00	
Depth of Layer	mm	200	200	200	200	200	
Depth of Test	mm	175	175	175	175	175	
Field Wet Density	t/m^3	1.91	1.98	1.95	1.92	1.95	
*Field Moisture Content	%	20.5	21.0	22.5	19.0	19.0	
Oversize Material	Wet %	0	0	0	0	0	
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	
Peak Converted Wet Density	t/m^3	2.012	2.032	2.026	2.040	2.060	
*Optimum Moisture Content	%	20.0	18.5	21.0	19.0	18.5	
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	
Moisture Ratio	%	**103**	**114**	**107**	**100**	**103**	
Moisture Variation	%	**0.5**	**2.5**	**1.5**	**0.0**	**0.5**	
Moisture Variation		**WET**	**WET**	**WET**	**-**	**WET**	
Density Ratio	%	**94.5**	**97.5**	**96.5**	**94.0**	**94.5**	

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CJ**
location :	**DONNYBROOK**	test date:	**5-Feb-18**

Test Number		273	274	275	276	277	278
Test location taken from							
Easting		315572	315602	31633	315650	315747	315419
Northing		5844597	5844590	5844546	5844580	5844726	5844616
Layer Number		2	2	2	2	2	3
Time of tests		10:10:00	10:20:00	10:30:00	10:50:00	11:40:00	13:05:00
Depth of Layer	mm	200	200	200	200	200	200
Depth of Test	mm	175	175	175	175	175	175
Field Wet Density	t/m^3	1.89	1.94	1.92	1.93	1.99	1.97
*Field Moisture Content	%	17.5	16.0	17.5	19.5	21.5	16.5
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.983	2.021	1.912	1.991	1.964	2.109
*Optimum Moisture Content	%	18.5	15.5	19.0	21.5	21.5	15.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**95**	**103**	**92**	**91**	**100**	**107**
Moisture Variation	%	**-1.0**	**0.5**	**-1.5**	**-2.0**	**0.0**	**1.0**
Moisture Variation		**DRY**	**WET**	**DRY**	**DRY**	**-**	**WET**
Density Ratio	%	**95.0**	**96.0**	**100.5**	**97.0**	**101.0**	**93.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CK**
location :	**DONNYBROOK**	test date:	**5-Feb-18**

Test Number		279	280			
Test location taken from						
Easting		315421	315450			
Northing		5844640	5844635			
Layer Number		3	3			
Time of tests		13:20:00	13:35:00			
Depth of Layer	mm	200	250			
Depth of Test	mm	175	225			
Field Wet Density	t/m³	1.94	1.93			
*Field Moisture Content	%	21.0	17.5			
Oversize Material	Wet %	0	0			
Sieve Size	mm	19.0	19.0			
Peak Converted Wet Density	t/m³	2.027	1.979			
*Optimum Moisture Content	%	21.5	20.0			
Compactive Effort Used	std / mod	STD	STD			
Moisture Ratio	%	**98**	**88**			
Moisture Variation	%	**-0.5**	**-2.5**			
Moisture Variation		**DRY**	**DRY**			
Density Ratio	%	**95.5**	**97.5**			

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CL**
location :	**DONNYBROOK**	test date:	**6-Feb-18**

Test Number		281	282	283	284	285	286
Test location taken from						Retest of #268	Retest of #271
Easting		315190	315184	315411	315391	315548	315628
Northing		5844814	5844776	5844648	5844607	5844553	5844539
Layer Number		1	1	3	4	2	2
Time of tests		11:15:00	11:25:00	12:25:00	12:35:00	13:05:00	13:20:00
Depth of Layer	mm	200	200	200	200	200	200
Depth of Test	mm	175	175	175	175	175	175
Field Wet Density	t/m³	1.94	1.95	1.99	1.95	2.02	2.04
*Field Moisture Content	%	18.5	17.5	21.0	21.0	20.5	17.0
Oversize Material	Wet %	0	0	0	0	0	3
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m³	1.940	1.957	1.988	2.026	1.977	1.987
*Optimum Moisture Content	%	19.5	20.0	21.0	21.0	21.0	19.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**95**	**88**	**105**	**100**	**98**	**90**
Moisture Variation	%	**-1.0**	**-2.5**	**1.0**	**0.0**	**-0.5**	**-2.0**
Moisture Variation		**DRY**	**DRY**	**WET**	**-**	**DRY**	**DRY**
Density Ratio	%	**100.0**	**99.5**	**100.0**	**96.0**	**102.0**	**103.0**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CM**
location :	**DONNYBROOK**	test date:	**7-Feb-18**

Test Number		287	288	289	290	291	
Test location taken from			Retest of #278				
Easting		315441	315417	315600	315608	315616	
Northing		5844596	5844613	5844653	5844680	5844711	
Layer Number		3	3	3	3	4	
Time of tests		11:45:00	14:15:00	14:30:00	14:45:00	15:00:00	
Depth of Layer	mm	200	200	300	300	300	
Depth of Test	mm	175	175	275	275	275	
Field Wet Density	t/m³	1.96	2.02	2.04	1.95	1.96	
*Field Moisture Content	%	25.0	18.0	22.5	20.5	20.0	
Oversize Material	Wet %	0	1	0	0	0	
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	
Peak Converted Wet Density	t/m³	2.043	1.960	2.004	1.977	1.963	
*Optimum Moisture Content	%	22.5	20.5	21.0	19.0	19.0	
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	
Moisture Ratio	%	**111**	**88**	**107**	**108**	**106**	
Moisture Variation	%	**2.5**	**-2.5**	**1.5**	**1.5**	**1.0**	
Moisture Variation		**WET**	**DRY**	**WET**	**WET**	**WET**	
Density Ratio	%	**96.0**	**103.0**	**102.0**	**98.5**	**99.5**	

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CO**
location :	**DONNYBROOK**	test date:	**10-Feb-18**

Test Number		296	297	298	299	300	301
Test location taken from							
Easting		315683	315670	315646	315650	315699	315704
Northing		5844748	5844735	5844692	5844657	5844655	5844649
Layer Number		3	3	3	3	3	3
Time of tests		9:40:00	10:00:00	10:15:00	10:30:00	10:45:00	12:50:00
Depth of Layer	mm	300	300	300	300	250	300
Depth of Test	mm	275	275	275	275	225	275
Field Wet Density	t/m^3	2.07	1.94	2.02	1.93	2.04	1.97
*Field Moisture Content	%	19.0	22.5	18.0	22.0	21.0	19.0
Oversize Material	Wet %	0	0	4	0	0	5
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.010	1.950	1.952	1.944	1.956	2.011
*Optimum Moisture Content	%	18.5	20.0	17.5	23.5	23.5	18.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**103**	**113**	**103**	**94**	**90**	**103**
Moisture Variation	%	**0.5**	**2.5**	**0.5**	**-1.5**	**-2.5**	**0.5**
Moisture Variation		**WET**	**WET**	**WET**	**DRY**	**DRY**	**WET**
Density Ratio	%	**103.0**	**99.5**	**103.5**	**99.5**	**104.5**	**98.0**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CP**
location :	**DONNYBROOK**	test date:	**10-Feb-18**

Test Number		302	303	304		
Test location taken from						
Easting		315702	315731	315735		
Northing		5844683	5844695	5844727		
Layer Number		3	3	3		
Time of tests		13:05:00	13:15:00	13:40:00		
Depth of Layer	mm	300	300	300		
Depth of Test	mm	275	275	275		
Field Wet Density	t/m^3	1.94	1.95	1.94		
*Field Moisture Content	%	17.5	16.0	17.5		
Oversize Material	Wet %	0	0	0		
Sieve Size	mm	19.0	19.0	19.0		
Peak Converted Wet Density	t/m^3	2.029	1.987	1.968		
*Optimum Moisture Content	%	17.0	19.0	19.5		
Compactive Effort Used	std / mod	STD	STD	STD		
Moisture Ratio	%	**103**	**84**	**90**		
Moisture Variation	%	**0.5**	**-3.0**	**-2.0**		
Moisture Variation		**WET**	**DRY**	**DRY**		
Density Ratio	%	**95.5**	**98.0**	**98.5**		

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CQ**
location :	**DONNYBROOK**	test date:	**12-Feb-18**

Test Number		305	306	307			
Test location taken from							
Easting		315399	315386	315401			
Northing		5844698	5844717	5844739			
Layer Number		5	5	6			
Time of tests		11:10:00	11:30:00	11:50:00			
Depth of Layer	mm	200	200	200			
Depth of Test	mm	175	175	175			
Field Wet Density	t/m^3	2.00	1.94	1.93			
*Field Moisture Content	%	20.5	22.0	21.5			
Oversize Material	Wet %	5	0	4			
Sieve Size	mm	19.0	19.0	19.0			
Peak Converted Wet Density	t/m^3	2.023	2.001	1.984			
*Optimum Moisture Content	%	20.5	20.0	21.0			
Compactive Effort Used	std / mod	STD	STD	STD			
Moisture Ratio	%	**100**	**110**	**103**			
Moisture Variation	%	**0.0**	**2.0**	**0.5**			
Moisture Variation		**-**	**WET**	**WET**			
Density Ratio	%	**98.5**	**97.0**	**97.5**			

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 16-Feb-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS I**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CR**
location :	**DONNYBROOK**	test date:	**13-Feb-18**

Test Number		311	312	313	314	315	
Test location taken from							
Easting		315378	315378	315375	315360	315352	
Northing		5844654	5844654	5844631	5844614	5844630	
Layer Number		4	4	4	4	4	
Time of tests		8:30:00	8:40:00	9:00:00	9:20:00	9:35:00	
Depth of Layer	mm	200	200	200	200	200	
Depth of Test	mm	175	275	175	175	175	
Field Wet Density	t/m³	1.95	1.98	1.99	1.99	2.02	
*Field Moisture Content	%	23.5	24.0	18.0	19.5	17.5	
Oversize Material	Wet %	0	0	3	3	21	
Sieve Size	mm	19.0	19.0	19.0	19.0	37.5	
Peak Converted Wet Density	t/m³	2.001	1.968	2.034	2.012	-	
*Optimum Moisture Content	%	21.0	21.0	17.5	19.0	-	
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	
Moisture Ratio	%	**112**	**115**	**103**	**103**	**-**	
Moisture Variation	%	**2.5**	**3.0**	**0.5**	**0.5**	**-**	
Moisture Variation		**WET**	**WET**	**WET**	**WET**	**-**	
Density Ratio	%	**97.5**	**100.5**	**98.0**	**99.0**	**Oversize**	

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS I**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CS**
location :	**DONNYBROOK**	test date:	**13-Feb-18**

Test Number		316					
Test location taken from							
Easting		315341					
Northing		5844648					
Layer Number		3					
Time of tests		14:10:00					
Depth of Layer	mm	200					
Depth of Test	mm	175					
Field Wet Density	t/m^3	1.97					
*Field Moisture Content	%	22.0					
Oversize Material	Wet %	0					
Sieve Size	mm	19.0					
Peak Converted Wet Density	t/m^3	1.985					
*Optimum Moisture Content	%	22.0					
Compactive Effort Used	std / mod	STD					
Moisture Ratio	%	**100**					
Moisture Variation	%	**0.0**					
Moisture Variation		**-**					
Density Ratio	%	**99.0**					

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CT**
location :	**DONNYBROOK**	test date:	**14-Feb-18**

Test Number		317	318	319	320	321	322
Test location taken from							
Easting		315324	315295	315288	315287	315308	315319
Northing		5844663	5844673	5844648	5844618	5844611	5844618
Layer Number		3	2	2	1	1	2
Time of tests		13:00:00	13:10:00	13:25:00	13:35:00	13:45:00	14:00:00
Depth of Layer	mm	200	200	200	200	200	200
Depth of Test	mm	175	175	175	175	175	175
Field Wet Density	t/m³	1.94	1.98	2.01	1.95	1.92	1.93
*Field Moisture Content	%	23.5	19.0	22.5	18.5	17.0	17.0
Oversize Material	Wet %	0	0	0	0	0	1
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m³	1.980	2.043	1.974	2.029	2.003	1.979
*Optimum Moisture Content	%	20.0	19.0	21.5	18.5	18.5	18.5
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**118**	**100**	**105**	**100**	**92**	**92**
Moisture Variation	%	**3.5**	**0.0**	**1.0**	**0.0**	**-1.5**	**-1.5**
Moisture Variation		**WET**	**-**	**WET**	**-**	**DRY**	**DRY**
Density Ratio	%	**98.0**	**97.0**	**102.0**	**96.0**	**96.0**	**97.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CX**
location :	**DONNYBROOK**	test date:	**14-Feb-18**

Test Number		323	324	325	326	327	328
Test location taken from							
Easting		315353	315357	315335	315329	315305	315319
Northing		5844710	5844741	5844328	584701	5844727	5844756
Layer Number		4	4	4	4	3	3
Time of tests		14:25:00	14:35:00	14:50:00	15:00:00	15:15:00	15:25:00
Depth of Layer	mm	200	200	200	200	200	200
Depth of Test	mm	175	175	175	175	175	175
Field Wet Density	t/m^3	1.97	1.98	1.97	1.94	2.05	1.94
*Field Moisture Content	%	20.0	22.0	22.0	21.5	20.0	21.0
Oversize Material	Wet %	2	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.015	1.917	1.978	1.962	2.052	2.015
*Optimum Moisture Content	%	20.0	24.0	21.5	21.5	20.5	22.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**100**	**92**	**103**	**100**	**98**	**96**
Moisture Variation	%	**0.0**	**-2.0**	**0.5**	**0.0**	**-0.5**	**-1.0**
Moisture Variation		**-**	**DRY**	**WET**	**-**	**DRY**	**DRY**
Density Ratio	%	**98.0**	**103.0**	**99.5**	**99.0**	**100.0**	**96.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CY**
location :	**DONNYBROOK**	test date:	**15-Feb-18**

Test Number		329	330	331	332	333	334
Test location taken from							
Easting		315279	315390	315526	315581	315606	315778
Northing		5844725	5844761	5844722	5844651	5844745	5844769
Layer Number		2	2	4	2	5	6
Time of tests		8:30:00	8:45:00	9:10:00	9:50:00	10:05:00	10:15:00
Depth of Layer	mm	200	200	200	200	300	300
Depth of Test	mm	225	225	225	225	225	225
Field Wet Density	t/m^3	2.02	1.97	2.00	1.94	1.99	1.96
*Field Moisture Content	%	20.0	22.5	20.5	21.0	23.5	20.0
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.033	1.995	1.967	2.013	1.943	2.014
*Optimum Moisture Content	%	20.5	22.0	22.0	20.5	24.0	21.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**98**	**103**	**93**	**103**	**98**	**95**
Moisture Variation	%	**-0.5**	**0.5**	**-1.5**	**0.5**	**-0.5**	**-1.0**
Moisture Variation		**DRY**	**WET**	**DRY**	**WET**	**DRY**	**DRY**
Density Ratio	%	**99.5**	**98.5**	**102.0**	**96.5**	**102.5**	**97.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**CZ**
location :	**DONNYBROOK**	test date:	**15-Feb-18**

Test Number		335	336	337	338	339	340
Test location taken from							
Easting		315521	315550	315490	315460	315524	315474
Northing		5844686	5844751	5844765	5844784	5844775	5844726
Layer Number		5	6	6	7	6	6
Time of tests		10:30:00	10:50:00	11:20:00	12:00:00	12:15:00	12:30:00
Depth of Layer	mm	200	250	200	200	250	200
Depth of Test	mm	225	225	225	225	225	225
Field Wet Density	t/m^3	1.95	2.01	1.93	1.95	1.97	1.96
*Field Moisture Content	%	24.5	25.5	21.5	18.5	16.0	22.5
Oversize Material	Wet %	0	0	0	0	2	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	1.967	1.973	1.962	2.008	1.933	1.983
*Optimum Moisture Content	%	23.5	24.5	21.5	21.0	19.0	22.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**105**	**104**	**100**	**88**	**84**	**103**
Moisture Variation	%	**1.0**	**1.0**	**0.0**	**-2.5**	**-3.0**	**0.5**
Moisture Variation		**WET**	**WET**	**-**	**DRY**	**DRY**	**WET**
Density Ratio	%	**99.0**	**102.0**	**98.5**	**97.0**	**102.0**	**99.0**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DA**
location :	**DONNYBROOK**	test date:	**15-Feb-18**

Test Number		341					
Test location taken from							
Easting		315466					
Northing		5844696					
Layer Number		5					
Time of tests		12:45:00					
Depth of Layer	mm	200					
Depth of Test	mm	175					
Field Wet Density	t/m^3	2.02					
*Field Moisture Content	%	19.5					
Oversize Material	Wet %	0					
Sieve Size	mm	19.0					
Peak Converted Wet Density	t/m^3	2.047					
*Optimum Moisture Content	%	20.0					
Compactive Effort Used	std / mod	STD					
Moisture Ratio	%	**98**					
Moisture Variation	%	**-0.5**					
Moisture Variation		**DRY**					
Density Ratio	%	**98.5**					

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DB**
location :	**DONNYBROOK**	test date:	**16-Feb-18**

Test Number		342	343	344	345	346	347
Test location taken from							
Easting		315359	315326	315296	315259	315207	315237
Northing		5844800	5844804	5844803	5844828	5844843	5844763
Layer Number		4	3	1	1	1	2
Time of tests		9:15:00	9:30:00	9:45:00	9:55:00	10:05:00	10:20:00
Depth of Layer	mm	250	250	250	250	250	250
Depth of Test	mm	225	225	225	225	225	225
Field Wet Density	t/m^3	1.99	1.94	2.01	2.06	2.02	1.97
*Field Moisture Content	%	22.5	28.0	23.5	19.0	26.0	19.5
Oversize Material	Wet %	3	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m^3	2.017	1.943	2.024	1.960	1.946	2.040
*Optimum Moisture Content	%	21.0	25.5	22.5	21.5	23.5	19.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**107**	**110**	**105**	**89**	**111**	**103**
Moisture Variation	%	**1.5**	**2.5**	**1.0**	**-2.5**	**2.5**	**0.5**
Moisture Variation		**WET**	**WET**	**WET**	**DRY**	**WET**	**WET**
Density Ratio	%	**99.0**	**99.5**	**99.5**	**105.5**	**103.5**	**96.5**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

field density test results

A C N 105 704 078
13 Brock Street Thomastown Vic, **P** 03 9464 4617 **F** 9464 4618

client :	**ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS PTY LTD**	job No:	**GS4472/1**
project :	**MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)**	report No.	**DC**
location :	**DONNYBROOK**	test date:	**16-Feb-18**

Test Number		348	349	350	351	352	353
Test location taken from							
Easting		315369	315384	315411	315496	315585	315523
Northing		5844665	5844654	5844649	5844711	5844651	5844720
Layer Number		5	5	5	5	4	5
Time of tests		11:45:00	12:05:00	12:20:00	13:35:00	14:30:00	14:50:00
Depth of Layer	mm	200	200	200	200	250	250
Depth of Test	mm	175	175	175	175	225	225
Field Wet Density	t/m³	1.94	1.96	1.95	1.92	2.05	1.99
*Field Moisture Content	%	17.5	20.5	19.0	18.0	21.0	21.0
Oversize Material	Wet %	0	0	0	0	0	0
Sieve Size	mm	19.0	19.0	19.0	19.0	19.0	19.0
Peak Converted Wet Density	t/m³	2.029	1.981	1.974	1.946	2.011	2.048
*Optimum Moisture Content	%	20.0	22.0	20.5	21.0	20.5	21.0
Compactive Effort Used	std / mod	STD	STD	STD	STD	STD	STD
Moisture Ratio	%	**88**	**93**	**93**	**86**	**103**	**100**
Moisture Variation	%	**-2.5**	**-1.5**	**-1.5**	**-3.0**	**0.5**	**0.0**
Moisture Variation		**DRY**	**DRY**	**DRY**	**DRY**	**WET**	**-**
Density Ratio	%	**95.5**	**99.0**	**98.5**	**98.5**	**102.0**	**97.0**

Specification Requirements: 95% Standard compaction

Notes: Moisture Variation: (-) indicates dry; (+) indicates wet

Material description: gravelly CLAY, medium to high plasticity, brown

Test Methods: AS1289 5.8.1 5.7.1 2.1.1 1.2.1 (6.4)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Tim Senserrick
Approved Signatory
Date 30-Apr-18

Ground Science
A C N 105 704 078
13 Brock Street Thomastown VIC 3074 **P** (03) 9464 4617 **F** (03) 9464 4618

Particle Size Distribution & Clay content

Client:	ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS I	Job No.	GS4472/1
Project:	MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)	Date:	16-Feb-18
Location:	DONNYBROOK	Report No.	CU

Lab Reference No.	#308	Sample Identification:	Location 1, 314492E, 5844647N
Laboratory Specimen Classification:		**CL, Silty CLAY, low plasticity, grey, with sand, trace gravel**	

Particle Size Distribution AS1289 3.6.3

Sieve Size	% Passing	Specification
63 mm	100	
53 mm	100	
37.5 mm	100	
26.5 mm	100	
19.0 mm	99	
13.2 mm	98	
9.5 mm	94	
6.7 mm	91	
4.75 mm	88	
2.36 mm	85	
1.18 mm	83	
600 um	82	
425 um	81	
300 um	80	
150 um	74	
75 um	59	
hydrometer values		
45 um	54	
23 um	47	
16 um	47	
12 um	45	
8 um	45	
1 um	39	

Consistency Limits and Moisture Content

Test		Method	Result	Spec.
Liquid Limit	%	AS1289 3.1.2	27	
Plastic Limit	%	AS1289 3.2.1	11	
Plasticity Index	%	AS1289 3.3.1	16	
Linear Shrinkage	%	AS1289 3.4.1	2.0	
Moisture Content	%	AS1289 2.1.1	11.2	

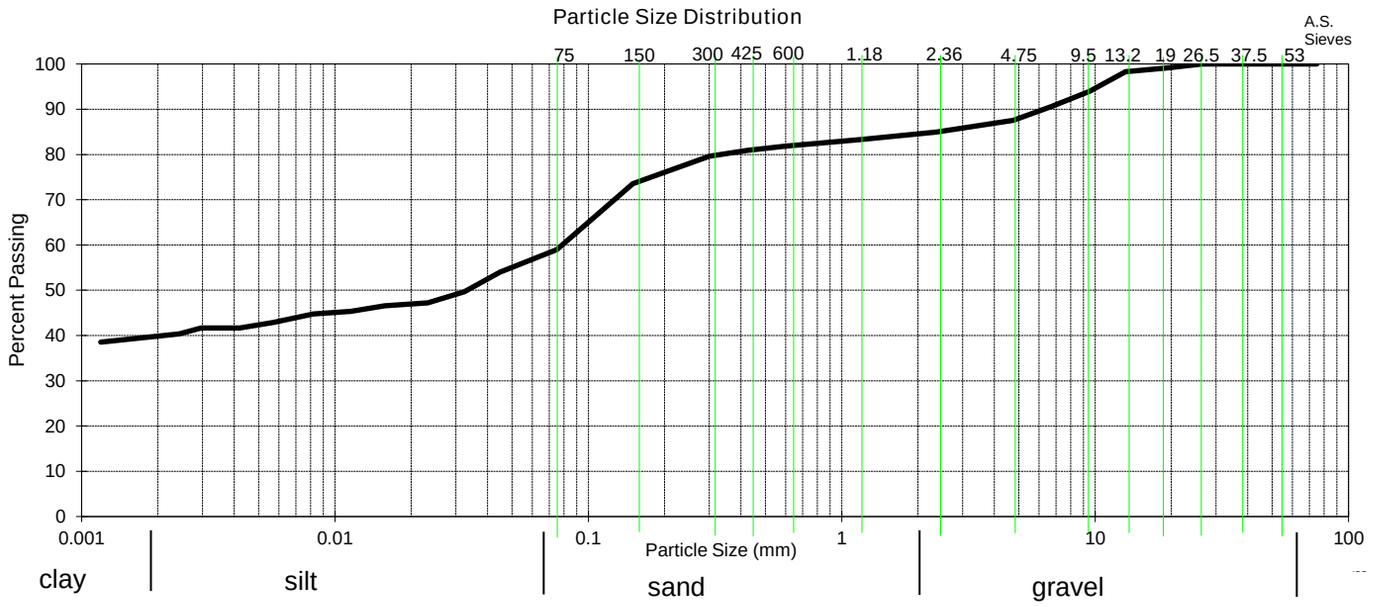
Sample History:	Oven Dried
Preparation Method:	Dry sieved
Cracking / Curling of linear shrinkage:	Cracking
Linear shrinkage mould length:	254

ND = not determined NO = not obtainable NP = non plastic

Notes Dispersion : mechanical / hydrometer: g/l
sampled by client, tested as received

Material properties

GRAVEL CONTENT =	**15**	%
SAND CONTENT =	**25**	%
SILT CONTENT =	**20**	%
CLAY CONTENT =	**40**	%



Date: 26/02/2018

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Mark Ma
Approved Signatory

Ground Science
A C N 105 704 078
13 Brock Street Thomastown VIC 3074 **P** (03) 9464 4617 **F** (03) 9464 4618

Particle Size Distribution & Clay content

Client:	ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS I	Job No.	GS4472/1
Project:	MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)	Date:	16-Feb-18
Location:	DONNYBROOK	Report No.	CV

Lab Reference No.	#309	Sample Identification:	Location 2, 314469E, 5844689N
Laboratory Specimen Classification:		**CL, Gravelly CLAY, low plasticity, light grey / brown, with silt, trace sand**	

Particle Size Distribution AS1289 3.6.3

Sieve Size	% Passing	Specification
63 mm	92	
53 mm	89	
37.5 mm	83	
26.5 mm	81	
19.0 mm	79	
13.2 mm	74	
9.5 mm	70	
6.7 mm	66	
4.75 mm	64	
2.36 mm	61	
1.18 mm	58	
600 um	56	
425 um	55	
300 um	55	
150 um	53	
75 um	50	
hydrometer values		
43 um	47	
22 um	41	
15 um	39	
11 um	38	
8 um	36	
1 um	29	

Consistency Limits and Moisture Content

Test		Method	Result	Spec.
Liquid Limit	%	AS1289 3.1.2	34	
Plastic Limit	%	AS1289 3.2.1	14	
Plasticity Index	%	AS1289 3.3.1	20	
Linear Shrinkage	%	AS1289 3.4.1	6.0	
Moisture Content	%	AS1289 2.1.1	12.6	

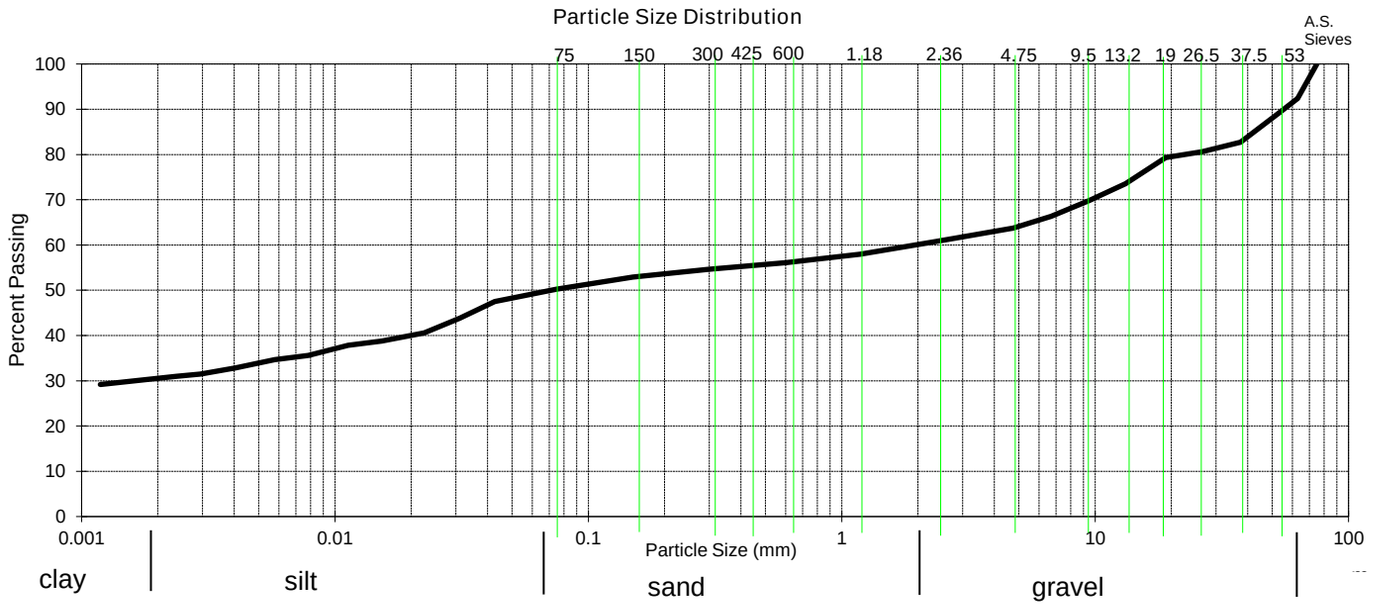
Sample History:	Oven Dried
Preparation Method:	Dry sieved
Cracking / Curling of linear shrinkage:	Cracking
Linear shrinkage mould length:	250

ND = not determined NO = not obtainable NP = non plastic

Notes Dispersion : mechanical / hydrometer: g/l
sampled by client, tested as received

Material properties

GRAVEL CONTENT =	**32**	%
SAND CONTENT =	**11**	%
SILT CONTENT =	**20**	%
CLAY CONTENT =	**30**	%



Date: 26/02/2018

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Mark Ma
Approved Signatory

Ground Science
A C N 105 704 078
13 Brock Street Thomastown VIC 3074 **P** (03) 9464 4617 **F** (03) 9464 4618

Particle Size Distribution & Clay content

Client:	ASCOTOWN PASTORAL PTY LTD C/- VERVE PROJECTS I	Job No.	GS4472/1
Project:	MERRIFILED LIVING - STAGE 35 & STAGE 36 (LEVEL 1)	Date:	16-Feb-18
Location:	DONNYBROOK	Report No.	CW

Lab Reference No.	#310	Sample Identification:	Location 3, 314456E, 5844685N
Laboratory Specimen Classification:		**CI, Silty CLAY, medium plasticity, light grey / brown, trace sand & gravel**	

Particle Size Distribution AS1289 3.6.3

Sieve Size	% Passing	Specification
63 mm	79	
53 mm	79	
37.5 mm	79	
26.5 mm	78	
19.0 mm	78	
13.2 mm	76	
9.5 mm	75	
6.7 mm	74	
4.75 mm	73	
2.36 mm	71	
1.18 mm	69	
600 um	68	
425 um	68	
300 um	67	
150 um	65	
75 um	62	
hydrometer values		
41 um	59	
22 um	50	
15 um	48	
11 um	46	
8 um	44	
1 um	37	

Consistency Limits and Moisture Content

Test		Method	Result	Spec.
Liquid Limit	%	AS1289 3.1.2	39	
Plastic Limit	%	AS1289 3.2.1	13	
Plasticity Index	%	AS1289 3.3.1	26	
Linear Shrinkage	%	AS1289 3.4.1	6.0	
Moisture Content	%	AS1289 2.1.1	8.5	

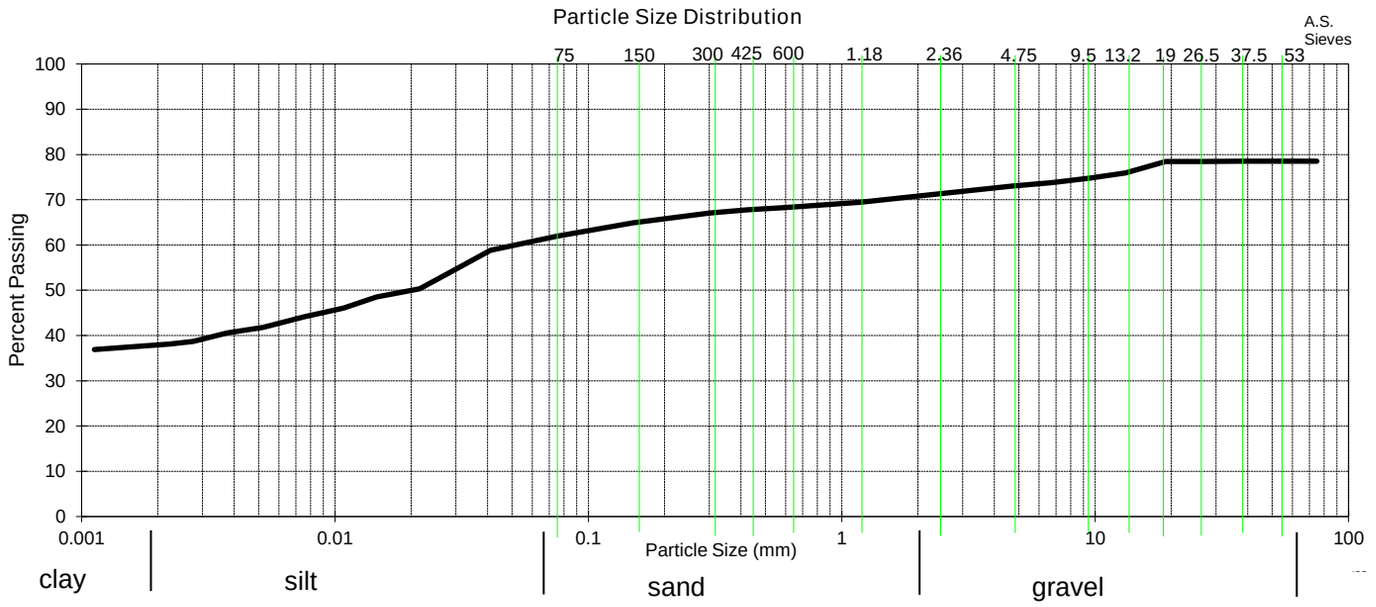
Sample History:	Oven Dried
Preparation Method:	Dry sieved
Cracking / Curling of linear shrinkage:	Cracking
Linear shrinkage mould length:	250

ND = not determined NO = not obtainable NP = non plastic

Notes Dispersion : mechanical / hydrometer: g/l
sampled by client, tested as received

Material properties

GRAVEL CONTENT =	**7**	%
SAND CONTENT =	**9**	%
SILT CONTENT =	**24**	%
CLAY CONTENT =	**38**	%



Date: 26/02/2018

NATA Accredited Laboratory No. 15055
Accredited for compliance with ISO/IEC 17025 - Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National Standards

Mark Ma
Approved Signatory

APPENDIX D

Photographs


CAT
CAT
330L