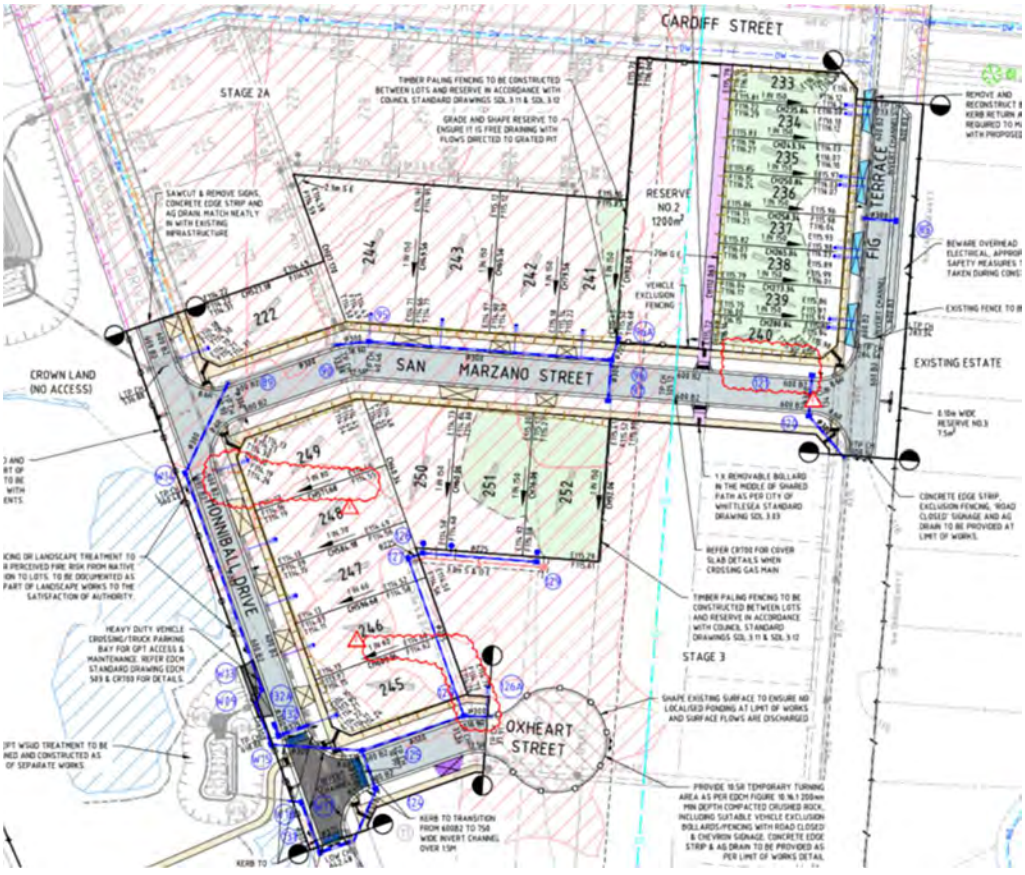
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LEVEL 1 INSPECTION AND TESTING SUMMARY REPORT

Marran Run – Stage 2B, Thomastown VIC



AMG Civil Group

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Document Details

Project Number	8018.01 – R0	Rev 0
Project Name	Marran Run – Stage 2B	
Project Location	Thomastown VIC	
Client	AMG Civil Group	

1. INTRODUCTION

This report presents the results of Level 1 Inspection and Testing for the fill placed for the proposed residential real-estate development Marran Run – Stage 2B in Thomastown VIC.

The works were commissioned by AMG Civil Group (client) by email request in April 2026.

Level 1 Inspection and Testing, as defined in AS3798 – 2007 *'Guideline on Earthworks for Commercial and Residential Development'*, provides for full time inspection of the construction of controlled fill and field laboratory testing accordance with AS1289 *'Methods of Testing Soils for Engineering Purposes'.* The compaction control testing was undertaken by experienced Geotechnician from CGS.

2. PROJECT SUMMARY

Continent Geotech Services (CGS) provided the Level 1 Inspection and Testing of fill placed within the proposed Marran Run – Stage 2B in Thomastown VIC. It is understood that a new residential subdivision is to be constructed at the location.

The earthworks were carried out by AMG Civil Group with the owned and hired equipment. CGS undertook the compaction control testing of the material as part of Level 1 Inspection and Testing process.

The areas of controlled fill were placed at the locations according to the drawings prepared by Spiire provided by client, Drawing No. 322931-000CR200 Rev 1 for the proposed subdivision in Thomastown. The Level 1 Inspection and testing conducted on 10th April and 8th May 2026 respectively.

The Level 1 Inspection and testing was done for various dates summarised below in Table 1 of this report.

3. INSPECTION AND SUPERVISION

3.1 Fill Placement and Testing Specifications

All filling in excess of 300mm depth within the building envelope of allotments shall be undertaken to specification satisfying requirements of AS3798 – 2007 '*Guideline on Earthworks for Commercial and Residential Development*', the following specifications based generally on the requirements of AS3798:

- The fill area shall be stripped of topsoil, subsoil, soft material, and vegetation to firm based approved by superintendent.
- Suitable fill material shall be placed in loose horizontal layers not exceeding 250mm in thickness.
- The fill shall be compacted to Dry Density Ratio of at least 98% Standard and moisture content is to be within ± 3% of the standard optimum moisture content (AS1289 5.1.1, 5.4.1 or 5.7.1),
- The fill material shall not contain greater than 20% by volume, of particles size greater than 37.5mm and no particle size over 200mm in any dimension,
- The frequency of field density testing shall be accordance with AS3798 for large scale developments (Type 1), which nominates a frequency of not less than
    - 1 test per layer of 200mm per 2500mm^2

- 1 test per 500m^3 distributed reasonably evenly throughout the full depth and area: or
- 3 tests per site visit, which requires the most tests.

The technical specification of the structural fill was not provided, so the above guidelines were assumed for completed earthworks at this site.

The duration of fill placement at different location within site are summarised in Table 1 below.

Table 1: Summary of Fill placement duration

Fill Area	Dates
Lot 250 to Lot 252	10th April 2026
Lot 233 to Lot 241	8th May 2026

3.2 Strip Surface Inspection

The subgrade for the fill area was prepared by removing the topsoil and vegetation layer using the scrapers. The inspection was carried out to confirm all the vegetation and topsoils are removed from the stripped surface.

Subgrade assessment was carried out by CGS following the topsoil removal and before any fill was placed. The soils exposed at the subgrade comprised natural silty clay. No soft spots were observed during the subgrade assessment.

4. EARTHWORKS AND TESTING

4.1 Fill Material

Fill material was mainly sourced from nearby construction sites, the clean fill certificates were visually looked on site while fill transportation. All the fill material was placed using compactor blade and Cat Dozer, in layers with good moisture, compacted with compactor and pad foot roller. Some oversize boulders of rock were pushed away from fill area with compactor or removed while placement of loose layers while spreading and placement of material.

The cleaned fill material was visually assessed by Geotechnician to confirm it is clean from debris/ vegetative matter and oversize rocks. It should be noted that no environmental analysis was performed by CGS on the fill material.

4.2 Fill Construction

The fill material was moisture conditioned during the placement and prior to placement while it was stockpiled.

The fill material generally placed in approximately 200m to 300mm loose layers, compacted layers achieved approximately 150mm to 250mm in thickness. The material was spread using dozer and compactor blade. The Cat 12 tonne padfoot roller was used to compact the material after placement.

CGS's level 1 Geotechnician was on site on a full-time basis during placement, compaction and testing of the fill.

4.3 Testing and Results

Field density testing was undertaken progressively on the compacted fill at the frequency of minimum tests as required for Type 1 Earthworks (large scale operations) as defined in table 8.1 of the AS3798-2007.

The field testing was undertaken by CGS, and all laboratory testing was performed in our NATA accredited laboratory in Thomastown.

The total of 9 (nine) field density and laboratory Hilf compaction tests were performed in all fill areas. The reports verify the achievement of the minimum density requirement of 95% Standard Compaction throughout the full depth area, with each layer tested accordingly. All the tests' results were provided to AMG Civil Group for inclusion within their internal quality system (refer to Appendix 1).

5. CONCLUSION

Following the completion of the earthworks and material assessment, the filling procedures conducted by AMG Civil Group satisfied the requirements of AS3798, regarding the placement of fill material on a project under Level 1 Supervision, and in accordance with specification as provided to CGS. Based on observations made by our on-site Geotechnician (Level 1 Inspector) and the results of field and laboratory tests, CGS consider that the engineered fill placed within stage 2B by AMG Civil Group. to the layers indicated in Appendix 2, as far as we have able to determine, has been placed in general accordance with intent of the specification.

This report has been prepared for benefit of our client with respect to the particular brief given to us and it may not be relied upon in other purpose without our prior review and agreement. No responsibility for this report will be taken by CGS if it is altered in any way, or not reproduced in full.

6. LIMITATION OF THIS REPORT

This report is valid for the following completion of level 1 supervision. CGS does not accept responsibility for any distortion or deviation of measurements as reported at the time given. It should be noted that even though the fill layer was moisture conditioned while compacting and meets the requirement but over the dry and wet weather it is subject to drying and cracking. The top 200-300mm of fill will deteriorate with time and should be taken into account by foundation engineer prior to construction of dwelling. The levels nominated in this report are guiding to amounts of fill placed and do not necessarily reflect accurate survey of fill levels.

It should be noted that any fill placed as part of drainage, sewer works, pavement works is not part of this level 1 supervision report

This report will be considered invalid if:

- Any works were carried/conducted on the site without supervision of CGS technician

Any other unforeseeable event any event outside of the time described above.

7. UNDERSTANDING LEVEL 1 INSPECTION AND TESTING

The purpose of performing level 1 inspection and testing is to ensure compliance of fill construction with the nominated specifications. The engagement of Geotechnical Inspection Testing Authority (GITA) allows the contractor to perform his role in the construction of the filling operation while the GITA monitors quality control of process of the fill placement. The visual observations of construction process and methodologies used by contractor allows the GITA to approve the subsequent placement of fill without having to wait to completion of testing and the extended time it takes to complete the laboratory results. The GITA will carry out random spots checks of the filling operations and complete the compaction control test for day's work. Level 1 inspection and testing requires full time inspection and testing of the fill placement undertaken on site. CGS are notified daily by project foreman where subsequent days of fill placement under level 1 to occur. Generally, projects rely on importation of a fill source, there can be delays in receipt of sufficient material to start placing which may result the periods where GITA representative not required on site. It is contractor's responsibility to notify the GITA prior to start any fill placement. A GITA relies on the contractor to advise when the site attendance required and makes all reasonable visual attempts to assess if the works were the same as pervious day of attendance.

Prepared By

J Gan – Senior Geotechnical Engineer

Reviewed by

S Kang – Project Manager

APPENDIX 1 – TESTING SUMMARY

Sample No.	Test No.	Location	Layer	Material Type	Date Tested	Density Ratio (%)	Moisture Variation of OMC (%)	Adjusted Moisture Variation (%)	Pass/Fail
26-4570A	1	Refer to Plan	FSL	Gravelly Clay	10-Apr-26	100.0	0.5% Wet	-	Pass
26-4570B	2	Refer to Plan	FSL	Gravelly Clay	10-Apr-26	100.0	0.5% Wet	-	Pass
26-4570C	3	Refer to Plan	FSL	Gravelly Clay	10-Apr-26	99.5	0.5% Wet	-	Pass
26-5062A	4	Refer to Plan	FSL	Gravelly Clay	08-May-26	99.5	OMC	-	Pass
26-5062B	5	Refer to Plan	FSL	Gravelly Clay	08-May-26	100.0	OMC	-	Pass
26-5062C	6	Refer to Plan	FSL	Gravelly Clay	08-May-26	101.0	OMC	-	Pass

APPENDIX 2 – NATA LAB RESULTS

Material Test Report

Report Number: 8018-21
Issue Number: 1
Date Issued: 04/09/2026
Client: AMG Civil Group
20 Graystone Court, Epping VIC 3076
Contact: Mark Russo
Project Number: 8018
Project Name: Marran Run Stage 2B
Project Location: 1 Cardiff St, Thomastown VIC 3074
Work Request: 4570
Date Sampled: 10/04/2026
Dates Tested: 10/04/2026 - 13/04/2026
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Remarks: FSL = Finish Surface Level
Specification: 98% Standard Maximum Dry Density
Location: Thomastown VIC 3074
Material: Gravelly CLAY
Material Source: Site

Continent Geotech Services
Continent Geotech Services Pty Ltd
Main Laboratory
14/337-339 Settlement Road Thomastown Victoria 3074
Phone: (03) 9465 9813
Email: admin@continentgeotech.com.au

Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Gayashan Mudalige
Lab Technician
Laboratory Accreditation Number: 19945

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	26-4570A	26-4570B	26-4570C
Date Tested	10/04/2026	10/04/2026	10/04/2026
Time Tested	08:10	08:14	08:21
Test Request #/Location	Refer to plan	Refer to plan	Refer to plan
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	200	200	200
Soil Description	Gravelly CLAY	Gravelly CLAY	Gravelly CLAY
Test Depth (mm)	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) (t/m^3)	1.93	1.92	1.94
Field Moisture Content (%)	22.8	23.9	22.8
Field Dry Density (FDD) (t/m^3)	1.57	1.55	1.58
Peak Converted Wet Density (t/m^3)	1.93	1.92	1.95
Adjusted Peak Converted Wet Density (t/m^3)	**	**	**
Adj. Optimum Moisture Content (%) (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content (%) (AS1289.5.4.1)	22.8	23.9	22.8
Moisture Ratio (%) (AS1289.5.4.1)	101.0	101.5	102.5
Adjusted Moisture Ratio (%) (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) (%)	-0.5	-0.5	-0.5
Adjusted Moisture Variation (%)	**	**	**
Hilf Density Ratio (%)	**100.0**	**100.0**	**99.5**
Compaction Method	**Standard**	**Standard**	**Standard**
Remarks	**	**	**

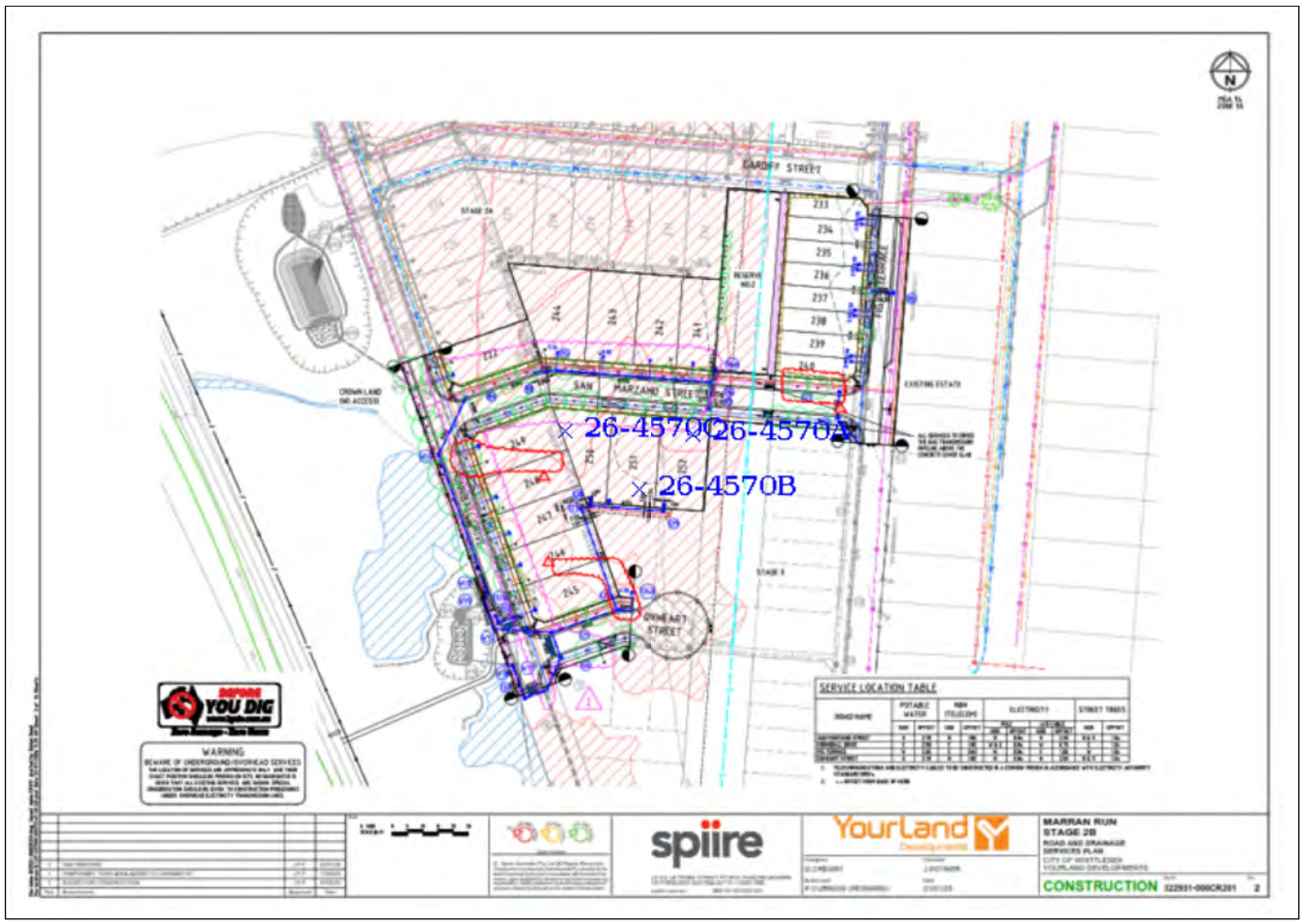
Moisture Variation Note:
Positive values = test is dry of OMC
Negative values = test is wet of OMC

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Results relate only to the items tested/sampled.

Sample Locations Plan

x - approximate test location

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Material Test Report

Report Number: 8018-26
Issue Number: 1
Date Issued: 04/09/2026
Client: AMG Civil Group
20 Graystone Court, Epping VIC 3076
Contact: Mark Russo
Project Number: 8018
Project Name: Marran Run Stage 2B
Project Location: 1 Cardiff St, Thomastown VIC 3074
Work Request: 5062
Date Sampled: 08/05/2026
Dates Tested: 08/05/2026 - 11/05/2026
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Remarks: FSL = Finish Surface Level
Specification: 98% Standard Maximum Dry Density
Location: Thomastown VIC 3074
Material: Gravelly CLAY
Material Source: Site

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Approved Signatory: Gayashan Mudalige
Lab Technician
Laboratory Accreditation Number: 19945

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	26-5062A	26-5062B	26-5062C
Date Tested	08/05/2026	08/05/2026	08/05/2026
Time Tested	9:10	9:20	9:35
Test Request #/Location	Refer to Plan	Refer to Plan	Refer to Plan
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	200	200	200
Soil Description	Gravelly CLAY	Gravelly CLAY	Gravelly CLAY
Test Depth (mm)	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) (t/m^3)	2.04	2.03	2.01
Field Moisture Content (%)	18.4	18.0	18.0
Field Dry Density (FDD) (t/m^3)	1.72	1.72	1.71
Peak Converted Wet Density (t/m^3)	2.04	2.02	1.99
Adjusted Peak Converted Wet Density (t/m^3)	**	**	**
Adj. Optimum Moisture Content (%) (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content (%) (AS1289.5.4.1)	18.4	18.0	18.0
Moisture Ratio (%) (AS1289.5.4.1)	101.0	100.5	101.0
Adjusted Moisture Ratio (%) (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) (%)	0.0	0.0	0.0
Adjusted Moisture Variation (%)	**	**	**
Hilf Density Ratio (%)	**99.5**	**100.0**	**101.0**
Compaction Method	**Standard**	**Standard**	**Standard**
Remarks	**	**	**

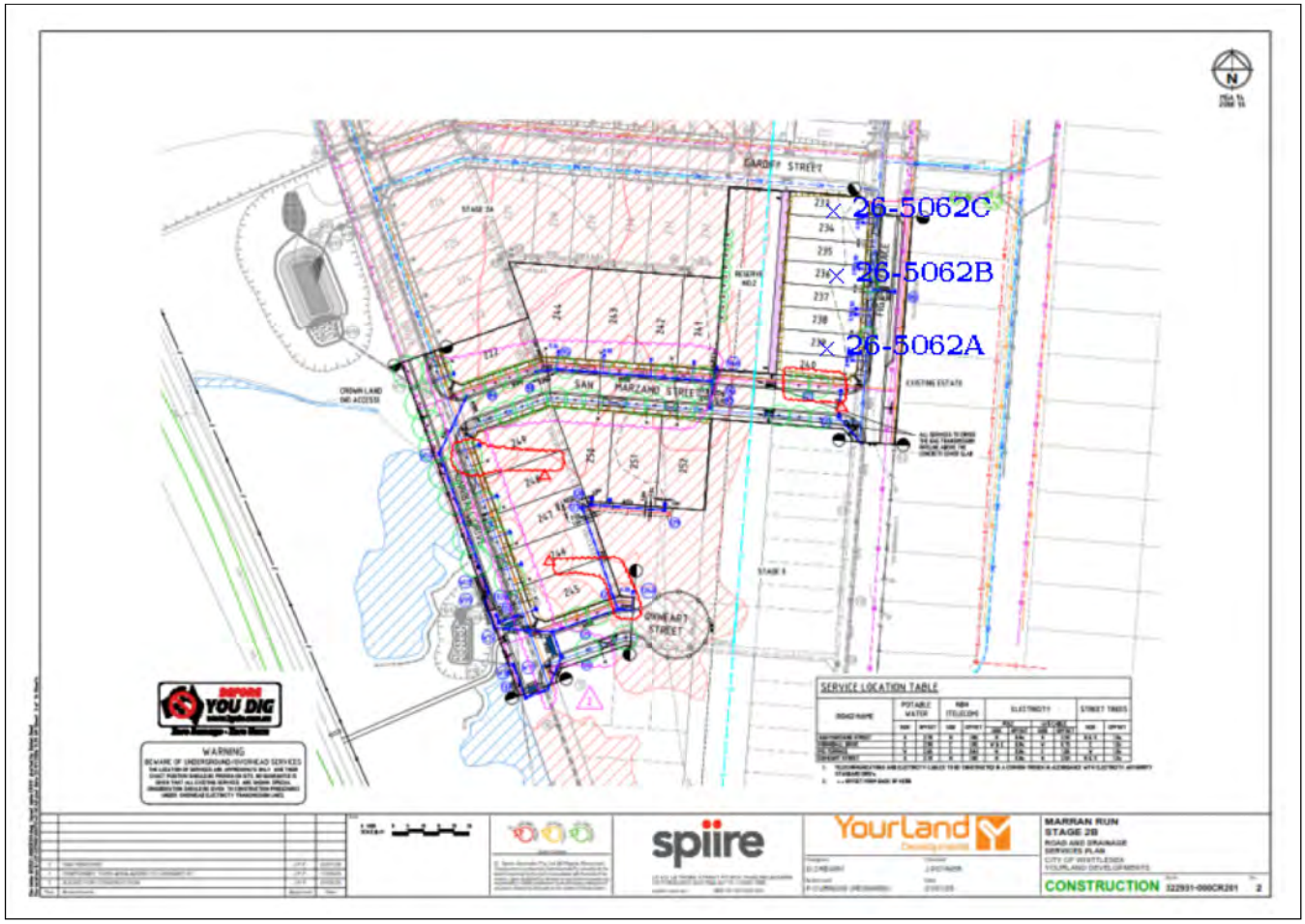
Moisture Variation Note:
Positive values = test is dry of OMC
Negative values = test is wet of OMC

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Sample Locations Plan

x - approximate test location

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Important Information About This Report

As a client of Continent Geotech Services (CGS), you should know that site subsurface conditions cause more construction problems than any other factor. These notes have been prepared by CGS to help you interpret and understand the limitations and applicability of this report.

Purpose and Use of Report

This report has been prepared solely for the Client and for the purpose identified herein. No other use, reliance, reproduction, or distribution is permitted, in full/part, without the prior written consent of the Consultant. In particular, the investigation does not cover contamination issues unless specifically required to do so by the client.

Scope and Requirement

The report has been developed on the basis of your project specific requirements as understood by CGS and applies only to the site investigated. Project criteria typically include the general nature of the project; its size and configuration; the location of any proposed structures on the site; other site improvements; the presence of underground utilities; and the additional risk imposed by scope-of-service limitations imposed by the client. Your report should not be used if there are any changes to the project without first asking CGS to assess how factors that changed subsequent to the date of the report affect the report's recommendations. CGS cannot accept responsibility for problems that may occur due to changed factors if they are not consulted.

Report is Project Specific

The report should not be applied to any project other than that originally specified at the time the report was issued. The results should not be used by other parties, or for other purposes, as they may contain neither adequate nor appropriate information. To avoid misuse of the information contained in your report, it is recommended that you confer with CGS before passing your report on to another party who may not be familiar with the background and the purpose of the report. The Consultant accepts no responsibility for reliance on this report where site conditions, design parameters, construction methods, or scope differ from those agreed upon.

Subsurface conditions can change

Geotechnical information is derived from limited sampling and testing at discrete locations and is interpreted using professional judgement. As such these conditions are an interpretation and must be considered as a guide only. Subsurface conditions may vary between investigation points and from those inferred. No warranty is given that actual conditions will be consistent with those described in the report. Any variations in ground conditions observed during construction, relative to those assumed or reported, should be promptly referred to CGS for assessment and comment.

Groundwater levels may vary

Unless otherwise indicated, the water levels presented on the test hole logs are the levels of free water or seepage recorded in the test hole at the given time of measuring. The actual groundwater level may differ from this recorded level depending on material permeability (i.e. depending on response time of the measuring instrument). Further, variations of this level could occur with time due to such effects as seasonal, environmental and tidal fluctuations or construction activities. Confirmation of groundwater levels, phreatic surfaces or piezometric pressures can only be made by appropriate instrumentation techniques and monitoring programmes.

Interpretation of Factual Data

Site assessment identifies actual subsurface conditions only at those points where samples are taken during the fieldwork. Data derived from literature and external data source review, sampling and subsequent laboratory testing are interpreted by engineers to provide an opinion about overall site conditions, their likely impact on the proposed development and recommended actions. Actual conditions may differ from those inferred to exist. While the existing site conditions cannot be altered, appropriate measures can be implemented to mitigate the impact of unforeseen conditions.

Recommendations

The report is based on the assumption that the site conditions identified through selective point sampling are representative of the conditions across the investigated area. All opinions and recommendations are based on the information available at the time of reporting and represent professional opinion only and are preliminary. This assumption cannot be substantiated until project implementation has commenced. The Consultant accepts no responsibility for decisions made without verification of actual conditions during construction.

Reliance and Time Limitation

This report must not be relied upon where site conditions have changed, where construction has not commenced within twelve (12) months of the investigation, or where the works deviate from those proposed, without further written review by CGS.

Third-Party Reliance

This report has been prepared solely for the Client and is not intended for reliance by any third party. The Consultant accepts no duty of care to, and disclaims all liability in respect of, any third party who may seek to rely on this report.

Integrity of Report

The report, as a whole, presents the findings of the site assessment, and the report should not be copied in part or altered in any way. Borehole logs, test results, figures, and other data form an integral part of the report and must not be separated from the accompanying interpretations and recommendations.

Reproduction of reports*

Where it is proposed to reproduce information from the geotechnical report, or other technical data, for inclusion in contract documents or engineering specifications for the subject development, such reproduction should include all relevant test pit/borehole logs and test data, together with the applicable standard description sheets and any factual or descriptive commentary provided in the report. No responsibility is accepted for the use of extracted or partial information.

**For further information on this aspect reference, should be made to "Guidelines for the Provision of Geotechnical information in Construction Contracts" published by the Institution of Engineers Australia, National headquarters, Canberra, 1987.*

Limitation of Responsibility

The Consultant's responsibility is limited to the scope of services agreed and provided and is subject to the terms and conditions of engagement. To the extent permitted by law, no liability is accepted beyond those terms.

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