

2026-04-09

Greg Dewe  
Land Operations Manager  
Fulton Hogan Ltd  
Via email: Gregory.Dewe@fultonhogan.com

Dear Greg,

## **Rosemerryn Subdivision – Stage 24 Geotechnical Completion Letter**

This geotechnical completion letter report is submitted to fulfil the geotechnical requirements of Condition 21 of the Selwyn District Council Resource Consent RC185574. Condition 21 requires confirmation that the original Technical Classification remains applicable after final earthworks have been completed.

### **1 Introduction**

Fulton Hogan Land Development Limited (FHL) is developing the Rosemerryn Subdivision located in Lincoln, Christchurch. Aurecon New Zealand Limited (Aurecon) has provided Geotechnical Engineering services for the subdivision development, including a geotechnical investigation and subsequent assessment of Stages 19 to 25 for the purposes of obtaining a subdivision consent. The investigation and assessment are detailed in the Aurecon Geotechnical Reports “*Rosemerryn Subdivision, Lincoln, Stages 19 to 24 Geotechnical Investigation Report*”, dated 22 June 2018 and “*Rosemerryn Subdivision, Lincoln, Stage 25 Geotechnical Investigation Report*” date 17 March 2022. Following the completion of these reports and subsequent planning and development of the subdivision, the various Stage numbering and boundaries have been adjusted by the Client. As such, the final Stage 24 area associated with this Geotechnical Completion Letter spans the area of Geotechnical Assessment in both referenced reports.

FHL has engaged Aurecon to provide a geotechnical review of the construction completed in Stage 24 of the Rosemerryn Subdivision to confirm the Technical Category Classifications of the proposed allotments. The extent of Stage 24 is shown in the attached Earthfill As-built plan for Stage 24 provided by Davie Lovell-Smith Ltd (Davie Lovell-Smith) and attached as Appendix A of this Letter. Aurecon’s review is summarised in the letter below.

### **2 Earthworks**

Cut and fill earthworks have been carried out across Stage 24 to ensure adequate drainage towards the street in accordance with the Selwyn District Council Code of Practice (SDC COP). The work was also carried out in accordance with the Christchurch City Council Construction Standards Specification (CCC CSS), the Infrastructure Design Standard (CCS IDS), and the New Zealand Building Code (NZBC). All bulk filling was compacted in accordance with NZS 4431:1989. Earthworks were undertaken using site won silt fill between March 2021 and November 2025. Cut and fill earthworks have been undertaken to a maximum 0.1m of cut and 1.2m of fill.

Bulk earthworks and compaction have been observed and signed off separately by the project Civil Engineers, Davie Lovell-Smith. Aurecon have reviewed the Nuclear Densometer (NDM) tests results,

and the Earthfill As-built plan for Stage 24 provided by Davie Lovell-Smith is attached as Appendix A of this letter.

The compaction testing results provided by Davie Loevell-Smith indicate that 95% MDD or greater compaction has generally been achieved in the areas of bulk fill. Where NDM results of fill are not available, the contractor completed additional compaction effort to provide further confirmation on the suitability of the fill compaction. NDM compaction results are included in Appendix B.

Complete NDM compaction results are generally not available for Lots 964 through 970 and Lots 973 through 979. As such, Davie Lovell Smith have undertaken shallow handheld testing on each of these lots comprising one hand-auger borehole and four Dynamic Cone Penetrometer (DCP) tests, which are included in Appendix C. The testing results generally indicates at least five blows per 100mm penetration (which corresponds to an ultimate bearing capacity of approximately 300kPa) at shallow depth of 0.3m to 0.6m below ground level. In general the consistent results achieved within the shallow handheld testing, combined with the available NDM compaction testing, indicates suitable compaction of fill materials has been achieved throughout Stage 24.

### 3 Liquefaction Hazard and Technical Category Assessment

#### 3.1 Seismically Induced Liquefaction

Aurecon’s Geotechnical Reports for Stages 19 to 25 were issued following the publication of the Ministry of Business, Innovation & Employment (MBIE) guidelines in December 2012, and subsequent updates in 2018, which define the Technical Category zoning, and the liquefaction induced deformation limits for each Technical Category.

The categories and corresponding criteria are as follows:

- **Technical Category 1 (TC1)** – Future land damage from liquefaction is unlikely, and ground settlements are expected to be within normally accepted tolerances.
- **Technical Category 2 (TC2)** – Minor to moderate land damage from liquefaction is possible in future large earthquakes.
- **Technical Category 3 (TC3)** – Moderate to significant land damage from liquefaction is possible in future large earthquakes.

The indicative vertical and horizontal displacements associated with each Technical Category classification, together with the impact of liquefaction on house foundations, are presented in Table 1 below.

**Table 1 Liquefaction Deformation Limits and House Foundation Implications**

Technical Category	Index Liquefaction Deformation Limits				Likely implications for House Foundations (subject to individual assessment)
	Vertical		Lateral Spread		
	SLS	ULS	SLS	ULS	
TC1	15mm	25mm	Nil	Nil	Standards NZS 3604 type foundations with tie slabs are acceptable subject to shallow geotechnical investigation.
TC2	50mm	100mm	50mm	100mm	MBIE enhanced foundation solutions.
TC3	>50mm	>100mm	>50mm	>100mm	Site specific foundation solution.

A liquefaction hazard assessment was undertaken as part of Aurecon's 2018 Geotechnical Report using the prescribed MBIE (2018) guidelines for residential development in Canterbury following the Canterbury Earthquake Sequence (CES).

The liquefaction analysis for Stage 24 was based on the boreholes and Cone Penetrometer (CPT) testing carried out as part of geotechnical investigations for the larger subdivision. The geotechnical investigation information used to assess Stage 24 is part of a large group of geotechnical information and only the tests relevant for this stage have been included in our assessment.

### 3.2 Technical Category Classification

Given the subdivision development has comprised relatively minor cut and fill earthworks, Aurecon considers that there has been no change in Technical Category Classification from our original assessment. Therefore, we consider that:

- **Lots 902 to 912 and 964 to 974 fulfil the requirements of a TC1 Classification.**
- **Lots 913 to 915, 975 to 979 and 982 to 988 fulfil the requirements of a TC2 Classification.**

## 4 Silty Soil Layers

Investigations undertaken by Aurecon prior to bulk earthworks indicate that loose to medium dense sands with interbedded layers of firm to stiff sandy silts may be encountered at shallow depths across the entirety of Stage 24. Lot specific shallow geotechnical investigations are required for all lots as part of the detailed building design process, which should also consider the potential for long term consolidation when selecting appropriate robust TC1 and TC2 type foundation systems.

## 5 Recommendations

### 5.1 General

**This report is not intended to be used for detailed design of site-specific shallow foundations and is not suitable to support individual building consent applications. Site specific investigations are required at building consent stage.**

### 5.2 TC1 Foundations

For lots identified as TC1, Aurecon considers NZS 3604:2011 type foundations are suitable, pending the completion of Lot Specific geotechnical investigations. We note that at the time of writing this letter, the location and structural form of the future dwellings on the lots are unknown and our recommendations relate to NZS 3604 type lightweight timber or steel framed residential buildings only.

### 5.3 TC2 Foundations

For lots identified as meeting TC2 requirements, Aurecon recommends founding dwellings on TC2 type 'enhanced foundation systems' as per Option 3 or 4 from the MBIE Guidelines (2012) Section 5.1.3 to mitigate the effects of liquefaction induced settlement. Alternatively, in accordance with MBIE Guidelines Section 5.4 a specific design could be undertaken by a suitably qualified chartered professional engineer.

## 6 Reference

Aurecon, 2018. *Rosemerryn Subdivision, Lincoln, Stages 19 to 24 Geotechnical Investigation Report, Rev0* - dated 22 June 2018. Aurecon New Zealand Limited, Christchurch, New Zealand.

Aurecon, 2022. *Rosemerryn Subdivision, Lincoln, Stage 25 Geotechnical Investigation Report, Rev0* – dated 17 March 2022. Aurecon New Zealand Limited, Christchurch, New Zealand.

MBIE, 2012. *Repairing and rebuilding houses affected by the Canterbury earthquakes*. Ministry of Business, Innovation and Employment, Wellington, New Zealand – December 2012.

MBIE, 2018. *Repairing and rebuilding houses affected by the Canterbury earthquakes*. Ministry of Business, Innovation and Employment, Wellington, New Zealand – May 2018.

## 7 Explanatory Statement

The contents of this letter are for the sole use of the Client and no responsibility or liability will be accepted to any third party. Information or opinions contained within this letter may not be used in other contexts or for any other purposes without our prior agreement.

The comments in this letter are based on our investigations of the site for the sole purposes of the geotechnical aspects only, as requested by the Client. Only a finite amount of information has been collected and this letter does not purport to completely describe all the site characteristics and properties.

The extent of our investigations and the results of all the tests carried out are as presented in the Geotechnical Reports for Stages 19 to 24 “*Rosemerryn Subdivision, Lincoln, Stages 19 to 24 Geotechnical Investigation Report*”, dated 22 June 2018 and for Stage 25 “*Rosemerryn Subdivision, Lincoln, Stage 25 Geotechnical Investigation Report*”, dated 17 March 2022.

We trust this meets your requirements and if there are any further questions, please do not hesitate to contact the undersigned.

Yours sincerely,

Prepared by



**George Young**

*Geotechnical Engineer*

Reviewed by



**Kieran Foote**

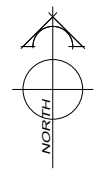
*Lead Geotechnical Engineer, CPEng*

Approved by



**Dr Jan Kupec**  
*Principal – Ground Engineering, CPEng*

**Appendix A – DLS Earthfill As-built Plan for Rosemerryn Subdivision Stage 24**



AMENDMENTS:		
AMENDMENT	DATE	DESCRIPTION

- NOTES:
1. This plan has been prepared for Earth Fill asbuilt purposes only. No liability is accepted if the plan is used for any other purpose.
  2. Any measurements taken from information which is not dimensioned on the electronic copy are at the risk of the recipient.
  3. All roading information is asbuilt.

**LEGEND**

CONTOURS SHOWN ARE APPROXIMATELY CUT (-ve) AND FILL (+ve) AT 0.1m INTERVALS.

	CUT
	FILL > 0.2m
	ASBUILT KERB
	ASBUILT FOOTPATH
	CUT DOWN



116 Wrights Road P O Box 679 Christchurch 8140. New Zealand  
 Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:  
**Rosemerryn - Stage 24**

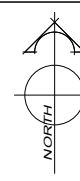
SHEET TITLE:  
**Earth Fill Asbuilt**

DRAWING STATUS:  
**Asbuilt**

SCALE: 1:500@A1 DATE: March 2026  
 1:1000@A3

CAD FILE: J:\21373\ASBUILT\E21373\_STAGE24\_ABEF.dwg DRAWN: GC  
 DRAWING No.: SHEET No.: REVISION:  
**E.21373.ABEF R0**

## Appendix B – Compaction Testing Results



AMENDMENTS:		
AMENDMENT	DATE	DESCRIPTION
R2	14/08/25	NO CHANGES THIS SHEET
R3	15/08/25	NO CHANGES THIS SHEET
R4	05/09/25	NO CHANGES THIS SHEET

- NOTES:
- ALL WORKS IN ACCORDANCE WITH SDC CODE OF PRACTICE PARTS 1-11 STANDARDS, IF STANDARDS ARE UNSPECIFIED REFER TO CCC CSS PARTS 1-7.
  - ORIGIN OF LEVELS**  
SS 11A SO 797  
BRASS PLAQUE  
RL=9.42m.  
  
ALL LEVELS IN TERMS OF LYTELTON VERTICAL DATUM 1937. LEVELS PRE 2010 & 2011 CANTERBURY EARTHQUAKES.
  - METAL DEPTHS TO BE CONFIRMED OR INCREASED BY ENGINEER FOLLOWING CHECKING OF SUBGRADE CBR STRENGTH ONCE EXCAVATED.
  - ALL BERMS TO BE COVER WITH A MINIMUM OF 150mm SCREENED TOPSOIL, GRASSED WITH CCC BERM MIX.
  - EXISTING SERVICES HAVE BEEN DIGITISED FROM SERVICE AUTHORITY PLANS; COMPLETENESS AND ACCURACY ARE NOT GUARANTEED, ALL SERVICES TO BE FULLY SEARCHED & PILOTTED PRIOR TO TRENCHING.
  - CLEARING TO INCLUDE REMOVAL OF ALL INTERNAL FENCING, ALL VEGETATION FROM LOTS, CLEARED AREA TO BE GRASSED AND FREE OF DEBRIS. ALL MATERIAL TO BE REMOVED FROM SITE.
  - CUT-FILL CONTOUR INTERVAL: MAJOR 1.0m MINOR 0.1m.
  - ALL EARTHFILL WORKS TO COMPLY WITH NZS 4431:1989 RELEVANT CERTIFICATION REQUIRED AS PROOF.
  - IF PEAT OR OTHER UNSUITABLE MATERIAL IS LOCATED IN THE SUBGRADE THE ENGINEER IS TO BE CONTACTED FOR INSTRUCTION.
  - ESCMP TO BE IN PLACE PRIOR TO ANY EARTHWORKS.
  - CONTRACTOR MUST READ ALL DISCHARGE CONSENTS PRIOR TO ANY EARTHWORKS.
  - DRAWINGS TO BE DISTRIBUTED AND READ AS A COMPLETE SET. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.



LEGEND:

	RETAINING WALL
<b>LEVELS</b>	
	PROPOSED LOT LEVELS
	EXISTING LOT LEVELS
	DIRECTION OF FLOW
	ENGINEERING FILL
	ENGINEERING CUT
	PREVIOUSLY COMPLETED EARTHWORKS

<b>EXISTING SERVICES</b>	<b>PROPOSED SERVICES</b>
KERB	KERB

DESIGNED BY	CHECKED BY	NAME	SIGNED	DATE
SAM JONES	TODD INNESS	SAM JONES		
		TODD INNESS		



116 Wrights Road P O Box 679 Christchurch 8140. New Zealand  
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

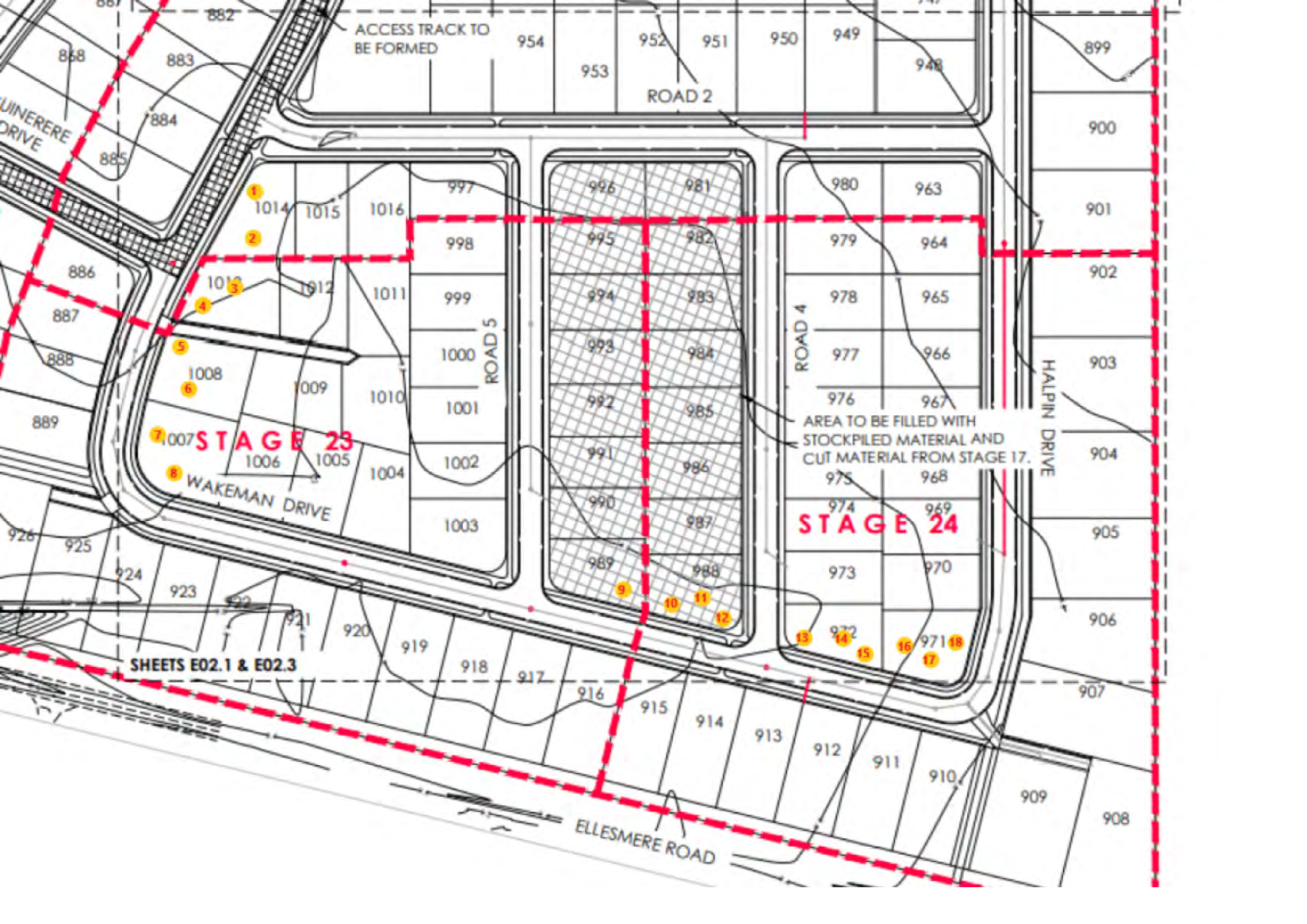
JOB TITLE:  
**Fulton Hogan Land Development Ltd.  
Rosemeryn - Stage 24A & 24B**

SHEET TITLE:  
**Cut Fill Plan  
RC225391 & RC225528**

DRAWING STATUS:  
**For Engineering Approval**

SCALE: 1:500@A1  
1:1000@A3 DATE: January 2026


CAD FILE: J:\21373\Eng\Drawings\E21373\_E020\_R4.dwg DRAWN: JS  
DRAWING No: E.21373 SHEET No: E02.1 REVISION: R4





AMENDMENT	DATE	DESCRIPTION
R12	22/03/2021	STAGES 15, 16, 19 & 20 BOUNDARIES UPDATED TO TSS
R13	21/04/2021	LOTS 768 & 7013 AMENDED
R14	1/06/2021	COMPLETED STAGES UPDATED
R15	1/07/2021	LOTS 819 - 821 & LOTS 617 - 620 AMENDED
R16	07/12/2021	LOTS 819 & 1028 AMENDED
R17	16/02/2020	LOTS 617-620 AMENDED, LOTS 7020 & 8000 ADDED
R18	23/06/2022	STAGES 23 & 24 ADDED
R19	28/07/2022	LOTS 1008 - 1013 AMENDED
R20	26/06/2023	COMPLETED STAGES UPDATED
R21	30/11/2023	STAGES 21, 23 & 24 UPDATED
R22	29/07/2024	LOT 666 CHANGED TO 1017

- NOTES:
- 1) Areas and dimensions are approximate only and are subject to final survey and deposit of plans.
  - 2) Service easements to be created as required.
  - 3) This plan has been prepared for information purposes only. No liability is accepted if the plan is used for any other purposes.



**DAVIE LOVELL-SMITH**  
PLANNING SURVEYING ENGINEERING

116 Wrights Road P O Box 679 Christchurch 8140, New Zealand  
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz

JOB TITLE:  
**Rosemerryn**

SHEET TITLE:  
**Proposed Subdivision Stages 21-24**

DRAWING STATUS:  
**For Information Only**

SCALE: 1:1000@A1 DATE: July 2024  
1:2000@A3

CAD FILE: J:\19458\Subcon\19458\_Stages 21-24\_R15 & R22\_COMPARISON.dwg REVISION:  
DRAWING No: SHEET No:  
**19458** 1 OF 1 **R22**



**Report No: MDD:CAN20S-07340**
**Issue No: 1**

# Maximum Dry Density Report

**Client:**  
 Maugers Contracting Ltd  
 PO Box 14174  
 Christchurch Airport  
  
 Christchurch 8544  
 NZ

**Project:** Maugers Contracting

The tests reported herein (unless otherwise indicated) have been performed in accordance with the laboratory's scope of accreditation. Samples are tested as received, in natural condition, unless stated otherwise in the comments. This report may only be reproduced in full.

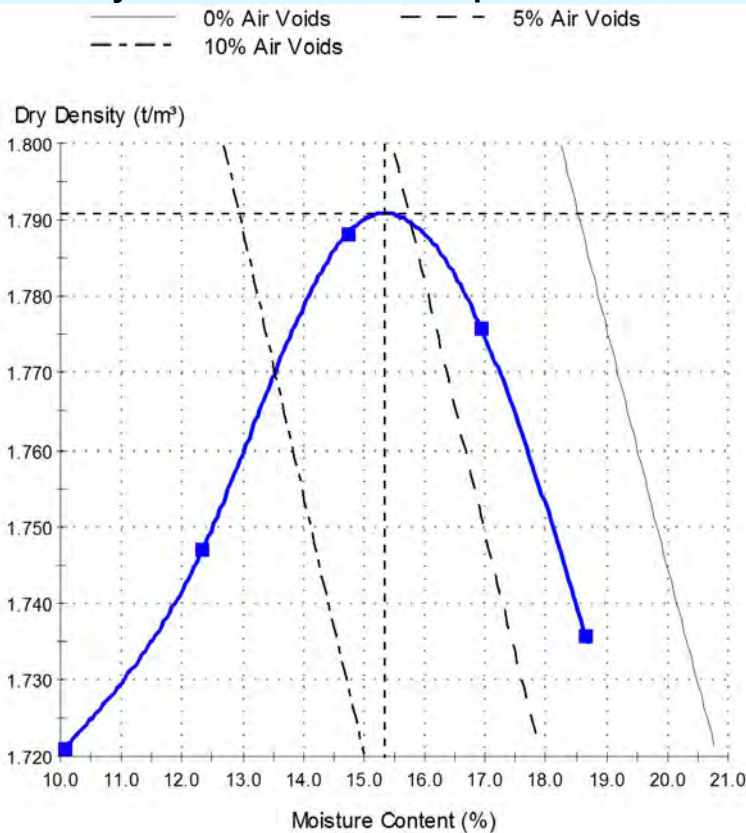
The results in this report relate only to the items / samples that were tested

Approved Signatory: Max Burford  
 (Supervisor)  
 IANZ Accreditation No:200  
 Date of Issue: 15/05/2020

## Sample Details

<b>Sample ID:</b>	CAN20S-07340	<b>Client Sample ID:</b>	QA Testing
<b>Material:</b>	SILT	<b>Sample Source:</b>	Miscellaneous Material Source
<b>Site/Sampled From:</b>	Site Rosemerryn	<b>Date Sampled:</b>	15/05/2020
<b>Specification:</b>	Standard Compaction Test	<b>Sampled By:</b>	Advised - See Comments
<b>Sampling Method:</b>	As Received - Not Accredited	<b>Date Tested:</b>	15/05/2020
<b>Technician:</b>	Max Burford	<b>Sampling Endorsed?:</b>	No

## Dry Density - Moisture Relationship



## Test Results

NZS 4402:1986 Test 4.1.1 - 1986

**Maximum Dry Density (t/m³): 1.79**  
**Optimum Moisture Content (%): 15**  
**Solid Density (t/m³): 2.680 assumed**  
**Oversize Sieve (mm): 19.0**  
**Oversize Material (%): 0**  
**Sample History:** Natural  
**Tested By:** Max Burford  
**Date Tested:** 15/05/2020

## Comments

Sampled by Hayden Greene

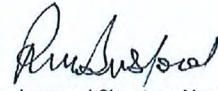
Report No: MDD:CAN17S-23169

Issue No: 1

# Maximum Dry Density Report

**Client:**  
 Maugers Contracting Ltd  
 25 Tahuna Street  
 Wainoni  
  
 Christchurch 8061  
 NZ  
**Project:** Maugers Contracting

The tests reported herein (unless otherwise indicated) have been performed in accordance with the laboratory's scope of accreditation. Samples are tested as received, in natural condition, unless stated otherwise in the comments. This report may only be reproduced in full.

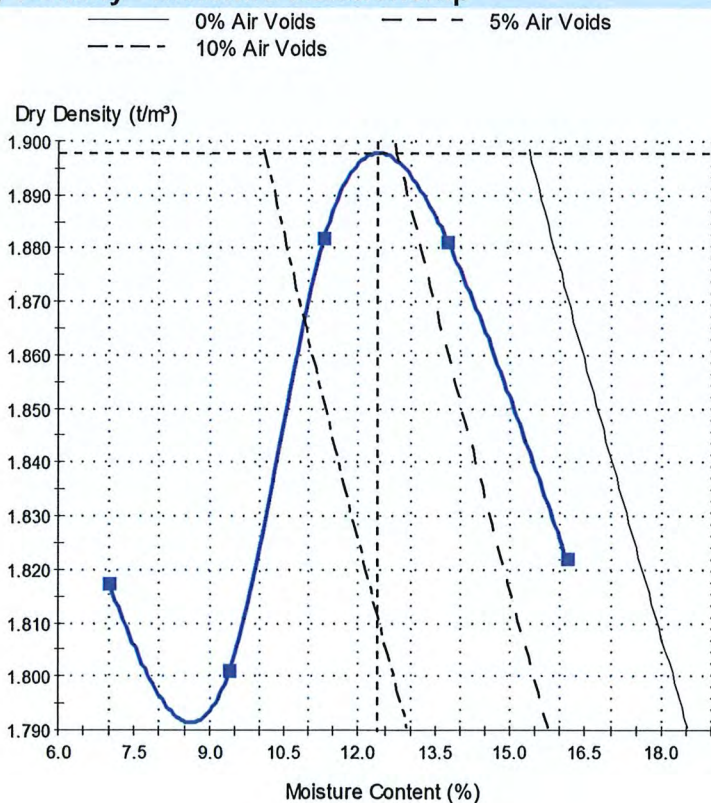



Approved Signatory: Max Burford  
 (Supervisor)  
 IANZ Accreditation No:200  
 Date of Issue: 15/09/2017

## Sample Details

<b>Sample ID:</b>	CAN17S-23169	<b>Client Sample ID:</b>	QA Testing
<b>Material:</b>	Sandy SILT	<b>Sample Source:</b>	Miscellaneous Material Source
<b>Site/Sampled From:</b>	Rosemerryn Stage 2 Lincoln	<b>Date Sampled:</b>	13/09/2017
<b>Specification:</b>	Standard Compaction Test	<b>Sampled By:</b>	Advised - See Comments
<b>Sampling Method:</b>	Not Advised - Not Accredited	<b>Date Tested:</b>	15/09/2017
<b>Technician:</b>	Alec Prattley	<b>Sampling Endorsed?:</b>	No

## Dry Density - Moisture Relationship



## Test Results

————— NZS 4402:1986 Test 4.1.1 - 1986 —————

<b>Maximum Dry Density (t/m³):</b>	1.90
<b>Optimum Moisture Content (%):</b>	12
<b>Solid Density (t/m³):</b>	2.680 assumed
<b>Oversize Sieve (mm):</b>	19.0
<b>Oversize Material (%):</b>	0
<b>Sample History:</b>	Natural

## Comments

Sampled by Kieran Stoop



DLS Job No.:

21373

Engineer: Davie Lovell-Smith

Checked By:

MJWM

Type:

Earthfill NDM Testing

Council Rep: \_\_\_\_\_

Development:

Rosemerryn - Stage 24

Contractor:

Rooneys Earthmoving Ltd

Contractors rep: \_\_\_\_\_

Lift Colour:

Lift 1

Lift 2

Lift 3

Lift 4

Lift 5

(WC-2) < M < (WC+4)

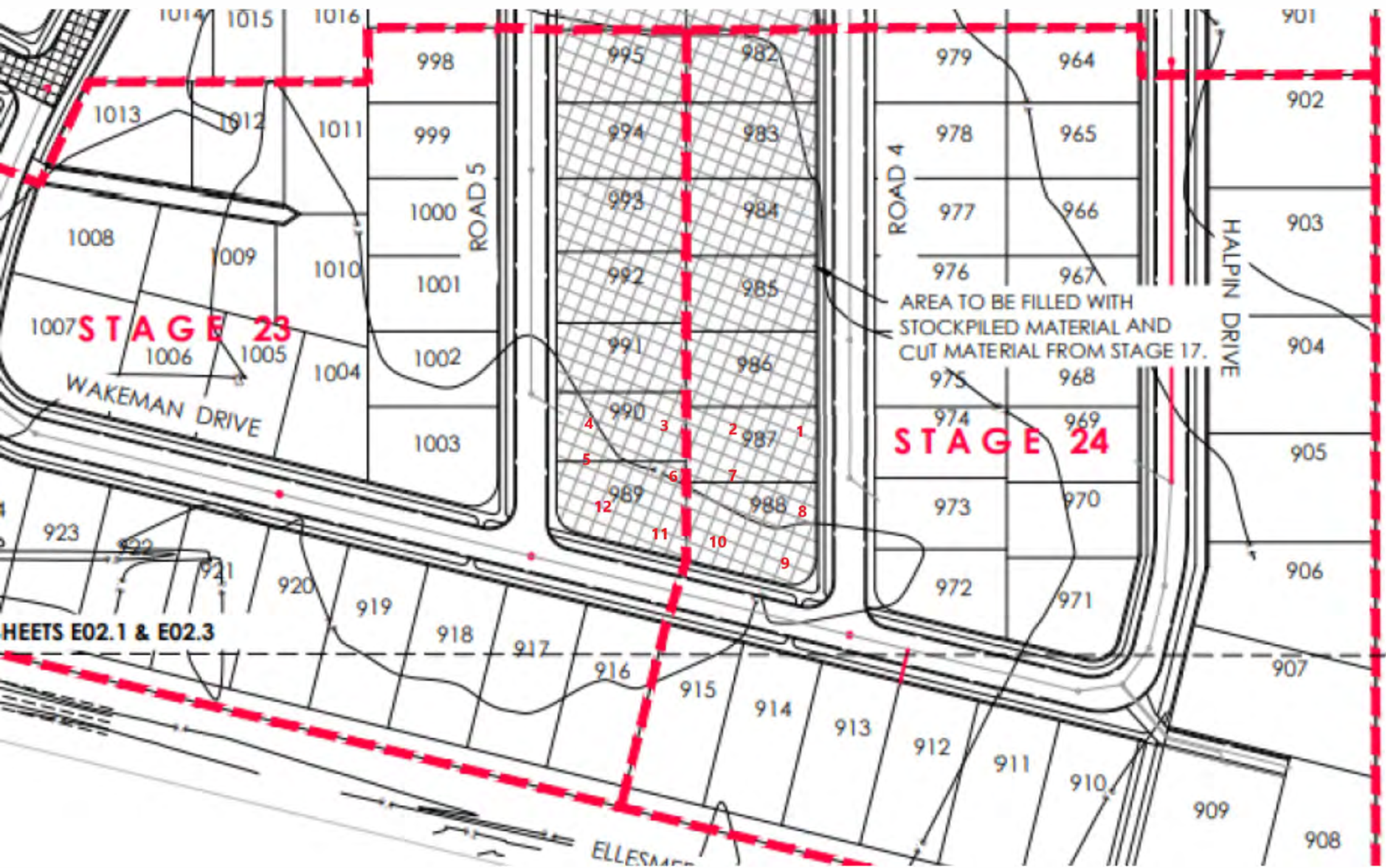
**Earthfill NDM Testing - Stage 24A & 24B Summary - Lot Order**

	Ref-erence	Stage #	Lot #	Old Lot #	L a y e r	Test #	Material	MDD	Water Content WC	Date of Test	NDM N	Moisture Content M	Compact-ion C	Compact-ion Pass/Fail	Report #	ID	Date of Check	DLS Checked By	
Sort	Sort		Lot					kg/m <sup>3</sup>	%	d/m/yy	kg/m <sup>3</sup>	%	%	C > 95			d/m/yy	Initials	
12		Stage 24 Analysis																	
212	215	Earthfill	24A	912		1	4	Fine Sandy SILT	1790	15.00	15/02/23	1763	17.4	98.5	Pass	18	018	9/06/2025	MJWM
213	216	Earthfill	24A	912		1	5	Fine Sandy SILT	1790	15.00	15/02/23	1744	16.8	97.4	Pass	18	018	9/06/2025	MJWM
214	217	Earthfill	24A	912		1	6	Fine Sandy SILT	1790	15.00	15/02/23	1784	16.9	99.7	Pass	18	018	9/06/2025	MJWM
220	223	Earthfill	24A	912		2	3	Fine Sandy SILT	1790	15.00	21/02/23	1765	14.3	98.6	Pass	19	019	9/06/2025	MJWM
221	224	Earthfill	24A	912		2	4	Fine Sandy SILT	1790	15.00	21/02/23	1789	10.7	99.9	Pass	19	019	9/06/2025	MJWM
226	229	Earthfill	24A	912		3	9	Fine Sandy SILT	1790	15.00	21/02/23	1789	9.5	99.9	Pass	19	019	9/06/2025	MJWM
344	110	Earthfill	24A	912		4	14	Site SILTS	1790	15.00	20/03/24	1810	16.8	101.1	Pass	47	047	15/01/26	JH
345	111	Earthfill	24A	912		4	15	Site SILTS	1790	15.00	20/03/24	1809	16.1	101.1	Pass	47	047	15/01/26	JH
348	114	Earthfill	24A	912		4	18	Site SILTS	1790	15.00	20/03/24	1767	16.7	98.7	Pass	47	047	15/01/26	JH
215	218	Earthfill	24A	913		1	7	Fine Sandy SILT	1790	15.00	15/02/23	1738	18.6	97.1	Pass	18	018	9/06/2025	MJWM
216	219	Earthfill	24A	913		1	8	Fine Sandy SILT	1790	15.00	15/02/23	1749	12.4	97.7	Pass	18	018	9/06/2025	MJWM
217	220	Earthfill	24A	913		1	9	Fine Sandy SILT	1790	15.00	15/02/23	1792	11.3	100.1	Pass	18	018	9/06/2025	MJWM
222	225	Earthfill	24A	913		2	5	Fine Sandy SILT	1790	15.00	21/02/23	1785	10.1	99.7	Pass	19	019	9/06/2025	MJWM
223	226	Earthfill	24A	913		2	6	Fine Sandy SILT	1790	15.00	21/02/23	1811	14.9	101.2	Pass	19	019	9/06/2025	MJWM
227	230	Earthfill	24A	913		3	10	Fine Sandy SILT	1790	15.00	21/02/23	1822	14.8	101.8	Pass	19	019	9/06/2025	MJWM
228	231	Earthfill	24A	913		3	11	Fine Sandy SILT	1790	15.00	21/02/23	1875	12.1	104.7	Pass	19	019	9/06/2025	MJWM
201	307	Earthfill	24A	914		1	15	Fine Sandy SILT	1790	15.00	2/02/23	1751	16.5	97.8	Pass	16	016	9/06/2025	MJWM
202	308	Earthfill	24A	914		1	16	Fine Sandy SILT	1790	15.00	2/02/23	1797	10.6	100.4	Pass	16	016	9/06/2025	MJWM
199	305	Earthfill	24A	915		1	13	Fine Sandy SILT	1790	15.00	2/02/23	1765	14.4	98.6	Pass	16	016	9/06/2025	MJWM
200	306	Earthfill	24A	915		1	14	Fine Sandy SILT	1790	15.00	2/02/23	1749	14.0	97.7	Pass	16	016	9/06/2025	MJWM
203	309	Earthfill	24A	915		2	1	Fine Sandy SILT	1790	15.00	8/02/23	1747	13.4	97.6	Pass	17	017	9/06/2025	MJWM
204	207	Earthfill	24A	915		2	2	Fine Sandy SILT	1790	15.00	8/02/23	1793	9.0	100.2	Pass	17	017	9/06/2025	MJWM
205	208	Earthfill	24A	915		2	3	Fine Sandy SILT	1790	15.00	8/02/23	1818	12.8	101.6	Pass	17	017	9/06/2025	MJWM
370	15	Earthfill	24A	972		1	4	Sandy SILT	1900	15.00	4/11/25	1941	11.7	102.2	Pass	61	061	4/12/25	MJWM
241	146	Earthfill	24A	972		1	13	Fine Sandy SILT	1790	15.00	30/05/24	1703	19.9	95.1	Pass	20	020	11/06/24	MJWM
361	153	Earthfill	24A	972		1	13	Sandy SILT	1790	15.00	30/05/24	1703	19.9	95.1	Pass	53	053	11/06/24	MJWM
242	144	Earthfill	24A	972		1	14	Fine Sandy SILT	1790	15.00	30/05/24	1812	16.3	101.2	Pass	20	020	11/06/24	MJWM

362	154	Earthfill	24A	972		1	14	Sandy SILT	1790	15.00	30/05/24	1812	16.3	101.2	Pass	53	053	11/06/24	MJWM
243	145	Earthfill	24A	972		1	15	Fine Sandy SILT	1790	15.00	30/05/24	1781	19.0	99.5	Pass	20	020	11/06/24	MJWM
363	155	Earthfill	24A	972		1	15	Sandy SILT	1790	15.00	30/05/24	1781	19.0	99.5	Pass	53	053	11/06/24	MJWM
375	20	Earthfill	24A	972.3		1	9	Sandy SILT	1900	15.00	4/11/25	1933	10.5	101.7	Pass	61	061	4/12/25	MJWM
376	21	Earthfill	24A	972.3		1	10	Sandy SILT	1900	15.00	4/11/25	1926	10.2	101.4	Pass	61	061	4/12/25	MJWM
371	16	Earthfill	24A	973		1	5	Sandy SILT	1900	15.00	4/11/25	1947	10.7	102.5	Pass	61	061	4/12/25	MJWM
374	19	Earthfill	24A	973		1	8	Sandy SILT	1900	15.00	4/11/25	1915	11.3	100.8	Pass	61	061	4/12/25	MJWM
377	22	Earthfill	24A	973		1	11	Sandy SILT	1900	15.00	4/11/25	1918	10.7	100.9	Pass	61	061	4/12/25	MJWM
372	17	Earthfill	24A	974		1	6	Sandy SILT	1900	15.00	4/11/25	1909	11.8	100.5	Pass	61	061	4/12/25	MJWM
373	18	Earthfill	24A	974		1	7	Sandy SILT	1900	15.00	4/11/25	1960	11.6	103.2	Pass	61	061	4/12/25	MJWM
369	14	Earthfill	24A	975		1	3	Sandy SILT	1900	15.00	4/11/25	1845	15.7	97.1	Pass	61	061	4/12/25	MJWM
406	51	Earthfill	24A	975.6		2	3	Sandy SILT	1900	15.00	20/11/25	1956	13.0	102.9	Pass	62	062	4/12/25	MJWM
180	284	Earthfill	24A	976	941F	-2	9	SILT	1790	15.00	10/03/24	1706	19.8	95.3	Pass	17a	210310	11/11/24	MJWM
182	286	Earthfill	24A	976	940E	-2	11	SILT	1790	15.00	10/03/24	1728	16.5	96.5	Pass	17a	210310	11/11/24	MJWM
183	287	Earthfill	24A	976	940F	-2	12	SILT	1790	15.00	10/03/24	1770	15.6	98.9	Pass	17a	210310	11/11/24	MJWM
168	272	Earthfill	24A	976	941C	0	9	SILT	1790	15.00	10/03/24	1870	12.4	104.5	Pass	16a	210309	11/11/24	MJWM
170	274	Earthfill	24A	976	940B	0	11	SILT	1790	15.00	10/03/24	1846	13.7	103.1	Pass	16a	210309	11/11/24	MJWM
171	275	Earthfill	24A	976	940C	0	12	SILT	1790	15.00	10/03/24	1821	15.0	101.7	Pass	16a	210309	11/11/24	MJWM
381	26	Earthfill	24A	976		1	15	Sandy SILT	1900	15.00	4/11/25	1940	13.5	102.1	Pass	61	061	4/12/25	MJWM
382	27	Earthfill	24A	976		1	16	Sandy SILT	1900	15.00	4/11/25	1830	14.1	96.3	Pass	61	061	4/12/25	MJWM
383	28	Earthfill	24A	976		1	17	Sandy SILT	1900	15.00	4/11/25	1993	10.6	104.9	Pass	61	061	4/12/25	MJWM
178	282	Earthfill	24A	977	941D	-2	7	SILT	1790	15.00	10/03/24	1742	17.9	97.3	Pass	17a	210310	11/11/24	MJWM
179	283	Earthfill	24A	977	941E	-2	8	SILT	1790	15.00	10/03/24	1793	16.9	100.2	Pass	17a	210310	11/11/24	MJWM
181	285	Earthfill	24A	977	940D	-2	10	SILT	1790	15.00	10/03/24	1771	17.0	98.9	Pass	17a	210310	11/11/24	MJWM
166	270	Earthfill	24A	977	941A	0	7	SILT	1790	15.00	10/03/24	1749	10.5	97.7	Pass	16a	210309	11/11/24	MJWM
167	271	Earthfill	24A	977	941B	0	8	SILT	1790	15.00	10/03/24	1863	12.6	104.1	Pass	16a	210309	11/11/24	MJWM
169	273	Earthfill	24A	977	940A	0	10	SILT	1790	15.00	10/03/24	1845	14.1	103.1	Pass	16a	210309	11/11/24	MJWM
399	44	Earthfill	24A	977		1	33	Sandy SILT	1900	15.00	4/11/25	1903	11.1	100.2	Pass	61	061	4/12/25	MJWM
400	45	Earthfill	24A	977		1	34	Sandy SILT	1900	15.00	4/11/25	1848	13.2	97.3	Pass	61	061	4/12/25	MJWM
148	252	Earthfill	24A	978	926E	-2	2	SILT	1790	15.00	9/03/21	1815	15.3	101.4	Pass	15	210309	11/11/24	MJWM
149	253	Earthfill	24A	978	926F	-2	3	SILT	1790	15.00	9/03/21	1784	15.0	99.7	Pass	15	210309	11/11/24	MJWM
137	241	Earthfill	24A	978	927F	-2	5	SILT	1790	15.00	8/03/21	1799	17.4	100.5	Pass	14	210308	11/11/24	MJWM
139	243	Earthfill	24A	978	926B	0	7	SILT	1790	15.00	8/03/21	1811	13.8	101.2	Pass	14	210308	11/11/24	MJWM
140	244	Earthfill	24A	978	926C	0	8	SILT	1790	15.00	8/03/21	1847	10.4	103.2	Pass	14	210308	11/11/24	MJWM
128	252	Earthfill	24A	978	927C	0	14	SILT	1790	15.00	3/03/21	1864	16.4	104.1	Pass	13	210303	11/11/24	MJWM
397	42	Earthfill	24A	978		1	31	Sandy SILT	1900	15.00	4/11/25	1876	11.8	98.7	Pass	61	061	4/12/25	MJWM
398	43	Earthfill	24A	978		1	32	Sandy SILT	1900	15.00	4/11/25	1891	14.3	99.5	Pass	61	061	4/12/25	MJWM
156	260	Earthfill	24A	979	926G	-4	10	SILT	1790	15.00	9/03/21	1841	13.9	102.8	Pass	15	210309	11/11/24	MJWM
147	251	Earthfill	24A	979	926D	-2	1	SILT	1790	15.00	9/03/21	1800	15.0	100.6	Pass	15	210309	11/11/24	MJWM
136	240	Earthfill	24A	979	927E	-2	4	SILT	1790	15.00	8/03/21	1849	14.9	103.3	Pass	14	210308	11/11/24	MJWM

138	242	Earthfill	24A	979	926A	0	6	SILT	1790	15.00	8/03/21	1823	15.7	101.8	Pass	14	210308	11/11/24	MJWM
127	251	Earthfill	24A	979	927B	0	13	SILT	1790	15.00	3/03/21	1866	11.1	104.2	Pass	13	210303	11/11/24	MJWM
395	40	Earthfill	24A	979		1	29	Sandy SILT	1900	15.00	4/11/25	1849	12.6	97.3	Pass	61	061	4/12/25	MJWM
396	41	Earthfill	24A	979		1	30	Sandy SILT	1900	15.00	4/11/25	1868	11.1	98.3	Pass	61	061	4/12/25	MJWM
135	239	Earthfill	24A	979.5	927D	-2	3	SILT	1790	15.00	8/03/21	1773	16.9	99.1	Pass	14	210308	11/11/24	MJWM
126	250	Earthfill	24A	979.5	927A	0	12	SILT	1790	15.00	3/03/21	1820	13.2	101.7	Pass	13	210303	11/11/24	MJWM
129	253	Earthfill	24A	982	929D	-2	15	SILT	1790	15.00	3/03/21	1874	15.4	104.7	Pass	13	210303	11/11/24	MJWM
130	254	Earthfill	24A	982	929E	-2	16	SILT	1790	15.00	3/03/21	1825	13.7	102.0	Pass	13	210303	11/11/24	MJWM
132	256	Earthfill	24A	982	928D	-2	18	SILT	1790	15.00	3/03/21	1799	17.5	100.5	Pass	13	210303	11/11/24	MJWM
120	244	Earthfill	24A	982	929A	0	6	SILT	1790	15.00	3/03/21	1851	14.3	103.4	Pass	13	210303	11/11/24	MJWM
121	245	Earthfill	24A	982	929B	0	7	SILT	1790	15.00	3/03/21	1783	14.4	99.6	Pass	13	210303	11/11/24	MJWM
123	247	Earthfill	24A	982	928A	0	9	SILT	1790	15.00	3/03/21	1741	15.6	97.3	Pass	13	210303	11/11/24	MJWM
88	87	Earthfill	24A	982		1	1	Fine Sandy SILT	1790	15.00	19/05/22	1813	16.5	101.3	Pass	5	005	9/06/2025	MJWM
89	88	Earthfill	24A	982		1	2	Fine Sandy SILT	1790	15.00	19/05/22	1821	15.4	101.7	Pass	5	005	9/06/2025	MJWM
90	89	Earthfill	24A	982		1	3	Fine Sandy SILT	1790	15.00	19/05/22	1793	16.2	100.2	Pass	5	005	9/06/2025	MJWM
100	99	Earthfill	24A	982		2	13	Fine Sandy SILT	1790	15.00	19/05/22	1733	19.1	96.8	Pass	5	005	9/06/2025	MJWM
101	100	Earthfill	24A	982		2	14	Fine Sandy SILT	1790	15.00	19/05/22	1784	17.7	99.7	Pass	5	005	9/06/2025	MJWM
102	101	Earthfill	24A	982		2	15	Fine Sandy SILT	1790	15.00	19/05/22	1852	16.1	103.5	Pass	5	005	9/06/2025	MJWM
112	111	Earthfill	24A	982		3	10	Fine Sandy SILT	1790	15.00	19/05/22	1759	17.8	98.3	Pass	6	006	9/06/2025	MJWM
113	112	Earthfill	24A	982		3	11	Fine Sandy SILT	1790	15.00	19/05/22	1700	19.3	94.97	Fail	6	006	9/06/2025	MJWM
114	113	Earthfill	24A	982		3	12	Fine Sandy SILT	1790	15.00	19/05/22	1730	16.7	96.6	Pass	6	006	9/06/2025	MJWM





**STAGE 23**

**STAGE 24**

AREA TO BE FILLED WITH STOCKPILED MATERIAL AND CUT MATERIAL FROM STAGE 17.

ELLESMERE





**STAGE 23**

**STAGE 24**

AREA TO BE FILLED WITH STOCKPILED MATERIAL AND CUT MATERIAL FROM STAGE 17.

ELLESME

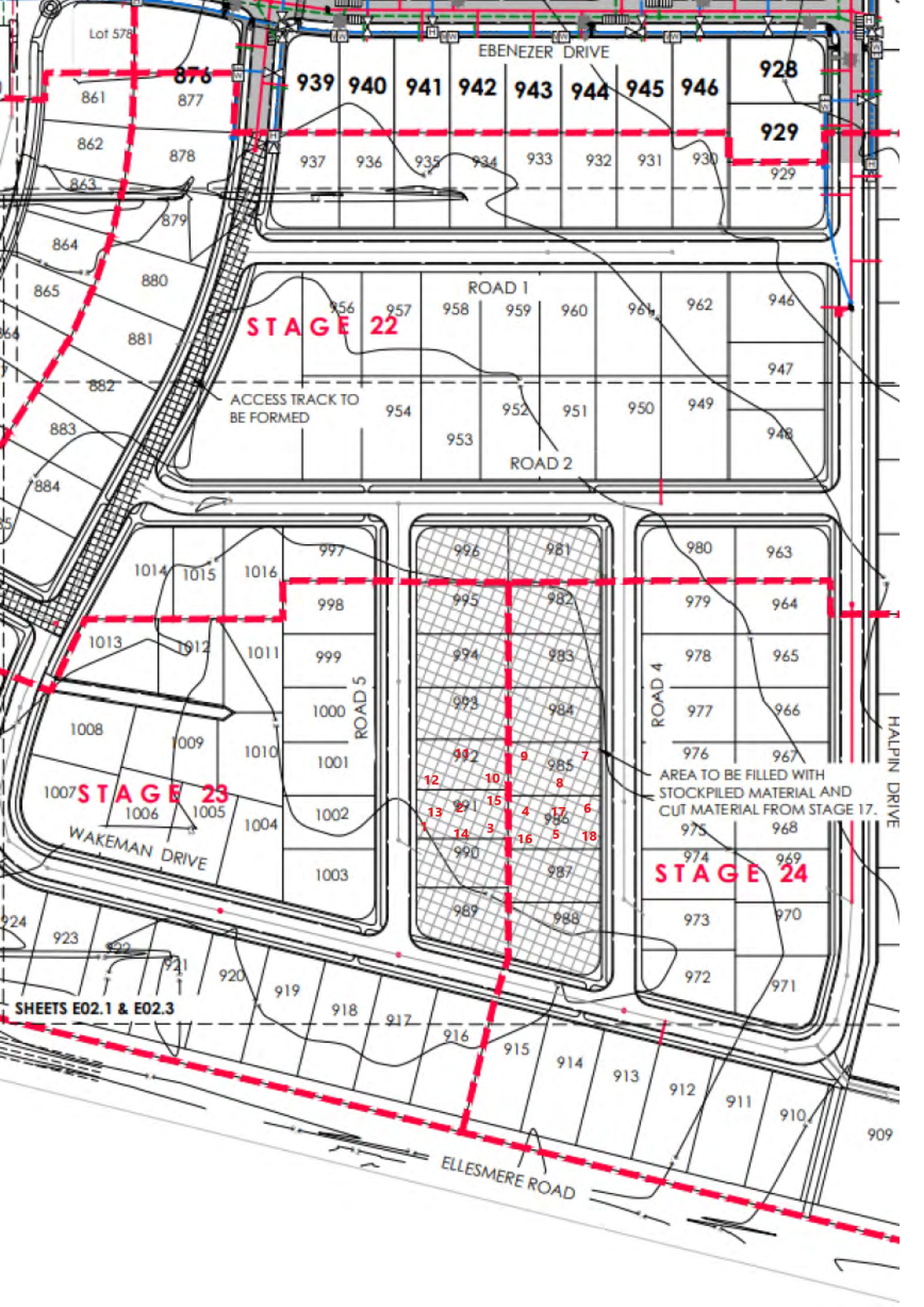
# Nuclear Density Report



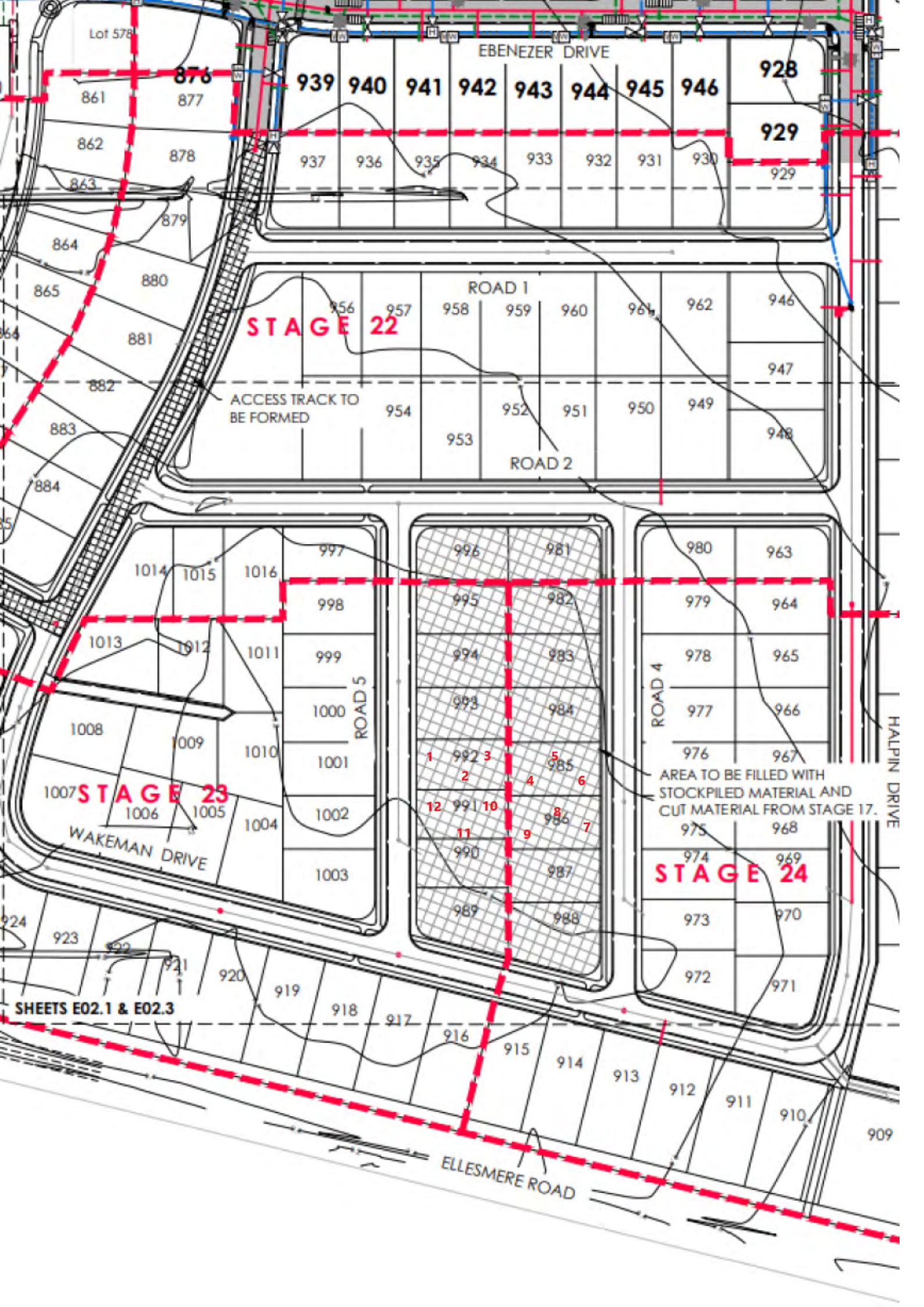
Site Tested	Rosemerryn Stage 23-24	Material Sample ID	CAN20S-07340
Tested By	Jason Daikee	MDD Method	Back Scatter
Date Tested	5-May-22	Max Dry Density	1790
Time Tested	1100	Min Dry Density (kg/m3)	
Material Tested	Silts	Solid Density Type	Assumed
Material Source	On Site		<b>Report 002</b>

Site No	Layer	Moisture (%)	Wet Density (kg/m3)	Dry Density (kg/m3)	Relative Compaction (%)
1	1	13.0	2014	1783	99.6
2		16.5	2003	1719	96
3		13.4	2032	1792	100.1
4		15.3	2034	1764	98.5
5		14.3	2011	1760	98.3
6		14.5	2070	1808	101
7		15.7	2001	1729	96.6
8		15.5	2067	1790	100
9		15	1973	1716	95.9
10		14.4	2118	1852	103.4
11		15	2022	1758	98.2
12		16	2071	1785	99.7
13	2	15.8	1994	1722	96.2
14		13.6	2065	1818	101.6
15		15.2	2018	1751	97.8
16		15	2040	1774	99.1
17		15.1	2027	1761	98.4
18		15	2113	1837	102.6

**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**







Lot 578

EBENEZER DRIVE

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STAGE 22

ROAD 1

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ACCESS TRACK TO BE FORMED

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ROAD 2

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1011

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984

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1001

1 992

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5 985

976

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1002

12 991

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8 986

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975

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1003

990

987

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STAGE 24

AREA TO BE FILLED WITH STOCKPILED MATERIAL AND CUT MATERIAL FROM STAGE 17.

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HALPIN DRIVE

SHEETS E02.1 & E02.3

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ELLESMERE ROAD

WAKEMAN DRIVE

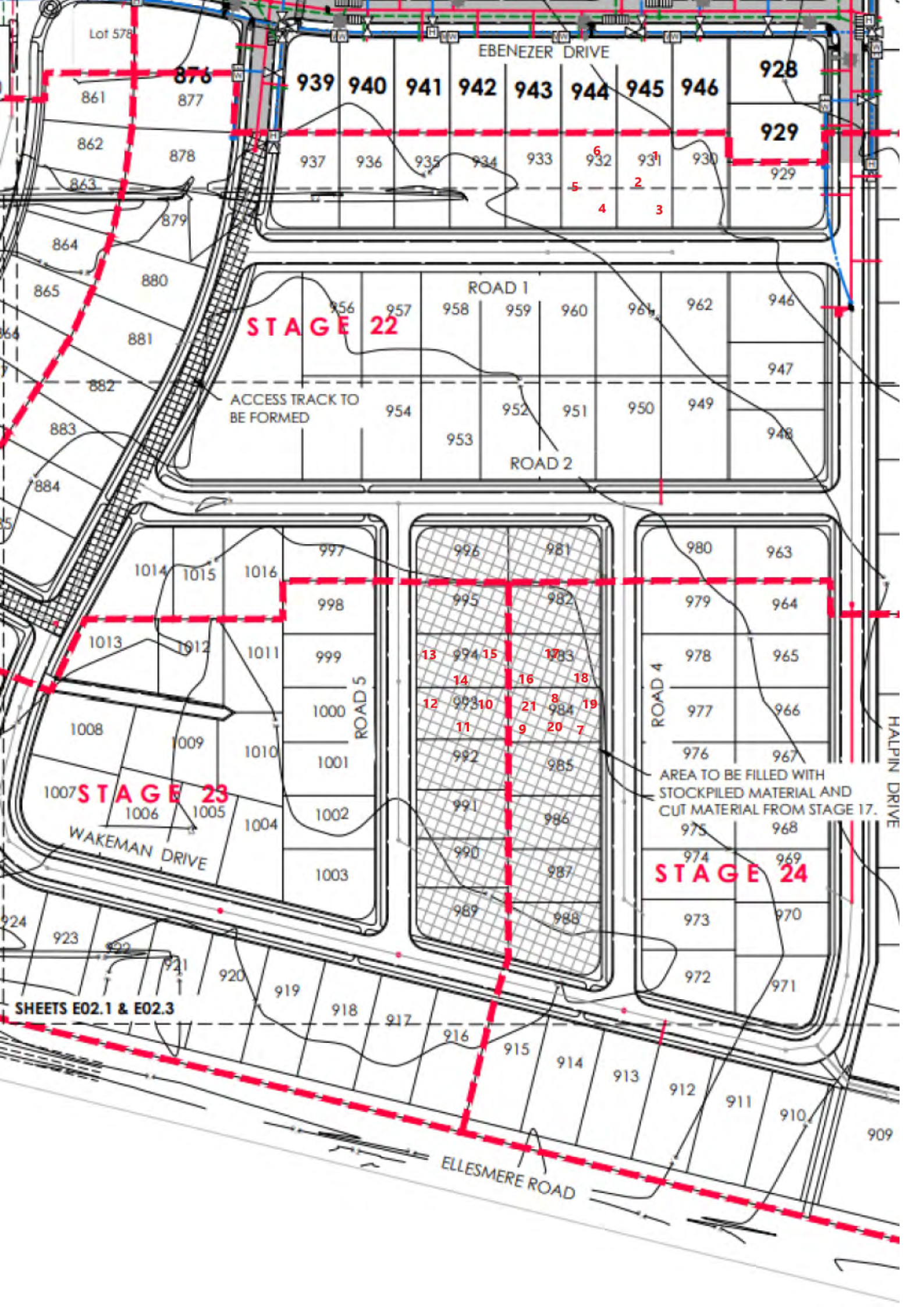
# Nuclear Density Report



Site Tested	Rosemerryn	Material Sample ID	CAN20S-07340
Tested By	Jason Daikee	MDD Method	Back Scatter
Date Tested	5-May-22	Max Dry Density	1790
Time Tested	1100	Min Dry Density (kg/m3)	
Material Tested	Silts	Solid Density Type	Assumed
Material Source	On Site		<b>Report 004</b>

Site No	Layer	Moisture (%)	Wet Density (kg/m3)	Dry Density (kg/m3)	Relative Compaction (%)
931 -1	1	15.9	2018	1741	97.3
2		13.2	2079	1837	102.6
3		15.3	1982	1719	96
932 -4		14.3	2009	1757	98.2
5		15.8	2055	1775	99.2
6		13.7	2102	1849	103.3
7		15	2054	1786	99.8
8		14.8	2017	1757	98.2
9		18.2	2127	1800	100.6
10		19.1	2093	1758	98.2
11		14.6	1970	1718	96
12		16.3	2022	1738	97.1
13		15.8	2102	1815	101.4
14		17.2	2119	1808	101
15		16.3	2002	1722	96.2
16		15.6	2058	1781	99.5
17		16.8	2139	1832	102.4
18		17	2037	1741	97.3
19	2	20.1	2106	1753	97.8
20		14.5	1954	1707	95.3
21		18.4	2055	1735	96.9

**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**



EBENEZER DRIVE

928

939 940 941 942 943 944 945 946

929

876

862 878

937 936 935 934 933 932 931 930

863 879

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5 4 3

864 880

**STAGE 22**

ROAD 1

956 957 958 959 960 961 962 946

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ACCESS TRACK TO BE FORMED

954 952 951 950 949

883

ROAD 2

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1014 1015 1016

997

996 981

980 963

998

995 982

979 964

999

13 994 15 17 3  
14 16 18  
12 993 10 21 8 984 19  
11 9 20 7

978 965

1000

ROAD 4

977 966

1001

976 967

1002

975 968

1003

974 969

1008 1009 1010

1007

1006 1005

1004

1003

**STAGE 24**

1002

973 970

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972 971

1000

1009 1010

1008 1007

1006 1005

1004 1003

1003 1002

1002 1001

1001 1000

1000 999

999 998

998 997

997 996

996 995

995 994

SHEETS E02.1 & E02.3

ELLESMERE ROAD

HALPIN DRIVE

909

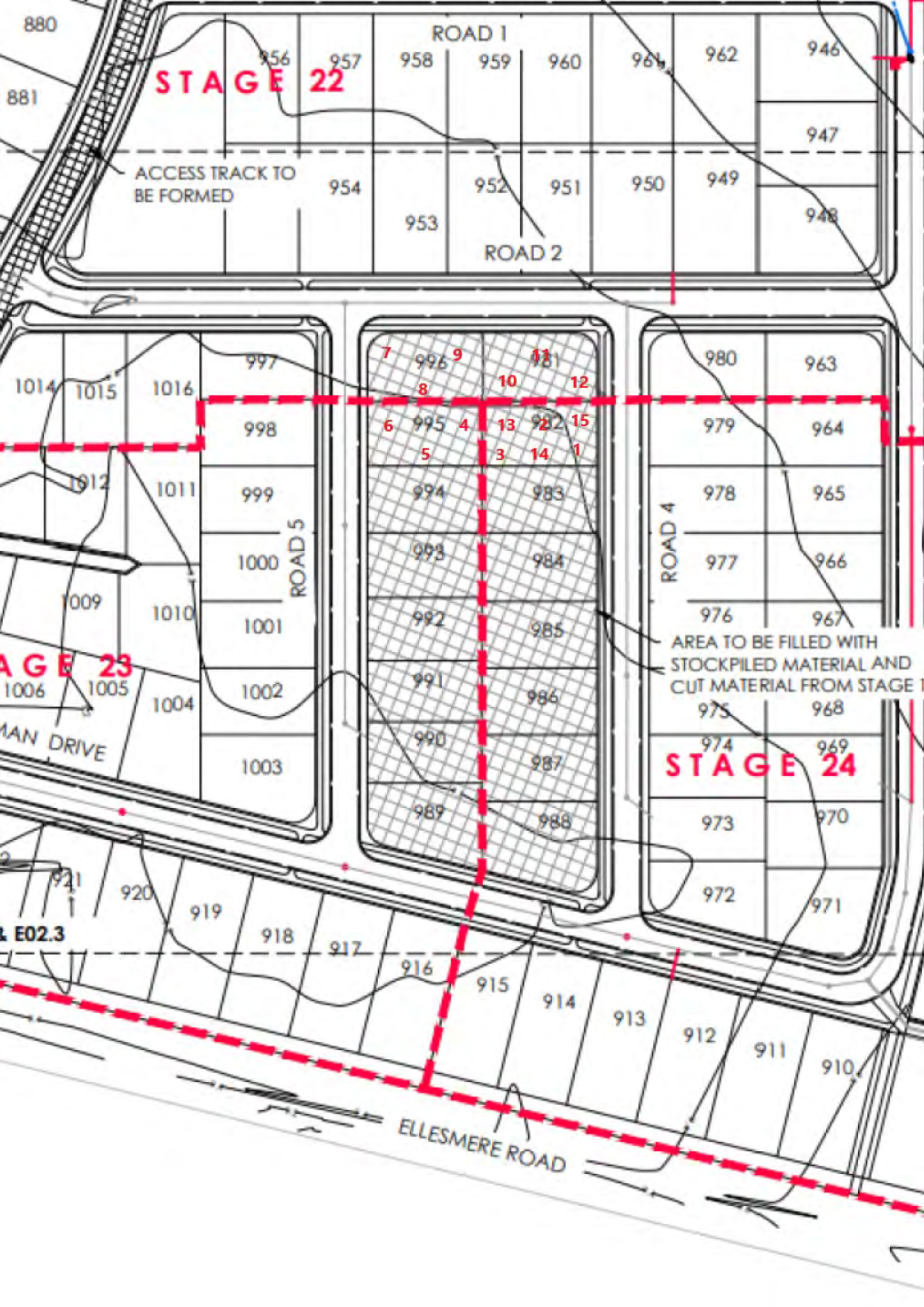
# Nuclear Density Report



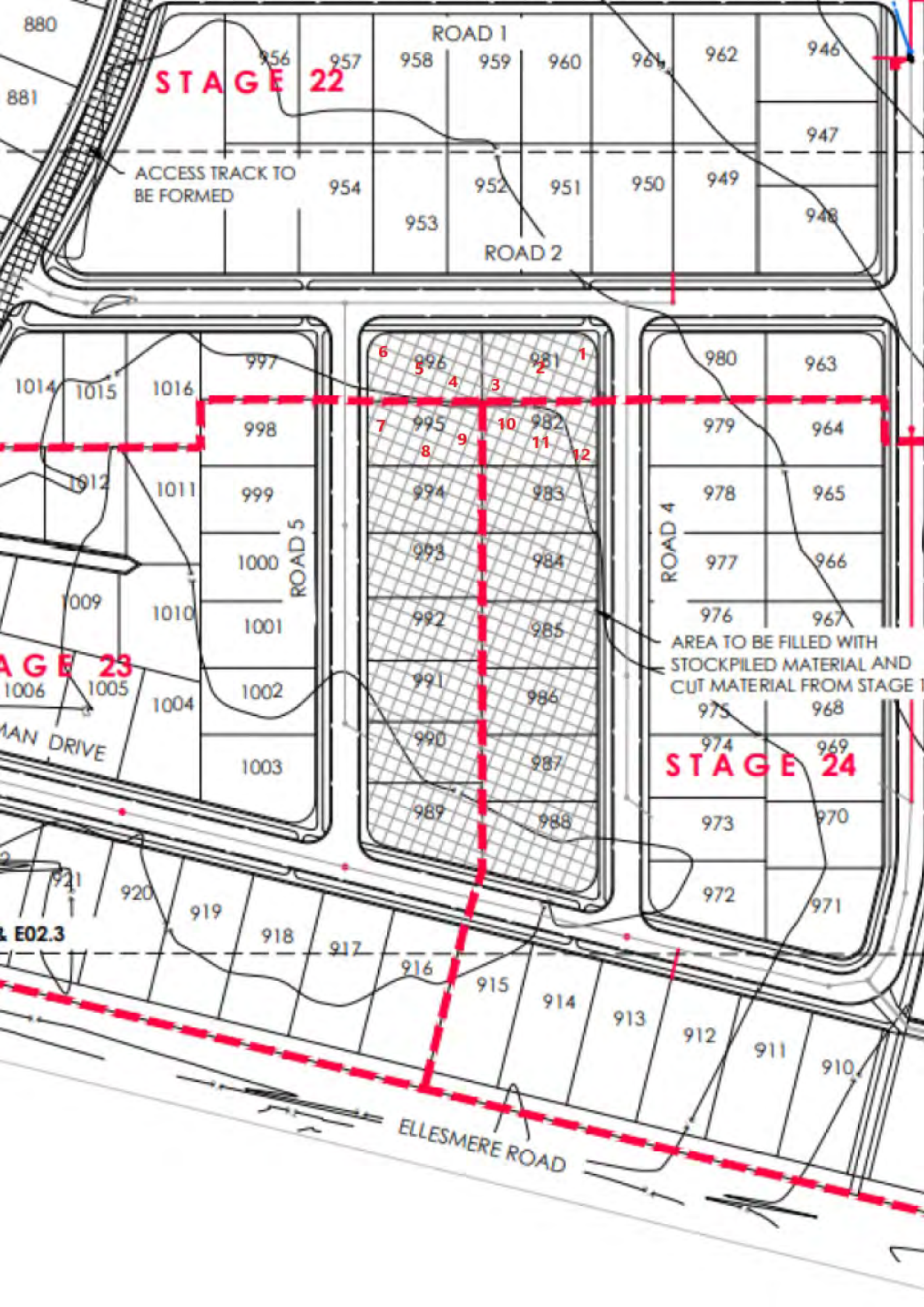
Site Tested	Rosemerryn	Material Sample ID	CAN20S-07340
Tested By	Jason Daikee	MDD Method	Back Scatter
Date Tested	19-May-22	Max Dry Density	1790
Time Tested	100	Min Dry Density (kg/m3)	
Material Tested	Silts	Solid Density Type	Assumed
Material Source	On Site		<b>Report 005</b>

Site No	Layer	Moisture (%)	Wet Density (kg/m3)	Dry Density (kg/m3)	Relative Compaction (%)
1	1	16.5	2112	1813	101.3
2	1	15.4	2101	1821	101.7
3	1	16.2	2084	1793	100.2
4	1	17.4	2002	1706	95.3
5	1	15.9	2054	1772	99
6	1	18.1	2099	1777	99.3
7	1	16.3	2144	1844	103
8	1	17.7	2048	1740	97.2
9	1	15.6	2010	1739	97.1
10	1	14.8	2062	1797	100.4
11	1	14.6	2033	1755	99.2
12	1	15.7	2038	1762	98.5
13	2	19.1	2064	1733	96.8
14	2	17.7	2099	1784	99.7
15	2	16.1	2149	1852	103.4

**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**







# Nuclear Density Report



Site Tested	Roseberrygn Stage 23	Material Sample ID:	Con20s-07340
Tested By	Kieran	MDD Method:	
Date Tested	3-3-21	Max. Dry Density:	1790
Time tested	9:00 am	Min Dry Density (t/m3):	
Material Tested	clay	Solid Density Type:	
Material Source	onsite		Report 13

	Site No	Layer	Moisture (%)	Wet Density (t/m3)	Dry Density (t/m3)	Relative Compaction (%)
1	931 E	2	16.3	2033	1747	97.6
2	931 F	2	15.0	2113	1838	102.7
3	930 D	2	15.4	2076	1798	100.5
4	930 E	2	14.8	2007	1749	97.7
5	930 F	2	15.4	1981	1717	95.9
6	929 A	1	14.3	2115	1851	103.4
7	929 B	1	14.4	2041	1783	99.6
8	929 C	1	14.0	2030	1781	99.5
9	928 A	1	15.6	2012	1741	97.3
10	928 B	1	14.4	2121	1854	103.6
11	928 C	1	11.7	2096	1876	104.8
12	927 A	1	13.2	2059	1820	101.6
13	927 B	1	11.1	2072	1866	104.2
14	927 C	1	16.4	2170	1864	104.2
15	929 D	2	15.4	2162	1874	104.7
16	929 E	2	13.7	2076	1825	102.0
17	929 F	2	17.1	2083	1778	99.4
18	928 D	2	17.5	2114	1799	100.5

entered 21/04 no plan.

**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**

Lot 1  
D.P.83562



RS 6016  
(BM 73)

ELLESMERE ROAD

1031  
Local Purpose  
(Drainage) Reserve  
to West  
183m<sup>2</sup>

# Density Report



Material Sample ID:	CAN205-07340		
MDD Method:			
Max. Dry Density:	1790		
Min Dry Density (t/m3):			
Solid Density Type:	Report 14		
Material Tested	Clay		
Material Source	Onsite		
Tested By	K L		
Date Tested	8-3-21		
Time tested	4.00		

14

	Site No	Layer	Moisture (%)	Wet Density (t/m3)	Dry Density (t/m3)	Relative Compaction (%)
1	926	E 2#	14.5	2083	1819	101.6
2	928	F 2#	15.9	2107	1817	101.5
3	927	D 2#	16.9	2072	1773	99.0
4	927	E 2#	14.9	2125	1849	103.3
5	927	F 2#	17.4	2113	1799	100.5
6	926	A 1	15.7	2110	1823	101.8
7	926	B 1	13.8	2062	1811	101.2
8	926	C 1	10.4	2039	1847	103.2
9	925	A 1	11.4	2075	1863	104.1
10	925	B 1	11.1	2085	1876	104.8
11	925	C 1	14.2	2104	1842	102.9
12	924	A 1	12.8	2064	1829	102.2
13	924	B 1	13.9	2064	1812	101.3
14	924	C 1	15.3	2087	1809	101.1

entered 2/1/04 no plan.

**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**



RS 6016  
(BM 73)

ELLESMERE ROAD

1031  
Local Purpose  
(Drainage) Reserve  
to Vest  
183m²

# Nuclear Density Report



Site Tested	ROSEmerryn Stg 23	Material Sample ID:	Can20s - 07340
Tested By	Kieran	MDD Method:	
Date Tested	9-3-21	Max. Dry Density:	1790
Time tested	4.00	Min Dry Density (t/m3):	
Material Tested	clay	Solid Density Type:	Report 15
Material Source	onsite		15

	Site No	Layer	Moisture (%)	Wet Density (t/m3)	Dry Density (t/m3)	Relative Compaction (%)
1	926 D	2	15.0	2070	1800	100.5
2	926 E	2	15.3	2093	1815	101.4
3	926 F	2	15.0	2051	1784	99.7
4	925 D	2	14.1	2036	1784	99.6
5	925 E	2	16.0	2084	1797	100.4
6	925 F	2	16.0	2172	1872	104.6
7	924 D	2	15.1	1970	1711	95.6
8	924 E	2	13.0	2068	1831	102.3
9	924 F	2	15.5	2051	1776	99.2
10	926 G	3	13.9	2097	1841	102.8
11	925 G	3	13.9	2067	1815	101.4
12	924 G	3	15.4	2020	1751	97.8
13	924 H	3	16.2	2059	1772	99.0

DEEP SWALE

entered 21/04 no plan

**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**



RS 6016  
(BM 73)

ELLESMERE ROAD

1031  
Local Purpose  
(Drainage) Reserve  
to Vest  
183m²

# Nuclear Density Report



Site Tested	Rosemaryn Stg 24	Material Sample ID:	Can 20s-07340
Tested By	Kieran	MDD Method:	
Date Tested	10-3-21	Max. Dry Density:	1790.
Time tested	10-00	Min Dry Density (t/m3):	
Material Tested	clay	Solid Density Type:	Report 16a
Material Source	onsite		16

	Site No	Layer	Moisture (%)	Wet Density (t/m3)	Dry Density (t/m3)	Relative Compaction (%)
1	943 A	1	15.1	2018	1754	98.0
2	943 B	1	15.5	2054	1777	99.3
3	943 C	1	13.9	2137	1876	104.8
4	942 A	1	13.6	2058	1811	101.2
5	942 B	1	15.2	2068	1798	100.2
6	942 C	1	16.1	<del>2078</del> 2079	1791	100.1
7	941 A	1	10.5	1933	1749	97.7
8	941 B	1	12.6	2098	1863	104.1
9	941 C	1	12.4	2102	1870	104.5
10	940 A	1	<del>10.7</del> 14.1	2105	1845	103.1
11	940 B	1	13.7	2100	1846	103.1
12	940 C	1	15.0	2094	1821	101.7

entered no plan 21/04

**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**



# Nuclear Density Report



Site Tested	Rosemeryn Stg 24	Material Sample ID:	Can 20s - 07340
Tested By	Kieran	MDD Method:	
Date Tested	10-3-21	Max. Dry Density:	1790
Time tested	4:30	Min Dry Density (t/m3):	
Material Tested	clay	Solid Density Type:	Report 17a
Material Source	onsite		17

	Site No	Layer	Moisture (%)	Wet Density (t/m3)	Dry Density (t/m3)	Relative Compaction (%)
1	943 D	2	16.7	2135	1829	102.2
2	943 E	2	15.1	2063	1793	100.1
3	943 F	2	16.2	2096	1804	100.8
4	942 D	2	14.7	2047	1785	99.7
5	942 E	2	15.2	2050	1779	99.4
6	942 F	2	16.3	2111	1814	101.4
7	941 D	2	17.9	2053	1742	97.3
8	941 E	2	16.9	2096	1793	100.2
9	941 F	2	19.8	2044	1706	95.3
10	940 D	2	17.0	2073	1771	99.0
11	940 E	2	16.5	2014	1728	96.6
12	940 F	2	15.6	2047	1770	98.9
13	939 A	1	16.1	2048	1763	98.5
14	939 B	1	13.5	2074	1828	102.1
15	939 C	1	13.4	1974	1741	97.2

entered no plan 21/04

**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**



RS 6016  
(BM 73)

ELLESMERE ROAD

1031  
Local Purpose  
(Drainage) Reserve  
to Vest  
183m<sup>2</sup>

STAGE 17

STAGE 23

STAGE 24

STAGE 22

STAGE 21

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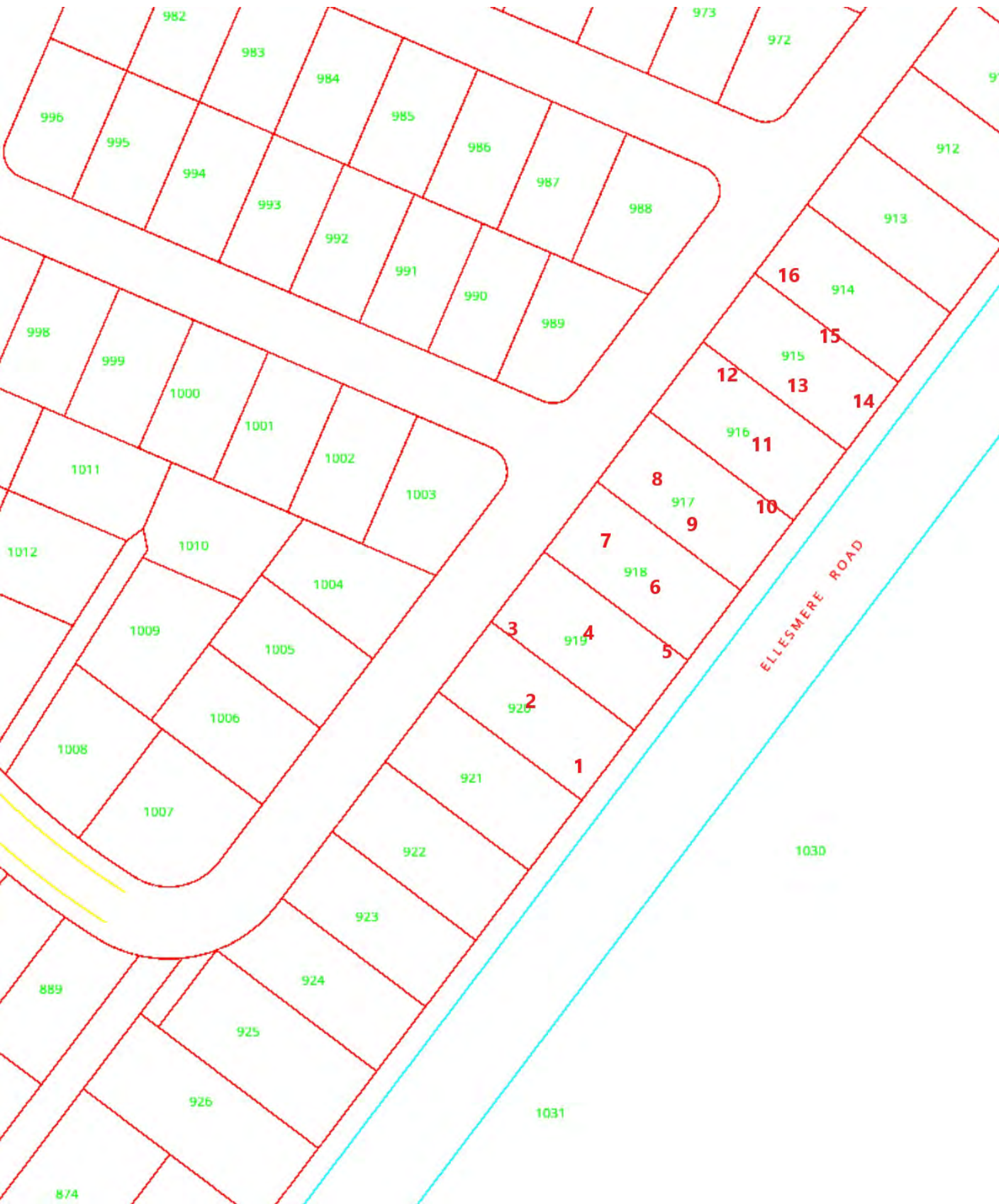
# Nuclear Density Report



Site Tested	Rosemerryn	Material Sample ID	CAN20S_07340
Tested By	Jason Daikee	MDD Method	Back Scatter
Date Tested	2-Feb-23	Max Dry Density	1790
Time Tested	415	Min Dry Density (kg/m3)	
Material Tested	clay silts	Solid Density Type	Assumed
Material Source	on site		<b>Report 016</b>

Site No	Layer	Moisture (%)	Wet Density (kg/m3)	Dry Density (kg/m3)	Relative Compaction (%)
1	2	17.6	2053	1746	97.5
2		15.0	2068	1798	100.5
3		15.7	2167	1872	104.6
4		13.8	2070	1819	101.6
5		12.7	1922	1705	95.3
6		17.4	2032	1730	96.7
7		17.0	2028	1753	96.8
8		15.2	1962	1703	95.1
9		14.3	2074	1814	101.3
10	1	15.5	2063	1785	99.7
11		12.3	1960	1745	97.5
12		13.4	2065	1820	101.7
13		14.4	2019	1765	98.6
14		14.0	1993	1749	97.7
15		16.5	2041	1751	97.8
16		10.6	1988	1797	100.4

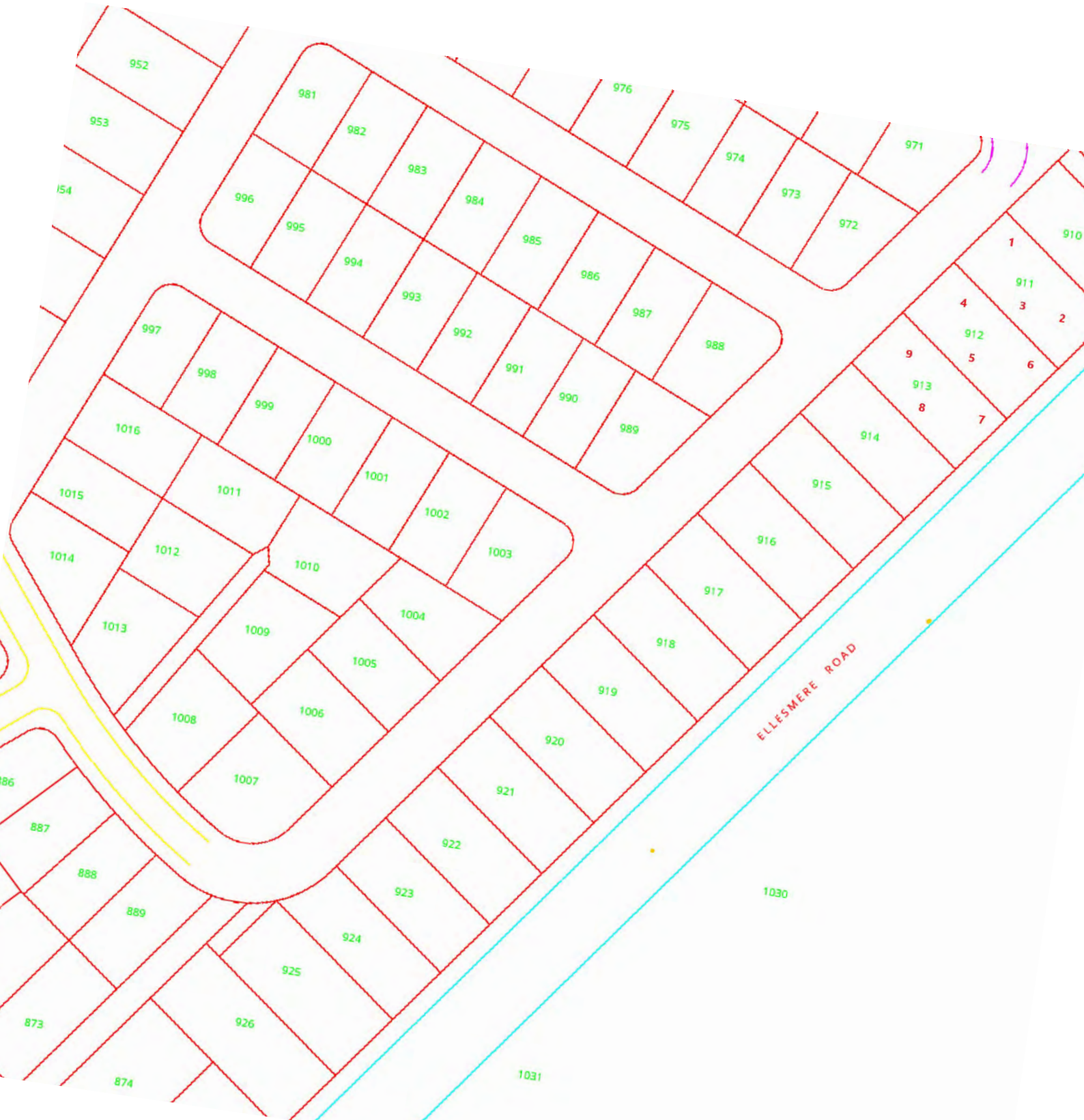
**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**





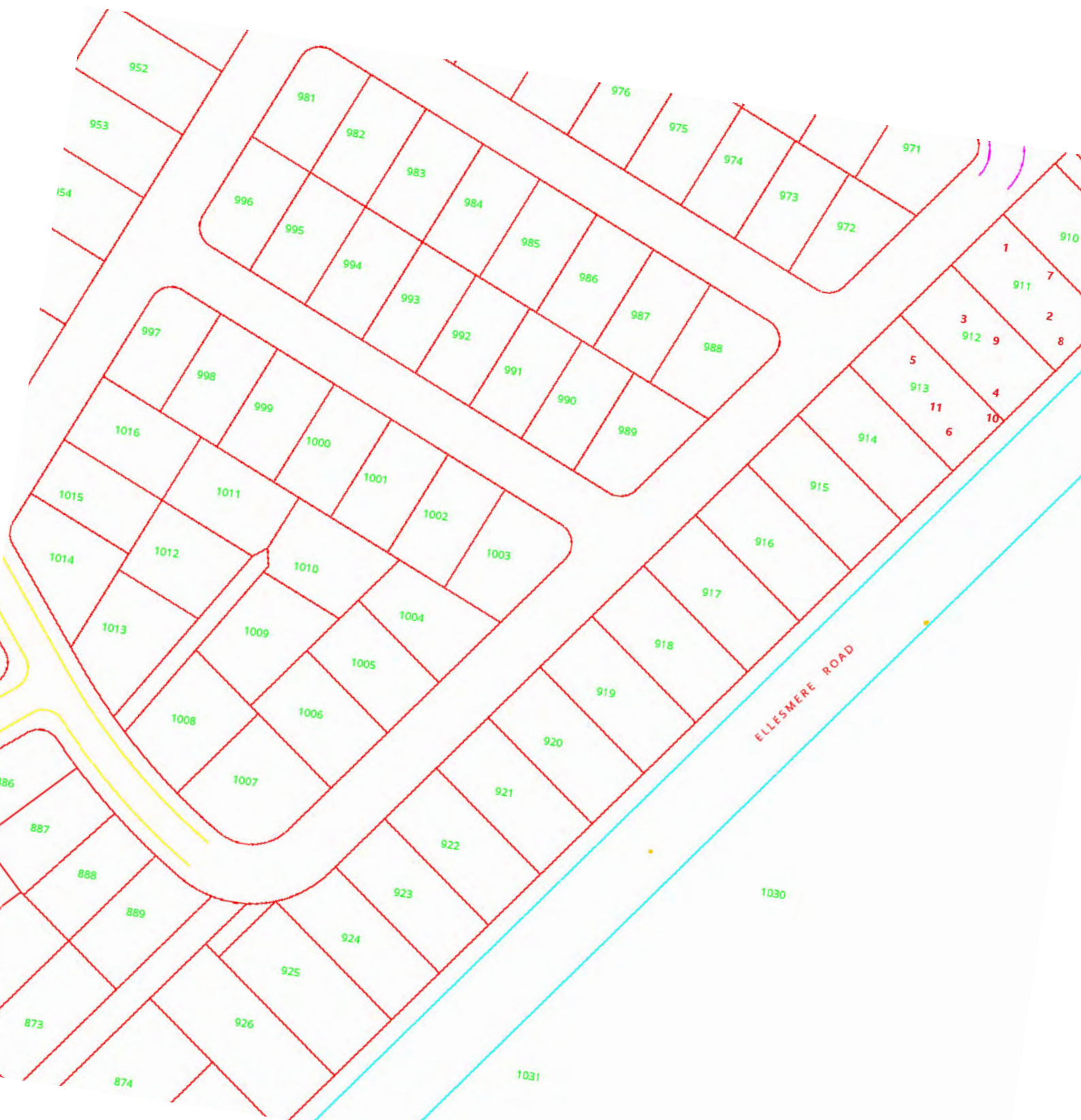






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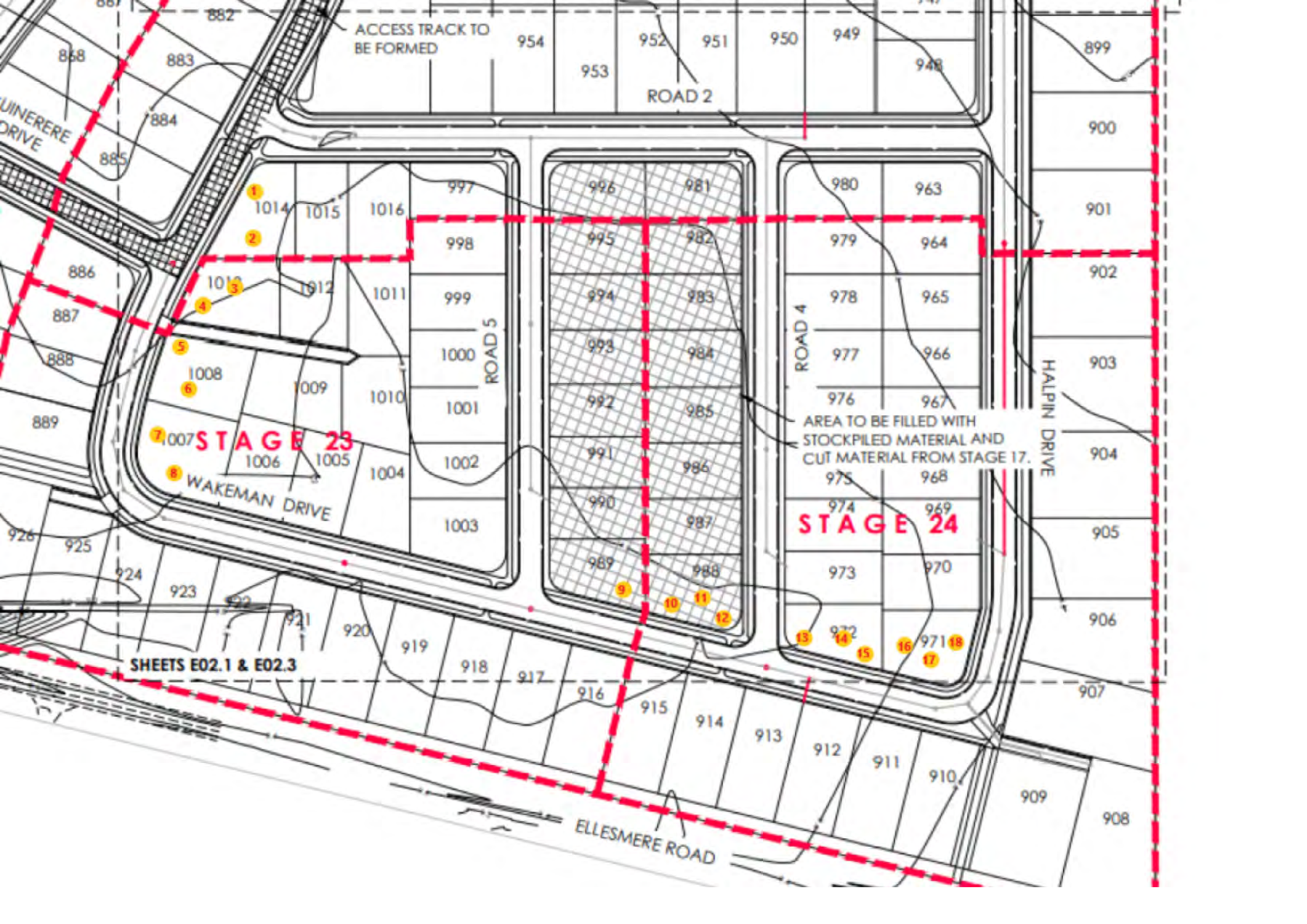
# Nuclear Density Report



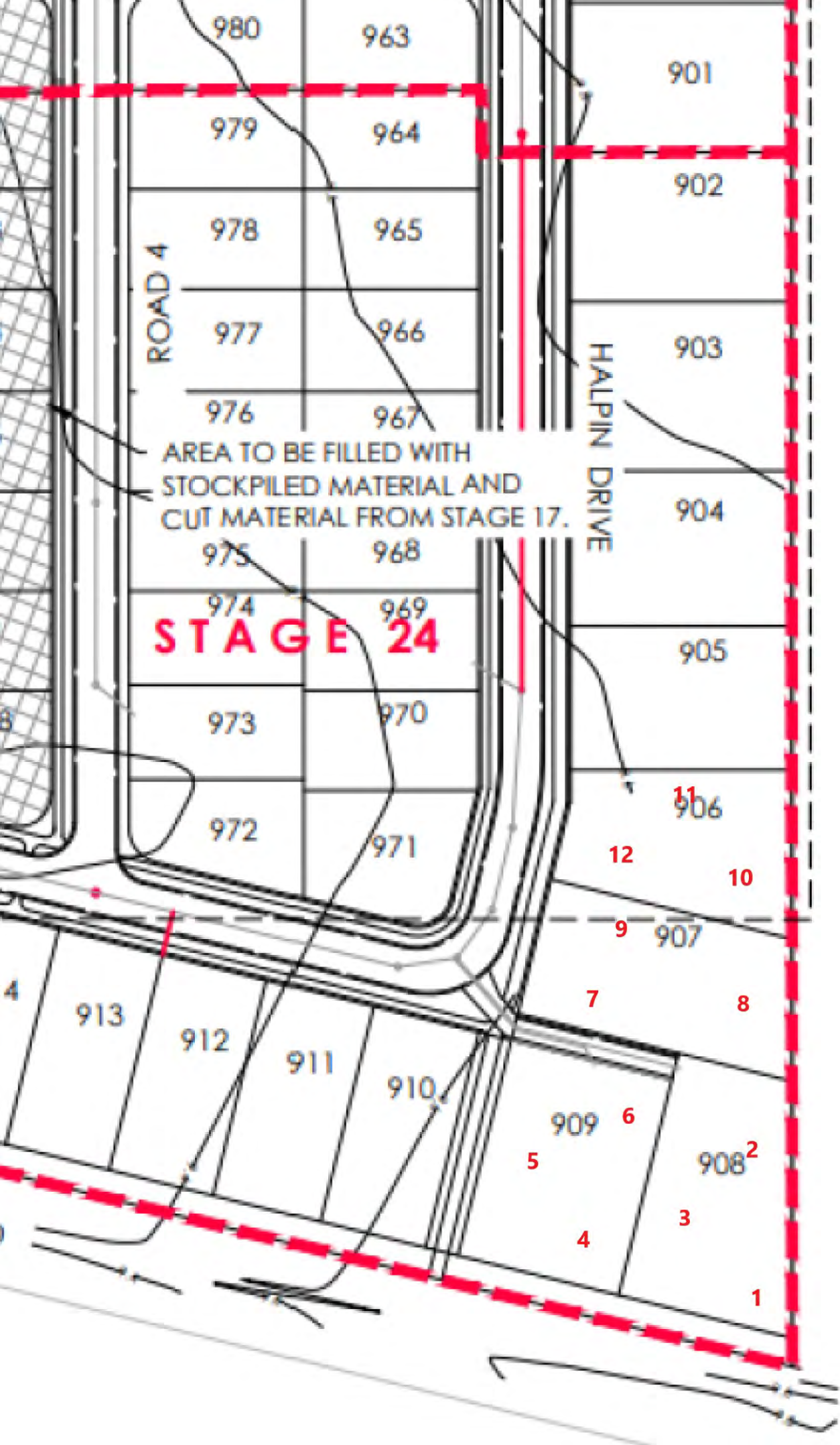
Site Tested	Rosemerryn	Material Sample ID	
Tested By	Jason Daikee	MDD Method	Back Scatter
Date Tested	30-May-24	Max Dry Density (kg/m3)	1790
Time Tested	815	Min Dry Density	95%
Material Tested	sandy silts	Solid Density Type	Assumed
Material Source	on site		<b>Report 020</b>

Site No	Layer	Moisture (%)	Wet Density (kg/m3)	Dry Density (kg/m3)	Relative Compaction (%)
1		12.4	2104	1871	104.5
2		13.3	2084	1840	102.8
3		12.6	2057	1827	102.1
4		13.1	2064	1825	102.0
5		17.4	2109	1796	100.3
6		12.8	2137	1894	105.8
7		13.3	1998	1764	98.6
8		13.9	1981	1739	97.1
9		17.0	2086	1783	99.6
10		18.9	2114	1779	99.4
11		18.6	2096	1767	98.7
12		17.2	2111	1800	100.6
13		19.9	2043	1703	95.2
14		16.3	2107	1812	101.2
15		19.0	2119	1781	99.5
16		17.5	2123	1808	101.0
17		16.9	2105	1801	100.6
18		16.9	2089	1787	99.8

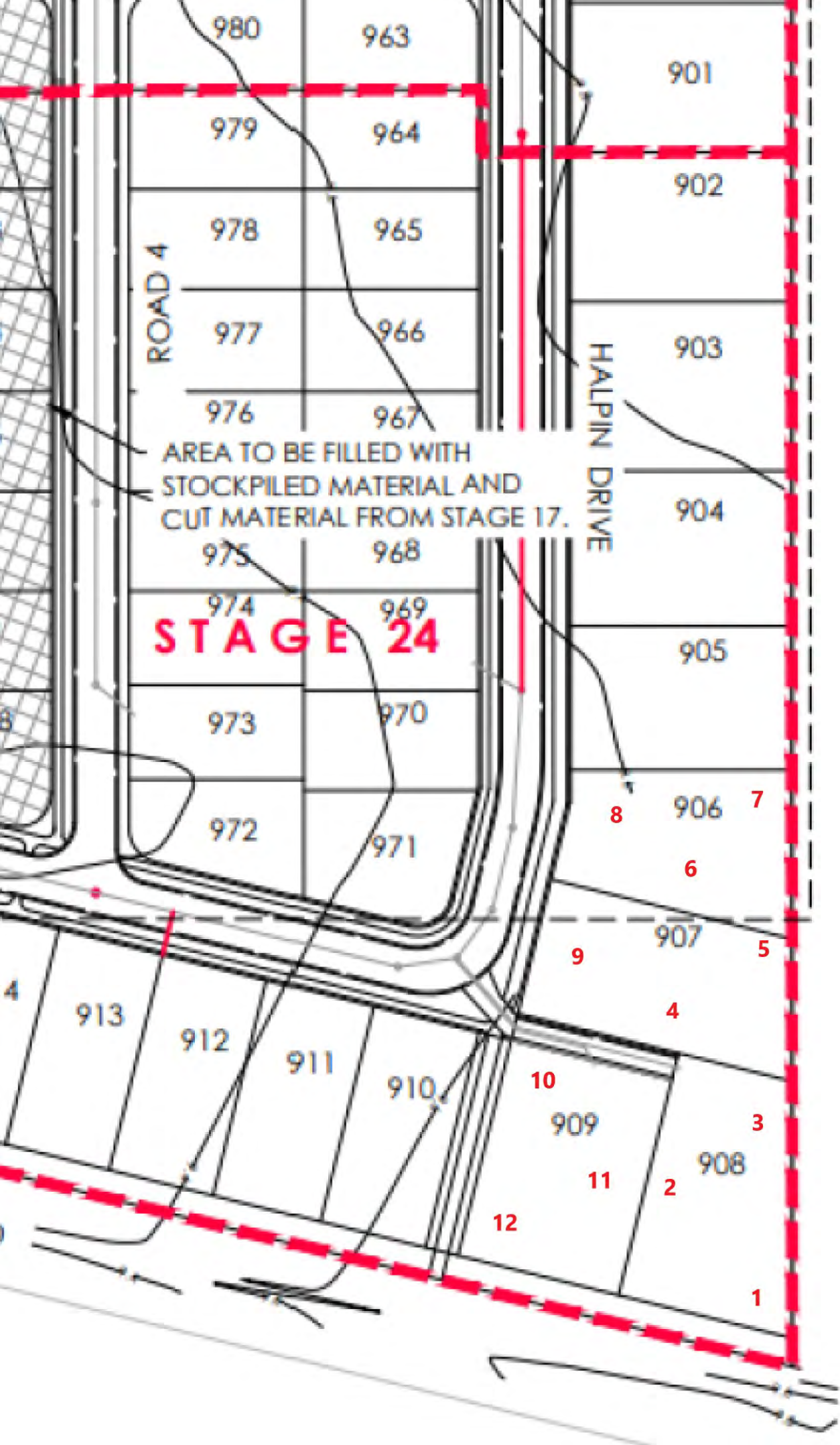
**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**



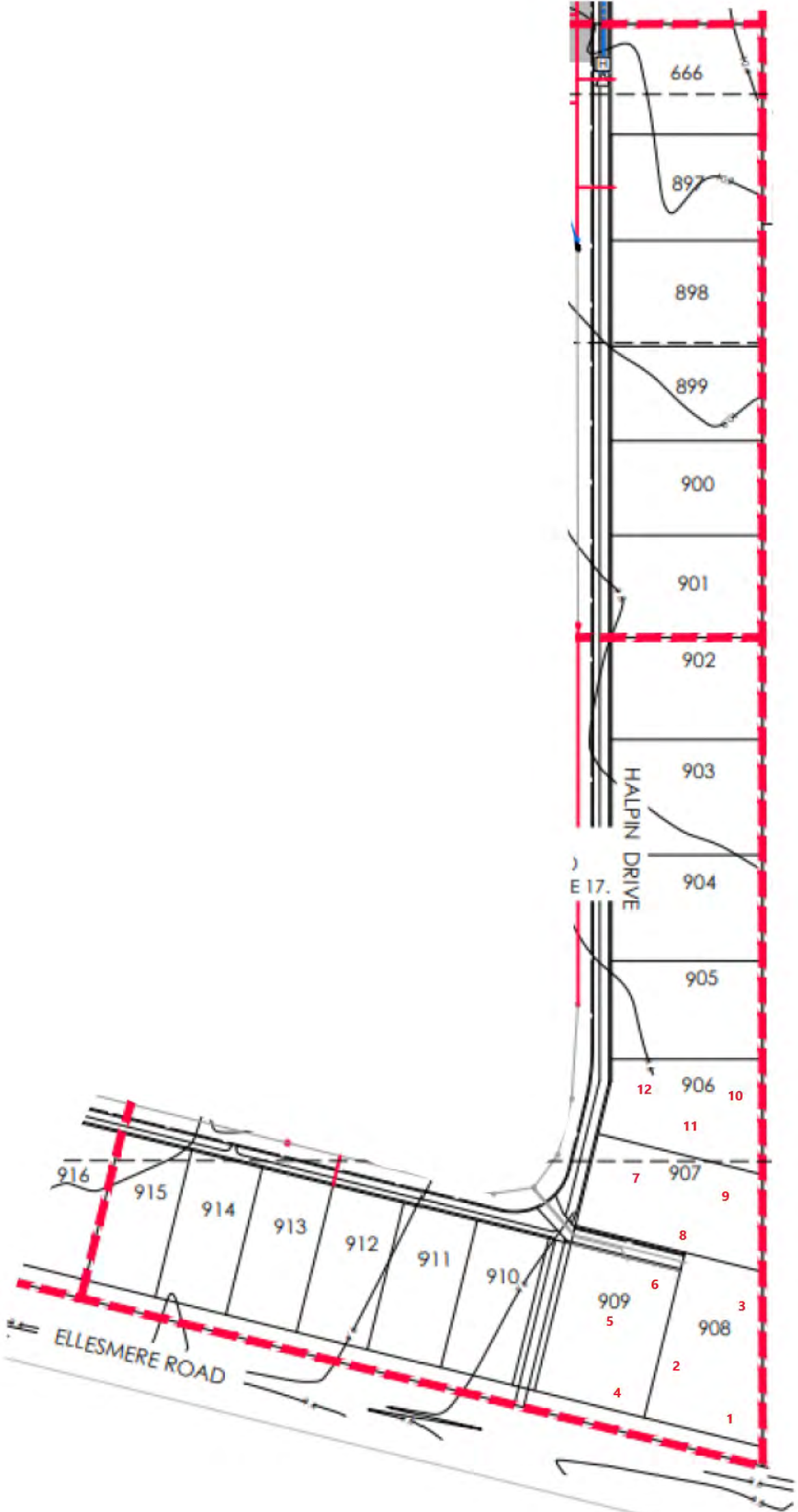












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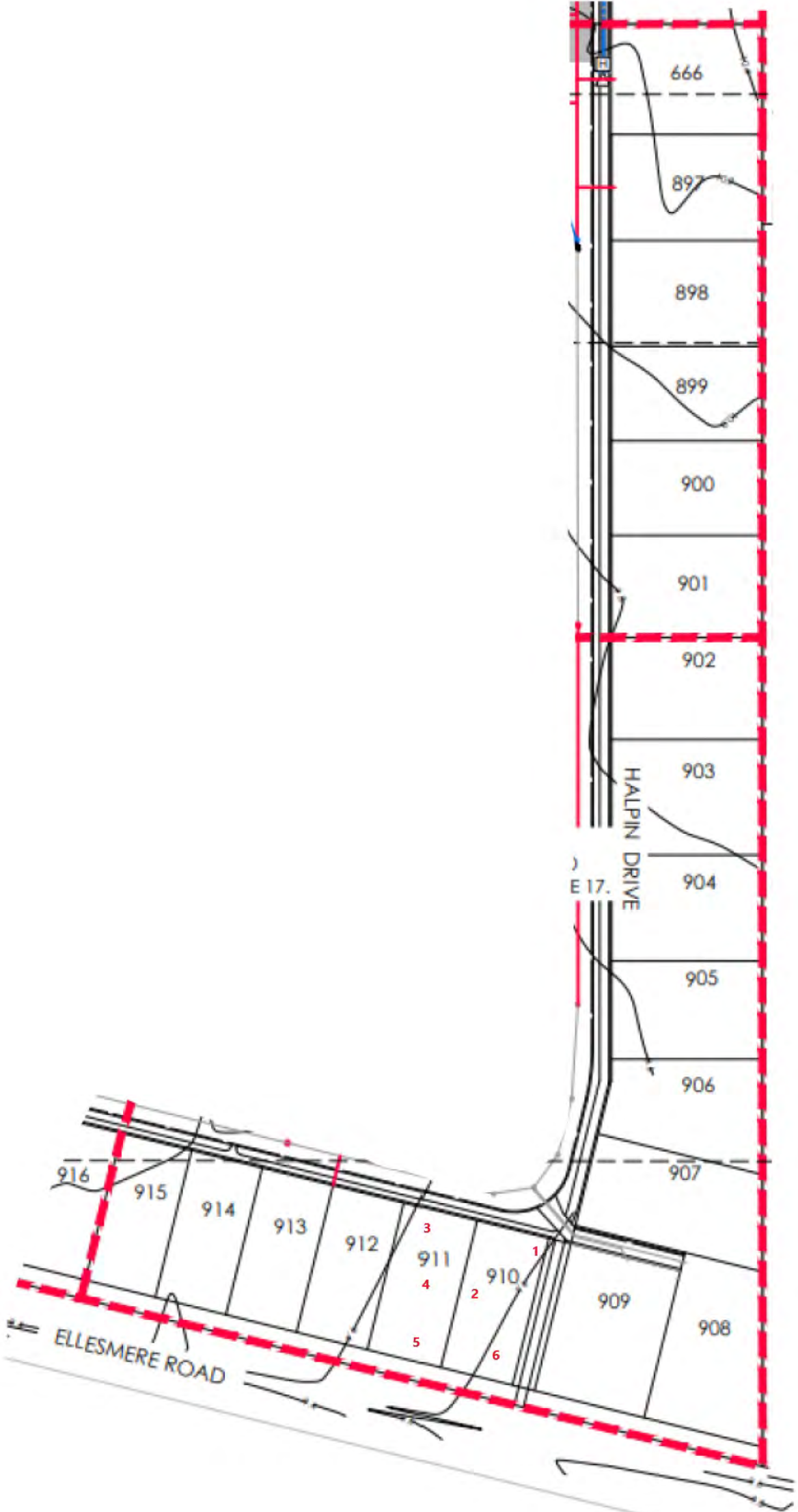
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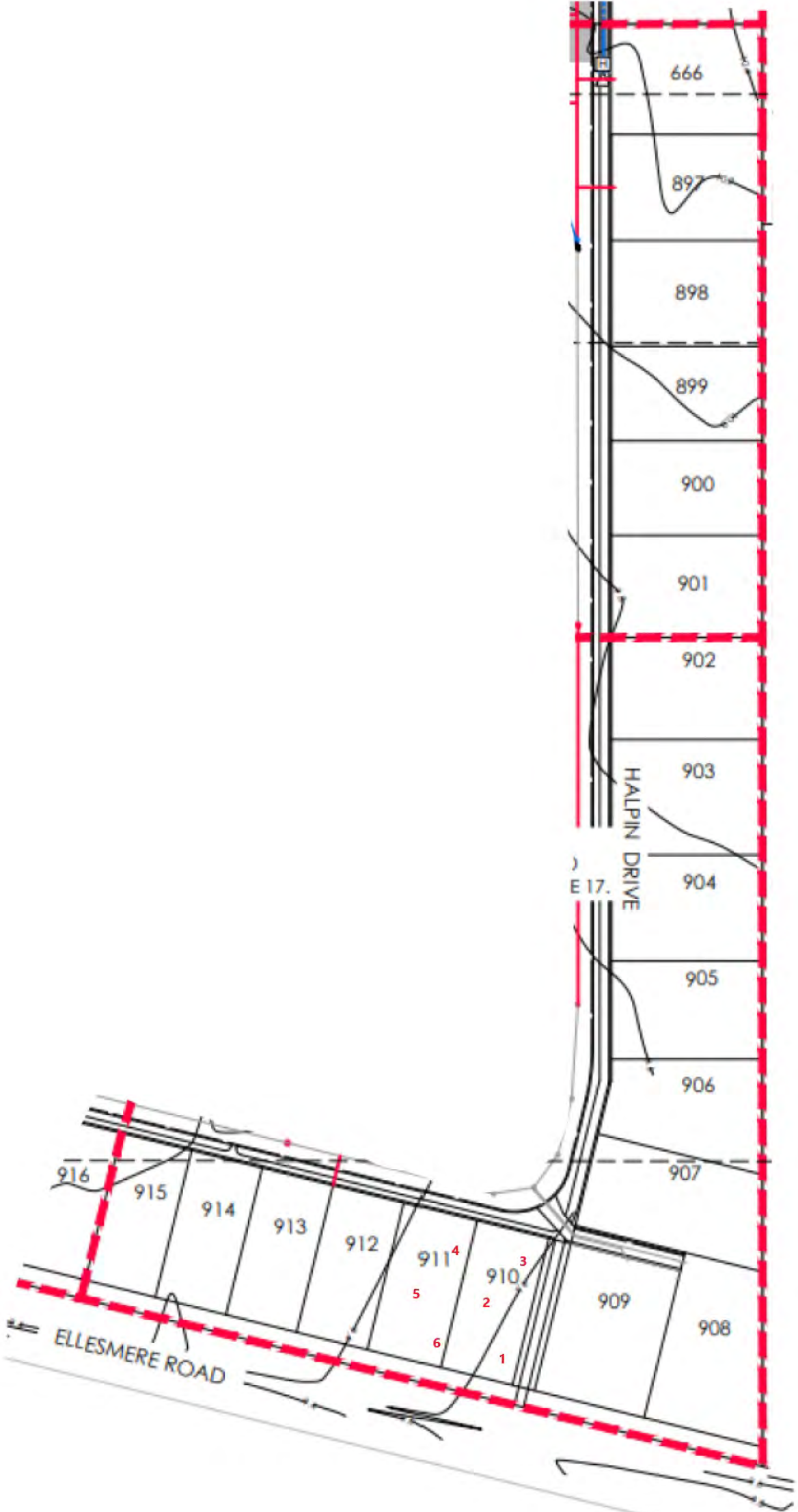
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# Nuclear Density Report

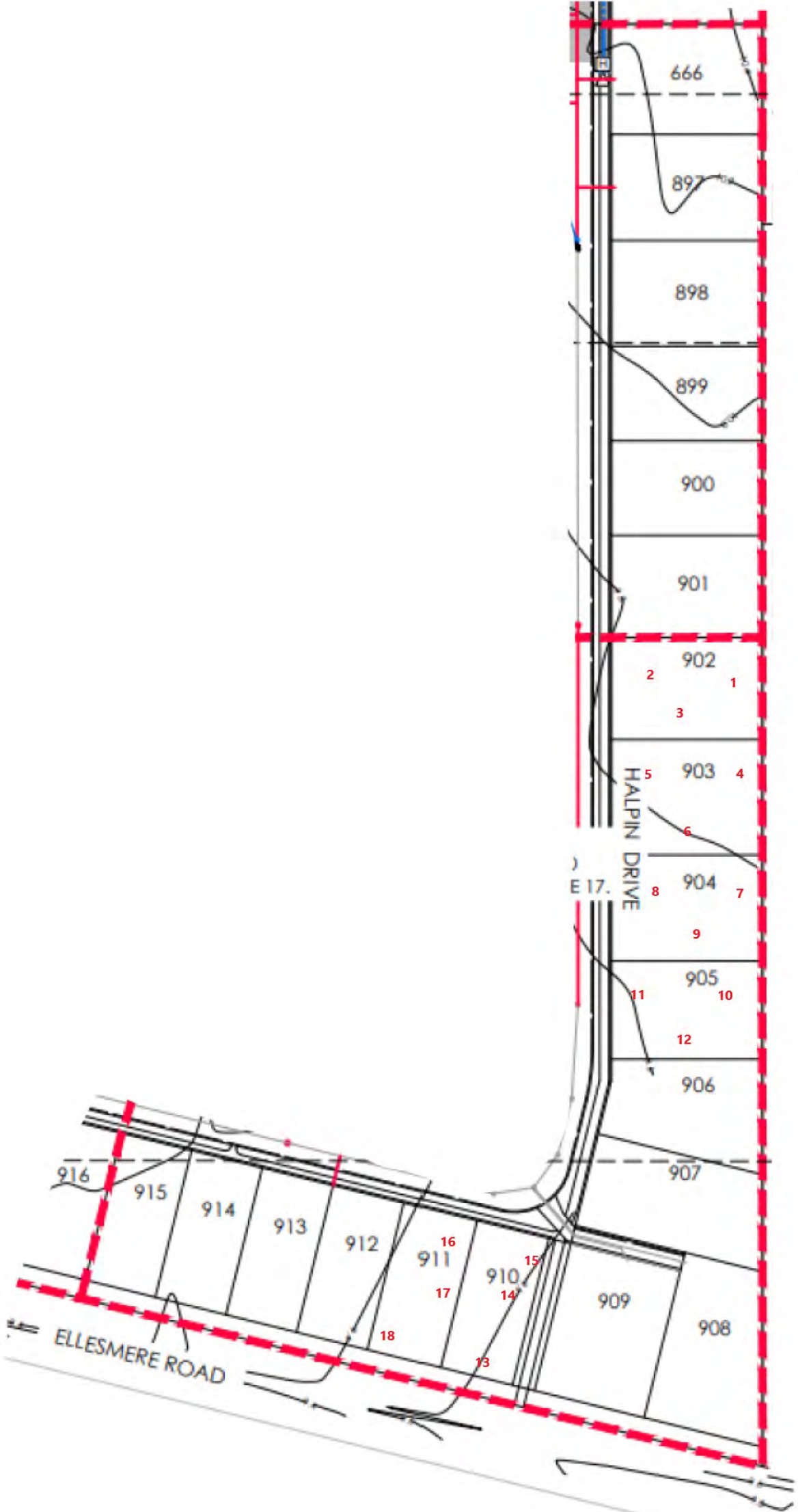


Site Tested	Rosemerryn	Material Sample ID	MDD_CAN20S_07340
Tested By	Jason Daikee	MDD Method	Back Scatter
Date Tested	7-Mar-24	Max Dry Density (kg/m3)	1790
Time Tested	830	Min Dry Density	95%
Material Tested	silts	Solid Density Type	Assumed
Material Source	on site		<b>045</b>

Site No	Layer	Moisture (%)	Wet Density (kg/m3)	Dry Density (kg/m3)	Relative Compaction (%)
1	1	12.9	2061	1825	102.0
2	1	13.0	2124	1880	105.0
3	1	9.4	2030	1855	103.6
4	1	9.7	1884	1717	95.9
5	1	11.0	2070	1865	104.2
6	1	8.3	2025	1870	104.5
7	1	10.8	1936	1747	97.6
8	1	11.4	1966	1766	98.6
9	1	9.1	2043	1874	104.7
10	1	11.6	1962	1757	98.2
11	1	11.4	1966	1766	98.6
12	1	13.5	2003	1765	98.6
13	3	12.5	2107	1873	104.6
14	3	15.9	2128	1836	102.6
15	3	12.0	1930	1722	96.2
16	3	14.2	2095	1834	102.4
17	3	13.8	2095	1841	102.8
18	3	15.0	2017	1754	98.0

**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**

Site No	Layer	Moisture (%)	Wet Density (kg/m3)	Dry Density (kg/m3)	Relative Compaction (%)
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# Nuclear Density Report

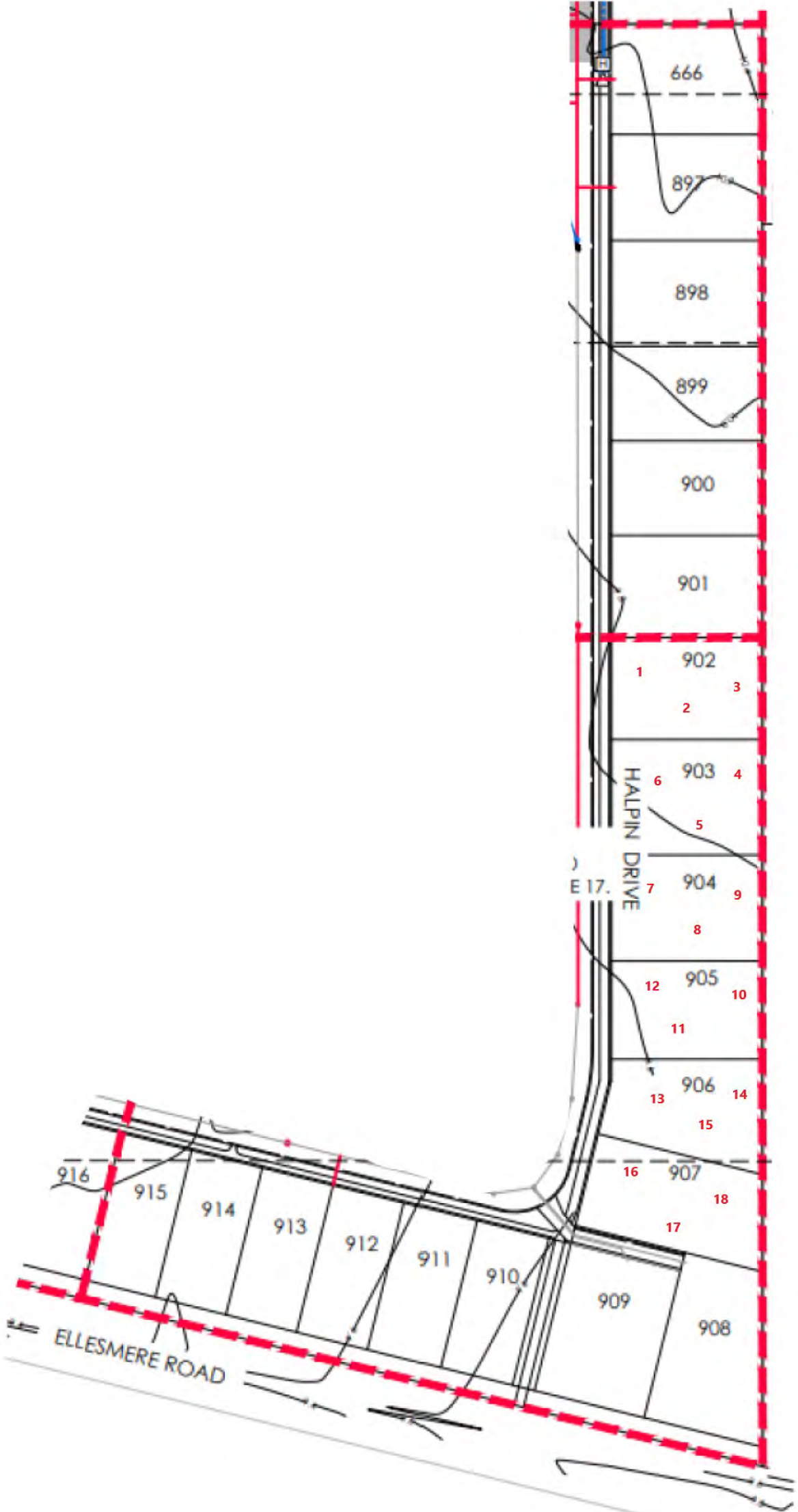


Site Tested	Rosemerryn	Material Sample ID	
Tested By	Jason Daikee	MDD Method	Back Scatter
Date Tested	18-Mar-24	Max Dry Density (kg/m3)	1790
Time Tested	745	Min Dry Density	95%
Material Tested	silts	Solid Density Type	Assumed
Material Source	on site		<b>046</b>

Site No	Layer	Moisture (%)	Wet Density (kg/m3)	Dry Density (kg/m3)	Relative Compaction (%)
1	2	13.1	1973	1744	97.4
2		10.9	1996	1799	100.5
3		12.7	1938	1720	96.1
4		13.5	1991	1754	98.0
5		11.9	1963	1754	98.0
6		13.0	1972	1744	97.4
7		14.9	2050	1785	99.7
8		15.0	2070	1800	100.6
9		15.8	2119	1829	102.2
10		13.8	2119	1861	104.0
11		15.1	2047	1779	99.4
12		15.6	2111	1825	102.0
13	2	15.3	1966	1705	95.2
14		13.5	1948	1717	95.9
15		11.5	2016	1809	101.1
16		13.2	2024	1788	99.9
17		15.1	1988	1727	96.5
18		13.4	2022	1782	99.6

**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**

Site No	Layer	Moisture (%)	Wet Density (kg/m3)	Dry Density (kg/m3)	Relative Compaction (%)
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# Nuclear Density Report

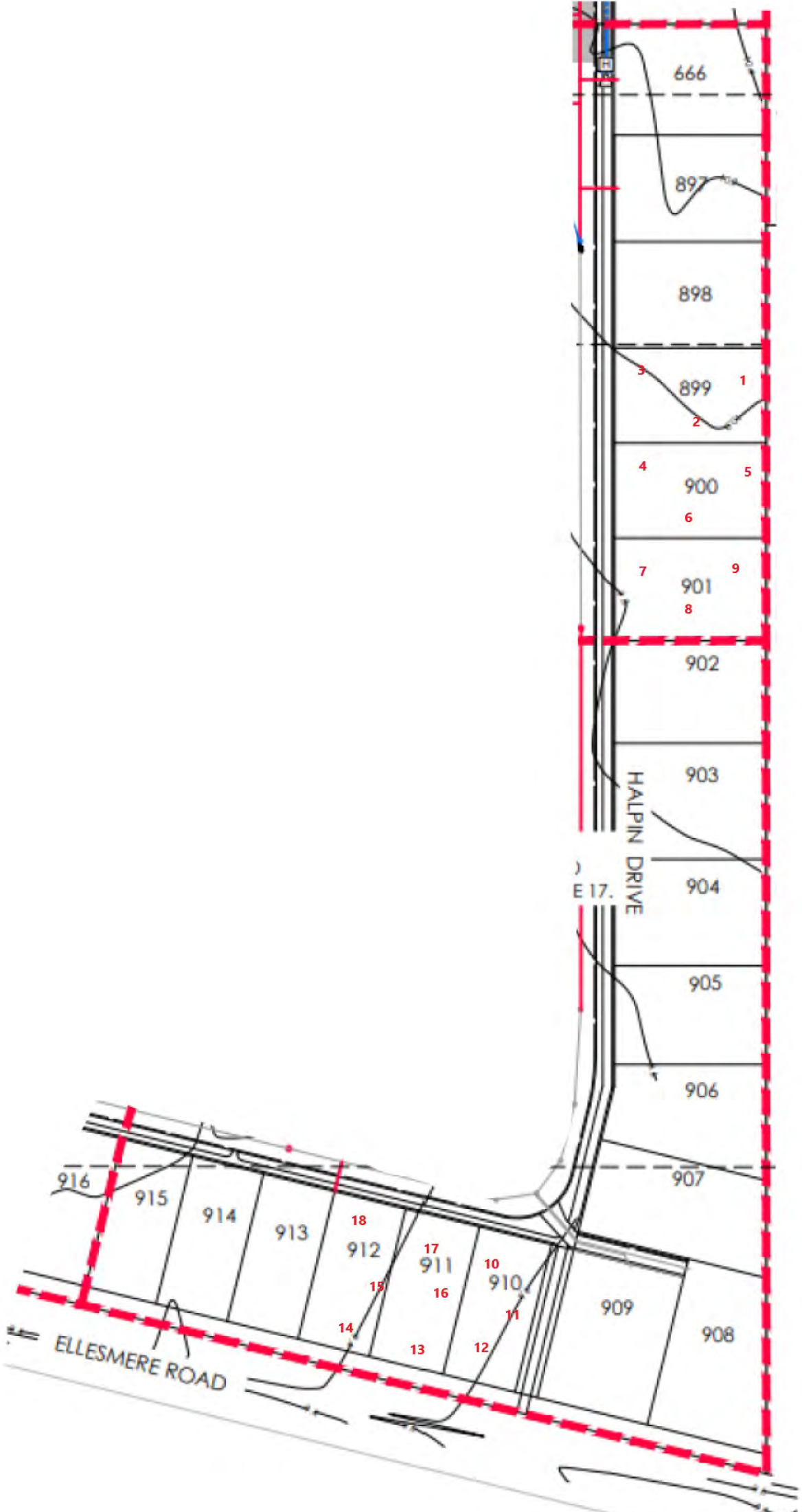


Site Tested	Rosemerryn	Material Sample ID	MDD_CAN20S_07340
Tested By	Jason Daikee	MDD Method	Back Scatter
Date Tested	20-Mar-24	Max Dry Density (kg/m3)	1790
Time Tested	900	Min Dry Density	95%
Material Tested	fine silts	Solid Density Type	Assumed
Material Source	on site		<b>047</b>

Site No	Layer	Moisture (%)	Wet Density (kg/m3)	Dry Density (kg/m3)	Relative Compaction (%)
1	1	10.6	1953	1766	98.7
2	1	13.5	2135	1880	105.0
3	1	10.4	2049	1855	103.7
4	1	10.7	2032	1835	102.5
5	1	18.1	2079	1760	98.3
6	1	20.7	2094	1735	96.9
7	1	16.0	2101	1812	101.2
8	1	14.7	2077	1811	101.2
9	1	14.7	2079	1812	101.3
time tested	1200				
10	4	19.5	2163	1811	101.2
11	4	14.0	2103	1845	103.1
12	4	17.1	2064	1762	98.5
13	4	16.4	2133	1832	102.4
14	4	16.8	2115	1810	101.1
15	4	16.1	2100	1809	101.1
16	4	16.2	2123	1827	102.1
17	4	17.5	2105	1791	100.1
18	4	16.7	2061	1767	98.7

**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**

Site No	Layer	Moisture (%)	Wet Density (kg/m3)	Dry Density (kg/m3)	Relative Compaction (%)
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ELLESMERE ROAD

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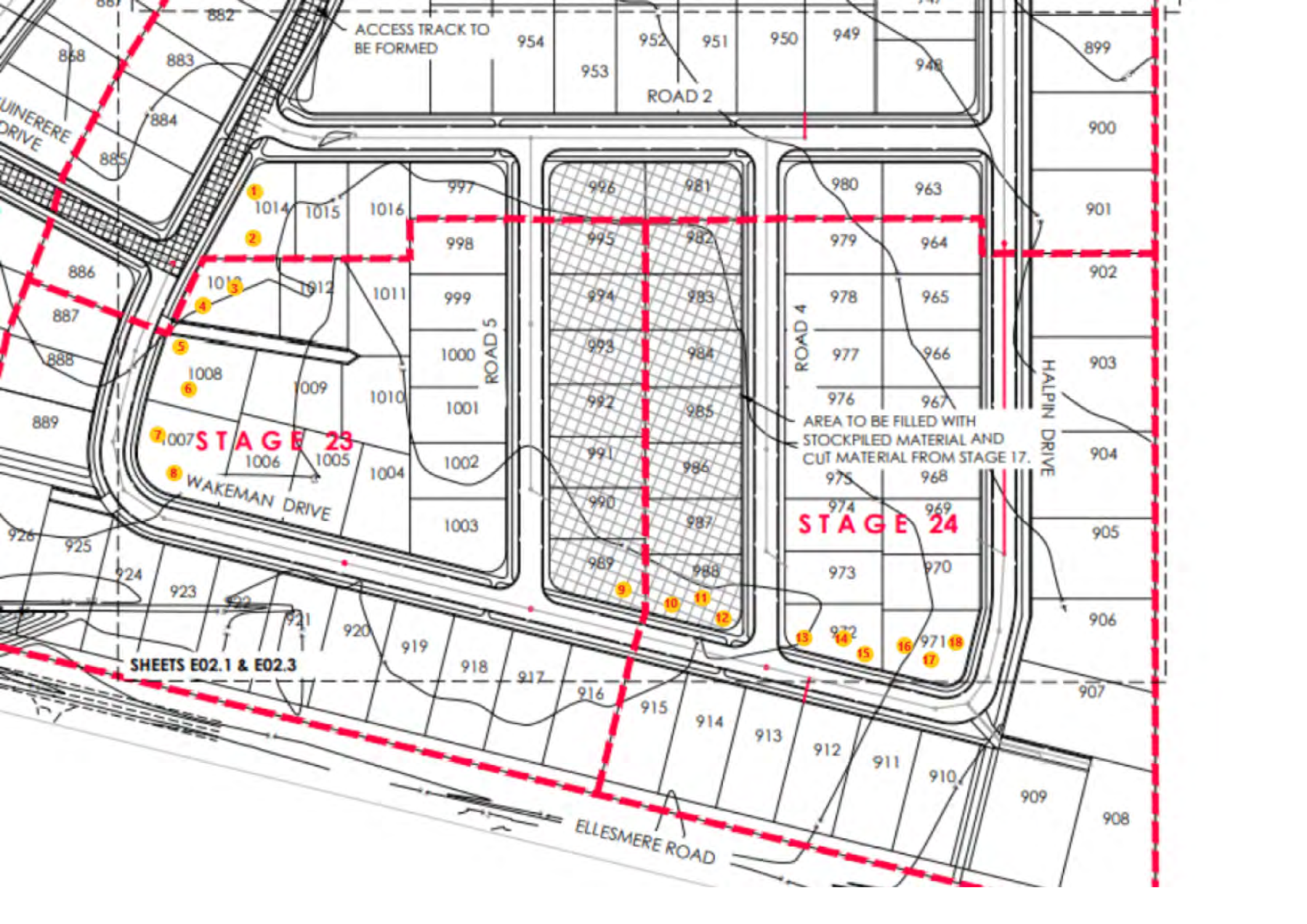
# Nuclear Density Report



Site Tested	Rosemerryn	Material Sample ID	
Tested By	Jason Daikee	MDD Method	Back Scatter
Date Tested	30-May-24	Max Dry Density (kg/m3)	1790
Time Tested	815	Min Dry Density	95%
Material Tested	sandy silts	Solid Density Type	Assumed
Material Source	on site		<b>Report 053</b>

Site No	Layer	Moisture (%)	Wet Density (kg/m3)	Dry Density (kg/m3)	Relative Compaction (%)
1		12.4	2104	1871	104.5
2		13.3	2084	1840	102.8
3		12.6	2057	1827	102.1
4		13.1	2064	1825	102.0
5		17.4	2109	1796	100.3
6		12.8	2137	1894	105.8
7		13.3	1998	1764	98.6
8		13.9	1981	1739	97.1
9		17.0	2086	1783	99.6
10		18.9	2114	1779	99.4
11		18.6	2096	1767	98.7
12		17.2	2111	1800	100.6
13		19.9	2043	1703	95.2
14		16.3	2107	1812	101.2
15		19.0	2119	1781	99.5
16		17.5	2123	1808	101.0
17		16.9	2105	1801	100.6
18		16.9	2089	1787	99.8

**NB: Please attach a copy of the SITE PLAN indicating the site Nos location.**





# NUCLEAR DENSITY TEST REPORT

**CLIENT:**



**SITE:**

ROSEMERRYIN Stage 24

**TEST MATERIAL:**

SITE SILTS



# NUCLEAR DENSITY TEST REPORT



Client:		Site:		Date tested :	
		ROSEMERRYRN Stage 24		4-21/11/2025	
Solid Density		SITE SILTS		SITE SENDY SILT	
Target Density is		Test Materials		Solid Density	
95% of MDD				Target Density is 95% of MDD	
Lab. MDD 1790 kg/m <sup>3</sup>				Lab. MDD 1900 kg/m <sup>3</sup>	
1701 (kg/m <sup>3</sup> )		Target Dry Density		1805 (kg/m <sup>3</sup> )	
LOTS LIFT 1 FILL-NDM Backscatter				061	
Test ID	Dry Density (kg/m <sup>3</sup> )	W. Content	(%) of MDD	Air Voids (%)	Comments/Location (see plan)
1	1781	17.5	99.5	PASS	
2	1964	14.2	103.4	PASS	
3	1845	15.7	97.1	PASS	
4	1941	11.7	102.2	PASS	
5	1947	10.7	102.5	PASS	
6	1909	11.8	100.5	PASS	
7	1960	11.6	103.2	PASS	
8	1915	11.3	100.8	PASS	
9	1933	10.5	101.7	PASS	
10	1926	10.2	101.4	PASS	
11	1918	10.7	100.9	PASS	
12	1938	12.5	102.0	PASS	
13	1927	14.2	101.4	PASS	
14	1964	12.9	103.4	PASS	
15	1940	13.5	102.1	PASS	
16	1830	14.1	96.3	PASS	
17	1993	10.6	104.9	PASS	
18	2048	10.9	107.8	PASS	
19	1858	11.6	97.8	PASS	
20	2102	10.1	110.6	PASS	
21	1849	12.6	97.3	PASS	
22	1968	11.1	103.6	PASS	
23	1876	11.8	98.7	PASS	
24	1891	14.3	99.5	PASS	
25	1903	11.1	100.2	PASS	
26	1848	12.3	97.3	PASS	
27	1858	11.6	97.8	PASS	
28	1902	10.1	100.1	PASS	
29	1849	12.6	97.3	PASS	
30	1868	11.1	98.3	PASS	
31	1876	11.8	98.7	PASS	
32	1891	14.3	99.5	PASS	
33	1903	11.1	100.2	PASS	
34	1848	13.2	97.3	PASS	
35	1859	11.9	97.8	PASS	
36	1877	12.4	98.8	PASS	
37	1831	10.8	96.4	PASS	
Average Values:		1906	12.2	101.0	

This report does not confirm acceptance of the fill material by a 3<sup>rd</sup> party & is a sample of the soil properties on the

Tested by: KF  
Entered by: KF

Checked by: RM



# NUCLEAR DENSITY TEST REPORT



Client:		Site:	ROSEMERRY N Stage 24	Date tested :	5-24/11/2025
Solid Density		Test Materials		Solid Density	
Target Density is		of MDD		Target Density is	
Lab. MDD		kg/m <sup>3</sup>		Lab. MDD	
0		(kg/m <sup>3</sup> )		1805 (kg/m <sup>3</sup> )	
LOTS LIFT 2 FILL-NDM Backscatter				<b>062</b>	
Test ID	Dry Density (kg/m <sup>3</sup> )	W. Content	(%) of MDD	Air Voids (%)	Comments/Location (see plan)
1	1911	13.0	100.6	PASS	
2	1924	13.6	101.3	PASS	
3	1956	13.0	102.9	PASS	
18	1996	9.4	105.1	PASS	
19	1939	10.0	102.1	PASS	
20	1941	10.1	102.2	PASS	
35	1818	10.7	95.7	PASS	
36	1924	9.3	101.3	PASS	
37	1864	8.9	98.1	PASS	
Average Values:		<b>1919</b>	<b>10.9</b>	<b>101.0</b>	

This report does not confirm acceptance of the fill material by a 3<sup>rd</sup> party & is a sample of the soil properties on the

Tested by: KF  
Entered by: KF

Checked by: RM



# NUCLEAR DENSITY TEST PHOTOS

Client:  DAVE LOVELL-SMITH

Date tested : 4-24/11/2025

Site: ROSEMERRYN Stage 24

Test Material: SITE SILTS

## TEST LOCATION PLAN



Entered by: KF

Checked by: RM

**Appendix C – Lot Specific Handheld Testing Results**



**Fulton Hogan**  
LAND DEVELOPMENT LTD.

**DAVIE LOVELL-SMITH**  
PLANNING SURVEYING ENGINEERING

116 Wights Road P O Box 679 Christchurch 8140. New Zealand  
Telephone: 03 379-0793 Website: www.dls.co.nz E-mail: office@dls.co.nz


**JOB TITLE:**  
Fulton Hogan Land Development Ltd.  
Rosemerryn - Stage 24A & 24B

**SHEET TITLE:**  
Cut Fill Plan  
RC225391 & RC225528

**DRAWING STATUS:**  
For Engineering Approval

SCALE: 1:500@A1 DATE: January 2026  
1:1000@A3

CAD FILE: J:\21373\Eng\Drawings\E21373\_002\_0\_R4.dwg DRAWN: JS  
DRAWING No: E.21373 SHEET No: E02.1 REVISION: R4

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 1	
		Stage <b>24B</b>		Lot <b>964</b>			
		Date:	18/03/2026				
		Location:	Rosemerryn, Stage 24B , Lot 964				
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
			0.00 - 0.10	2	2.00	3.65	
			0.01 - 0.20	2	2.00	3.65	
			0.20 - 0.30	2	2.67	3.65	
			0.30 - 0.40	4	4.67	7.94	
			0.40 - 0.50	8	11.33	17.25	
			0.50 - 0.60	22	15.00	53.57	
			0.60 - 0.70				
			0.70 - 0.80				
			0.80 - 0.90				
			0.90 - 1.00				
			1.00 - 1.10				
			1.10 - 1.20				
			1.20 - 1.30				
			1.30 - 1.40				
			1.40 - 1.50				
			1.50 - 1.60				
			1.60 - 1.70				
			1.70 - 1.80				
			1.80 - 1.90				
			1.90 - 2.00				
			2.00 - 2.10				
			2.10 - 2.20				
			2.20 - 2.30				
			2.30 - 2.40				
			2.40 - 2.50				
			2.50 - 2.60				
			2.60 - 2.70				
			2.70 - 2.80				
			2.80 - 2.90				
			2.90 - 3.00				


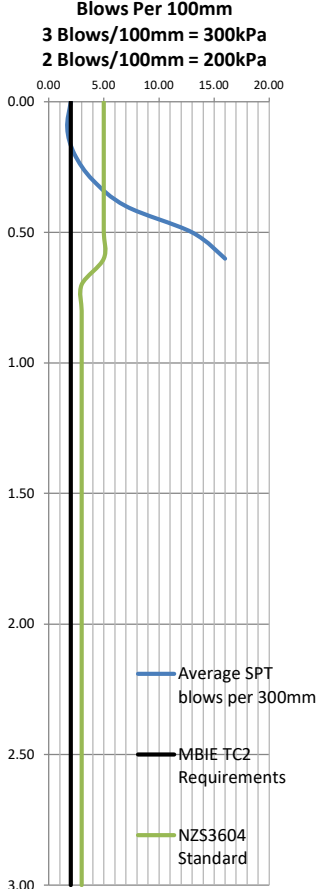


  


**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**

0.00 5.00 10.00 15.00 20.00

0.00  
0.50  
1.00  
1.50  
2.00  
2.50  
3.00

— Average SPT blows per 300mm  
— MBIE TC2 Requirements  
— NZS3604 Standard

		Scala Penetrometer Log				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 2
Stage 24B		Lot 964				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24B , Lot 964				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p> 
Topsoil		0.00 - 0.10	2	2.00	3.65	
		0.01 - 0.20	2	1.67	3.65	
Sandy silt, Brown		0.20 - 0.30	1	2.33	1.68	
		0.30 - 0.40	4	4.00	7.94	
		0.40 - 0.50	7	7.00	14.86	
		0.50 - 0.60	10	13.00	22.15	
Refusal		0.60 - 0.70	22	16.00	53.57	
		0.70 - 0.80				
		0.80 - 0.90				
		0.90 - 1.00				
		1.00 - 1.10				
		1.10 - 1.20				
		1.20 - 1.30				
		1.30 - 1.40				
		1.40 - 1.50				
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 3	
		Stage 24B		Lot 964			
		Date:		18/03/2026			
		Location:		Rosemerryn, Stage 24B , Lot 964			
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
			0.00 - 0.10	2	1.50	3.65	
			0.01 - 0.20	1	1.67	1.68	
			0.20 - 0.30	2	2.67	3.65	
			0.30 - 0.40	5	6.00	10.19	
			0.40 - 0.50	11	12.67	24.65	
			0.50 - 0.60	22	16.50	53.57	
			0.60 - 0.70				
			0.70 - 0.80				
			0.80 - 0.90				
			0.90 - 1.00				
			1.00 - 1.10				
			1.10 - 1.20				
			1.20 - 1.30				
			1.30 - 1.40				
			1.40 - 1.50				
			1.50 - 1.60				
			1.60 - 1.70				
			1.70 - 1.80				
			1.80 - 1.90				
			1.90 - 2.00				
			2.00 - 2.10				
			2.10 - 2.20				
			2.20 - 2.30				
			2.30 - 2.40				
			2.40 - 2.50				
			2.50 - 2.60				
			2.60 - 2.70				
			2.70 - 2.80				
			2.80 - 2.90				
			2.90 - 3.00				




  

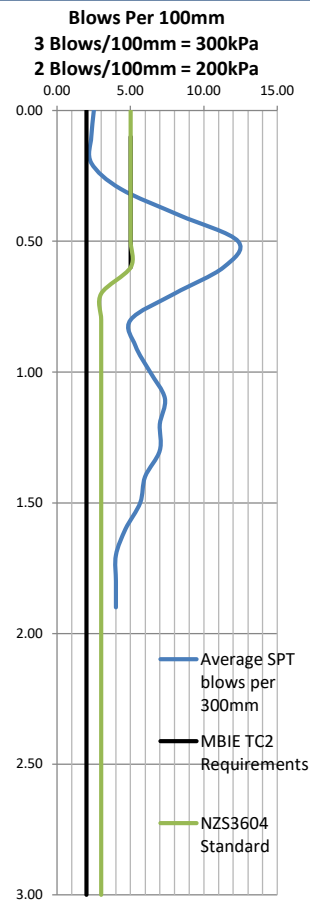
**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**


0.00 5.00 10.00 15.00 20.00

0.00  
0.50  
1.00  
1.50  
2.00  
2.50  
3.00

- Average SPT blows per 300mm
- MBIE TC2 Requirements
- NZS3604 Standard

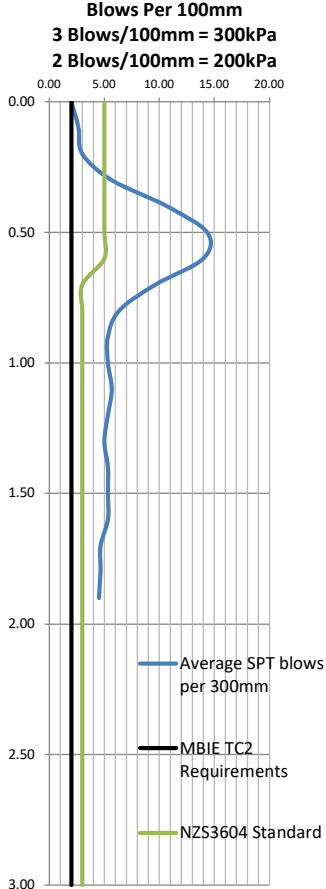
		Scala Penetrometer Log				Job No: 21373
		Project: Foundation Testing - Rosemerryn		SPT No: 4		
Stage 24B		Lot 964				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24B, Lot 964				
Logged By:		Sam Medlicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
Topsoil		0.00 - 0.10	2	2.50	3.65	
		0.01 - 0.20	3	2.33	5.75	
		0.20 - 0.30	2	2.33	3.65	
Sandy silt, Brown		0.30 - 0.40	2	4.33	3.65	
		0.40 - 0.50	9	8.33	19.68	
		0.50 - 0.60	14	12.33	32.29	
Refusal		0.60 - 0.70	14	11.33	32.29	
		0.70 - 0.80	6	8.00	12.50	
		0.80 - 0.90	4	5.00	7.94	
		0.90 - 1.00	5	5.33	10.19	
		1.00 - 1.10	7	6.33	14.86	
		1.10 - 1.20	7	7.33	14.86	
		1.20 - 1.30	8	7.00	17.25	
		1.30 - 1.40	6	7.00	12.50	
		1.40 - 1.50	7	6.00	14.86	
		1.50 - 1.60	5	5.67	10.19	
		1.60 - 1.70	5	4.67	10.19	
		1.70 - 1.80	4	4.00	7.94	
		1.80 - 1.90	3	4.00	5.75	
		1.90 - 2.00	5	4.00	10.19	
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				




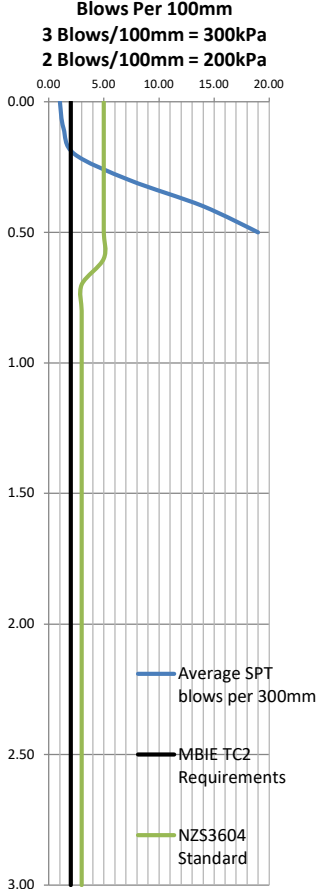
 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn			SPT No: 1	
		Stage	24B	Lot 965		
		Date:	18/03/2026			
		Location:	Rosemerryn, Stage 24B , Lot 965			
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
			0.00 - 0.10	2	2.00	3.65
			0.01 - 0.20	2	2.67	3.65
			0.20 - 0.30	4	3.00	7.94
			0.30 - 0.40	3	5.67	5.75
			0.40 - 0.50	10	10.67	22.15
			0.50 - 0.60	19	14.33	45.46
			0.60 - 0.70	14	14.00	32.29
			0.70 - 0.80	9	9.67	19.68
			0.80 - 0.90	6	6.33	12.50
			0.90 - 1.00	4	5.33	7.94
			1.00 - 1.10	6	5.33	12.50
			1.10 - 1.20	6	5.67	12.50
			1.20 - 1.30	5	5.33	10.19
			1.30 - 1.40	5	5.00	10.19
			1.40 - 1.50	5	5.33	10.19
			1.50 - 1.60	6	5.33	12.50
			1.60 - 1.70	5	5.33	10.19
			1.70 - 1.80	5	4.67	10.19
			1.80 - 1.90	4	4.67	7.94
			1.90 - 2.00	5	4.50	10.19
			2.00 - 2.10			
			2.10 - 2.20			
			2.20 - 2.30			
			2.30 - 2.40			
			2.40 - 2.50			
			2.50 - 2.60			
			2.60 - 2.70			
			2.70 - 2.80			
			2.80 - 2.90			
			2.90 - 3.00			


  

**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**



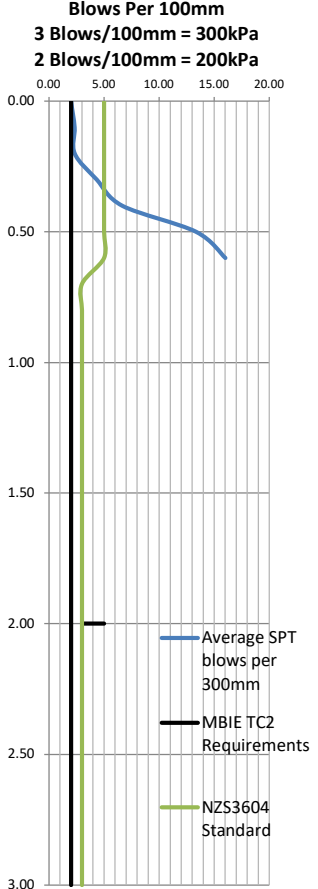
— Average SPT blows per 300mm  
— MBIE TC2 Requirements  
— NZS3604 Standard

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 2	
		Stage <b>24B</b>		Lot <b>965</b>			
		Date:		18/03/2026			
		Location:		Rosemerryn, Stage 24B , Lot 965			
		Logged By:		Sam Medicott			
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard </p>	
		0.00 - 0.10	1	1.00	1.68		
		0.01 - 0.20	1	1.33	1.68		
		0.20 - 0.30	2	2.33	3.65		
		0.30 - 0.40	4	7.33	7.94		
		0.40 - 0.50	16	14.00	37.50		
		0.50 - 0.60	22	19.00	53.57		
		0.60 - 0.70					
		0.70 - 0.80					
		0.80 - 0.90					
		0.90 - 1.00					
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					




 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 3
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
			0.00 - 0.10	2	2.00	3.65
			0.01 - 0.20	2	2.33	3.65
			0.20 - 0.30	3	2.33	5.75
			0.30 - 0.40	2	4.33	3.65
			0.40 - 0.50	8	6.67	17.25
			0.50 - 0.60	10	13.33	22.15
			0.60 - 0.70	22	16.00	53.57
			0.70 - 0.80			
			0.80 - 0.90			
			0.90 - 1.00			
			1.00 - 1.10			
			1.10 - 1.20			
			1.20 - 1.30			
			1.30 - 1.40			
			1.40 - 1.50			
			1.50 - 1.60			
			1.60 - 1.70			
			1.70 - 1.80			
			1.80 - 1.90			
			1.90 - 2.00			
			2.00 - 2.10			
			2.10 - 2.20			
			2.20 - 2.30			
			2.30 - 2.40			
			2.40 - 2.50			
			2.50 - 2.60			
			2.60 - 2.70			
			2.70 - 2.80			
			2.80 - 2.90			
			2.90 - 3.00			

**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**

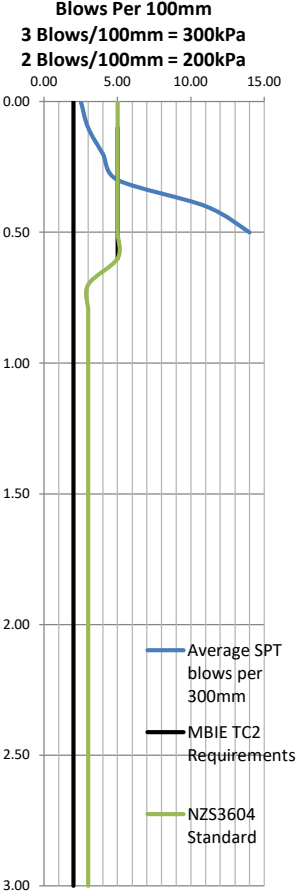


— Average SPT blows per 300mm  
— MBIE TC2 Requirements  
— NZS3604 Standard


		Scala Penetrometer Log				Job No: 21373
		Project: Foundation Testing - Rosemerryn		SPT No: 4		
Stage 24B		Lot 965				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24B , Lot 965				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
Topsoil		0.00 - 0.10	2	2.50	3.65	
		0.01 - 0.20	3	3.00	5.75	
		0.20 - 0.30	4	4.00	7.94	
Sandy silt, Brown		0.30 - 0.40	5	5.00	10.19	
		0.40 - 0.50	6	11.00	12.50	
Refusal		0.50 - 0.60	22	14.00	53.57	
		0.60 - 0.70				
		0.70 - 0.80				
		0.80 - 0.90				
		0.90 - 1.00				
		1.00 - 1.10				
		1.10 - 1.20				
		1.20 - 1.30				
		1.30 - 1.40				
		1.40 - 1.50				
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				

**Blows Per 100mm**  
3 Blows/100mm = 300kPa  
2 Blows/100mm = 200kPa




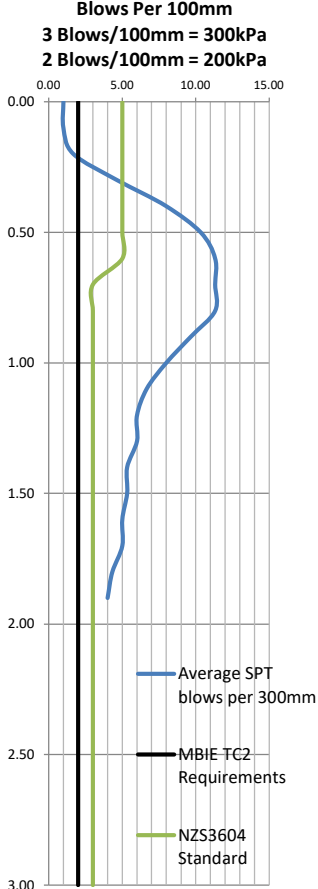


— Average SPT blows per 300mm  
— MBIE TC2 Requirements  
— NZS3604 Standard


 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn			SPT No: 1	
		Stage <b>24B</b>		Lot <b>966</b>		
		Date:	18/03/2026			
		Location:	Rosemerryn, Stage 24B , Lot 966			
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
			0.00 - 0.10	2	2.50	3.65
			0.01 - 0.20	3	3.00	5.75
			0.20 - 0.30	4	4.00	7.94
			0.30 - 0.40	5	7.33	10.19
			0.40 - 0.50	13	11.67	29.72
			0.50 - 0.60	17	13.67	40.13
			0.60 - 0.70	11	11.33	24.65
			0.70 - 0.80	6	7.33	12.50
			0.80 - 0.90	5	5.00	10.19
			0.90 - 1.00	4	5.00	7.94
			1.00 - 1.10	6	5.67	12.50
			1.10 - 1.20	7	6.67	14.86
			1.20 - 1.30	7	6.67	14.86
			1.30 - 1.40	6	6.33	12.50
			1.40 - 1.50	6	5.67	12.50
			1.50 - 1.60	5	5.00	10.19
			1.60 - 1.70	4	4.67	7.94
			1.70 - 1.80	5	4.67	10.19
			1.80 - 1.90	5	5.00	10.19
			1.90 - 2.00	5	5.00	10.19
			2.00 - 2.10			
			2.10 - 2.20			
			2.20 - 2.30			
			2.30 - 2.40			
			2.40 - 2.50			
			2.50 - 2.60			
			2.60 - 2.70			
			2.70 - 2.80			
			2.80 - 2.90			
			2.90 - 3.00			

**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**

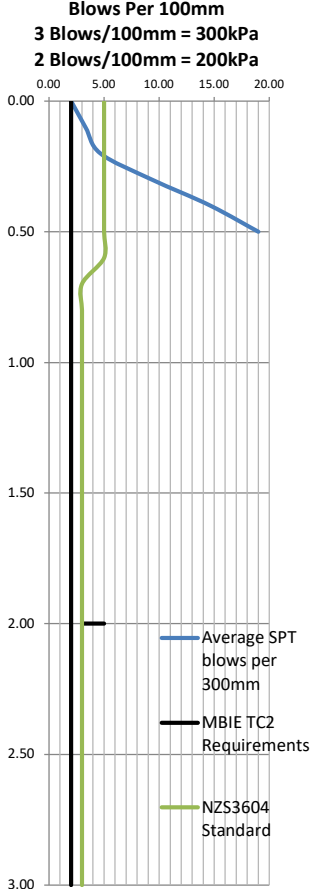
— Average SPT blows per 300mm  
— MBIE TC2 Requirements  
— NZS3604 Standard

		Scala Penetrometer Log				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 2
Stage 24B		Lot 966				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24B , Lot 966				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p> 
Topsoil		0.00 - 0.10	1	1.00	1.68	
		0.01 - 0.20	1	1.00	1.68	
		0.20 - 0.30	1	1.67	1.68	
Sandy silt, Brown		0.30 - 0.40	3	4.67	5.75	
		0.40 - 0.50	10	8.00	22.15	
		0.50 - 0.60	11	10.33	24.65	
		0.60 - 0.70	10	11.33	22.15	
		0.70 - 0.80	13	11.33	29.72	
Refusal		0.80 - 0.90	11	11.33	24.65	
		0.90 - 1.00	10	9.67	22.15	
		1.00 - 1.10	8	8.00	17.25	
		1.10 - 1.20	6	6.67	12.50	
		1.20 - 1.30	6	6.00	12.50	
		1.30 - 1.40	6	6.00	12.50	
		1.40 - 1.50	6	5.33	12.50	
		1.50 - 1.60	4	5.33	7.94	
		1.60 - 1.70	6	5.00	12.50	
		1.70 - 1.80	5	5.00	10.19	
		1.80 - 1.90	4	4.33	7.94	
		1.90 - 2.00	4	4.00	7.94	
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				




 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 3
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
			0.00 - 0.10	2	2.00	3.65
			0.01 - 0.20	2	3.33	3.65
			0.20 - 0.30	6	4.67	12.50
			0.30 - 0.40	6	9.33	12.50
			0.40 - 0.50	16	14.67	37.50
			0.50 - 0.60	22	19.00	53.57
			0.60 - 0.70			
			0.70 - 0.80			
			0.80 - 0.90			
			0.90 - 1.00			
			1.00 - 1.10			
			1.10 - 1.20			
			1.20 - 1.30			
			1.30 - 1.40			
			1.40 - 1.50			
			1.50 - 1.60			
			1.60 - 1.70			
			1.70 - 1.80			
			1.80 - 1.90			
			1.90 - 2.00			
			2.00 - 2.10			
			2.10 - 2.20			
			2.20 - 2.30			
			2.30 - 2.40			
			2.40 - 2.50			
			2.50 - 2.60			
			2.60 - 2.70			
			2.70 - 2.80			
			2.80 - 2.90			
			2.90 - 3.00			

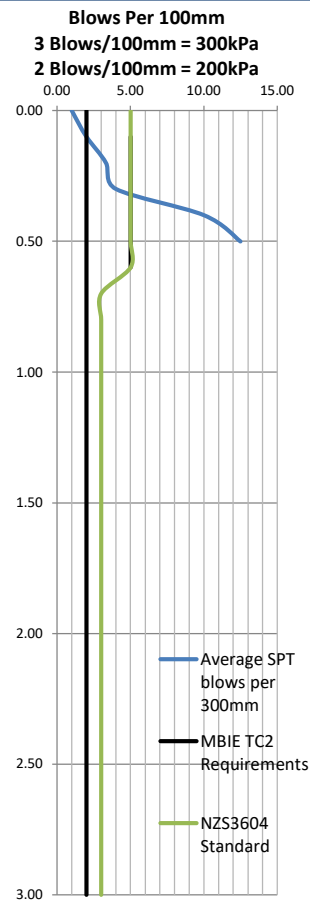
  


**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**



— Average SPT blows per 300mm  
— MBIE TC2 Requirements  
— NZS3604 Standard

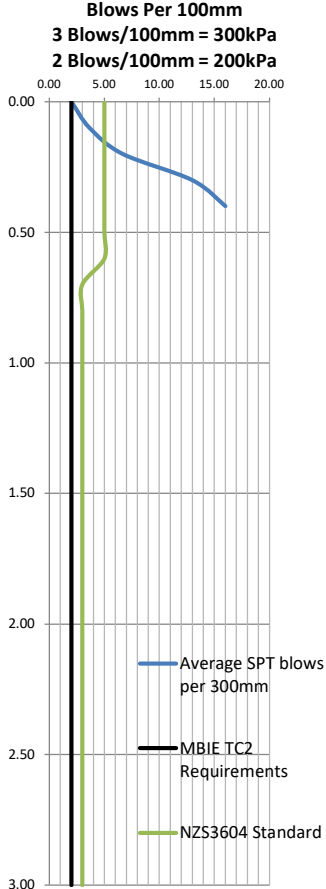
		Scala Penetrometer Log				Job No: 21373
		Project: Foundation Testing - Rosemerryn		SPT No: 4		
Stage 24B		Lot 966				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24B, Lot 966				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
Topsoil		0.00 - 0.10	1	1.00	1.68	
		0.01 - 0.20	1	2.00	1.68	
		0.20 - 0.30	4	3.33	7.94	
Sandy silt, Brown		0.30 - 0.40	5	4.00	10.19	
		0.40 - 0.50	3	10.00	5.75	
Refusal		0.50 - 0.60	22	12.50	53.57	
		0.60 - 0.70				
		0.70 - 0.80				
		0.80 - 0.90				
		0.90 - 1.00				
		1.00 - 1.10				
		1.10 - 1.20				
		1.20 - 1.30				
		1.30 - 1.40				
		1.40 - 1.50				
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				




 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 1	
		Stage <b>24B</b>		Lot <b>967</b>			
		Date:	18/03/2026				
		Location:	Rosemerryn, Stage 24B , Lot 967				
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
			0.00 - 0.10	1	2.00	1.68	
			0.01 - 0.20	3	3.67	5.75	
			0.20 - 0.30	7	6.67	14.86	
			0.30 - 0.40	10	13.00	22.15	
			0.40 - 0.50	22	16.00	53.57	
			0.50 - 0.60				
			0.60 - 0.70				
			0.70 - 0.80				
			0.80 - 0.90				
			0.90 - 1.00				
			1.00 - 1.10				
			1.10 - 1.20				
			1.20 - 1.30				
			1.30 - 1.40				
			1.40 - 1.50				
			1.50 - 1.60				
			1.60 - 1.70				
			1.70 - 1.80				
			1.80 - 1.90				
			1.90 - 2.00				
			2.00 - 2.10				
			2.10 - 2.20				
			2.20 - 2.30				
			2.30 - 2.40				
			2.40 - 2.50				
			2.50 - 2.60				
			2.60 - 2.70				
			2.70 - 2.80				
			2.80 - 2.90				
			2.90 - 3.00				

**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**

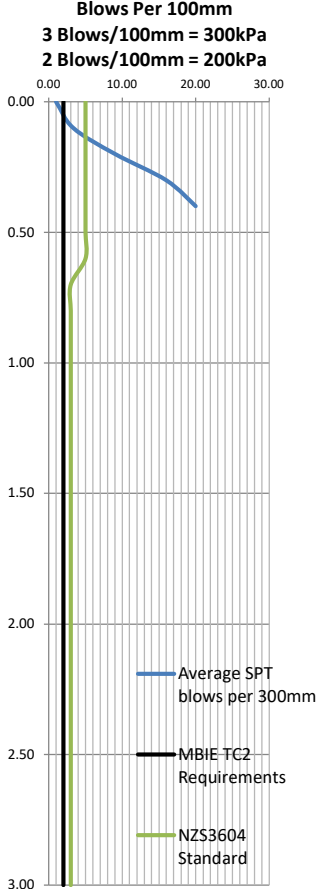


— Average SPT blows per 300mm  
— MBIE TC2 Requirements  
— NZS3604 Standard

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 2
		Stage <b>24B</b>	Lot <b>967</b>			
		Date:	18/03/2026			
		Location:	Rosemerryn, Stage 24B , Lot 967			
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
			0.00 - 0.10	1	1.00	1.68
			0.01 - 0.20	1	3.33	1.68
			0.20 - 0.30	8	9.00	17.25
			0.30 - 0.40	18	16.00	42.78
			0.40 - 0.50	22	20.00	53.57
			0.50 - 0.60			
			0.60 - 0.70			
			0.70 - 0.80			
			0.80 - 0.90			
			0.90 - 1.00			
			1.00 - 1.10			
			1.10 - 1.20			
			1.20 - 1.30			
			1.30 - 1.40			
			1.40 - 1.50			
			1.50 - 1.60			
			1.60 - 1.70			
			1.70 - 1.80			
			1.80 - 1.90			
			1.90 - 2.00			
			2.00 - 2.10			
			2.10 - 2.20			
			2.20 - 2.30			
			2.30 - 2.40			
			2.40 - 2.50			
			2.50 - 2.60			
			2.60 - 2.70			
			2.70 - 2.80			
			2.80 - 2.90			
			2.90 - 3.00			


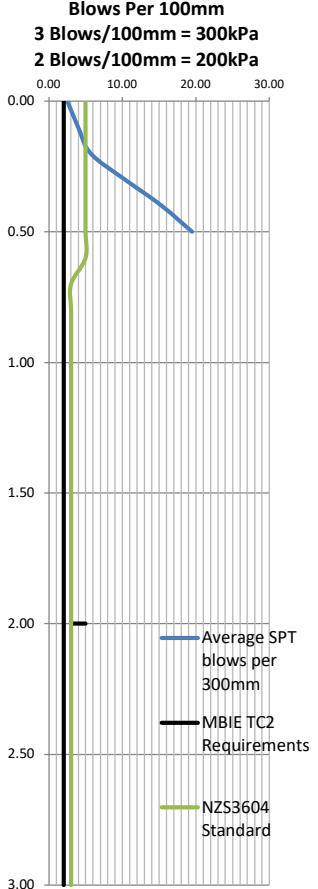
  


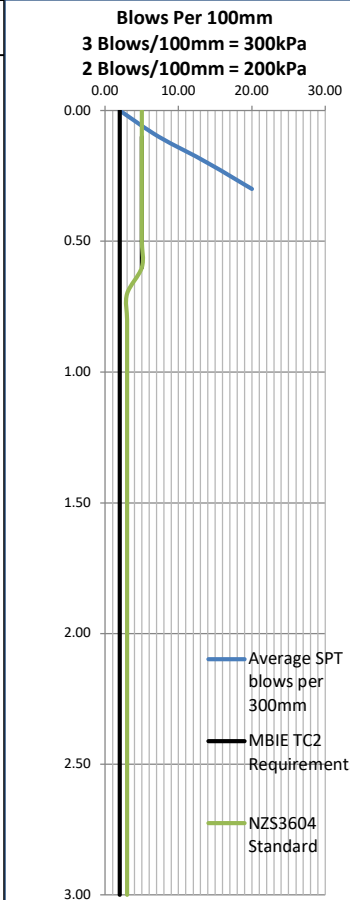

**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**




— Average SPT blows per 300mm  
— NZS3604 Standard

— MBIE TC2 Requirements

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 3	
		Stage 24B		Lot 967			
		Date:		18/03/2026			
		Location:		Rosemerryn, Stage 24B , Lot 967			
Logged By:		Sam Medicott					
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard </p>	
		0.00 - 0.10	2	2.50	3.65		
		0.01 - 0.20	3	4.00	5.75		
		0.20 - 0.30	7	5.67	14.86		
		0.30 - 0.40	7	10.33	14.86		
		0.40 - 0.50	17	15.33	40.13		
		0.50 - 0.60	22	19.50	53.57		
		0.60 - 0.70					
		0.70 - 0.80					
		0.80 - 0.90					
		0.90 - 1.00					
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					


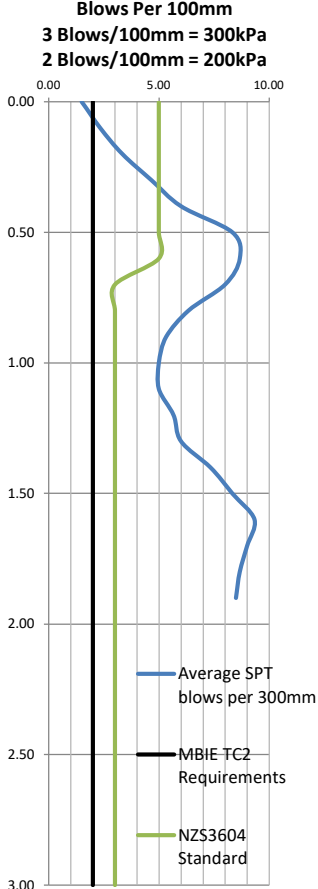



		Scala Penetrometer Log				Job No: 21373	
		Project: Foundation Testing - Rosemerryn		Lot 967		SPT No: 4	
Stage 24B		Date: 18/03/2026					
Location: Rosemerryn, Stage 24B, Lot 967		Logged By: Sam Medicott					
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p> 	
Topsoil		0.00 - 0.10	2	2.00	3.65		
		0.01 - 0.20	2	7.33	3.65		
Refusal		0.20 - 0.30	18	14.00	42.78		
		0.30 - 0.40	22	20.00	53.57		
		0.40 - 0.50					
		0.50 - 0.60					
		0.60 - 0.70					
		0.70 - 0.80					
		0.80 - 0.90					
		0.90 - 1.00					
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
	2.00 - 2.10						
	2.10 - 2.20						
	2.20 - 2.30						
	2.30 - 2.40						
	2.40 - 2.50						
	2.50 - 2.60						
	2.60 - 2.70						
	2.70 - 2.80						
	2.80 - 2.90						
	2.90 - 3.00						


 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 1	
		Stage <b>24B</b>		Lot <b>968</b>			
		Date:	18/03/2026				
		Location:	Rosemerryn, Stage 24B , Lot 968				
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
			0.00 - 0.10	2	2.00	3.65	
			0.01 - 0.20	2	2.33	3.65	
			0.20 - 0.30	3	4.00	5.75	
			0.30 - 0.40	7	7.00	14.86	
			0.40 - 0.50	11	9.00	24.65	
			0.50 - 0.60	9	9.33	19.68	
			0.60 - 0.70	8	9.67	17.25	
			0.70 - 0.80	12	14.00	27.17	
			0.80 - 0.90	22	17.00	53.57	
			0.90 - 1.00				
			1.00 - 1.10				
			1.10 - 1.20				
			1.20 - 1.30				
			1.30 - 1.40				
			1.40 - 1.50				
			1.50 - 1.60				
			1.60 - 1.70				
			1.70 - 1.80				
			1.80 - 1.90				
			1.90 - 2.00				
			2.00 - 2.10				
			2.10 - 2.20				
			2.20 - 2.30				
			2.30 - 2.40				
			2.40 - 2.50				
			2.50 - 2.60				
			2.60 - 2.70				
			2.70 - 2.80				
			2.80 - 2.90				
			2.90 - 3.00				

**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**

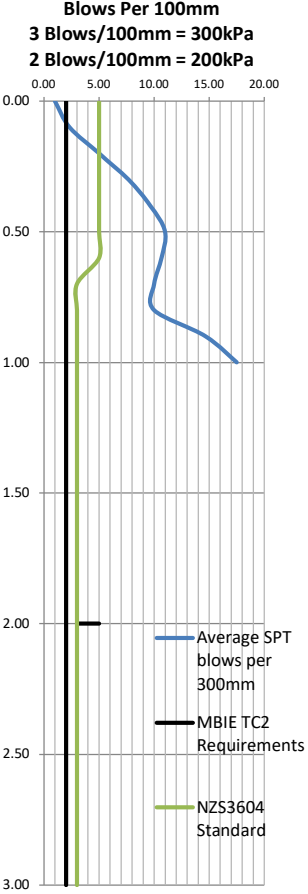
Legend:  
— Average SPT blows per 300mm  
— MBIE TC2 Requirements  
— NZS3604 Standard

		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 2
Stage 24B		Lot 968				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24B , Lot 968				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b> 3 Blows/100mm = 300kPa 2 Blows/100mm = 200kPa</p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard         </p>
Topsoil		0.00 - 0.10	1	1.50	1.68	
		0.01 - 0.20	2	2.33	3.65	
		0.20 - 0.30	4	3.33	7.94	
Sandy silt, Brown		0.30 - 0.40	4	4.67	7.94	
		0.40 - 0.50	6	6.00	12.50	
Sandy silt, Grey		0.50 - 0.60	8	8.33	17.25	
		0.60 - 0.70	11	8.67	24.65	
Refusal		0.70 - 0.80	7	8.00	14.86	
		0.80 - 0.90	6	6.33	12.50	
		0.90 - 1.00	6	5.33	12.50	
		1.00 - 1.10	4	5.00	7.94	
		1.10 - 1.20	5	5.00	10.19	
		1.20 - 1.30	6	5.67	12.50	
		1.30 - 1.40	6	6.00	12.50	
		1.40 - 1.50	6	7.33	12.50	
		1.50 - 1.60	10	8.33	22.15	
		1.60 - 1.70	9	9.33	19.68	
		1.70 - 1.80	9	9.00	19.68	
		1.80 - 1.90	9	8.67	19.68	
		1.90 - 2.00	8	8.50	17.25	
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 3
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
			0.00 - 0.10	1	1.00	1.68
			0.01 - 0.20	1	2.33	1.68
			0.20 - 0.30	5	5.00	10.19
			0.30 - 0.40	9	7.67	19.68
			0.40 - 0.50	9	9.67	19.68
			0.50 - 0.60	11	11.00	24.65
			0.60 - 0.70	13	10.67	29.72
			0.70 - 0.80	8	10.00	17.25
			0.80 - 0.90	9	10.00	19.68
			0.90 - 1.00	13	14.67	29.72
			1.00 - 1.10	22	17.50	53.57
			1.10 - 1.20			
			1.20 - 1.30			
			1.30 - 1.40			
			1.40 - 1.50			
			1.50 - 1.60			
			1.60 - 1.70			
			1.70 - 1.80			
			1.80 - 1.90			
			1.90 - 2.00			
			2.00 - 2.10			
			2.10 - 2.20			
			2.20 - 2.30			
			2.30 - 2.40			
			2.40 - 2.50			
			2.50 - 2.60			
			2.60 - 2.70			
			2.70 - 2.80			
			2.80 - 2.90			
			2.90 - 3.00			

**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**





**Scala Penetrometer Log**

Job No: 21373  
SPT No: 4

Project: Foundation Testing - Rosemerryn

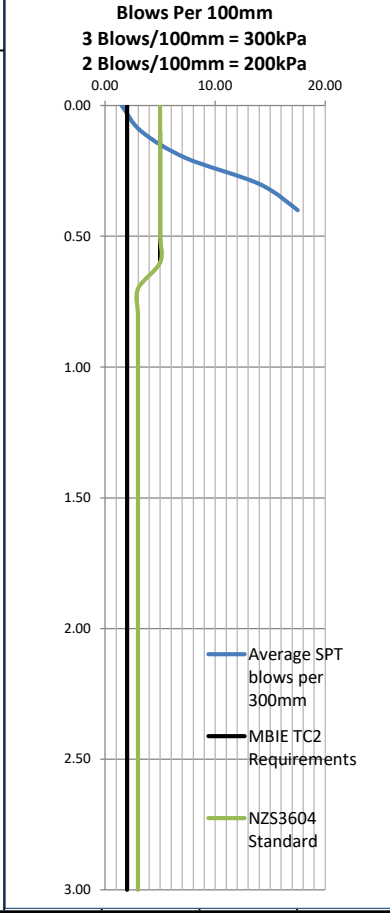
Stage 24B Lot 968


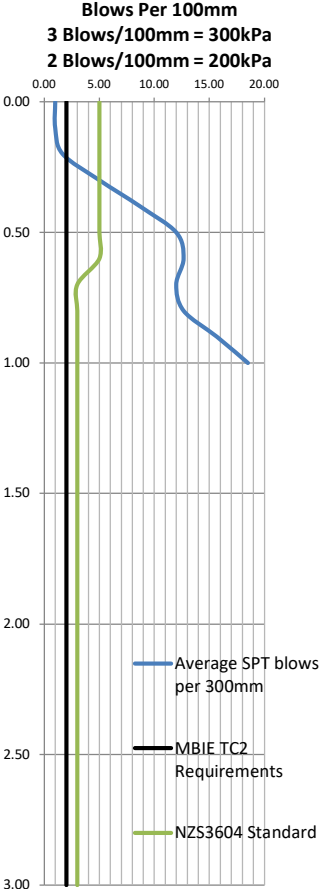
Date: 18/03/2026


Location: Rosemerryn, Stage 24B , Lot 968

Logged By: Sam Medicott

Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
Topsoil		0.00 - 0.10	1	1.50	1.68
		0.01 - 0.20	2	3.33	3.65
Sandy silt, Brown		0.20 - 0.30	7	7.33	14.86
		0.30 - 0.40	13	14.00	29.72
Refusal		0.40 - 0.50	22	17.50	53.57
		0.50 - 0.60			
		0.60 - 0.70			
		0.70 - 0.80			
		0.80 - 0.90			
		0.90 - 1.00			
		1.00 - 1.10			
		1.10 - 1.20			
		1.20 - 1.30			
		1.30 - 1.40			
		1.40 - 1.50			
		1.50 - 1.60			
		1.60 - 1.70			
		1.70 - 1.80			
		1.80 - 1.90			
		1.90 - 2.00			
		2.00 - 2.10			
		2.10 - 2.20			
		2.20 - 2.30			
		2.30 - 2.40			
		2.40 - 2.50			
		2.50 - 2.60			
		2.60 - 2.70			
		2.70 - 2.80			
		2.80 - 2.90			
		2.90 - 3.00			



 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 1	
		Stage <b>24B</b>		Lot <b>969</b>			
		Date:	18/03/2026				
		Location:	Rosemerryn, Stage 24B , Lot 969				
Logged By:		Sam Medicott					
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard </p>	
		0.00 - 0.10	1	1.00	1.68		
		0.01 - 0.20	1	1.00	1.68		
		0.20 - 0.30	1	1.67	1.68		
		0.30 - 0.40	3	5.00	5.75		
		0.40 - 0.50	11	8.67	24.65		
		0.50 - 0.60	12	12.00	27.17		
		0.60 - 0.70	13	12.67	29.72		
		0.70 - 0.80	13	12.00	29.72		
		0.80 - 0.90	10	12.67	22.15		
		0.90 - 1.00	15	15.67	34.88		
		1.00 - 1.10	22	18.50	53.57		
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					

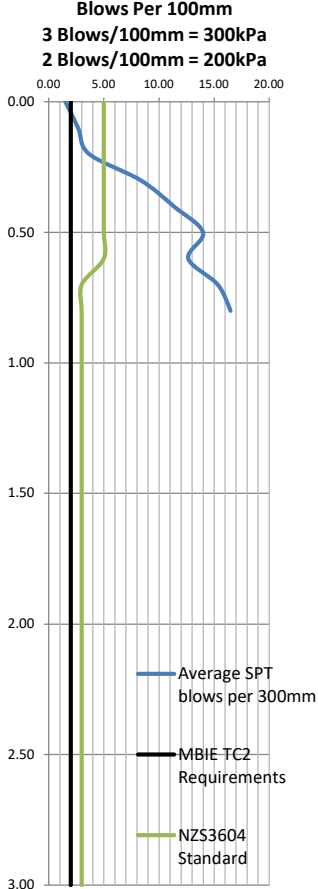
 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 2
		Stage <b>24B</b>	Lot <b>969</b>			
		Date:	18/03/2026			
		Location:	Rosemerryn, Stage 24B , Lot 969			
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
			0.00 - 0.10	2	1.50	3.65
			0.01 - 0.20	1	2.67	1.68
			0.20 - 0.30	5	3.67	10.19
			0.30 - 0.40	5	8.33	10.19
			0.40 - 0.50	15	11.33	34.88
			0.50 - 0.60	14	14.00	32.29
			0.60 - 0.70	13	12.67	29.72
			0.70 - 0.80	11	15.33	24.65
			0.80 - 0.90	22	16.50	53.57
			0.90 - 1.00			
			1.00 - 1.10			
			1.10 - 1.20			
			1.20 - 1.30			
			1.30 - 1.40			
			1.40 - 1.50			
			1.50 - 1.60			
			1.60 - 1.70			
			1.70 - 1.80			
			1.80 - 1.90			
			1.90 - 2.00			
			2.00 - 2.10			
			2.10 - 2.20			
			2.20 - 2.30			
			2.30 - 2.40			
			2.40 - 2.50			
			2.50 - 2.60			
			2.60 - 2.70			
			2.70 - 2.80			
			2.80 - 2.90			
			2.90 - 3.00			


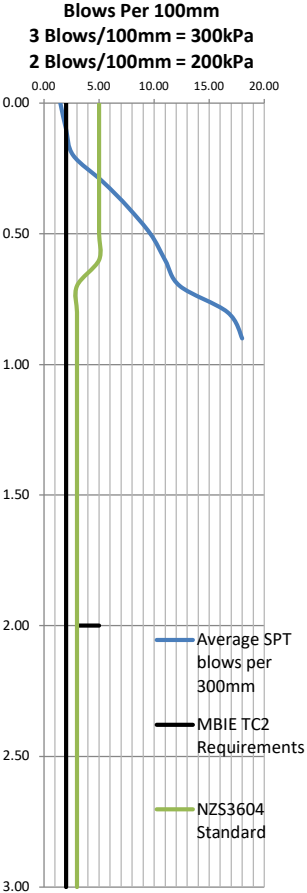
**Blows Per 100mm**


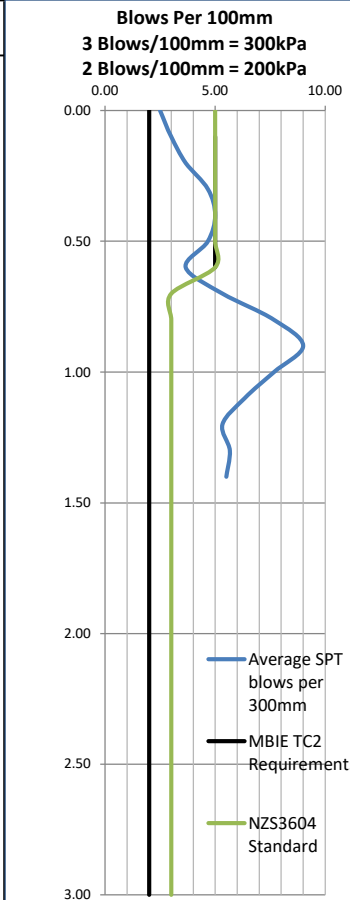

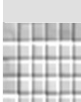

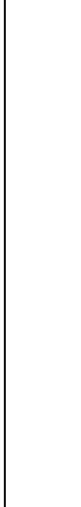
**3 Blows/100mm = 300kPa**


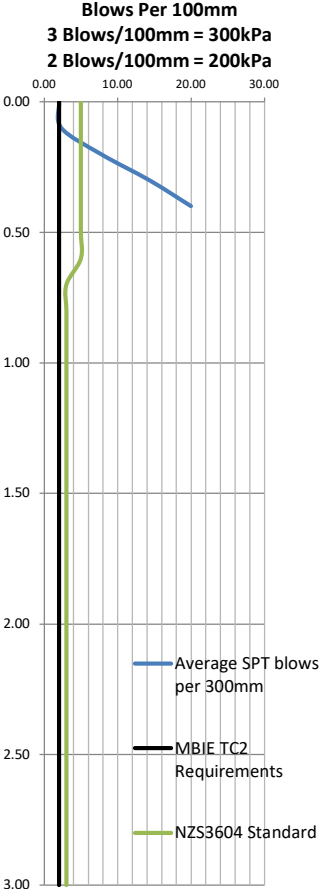

**2 Blows/100mm = 200kPa**



— Average SPT blows per 300mm  
— MBIE TC2 Requirements  
— NZS3604 Standard

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 3	
		Stage 24B		Lot 969			
		Date:		18/03/2026			
		Location:		Rosemerryn, Stage 24B , Lot 969			
Logged By:		Sam Medicott					
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard </p>	
		0.00 - 0.10	1	1.50	1.68		
		0.01 - 0.20	2	2.00	3.65		
		0.20 - 0.30	3	2.67	5.75		
		0.30 - 0.40	3	5.33	5.75		
		0.40 - 0.50	10	7.67	22.15		
		0.50 - 0.60	10	9.67	22.15		
		0.60 - 0.70	9	11.00	19.68		
		0.70 - 0.80	14	12.33	32.29		
		0.80 - 0.90	14	16.67	32.29		
		0.90 - 1.00	22	18.00	53.57		
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					

		Scala Penetrometer Log				Job No: 21373
		Project: Foundation Testing - Rosemerryn		SPT No: 4		
Stage 24B		Lot 969				
Date:		23/03/2026				
Location:		Rosemerryn, Stage 24B, Lot 969				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p>0.00 5.00 10.00</p> <p>0.00 0.50 1.00 1.50 2.00 2.50 3.00</p> <p>— Average SPT blows per 300mm  — MBIE TC2 Requirements  — NZS3604 Standard</p>
Topsoil		0.00 - 0.10	2	2.50	3.65	
		0.01 - 0.20	3	3.00	5.75	
Sandy silt, Grey		0.20 - 0.30	4	3.67	7.94	
		0.30 - 0.40	4	4.67	7.94	
		0.40 - 0.50	6	5.00	12.50	
Sandy silt, Brown with Rust Stains		0.50 - 0.60	5	4.67	10.19	
		0.60 - 0.70	3	3.67	5.75	
		0.70 - 0.80	3	5.33	5.75	
Refusal		0.80 - 0.90	10	7.67	22.15	
		0.90 - 1.00	10	9.00	22.15	
		1.00 - 1.10	7	7.67	14.86	
		1.10 - 1.20	6	6.33	12.50	
		1.20 - 1.30	6	5.33	12.50	
		1.30 - 1.40	4	5.67	7.94	
		1.40 - 1.50	7	5.50	14.86	
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
2.10 - 2.20						
2.20 - 2.30						
2.30 - 2.40						
2.40 - 2.50						
2.50 - 2.60						
2.60 - 2.70						
2.70 - 2.80						
2.80 - 2.90						
2.90 - 3.00						

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 1	
		Stage <b>24B</b>		Lot <b>970</b>			
		Date:	18/03/2026				
		Location:	Rosemerryn, Stage 24B , Lot 970				
Logged By:		Sam Medicott					
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p>— Average SPT blows per 300mm  — MBIE TC2 Requirements  — NZS3604 Standard</p>	
Topsoil		0.00 - 0.10	2	2.00	3.65		
		0.01 - 0.20	2	2.33	3.65		
		0.20 - 0.30	3	7.67	5.75		
		0.30 - 0.40	18	14.33	42.78		
Refusal		0.40 - 0.50	22	20.00	53.57		
		0.50 - 0.60					
		0.60 - 0.70					
		0.70 - 0.80					
		0.80 - 0.90					
		0.90 - 1.00					
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					



**DAVIE LOVELL-SMITH**  
 PLANNING SURVEYING ENGINEERING

**Scala Penetrometer Log**

Job No: 21373

Project: Foundation Testing - Rosemerryn

SPT No: 2

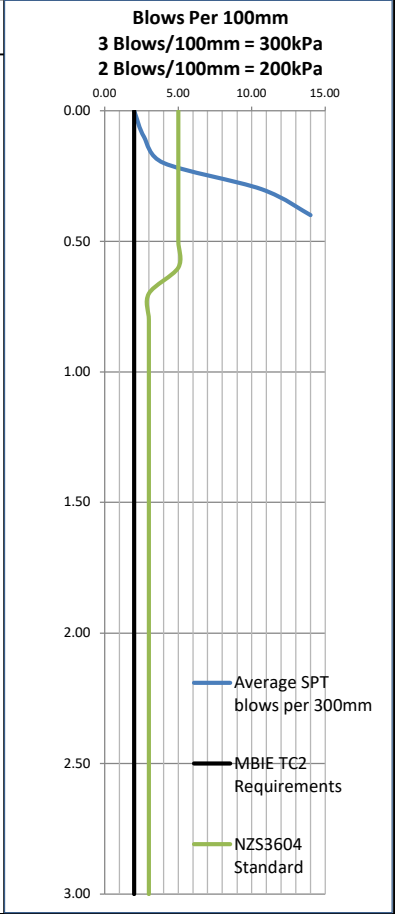
Stage 24B Lot 970


Date: 18/03/2026

Location: Rosemerryn, Stage 24B, Lot 970

Logged By: Sam Medicott

Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
		0.00 - 0.10	2	2.00	3.65
		0.01 - 0.20	2	2.67	3.65
		0.20 - 0.30	4	4.00	7.94
		0.30 - 0.40	6	10.67	12.50
		0.40 - 0.50	22	14.00	53.57
		0.50 - 0.60			
		0.60 - 0.70			
		0.70 - 0.80			
		0.80 - 0.90			
		0.90 - 1.00			
		1.00 - 1.10			
		1.10 - 1.20			
		1.20 - 1.30			
		1.30 - 1.40			
		1.40 - 1.50			
		1.50 - 1.60			
		1.60 - 1.70			
		1.70 - 1.80			
		1.80 - 1.90			
		1.90 - 2.00			
		2.00 - 2.10			
		2.10 - 2.20			
		2.20 - 2.30			
		2.30 - 2.40			
		2.40 - 2.50			
		2.50 - 2.60			
		2.60 - 2.70			
		2.70 - 2.80			
		2.80 - 2.90			
		2.90 - 3.00			



 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 3
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
			0.00 - 0.10	1	1.00	1.68
			0.01 - 0.20	1	2.00	1.68
			0.20 - 0.30	4	3.00	7.94
			0.30 - 0.40	4	7.00	7.94
			0.40 - 0.50	13	13.00	29.72
			0.50 - 0.60	22	17.50	53.57
			0.60 - 0.70			
			0.70 - 0.80			
			0.80 - 0.90			
			0.90 - 1.00			
			1.00 - 1.10			
			1.10 - 1.20			
			1.20 - 1.30			
			1.30 - 1.40			
			1.40 - 1.50			
			1.50 - 1.60			
			1.60 - 1.70			
			1.70 - 1.80			
			1.80 - 1.90			
			1.90 - 2.00			
			2.00 - 2.10			
			2.10 - 2.20			
			2.20 - 2.30			
			2.30 - 2.40			
			2.40 - 2.50			
			2.50 - 2.60			
			2.60 - 2.70			
			2.70 - 2.80			
			2.80 - 2.90			
			2.90 - 3.00			

**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**

— Average SPT blows per 300mm  
— MBIE TC2 Requirements  
— NZS3604 Standard



**Scala Penetrometer Log**

Job No: 21373  
SPT No: 4

Project: Foundation Testing - Rosemerryn

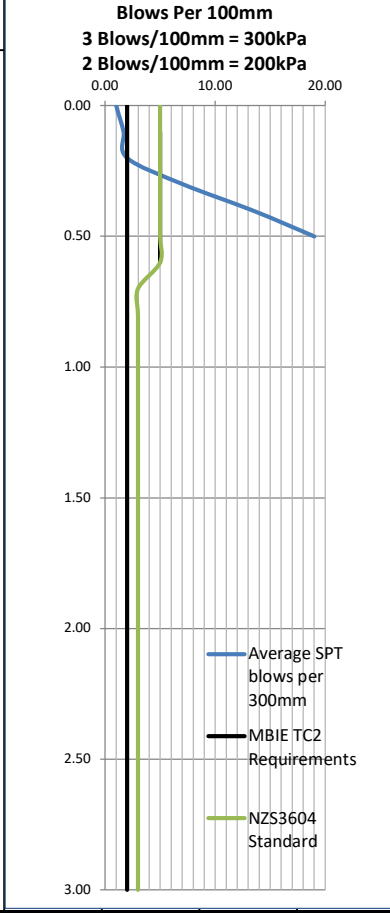
Stage 24B Lot 970


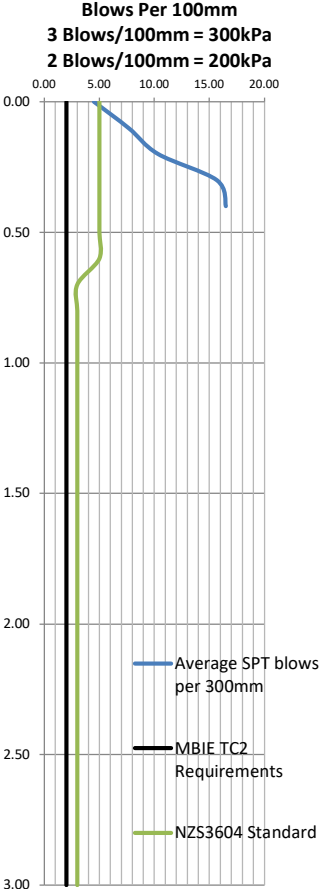
Date: 18/03/2026

Location: Rosemerryn, Stage 24B , Lot 970

Logged By: Sam Medicott

Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
		0.00 - 0.10	1	1.00	1.68
		0.01 - 0.20	1	1.67	1.68
		0.20 - 0.30	3	2.00	5.75
		0.30 - 0.40	2	7.00	3.65
		0.40 - 0.50	16	13.33	37.50
		0.50 - 0.60	22	19.00	53.57
		0.60 - 0.70			
		0.70 - 0.80			
		0.80 - 0.90			
		0.90 - 1.00			
		1.00 - 1.10			
		1.10 - 1.20			
		1.20 - 1.30			
		1.30 - 1.40			
		1.40 - 1.50			
		1.50 - 1.60			
		1.60 - 1.70			
		1.70 - 1.80			
		1.80 - 1.90			
		1.90 - 2.00			
		2.00 - 2.10			
		2.10 - 2.20			
		2.20 - 2.30			
		2.30 - 2.40			
		2.40 - 2.50			
		2.50 - 2.60			
		2.60 - 2.70			
		2.70 - 2.80			
		2.80 - 2.90			
		2.90 - 3.00			



 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 1	
		Stage <b>24A</b>		Lot <b>973</b>			
		Date:		18/03/2026			
		Location:		Rosemerryn, Stage 24A , Lot 973			
Logged By:		Sam Medicott					
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p>— Average SPT blows per 300mm  — MBIE TC2 Requirements  — NZS3604 Standard</p>	
		0.00 - 0.10	3	4.50	5.75		
		0.01 - 0.20	6	7.67	12.50		
		0.20 - 0.30	14	10.33	32.29		
		0.30 - 0.40	11	15.67	24.65		
		0.40 - 0.50	22	16.50	53.57		
		0.50 - 0.60					
		0.60 - 0.70					
		0.70 - 0.80					
		0.80 - 0.90					
		0.90 - 1.00					
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					



**DAVIE LOVELL-SMITH**  
 PLANNING SURVEYING ENGINEERING

**Scala Penetrometer Log**

Job No: 21373

Project: Foundation Testing - Rosemerryn

SPT No: 2

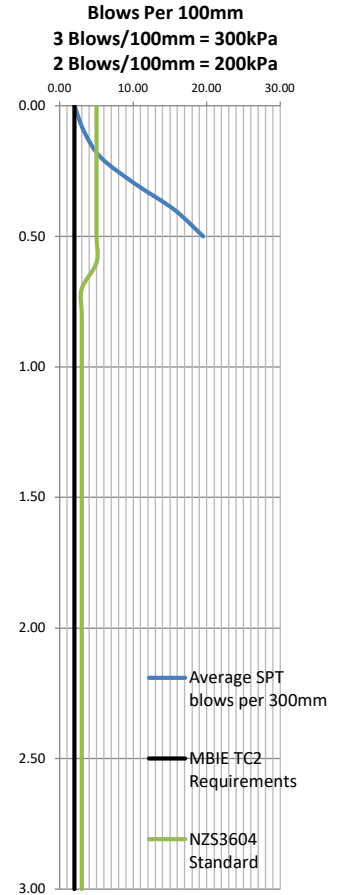
Stage 24A Lot 973


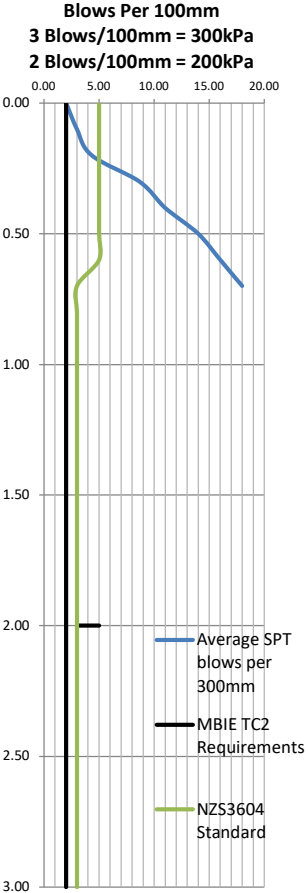
Date: 18/03/2026

Location: Rosemerryn, Stage 24A, Lot 973

Logged By: Sam Medicott

Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
		0.00 - 0.10	1	2.00	1.68
		0.01 - 0.20	3	3.33	5.75
		0.20 - 0.30	6	5.67	12.50
		0.30 - 0.40	8	10.33	17.25
		0.40 - 0.50	17	15.67	40.13
		0.50 - 0.60	22	19.50	53.57
		0.60 - 0.70			
		0.70 - 0.80			
		0.80 - 0.90			
		0.90 - 1.00			
		1.00 - 1.10			
		1.10 - 1.20			
		1.20 - 1.30			
		1.30 - 1.40			
		1.40 - 1.50			
		1.50 - 1.60			
		1.60 - 1.70			
		1.70 - 1.80			
		1.80 - 1.90			
		1.90 - 2.00			
		2.00 - 2.10			
		2.10 - 2.20			
		2.20 - 2.30			
		2.30 - 2.40			
		2.40 - 2.50			
		2.50 - 2.60			
		2.60 - 2.70			
		2.70 - 2.80			
		2.80 - 2.90			
		2.90 - 3.00			



 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 3	
		Stage 24A		Lot 973			
		Date: 18/03/2026					
		Location: Rosemerryn, Stage 24A, Lot 973					
Logged By: Sam Medicott							
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard </p>	
		0.00 - 0.10	1	2.00	1.68		
		0.01 - 0.20	3	3.00	5.75		
		0.20 - 0.30	5	4.33	10.19		
		0.30 - 0.40	5	8.67	10.19		
		0.40 - 0.50	16	11.00	37.50		
		0.50 - 0.60	12	14.00	27.17		
		0.60 - 0.70	14	16.00	32.29		
		0.70 - 0.80	22	18.00	53.57		
		0.80 - 0.90					
		0.90 - 1.00					
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					



**Scala Penetrometer Log**

Job No: 21373

Project: Foundation Testing - Rosemerryn

SPT No: 4

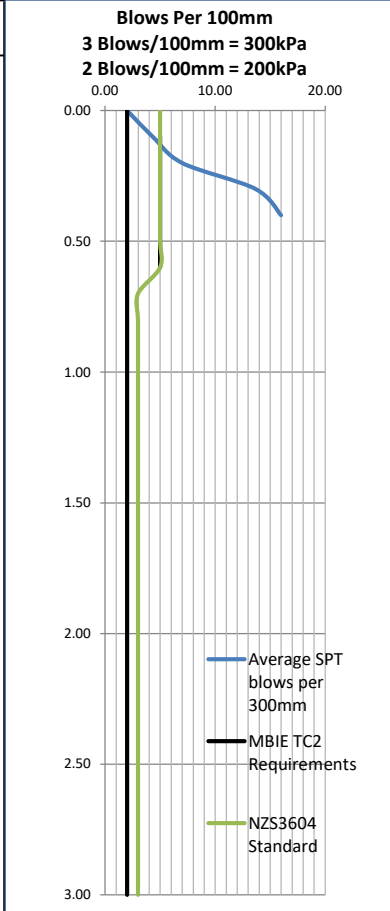
Stage 24A Lot 973


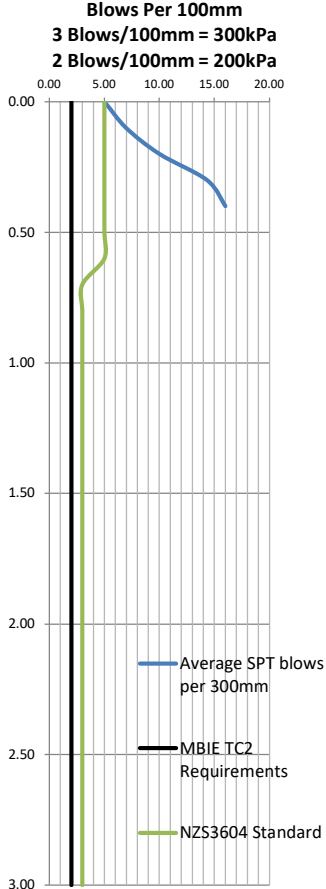

Date: 18/03/2026

Location: Rosemerryn, Stage 24A, Lot 973

Logged By: Sam Medicott

Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
Topsoil		0.00 - 0.10	2	2.00	3.65
		0.01 - 0.20	2	4.33	3.65
		0.20 - 0.30	9	7.00	19.68
Sandy silt, Brown Refusal		0.30 - 0.40	10	13.67	22.15
		0.40 - 0.50	22	16.00	53.57
		0.50 - 0.60			
		0.60 - 0.70			
		0.70 - 0.80			
		0.80 - 0.90			
		0.90 - 1.00			
		1.00 - 1.10			
		1.10 - 1.20			
		1.20 - 1.30			
		1.30 - 1.40			
		1.40 - 1.50			
		1.50 - 1.60			
		1.60 - 1.70			
		1.70 - 1.80			
		1.80 - 1.90			
		1.90 - 2.00			
		2.00 - 2.10			
		2.10 - 2.20			
		2.20 - 2.30			
		2.30 - 2.40			
		2.40 - 2.50			
		2.50 - 2.60			
		2.60 - 2.70			
		2.70 - 2.80			
		2.80 - 2.90			
		2.90 - 3.00			



 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 1	
		Stage <b>24A</b>		Lot <b>974</b>			
		Date:		18/03/2026			
		Location:		Rosemerryn, Stage 24A , Lot 974			
Logged By:		Sam Medicott					
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard </p>	
Topsoil		0.00 - 0.10	1	5.00	1.68		
		0.01 - 0.20	9	7.00	19.68		
Refusal		0.20 - 0.30	11	10.00	24.65		
		0.30 - 0.40	10	14.33	22.15		
		0.40 - 0.50	22	16.00	53.57		
		0.50 - 0.60					
		0.60 - 0.70					
		0.70 - 0.80					
		0.80 - 0.90					
		0.90 - 1.00					
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
2.00 - 2.10							
2.10 - 2.20							
2.20 - 2.30							
2.30 - 2.40							
2.40 - 2.50							
2.50 - 2.60							
2.60 - 2.70							
2.70 - 2.80							
2.80 - 2.90							
2.90 - 3.00							



**DAVIE LOVELL-SMITH**  
PLANNING SURVEYING ENGINEERING

**Scala Penetrometer Log**

Job No: 21373

Project: Foundation Testing - Rosemerryn

SPT No: 2

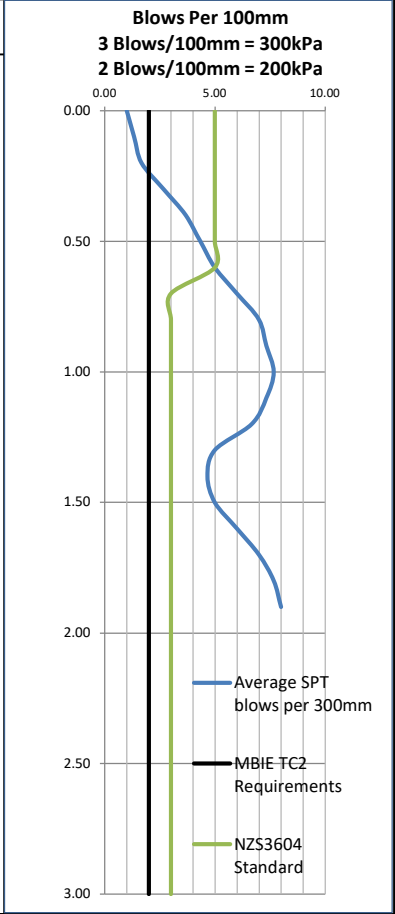
Stage 24A Lot 974




Date: 18/03/2026

Location: Rosemerryn, Stage 24A, Lot 974

Logged By: Sam Medicott

Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
		0.00 - 0.10	1	1.00	1.68
		0.01 - 0.20	1	1.33	1.68
		0.20 - 0.30	2	1.67	3.65
		0.30 - 0.40	2	2.67	3.65
		0.40 - 0.50	4	3.67	7.94
		0.50 - 0.60	5	4.33	10.19
		0.60 - 0.70	4	5.00	7.94
		0.70 - 0.80	6	6.00	12.50
		0.80 - 0.90	8	7.00	17.25
		0.90 - 1.00	7	7.33	14.86
		1.00 - 1.10	7	7.67	14.86
		1.10 - 1.20	9	7.33	19.68
		1.20 - 1.30	6	6.67	12.50
		1.30 - 1.40	5	5.00	10.19
		1.40 - 1.50	4	4.67	7.94
		1.50 - 1.60	5	5.00	10.19
		1.60 - 1.70	6	6.00	12.50
		1.70 - 1.80	7	7.00	14.86
		1.80 - 1.90	8	7.67	17.25
		1.90 - 2.00	8	8.00	17.25
		2.00 - 2.10			
		2.10 - 2.20			
		2.20 - 2.30			
		2.30 - 2.40			
		2.40 - 2.50			
		2.50 - 2.60			
		2.60 - 2.70			
		2.70 - 2.80			
		2.80 - 2.90			
		2.90 - 3.00			



 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 3
Stage 24A		Lot 974				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24A, Lot 974				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
Topsoil		0.00 - 0.10	3	3.00	5.75	
		0.01 - 0.20	3	4.33	5.75	
Sandy silt, Grey		0.20 - 0.30	7	6.00	14.86	
		0.30 - 0.40	8	11.33	17.25	
Refusal		0.40 - 0.50	19	16.33	45.46	
		0.50 - 0.60	22	20.50	53.57	
		0.60 - 0.70				
		0.70 - 0.80				
		0.80 - 0.90				
		0.90 - 1.00				
		1.00 - 1.10				
		1.10 - 1.20				
		1.20 - 1.30				
		1.30 - 1.40				
		1.40 - 1.50				
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				


  

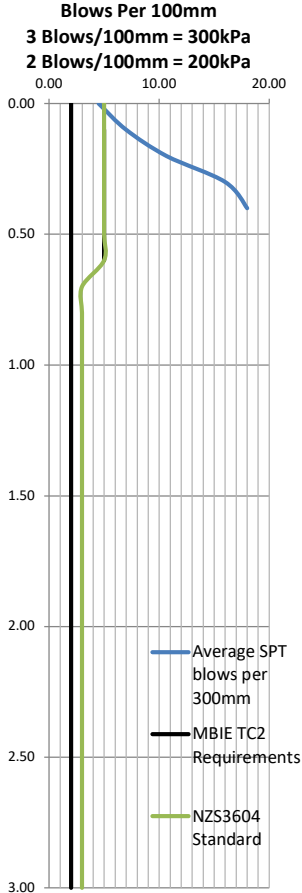
**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**


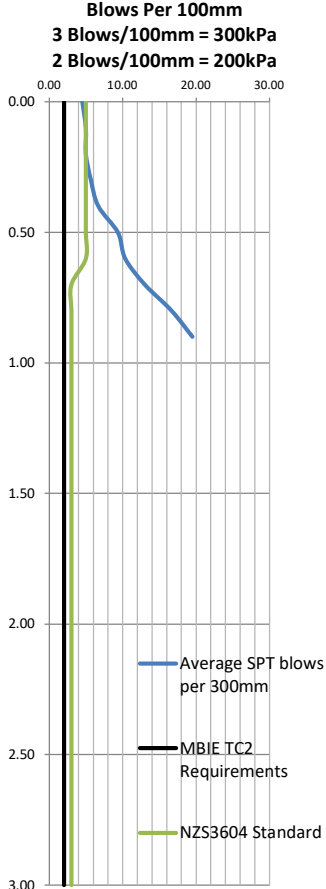


0.00 10.00 20.00 30.00


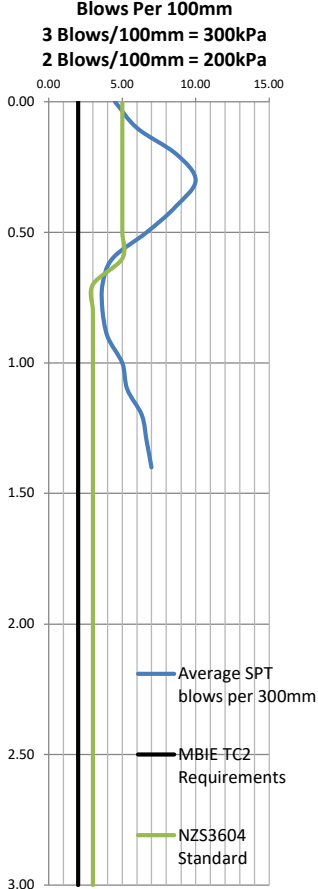
0.00  
0.50  
1.00  
1.50  
2.00  
2.50  
3.00


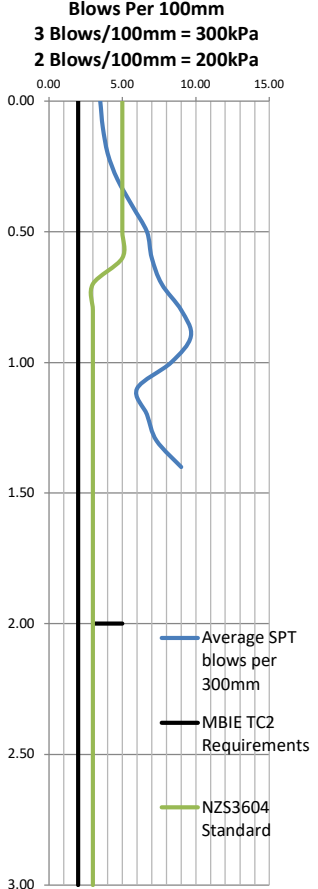
— Average SPT blows per 300mm  
— MBIE TC2 Requirements  
— NZS3604 Standard

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn					SPT No: 4
		Stage	24A	Lot		974	
		Date:	18/03/2026				
		Location:	Rosemerryn, Stage 24A , Lot 974				
Description of Soils		Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
			0.00 - 0.10	3	4.50	5.75	
			0.01 - 0.20	6	7.00	12.50	
			0.20 - 0.30	12	10.67	27.17	
			0.30 - 0.40	14	16.00	32.29	
			0.40 - 0.50	22	18.00	53.57	
			0.50 - 0.60				
			0.60 - 0.70				
			0.70 - 0.80				
			0.80 - 0.90				
			0.90 - 1.00				
			1.00 - 1.10				
			1.10 - 1.20				
			1.20 - 1.30				
			1.30 - 1.40				
			1.40 - 1.50				
			1.50 - 1.60				
			1.60 - 1.70				
			1.70 - 1.80				
			1.80 - 1.90				
			1.90 - 2.00				
			2.00 - 2.10				
			2.10 - 2.20				
			2.20 - 2.30				
			2.30 - 2.40				
			2.40 - 2.50				
			2.50 - 2.60				
			2.60 - 2.70				
			2.70 - 2.80				
			2.80 - 2.90				
			2.90 - 3.00				



 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 1	
		Stage <b>24A</b>		Lot <b>975</b>			
		Date:		18/03/2026			
		Location:		Rosemerryn, Stage 24A , Lot 975			
Logged By:		Sam Medicott					
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard </p>	
Topsoil		0.00 - 0.10	3	4.50	5.75		
		0.01 - 0.20	6	5.00	12.50		
		0.20 - 0.30	6	5.00	12.50		
Sandy silt, Grey		0.30 - 0.40	3	5.67	5.75		
		0.40 - 0.50	8	6.67	17.25		
		0.50 - 0.60	9	9.33	19.68		
		0.60 - 0.70	11	10.33	24.65		
Refusal		0.70 - 0.80	11	13.00	24.65		
		0.80 - 0.90	17	16.67	40.13		
		0.90 - 1.00	22	19.50	53.57		
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 2
Stage 24A		Lot 975				
Date:		23/03/2026				
Location:		Rosemerryn, Stage 24A, Lot 975				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b></p> <p style="text-align: center;"><b>3 Blows/100mm = 300kPa</b></p> <p style="text-align: center;"><b>2 Blows/100mm = 200kPa</b></p> 
		0.00 - 0.10	3	4.50	5.75	
		0.01 - 0.20	6	6.00	12.50	
		0.20 - 0.30	9	8.67	19.68	
		0.30 - 0.40	11	10.00	24.65	
		0.40 - 0.50	10	8.67	22.15	
		0.50 - 0.60	5	6.67	10.19	
		0.60 - 0.70	5	4.33	10.19	
		0.70 - 0.80	3	3.67	5.75	
		0.80 - 0.90	3	3.67	5.75	
		0.90 - 1.00	5	4.00	10.19	
		1.00 - 1.10	4	5.00	7.94	
		1.10 - 1.20	6	5.33	12.50	
		1.20 - 1.30	6	6.33	12.50	
		1.30 - 1.40	7	6.67	14.86	
		1.40 - 1.50	7	7.00	14.86	
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 3	
		Stage 24A		Lot 975			
		Date: 18/03/2026					
		Location: Rosemerryn, Stage 24A, Lot 975					
Logged By: Sam Medicott							
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: center;">0.00 5.00 10.00 15.00</p> <p style="text-align: center;">0.00 0.50 1.00 1.50 2.00 2.50 3.00</p> <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard </p>	
		0.00 - 0.10	3	3.50	5.75		
		0.01 - 0.20	4	3.67	7.94		
		0.20 - 0.30	4	4.00	7.94		
		0.30 - 0.40	4	4.67	7.94		
		0.40 - 0.50	6	5.67	12.50		
		0.50 - 0.60	7	6.67	14.86		
		0.60 - 0.70	7	7.00	14.86		
		0.70 - 0.80	7	7.67	14.86		
		0.80 - 0.90	9	9.00	19.68		
		0.90 - 1.00	11	9.67	24.65		
		1.00 - 1.10	9	8.33	19.68		
		1.10 - 1.20	5	6.00	10.19		
		1.20 - 1.30	4	6.67	7.94		
		1.30 - 1.40	11	7.33	24.65		
		1.40 - 1.50	7	9.00	14.86		
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					



**Scala Penetrometer Log**

Job No: 21373  
SPT No: 4

Project: Foundation Testing - Rosemerryn

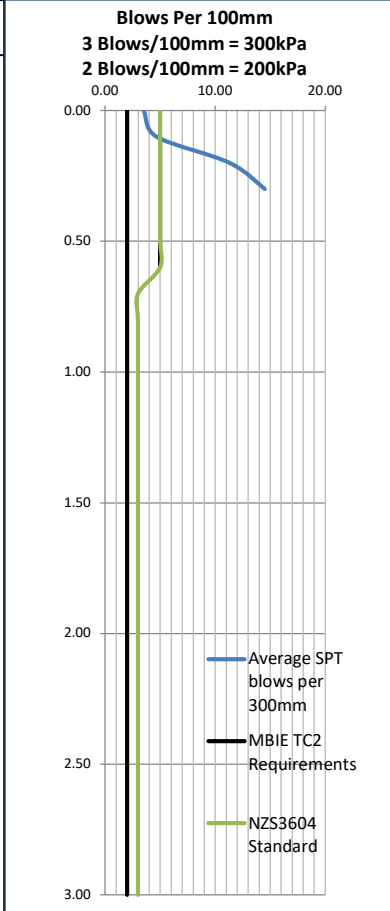
Stage 24A Lot 975





Date: 18/03/2026

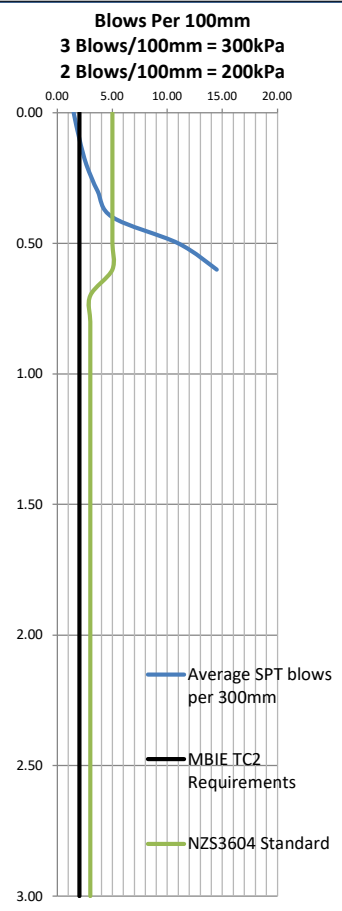
Location: Rosemerryn, Stage 24A, Lot 975


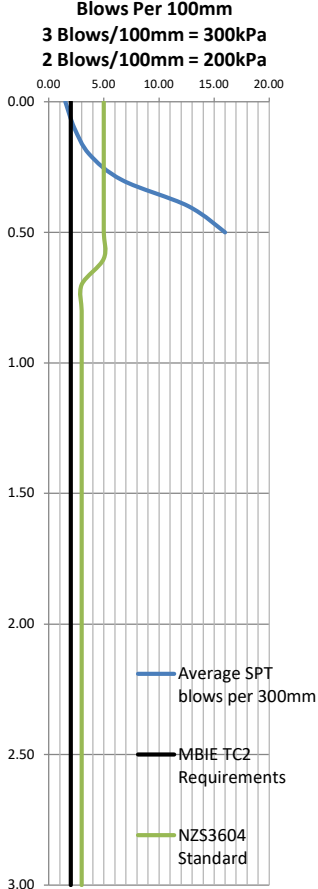
Logged By: Sam Medicott




Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
		0.00 - 0.10	2	3.50	3.65
		0.01 - 0.20	5	4.67	10.19
		0.20 - 0.30	7	11.33	14.86
		0.30 - 0.40	22	14.50	53.57
		0.40 - 0.50			
		0.50 - 0.60			
		0.60 - 0.70			
		0.70 - 0.80			
		0.80 - 0.90			
		0.90 - 1.00			
		1.00 - 1.10			
		1.10 - 1.20			
		1.20 - 1.30			
		1.30 - 1.40			
		1.40 - 1.50			
		1.50 - 1.60			
		1.60 - 1.70			
		1.70 - 1.80			
		1.80 - 1.90			
		1.90 - 2.00			
		2.00 - 2.10			
		2.10 - 2.20			
		2.20 - 2.30			
		2.30 - 2.40			
		2.40 - 2.50			
		2.50 - 2.60			
		2.60 - 2.70			
		2.70 - 2.80			
		2.80 - 2.90			
		2.90 - 3.00			

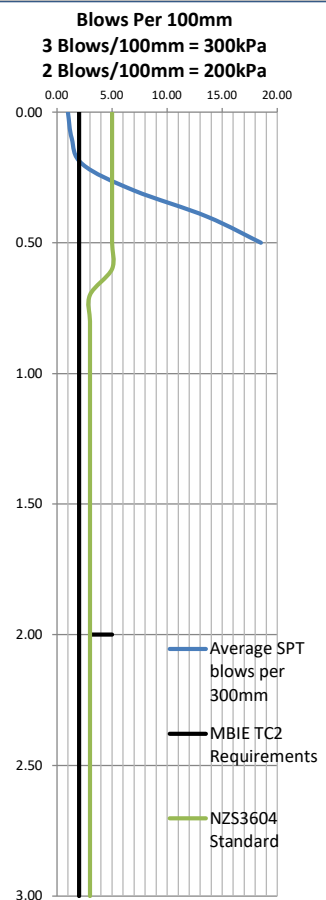


		Scala Penetrometer Log				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 1
Stage 24A		Lot 976				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24A , Lot 976				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
Topsoil		0.00 - 0.10	2	1.50	3.65	
		0.01 - 0.20	1	2.00	1.68	
Sandy silt, Brown		0.20 - 0.30	3	2.67	5.75	
		0.30 - 0.40	4	3.67	7.94	
		0.40 - 0.50	4	5.00	7.94	
		0.50 - 0.60	7	11.00	14.86	
Refusal		0.60 - 0.70	22	14.50	53.57	
		0.70 - 0.80				
		0.80 - 0.90				
		0.90 - 1.00				
		1.00 - 1.10				
		1.10 - 1.20				
		1.20 - 1.30				
		1.30 - 1.40				
		1.40 - 1.50				
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
2.30 - 2.40						
2.40 - 2.50						
2.50 - 2.60						
2.60 - 2.70						
2.70 - 2.80						
2.80 - 2.90						
2.90 - 3.00						



 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 2	
		Stage 24A		Lot 976			
		Date: 18/03/2026					
		Location: Rosemerryn, Stage 24A, Lot 976					
Logged By: Sam Medicott							
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p> 	
		0.00 - 0.10	2	1.50	3.65		
		0.01 - 0.20	1	2.33	1.68		
		0.20 - 0.30	4	3.67	7.94		
		0.30 - 0.40	6	6.67	12.50		
		0.40 - 0.50	10	12.67	22.15		
		0.50 - 0.60	22	16.00	53.57		
		0.60 - 0.70					
		0.70 - 0.80					
		0.80 - 0.90					
		0.90 - 1.00					
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 3
Stage 24A		Lot 976				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24A, Lot 976				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
Topsoil		0.00 - 0.10	1	1.00	1.68	
		0.01 - 0.20	1	1.33	1.68	
		0.20 - 0.30	2	2.33	3.65	
Sandy silt, Brown Refusal		0.30 - 0.40	4	7.00	7.94	
		0.40 - 0.50	15	13.67	34.88	
		0.50 - 0.60	22	18.50	53.57	
		0.60 - 0.70				
		0.70 - 0.80				
		0.80 - 0.90				
		0.90 - 1.00				
		1.00 - 1.10				
		1.10 - 1.20				
		1.20 - 1.30				
		1.30 - 1.40				
		1.40 - 1.50				
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				





**Scala Penetrometer Log**

Job No: 21373  
SPT No: 4

Project: Foundation Testing - Rosemerryn

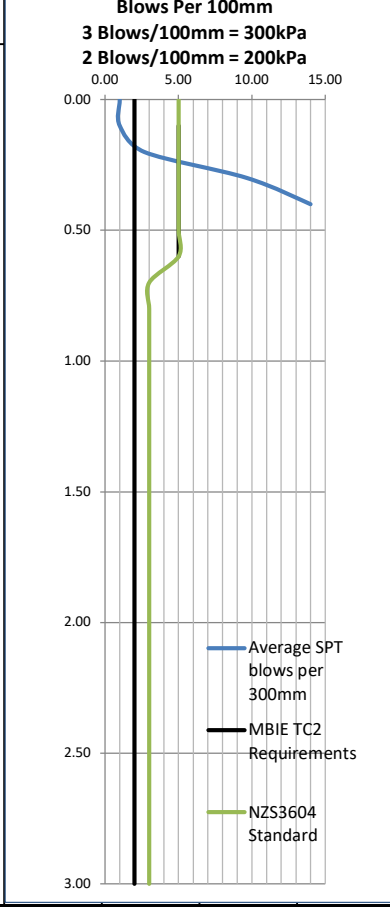
Stage 24A Lot 976


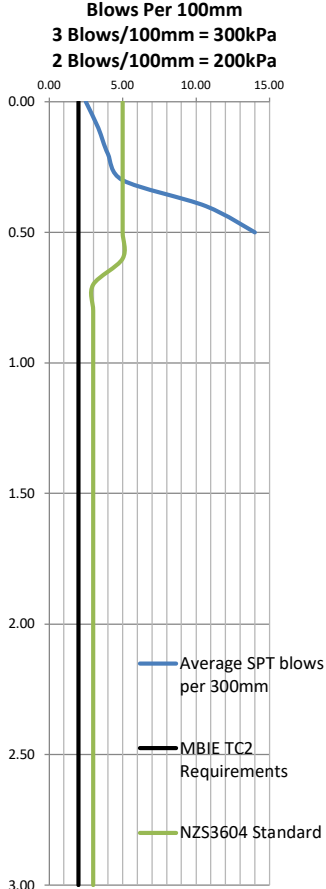


Date: 18/03/2026

Location: Rosemerryn, Stage 24A, Lot 976

Logged By: Sam Medicott

Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
		0.00 - 0.10	1	1.00	1.68
		0.01 - 0.20	1	1.00	1.68
		0.20 - 0.30	1	2.67	1.68
		0.30 - 0.40	6	9.67	12.50
		0.40 - 0.50	22	14.00	53.57
		0.50 - 0.60			
		0.60 - 0.70			
		0.70 - 0.80			
		0.80 - 0.90			
		0.90 - 1.00			
		1.00 - 1.10			
		1.10 - 1.20			
		1.20 - 1.30			
		1.30 - 1.40			
		1.40 - 1.50			
		1.50 - 1.60			
		1.60 - 1.70			
		1.70 - 1.80			
		1.80 - 1.90			
		1.90 - 2.00			
		2.00 - 2.10			
		2.10 - 2.20			
		2.20 - 2.30			
		2.30 - 2.40			
		2.40 - 2.50			
		2.50 - 2.60			
		2.60 - 2.70			
		2.70 - 2.80			
		2.80 - 2.90			
		2.90 - 3.00			



 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn			SPT No: 1	
		Stage	24A	Lot 977		
		Date:	18/03/2026			
		Location:	Rosemerryn, Stage 24A , Lot 977			
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard </p>
Topsoil		0.00 - 0.10	2	2.50	3.65	
		0.01 - 0.20	3	3.33	5.75	
		0.20 - 0.30	5	4.00	10.19	
Sandy silt, Brown		0.30 - 0.40	4	5.00	7.94	
		0.40 - 0.50	6	10.67	12.50	
Refusal		0.50 - 0.60	22	14.00	53.57	
		0.60 - 0.70				
		0.70 - 0.80				
		0.80 - 0.90				
		0.90 - 1.00				
		1.00 - 1.10				
		1.10 - 1.20				
		1.20 - 1.30				
		1.30 - 1.40				
		1.40 - 1.50				
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				



**DAVIE LOVELL-SMITH**  
 PLANNING SURVEYING ENGINEERING

**Scala Penetrometer Log**

Job No: 21373

Project: Foundation Testing - Rosemerryn

SPT No: 2

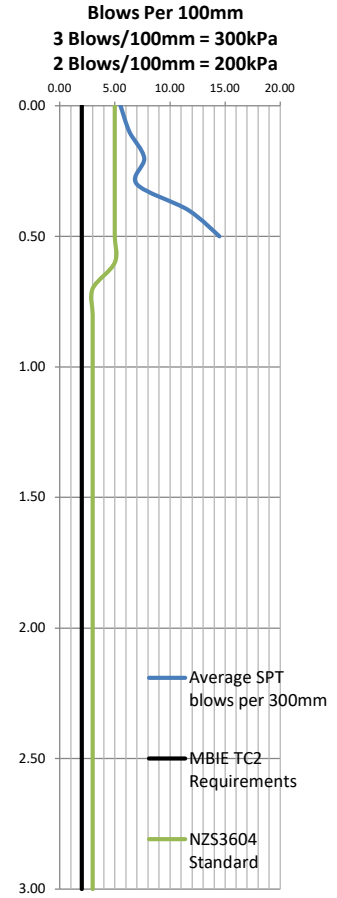
Stage 24A Lot 977


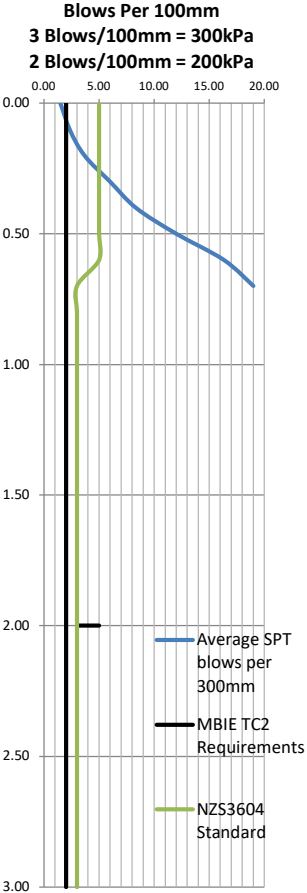
Date: 18/03/2026

Location: Rosemerryn, Stage 24A, Lot 977

Logged By: Sam Medicott

Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
		0.00 - 0.10	2	5.50	3.65
		0.01 - 0.20	9	6.33	19.68
		0.20 - 0.30	8	7.67	17.25
		0.30 - 0.40	6	7.00	12.50
		0.40 - 0.50	7	11.67	14.86
		0.50 - 0.60	22	14.50	53.57
		0.60 - 0.70			
		0.70 - 0.80			
		0.80 - 0.90			
		0.90 - 1.00			
		1.00 - 1.10			
		1.10 - 1.20			
		1.20 - 1.30			
		1.30 - 1.40			
		1.40 - 1.50			
		1.50 - 1.60			
		1.60 - 1.70			
		1.70 - 1.80			
		1.80 - 1.90			
		1.90 - 2.00			
		2.00 - 2.10			
		2.10 - 2.20			
		2.20 - 2.30			
		2.30 - 2.40			
		2.40 - 2.50			
		2.50 - 2.60			
		2.60 - 2.70			
		2.70 - 2.80			
		2.80 - 2.90			
		2.90 - 3.00			



 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 3	
		Stage 24A		Lot 977			
		Date:	18/03/2026				
		Location:	Rosemerryn, Stage 24A, Lot 977				
Logged By:	Sam Medicott						
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard         </p>	
		0.00 - 0.10	1	1.50	1.68		
		0.01 - 0.20	2	2.33	3.65		
		0.20 - 0.30	4	3.67	7.94		
		0.30 - 0.40	5	6.00	10.19		
		0.40 - 0.50	9	8.33	19.68		
		0.50 - 0.60	11	12.00	24.65		
		0.60 - 0.70	16	16.33	37.50		
		0.70 - 0.80	22	19.00	53.57		
		0.80 - 0.90					
		0.90 - 1.00					
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					



**Scala Penetrometer Log**

Job No: 21373

Project: Foundation Testing - Rosemerryn

SPT No: 4

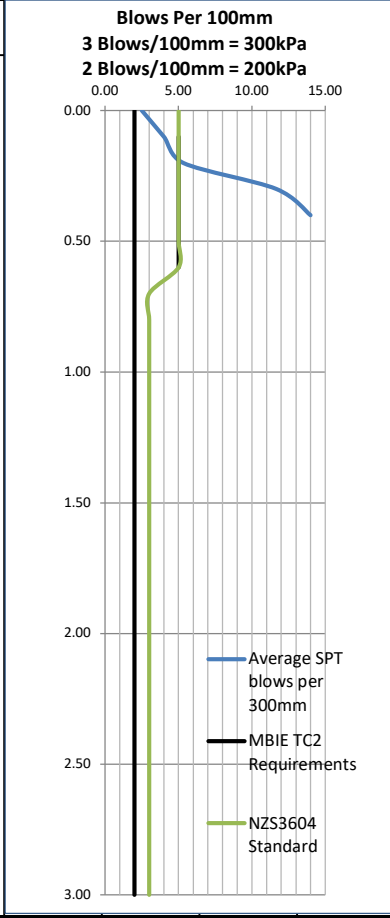
Stage 24A Lot 977


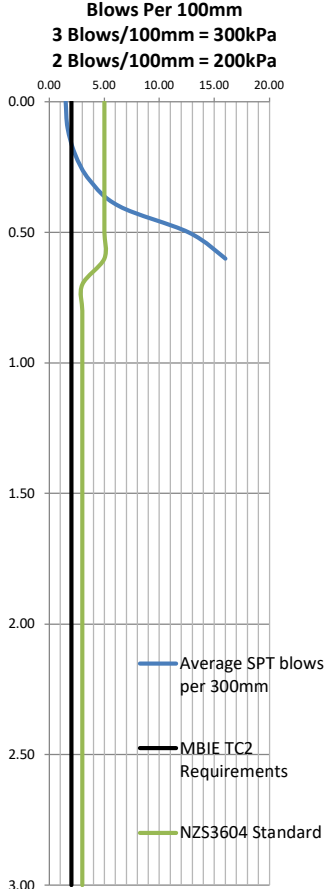


Date: 18/03/2026


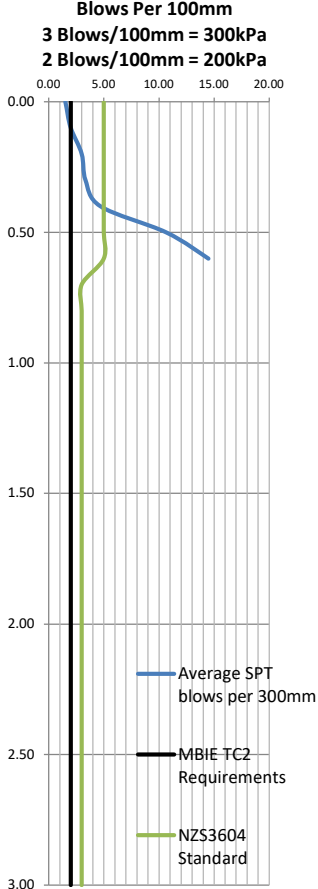
Location: Rosemerryn, Stage 24A, Lot 977




Logged By: Sam Medicott

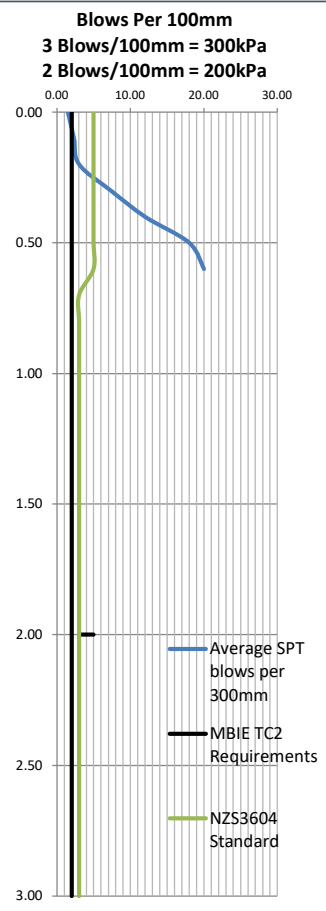
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
		0.00 - 0.10	2	2.50	3.65
		0.01 - 0.20	3	4.00	5.75
		0.20 - 0.30	7	5.33	14.86
		0.30 - 0.40	6	11.67	12.50
		0.40 - 0.50	22	14.00	53.57
		0.50 - 0.60			
		0.60 - 0.70			
		0.70 - 0.80			
		0.80 - 0.90			
		0.90 - 1.00			
		1.00 - 1.10			
		1.10 - 1.20			
		1.20 - 1.30			
		1.30 - 1.40			
		1.40 - 1.50			
		1.50 - 1.60			
		1.60 - 1.70			
		1.70 - 1.80			
		1.80 - 1.90			
		1.90 - 2.00			
		2.00 - 2.10			
		2.10 - 2.20			
		2.20 - 2.30			
		2.30 - 2.40			
		2.40 - 2.50			
		2.50 - 2.60			
		2.60 - 2.70			
		2.70 - 2.80			
		2.80 - 2.90			
		2.90 - 3.00			




 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 1	
		Stage <b>24A</b>		Lot <b>978</b>			
		Date:	18/03/2026				
		Location:	Rosemerryn, Stage 24A , Lot 978				
Logged By:		Sam Medicott					
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard </p>	
Topsoil		0.00 - 0.10	1	1.50	1.68		
		0.01 - 0.20	2	1.67	3.65		
		0.20 - 0.30	2	2.33	3.65		
		0.30 - 0.40	3	3.67	5.75		
Sandy silt, Brown		0.40 - 0.50	6	6.33	12.50		
		0.50 - 0.60	10	12.67	22.15		
Refusal		0.60 - 0.70	22	16.00	53.57		
		0.70 - 0.80					
		0.80 - 0.90					
		0.90 - 1.00					
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 2	
		Stage 24A		Lot 978			
		Date:	18/03/2026				
		Location:	Rosemerryn, Stage 24A, Lot 978				
Logged By:	Sam Medicott						
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard </p>	
		0.00 - 0.10	1	1.50	1.68		
		0.01 - 0.20	2	2.00	3.65		
		0.20 - 0.30	3	3.00	5.75		
		0.30 - 0.40	4	3.33	7.94		
		0.40 - 0.50	3	4.67	5.75		
		0.50 - 0.60	7	10.67	14.86		
		0.60 - 0.70	22	14.50	53.57		
		0.70 - 0.80					
		0.80 - 0.90					
		0.90 - 1.00					
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					

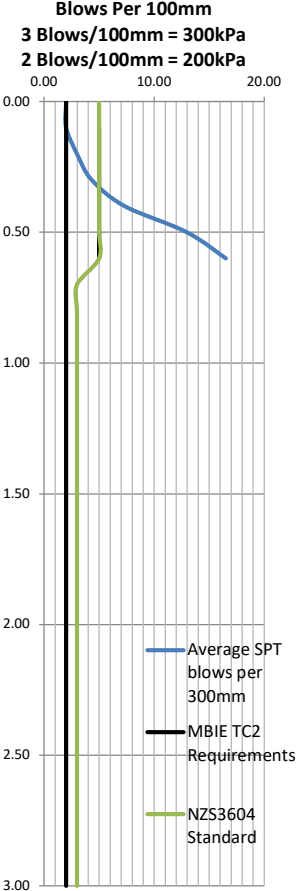
 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 3
Stage 24A		Lot 978				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24A, Lot 978				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
Topsoil		0.00 - 0.10	2	1.50	3.65	
		0.01 - 0.20	1	2.33	1.68	
		0.20 - 0.30	4	3.00	7.94	
Sandy silt, Brown		0.30 - 0.40	4	7.33	7.94	
		0.40 - 0.50	14	12.00	32.29	
Refusal		0.50 - 0.60	18	18.00	42.78	
		0.60 - 0.70	22	20.00	53.57	
		0.70 - 0.80				
		0.80 - 0.90				
		0.90 - 1.00				
		1.00 - 1.10				
		1.10 - 1.20				
		1.20 - 1.30				
		1.30 - 1.40				
		1.40 - 1.50				
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				




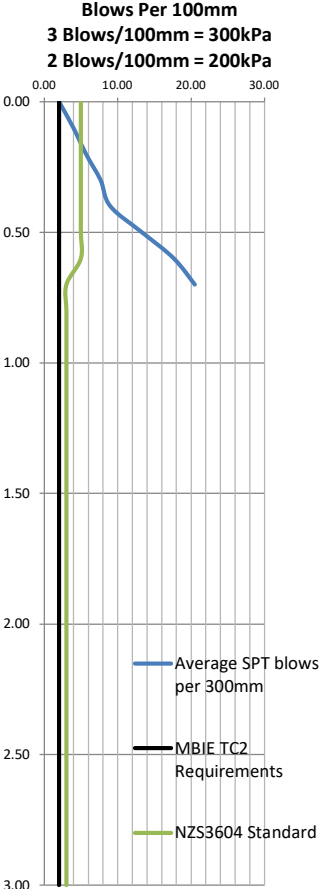


 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 4
Stage 24A		Lot 978				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24A , Lot 978				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	
		0.00 - 0.10	2	2.00	3.65	
		0.01 - 0.20	2	2.00	3.65	
		0.20 - 0.30	2	3.00	3.65	
		0.30 - 0.40	5	4.33	10.19	
		0.40 - 0.50	6	7.33	12.50	
		0.50 - 0.60	11	13.00	24.65	
		0.60 - 0.70	22	16.50	53.57	
		0.70 - 0.80				
		0.80 - 0.90				
		0.90 - 1.00				
		1.00 - 1.10				
		1.10 - 1.20				
		1.20 - 1.30				
		1.30 - 1.40				
		1.40 - 1.50				
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				


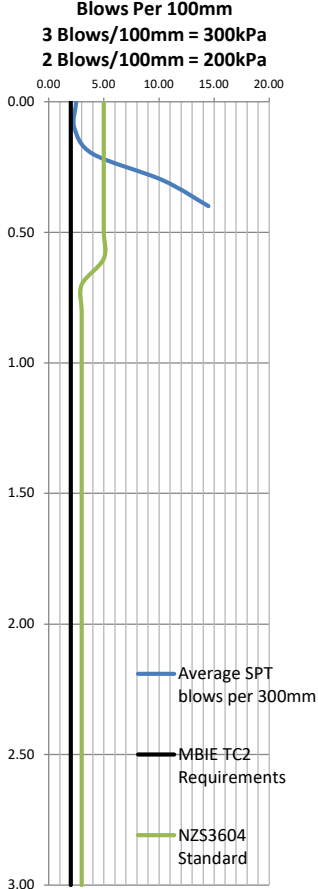
  


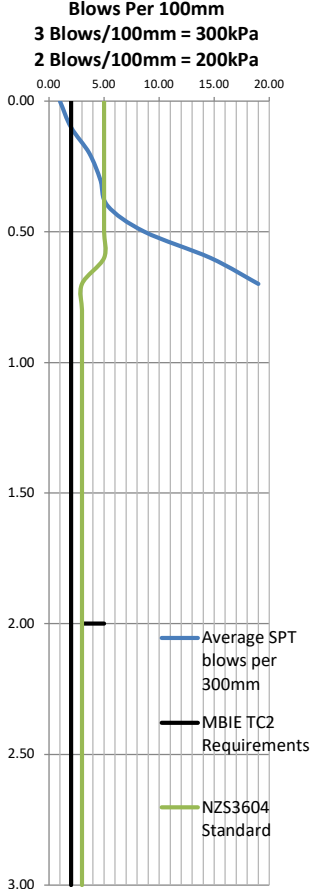
**Blows Per 100mm**  
**3 Blows/100mm = 300kPa**  
**2 Blows/100mm = 200kPa**



— Average SPT blows per 300mm  
— MBIE TC2 Requirements  
— NZS3604 Standard

		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn		SPT No: 1		
Stage 24A		Lot 978				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24A, Lot 978				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p> 
Topsoil		0.00 - 0.10	1	2.00	1.68	
		0.01 - 0.20	3	4.00	5.75	
		0.20 - 0.30	8	5.67	17.25	
Sandy silt, Brown Refusal		0.30 - 0.40	6	7.67	12.50	
		0.40 - 0.50	9	9.00	19.68	
		0.50 - 0.60	12	13.33	27.17	
		0.60 - 0.70	19	17.67	45.46	
		0.70 - 0.80	22	20.50	53.57	
		0.80 - 0.90				
		0.90 - 1.00				
		1.00 - 1.10				
		1.10 - 1.20				
		1.20 - 1.30				
		1.30 - 1.40				
		1.40 - 1.50				
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373	
		Project: Foundation Testing - Rosemerryn				SPT No: 2	
		Stage 24A		Lot 978			
		Date: 18/03/2026					
		Location: Rosemerryn, Stage 24A, Lot 978					
Logged By: Sam Medicott							
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p>  <p style="text-align: right;"> <span style="color: blue;">—</span> Average SPT blows per 300mm  <span style="color: black;">—</span> MBIE TC2 Requirements  <span style="color: green;">—</span> NZS3604 Standard </p>	
		0.00 - 0.10	2	2.50	3.65		
		0.01 - 0.20	3	2.33	5.75		
		0.20 - 0.30	2	4.00	3.65		
		0.30 - 0.40	7	10.33	14.86		
		0.40 - 0.50	22	14.50	53.57		
		0.50 - 0.60					
		0.60 - 0.70					
		0.70 - 0.80					
		0.80 - 0.90					
		0.90 - 1.00					
		1.00 - 1.10					
		1.10 - 1.20					
		1.20 - 1.30					
		1.30 - 1.40					
		1.40 - 1.50					
		1.50 - 1.60					
		1.60 - 1.70					
		1.70 - 1.80					
		1.80 - 1.90					
		1.90 - 2.00					
		2.00 - 2.10					
		2.10 - 2.20					
		2.20 - 2.30					
		2.30 - 2.40					
		2.40 - 2.50					
		2.50 - 2.60					
		2.60 - 2.70					
		2.70 - 2.80					
		2.80 - 2.90					
		2.90 - 3.00					

 <b>DAVIE LOVELL-SMITH</b> <small>PLANNING SURVEYING ENGINEERING</small>		<b>Scala Penetrometer Log</b>				Job No: 21373
		Project: Foundation Testing - Rosemerryn				SPT No: 3
Stage 24A		Lot 978				
Date:		18/03/2026				
Location:		Rosemerryn, Stage 24A, Lot 978				
Logged By:		Sam Medicott				
Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)	<p style="text-align: center;"><b>Blows Per 100mm</b>  <b>3 Blows/100mm = 300kPa</b>  <b>2 Blows/100mm = 200kPa</b></p> 
		0.00 - 0.10	1	1.00	1.68	
		0.01 - 0.20	1	2.00	1.68	
		0.20 - 0.30	4	3.67	7.94	
		0.30 - 0.40	6	4.67	12.50	
		0.40 - 0.50	4	5.33	7.94	
		0.50 - 0.60	6	8.67	12.50	
		0.60 - 0.70	16	14.67	37.50	
		0.70 - 0.80	22	19.00	53.57	
		0.80 - 0.90				
		0.90 - 1.00				
		1.00 - 1.10				
		1.10 - 1.20				
		1.20 - 1.30				
		1.30 - 1.40				
		1.40 - 1.50				
		1.50 - 1.60				
		1.60 - 1.70				
		1.70 - 1.80				
		1.80 - 1.90				
		1.90 - 2.00				
		2.00 - 2.10				
		2.10 - 2.20				
		2.20 - 2.30				
		2.30 - 2.40				
		2.40 - 2.50				
		2.50 - 2.60				
		2.60 - 2.70				
		2.70 - 2.80				
		2.80 - 2.90				
		2.90 - 3.00				



**Scala Penetrometer Log**

Job No: 21373  
SPT No: 4

Project: Foundation Testing - Rosemerryn

Stage 24A Lot 978

Date: 18/03/2026

Location: Rosemerryn, Stage 24A, Lot 978

Logged By: Sam Medicott

Description of Soils	Graphic	Depth (m)	SPT blows	Average SPT blows per 300mm	CBR (%)
		0.00 - 0.10	3	2.00	5.75
		0.01 - 0.20	1	2.00	1.68
		0.20 - 0.30	2	2.00	3.65
		0.30 - 0.40	3	3.67	5.75
		0.40 - 0.50	6	6.33	12.50
		0.50 - 0.60	10	12.67	22.15
		0.60 - 0.70	22	16.00	53.57
		0.70 - 0.80			
		0.80 - 0.90			
		0.90 - 1.00			
		1.00 - 1.10			
		1.10 - 1.20			
		1.20 - 1.30			
		1.30 - 1.40			
		1.40 - 1.50			
		1.50 - 1.60			
		1.60 - 1.70			
		1.70 - 1.80			
		1.80 - 1.90			
		1.90 - 2.00			
		2.00 - 2.10			
		2.10 - 2.20			
		2.20 - 2.30			
		2.30 - 2.40			
		2.40 - 2.50			
		2.50 - 2.60			
		2.60 - 2.70			
		2.70 - 2.80			
		2.80 - 2.90			
		2.90 - 3.00			

