

**AS 3798
LEVEL ONE
REPORT**

PREPARED FOR:

Company Name:

THE COTTAR TRUST t/a

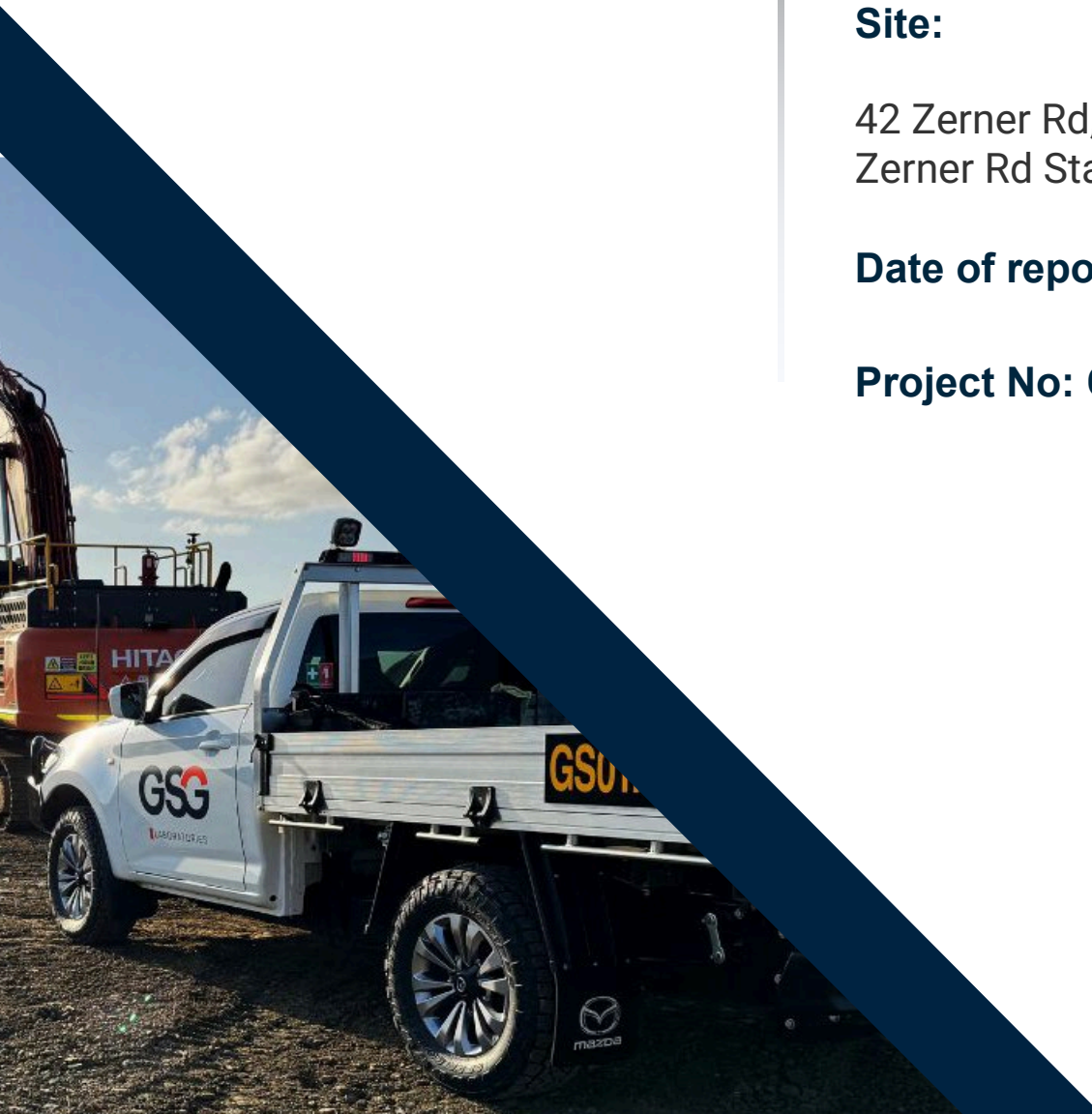
ROBERTS BROS PTY LTD

Site:

42 Zerner Rd, Pie Creek, 4570
Zerner Rd Stage 2

Date of report: 28 August 2026

Project No: GSGY-GLN-26-343



28 August 2026

THE COTTAR TRUST t/a ROBERTS BROS PTY LTD
42 Zerner Rd
Pie Creek, QLD, 4570

Attention: THE COTTAR TRUST t/a ROBERTS BROS PTY LTD

RE: GSGY-GLN-26-343
AS 3798 Level 1 Supervision Report

Dear THE COTTAR TRUST t/a ROBERTS BROS PTY LTD,

This letter presents a Level 1 Supervision report for testing services undertaken by GSG Laboratories during the placement of fill (earthworks) at 42 Zerner Rd, Stage 2.

The primary objective of level 1 inspection and testing is for GSG Laboratories to express an opinion on the compliance of the work performed during the fill placement of this project.

AS 3798 provides guidance on the specification, execution, and control testing of earthworks and associated site preparation works for commercial and residential developments.

Please do not hesitate to contact the undersigned should there be any queries regarding this report.

For and on behalf of GSG Laboratories.



Corey Van Straten

Corey Van Straten – Laboratory Manager

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a. Brisbane, Bundaberg, Gympie, Hervey Bay, Tamworth

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1. Referenced documents

The following document should be read and adhered to in relation to this report:

- Australian Standard AS 3798 - Guidelines on earthworks for commercial and residential developments.

2. Introduction

This report presents the results of field and laboratory activities (testing services) provided by GSG Laboratories during the placement of fill (earthworks) at **42 Zerner Rd, Pie Creek, Stage 2**.

The Cottar Trust t/a Roberts Bros PTY LTD requested GSG Laboratories as the geotechnical inspection and testing authority (GITA) to conduct Level 1 Inspection and Testing for the duration of these works in accordance with AS 3798 - Guidelines on earthworks for commercial and residential developments.

Level 1 testing, as defined in AS 3798 - Guidelines on earthworks for commercial and residential development, provides for full-time inspection for the placement of controlled fill and compaction testing in accordance with AS 1289 - Methods of testing soils for engineering purposes.

The Level 1 inspection and testing was performed during the period of 23 March 2026 to 19 August 2026

3. Site description

Level 1 inspection and testing was provided for the fill placed as indicated on the drawing in Appendix A.

Material selection and condition, as well as compaction testing, were conducted during the placement of the fill.

4. Site inspection and preparation

GSG Laboratories were present for the site stripping which included removal of topsoil, vegetation, and any other deleterious materials. After stripping, all areas were proof rolled prior to fill placement. Any area with movement were excavated and re-worked prior to fill being placed.

5. Placement specification

The project specification requires that earthworks comply with the following:

- Fill to be compacted in near horizontal layers not exceeding 300mm loose thickness and compacted to at least 95% of standard compaction.
- Moisture ratio of the fill material to be within **+/-2.0 %** of the optimum moisture content (OMC).

6. Construction

The following construction plant was used on this site during the placement of fill (earthworks).

- 2 x Padfoot compactor.
- 1 x Compactor
- 3 x Moxy dump truck.
- 2 x Excavator.
- 1 x Grader.
- 1 x Water cart.
- 2 x Bulldozer.
- 2 x Smooth drum roller.

7. Construction materials

The fill material used on this project was sourced from **Onsite Cut** and was assessed by GSG Laboratories to be free of debris, vegetative matter, and oversize material. Visual assessments of the material used were considered acceptable for use on this project. The fill product used is best described as a **Sandy Gravelly Clay**.

Any material that was found to be out of the moisture specification was conditioned using a water cart prior and during placement.

8. Fill placement

During fill placement, the material was placed in approximately 300mm loose layers.

The material was then compacted by means of a Compactor until compaction was achieved.

9. Field and laboratory testing

All nuclear density and compaction control testing was performed in accordance with AS 3798 - Table 5.1 - Minimum relative compaction and AS 3798 - Table 8.1 - Frequency of Field Density Tests.

Based on the layout plans provided by the client, a fill volume of approximately **29,040m³** was used on this project.

In accordance with AS 3798 - Table 8.1, the type of earthworks is Type 1 - Large scale operation, therefore, the frequency of testing was 1 test per 500m³ distributed reasonably evenly throughout full depth and area as per AS 3798 – Table 8.1.

A total of **58** compactions (AS 1289.5.7.1) and **58** density tests (AS 1289.5.8.1) were performed.

A summary of the results and test certificates are included in Appendix B.

10. Conclusion

GSG Laboratories has provided Level 1 inspection and testing services during the placement of fill (earthworks) at **Zerner Rd Stage 2** between 23 March 2026 and 19 August 2026

A technician from GSG Laboratories was on-site full-time during fill placement and observed the construction techniques adopted.

Based on the observations made by GSG Laboratories personnel and the results of field and laboratory tests, GSG Laboratories consider that the fill has been placed in general accordance with the intent of the specification and AS 3798.

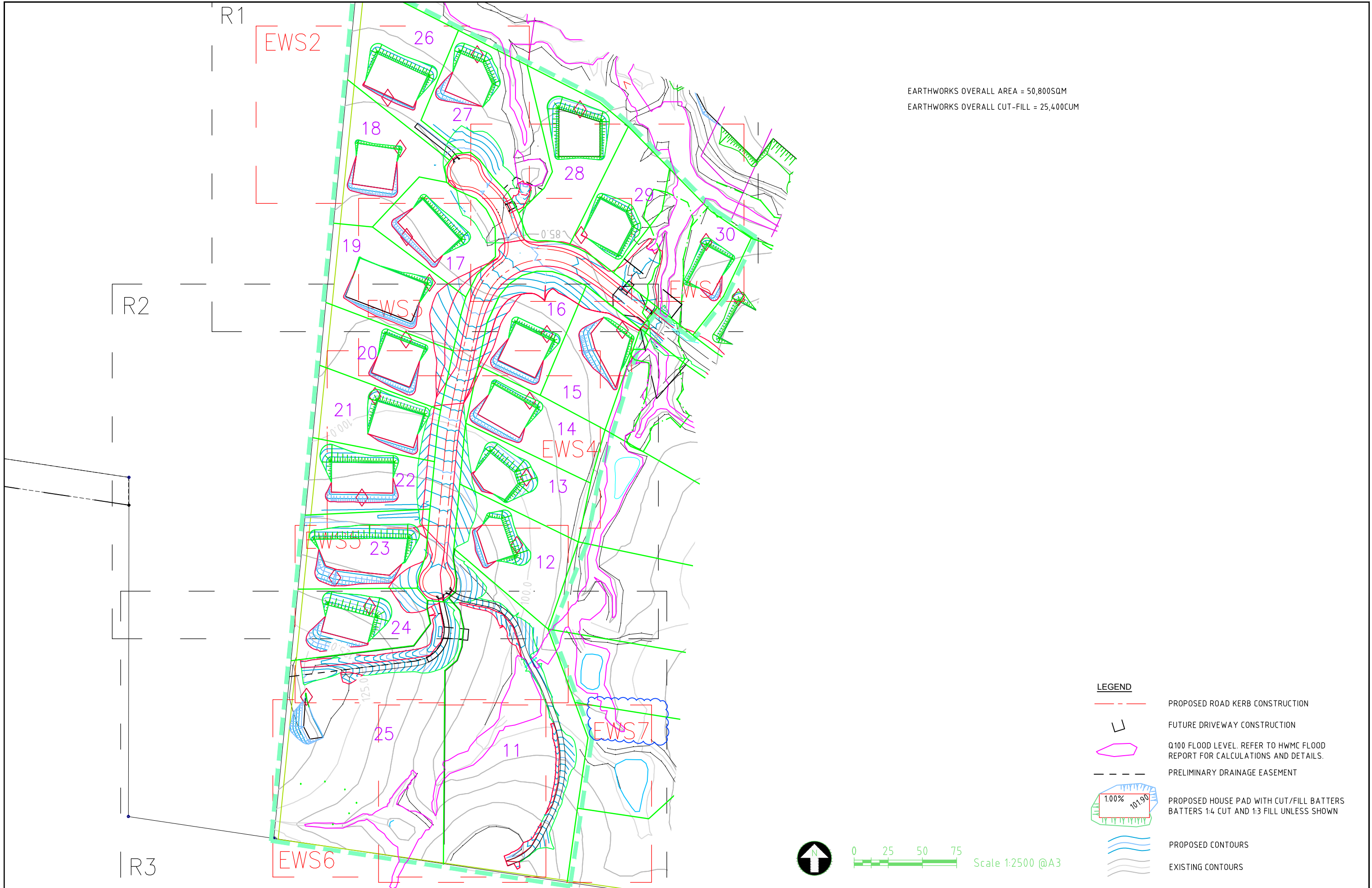
Any placement of fill that has occurred during the above periods within the defined areas can be classified as 'Controlled Fill'. Any placement of fill that was placed and compacted outside the above periods of the Level 1 inspection and testing supervision will require a separate evaluation, as this fill may not be suitable nor appropriately compacted.

Advice should be sought if uncontrolled fill is encountered.

11. Conditions of this report

- a) The extent of testing associated with this assessment is limited to discrete testing locations. It should be noted that subsurface conditions can vary from the testing locations observed during the field work and used as the basis of the recommendations contained in this report. If subsurface conditions encountered differ from those given in this report further advice should be sought immediately.
- b) The conclusion presented in this report are relevant to the conditions of the site and the state of legislation currently enacted as at the date of this report. Findings and conclusions are made assuming that the soil, groundwater, geological and chemical conditions detailed within this report are accurate and remain applicable to the site at the time of writing. No other warranties are made or intended.
- c) Unless otherwise stated, Level 1 certification does not address trench backfill operations, batter slope stability, retaining wall construction, global stability analysis, acid sulphate testing and or management.
- d) The 'supervision' component of this Level 1 report is not NATA accredited.
- e) GGS Laboratories must be contacted if any site levels are modified whatsoever.
- f) It is the client's responsibility to maintain site drainage after the issue of this report.
- g) This report may not be reproduced except in full, and only with the permission of GSG Laboratories. The information shall only be used and is only applicable for this site.

Appendix A – Site plan



A3					PSM/(AHD)RL	753689/65.093 AHD VIA CORS	 HAYNES CONSULTING ENGINEERS	HAYNES CONSULTING ENGINEERS ABN 53 613 630 078 PO BOX 549 NOOSA HEADS QLD 4567 (0432) 784 150	RIGBY STAGE 2 LOT 1 RP216216, 20 LOTS ROADWORKS AND DRAINAGE OPW 42 ZERNER ROAD, PIE CREEK, FOR ROBERTS BROS. PTY LTD EARTHWORKS	2109-S2 Sheet No. - Revision No. EW 0
	0	7-1-26	FOR CONSTRUCTION	ATH	SURVEYED	MURRAY AND ASSOC				
	Rv	DATE	REVISIONS	APPR.	RPEQ NO.	13201				
					RPEQ NAME	ALLISTER HAYNES				
					CERTIFIED					

Appendix B – Test Results

Project Summary Report



LABORATORIES

Gympie Laboratory

1 Dennis Little Drive Glanmire QLD 4570

Phone: (07) 4128 3213

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Report Date: 28/08/2026
Client: THE COTTAR TRUST t/a ROBERTS BROS PTY LTD
 42 Zerner Road, Pie Creek QLD 4570
Contact: PHIL ROBERTS
Project Number: GSGY-GLN-26-343
Project Name: Roberts Brothers Rigby Stage 2
Project Location: 42 Zerner Road, Pie Creek, QLD, 4570
Specification: Minimum 95% Hilt Density Ratio
Test Methods: AS 1289 5.7.1 STD & 5.8.1 & 2.1.1

Lot #	Sample #	Date Sampled	Location	Easting	Northing	Elevation (m)	Layer	Relative Compaction (%)	Moisture Variation (%)	Moisture Content (%)	Field Wet Density (t/m3)
23	G6844A	23/03/2026	Lot 23	463547.264	7096973.757	112.787	Embankment Fill	98.0	-1.0	15.1	2.06
23	G6844B	23/03/2026	Lot 23	463524.224	7096975.884	113.129	Embankment Fill	99.5	0.0	15.3	2.11
23	G6844C	23/03/2026	Lot 23	463548.985	7096983.320	112.251	Embankment Fill	102.5	-0.5	19.5	2.12
23	G6844D	23/03/2026	Lot 23	463523.360	7096979.522	112.361	Embankment Fill	103.0	-0.5	20.8	2.13
12	G6831A	23/03/2026	Lot 12	463626.557	7096983.388	104.944	Embankment Fill	104.0	2.0	15.9	2.17
12	G6831B	23/03/2026	Lot 12	463643.357	7096975.288	104.494	Embankment Fill	103.5	2.0	13.2	2.13
**	G6885A	25/03/2026	Road 3	540	0.0 from CL	**	GST	105.5	3.0	9.4	2.24
**	G6885B	26/03/2026	Road 3	440	-1.5 from CL	**	GST	97.5	0.0	21.3	1.97
21	G6926A	31/03/2026	Lot 21	463572.714	7097066.848	100.966	Embankment Fill	97.5	-2.0	23.9	1.99
21	G6926B	31/03/2026	Lot 21	463556.750	7097070.721	101.00	Embankment Fill	100.0	-2.0	23.2	2.02
14	G6927A	31/03/2026	Lot 14	463653.642	7097081.999	96.63	Embankment Fill	98.5	2.0	17.1	2.16
13	G6928A	31/03/2026	Lot 13	463642.666	7097038.485	101.20	Embankment Fill	101.0	-1.0	25.3	2.01
**	G6931A	31/03/2026	Road 3 - Subgrade Replacement Layer 1	440	-2.0 from CL	**	Subgrade Replacement Layer 1	101.5	1.0	10.5	2.25
**	G6931B	31/03/2026	Road 3 - Subgrade Replacement Layer 1	540	1.0 from CL	**	Subgrade Replacement Layer 1	102.0	0.5	10.7	2.28
13	G6928B	01/04/2026	Lot 13	463628.016	7097034.531	101.779	Embankment Fill	99.0	-0.5	22.6	2.01
**	G7003A	17/04/2026	Lot 26	463545.123	7097324.688	83.465	Embankment Fill	99.0	-1.0	21.6	2.00
**	G7003B	17/04/2026	Lot 26	463572.814	7097318.147	83.499	Embankment Fill	95.5	-0.5	22.2	1.93
**	G6943A	17/04/2026	Lot 19	463590.000	7097166.613	92.04	Embankment Fill	105.5	2.0	14.4	2.18
**	G6943B	17/04/2026	Lot 19	463571.300	7097182.380	91.96	Embankment Fill	103.5	2.0	15.3	2.21
**	G7002A	17/04/2026	Lot 17	463585.018	7097225.266	89.155	Embankment Fill	101.5	0.0	18.6	2.12
**	G7002B	17/04/2026	Lot 17	463596.856	7097206.057	89.216	Embankment Fill	104.5	0.0	19.8	2.18
**	G7004A	21/04/2026	Lot 27	463610.832	7097319.915	79.848	Embankment Fill	101.5	-2.0	23.1	2.11
**	G7004B	21/04/2026	Lot 27	463612.313	7097309.609	80.004	Embankment Fill	99.0	-2.0	23.8	2.03
**	G7009A	24/04/2026	Lot 18	463560.864	7097260.479	88.04	Embankment Fill	102.0	2.0	17.7	2.06
**	G7009B	24/04/2026	Lot 18	463544.821	7097267.720	87.99	Embankment Fill	104.0	2.0	16.3	2.08
16	G7096A	30/04/2026	Lot 16	463648.070	7097136.911	92.39	Embankment Fill	102.5	1.5	19.1	2.03
16	G7096B	30/04/2026	Lot 16	463662.945	7097126.663	92.44	Embankment Fill	102.0	1.5	19.4	2.03
**	G7098A	30/04/2026	Road 3 GST	340	-2.0 from CL	**	GST	96.0	0.5	15.1	2.06
**	G7098B	30/04/2026	Haack Court GST	40	1.5 from CL	**	GST	100.5	1.5	21.8	1.99
**	G7073A	07/05/2026	Lot 28	463705.439	7097285.609	81.912	Embankment Fill	100.5	-1.0	17.8	2.11
**	G7073B	07/05/2026	Lot 28	463696.352	7097287.220	81.890	Embankment Fill	103.0	-1.0	21.0	2.15
**	G7073C	07/05/2026	Lot 28	463704.035	7097275.214	82.015	Embankment Fill	98.0	-0.5	18.7	2.05
**	G7120A	07/05/2026	Road 3	540	0.0 from CL	**	Subgrade Replacement Layer 2	102.5	3.5	9.8	2.19
**	G7121A	07/05/2026	Road 3	340	-0.8 from CL	**	Subgrade Replacement Layer 1	98.5	1.5	9.5	2.21
**	G7121B	07/05/2026	Road 3	240	0.3 from CL	**	Subgrade Replacement Layer 1	98.5	2.0	9.6	2.17
**	G7121C	07/05/2026	Haack Court	60	-1.0 from CL	**	Subgrade Replacement Layer 1	99.0	1.5	9.7	2.17
**	G7122A	07/05/2026	Road 3	240	0.5 from CL	**	GST	96.5	2.0	10.9	2.12
**	G7120B	12/05/2026	Road 3	240	-0.4 from CL	**	Subgrade Replacement Layer 2	102.0	1.0	12.2	2.23
**	G7120C	12/05/2026	Road 3	340	-1.0 from CL	**	Subgrade Replacement Layer 2	101.0	2.0	9.6	2.24
**	G7120D	12/05/2026	Road 3	440	0.4 from CL	**	Subgrade Replacement Layer 2	103.5	2.0	11.7	2.24
**	G7120E	12/05/2026	Haack Court	60	0.5 from CL	**	Subgrade Replacement Layer 2	100.5	2.0	10.3	2.19
22	G7097A	12/05/2026	Lot 22	463563.853	7097030.227	105.407	Embankment Fill	98.5	-0.5	21.2	2.04
22	G7097B	12/05/2026	Lot 22	463542.791	7097032.884	105.363	Embankment Fill	96.5	-0.5	20.2	2.00
25	G7177A	21/05/2026	Lot 25	463518.989	7096837.598	126.124	Embankment Fill	96.5	-0.5	14.9	2.12
20	G7225A	02/06/2026	Lot 20	463555.920	7097125.228	96.526	Embankment Fill	98.0	-1.5	22.6	2.04
20	G7225B	02/06/2026	Lot 20	463570.092	7097117.047	96.524	Embankment Fill	97.5	-2.0	23.2	2.02
24	G7138A	02/06/2026	Lot 24	463507.394	7096934.763	121.674	Embankment Fill	101.0	2.0	16.5	2.05
24	G7138B	02/06/2026	Lot 24	463521.905	7096927.803	121.703	Embankment Fill	101.5	1.5	18.2	2.08

Lot #	Sample #	Date Sampled	Location	Easting	Northing	Elevation (m)	Layer	Relative Compaction (%)	Moisture Variation (%)	Moisture Content (%)	Field Wet Density (t/m3)
24	G7138C	02/06/2026	Lot 24	463540.041	7096928.460	121.626	Embankment Fill	103.0	2.0	18.1	2.11
27	G7226A	02/06/2026	Lot 27	463617.589	7097333.589	80.033	Embankment Fill	101.5	-1.5	23.2	2.11
27	G7226B	02/06/2026	Lot 27	463626.148	7097307.848	80.520	Embankment Fill	103.0	-1.5	23.6	2.16
**	G7460A	23/07/2026	Sparks CL / Road 3	200	-0.2 from CL	**	2.3 Layer	105.5	3.0	4.9	2.42
**	G7460B	23/07/2026	Sparks CL / Road 3	300	1.5 from CL	**	2.3 Layer	105.5	3.5	4.7	2.39
**	G7460C	23/07/2026	Sparks CL / Road 3	400	-1.0 from CL	**	2.3 Layer	103.5	2.5	4.4	2.35
**	G7460D	23/07/2026	Sparks CL / Road 3	500	-0.5 from CL	**	2.3 Layer	103.5	2.5	4.9	2.36
**	G7460E	23/07/2026	Hacck Court / Road 4	65	0.3 from CL	**	2.3 Layer	103.0	3.5	5.2	2.36
**	G7461A	23/07/2026	Lot 29	463717.346	7097236.765	84.10	Embankment Fill	100.0	1.5	14.9	2.11
**	G7461B	23/07/2026	Lot 29	463731.315	7097231.903	84.04	Embankment Fill	99.0	2.0	12.6	2.09
**	G7461C	23/07/2026	Lot 29	463714.473	7097220.804	84.22	Embankment Fill	99.0	2.0	12.8	2.11
**	G7462A	23/07/2026	Lot 28	463681.041	7097278.873	82.00	Embankment Fill	101.0	-2.0	24.9	2.06
**	G7462B	23/07/2026	Lot 28	463680.249	7097293.923	81.80	Embankment Fill	97.0	-1.0	19.4	2.04
**	G7463A	23/07/2026	Lot 27	463624.373	7097315.830	80.55	Embankment Fill	101.5	-2.0	25.0	2.03
**	G7463B	23/07/2026	Lot 27	463606.313	7097326.746	80.50	Embankment Fill	99.5	-2.0	23.7	2.02
**	G7464A	23/07/2026	Lot 26	463553.005	7097321.399	83.64	Embankment Fill	95.5	-2.0	22.3	1.93
**	G7464B	23/07/2026	Lot 26	463569.367	7097329.941	83.50	Embankment Fill	96.5	-2.0	21.5	1.96
**	G7465A	23/07/2026	Lot 24	463531.045	7096919.704	121.65	Embankment Fill	98.0	-0.5	20.3	2.01
**	G7466A	23/07/2026	Lot 25	463509.163	7096823.143	129.20	Embankment Fill	96.5	0.0	13.7	2.06
**	G7466B	23/07/2026	Lot 25	463516.747	7096842.178	128.90	Embankment Fill	101.0	2.0	13.2	2.15
**	G7466C	23/07/2026	Lot 25	463521.758	7096859.458	128.90	Embankment Fill	97.5	0.0	14.0	2.09
**	G7466D	23/07/2026	Lot 25	463523.161	7096874.147	128.45	Embankment Fill	98.5	1.5	12.6	2.11
**	G7467A	23/07/2026	Lot 12	463641.530	7096992.076	104.50	Embankment Fill	99.0	-1.0	21.2	2.04
**	G7468A	23/07/2026	Lot 14	463673.312	7097070.462	96.25	Embankment Fill	98.5	-0.5	16.0	2.16
**	G7568A	19/08/2026	Road 3/ Sparks CL	200	-0.5 from CL	**	2.1 Base Layer	100.0	4.0	4.8	2.28
**	G7568B	19/08/2026	Road 3/ Sparks CL	300	-1.3 from CL	**	2.1 Base Layer	100.5	1.5	5.8	2.32
**	G7568C	19/08/2026	Road 3/ Sparks CL	400	0.9 from CL	**	2.1 Base Layer	101.5	2.5	5.6	2.36
**	G7568D	19/08/2026	Road 3/ Sparks CL	500	1.1 from CL	**	2.1 Base Layer	100.0	2.5	5.5	2.32
**	G7568E	19/08/2026	Road 4/ Hacck Ct	40	0.0 from CL	**	2.1 Base Layer	100.0	2.0	6.2	2.29

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC