

22nd October 2025

Ref No: 943_Level 1_26 Gibbings Court, Lilywood

REPORT ON LEVEL 1

EARTHWORKS INSPECTION AND TESTING



Project: 26 Gibbings Court, Lilywood

Contractor: SEE Civil Pty Ltd

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1 Introduction

1.0 GENERAL

Australian Soil & Concrete Testing P/L (ASCT) was commissioned by Mr. James Dunne, on behalf of SEE Civil Pty Ltd (the Contractor). ASCT was engaged in the role of *Geotechnical Inspection & Testing Authority* (the GITA), to provide 'Level 1' services in accordance with section 8.2 of AS 3798 – '*Guidelines on earthworks for commercial and residential developments*'.

This engagement included the inspection and testing of construction earthworks at 26 Gibbings Court development, Upper Caboolture, Queensland. Specifically, the filling of allotment fill. A graphical representation of the extent of earthworks covered by this report, is provided in Appendix A.

The earthworks were undertaken by SEE Civil Pty Ltd (the Constructor).

1.1 SITE DESCRIPTION

The site is located at 26 Gibbings Court, Lilywood, Upper Caboolture shown below.



1.2 SITE GEOLOGY

Ck	Kurwongbah Beds	Phyllite, slate, basic metavolcanics
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Source: Moreton Geology Map

2.0 Earthworks

The subject earthworks were commenced on the 16/06/2025 and concluded on the 12/08/2025.

Filling operations were undertaken using site won materials. These materials generally consisted of Clays and Sandy Clays. The materials exhibited medium to high plasticity.

Fill materials were moisture conditioned, placed in layers not exceeding 300mm, and compacted in place using padfoot rollers.

3.0 Specifications

ASCT was provided with project specifications, which included requirements for;

Compaction	-	Minimum 95% Standard (AS 1289.5.7.1)
Moisture	-	Material OMC \pm 2% (AS 1289.5.1.1). Moisture Variation of -2% to +3%.
Layer	-	Max 300mm thickness.

In the absence of a project specific earthworks specification, ASCT adopted the following criteria;

Compaction	-	Minimum 95% Standard (AS 3798, Table 5.1).
Moisture	-	Material OMC \pm 2% (AS 3798, section 5.3).

4.0 Inspection & Testing Procedure

Inspections were provided by experienced ASCT Technicians, to confirm that earthworks were constructed to the principles of AS 3798 section 6.2 'Fill Construction'.

These inspections included (as appropriate);

- a) The adequate removal of topsoil and organics.
- b) The soundness of the fill foundation, to provide a dense stable surface for filling.
- c) The profile of the fill foundation, including appropriate benching/keying of slope interface.
- d) The placement of imported, and/or site won materials.
- e) The moisture conditioning of materials, and subsequent compaction.
- f) Test rolling.
- g) Testing (Field & Laboratory).

Testing was carried out by ASCT Technicians, in accordance with the Australian Standards AS 1289. The frequency of testing was in accordance with AS 3798 Table 8.1.

Test locations were randomly selected by ASCT. The tests were generally distributed evenly throughout the earthworks, having regard for any areas of concern observed during inspections.

The reported test locations were determined by ASCT. They were not professionally surveyed and should be considered as approximate only.

In the conduct of the inspections & testing (above), ASCT was afforded full access to the works without impairment or undue influence of any kind.

All test results (e.g.: Moisture Content, Moisture Variation & Relative Compaction) have been completed, calculated, rounded & reported strictly in accordance with the stated test methods – By ASCT, without fear or favour of any kind.

5.0 Results of Compliance Testing

The assessment of compaction test results against the specification, was conducted on a ‘not any to fail’ basis (see AS 3798 Appendix C). As such, if any test result failed to meet the specification - the earthworks portion represented by that test result has been re-worked & re-tested by ASCT.

ASCT can confirm that all test results indicate that the earthwork materials have been compacted in accordance with the project specification.

All test reports pertaining to the earthworks are included in [Appendix B](#).

A summary of the Field Density test reports is provided, below.

SUMMARY OF FIELD DENSITY TEST RESULTS

Sample Number	Sample Date	Location of Test		Level of Test	Density Ratio %
31286	16/06/2025	E:489303.4	N:7002049.2	R.L 21.4	103.0
31287	16/06/2025	E:489278.0	N:7002062.8	R.L 22.1	102.5
31288	16/06/2025	E:489259.1	N:7002045.4	R.L 24.0	102.5
31310	17/06/2025	E:489323.8	N:7002115.9	R.L 20.04	100.5
31311	17/06/2025	E:489336.8	N:7002137.8	R.L 20.28	97.5
31312	17/06/2025	E:489309.8	N:7002051.9	R.L 21.50	102.0
31328	18/06/2025	E:489331.8	N:7002120.9	R.L 21.21	101.0
31329	18/06/2025	E:489299.2	N:7002099.0	R.L 19.53	100.5
31330	18/06/2025	E:489277.7	N:7002050.1	R.L 23.5	102.0
31349	19/06/2025	E:489295.6	N:7002059.9	R.L 22.49	100.5
31350	19/06/2025	E:489293.2	N:7002101.5	R.L 20.49	98.0
31351	19/06/2025	E:489318.4	N:7002042.2	R.L 21.8	99.0
31374	20/06/2025	E:489308.6	N:7002049.9	R.L 23.06	102.5
31375	20/06/2025	E:489306.3	N:7002101.1	R.L 20.99	100.0
31376	20/06/2025	E:489339.7	N:7002152.1	R.L 18.73	102.5
31416	25/06/2025	E: 489349.6	N: 7002140.1	R.L: 22.10	103.5
31417	25/06/2025	E: 489326.1	N: 7002146.8	R.L: 20.30	100.5
31418	25/06/2025	E: 489321.0	N: 7002097.9	R.L: 22.20	105.5
31497	26/06/2025	E: 489335.17	N: 7002156.34	R.L: 25.60	101.5
31498	26/06/2025	E: 489291.57	N: 7002144.12	R.L: 26.34	101.0
31499	26/06/2025	E: 489291.61	N: 7002099.82	R.L: 25.04	105.0
31500	27/06/2025	E: 489338.15	N: 7002153.02	R.L: 25.57	103.5
31501	27/06/2025	E: 489332.14	N: 7002227.23	R.L: 22.19	102.0

31502	27/06/2025	E: 489288.63	N: 7002097.60	R.L: 24.96	101.0
31607	7/07/2025	E:489225.7	N:7002166.7	R.L 20.35	100.0
31608	7/07/2025	E:489201.1	N:7002173.7	R.L 20.49	101.5
31609	7/07/2025	E:489267.8	N:7002175.3	R.L 20.17	101.5
31610	7/07/2025	E:489294.4	N:7002088.1	R.L 23.5	96.0
31624	8/07/2025	E:489228.0	N:7002104.9	R.L 24.5	104.0
31625	8/07/2025	E:489235.9	N:7002119.1	R.L 23.85	103.0
31626	8/07/2025	E:489210.8	N:7002108.3	R.L 24.6	104.5
31663	9/07/2025	E:489137.8	N:7002149.7	R.L 17.4	100.5
31664	9/07/2025	E:489327.6	N:7002092.2	R.L 23.4	97.5
31665	9/07/2025	E:489318.4	N:7002111.9	R.L 23.08	95.0
31677	10/07/2025	E:489126.1	N:7002133.4	R.L 18.58	95.5
31678	10/07/2025	E:489124.1	N:7002148.7	R.L 18.1	102.5
31679	10/07/2025	E:489340.9	N:7002126.4	R.L 23.3	106.0
31680	10/07/2025	E:489359.4	N:7002132.1	R.L 23.73	98.5
31681	10/07/2025	E:489346.0	N:7002145.6	R.L 22.7	99.0
31682	10/07/2025	E:489339.9	N:7002035.2	R.L 21.80	98.5
31683	11/07/2025	E:489124.2	N:7002131.6	R.L 19.65	103.0
31684	11/07/2025	E:489200.5	N:7002159.3	R.L 20.93	103.5
31685	11/07/2025	E:489239.1	N:7002154.9	R.L 20.71	102.0
31686	11/07/2025	E:489288.1	N:7002155.3	R.L 21.1	104.0
31687	11/07/2025	E:489317.1	N:7002034.3	R.L 22.3	100.0
31702	12/07/2025	E:489334.6	N:7002127.9	R.L 23.5	105.5
31703	12/07/2025	E:489324.1	N:7002139.6	R.L 22.60	104.0
31704	12/07/2025	E:489299.7	N:7002077.3	R.L 24.60	95.5
31705	12/07/2025	E:489311.9	N:7002058.6	R.L 24.40	97.5
31743	14/07/2025	E:489113.3	N:7002134.9	R.L 20.44	102.0
31744	14/07/2025	E:489128.5	N:7002134.8	R.L 19.82	95.5
31745	14/07/2025	E:489329.5	N:7002138.3	R.L 22.64	103.0
31746	14/07/2025	E:489391.6	N:7002025.9	R.L 23.8	102.5
31747	14/07/2025	E:489362.8	N:7002038.4	R.L 24.0	104.0
31748	14/07/2025	E:489470.3	N:7001843.9	R.L 23.95	97.5
31751	15/07/2025	E:489501.8	N:7001920.9	R.L 24.96	99.0
31752	15/07/2025	E:489520.1	N:7001921.8	R.L 25.10	101.5
31753	15/07/2025	E:489475.7	N:7001905.7	R.L 24.76	101.0
31754	15/07/2025	E:489408.5	N:7001852.8	R.L 23.0	101.5
31755	15/07/2025	E:489414.6	N:7001889.9	R.L 23.5	101.0
31756	15/07/2025	E:489141.9	N:7002170.9	R.L 21.22	97.5
31757	15/07/2025	E:489167.1	N:7002168.4	R.L 21.09	100.0
31758	15/07/2025	E:489227.4	N:7002162.7	R.L 20.70	105.0
31759	15/07/2025	E:489401.3	N:7001870.2	R.L 24.0	101.0
31760	15/07/2025	E:489393.3	N:7002017.6	R.L 24.30	102.0
31775	16/07/2025	E:489333.9	N:7002135.2	RL:21.40	104.0
31776	16/07/2025	E:489353.9	N:7002135.2	RL:24.20	103.0
31777	16/07/2025	E:489326.9	N:7002128.1	RL:20.70	95.5



31778	16/07/2025	E:489351.8	N:7002108.2	RL:24.10	98.5
31779	16/07/2025	E:489251.3	N:7002137.8	RL:21.80	95.5
31780	16/07/2025	E:489258.1	N:7002145.2	RL:21.70	102.0
31781	16/07/2025	E:489287.4	N:7002142.3	RL:21.50	97.0
31782	16/07/2025	E:489234.1	N:7002138.9	RL:21.50	104.0
31786	17/07/2025	E:489340.9	N:7002161.0	RL:25.20	102.5
31787	17/07/2025	E:489321.9	N:7002157.9	RL:22.85	102.5
31788	17/07/2025	E:489345.7	N:7002138.9	RL:24.80	98.5
31789	17/07/2025	E:489347.5	N:7002123.2	RL:24.50	99.5
31790	17/07/2025	E:489251.7	N:7002126.1	RL:22.05	104.5
31791	17/07/2025	E:489284.6	N:7002153.1	RL:23.60	101.5
31792	17/07/2025	E:489292.7	N:7002162.9	RL:23.80	96.5
31884	22/07/2025	E:489325.6	N:7002162.7	RL:24.25	98.5
31885	22/07/2025	E:489345.3	N:7002154.5	RL:24.70	101.5
31886	22/07/2025	E:489324.5	N:7002147.2	RL:24.50	101.0
31887	22/07/2025	E:489291.6	N:7002098.4	RL:22.70	100.0
31888	22/07/2025	E:489291.4	N:7002096.7	RL:22.50	103.0
31889	22/07/2025	E:489296.7	N:7002094.5	RL:22.84	102.0
31928	23/07/2025	E:489298.8	N:7002100.5	RL:23.05	99.0
31929	23/07/2025	E:489313.2	N:7002169.2	RL:25.05	101.5
31930	23/07/2025	E:489299.7	N:7002151.8	RL:25.00	96.5
31931	23/07/2025	E:489332.0	N:7002156.0	RL:25.10	99.5
31932	23/07/2025	E:489276.0	N:7002179.0	RL:22.50	99.0
31933	23/07/2025	E:489300.0	N:7002211.0	RL:27.40	95.5
31934	23/07/2025	E:489214.0	N:7002156.0	RL:26.90	99.0
31935	23/07/2025	E:489254.0	N:7002137.0	RL:24.50	102.5
31985	24/07/2025	E:489224.0	N:7002141.0	RL:24.30	104.5
31986	24/07/2025	E:489235.0	N:7002162.0	RL:24.40	99.0
31987	24/07/2025	E:489283.0	N:7002140.0	RL:24.40	102.5
31988	24/07/2025	E:489206.3	N:7002134.1	R:24.50	102.0
31989	24/07/2025	E:489228.2	N:7002121.2	RL:24.55	104.5
31990	24/07/2025	E:489248.2	N:7002139.4	RL:25.10	102.0
31998	25/07/2025	E:489277.1	N:7002135.3	RL:24.85	96.5
31999	25/07/2025	E:489107.8	N:7002172.0	RL:19.20	95.5
32000	25/07/2025	E:489190.7	N:7002168.2	RL:23.30	100.5
32001	25/07/2025	E:489217.3	N:7002168.4	RL:23.40	97.5
32022	29/07/2025	E:489291.6	N:7002098.4	RL:22.70	102.0
32023	29/07/2025	E:489291.4	N:7002096.7	RL:22.50	99.0
32024	29/07/2025	E:489296.7	N:7002094.5	RL:22.84	100.5
32025	29/07/2025	E:489298.8	N:7002100.5	RL:23.05	101.0
32048	30/07/2025	E:489313.2	N:7002169.2	RL:25.05	102.5
32049	30/07/2025	E:489299.7	N:7002151.8	RL:25.00	103.0
32050	30/07/2025	E:489332.0	N:7002156.0	RL:25.10	99.5
32051	30/07/2025	E:489276.0	N:7002179.0	RL:22.50	103.0
32072	31/07/2025	E:489300.0	N:7002211.0	RL:27.40	99.0

32073	31/07/2025	E:489214.0	N:7002156.0	RL:26.90	97.0
32074	31/07/2025	E:489254.0	N:7002137.0	RL:24.50	99.0
32075	31/07/2025	E:489236.6	N:7002163.8	RL:23.65	101.0
32076	31/07/2025	E:489129.2	N:7002185.9	RL:19.80	101.0
32077	31/07/2025	E:489143.4	N:7002154.5	RL:23.60	102.0
32078	31/07/2025	E:489198.4	N:7002155.8	RL:23.70	97.5
32079	31/07/2025	E:489224.1	N:7002182.4	RL:24.05	101.0
32080	31/07/2025	E:489238.3	N:7002157.4	RL:24.60	104.0
32081	31/07/2025	E:489254.9	N:7002169.9	RL:24.80	103.5
32089	1/08/2025	E:489140.0	N:7002141.0	RL:22.95	103.5
32090	1/08/2025	E:489124.4	N:7002156.8	RL:22.80	104.0
32091	1/08/2025	E:489139.2	N:7002190.8	RL:20.85	101.5
32092	1/08/2025	E:489203.8	N:7002170.3	RL:24.05	96.5
32093	1/08/2025	E:489214.6	N:7002180.2	RL:24.20	95.5
32094	1/08/2025	E:489225.4	N:7002150.2	RL:24.90	95.5
32095	1/08/2025	E:489239.5	N:7002172.6	RL:25.05	104.0
32096	1/08/2025	E:489209.7	N:7002160.9	RL:24.45	95.5
32097	1/08/2025	E:489193.7	N:7002140.2	RL:24.60	95.5
32098	1/08/2025	E:489155.0	N:7002148.4	RL:22.90	107.0
32116	4/08/2025	E:489250.4	N:7002148.9	RL:25.75	96.0
32117	4/08/2025	E:489250.8	N:7002166.4	RL:25.65	95.5
32118	4/08/2025	E:489211.3	N:7002144.8	RL:25.30	95.5
32119	4/08/2025	E:489116.9	N:7002161.6	RL:24.25	96.0
32120	4/08/2025	E:489123.5	N:7002177.3	RL:21.40	106.5
32121	4/08/2025	E:489218.0	N:7002142.4	RL:26.85	97.5
32122	4/08/2025	E:489217.9	N:7002158.7	RL:25.90	100.0
32123	4/08/2025	E:489190.6	N:7002182.8	RL:25.70	96.5
32124	4/08/2025	E:489147.7	N:7002144.6	RL:24.20	105.5
32125	4/08/2025	E:489149.2	N:7002166.3	RL:23.20	98.0
32149	5/08/2025	E:489249.9	N:7002174.6	RL:26.30	99.0
32150	5/08/2025	E:489253.0	N:7002151.3	RL:26.20	97.5
32151	5/08/2025	E:489235.4	N:7002151.1	RL:26.35	97.5
32152	5/08/2025	E:489211.2	N:7002160.9	RL:26.30	96.5
32153	5/08/2025	E:489197.0	N:7002146.9	RL:25.90	100.5
32154	5/08/2025	E:489201.3	N:7002159.8	RL:25.80	100.0
32155	5/08/2025	E:489168.9	N:7002137.9	RL:24.50	95.5
32156	5/08/2025	E:489177.5	N:7002132.1	RL:23.60	100.5
32157	5/08/2025	E:489123.7	N:7002147.1	RL:23.65	101.0
32158	5/08/2025	E:489130.4	N:7002190.6	RL:23.20	102.5
32173	6/08/2025	E:489129.7	N:7002185.5	RL:23.60	102.0
32174	6/08/2025	E:489147.1	N:7002152.4	RL:24.70	104.0
32175	6/08/2025	E:489138.9	N:7002131.6	RL:24.80	103.0
32176	6/08/2025	E:489124.5	N:7002188.1	RL:23.50	101.5
32177	6/08/2025	E:489141.8	N:7002148.1	RL:24.60	97.5
32178	6/08/2025	E:489158.1	N:7002151.0	RL:24.50	96.0

32179	6/08/2025	E:489194.2	N:7002155.6	RL:25.90	99.0
32180	6/08/2025	E:489189.5	N:7002141.6	RL:25.95	98.5
32181	6/08/2025	E:489207.4	N:7002188.8	RL:25.80	101.0
32182	6/08/2025	E:489187.1	N:7002183.9	RL:25.85	101.5
32215	7/08/2025	E:489140.3	N:7002116.7	RL:25.05	96.5
32216	7/08/2025	E:489142.4	N:7002177.6	RL:25.40	99.0
32217	7/08/2025	E:489155.7	N:7002142.5	RL:25.70	103.5
32218	7/08/2025	E:489125.3	N:7002142.3	RL:24.70	106.5
32219	7/08/2025	E:489149.1	N:7002173.3	RL:25.40	97.0
32220	7/08/2025	E:489175.8	N:7002175.8	RL:25.45	102.5
32221	7/08/2025	E:489206.6	N:7002176.2	RL:25.50	102.0
32222	7/08/2025	E:489216.2	N:7002183.5	RL:25.60	102.5
32223	7/08/2025	E:489235.7	N:7002183.1	RL:25.50	102.5
32224	7/08/2025	E:489123.8	N:7002192.0	RL:24.20	99.0
32267	12/08/2025	E:489337.9	N:7002105.9	RL:24.65	98.5
32268	12/08/2025	E:489295.0	N:7002147.3	RL:25.40	100.0
32269	12/08/2025	E:489251.0	N:7002195.7	RL:26.10	104.0
32270	12/08/2025	E:489232.3	N:7002183.9	RL:25.85	101.0
32271	12/08/2025	E:489153.7	N:7002166.6	RL:25.50	103.5
32272	12/08/2025	E:489292.4	N:7002118.1	RL:24.80	103.5
32273	12/08/2025	E:489135.2	N:7002082.8	RL:23.70	100.0

No. of Tests: 179

Mean: 100.5%

6.0 Limitations

Unless otherwise stated in this report, this report does not address or include: Backfill behind retaining structures, Backfilling of service trenches, Any topsoil placed on the site, Slope stability, or Site drainage.

The following should also be considered:

- a. This report is not a SITE CLASS REPORT as per AS2870-2011 and not a Geotechnical Site Investigation Report as per AS1726-2017.
- b. The shrink/swell movements which can occur in the residual silty clays due to weather related natural moisture changes by the reduction in surface evaporation subsequent to covering the site with buildings and pavements. As outlined in AS2870-2011 (“Residential Slabs and Footings – Constructions”).
- c. It should be noted that there is a possibility that compaction levels may have increased during placement of subsequent layers especially when there have been fully laden earthmoving equipment frequently travel across the fill areas exerting high traffic loads.
- d. All compacted filling is subject to decompaction phenomenon.
- e. Compacted FILL usually experiences secondary settlement at a rate of about 1% x depth.

7.0 Conclusion

The earthworks have been conducted under section 8.2 - **Level 1 Inspection and Testing**, of AS 3798 – *Guidelines on earthworks for commercial and residential developments (2007)*.

Based on the inspections and field/laboratory testing, it is the opinion of ASCT that the earthworks are compliant with the project specifications.

Should you require any further assistance please do not hesitate to call this office.

Yours Faithfully,

A handwritten signature in black ink, appearing to read 'Mitchell Eaton'.

Mitchell Eaton (Laboratory Manager)

Australian Soil & Concrete Testing – Brisbane North

A handwritten signature in blue ink, appearing to read 'James Tayler'.

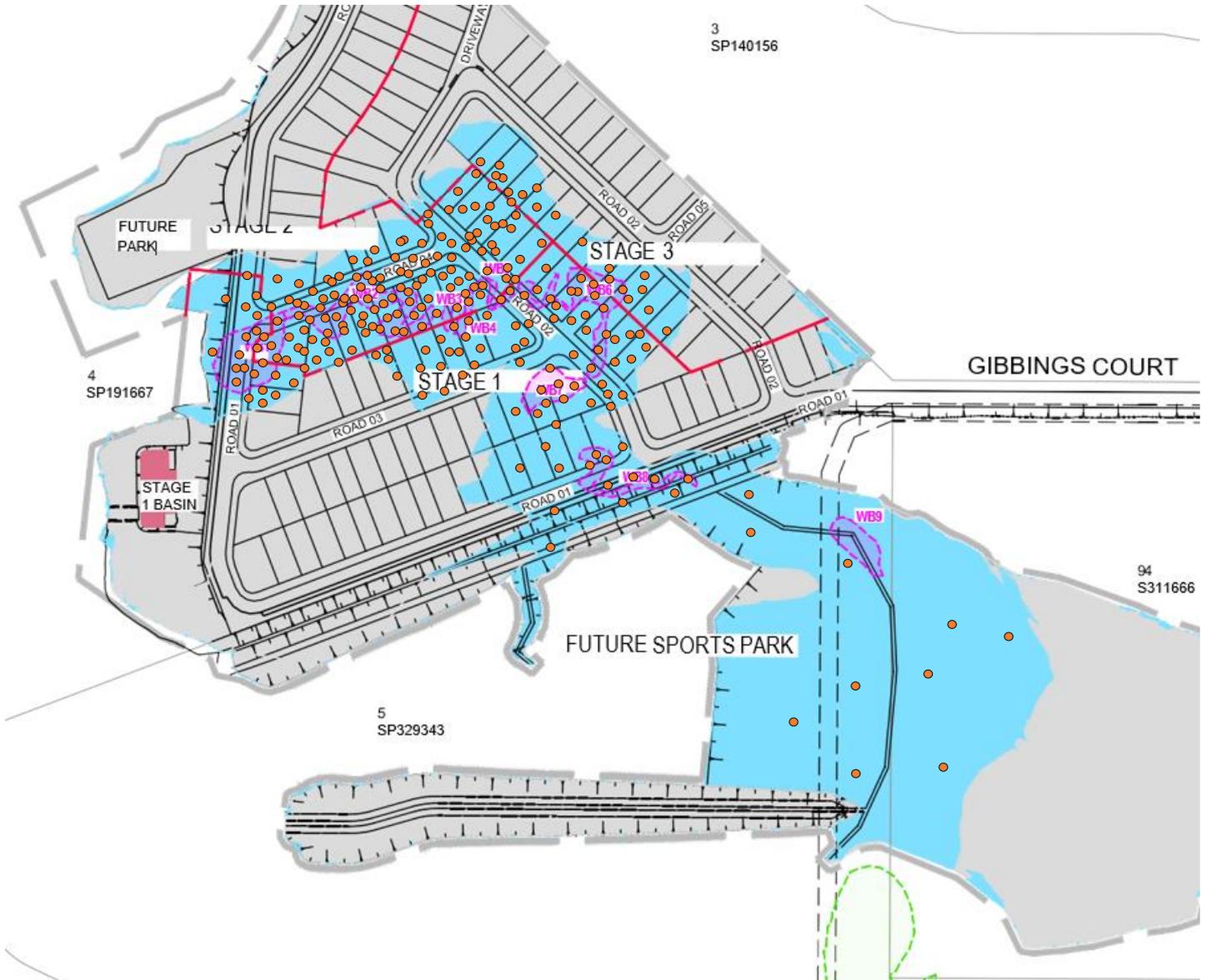
Reviewed By

James Tayler

Senior Engineer

RPEQ#1407

Appendix A – Extent of Earthworks



ASCT Brisbane North

Lab: 2/37 Northlink Place, Virginia, Qld 4014

(07) 3256 7536

Brisbane.North@asct.com.au



Appendix B – Test Reports

**ASCT Brisbane North**

(Postal Address is the same)

2/37 Northlink Place, Virginia, Qld 4014

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E-Mail: Brisbane.North@asct.com.au

Mobile: 0415 380 326

A.B.N. 92 602 346 127

Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 1

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill - Stage 1
 Lot Number:

Report No: **4**
 Report Date: 19/06/2025
 Project No: 943
 Test Request:
 ITP/PCP:

Sample Information & Location

Sample Number:		31286	31287	31288	-	-
Field Test Number:		1	2	3	-	-
Date - Field Tested:		16/06/2025	16/06/2025	16/06/2025	-	-
Time - Field Tested:		11:49	16:02	16:10	-	-
Material Source / Type:		Onsite Cut - Allotment Fill				
Remarks / Notes:						
Control Line:		Lot 111	Lot 112	Lot 114		
Location/Chainage/Easting:	(m)	E:489303.4	E:489278.0	E:489259.1	-	-
Position/Offset/Northing:	(m)	N:7002049.2	N:7002062.8	N:7002045.4	-	-
Level/Layer/R.L.		R.L 21.4	R.L 22.1	R.L 24.0	-	-
Layer Depth:	(mm)	300	300	300	-	-
Depth Tested:	(mm)	300	300	300	-	-

Field & Laboratory Results

Laboratory testing 17/06/2025

Field Wet Density:	(t/m ³)	2.06	2.00	2.07	-	-
Field Dry Density:	(t/m ³)	1.61	1.54	1.63	-	-
Retained Oversize (Wet basis):	(%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-	-
Material Description:		Clay, Brown	Clay, Brown	Clay, Brown	-	-
Moisture Content Method:		AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-
Field Moisture Content:	(%)	27.8	30.0	27.1	-	-
Adjusted Lab OMC:	(%)	25.4	28.0	25.0	-	-
Fraction Tested:		Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-	-
Lab Max Converted Wet Density:	(t/m ³)	2.00	1.95	2.02	-	-
Adjusted Lab Max CWD:	(t/m ³)	2.00	1.95	2.02	-	-
Compactive Effort:		Standard	Standard	Standard	-	-

Relative Compaction & Moisture

Moisture Variation	(%)	2% Wetter than OMC	2% Wetter than OMC	2% Wetter than OMC	-	-
Moisture Ratio	(%)	109.0	107.0	108.5	-	-
Density Ratio	(%)	103.0	102.5	102.5	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

NATA Accreditation number: 20313

Approved By:


 M.Eaton
 Approved Signatory

**ASCT Brisbane North**

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 1

Client:	See Civil Pty Ltd	Report No:	5
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	19/06/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill - Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

Sample Number:	31310	31311	31312	-	-
Field Test Number:	1	2	3	-	-
Date - Field Tested:	17/06/2025	17/06/2025	17/06/2025	-	-
Time - Field Tested:	10:40	10:45	14:00	-	-
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 144	Lot 144	Lot 110		
Location/Chainage/Easting: (m)	E:489323.8	E:489336.8	E:489309.8	-	-
Position/Offset/Northing: (m)	N:7002115.9	N:7002137.8	N:7002051.9	-	-
Level/Layer/R.L.	R.L 20.04	R.L 20.28	R.L 21.50	-	-
Layer Depth: (mm)	300	300	300	-	-
Depth Tested: (mm)	300	300	300	-	-

Field & Laboratory Results

Laboratory testing 18/06/2025 to 19/06/2025

Field Wet Density: (t/m ³)	2.04	1.99	2.01	-	-
Field Dry Density: (t/m ³)	1.61	1.58	1.57	-	-
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-	-
Material Description:	Clay, Brown	Clay, Brown	Clay, Brown	-	-
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-
Field Moisture Content: (%)	26.4	25.4	28.2	-	-
Adjusted Lab OMC: (%)	24.0	23.2	25.9	-	-
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-	-
Lab Max Converted Wet Density: (t/m ³)	2.03	2.04	1.97	-	-
Adjusted Lab Max CWD: (t/m ³)	2.03	2.04	1.97	-	-
Compactive Effort:	Standard	Standard	Standard	-	-

Relative Compaction & Moisture

Moisture Variation (%)	2.5% Wetter than OMC	2% Wetter than OMC	2% Wetter than OMC	-	-
Moisture Ratio (%)	110.5	110.0	108.5	-	-
Density Ratio (%)	100.5	97.5	102.0	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling), Q020-Jan 2024 (Characteristic Value of a Lot)

Remarks Regarding the Lot.

Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

NATA Accreditation number: 20313

Approved By:


M.Eaton
Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 1

Client:	See Civil Pty Ltd	Report No:	6
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	20/06/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill - Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

Sample Number:		31328	31329	31330	-	-
Field Test Number:		1	2	3	-	-
Date - Field Tested:		18/06/2025	18/06/2025	18/06/2025	-	-
Time - Field Tested:		13:37	14:15	14:20	-	-
Material Source / Type:	Onsite Cut - Allotment Fill					
Remarks / Notes:						
Control Line:		Lot 144	Lot 140	Lot 113		
Location/Chainage/Easting:	(m)	E:489331.8	E:489299.2	E:489277.7	-	-
Position/Offset/Northing:	(m)	E:7002120.9	E:7002099.0	E:7002050.1	-	-
Level/Layer/R.L.		R.L 21.21	R.L 19.53	R.L 23.5	-	-
Layer Depth:	(mm)	300	300	300	-	-
Depth Tested:	(mm)	300	300	300	-	-

Field & Laboratory Results

Laboratory testing 20/06/2025

Field Wet Density:	(t/m ³)	2.00	2.02	2.04	-	-
Field Dry Density:	(t/m ³)	1.58	1.61	1.63	-	-
Retained Oversize (Wet basis):	(%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-	-
Material Description:		Clay, Brown	Clay, Brown	Clay, Brown	-	-
Moisture Content Method:		AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-
Field Moisture Content:	(%)	26.5	25.2	25.3	-	-
Adjusted Lab OMC:	(%)	26.0	24.7	25.3	-	-
Fraction Tested:		Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-	-
Lab Max Converted Wet Density:	(t/m ³)	1.99	2.01	2.01	-	-
Adjusted Lab Max CWD:	(t/m ³)	1.99	2.01	2.01	-	-
Compactive Effort:		Standard	Standard	Standard	-	-

Relative Compaction & Moisture

Moisture Variation	(%)	0.5% Wetter than OMC	0.5% Wetter than OMC	At OMC	-	-
Moisture Ratio	(%)	102.0	102.5	100.5	-	-
Density Ratio	(%)	101.0	100.5	102.0	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

NATA Accreditation number: 20313

Approved By:

M. Eaton
Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 1

Client:	See Civil Pty Ltd	Report No:	7
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	23/06/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill - Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

Sample Number:	31349	31350	31351	-	-
Field Test Number:	1	2	3	-	-
Date - Field Tested:	19/06/2025	19/06/2025	19/06/2025	-	-
Time - Field Tested:	11:06	14:10	15:50	-	-
Material Source / Type:	Onsite Cut - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 111	Lot 139	Road 01		
Location/Chainage/Easting: (m)	E:489295.6	E:489293.2	E:489318.4	-	-
Position/Offset/Northing: (m)	N:7002059.9	E:7002101.5	E:7002042.2	-	-
Level/Layer/R.L.	R.L 22.49	R.L 20.49	R.L 21.8	-	-
Layer Depth: (mm)	300	300	300	-	-
Depth Tested: (mm)	300	300	300	-	-

Field & Laboratory Results

Laboratory testing 23/06/2025

Field Wet Density: (t/m ³)	2.09	2.04	2.05	-	-
Field Dry Density: (t/m ³)	1.70	1.68	1.68	-	-
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-	-
Material Description:	Clay, Brown	Clay, Brown	Clay, Brown	-	-
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-
Field Moisture Content: (%)	22.4	21.6	22.1	-	-
Adjusted Lab OMC: (%)	20.6	20.9	21.5	-	-
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-	-
Lab Max Converted Wet Density: (t/m ³)	2.07	2.08	2.06	-	-
Adjusted Lab Max CWD: (t/m ³)	2.07	2.08	2.06	-	-
Compactive Effort:	Standard	Standard	Standard	-	-

Relative Compaction & Moisture

Moisture Variation (%)	2% Wetter than OMC	0.5% Wetter than OMC	0.5% Wetter than OMC	-	-
Moisture Ratio (%)	109.0	104.0	103.0	-	-
Density Ratio (%)	100.5	98.0	99.0	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

NATA Accreditation number: 20313

Approved By:


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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 1

Client:	See Civil Pty Ltd	Report No:	8
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	24/06/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill - Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

Sample Number:	31374	31375	31376	-	-
Field Test Number:	1	2	3	-	-
Date - Field Tested:	20/06/2025	20/06/2025	20/06/2025	-	-
Time - Field Tested:	14:10	14:16	14:21	-	-
Material Source / Type:	Onsite Cut - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 111	Lot 140	Lot 145		
Location/Chainage/Easting: (m)	E:489308.6	E:489306.3	E:489339.7	-	-
Position/Offset/Northing: (m)	N:7002049.9	N:7002101.1	N:7002152.1	-	-
Level/Layer/R.L.	R.L 23.06	R.L 20.99	R.L 18.73	-	-
Layer Depth: (mm)	300	300	300	-	-
Depth Tested: (mm)	300	300	300	-	-

Field & Laboratory Results

Laboratory testing 23/06/2025

Field Wet Density: (t/m ³)	2.19	2.07	2.11	-	-
Field Dry Density: (t/m ³)	1.85	1.76	1.70	-	-
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-	-
Material Description:	Sandy Clay, Brown	Sandy Clay, Brown	Sandy Clay, Brown	-	-
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-
Field Moisture Content: (%)	18.3	17.9	24.0	-	-
Adjusted Lab OMC: (%)	18.2	18.3	22.1	-	-
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-	-
Lab Max Converted Wet Density: (t/m ³)	2.13	2.07	2.07	-	-
Adjusted Lab Max CWD: (t/m ³)	2.13	2.07	2.07	-	-
Compactive Effort:	Standard	Standard	Standard	-	-

Relative Compaction & Moisture

Moisture Variation (%)	At OMC	0.5% Dryer than OMC	2% Wetter than OMC	-	-
Moisture Ratio (%)	100.0	98.0	108.5	-	-
Density Ratio (%)	102.5	100.0	102.5	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

NATA Accreditation number: 20313

Approved By:


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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page:

1 of 1

Client:	See Civil Pty Ltd	Report No:	9
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	7/07/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill - Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

Sample Number:	31416	31417	31418	-	-
Field Test Number:	16	17	18	-	-
Date - Field Tested:	25/06/2025	25/06/2025	25/06/2025	-	-
Time - Field Tested:	1352	1420	1505	-	-
Material Source / Type:	Onsite Cut - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot No: 337	Lot No: 145	Lot No: 140		
Location/Chainage/Easting: (m)	E: 489349.6	E: 489326.1	E: 489321.0	-	-
Position/Offset/Northing: (m)	N: 7002140.1	N: 7002146.8	N: 7002097.9	-	-
Level/Layer/R.L.	R.L: 22.10	R.L: 20.30	R.L: 22.20	-	-
Layer Depth: (mm)	300	300	300	-	-
Depth Tested: (mm)	300	300	300	-	-

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.07	2.04	2.04	-	-
Field Dry Density: (t/m ³)	1.63	1.62	1.58	-	-
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-	-
Material Description:	Clay, Brown	Clay, Brown	Clay, Brown	-	-
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-
Field Moisture Content: (%)	27.0	26.0	29.0	-	-
Adjusted Lab OMC: (%)	24.9	24.5	27.7	-	-
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-	-
Lab Max Converted Wet Density: (t/m ³)	2.00	2.03	1.94	-	-
Adjusted Lab Max CWD: (t/m ³)	2.00	2.03	1.94	-	-
Compactive Effort:	Standard	Standard	Standard	-	-

Relative Compaction & Moisture

Moisture Variation (%)	2.0% Wetter than OMC	1.5% Wetter than OMC	1.0% Wetter than OMC	-	-
Moisture Ratio (%)	108.0	106.0	104.5	-	-
Density Ratio (%)	103.5	100.5	105.5	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 26/06/2025



Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

Accreditation number: 20313

Approved By:

M. Eaton
Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page:

1 of 1

Client:	See Civil Pty Ltd	Report No:	10
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	7/07/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill - Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

Sample Number:	31497	31498	31499	-	-
Field Test Number:	19	20	21	-	-
Date - Field Tested:	26/06/2025	26/06/2025	26/06/2025	-	-
Time - Field Tested:	1400	1426	1449	-	-
Material Source / Type:	Onsite Cut - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot No: 146	Lot No: 143	Lot No: 139		
Location/Chainage/Easting:	(m) E: 489335.17	E: 489291.57	E: 489291.61	-	-
Position/Offset/Northing:	(m) N: 7002156.34	N: 7002144.12	N: 7002099.82	-	-
Level/Layer/R.L.	R.L: 25.60	R.L: 26.34	R.L: 25.04	-	-
Layer Depth:	(mm) 300	300	300	-	-
Depth Tested:	(mm) 300	300	300	-	-

Field & Laboratory Results

Field Wet Density:	(t/m ³)	2.06	2.06	2.19	-	-
Field Dry Density:	(t/m ³)	1.71	1.68	1.84	-	-
Retained Oversize (Wet basis):	(%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-	-
Material Description:		Sandy Clay, Brown	Sandy Clay, Light Brown	Sandy Clay, Brown	-	-
Moisture Content Method:		AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-
Field Moisture Content:	(%)	20.5	23.0	19.0	-	-
Adjusted Lab OMC:	(%)	21.1	22.7	19.2	-	-
Fraction Tested:		Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-	-
Lab Max Converted Wet Density:	(t/m ³)	2.03	2.04	2.09	-	-
Adjusted Lab Max CWD:	(t/m ³)	2.03	2.04	2.09	-	-
Compactive Effort:		Standard	Standard	Standard	-	-

Relative Compaction & Moisture

Moisture Variation	(%)	0.5% Drier than OMC	At OMC	At OMC	-	-
Moisture Ratio	(%)	97.0	100.5	99.0	-	-
Density Ratio	(%)	101.5	101.0	105.0	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 01/07/2025 to 02/07/2025



Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

Accreditation number: 20313

Approved By:

M. Eaton
Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page:

1 of 1

Client:	See Civil Pty Ltd	Report No:	11
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	7/07/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill - Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

	31500	31501	31502	-	-
Sample Number:	31500	31501	31502	-	-
Field Test Number:	22	23	24	-	-
Date - Field Tested:	27/05/2025	27/05/2025	27/05/2025	-	-
Time - Field Tested:	1110	1120	1146	-	-
Material Source / Type:	Onsite Cut - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot No: 144	Lot No: 142	Lot No: 140		
Location/Chainage/Easting:	(m) E: 489338.15	E: 489332.14	E: 489288.63	-	-
Position/Offset/Northing:	(m) N: 7002153.02	N: 7002227.23	N: 7002097.60	-	-
Level/Layer/R.L.	R.L: 25.57	R.L: 22.19	R.L: 24.96	-	-
Layer Depth:	(mm) 300	300	300	-	-
Depth Tested:	(mm) 300	300	300	-	-

Field & Laboratory Results

Field Wet Density:	(t/m ³)	2.06	2.08	2.04	-	-
Field Dry Density:	(t/m ³)	1.76	1.82	1.76	-	-
Retained Oversize (Wet basis):	(%)	0% on 19.0mm	3% on 19.0mm	0% on 19.0mm	-	-
Material Description:		Sandy Clay, Light Brown	Sandy Clay, Light Brown	Sandy Clay, Light Brown	-	-
Moisture Content Method:		AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-
Field Moisture Content:	(%)	17.0	14.5	16.0	-	-
Adjusted Lab OMC:	(%)	18.7	16.2	17.6	-	-
Fraction Tested:		Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-	-
Lab Max Converted Wet Density:	(t/m ³)	2.00	2.03	2.01	-	-
Adjusted Lab Max CWD:	(t/m ³)	2.00	2.04	2.01	-	-
Compactive Effort:		Standard	Standard	Standard	-	-

Relative Compaction & Moisture

Moisture Variation	(%)	2.0% Drier than OMC	2.0% Drier than OMC	2.0% Drier than OMC	-	-
Moisture Ratio	(%)	90.0	88.5	89.5	-	-
Density Ratio	(%)	103.5	102.0	101.0	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 01/07/2025



Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

Accreditation number: 20313

Approved By:


M.Eaton
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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 1

Client: See Civil Pty Ltd Report No: **13**
 Client Address: 108 Siganto Drive, Helensvale QLD 4210 Report Date: 14/07/2025
 Project: 26 Gibbings Court, Lilywood Project No: 943
 Component: Allotment Fill Stage 1 Test Request:
 Lot Number: ITP/PCP:

Sample Information & Location

Sample Number:	31607	31608	31609	31610	-
Field Test Number:	1	2	3	4	-
Date - Field Tested:	7/07/2025	7/07/2025	7/07/2025	7/07/2025	-
Time - Field Tested:	11:09	11:13	11:17	15:00	-
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 206	Lot 204	Lot 208	Lot 139	
Location/Chainage/Easting: (m)	E:489225.7	E:489201.1	E:489267.8	E:489294.4	-
Position/Offset/Northing: (m)	N:7002166.7	N:7002173.7	N:7002175.3	N:7002088.1	-
Level/Layer/R.L.	R.L 20.35	R.L 20.49	R.L 20.17	R.L 23.5	-
Layer Depth: (mm)	300	300	300	300	-
Depth Tested: (mm)	300	300	300	300	-

Field & Laboratory Results

Laboratory testing 08/07/2025

Field Wet Density: (t/m ³)	2.04	2.08	2.08	1.97	-
Field Dry Density: (t/m ³)	1.67	1.70	1.70	1.56	-
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-
Material Description:	Brown Clay	Brown Clay	Brown Clay	-	-
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-
Field Moisture Content: (%)	22.1	22.2	22.1	26.8	-
Adjusted Lab OMC: (%)	22.3	22.5	22.2	24.9	-
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-
Lab Max Converted Wet Density: (t/m ³)	2.04	2.04	2.05	2.05	-
Adjusted Lab Max CWD: (t/m ³)	2.04	2.04	2.05	2.05	-
Compactive Effort:	Standard	Standard	Standard	Standard	-

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Drier than OMC	At OMC	At OMC	2% Wetter than OMC	-
Moisture Ratio (%)	99.0	99.0	99.5	107.5	-
Density Ratio (%)	100.0	101.5	101.5	96.0	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

NATA Accreditation number: 20313

Approved By:


M.Eaton
Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 1

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill - Stage 1
 Lot Number:

Report No: **14**
 Report Date: 14/07/2025
 Project No: 943
 Test Request:
 ITP/PCP:

Sample Information & Location

Sample Number:		31624	31625	31626	-	-
Field Test Number:		1	2	3	-	-
Date - Field Tested:		8/07/2025	8/07/2025	8/07/2025	-	-
Time - Field Tested:		14:05	14:11	14:17	-	-
Material Source / Type:		Onsite - Allotment Fill				
Remarks / Notes:						
Control Line:		Road 03	Lot 112	Road 03		
Location/Chainage/Easting:	(m)	E:489228.0	E:489235.9	E:489210.8	-	-
Position/Offset/Northing:	(m)	N:7002104.9	N:7002119.1	N:7002108.3	-	-
Level/Layer/R.L.		R.L 24.5	R.L 23.85	R.L 24.6	-	-
Layer Depth:	(mm)	300	300	300	-	-
Depth Tested:	(mm)	300	300	300	-	-

Field & Laboratory Results

Laboratory testing 09/07/2025

Field Wet Density:	(t/m ³)	2.18	2.08	2.09	-	-
Field Dry Density:	(t/m ³)	1.80	1.64	1.67	-	-
Retained Oversize (Wet basis):	(%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-	-
Material Description:		Gravelly Clay, Brown	Gravelly Clay, Brown	Gravelly Clay, Brown	-	-
Moisture Content Method:		AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-
Field Moisture Content:	(%)	21.3	27.3	25.1	-	-
Adjusted Lab OMC:	(%)	19.2	25.6	24.4	-	-
Fraction Tested:		Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-	-
Lab Max Converted Wet Density:	(t/m ³)	2.10	2.02	2.00	-	-
Adjusted Lab Max CWD:	(t/m ³)	2.10	2.02	2.00	-	-
Compactive Effort:		Standard	Standard	Standard	-	-

Relative Compaction & Moisture

Moisture Variation	(%)	2% Wetter than OMC	1.5% Wetter than OMC	0.5% Wetter than OMC	-	-
Moisture Ratio	(%)	111.0	106.5	102.5	-	-
Density Ratio	(%)	104.0	103.0	104.5	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

NATA Accreditation number: 20313

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 1

Client:	See Civil Pty Ltd	Report No:	16
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	14/07/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

Sample Number:	31663	31664	31665	-	-
Field Test Number:	1	2	3	-	-
Date - Field Tested:	9/07/2025	9/07/2025	9/07/2025	-	-
Time - Field Tested:	13:08	13:25	14:02	-	-
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 159	Lot 140	Road 02		
Location/Chainage/Easting: (m)	E:489137.8	E:489327.6	E:489318.4	-	-
Position/Offset/Northing: (m)	N:7002149.7	N:7002092.2	N:7002111.9	-	-
Level/Layer/R.L.	R.L 17.4	R.L 23.4	R.L 23.08	-	-
Layer Depth: (mm)	300	300	300	-	-
Depth Tested: (mm)	300	300	300	-	-

Field & Laboratory Results

Laboratory testing 10/07/2025

Field Wet Density: (t/m ³)	2.04	2.15	2.06	-	-
Field Dry Density: (t/m ³)	1.67	1.96	1.91	-	-
Retained Oversize (Wet basis): (%)	0% on 19.0mm	7% on 19.0mm	2% on 19.0mm	-	-
Material Description:	Clay, Brown	Clayey Gravel, Brown	Clayey Gravel, Brown	-	-
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-
Field Moisture Content: (%)	22.3	10.0	7.8	-	-
Adjusted Lab OMC: (%)	22.6	10.3	9.9	-	-
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-	-
Lab Max Converted Wet Density: (t/m ³)	2.03	2.19	2.16	-	-
Adjusted Lab Max CWD: (t/m ³)	2.03	2.21	2.17	-	-
Compactive Effort:	Standard	Standard	Standard	-	-

Relative Compaction & Moisture

Moisture Variation (%)	At OMC	0.5% Dryer than OMC	2% Dryer than OMC	-	-
Moisture Ratio (%)	99.0	97.0	79.0	-	-
Density Ratio (%)	100.5	97.5	95.0	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 2

Client:	See Civil Pty Ltd	Report No:	17
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	15/07/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill - Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

	31677	31678	31679	31680	31681
Sample Number:	1	2	3	4	5
Field Test Number:	1	2	3	4	5
Date - Field Tested:	10/07/2025	10/07/2025	10/07/2025	10/07/2025	10/07/2025
Time - Field Tested:	13:10	13:16	14:09	14:13	14:16
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Road 01	Road 01	Lot 143	Lot 339	Lot 144
Location/Chainage/Easting:	(m) E:489126.1	E:489.124.1	E:489340.9	E:489359.4	E:489346.0
Position/Offset/Northing:	(m) N:7002133.4	N:7002148.7	N:7002126.4	N:7002132.1	N:7002145.6
Level/Layer/R.L.	R.L 18.58	R.L 18.1	R.L 23.3	R.L 23.73	R.L 22.7
Layer Depth:	(mm) 300	300	300	300	300
Depth Tested:	(mm) 300	300	300	300	300

Field & Laboratory Results

Laboratory testing 14/07/2025 to 15/07/2025

Field Wet Density:	(t/m ³)	1.91	2.05	2.14	2.08	2.08
Field Dry Density:	(t/m ³)	1.56	1.66	1.78	1.73	1.74
Retained Oversize (Wet basis):	(%)	0% on 19.0mm				
Material Description:		Sandy Clay, Brown				
Moisture Content Method:		AS1289.2.1.1 - Oven				
Field Moisture Content:	(%)	22.5	23.0	20.3	20.5	19.8
Adjusted Lab OMC:	(%)	22.7	23.1	21.6	20.6	19.7
Fraction Tested:		Passing 19.0mm				
Lab Max Converted Wet Density:	(t/m ³)	2.00	2.00	2.02	2.11	2.10
Adjusted Lab Max CWD:	(t/m ³)	2.00	2.00	2.02	2.11	2.10
Compactive Effort:		Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation	(%)	At OMC	At OMC	1.5% Dryer than OMC	At OMC	At OMC
Moisture Ratio	(%)	99.0	99.5	93.5	99.0	100.5
Density Ratio	(%)	95.5	102.5	106.0	98.5	99.0

<i>Specified Density Ratio</i>		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
<i>Minimum (%)</i>		-	-	-	-	-
<i>Maximum (%)</i>		-	-	-	-	-
<i>Specified Moisture Ratio</i>		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
<i>Minimum (%)</i>		-	-	-	-	-
<i>Maximum (%)</i>		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

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NATA Accreditation number: 20313

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 2 of 2

Client:	See Civil Pty Ltd	Report No:	17
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	15/07/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill - Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

Sample Number:	31682	-	-	-	-
Field Test Number:	6	-	-	-	-
Date - Field Tested:	10/07/2025	-	-	-	-
Time - Field Tested:	14:22	-	-	-	-
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Embankment	-	-	-	-
Location/Chainage/Easting: (m)	E:489339.9	-	-	-	-
Position/Offset/Northing: (m)	N:7002035.2	-	-	-	-
Level/Layer/R.L.	R.L 21.80	-	-	-	-
Layer Depth: (mm)	300	-	-	-	-
Depth Tested: (mm)	300	-	-	-	-

Field & Laboratory Results

Laboratory testing 14/07/2025 to 15/07/2025

Field Wet Density: (t/m ³)	2.05	-	-	-	-
Field Dry Density: (t/m ³)	1.67	-	-	-	-
Retained Oversize (Wet basis): (%)	0% on 19.0mm	-	-	-	-
Material Description:	Sandy Clay, Brown	-	-	-	-
Moisture Content Method:	AS1289.2.1.1 - Oven	-	-	-	-
Field Moisture Content: (%)	22.3	-	-	-	-
Adjusted Lab OMC: (%)	21.8	-	-	-	-
Fraction Tested:	Passing 19.0mm	-	-	-	-
Lab Max Converted Wet Density: (t/m ³)	2.08	-	-	-	-
Adjusted Lab Max CWD: (t/m ³)	2.08	-	-	-	-
Compactive Effort:	Standard	-	-	-	-

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Wetter than OMC	-	-	-	-
Moisture Ratio (%)	102.0	-	-	-	-
Density Ratio (%)	98.5	-	-	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.



Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

NATA Accreditation number: 20313

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 1

Client:	See Civil Pty Ltd	Report No:	18
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	15/07/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill - Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

	31683	31684	31685	31686	31687
Sample Number:	1	2	3	4	5
Field Test Number:	11/07/2025	11/07/2025	11/07/2025	11/07/2025	11/07/2025
Date - Field Tested:	10:08	10:13	10:15	10:19	10:30
Time - Field Tested:	Onsite - Allotment Fill				
Material Source / Type:					
Remarks / Notes:					
Control Line:	Road 01	Lot 204	Lot 207	Road 02	Embankment
Location/Chainage/Easting:	(m) E:489124.2	E:489200.5	E:489239.1	E:489288.1	E:489317.1
Position/Offset/Northing:	(m) N:7002131.6	N:7002159.3	N:7002154.9	N:7002155.3	N:7002034.3
Level/Layer/R.L.	R.L 19.65	R.L 20.93	R.L 20.71	R.L 21.1	R.L 22.3
Layer Depth:	(mm) 300	300	300	300	300
Depth Tested:	(mm) 300	300	300	300	300

Field & Laboratory Results

Laboratory testing 14/07/2025

Field Wet Density:	(t/m ³)	1.98	2.11	2.01	2.11	2.05
Field Dry Density:	(t/m ³)	1.65	1.70	1.65	1.69	1.67
Retained Oversize (Wet basis):	(%)	0% on 19.0mm				
Material Description:		Sandy Clay, Brown				
Moisture Content Method:		AS1289.2.1.1 - Oven				
Field Moisture Content:	(%)	19.5	24.6	22.1	24.8	23.2
Adjusted Lab OMC:	(%)	18.4	22.7	23.7	23.0	21.3
Fraction Tested:		Passing 19.0mm				
Lab Max Converted Wet Density:	(t/m ³)	1.91	2.04	1.98	2.03	2.05
Adjusted Lab Max CWD:	(t/m ³)	1.91	2.04	1.98	2.03	2.05
Compactive Effort:		Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation	(%)	1% Wetter than OMC	2% Wetter than OMC	1.5% Drier than OMC	1.5% Wetter than OMC	2% Wetter than OMC
Moisture Ratio	(%)	106.0	108.5	93.5	108.0	109.0
Density Ratio	(%)	103.0	103.5	102.0	104.0	100.0

<i>Specified Density Ratio</i>		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
<i>Specified Moisture Ratio</i>		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

NATA Accreditation number: 20313

Approved By:


M.Eaton
Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 1

Client:	See Civil Pty Ltd	Report No:	19
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	18/07/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill - Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

	31702	31703	31704	31705	
Sample Number:	31702	31703	31704	31705	-
Field Test Number:	46	47	48	49	-
Date - Field Tested:	12/07/2025	12/07/2025	12/07/2025	12/07/2025	-
Time - Field Tested:	6:52	6:56	7:09	7:14	-
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 143	Lot 144	Lot 111	Lot 110	
Location/Chainage/Easting:	(m) E:489334.6	E:489324.1	E:489299.7	E:489311.9	-
Position/Offset/Northing:	(m) N:7002127.9	N:7002139.6	N:7002077.3	N:7002058.6	-
Level/Layer/R.L.	R.L 23.5	R.L 22.60	R.L 24.60	R.L 24.40	-
Layer Depth:	(mm) 300	300	300	300	-
Depth Tested:	(mm) 300	300	300	300	-

Field & Laboratory Results

Laboratory testing 16/07/2025 to 17/07/2025

Field Wet Density:	(t/m ³)	2.12	2.11	1.98	1.97	-
Field Dry Density:	(t/m ³)	1.72	1.74	1.66	1.63	-
Retained Oversize (Wet basis):	(%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-
Material Description:		Clay, Brown	Clay, Brown	Silty Clay, Brown	Clay, Brown	-
Moisture Content Method:		AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-
Field Moisture Content:	(%)	23.8	21.4	19.3	20.7	-
Adjusted Lab OMC:	(%)	23.4	19.4	18.3	19.9	-
Fraction Tested:		Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-
Lab Max Converted Wet Density:	(t/m ³)	2.02	2.03	2.07	2.02	-
Adjusted Lab Max CWD:	(t/m ³)	2.02	2.03	2.07	2.02	-
Compactive Effort:		Standard	Standard	Standard	Standard	-

Relative Compaction & Moisture

Moisture Variation	(%)	0.5% Wetter than OMC	2% Wetter than OMC	1% Wetter than OMC	1% Wetter than OMC	-
Moisture Ratio	(%)	101.5	110.5	105.5	104.0	-
Density Ratio	(%)	105.5	104.0	95.5	97.5	-

<i>Specified Density Ratio</i>		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
<i>Minimum (%)</i>		-	-	-	-	-
<i>Maximum (%)</i>		-	-	-	-	-
<i>Specified Moisture Ratio</i>		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
<i>Minimum (%)</i>		-	-	-	-	-
<i>Maximum (%)</i>		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

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NATA Accreditation number: 20313

Approved By:

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Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 2

Client: See Civil Pty Ltd Report No: **20**
 Client Address: 108 Siganto Drive, Helensvale QLD 4210 Report Date: 18/07/2025
 Project: 26 Gibbings Court, Lilywood Project No: 943
 Component: Allotment Fill Stage 1 Test Request:
 Lot Number: ITP/PCP:

Sample Information & Location

Sample Number:	31743	31744	31745	31746	31747
Field Test Number:	50	51	52	53	54
Date - Field Tested:	14/07/2025	14/07/2025	14/07/2025	14/07/2025	14/07/2025
Time - Field Tested:	14:03	14:06	14:15	14:23	14:26
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Road 01	Lot 158	Lot 144	Embankment	Embankment
Location/Chainage/Easting: (m)	E:489113.3	E:489128.5	E:489329.5	E:489391.6	E:489362.8
Position/Offset/Northing: (m)	N:7002134.9	N:7002134.8	N:7002138.3	N:7002025.9	N:7002038.4
Level/Layer/R.L.	R.L 20.44	R.L 19.82	R.L 22.64	R.L 23.8	R.L 24.0
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Laboratory testing 17/07/2025

Field Wet Density: (t/m ³)	2.04	1.96	2.10	2.05	2.14
Field Dry Density: (t/m ³)	1.67	1.63	1.72	1.59	1.78
Retained Oversize (Wet basis): (%)	0% on 19.0mm				
Material Description:	Silty Clay, Brown	Clay, Brown	Clay, Brown	Silty Clay, Brown	Silty Clay, Brown
Moisture Content Method:	AS1289.2.1.1 - Oven				
Field Moisture Content: (%)	22.1	20.1	22.1	28.9	20.2
Adjusted Lab OMC: (%)	21.5	17.6	20.3	27.1	18.6
Fraction Tested:	Passing 19.0mm				
Lab Max Converted Wet Density: (t/m ³)	2.00	2.05	2.04	2.00	2.06
Adjusted Lab Max CWD: (t/m ³)	2.00	2.05	2.04	2.00	2.06
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Wetter than OMC	2.5% Wetter than OMC	1.5% Wetter than OMC	1.5% Wetter than OMC	1.5% Wetter than OMC
Moisture Ratio (%)	103.0	114.0	108.5	107.0	108.5
Density Ratio (%)	102.0	95.5	103.0	102.5	104.0

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

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Approved By:

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Client:	See Civil Pty Ltd	Report No:	20
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	18/07/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

Sample Number:	31748	-	-	-	-
Field Test Number:	55	-	-	-	-
Date - Field Tested:	14/07/2025	-	-	-	-
Time - Field Tested:	14:32	-	-	-	-
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Park	-	-	-	-
Location/Chainage/Easting: (m)	E:489470.3	-	-	-	-
Position/Offset/Northing: (m)	N:7001843.9	-	-	-	-
Level/Layer/R.L.	R.L 23.95	-	-	-	-
Layer Depth: (mm)	300	-	-	-	-
Depth Tested: (mm)	300	-	-	-	-

Field & Laboratory Results

Laboratory testing 17/07/2025

Field Wet Density: (t/m ³)	2.02	-	-	-	-
Field Dry Density: (t/m ³)	1.69	-	-	-	-
Retained Oversize (Wet basis): (%)	0% on 19.0mm	-	-	-	-
Material Description:	Silty Clay, Brown	-	-	-	-
Moisture Content Method:	AS1289.2.1.1 - Oven	-	-	-	-
Field Moisture Content: (%)	18.9	-	-	-	-
Adjusted Lab OMC: (%)	18.5	-	-	-	-
Fraction Tested:	Passing 19.0mm	-	-	-	-
Lab Max Converted Wet Density: (t/m ³)	2.07	-	-	-	-
Adjusted Lab Max CWD: (t/m ³)	2.07	-	-	-	-
Compactive Effort:	Standard	-	-	-	-

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Wetter than OMC	-	-	-	-
Moisture Ratio (%)	102.0	-	-	-	-
Density Ratio (%)	97.5	-	-	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 2

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number:

Report No: 23
 Report Date: 23/07/2025
 Project No: 943
 Test Request:
 ITP/PCP:

Sample Information & Location

Sample Number:	31751	31752	31753	31754	31755
Field Test Number:	56	57	58	59	60
Date - Field Tested:	15/07/2025	15/07/2025	15/07/2025	15/07/2025	15/07/2025
Time - Field Tested:	13:46	13:49	13:53	11:20	11:26
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Sports Park	Sports Park	Sports Park	Sports Park	Sports Park
Location/Chainage/Easting: (m)	E:489501.8	E:489520.1	E:489475.7	E:489408.5	E:489414.6
Position/Offset/Northing: (m)	N:7001920.9	N:7001921.8	N:7001905.7	N:7001852.8	N:7001889.9
Level/Layer/R.L.	R.L 24.96	R.L 25.10	R.L 24.76	R.L 23.0	R.L 23.5
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Laboratory testing 19/07/2025

Field Wet Density: (t/m ³)	2.04	2.05	2.06	2.11	2.10
Field Dry Density: (t/m ³)	1.68	1.67	1.72	1.78	1.77
Retained Oversize (Wet basis): (%)	0% on 19.0mm				
Material Description:	Silty Clay, Brown	Silty Clay, Brown	Clay, Brown	Clay, Brown	Clay, Brown
Moisture Content Method:	AS1289.2.1.1 - Oven				
Field Moisture Content: (%)	21.4	23.0	19.5	19.0	18.6
Adjusted Lab OMC: (%)	21.9	22.0	19.9	18.7	18.4
Fraction Tested:	Passing 19.0mm				
Lab Max Converted Wet Density: (t/m ³)	2.06	2.02	2.03	2.09	2.08
Adjusted Lab Max CWD: (t/m ³)	2.06	2.02	2.03	2.09	2.08
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Drier than OMC	1% Wetter than OMC	0.5% Drier than OMC	At OMC	At OMC
Moisture Ratio (%)	97.5	104.5	97.5	101.5	101.5
Density Ratio (%)	99.0	101.5	101.0	101.5	101.0

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

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NATA Accreditation number: 20313

Approved By:

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 Approved Signatory

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Page: 2 of 2

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number:

Report No: **23**
 Report Date: 23/07/2025
 Project No: 943
 Test Request:
 ITP/PCP:

Sample Information & Location

Sample Number:	31756	31757	31758	31759	31760
Field Test Number:	61	62	63	64	65
Date - Field Tested:	15/07/2025	15/07/2025	15/07/2025	15/07/2025	15/07/2025
Time - Field Tested:	13:12	13:15	13:19	14:20	14:27
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Road 04	Lot 201	Lot 206	Sports Park	Embankment
Location/Chainage/Easting: (m)	E:489141.9	E:489167.1	E:489227.4	E:489401.3	E:489393.3
Position/Offset/Northing: (m)	N:7002170.9	N:7002168.4	N:7002162.7	N:7001870.2	N:7002017.6
Level/Layer/R.L.	R.L 21.22	R.L 21.09	R.L 20.70	R.L 24.0	R.L 24.3
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Laboratory testing 19/07/2025

Field Wet Density: (t/m ³)	1.92	1.92	2.11	2.10	2.00
Field Dry Density: (t/m ³)	1.61	1.59	1.70	1.76	1.60
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm
Material Description:	Silty Clay, Brown	Silty Clay, Red Brown	Clay, Brown	Gravelly Clay, Brown	Clay, Red
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven
Field Moisture Content: (%)	19.0	20.9	23.8	19.4	25.2
Adjusted Lab OMC: (%)	21.8	21.9	24.4	19.8	25.9
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm
Lab Max Converted Wet Density: (t/m ³)	1.97	1.92	2.01	2.08	1.96
Adjusted Lab Max CWD: (t/m ³)	1.97	1.92	2.01	2.08	1.96
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	2.5% Drier than OMC	1% Drier than OMC	0.5% Drier than OMC	0.5% Drier than OMC	0.5% Drier than OMC
Moisture Ratio (%)	87.0	95.5	97.5	98.0	97.0
Density Ratio (%)	97.5	100.0	105.0	101.0	102.0

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

NATA Accreditation number: 20313

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page:

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Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number:

Report No: **24**
 Report Date: 25/07/2025
 Project No: 943
 Test Request:
 ITP/PCP:

Sample Information & Location

Sample Number:	31775	31776	31777	31778	31779
Field Test Number:	66	67	68	69	70
Date - Field Tested:	16/07/2025	16/07/2025	16/07/2025	16/07/2025	16/07/2025
Time - Field Tested:	1016	0956	1025	1004	1349
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 144	Lot 143	Road 02	Lot 141	Lot 138
Location/Chainage/Easting: (m)	E:489333.9	E:489353.9	E:489326.9	E489351.8	E:489251.3
Position/Offset/Northing: (m)	N:7002135.2	N:7002135.2	N:7002128.1	N:7002108.2	N:7002137.8
Level/Layer/R.L.	RL:21.40	RL:24.20	RL:20.70	RL:24.10	RL:21.80
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.12	2.05	1.94	1.94	2.02
Field Dry Density: (t/m ³)	1.76	1.60	1.59	1.53	1.79
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	4% on 19.0mm
Material Description:	Clay, Red Brown	Clay, Red	Silty Clay, Red Brown	Clay, Red	Silty Clay, Pale Brown
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven
Field Moisture Content: (%)	20.0	27.5	22.0	26.5	12.5
Adjusted Lab OMC: (%)	20.4	27.9	22.3	25.6	12.8
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm
Lab Max Converted Wet Density: (t/m ³)	2.03	1.98	2.03	1.96	2.11
Adjusted Lab Max CWD: (t/m ³)	2.03	1.98	2.03	1.96	2.11
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Drier than OMC	At OMC	0.5% Drier than OMC	1.0% Wetter than OMC	0.5% Drier than OMC
Moisture Ratio (%)	98.5	99.0	97.5	103.5	97.5
Density Ratio (%)	104.0	103.0	95.5	98.5	95.5

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 19/07/2025



Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

Accreditation number: 20313

Approved By:

M.Eaton
Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 2 of 2

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number:

Report No: **24**
 Report Date: 25/07/2025
 Project No: 943
 Test Request:
 ITP/PCP:

Sample Information & Location

Sample Number:		31780	31781	31782	-	-
Field Test Number:		71	72	73	-	-
Date - Field Tested:		16/07/2025	16/07/2025	16/07/2025	-	-
Time - Field Tested:		1355	1408	1412	-	-
Material Source / Type:		Onsite - Allotment Fill				
Remarks / Notes:						
Control Line:		Lot 139	Lot 140	Lot 137	-	-
Location/Chainage/Easting:	(m)	E489258.1	E:489287.4	E:489234.1	-	-
Position/Offset/Northing:	(m)	N:7002145.2	N:7002142.3	N:7002138.9	-	-
Level/Layer/R.L.		RL:21.70	RL:21.50	RL:21.50	-	-
Layer Depth:	(mm)	300	300	300	-	-
Depth Tested:	(mm)	300	300	300	-	-

Field & Laboratory Results

Field Wet Density:	(t/m ³)	2.03	1.97	2.14	-	-
Field Dry Density:	(t/m ³)	1.63	1.64	1.78	-	-
Retained Oversize (Wet basis):	(%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-	-
Material Description:		Clay, Pale Brown	Silty Clay, Brown	Silty Clay, Brown	-	-
Moisture Content Method:		AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-
Field Moisture Content:	(%)	24.0	20.0	20.0	-	-
Adjusted Lab OMC:	(%)	24.6	19.4	20.7	-	-
Fraction Tested:		Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-	-
Lab Max Converted Wet Density:	(t/m ³)	1.99	2.03	2.06	-	-
Adjusted Lab Max CWD:	(t/m ³)	1.99	2.03	2.06	-	-
Compactive Effort:		Standard	Standard	Standard	-	-

Relative Compaction & Moisture

Moisture Variation	(%)	0.5% Drier than OMC	0.5% Wetter than OMC	0.5% Drier than OMC	-	-
Moisture Ratio	(%)	98.5	103.0	97.5	-	-
Density Ratio	(%)	102.0	97.0	104.0	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 19/07/2025



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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page:

1 of 2

Client:	See Civil Pty Ltd	Report No:	26
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	25/07/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

	31786	31787	31788	31789	31790
Sample Number:	74	75	76	77	78
Field Test Number:	17/07/2025	17/07/2025	17/07/2025	17/07/2025	17/07/2025
Date - Field Tested:	1017	1021	1026	1032	1355
Time - Field Tested:	Onsite - Allotment Fill				
Material Source / Type:					
Remarks / Notes:					
Control Line:	Lot 337	Lot 145	Lot 144	Lot 142	Lot 138
Location/Chainage/Easting: (m)	E:489340.9	E:489321.9	E:489345.7	E:489347.5	E:489251.7
Position/Offset/Northing: (m)	N:7002161.0	N:7002157.9	N:7002138.9	N:7002123.2	N:7002126.1
Level/Layer/R.L.	RL:25.20	RL:22.85	RL:24.80	RL:24.50	RL:22.05
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	1.99	1.97	2.03	2.01	2.15
Field Dry Density: (t/m ³)	1.62	1.55	1.65	1.61	1.80
Retained Oversize (Wet basis): (%)	0% on 19.0mm				
Material Description:	Brown Silty Clay	Brown/Tan Clay	Tan Brown Clay	Tan Brown Clay	Brown Silty Clay
Moisture Content Method:	AS1289.2.1.1 - Oven				
Field Moisture Content: (%)	23.0	27.0	23.0	24.5	20.0
Adjusted Lab OMC: (%)	23.4	27.6	23.3	24.8	20.6
Fraction Tested:	Passing 19.0mm				
Lab Max Converted Wet Density: (t/m ³)	1.93	1.93	2.06	2.02	2.05
Adjusted Lab Max CWD: (t/m ³)	1.93	1.93	2.06	2.02	2.05
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Drier than OMC	1.0% Drier than OMC			
Moisture Ratio (%)	97.5	98.0	98.5	98.5	96.0
Density Ratio (%)	102.5	102.5	98.5	99.5	104.5

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 19/07/2025 to 21/07/2025



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Accreditation number: 20313

Approved By:

M.Eaton
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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 2 of 2

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number:

Report No: 26
 Report Date: 25/07/2025
 Project No: 943
 Test Request:
 ITP/PCP:

Sample Information & Location

Sample Number:		31791	31792	-	-	-
Field Test Number:		79	80	-	-	-
Date - Field Tested:		17/07/2025	17/07/2025	-	-	-
Time - Field Tested:		1409	1413	-	-	-
Material Source / Type:		Onsite - Allotment Fill				
Remarks / Notes:						
Control Line:		Lot 140	Road 02	-	-	-
Location/Chainage/Easting:	(m)	E:489284.6	E:489292.7	-	-	-
Position/Offset/Northing:	(m)	N:7002153.1	N:7002162.9	-	-	-
Level/Layer/R.L.		RL:23.60	RL:23.80	-	-	-
Layer Depth:	(mm)	300	300	-	-	-
Depth Tested:	(mm)	300	300	-	-	-

Field & Laboratory Results

Field Wet Density:	(t/m ³)	1.98	1.91	-	-	-
Field Dry Density:	(t/m ³)	1.58	1.54	-	-	-
Retained Oversize (Wet basis):	(%)	0% on 19.0mm	0% on 19.0mm	-	-	-
Material Description:		Red Clay	Red/Brown Silty Clay	-	-	-
Moisture Content Method:		AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-	-
Field Moisture Content:	(%)	25.5	24.5	-	-	-
Adjusted Lab OMC:	(%)	26.3	25.0	-	-	-
Fraction Tested:		Passing 19.0mm	Passing 19.0mm	-	-	-
Lab Max Converted Wet Density:	(t/m ³)	1.95	1.98	-	-	-
Adjusted Lab Max CWD:	(t/m ³)	1.95	1.98	-	-	-
Compactive Effort:		Standard	Standard	-	-	-

Relative Compaction & Moisture

Moisture Variation	(%)	1.0% Drier than OMC	0.5% Drier than OMC	-	-	-
Moisture Ratio	(%)	96.5	98.0	-	-	-
Density Ratio	(%)	101.5	96.5	-	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 19/07/2025 to 21/07/2025



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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 2

Client:	See Civil Pty Ltd	Report No:	27
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	29/07/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

	31884	31885	31886	31887	31888
Sample Number:	81	82	83	84	85
Field Test Number:	22/07/2025	22/07/2025	22/07/2025	22/07/2025	22/07/2025
Date - Field Tested:	1401	1406	1410	1414	1419
Time - Field Tested:	Onsite - Allotment Fill				
Material Source / Type:	1				
Remarks / Notes:	Lot 145	Lot 339	Lot 144	Lot 144	Lot 337
Control Line:	E:489325.6	E:489345.3	E:489324.5	E:489331.2	E:489332.6
Location/Chainage/Easting: (m)	N:7002162.7	N:7002154.5	N:7002147.2	N:7002154.0	N:7002169.3
Position/Offset/Northing: (m)	RL:24.25	RL:24.70	RL:24.50	RL:24.90	RL:23.70
Level/Layer/R.L.	300	300	300	300	300
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)					

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.02	2.06	2.07	2.09	2.12
Field Dry Density: (t/m ³)	1.64	1.69	1.71	1.69	1.72
Retained Oversize (Wet basis): (%)	0% on 19.0mm				
Material Description:	Clay, Brown	Clay, Brown	Clay, Red Brown	Silty Clay, Brown	Clay, Brown
Moisture Content Method:	AS1289.2.1.1 - Oven				
Field Moisture Content: (%)	23.0	22.5	21.5	23.5	23.0
Adjusted Lab OMC: (%)	22.9	22.1	21.0	23.5	23.2
Fraction Tested:	Passing 19.0mm				
Lab Max Converted Wet Density: (t/m ³)	2.05	2.04	2.05	2.09	2.06
Adjusted Lab Max CWD: (t/m ³)	2.05	2.04	2.05	2.09	2.06
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

	At OMC	At OMC	0.5% Wetter than OMC	At OMC	0.5% Drier than OMC
Moisture Variation (%)	100.0	101.0	101.5	100.5	98.5
Moisture Ratio (%)	98.5	101.5	101.0	100.0	103.0
Density Ratio (%)					

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 23/07/2025 to 29/07/2025



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Approved By:

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Compaction Control Test Report (Nuclear Gauge & Hilf) Page: 2 of 2

Client:	See Civil Pty Ltd	Report No:	27
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	29/07/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	
Lot Number:		ITP/PCP:	

Sample Information & Location

Sample Number:	31889	-	-	-	-
Field Test Number:	86	-	-	-	-
Date - Field Tested:	22/07/2025	-	-	-	-
Time - Field Tested:	1423	-	-	-	-
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Road 02	-	-	-	-
Location/Chainage/Easting: (m)	E:489319.5	-	-	-	-
Position/Offset/Northing: (m)	N:7002139.2	-	-	-	-
Level/Layer/R.L.	RL:23.85	-	-	-	-
Layer Depth: (mm)	300	-	-	-	-
Depth Tested: (mm)	300	-	-	-	-

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.08	-	-	-	-
Field Dry Density: (t/m ³)	1.72	-	-	-	-
Retained Oversize (Wet basis): (%)	0% on 19.0mm	-	-	-	-
Material Description:	Clay, Brown	-	-	-	-
Moisture Content Method:	AS1289.2.1.1 - Oven	-	-	-	-
Field Moisture Content: (%)	21.0	-	-	-	-
Adjusted Lab OMC: (%)	21.8	-	-	-	-
Fraction Tested:	Passing 19.0mm	-	-	-	-
Lab Max Converted Wet Density: (t/m ³)	2.04	-	-	-	-
Adjusted Lab Max CWD: (t/m ³)	2.04	-	-	-	-
Compactive Effort:	Standard	-	-	-	-

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Drier than OMC	-	-	-	-
Moisture Ratio (%)	97.0	-	-	-	-
Density Ratio (%)	102.0	-	-	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 23/07/2025 to 29/07/2025



Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

Accreditation number: 20313

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 2

Client: See Civil Pty Ltd Report No: **28**
 Client Address: 108 Siganto Drive, Helensvale QLD 4210 Report Date: 30/07/2025
 Project: 26 Gibbings Court, Lilywood Project No: 943
 Component: Allotment Fill Stage 1 Test Request:
 Lot Number: ITP/PCP:

Sample Information & Location

Sample Number:	31928	31929	31930	31931	31932
Field Test Number:	87	88	89	90	91
Date - Field Tested:	23/07/2025	23/07/2025	23/07/2025	23/07/2025	23/07/2025
Time - Field Tested:	10:02	10:06	10:11	10:15	14:05
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Embankment	Road 02	Lot 145	Lot 147	Road 02
Location/Chainage/Easting: (m)	E:489323.9	E:489317.2	E:489303.2	E:489298.9	E:489316.1
Position/Offset/Northing: (m)	N:7002158.9	N:7002143.4	N:7002158.5	E:7002179.7	N:7002115.9
Level/Layer/R.L.	R.L 24.50	R.L 24.30	R.L 24.10	R.L 23.95	R.L 25.0
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Laboratory testing 29/07/2025

Field Wet Density: (t/m ³)	2.07	2.13	2.00	2.05	2.05
Field Dry Density: (t/m ³)	1.67	1.73	1.63	1.69	1.69
Retained Oversize (Wet basis): (%)	0% on 19.0mm				
Material Description:	Clay, Brown	Silty Clay, Brown	Clay, Brown	Silty Clay, Brown	Clay, Brown
Moisture Content Method:	AS1289.2.1.1 - Oven				
Field Moisture Content: (%)	23.9	23.0	23.2	21.4	20.9
Adjusted Lab OMC: (%)	22.0	22.3	22.8	22.1	21.2
Fraction Tested:	Passing 19.0mm				
Lab Max Converted Wet Density: (t/m ³)	2.09	2.09	2.08	2.06	2.07
Adjusted Lab Max CWD: (t/m ³)	2.09	2.09	2.08	2.06	2.07
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	2% Wetter than OMC	0.5% Wetter than OMC	0.5% Wetter than OMC	0.5% Drier than OMC	At OMC
Moisture Ratio (%)	108.5	103.0	102.0	96.5	99.0
Density Ratio (%)	99.0	101.5	96.5	99.5	99.0

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

NATA Accreditation number: 20313

Approved By:

M.Eaton
Approved Signatory

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2/37 Northlink Place, Virginia, Qld 4014**Telephone:** (07) 3256 7536**E-Mail:** Brisbane.North@asct.com.au**Mobile:** 0415 380 326**A.B.N.:** 92 602 346 127**Compaction Control Test Report (Nuclear Gauge & Hilf)**

Page: 2 of 2

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number:

Report No: **28**
 Report Date: 30/07/2025
 Project No: 943
 Test Request: ITP/PCP:

Sample Information & Location

Sample Number:	31933	31934	31935	-	-
Field Test Number:	92	93	94	-	-
Date - Field Tested:	23/07/2025	23/07/2025	23/07/2025	-	-
Time - Field Tested:	14:09	14:15	14:20	-	-
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Road 02	Embankment	Lot 140	-	-
Location/Chainage/Easting: (m)	E:489327.4	E:489321.3	E:489310.5	-	-
Position/Offset/Northing: (m)	N:7002108.9	N:7002099.7	N:7002107.3	-	-
Level/Layer/R.L.	R.L 25.05	R.L 25.05	R.L 25.05	-	-
Layer Depth: (mm)	300	300	300	-	-
Depth Tested: (mm)	300	300	300	-	-

Field & Laboratory Results

Laboratory testing 29/07/2025

Field Wet Density: (t/m ³)	1.95	2.06	2.12	-	-
Field Dry Density: (t/m ³)	1.61	1.70	1.73	-	-
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-	-
Material Description:	Clay, Brown	Clay, Pale Brown	Clay, Brown	-	-
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-
Field Moisture Content: (%)	21.4	21.4	21.9	-	-
Adjusted Lab OMC: (%)	21.7	20.5	22.5	-	-
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-	-
Lab Max Converted Wet Density: (t/m ³)	2.05	2.08	2.06	-	-
Adjusted Lab Max CWD: (t/m ³)	2.05	2.08	2.06	-	-
Compactive Effort:	Standard	Standard	Standard	-	-

Relative Compaction & Moisture

Moisture Variation (%)	At OMC	1% Wetter than OMC	0.5% Drier than OMC	-	-
Moisture Ratio (%)	99.0	104.5	97.5	-	-
Density Ratio (%)	95.5	99.0	102.5	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1-2001 (Prep), AS1289.5.4.1-2007 (Density Ratio, Moisture Variation & Ratio), AS1289.5.7.1-2006 (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1-2007 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) - (Disturbed Sampling)

Remarks Regarding the Lot.

Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

NATA Accreditation number: 20313

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page:

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Client:	See Civil Pty Ltd	Report No:	33
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	4/08/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	-
Lot Number:	-	ITP/PCP:	-

Sample Information & Location

Sample Number:	31985	31986	31987	31988	31989
Field Test Number:	95	96	97	98	99
Date - Field Tested:	24/07/2025	24/07/2025	24/07/2025	24/07/2025	24/07/2025
Time - Field Tested:	1400	1404	1409	1412	1416
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	-	-	-	-	Lot 145
Location/Chainage/Easting: (m)	E:489291.6	E:489291.4	E:489296.7	E:489298.8	E:489313.2
Position/Offset/Northing: (m)	N:7002098.4	N:7002096.7	N:7002094.5	N:7002100.5	N:7002169.2
Level/Layer/R.L.	RL:22.70	RL:22.50	RL:22.84	RL:23.05	RL:25.05
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.11	2.03	2.10	2.06	2.12
Field Dry Density: (t/m ³)	1.71	1.64	1.72	1.65	1.72
Retained Oversize (Wet basis): (%)	0% on 19.0mm				
Material Description:	Clay, Brown				
Moisture Content Method:	AS1289.2.1.1 - Oven				
Field Moisture Content: (%)	23.5	23.5	22.5	25.0	23.0
Adjusted Lab OMC: (%)	23.7	23.0	21.5	24.7	22.3
Fraction Tested:	Passing 19.0mm				
Lab Max Converted Wet Density: (t/m ³)	2.02	2.05	2.05	2.02	2.03
Adjusted Lab Max CWD: (t/m ³)	2.02	2.05	2.05	2.02	2.03
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Drier than OMC	0.5% Wetter than OMC			
Moisture Ratio (%)	99.0	102.5	103.5	101.5	103.5
Density Ratio (%)	104.5	99.0	102.5	102.0	104.5

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), , AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 30/07/2025 to 31/07/2025



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Accreditation number: 20313

Approved By:

M.Eaton
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Compaction Control Test Report (Nuclear Gauge & Hilf) Page: 2 of 2

Client:	See Civil Pty Ltd	Report No:	33
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	4/08/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	-
Lot Number:	-	ITP/PCP:	-

Sample Information & Location

Sample Number:	31990	-	-	-	-
Field Test Number:	100	-	-	-	-
Date - Field Tested:	24/07/2025	-	-	-	-
Time - Field Tested:	1417	-	-	-	-
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Road 02	-	-	-	-
Location/Chainage/Easting: (m)	E:489299.7	-	-	-	-
Position/Offset/Northing: (m)	N:7002151.8	-	-	-	-
Level/Layer/R.L.	RL:25.00	-	-	-	-
Layer Depth: (mm)	300	-	-	-	-
Depth Tested: (mm)	300	-	-	-	-

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.08	-	-	-	-
Field Dry Density: (t/m ³)	1.70	-	-	-	-
Retained Oversize (Wet basis): (%)	0% on 19.0mm	-	-	-	-
Material Description:	Clay, Brown	-	-	-	-
Moisture Content Method:	AS1289.2.1.1 - Oven	-	-	-	-
Field Moisture Content: (%)	22.0	-	-	-	-
Adjusted Lab OMC: (%)	22.9	-	-	-	-
Fraction Tested:	Passing 19.0mm	-	-	-	-
Lab Max Converted Wet Density: (t/m ³)	2.04	-	-	-	-
Adjusted Lab Max CWD: (t/m ³)	2.04	-	-	-	-
Compactive Effort:	Standard	-	-	-	-

Relative Compaction & Moisture

Moisture Variation (%)	1.0% Drier than OMC	-	-	-	-
Moisture Ratio (%)	96.5	-	-	-	-
Density Ratio (%)	102.0	-	-	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 30/07/2025 to 31/07/2025



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Compaction Control Test Report (Nuclear Gauge & Hilf)

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Client:	See Civil Pty Ltd	Report No:	34
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	8/08/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	-
Lot Number:	-	ITP/PCP:	-

Sample Information & Location

Sample Number:	31998	31999	32000	32001	-
Field Test Number:	101	102	103	104	-
Date - Field Tested:	25/07/2025	25/07/2025	25/07/2025	25/07/2025	-
Time - Field Tested:	0956	1001	1005	1009	-
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 144	Road 02	Lot 335	Lot 205	
Location/Chainage/Easting:	(m) E:489332.0	E:489276.0	E:489300.0	E:489214.0	-
Position/Offset/Northing:	(m) N:7002156.0	N:7002179.0	N:7002211.0	N:7002156.0	-
Level/Layer/R.L.	RL:25.10	RL:22.50	RL:27.40	RL:26.90	-
Layer Depth:	(mm) 300	300	300	300	-
Depth Tested:	(mm) 300	300	300	300	-

Field & Laboratory Results

Field Wet Density:	(t/m ³)	1.99	1.99	1.95	1.90	-
Field Dry Density:	(t/m ³)	1.73	1.61	1.57	1.53	-
Retained Oversize (Wet basis):	(%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-
Material Description:		Clay, Brown	Clay, Brown	Clay, Brown	Clay, Brown	-
Moisture Content Method:		AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-
Field Moisture Content:	(%)	15.5	24.0	24.0	24.0	-
Adjusted Lab OMC:	(%)	15.8	23.7	22.2	21.8	-
Fraction Tested:		Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-
Lab Max Converted Wet Density:	(t/m ³)	2.06	2.09	1.93	1.94	-
Adjusted Lab Max CWD:	(t/m ³)	2.06	2.09	1.93	1.94	-
Compactive Effort:		Standard	Standard	Standard	Standard	-

Relative Compaction & Moisture

Moisture Variation	(%)	0.5% Drier than OMC	0.5% Wetter than OMC	1.5% Wetter than OMC	2.0% Wetter than OMC	-
Moisture Ratio	(%)	97.0	101.0	107.5	110.5	-
Density Ratio	(%)	96.5	95.5	100.5	97.5	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), , AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 04/08/2025



Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

Accreditation number: 20313

Approved By:


M.Eaton
Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

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Client:	See Civil Pty Ltd	Report No:	35
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	8/08/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	-
Lot Number:	-	ITP/PCP:	-

Sample Information & Location

Sample Number:	32022	32023	32024	32025	-
Field Test Number:	105	106	107	108	-
Date - Field Tested:	30/07/2025	30/07/2025	30/07/2025	30/07/2025	-
Time - Field Tested:	1401	1406	1412	1416	-
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 149	Lot 151	Lot 207	Lot 148	
Location/Chainage/Easting: (m)	E:489254.0	E:489224.0	E:489235.0	E:489283.0	-
Position/Offset/Northing: (m)	N:7002137.0	N:7002141.0	N:7002162.0	N:7002140.0	-
Level/Layer/R.L.	RL:24.50	RL:24.30	RL:24.40	RL:24.40	-
Layer Depth: (mm)	300	300	300	300	-
Depth Tested: (mm)	300	300	300	300	-

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.09	2.07	2.08	2.06	-
Field Dry Density: (t/m ³)	1.71	1.70	1.79	1.70	-
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-
Material Description:	Clay, Brown	Clay, Brown	Clay, Brown	Clay, Brown	-
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-
Field Moisture Content: (%)	22.0	22.0	16.5	21.5	-
Adjusted Lab OMC: (%)	22.4	20.8	16.1	21.1	-
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-
Lab Max Converted Wet Density: (t/m ³)	2.05	2.09	2.07	2.04	-
Adjusted Lab Max CWD: (t/m ³)	2.05	2.09	2.07	2.04	-
Compactive Effort:	Standard	Standard	Standard	Standard	-

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Drier than OMC	1.0% Wetter than OMC	0.5% Wetter than OMC	At OMC	-
Moisture Ratio (%)	98.0	104.5	102.0	101.0	-
Density Ratio (%)	102.0	99.0	100.5	101.0	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, CI 6.4(b) (Sampling), CV calculations derived from Austroads NTR-09 publication (Not Included in NATA endorsement)

Remarks Regarding the Lot.

Laboratory testing 04/08/2025



Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

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Approved By:

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page:

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Client:	See Civil Pty Ltd	Report No:	36
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	8/08/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	-
Lot Number:	-	ITP/PCP:	-

Sample Information & Location

Sample Number:	32048	32049	32050	32051	-
Field Test Number:	109	110	111	112	-
Date - Field Tested:	30/07/2025	30/07/2025	30/07/2025	30/07/2025	-
Time - Field Tested:	1352	1356	1402	1408	-
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 152	Road 03	Lot 149	Lot 148	
Location/Chainage/Easting:	(m) E:489206.3	E:489228.2	E:489248.2	E:489277.1	-
Position/Offset/Northing:	(m) N:7002134.1	N:7002121.2	N:7002139.4	N:7002135.3	-
Level/Layer/R.L.	R:24.50	RL:24.55	RL:25.10	RL:24.85	-
Layer Depth:	(mm) 300	300	300	300	-
Depth Tested:	(mm) 300	300	300	300	-

Field & Laboratory Results

Field Wet Density:	(t/m ³)	2.13	2.10	2.05	2.09	-
Field Dry Density:	(t/m ³)	1.86	1.81	1.78	1.77	-
Retained Oversize (Wet basis):	(%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	-
Material Description:		Silty Clay, Brown	Silty Clay, Brown	Silty Clay, Brown	Silty Clay, Brown	-
Moisture Content Method:		AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-
Field Moisture Content:	(%)	14.5	16.0	15.0	18.0	-
Adjusted Lab OMC:	(%)	14.9	17.7	17.0	19.3	-
Fraction Tested:		Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	-
Lab Max Converted Wet Density:	(t/m ³)	2.09	2.04	2.05	2.03	-
Adjusted Lab Max CWD:	(t/m ³)	2.09	2.04	2.05	2.03	-
Compactive Effort:		Standard	Standard	Standard	Standard	-

Relative Compaction & Moisture

Moisture Variation	(%)	At OMC	2.0% Dryer than OMC	2.0% Dryer than OMC	1.5% Dryer than OMC	-
Moisture Ratio	(%)	98.5	89.5	88.0	92.0	-
Density Ratio	(%)	102.5	103.0	99.5	103.0	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, CI 6.4(b) (Sampling), CV calculations derived from Austroads NTR-09 publication (Not Included in NATA endorsement)

Remarks Regarding the Lot.

Laboratory testing 04/08/2025



Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

Accreditation number: 20313

Approved By:


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Compaction Control Test Report (Nuclear Gauge & Hilf)

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Client:	See Civil Pty Ltd	Report No:	40
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	8/08/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	-
Lot Number:	-	ITP/PCP:	-

Sample Information & Location

Sample Number:	32072	32073	32074	32075	32076
Field Test Number:	113	114	115	116	117
Date - Field Tested:	31/07/2025	31/07/2025	31/07/2025	31/07/2025	31/07/2025
Time - Field Tested:	1015	1020	1024	1028	1426
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Embankment	Lot 204	Lot 206	Lot 207	Road 01
Location/Chainage/Easting: (m)	E:489107.8	E:489190.7	E:489217.3	E:489236.6	E:489129.2
Position/Offset/Northing: (m)	N:7002172.0	N:7002168.2	N:7002168.4	N:7002163.8	N:7002185.9
Level/Layer/R.L.	RL:19.20	RL:23.30	RL:23.40	RL:23.65	RL:19.80
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.18	2.06	1.97	2.00	2.20
Field Dry Density: (t/m ³)	1.96	1.77	1.67	1.69	2.04
Retained Oversize (Wet basis): (%)	5% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	4% on 19.0mm
Material Description:	Gravelly Silty Clay, Brown	Silty Gravelly Clay, Red Brown	Silty Clay, Red Brown	Silty Clay, Red Brown	Silty Gravelly Clay, Red Mottled Brown
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven
Field Moisture Content: (%)	11.0	17.0	18.0	18.5	8.0
Adjusted Lab OMC: (%)	10.3	14.8	16.1	17.0	9.5
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm
Lab Max Converted Wet Density: (t/m ³)	2.20	2.12	1.99	1.98	2.18
Adjusted Lab Max CWD: (t/m ³)	2.21	2.12	1.99	1.98	2.19
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Wetter than OMC	2.0% Wetter than OMC	2.0% Wetter than OMC	1.5% Wetter than OMC	1.5% Drier than OMC
Moisture Ratio (%)	106.5	113.0	111.0	108.5	82.5
Density Ratio (%)	99.0	97.0	99.0	101.0	100.5

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 04/08/2025



Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

Accreditation number: 20313

Approved By:

M. Eaton
Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 2 of 2

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number: -

Report No: 40
 Report Date: 8/08/2025
 Project No: 943
 Test Request: -
 ITP/PCP: -

Sample Information & Location

Sample Number:	32077	32078	32079	32080	32081
Field Test Number:	118	119	120	121	122
Date - Field Tested:	31/07/2025	31/07/2025	31/07/2025	31/07/2025	31/07/2025
Time - Field Tested:	1421	1351	1356	1402	1408
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 201	Lot 204	Lot 206	Lot 150	Lot 208
Location/Chainage/Easting: (m)	E:489143.4	E:489198.4	E:489224.1	E:489238.3	E:489254.9
Position/Offset/Northing: (m)	N:7002154.5	N:7002155.8	N:7002182.4	N:7002157.4	N:7002169.9
Level/Layer/R.L.	RL:23.60	RL:23.70	RL:24.05	RL:24.60	RL:24.80
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.22	2.07	2.00	2.07	2.05
Field Dry Density: (t/m ³)	2.04	1.75	1.61	1.65	1.63
Retained Oversize (Wet basis): (%)	3% on 19.0mm	1% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm
Material Description:	Gravelly Silty Clay, Pale Brown	Gravelly Silty Clay, Red Brown	Silty Clay, Red	Clay, Red	Gravelly Silty Clay, Brown
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven
Field Moisture Content: (%)	9.0	18.0	24.5	25.0	26.0
Adjusted Lab OMC: (%)	10.4	17.4	24.9	25.6	25.1
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm
Lab Max Converted Wet Density: (t/m ³)	2.17	2.12	1.98	1.99	1.98
Adjusted Lab Max CWD: (t/m ³)	2.17	2.12	1.98	1.99	1.98
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	1.5% Drier than OMC	1.0% Wetter than OMC	0.5% Drier than OMC	0.5% Drier than OMC	0.5% Wetter than OMC
Moisture Ratio (%)	85.0	105.0	98.0	98.5	103.0
Density Ratio (%)	102.0	97.5	101.0	104.0	103.5

Specified Density Ratio	Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)	-	-	-	-	-
Maximum (%)	-	-	-	-	-
Specified Moisture Ratio	Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)	-	-	-	-	-
Maximum (%)	-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 04/08/2025



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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 2

Client:	See Civil Pty Ltd	Report No:	41
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	8/08/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	-
Lot Number:	-	ITP/PCP:	-

Sample Information & Location

Sample Number:	32089	32090	32091	32092	32093
Field Test Number:	123	124	125	126	127
Date - Field Tested:	1/08/2025	1/08/2025	1/08/2025	1/08/2025	1/08/2025
Time - Field Tested:	0956	1001	1007	1015	1020
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 159	Lot 201	Road 01	Lot 204	Lot 205
Location/Chainage/Easting: (m)	E489140.0	E:489124.4	E:489139.2	E:489203.8	E:489214.6
Position/Offset/Northing: (m)	N:7002141.0	N:7002156.8	N:7002190.8	N:7002170.3	N:7002180.2
Level/Layer/R.L.	RL:22.95	RL:22.80	RL:20.85	RL:24.05	RL:24.20
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.19	2.19	1.97	1.87	1.86
Field Dry Density: (t/m ³)	1.83	1.84	1.60	1.42	1.42
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	1% on 19.0mm
Material Description:	Sandy Clay, Brown	Sandy Clay, Brown	Clay, Brown	Clay, Red	Gravelly Clay, Brown
Moisture Content Method:	AS1289.2.1.1 - Oven				
Field Moisture Content: (%)	19.0	19.0	23.0	32.0	30.5
Adjusted Lab OMC: (%)	20.8	20.5	22.9	29.9	30.6
Fraction Tested:	Passing 19.0mm				
Lab Max Converted Wet Density: (t/m ³)	2.11	2.10	1.94	1.94	1.94
Adjusted Lab Max CWD: (t/m ³)	2.11	2.10	1.94	1.94	1.95
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	1.5% Drier than OMC	1.5% Drier than OMC	0.5% Wetter than OMC	2.0% Wetter than OMC	At OMC
Moisture Ratio (%)	92.0	93.0	101.0	106.5	99.5
Density Ratio (%)	103.5	104.0	101.5	96.5	95.5

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)	95	98.4	10	100.18	4.36	0.405
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, CI 6.4(b) (Sampling), CV calculations derived from Austroads NTR-09 publication (Not Included in NATA endorsement)

Remarks Regarding the Lot.

Laboratory testing 06/08/2025



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Approved By:


M. Eaton
Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 2 of 2

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number: -

Report No: 41
 Report Date: 8/08/2025
 Project No: 943
 Test Request: -
 ITP/PCP: -

Sample Information & Location

Sample Number:	32094	32095	32096	32097	32098
Field Test Number:	128	129	130	131	132
Date - Field Tested:	1/08/2025	1/08/2025	1/08/2025	1/08/2025	1/08/2025
Time - Field Tested:	1338	1342	1348	1351	1359
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 151	Lot 207	Lot 205	Lot 153	Lot 202
Location/Chainage/Easting: (m)	E:489225.4	E:489239.5	E:489209.7	E:489193.7	E:489155.0
Position/Offset/Northing: (m)	N:7002150.2	N:7002172.6	N:7002160.9	N:7002140.2	N:7002148.4
Level/Layer/R.L.	RL:24.90	RL:25.05	RL:24.45	RL:24.60	RL:22.90
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.01	2.12	1.94	1.92	2.22
Field Dry Density: (t/m ³)	1.62	1.82	1.53	1.62	1.88
Retained Oversize (Wet basis): (%)	0% on 19.0mm				
Material Description:	Silty Clay, Brown	Silty Clay, Brown	Silty Clay, Brown	Silty Clay, Brown	Clay, Brown
Moisture Content Method:	AS1289.2.1.1 - Oven				
Field Moisture Content: (%)	24.0	17.0	26.5	19.0	18.5
Adjusted Lab OMC: (%)	23.8	18.6	28.3	19.4	21.0
Fraction Tested:	Passing 19.0mm				
Lab Max Converted Wet Density: (t/m ³)	2.05	2.04	2.02	2.01	2.07
Adjusted Lab Max CWD: (t/m ³)	2.05	2.04	2.02	2.01	2.07
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Wetter than OMC	1.5% Drier than OMC	1.5% Drier than OMC	0.5% Drier than OMC	2.5% Drier than OMC
Moisture Ratio (%)	102.0	91.0	94.0	97.0	87.5
Density Ratio (%)	98.5	104.0	95.5	95.5	107.0

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)	95	98.4	10	100.18	4.36	0.405
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling), CV calculations derived from Austroads NTR-09 publication (Not Included in Nata endorsement)

Remarks Regarding the Lot.

Laboratory testing 06/08/2025



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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page:

1 of 2

Client:	See Civil Pty Ltd	Report No:	42
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	22/08/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	-
Lot Number:	-	ITP/PCP:	-

Sample Information & Location

Sample Number:	32116	32117	32118	32119	32120
Field Test Number:	133	134	135	136	137
Date - Field Tested:	4/08/2025	4/08/2025	4/08/2025	4/08/2025	4/08/2025
Time - Field Tested:	1000	1006	1011	1020	1026
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 149	Lot 208	Lot 152	Road 01	Road 01
Location/Chainage/Easting: (m)	E:489250.4	E:489250.8	E:489211.3	E:489116.9	E:489123.5
Position/Offset/Northing: (m)	N:7002148.9	N:7002166.4	N:7002144.8	N:7002161.6	N:7002177.3
Level/Layer/R.L.	RL:25.75	RL:25.65	RL:25.30	RL:24.25	RL:21.40
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	1.86	1.88	1.93	1.88	2.09
Field Dry Density: (t/m ³)	1.45	1.48	1.54	1.60	1.77
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm
Material Description:	Clay, Red Brown	Silty Clay, Red Brown	Clay, Grey Mottled Red	Clay, Brown	Clay, Brown
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven
Field Moisture Content: (%)	29.0	27.5	25.0	17.5	18.0
Adjusted Lab OMC: (%)	28.9	26.6	23.2	17.9	19.5
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm
Lab Max Converted Wet Density: (t/m ³)	1.94	1.96	2.02	1.95	1.97
Adjusted Lab Max CWD: (t/m ³)	1.94	1.96	2.02	1.95	1.97
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	At OMC	0.5% Wetter than OMC	2.0% Wetter than OMC	0.5% Drier than OMC	1.5% Drier than OMC
Moisture Ratio (%)	100.0	103.0	108.5	97.5	91.5
Density Ratio (%)	96.0	95.5	95.5	96.0	106.5

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)	95	97.1	10	98.75	4.01	0.405
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, CI 6.4(b) (Sampling), CV calculations derived from Austroads NTR-09 publication (Not Included in NATA endorsement)

Remarks Regarding the Lot.

Laboratory testing 07/08/2025 to 09/08/2025



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Approved By:

M.Eaton
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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 2 of 2

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number: -

Report No: 42
 Report Date: 22/08/2025
 Project No: 943
 Test Request: -
 ITP/PCP: -

Sample Information & Location

Sample Number:	32121	32122	32123	32124	32125
Field Test Number:	138	139	140	141	142
Date - Field Tested:	4/08/2025	4/08/2025	4/08/2025	4/08/2025	4/08/2025
Time - Field Tested:	1404	1408	1414	1424	1429
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 151	Lot 205	Lot 204	Lot 159	Lot 201
Location/Chainage/Easting: (m)	E:489218.0	E:489217.9	E:489190.6	E:489147.7	E:489149.2
Position/Offset/Northing: (m)	N:7002142.4	N:7002158.7	N:7002182.8	N:7002144.6	N:7002166.3
Level/Layer/R.L.	RL:26.85	RL:25.90	RL:25.70	RL:24.20	RL:23.20
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	1.92	1.99	1.95	2.20	2.04
Field Dry Density: (t/m ³)	1.51	1.60	1.65	1.86	1.70
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm
Material Description:	Silty Clay, Red Brown	Clay, Red Brown	Silty Clay, Pale Brown	Silty Clay, Brown	Clay, Brown
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven
Field Moisture Content: (%)	28.0	24.5	18.5	18.5	20.5
Adjusted Lab OMC: (%)	26.6	24.5	16.1	18.0	18.7
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm
Lab Max Converted Wet Density: (t/m ³)	1.98	1.99	2.02	2.09	2.08
Adjusted Lab Max CWD: (t/m ³)	1.98	1.99	2.02	2.09	2.08
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	1.0% Wetter than OMC	At OMC	2.0% Wetter than OMC	0.5% Wetter than OMC	2.0% Wetter than OMC
Moisture Ratio (%)	104.5	99.0	113.5	103.0	109.5
Density Ratio (%)	97.5	100.0	96.5	105.5	98.0

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)	95	97.1	10	98.75	4.01	0.405
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling), CV calculations derived from Austroads NTR-09 publication (Not Included in Nata endorsement)

Remarks Regarding the Lot.

Laboratory testing 07/08/2025 to 09/08/2025



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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 2

Client:	See Civil Pty Ltd	Report No:	43
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	22/08/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	-
Lot Number:	-	ITP/PCP:	-

Sample Information & Location

Sample Number:	32149	32150	32151	32152	32153
Field Test Number:	143	144	145	146	147
Date - Field Tested:	5/08/2025	5/08/2025	5/08/2025	5/08/2025	5/08/2025
Time - Field Tested:	1002	1007	1013	1019	1402
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 208	Lot 149	Lot 150	Lot 205	Lot 153
Location/Chainage/Easting: (m)	E:489249.9	E:489253.0	E:489235.4	E:489211.2	E:489197.0
Position/Offset/Northing: (m)	N:7002174.6	N:7002151.3	N:7002151.1	N:7002160.9	N:7002146.9
Level/Layer/R.L.	RL:26.30	RL:26.20	RL:26.35	RL:26.30	RL:25.90
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	1.94	1.94	1.91	1.89	1.96
Field Dry Density: (t/m ³)	1.50	1.49	1.48	1.47	1.49
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm
Material Description:	Silty Clay, Red Mottled Grey	Silty Clay, Red Mottled Grey	Silty Clay, Red Mottled Grey	Silty Clay, Brown Mottled Red	Silty Clay, Red Mottled Grey
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven
Field Moisture Content: (%)	29.0	31.0	28.5	28.5	31.5
Adjusted Lab OMC: (%)	28.7	31.1	27.9	27.3	30.8
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm
Lab Max Converted Wet Density: (t/m ³)	1.96	2.00	1.96	1.96	1.95
Adjusted Lab Max CWD: (t/m ³)	1.96	2.00	1.96	1.96	1.95
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	At OMC	At OMC	1.0% Wetter than OMC	1.0% Wetter than OMC	0.5% Wetter than OMC
Moisture Ratio (%)	101.0	99.5	103.0	104.0	101.5
Density Ratio (%)	99.0	97.5	97.5	96.5	100.5

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 09/08/2025



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Accreditation number: 20313

Approved By:

M. Eaton
Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 2 of 2

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number: -

Report No: **43**
 Report Date: 22/08/2025
 Project No: 943
 Test Request: -
 ITP/PCP: -

Sample Information & Location

Sample Number:	32154	32155	32156	32157	32158
Field Test Number:	148	149	150	151	152
Date - Field Tested:	5/08/2025	5/08/2025	5/08/2025	5/08/2025	5/08/2025
Time - Field Tested:	1407	1412	1417	1422	1427
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 204	Lot 158	Road 01	Lot 151	Road 04
Location/Chainage/Easting: (m)	E:489201.3	E:489168.9	E:489177.5	E:489123.7	E:489130.4
Position/Offset/Northing: (m)	N:7002159.8	N:7002137.9	N:7002132.1	N:7002147.1	N:7002190.6
Level/Layer/R.L.	RL:25.80	RL:24.50	RL:23.60	RL:23.65	RL:23.20
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	1.94	1.85	2.00	2.00	2.04
Field Dry Density: (t/m ³)	1.42	1.46	1.68	1.68	1.68
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm
Material Description:	Silty Clay, Red Mottled Grey	Silty Clay, Brown	Clay, Brown	Clay, Brown	Clay, Brown
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven
Field Moisture Content: (%)	36.0	27.0	18.5	19.0	21.5
Adjusted Lab OMC: (%)	36.3	25.0	21.4	21.2	23.8
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm
Lab Max Converted Wet Density: (t/m ³)	1.94	1.94	1.99	1.98	1.99
Adjusted Lab Max CWD: (t/m ³)	1.94	1.94	1.99	1.98	1.99
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	At OMC	2.0% Wetter than OMC	2.5% Drier than OMC	2.0% Drier than OMC	2.0% Drier than OMC
Moisture Ratio (%)	99.5	108.0	87.5	90.0	90.5
Density Ratio (%)	100.0	95.5	100.5	101.0	102.5

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling),

Remarks Regarding the Lot.

Laboratory testing 09/08/2025



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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page:

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Client:	See Civil Pty Ltd	Report No:	51
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	22/08/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	-
Lot Number:	-	ITP/PCP:	-

Sample Information & Location

Sample Number:	32173	32174	32175	32176	32177
Field Test Number:	153	154	155	156	157
Date - Field Tested:	6/08/2025	6/08/2025	6/08/2025	6/08/2025	6/08/2025
Time - Field Tested:	1000	1008	1012	1402	1409
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Road 01	Lot 201	Lot 159	Road 01	Road 01
Location/Chainage/Easting: (m)	E:489129.7	E:489147.1	E:489138.9	E:489124.5	E:489141.8
Position/Offset/Northing: (m)	N:7002185.5	N:7002152.4	N:7002131.6	N:7002188.1	N:7002148.1
Level/Layer/R.L.	RL:23.60	RL:24.70	RL:24.80	RL:23.50	RL:24.60
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.02	2.16	2.15	2.06	1.95
Field Dry Density: (t/m ³)	1.54	1.90	1.90	1.75	1.61
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm
Material Description:	Silty Clay, Red Brown	Silty Gravelly Clay, Pale Brown	Silty Gravelly Clay, Pale Brown	Silty Clay, Pale Brown	Silty Clay, Brown Mottled Red
Moisture Content Method:	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven
Field Moisture Content: (%)	31.0	13.5	13.5	18.0	21.0
Adjusted Lab OMC: (%)	28.9	13.9	13.3	17.7	21.0
Fraction Tested:	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm	Passing 19.0mm
Lab Max Converted Wet Density: (t/m ³)	1.98	2.08	2.09	2.03	2.00
Adjusted Lab Max CWD: (t/m ³)	1.98	2.08	2.09	2.03	2.00
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	2.0% Wetter than OMC	0.5% Drier than OMC	At OMC	0.5% Wetter than OMC	At OMC
Moisture Ratio (%)	107.5	96.5	101.5	103.0	99.5
Density Ratio (%)	102.0	104.0	103.0	101.5	97.5

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling), CV calculations derived from Austroads NTR-09 publication (Not Included in NATA endorsement)

Remarks Regarding the Lot.

Laboratory testing 09/08/2025 to 10/08/2025



Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

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Approved By:

M.Eaton
Approved Signatory

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 2 of 2

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number: -

Report No: 51
 Report Date: 22/08/2025
 Project No: 943
 Test Request: -
 ITP/PCP: -

Sample Information & Location

Sample Number:	32178	32179	32180	32181	32182
Field Test Number:	158	159	160	161	162
Date - Field Tested:	6/08/2025	6/08/2025	6/08/2025	6/08/2025	6/08/2025
Time - Field Tested:	1414	1419	1425	1432	1440
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 202	Lot 204	Lot 203	Road 04	Road 04
Location/Chainage/Easting: (m)	E:489158.1	E:489194.2	E:489189.5	E:489207.4	E:489187.1
Position/Offset/Northing: (m)	N:7002151.0	N:7002155.6	N:7002141.6	N:7002188.8	N:7002183.9
Level/Layer/R.L.	RL:24.50	RL:25.90	RL:25.95	RL:25.80	RL:25.85
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	1.92	2.00	2.00	2.03	2.06
Field Dry Density: (t/m ³)	1.64	1.69	1.72	1.66	1.69
Retained Oversize (Wet basis): (%)	0% on 19.0mm				
Material Description:	Silty Clay, Pale Brown				
Moisture Content Method:	AS1289.2.1.1 - Oven				
Field Moisture Content: (%)	17.0	18.5	16.5	22.5	22.0
Adjusted Lab OMC: (%)	17.8	17.9	15.5	19.6	20.0
Fraction Tested:	Passing 19.0mm				
Lab Max Converted Wet Density: (t/m ³)	2.00	2.02	2.03	2.02	2.03
Adjusted Lab Max CWD: (t/m ³)	2.00	2.02	2.03	2.02	2.03
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Drier than OMC	0.5% Wetter than OMC	1.0% Wetter than OMC	2.5% Wetter than OMC	2.0% Wetter than OMC
Moisture Ratio (%)	96.5	102.5	106.0	114.0	109.5
Density Ratio (%)	96.0	99.0	98.5	101.0	101.5

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling), CV calculations derived from Austroads NTR-09 publication (Not Included in Nata endorsement)

Remarks Regarding the Lot.

Laboratory testing 09/08/2025 to 10/08/2025



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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page:

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Client:	See Civil Pty Ltd	Report No:	56
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	26/08/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	-
Lot Number:	-	ITP/PCP:	-

Sample Information & Location

Sample Number:	32215	32216	32217	32218	32219
Field Test Number:	163	164	165	166	167
Date - Field Tested:	7/08/2025	7/08/2025	7/08/2025	7/08/2025	7/08/2025
Time - Field Tested:	1001	1006	1011	1017	1022
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 201	Road 04	Lot 202	Lot 159	Lot 201
Location/Chainage/Easting: (m)	E:489140.3	E:489142.4	E:489155.7	E:489125.3	E:489149.1
Position/Offset/Northing: (m)	N:7002116.7	N:7002177.6	N:7002142.5	N:7002142.3	N:7002173.3
Level/Layer/R.L.	RL:25.05	RL:25.40	RL:25.70	RL:24.70	RL:25.40
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.03	2.04	2.07	2.11	2.04
Field Dry Density: (t/m ³)	1.81	1.77	1.76	1.79	1.82
Retained Oversize (Wet basis): (%)	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	0% on 19.0mm	3% on 19.0mm
Material Description:	Light Grey Clay	Light Brown Clay	Clay	Brown Clay	Brown Sandy Clay
Moisture Content Method:	AS1289.2.1.1 - Oven				
Field Moisture Content: (%)	12.0	15.0	18.0	17.5	12.0
Adjusted Lab OMC: (%)	13.0	15.3	16.8	18.9	13.2
Fraction Tested:	Passing 19.0mm				
Lab Max Converted Wet Density: (t/m ³)	2.10	2.06	2.00	1.98	2.09
Adjusted Lab Max CWD: (t/m ³)	2.10	2.06	2.00	1.98	2.10
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	1.0% Dryer than OMC	At OMC	1.0% Wetter than OMC	1.0% Dryer than OMC	1.0% Dryer than OMC
Moisture Ratio (%)	92.5	99.5	107.0	94.0	91.5
Density Ratio (%)	96.5	99.0	103.5	106.5	97.0

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling), CV calculations derived from Austroads NTR-09 publication (Not Included in Nata endosrement)

Remarks Regarding the Lot.

Laboratory testing 18/08/2025 to 21/08/2025



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Accreditation number: 20313

Approved By:

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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 2 of 2

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number: -

Report No: 56
 Report Date: 26/08/2025
 Project No: 943
 Test Request: -
 ITP/PCP: -

Sample Information & Location

Sample Number:	32220	32221	32222	32223	32224
Field Test Number:	168	169	170	171	172
Date - Field Tested:	7/08/2025	7/08/2025	7/08/2025	7/08/2025	7/08/2025
Time - Field Tested:	1410	1414	1420	1425	1430
Material Source / Type:	Onsite - Allotment Fill				
Remarks / Notes:					
Control Line:	Lot 203	Lot 205	Lot 206	Lot 207	Road 01
Location/Chainage/Easting: (m)	E:489175.8	E:489206.6	E:489216.2	E:489235.7	E:489123.8
Position/Offset/Northing: (m)	N:7002175.8	N:7002176.2	N:7002183.5	N:7002183.1	N:7002192.0
Level/Layer/R.L.	RL:25.45	RL:25.50	RL:25.60	RL:25.50	RL:24.20
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.02	2.00	2.02	2.03	2.10
Field Dry Density: (t/m ³)	1.68	1.70	1.79	1.74	1.86
Retained Oversize (Wet basis): (%)	0% on 19.0mm				
Material Description:	Grey Clay	Grey Clay	Red Brown Clay	Redy Brown Clay	Grey Clay
Moisture Content Method:	AS1289.2.1.1 - Oven				
Field Moisture Content: (%)	20.0	17.5	13.5	16.5	13.0
Adjusted Lab OMC: (%)	20.4	17.6	13.1	16.8	12.9
Fraction Tested:	Passing 19.0mm				
Lab Max Converted Wet Density: (t/m ³)	1.97	1.96	1.98	1.98	2.12
Adjusted Lab Max CWD: (t/m ³)	1.97	1.96	1.98	1.98	2.12
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Drier than OMC	At OMC	0.5% Wetter than OMC	At OMC	At OMC
Moisture Ratio (%)	97.0	98.5	102.0	98.5	102.0
Density Ratio (%)	102.5	102.0	102.5	102.5	99.0

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling), CV calculations derived from Austroads NTR-09 publication (Not Included in Nata endorsement)

Remarks Regarding the Lot.

Laboratory testing 18/08/2025 to 21/08/2025



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Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 1 of 2

Client:	See Civil Pty Ltd	Report No:	57
Client Address:	108 Siganto Drive, Helensvale QLD 4210	Report Date:	26/08/2025
Project:	26 Gibbings Court, Lilywood	Project No:	943
Component:	Allotment Fill Stage 1	Test Request:	-
Lot Number:	-	ITP/PCP:	-

Sample Information & Location

Sample Number:	32267	32268	32269	32270	32271
Field Test Number:	173	174	175	176	177
Date - Field Tested:	12/08/2025	12/08/2025	12/08/2025	12/08/2025	12/08/2025
Time - Field Tested:	0957	1011	1019	1026	1036
Material Source / Type:	Onsite - Subgrade				
Remarks / Notes:					
Control Line:	Road 02	Road 02	Road 02	Road 04	Road 04
Location/Chainage/Easting: (m)	E:489337.9	E:489295.0	E:489251.0	E:489232.3	E:489153.7
Position/Offset/Northing: (m)	N:7002105.9	N:7002147.3	N:7002195.7	N:7002183.9	N:7002166.6
Level/Layer/R.L.	RL:24.65	RL:25.40	RL:26.10	RL:25.85	RL:25.50
Layer Depth: (mm)	300	300	300	300	300
Depth Tested: (mm)	300	300	300	300	300

Field & Laboratory Results

Field Wet Density: (t/m ³)	2.04	2.05	2.05	1.97	2.03
Field Dry Density: (t/m ³)	1.78	1.74	1.76	1.60	1.74
Retained Oversize (Wet basis): (%)	0% on 19.0mm				
Material Description:	Clay, Pale Brown	Clay, Pale Brown	Clay, Pale Brown	Clay, Red Brown	Clay, Brown
Moisture Content Method:	AS1289.2.1.1 - Oven				
Field Moisture Content: (%)	15.0	18.0	16.5	22.5	17.0
Adjusted Lab OMC: (%)	14.6	16.8	16.0	22.4	16.9
Fraction Tested:	Passing 19.0mm				
Lab Max Converted Wet Density: (t/m ³)	2.07	2.06	1.97	1.94	1.96
Adjusted Lab Max CWD: (t/m ³)	2.07	2.06	1.97	1.94	1.96
Compactive Effort:	Standard	Standard	Standard	Standard	Standard

Relative Compaction & Moisture

Moisture Variation (%)	0.5% Wetter than OMC	1.0% Wetter than OMC	0.5% Wetter than OMC	0.5% Wetter than OMC	At OMC
Moisture Ratio (%)	102.0	106.0	103.0	101.0	100.0
Density Ratio (%)	98.5	100.0	104.0	101.0	103.5

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, CI 6.4(b) (Sampling), CV calculations derived from Austroads NTR-09 publication (Not Included in NATA endorsement)

Remarks Regarding the Lot.

Laboratory testing 21/08/2025 to 22/08/2025



Accredited for compliance with ISO/IEC 17025 - Testing. The results relate only to the items sampled/tested.

Accreditation number: 20313

Approved By:

M.Eaton
Approved Signatory

**ASCT Brisbane North**

(Postal Address is the same)

2/37 Northlink Place, Virginia, Qld 4014

Telephone: (07) 3256 7536

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A.B.N. 92 602 346 127

Compaction Control Test Report (Nuclear Gauge & Hilf)

Page: 2 of 2

Client: See Civil Pty Ltd
 Client Address: 108 Siganto Drive, Helensvale QLD 4210
 Project: 26 Gibbings Court, Lilywood
 Component: Allotment Fill Stage 1
 Lot Number: -

Report No: 57
 Report Date: 26/08/2025
 Project No: 943
 Test Request: -
 ITP/PCP: -

Sample Information & Location

Sample Number:		32272	32273	-	-	-
Field Test Number:		178	179	-	-	-
Date - Field Tested:		12/08/2025	12/08/2025	-	-	-
Time - Field Tested:		1407	1414	-	-	-
Material Source / Type:		Onsite - Subgrade				
Remarks / Notes:						
Control Line:		Road 03	Road 03	-	-	-
Location/Chainage/Easting:	(m)	E:489292.4	E:489135.2	-	-	-
Position/Offset/Northing:	(m)	N:7002118.1	N:7002082.8	-	-	-
Level/Layer/R.L.		RL:24.80	RL:23.70	-	-	-
Layer Depth:	(mm)	300	300	-	-	-
Depth Tested:	(mm)	300	300	-	-	-

Field & Laboratory Results

Field Wet Density:	(t/m ³)	2.08	1.92	-	-	-
Field Dry Density:	(t/m ³)	1.80	1.64	-	-	-
Retained Oversize (Wet basis):	(%)	0% on 19.0mm	0% on 19.0mm	-	-	-
Material Description:		Clay, Pale Brown	Clay, Red Brown	-	-	-
Moisture Content Method:		AS1289.2.1.1 - Oven	AS1289.2.1.1 - Oven	-	-	-
Field Moisture Content:	(%)	15.5	17.0	-	-	-
Adjusted Lab OMC:	(%)	15.6	17.0	-	-	-
Fraction Tested:		Passing 19.0mm	Passing 19.0mm	-	-	-
Lab Max Converted Wet Density:	(t/m ³)	2.01	1.93	-	-	-
Adjusted Lab Max CWD:	(t/m ³)	2.01	1.93	-	-	-
Compactive Effort:		Standard	Standard	-	-	-

Relative Compaction & Moisture

Moisture Variation	(%)	0.5% Drier than OMC	At OMC	-	-	-
Moisture Ratio	(%)	98.5	100.5	-	-	-
Density Ratio	(%)	103.5	100.0	-	-	-

Specified Density Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-
Specified Moisture Ratio		Characteristic Value	Number of Tests	Mean	Standard Deviation	Constant k
Minimum (%)		-	-	-	-	-
Maximum (%)		-	-	-	-	-

Test Methods Used.

AS1289.1.1 (Prep), AS1289.5.4.1 - (Moisture Ratio), AS1289.5.7.1 - (Hilf Density/Moisture Ratio (Rapid Method)), AS1289.5.8.1 (Nuclear Gauge, Direct Transmission), AS 1289.1.2.1, Cl 6.4(b) (Sampling), CV calculations derived from Austroads NTR-09 publication (Not Included in NATA endorsement)

Remarks Regarding the Lot.

Laboratory testing 21/08/2025 to 22/08/2025



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