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**Level One Report** 

# **Naric Civil**

Riverbank Estate - Stage 19B,

Lot 1008 Waterside Esplanade, Caboolture South

April 2020



# RYAN & ASSOCIATES GEOTECHNICAL PTY LTD

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**April 2020** 

Naric Civil Ptv Ltd P.O. Box 150 Redbank Qld 4301

> Re: Riverbank Estate Stage 19B – Lot 1008 Waterside Esplanade, Caboolture South.

> > Geotechnical Testing & Certification.

#### Scope

Ryan & Associates Geotechnical was commissioned by Naric Civil Pty Ltd to provide geotechnical inspections, testing and certification of the filling earthworks at the abovementioned project.

The project was assumed to be a Residential development as per "AS3798 – 2007 Guidelines on Earthworks for Commercial and Residential Developments to Level one requirement as outlined in Section 8".

The development comprises of a proposed 32 lot subdivision being constructed on previously developed land, controlled filling works to Lots 895, 896, 901 – 911 & 923 -925 have been included within this report. Refer to Appendix A "Site Plans" drawing number 17-002277.4 - 200.

Ryan & Associates Geotechnical maintained a site presence during the works in accordance with AS3798 - 2007 Level 1. Appendix B - Testing Summary, of this report, contains the testing summary of all testing undertaken with achieved compaction densities.

Site inspections and compaction control testing was carried out as work progressed, with records compiled on all aspects of the earthworks.

This level one report does not cover any fill placed by others prior to or after Ryan & Associates controlled filling works.

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#### **Foundation Preparation** 2

#### 2.1 Stripping of Area

Existing topsoil materials were stripped prior to proof rolling and the commencement of filling operations.

Inspections prior to the placement of fill revealed in-situ materials consisting of Clay fill materials.

A proof roll was carried out on the fill areas prior to the commencement of placement of fill.

#### 2.2 Removal of Unsuitable Materials

Apart from top soil materials no unsuitable was required to be removed within proposed fill areas prior to proof rolling and placement of fill.

#### 3 Controlled Filling

Fill used consisted of cut & imported materials. Fills were placed using an Excavator in layers not exceeding 0.2m. The fill zones were compacted using a Pad Foot Vibrating Roller.

## **Compaction Control Operations**

Compliance testing of fill operations was performed by Ryan & Associates Geotechnical between the Months of February 2020 to April 2020.

The test results show, where applicable, a Dry Density Ratio of 95% standard or greater was consistently achieved for testing performed on fill materials.

Testing results are shown in the Testing Summary; refer to Appendix B – Testing Summary of this report.

Individual Lot Certificates for the controlled filling works to Lots 895, 896, 901 – 911 & 923 - 925 have been included within this report, refer to Appendix C

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#### 5 Conclusion

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in accordance with good engineering practice and can be considered controlled fill. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

The earthworks at the time of completion have been carried out to meet the requirements of Level 1 Certification as per AS3798 – 2007 "Guidelines on Earthworks for Commercial and Residential Development", Clause 8.2.

**RYAN & ASSOCIATES** 

Geotechnical Pty Ltd.

Stephen Roberts

Laboratory Manager

April 2020

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#### Limitations

This level one certification report verifies that all supervised fill placed meets the minimum requirements of 95% standard compaction where applicable. As far as could be determined the earthworks at the time of completion have been carried out to meet the requirements of the drawing and specification.

This level one report makes no reference to previous filling works if any or natural ground and its suitability to future design beyond its acceptance of passing proof rolling.

This level one report only covers earthworks filling as detailed in the earth works drawings.

Unless otherwise stated, this Level 1 Certification does not address any other geotechnical issues which may relevant to building construction and serviceability.

This Level 1 Certification does not include backfill to service trenches, retaining walls bridging layers, top soil or any pavements.

A full geotechnical site investigation/classification and foundation design for the specific ground conditions should be carried out by a suitably qualified and experienced professional, prior to building when the structure type and location is known.

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# Appendix A

Site Plan

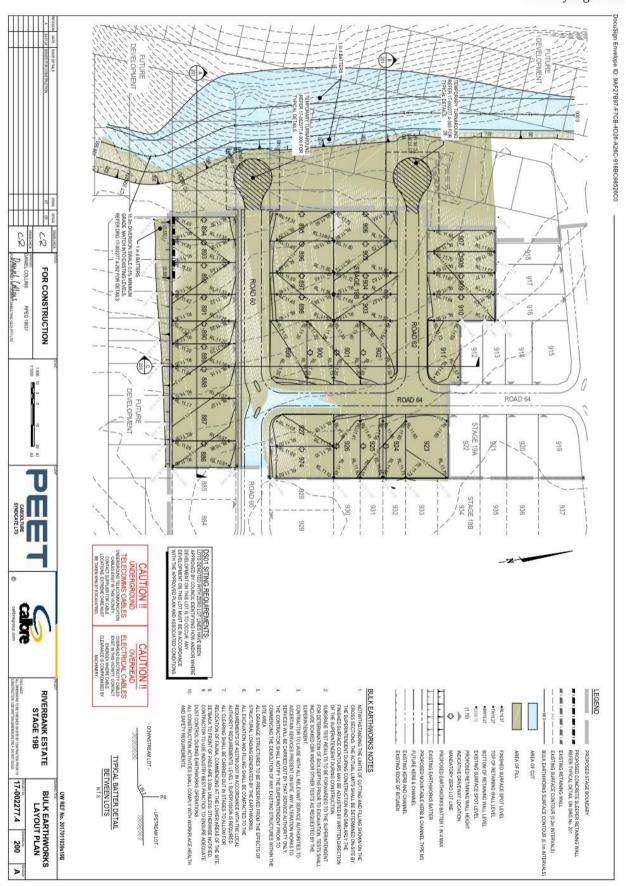
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# **Appendix B**

**Testing Summary** 

April 2020

Client: Naric Civil Pty Ltd
Project: Riverbank Estate Stage 19B

Project Number: R20-015

Project Location: Lot 1008 Market Drive
Suburb: Caboolture South

Sample Number :	Project Number :	Date Sampled :	Location	Test Number :	Test Depth	Layer Depth	MDD (t/m³)	OMC (%)	Oversize Wet (%)	Oversize Dry (%)	Oversize Density (t/m³)	Dry Density (t/m³)	Field MC (%)	Density Ratio (%)				Report No.
N20881	R20-015	6/03/2020	Stormwater, 2/D - 3/D, Base of trench		150		1.801	16.1	0	0		1.768	16	98.2				
N20882	R20-015	6/03/2020	Stormwater, G33/DB - 2/D, Base of trench		150		1.796	16.8	0	0		1.79	16.2	99.7				
N20883	R20-015	6/03/2020	Stormwater, G34/DC - 3/D, Base of trench		150		1.8	16.8	0	0		1.757	16.7	97.6				
N20884	R20-015	12/03/2020	Stormwater, 1/D - 2/D, Base of trench		150		1.762	18.6	0	0		1.686	18.6	95.7				
N20885	R20-015	12/03/2020	Stormwater, G35/CD - G34/DC, Base of trench		150		1.799	15.6	0	0		1.75	15.4	97.3				
N20877	R20-015	16/03/2020	Stormwater, G30/D - G31/D, Base of trench		150		1.797	17.3	0	0		1.762	16.3	98				
N20878	R20-015	16/03/2020	Stormwater, G32/D9 - 2/D, Base of trench		150		1.806	18.2	0	0		1.749	17.1	96.8				
N20501	R20-015	27/03/2020	Road 60, CH 1527, 1.5m Left of C.L.		150	300	1.785	18.4	0	0		1.832	16.4	102.6				
N20502	R20-015	27/03/2020	Road 60, CH 1560, 1m Right of C.L.		150	300	1.776	18.4	0	0		1.804	17.4	101.6				
N20503	R20-015	27/03/2020	Road 60, CH 1590, 0.5m Left of C.L.		150	300	1.805	18.4	0	0		1.816	16.6	100.6				
N20504	R20-015	27/03/2020	Road 64, CH 110, 1.5m Right of C.L.		150	300	1.811	18.6	0	0		1.812	17.9	100.1				
N20505	R20-015	27/03/2020	Road 64, CH 70, 0.5m Left of C.L.		150	300	1.77	18.8	0	0		1.821	16.8	102.9				
N20506	R20-015	27/03/2020	Road 62, CH 110, 1m Right of C.L.		150	300	1.791	18.3	0	0		1.832	16.9	102.3				
N20507	R20-015	27/03/2020	Road 62, CH 70, C.L.		150	300	1.776	19	0	0		1.806	18.4	101.7				
N20763	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #1, F.L.		150	300	2.331	6.7	0	0		2.241	4.7	96.1				
N20764	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #2, F.L.		150	300	2.343	6.3	0	0		2.279	4.3	97.3				
N20765	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #3, F.L.		150	300	2.322	6.6	0	0		2.219	4.6	95.6				
N20766	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #4, F.L.		150	300	2.381	6.7	0	0		2.265	4.7	95.1				
N20767	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #5, F.L.		150	300	2.38	6.6	0	0		2.264	4.6	95.1				
N20768	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #6, F.L.		150	300	2.384	6.8	0	0		2.274	4.8	95.4				

Client: Naric Civil Pty Ltd
Project: Riverbank Estate Stage 19B

Project Number: R20-015

Project Location: Lot 1008 Market Drive
Suburb: Caboolture South

Sample Number :	Project Number :	Date Sampled :	Location	Test Number :	Test Depth	Layer Depth	MDD (t/m³)	OMC (%)	Oversize Wet (%)	Oversize Dry (%)	Oversize Density (t/m³)	Dry Density (t/m³)	Field MC (%)	Density Ratio (%)				Report No.
N20769	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #7, F.L.		150	300	2.353	6.4	0	0		2.262	4.4	96.1				
N20770	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #8, F.L.		150	300	2.35	6.8	0	0		2.235	4.8	95.1				
N20771	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #9, F.L.		150	300	2.338	6.4	0	0		2.238	4.4	95.7				
N20772	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #10, F.L.		150	300	2.344	6.7	0	0		2.251	4.7	96				
N20773	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #11, F.L.		150	300	2.343	6.7	0	0		2.265	5.1	96.7				
N20774	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #12, F.L.		150	300	2.331	6.9	0	0		2.251	4.9	96.6				
N20775	R20-015	3/04/2020	Watermain, Refer to attached plan, Test #13, F.L.		150	300	2.338	6.8	0	0		2.268	4.8	97				
N20776	R20-015	3/04/2020	Sewer, E/10D - 6/10, 0.5m Below F.L.		150	300	2.349	7	0	0		2.263	5.1	96.3				
N20777	R20-015	3/04/2020	Sewer, E/10D - 6/10, F.L.		150	300	2.355	7.1	0	0		2.247	5.1	95.4				
N20778	R20-015	3/04/2020	Sewer, E/10C - 5/10, 0.5m Below F.L.		150	300	2.352	6.9	0	0		2.273	5.2	96.6				
N20779	R20-015	3/04/2020	Sewer, E/10C - 5/10, F.L.		150	300	2.35	6.7	0	0		2.272	5.1	96.7				
N20780	R20-015	3/04/2020	Sewer, 3/10 - E/10B, 1.0m Below F.L		150	300	2.38	6.6	0	0		2.265	4.6	95.2				
N20781	R20-015	3/04/2020	Sewer, 3/10 - E/10B, 0.5m Below F.L		150	300	2.382	6.7	0	0		2.27	4.6	95.3				
N20782	R20-015	3/04/2020	Sewer, 3/10 - E/10B, F.L		150	300	2.34	6.9	0	0		2.226	5.1	95.1				
N20783	R20-015	3/04/2020	Sewer, 1/10 - E/10A, 0.5m Below F.L.		150	300	2.337	7.1	0	0		2.226	5.1	95.2				
N20784	R20-015	3/04/2020	Sewer, 1/10 - E/10A, F.L.		150	300	2.335	6.4	0	0		2.238	4.4	95.8				
N20785	R20-015	3/04/2020	Sewer, 1/10 - 6/8, 1.0m Below F.L.		150	300	2.363	6.1	0	0		2.284	4.4	96.7				
N20786	R20-015	3/04/2020	Sewer, 1/10 - 6/8, 0.5m Below F.L.		150	300	2.35	6.3	0	0		2.254	4.4	95.9				
N20787	R20-015	3/04/2020	Sewer, 1/10 - 6/8, F.L.		150	300	2.335	6.4	0	0		2.265	4.9	97				
N20788	R20-015	3/04/2020	Sewer, E/8E - 7/8, 0.5m Below F.L.		150	300	2.333	6.4	0	0		2.257	5	96.7				

Client: Naric Civil Pty Ltd
Project: Riverbank Estate Stage 19B

Project Number: R20-015

Project Location: Lot 1008 Market Drive
Suburb: Caboolture South

Sample Number :	Project Number :	Date Sampled :	Location	Test Number :	Test Depth	Layer Depth	MDD (t/m³)	OMC (%)	Oversize Wet (%)	Oversize Dry (%)	Oversize Density (t/m³)	Dry Density (t/m³)	Field MC (%)	Density Ratio (%)				Report No.
N20789	R20-015	3/04/2020	Sewer, E/8E - 7/8, F.L.		150	300	2.336	6.8	0	0		2.237	4.8	95.8				
N20790	R20-015	3/04/2020	Sewer, E/8 - 8/8, 0.5m Below F.L.		150	300	2.376	6.5	0	0		2.258	4.6	95				
N20791	R20-015	3/04/2020	Sewer, E/8 - 8/8, F.L.		150	300	2.334	6.7	0	0		2.25	5.4	96.4				
N20792	R20-015	3/04/2020	Stormwater, G30/D - G31/D, F.L.		150	300	2.294	6.3	0	0		2.29	4.3	99.8				
N20793	R20-015	3/04/2020	Stormwater, G31/D - 1/D, F.L.		150	300	2.297	6.4	0	0		2.298	4.4	100				
N20794	R20-015	3/04/2020	Stormwater, 1/D - 2/D, F.L.		150	300	2.297	6.6	0	0		2.295	4.5	99.9				
N20795	R20-015	3/04/2020	Stormwater, 2/D - 3/D, F.L.		150	300	2.299	6.4	0	0		2.305	4.5	100.3				
N20796	R20-015	3/04/2020	Stormwater, 3/D - 4/D, F.L.		150	300	2.314	6.2	0	0		2.312	4.2	99.9				
N20797	R20-015	3/04/2020	Stormwater, G32/DA - 2/D, F.L.		150	300	2.305	6.6	0	0		2.313	4.6	100.4				
N20798	R20-015	3/04/2020	Stormwater, G33/DA - 2/D, F.L.		150	300	2.339	6.1	0	0		2.345	4.1	100.3				
N20799	R20-015	3/04/2020	Stormwater, G35/DC - G34/DC, F.L.		150	300	2.306	6.3	0	0		2.312	4.3	100.3				
N20800	R20-015	3/04/2020	Stormwater, G34/DC - 3/D, F.L.		150	300	2.306	6.3	0	0		2.311	4.3	100.2				
N20801	R20-015	3/04/2020	Road 60, CH 1488		150	300	2.317	6.2	0	0		2.321	4.3	100.2				
N20802	R20-015	3/04/2020	Road 60, CH 1536		150	300	2.277	7.1	0	0		2.277	5.1	100				
N20803	R20-015	3/04/2020	Road 60, CH 1600		150	300	2.29	6.5	0	0		2.286	4.5	99.8				
N20804	R20-015	3/04/2020	Road 64, CH 140		150	300	2.276	6.7	0	0		2.285	3.9	100.4				
N20805	R20-015	3/04/2020	Road 64, CH 94		150	300	2.282	6.8	0	0		2.318	4.8	101.6				
N20806	R20-015	3/04/2020	Road 62, CH 37		150	300	2.284	6.4	0	0		2.303	5.1	100.8				
N20807	R20-015	3/04/2020	Road 62, CH 99		150	300	2.3	6.6	0	0		2.315	4.7	100.6				
N20908	R20-015	14/04/2020	Lot 907, F.L.		150	300	1.743	21.6	0	0		1.735	20.2	99.5				

Client: Naric Civil Pty Ltd
Project: Riverbank Estate Stage 19B

Project Number: R20-015

Project Location: Lot 1008 Market Drive
Suburb: Caboolture South

Sample Number :	Project Number :	Date Sampled :	Location	Test Number :	Test Depth	Layer Depth	MDD (t/m³)	OMC (%)	Oversize Wet (%)	Oversize Dry (%)	Oversize Density (t/m³)	Dry Density (t/m³)	Field MC (%)	Density Ratio (%)				Report No.
N20909	R20-015	14/04/2020	Lot 908, F.L.		150	300	1.748	21.3	0	0	•	1.702	20.8	97.4				
N20910	R20-015	14/04/2020	Lot 909, F.L.		150	300	1.749	21.6	0	0		1.733	20.9	99.1				
N20911	R20-015	14/04/2020	Lot 910, F.L.		150	300	1.763	21.8	0	0		1.733	20	98.3				
N20912	R20-015	14/04/2020	Lot 911, F.L.		150	300	1.735	22.1	0	0		1.704	21.3	98.2				
N20913	R20-015	14/04/2020	Lot 906, F.L.		150	300	1.736	23	0	0		1.7	21.9	97.9				
N20914	R20-015	14/04/2020	Lot 905, F.L.		150	300	1.77	21.8	0	0		1.721	20.4	97.2				
N20915	R20-015	14/04/2020	Lot 904, F.L.		150	300	1.751	21.5	0	0		1.749	20.8	99.9				
N20916	R20-015	14/04/2020	Lot 903, F.L.		150	300	1.746	20.7	0	0		1.735	19.4	99.4				
N20917	R20-015	14/04/2020	Lot 902, F.L.		150	300	1.752	21	0	0		1.719	19.8	98.1				
N20918	R20-015	14/04/2020	Lot 901, F.L.		150	300	1.759	21.3	0	0		1.713	19.9	97.4				
N20919	R20-015	14/04/2020	Lot 895, F.L.		150	300	1.763	21.6	0	0		1.743	20.3	98.9				
N20920	R20-015	14/04/2020	Lot 896, F.L.		150	300	1.748	21.8	0	0		1.734	20.6	99.2				
N20921	R20-015	14/04/2020	Lot 923, F.L.		150	300	1.742	21.9	0	0		1.742	21.1	100				
N20922	R20-015	14/04/2020	Lot 924, F.L.		150	300	1.736	22	0	0		1.742	21.1	100.4				
N20923	R20-015	14/04/2020	Lot 925, F.L.		150	300	1.755	21.5	0	0		1.721	20.8	98.1				
N20924	R20-015	14/04/2020	Road 60, CH 1493		150	300	2.33	8.4	0	0		2.336	7.3	100.3				
N20925	R20-015	14/04/2020	Road 60, CH 1530		150	300	2.335	8.4	0	0		2.347	7.6	100.5				
N20926	R20-015	14/04/2020	Road 60, CH 1598		150	300	2.329	8.4	0	0		2.343	7.3	100.6				
N20927	R20-015	14/04/2020	Road 64, CH 136		150	300	2.321	7.7	0	0		2.324	7.8	100.1				
N20928	R20-015	14/04/2020	Road 64, CH 66		150	300	2.337	8.1	0	0		2.344	7.3	100.3				

Client: Naric Civil Pty Ltd
Project: Riverbank Estate Stage 19B

Project Number: R20-015

Project Location: Lot 1008 Market Drive
Suburb: Caboolture South

Sample Number :	Project Number :	Date Sampled :	Location	Test Number :	Test Depth	Layer Depth	MDD (t/m³)	OMC (%)	Oversize Wet (%)	Oversize Dry (%)	Oversize Density (t/m³)	Dry Density (t/m³)	Field MC (%)	Density Ratio (%)				Report No.
N20929	R20-015	14/04/2020	Road 62, CH 120		150	300	2.334	8.4	0	0	\-	2.336	7.5	100.1				
N20930	R20-015	14/04/2020	Road 62, CH 50		150	300	2.321	8.3	0	0		2.328	6.9	100.3				
N20934	R20-015	17/04/2020	Sewer, 6/10 - E/10, 0.5m B.F.L		150	300	1.865	13.6	0	0		1.798	12.1	96.4				
N20935	R20-015	17/04/2020	Sewer, 6/10 - E/10, F.L		150	300	1.847	14.1	0	0		1.79	13	96.9				
N20936	R20-015	17/04/2020	Sewer, 6/10 - 5/10, 0.5m B.F.L		150	300	1.838	14.2	0	0		1.779	13.5	96.8				
N20937	R20-015	17/04/2020	Sewer, 6/10 - 5/10, F.L		150	300	1.858	14	0	0		1.789	12.9	96.3				
N20938	R20-015	17/04/2020	Sewer, 5/10 - 3/10, 0.5m B.F.L		150	300	1.828	14.6	0	0		1.789	13.2	97.9				
N20939	R20-015	17/04/2020	Sewer, 5/10 - 3/10, F.L		150	300	1.836	14.3	0	0		1.789	13	97.4				
N20940	R20-015	17/04/2020	Sewer, 3/10 - 1/10, 0.5m B.F.L		150	300	1.855	14.6	0	0		1.775	13.7	95.7				
N20941	R20-015	17/04/2020	Sewer, 3/10 - 1/10, F.L		150	300	1.86	14.4	0	0		1.784	13.1	95.9				
N20942	R20-015	17/04/2020	Sewer, 8/8 - 7/8, 0.5m B.F.L		150	300	1.869	13.1	0	0		1.806	12.2	96.6				
N20943	R20-015	17/04/2020	Sewer, 8/8 - 7/8, F.L		150	300	1.848	14.2	0	0		1.795	12.8	97.1				
N20944	R20-015	17/04/2020	Sewer, 7/8 - 6/8, 0.5m B.F.L		150	300	1.858	14.4	0	0		1.793	12.8	96.5				
N20945	R20-015	17/04/2020	Sewer, 7/8 - 6/8, F.L		150	300	1.863	14.4	0	0		1.798	12.5	96.5				
N20946	R20-015	17/04/2020	Sewer, 6/8 - 5/8, 0.5m B.F.L		150	300	1.856	14.4	0	0		1.79	13.3	96.4				
N20947	R20-015	17/04/2020	Sewer, 6/8 - 5/8, F.L		150	300	1.853	14.4	0	0		1.785	13	96.3				
N20988	R20-015	20/04/2020	Road 62, CH 56		150	300	2.304	7.1	0	0		2.378	4.5	103.2				
N20989	R20-015	20/04/2020	Road 62, CH 124		150	300	2.305	6.9	0	0		2.392	4.1	103.8				
N20990	R20-015	20/04/2020	Road 64, CH 111		150	300	2.31	6.8	0	0		2.383	4.1	103.2				
N20991	R20-015	20/04/2020	Road 60, CH 1513		150	300	2.3	6.7	0	0		2.385	4	103.7				

Client: Naric Civil Pty Ltd
Project: Riverbank Estate Stage 19B

Project Number: R20-015

Project Location: Lot 1008 Market Drive
Suburb: Caboolture South

Sample Number :	Project Number :	Date Sampled :	Location	Test Number :	Test Depth	Layer Depth	MDD (t/m³)	OMC (%)	Oversize Wet (%)	Oversize Dry (%)	Oversize Density (t/m³)	Dry Density (t/m³)	Field MC (%)	Density Ratio (%)					Report No.
N20992	R20-015	20/04/2020	Road 60, CH 1603		150	300	2.315	6.4	0	0		2.424	3.8	104.7				ï	
																			12-15



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# **Appendix C**

Individual Lot Certificates

April 2020



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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 895

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

The earthworks at the time of completion have been carried out to meet the requirements of Level 1 Certification as per AS3798 – 2007 "Guidelines on Earthworks for Commercial and Residential Development".

This level one certificate verifies that supervised fill was placed and meets the minimum requirements of 95% standard compaction where applicable as per drawing numbered 17-002277.4 - 200.

This level one certificate makes no reference to previous filling works if any or natural ground and its suitability to future design beyond its acceptance of passing proof rolling.

This level one certificate does not cover any fill placed by others prior to or after Ryan & Associates controlled filling works.

Unless otherwise stated, this Level 1 Certification does not address any other geotechnical issues which may be relevant to building construction and serviceability.

This Level 1 Certification does not include backfill to service trenches or retaining walls.

A full geotechnical site investigation/classification and foundation design for the specific ground conditions should be carried out by a suitably qualified and experienced professional, prior to building when the structure type and location is known.

**Stephen Roberts** for and on behalf of RYAN & ASSOCIATES GEOTECHNICIAL

Enc. Drawing showing lateral extent of controlled filling

April 2020



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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 896

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

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**Stephen Roberts** for and on behalf of RYAN & ASSOCIATES GEOTECHNICIAL

Enc. Drawing showing lateral extent of controlled filling

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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 901

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

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**Stephen Roberts** for and on behalf of RYAN & ASSOCIATES GEOTECHNICIAL

Enc. Drawing showing lateral extent of controlled filling

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# BULK FILL OPERATIONS TESTING CERTIFICATE (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B – Lot 1008 Waterside Esplanade, Caboolture South Lot 902

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

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This level one certificate verifies that supervised fill was placed and meets the minimum requirements of 95% standard compaction where applicable as per drawing numbered 17-002277.4 - 200.

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Stephen Roberts
for and on behalf of
RYAN & ASSOCIATES GEOTECHNICIAL

Enc. Drawing showing lateral extent of controlled filling

April 2020

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#### **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 903

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

The earthworks at the time of completion have been carried out to meet the requirements of Level 1 Certification as per AS3798 – 2007 "Guidelines on Earthworks for Commercial and Residential Development".

This level one certificate verifies that supervised fill was placed and meets the minimum requirements of 95% standard compaction where applicable as per drawing numbered 17-002277.4 - 200.

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Enc. Drawing showing lateral extent of controlled filling

April 2020



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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 904

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

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This level one certificate verifies that supervised fill was placed and meets the minimum requirements of 95% standard compaction where applicable as per drawing numbered 17-002277.4 - 200.

This level one certificate makes no reference to previous filling works if any or natural ground and its suitability to future design beyond its acceptance of passing proof rolling.

This level one certificate does not cover any fill placed by others prior to or after Ryan & Associates controlled filling works.

Unless otherwise stated, this Level 1 Certification does not address any other geotechnical issues which may be relevant to building construction and serviceability.

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**Stephen Roberts** for and on behalf of RYAN & ASSOCIATES GEOTECHNICIAL

Enc. Drawing showing lateral extent of controlled filling

April 2020



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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 905

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

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Enc. Drawing showing lateral extent of controlled filling

April 2020



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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 906

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

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**Stephen Roberts** for and on behalf of RYAN & ASSOCIATES GEOTECHNICIAL

Enc. Drawing showing lateral extent of controlled filling

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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 907

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

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Enc. Drawing showing lateral extent of controlled filling

April 2020



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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 908

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

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**Stephen Roberts** for and on behalf of RYAN & ASSOCIATES GEOTECHNICIAL

Enc. Drawing showing lateral extent of controlled filling

April 2020



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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 909

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

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**Stephen Roberts** for and on behalf of RYAN & ASSOCIATES GEOTECHNICIAL

Enc. Drawing showing lateral extent of controlled filling

April 2020



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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 910

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**Stephen Roberts** for and on behalf of RYAN & ASSOCIATES GEOTECHNICIAL

Enc. Drawing showing lateral extent of controlled filling

April 2020



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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 911

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

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**Stephen Roberts** for and on behalf of RYAN & ASSOCIATES GEOTECHNICIAL

Enc. Drawing showing lateral extent of controlled filling

April 2020



Loganholme

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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 923

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

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**Stephen Roberts** for and on behalf of **RYAN & ASSOCIATES GEOTECHNICIAL** 

Enc. Drawing showing lateral extent of controlled filling

April 2020



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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 924

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

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This level one certificate verifies that supervised fill was placed and meets the minimum requirements of 95% standard compaction where applicable as per drawing numbered 17-002277.4 - 200.

This level one certificate makes no reference to previous filling works if any or natural ground and its suitability to future design beyond its acceptance of passing proof rolling.

This level one certificate does not cover any fill placed by others prior to or after Ryan & Associates controlled filling works.

Unless otherwise stated, this Level 1 Certification does not address any other geotechnical issues which may be relevant to building construction and serviceability.

This Level 1 Certification does not include backfill to service trenches or retaining walls.

A full geotechnical site investigation/classification and foundation design for the specific ground conditions should be carried out by a suitably qualified and experienced professional, prior to building when the structure type and location is known.

**Stephen Roberts** for and on behalf of **RYAN & ASSOCIATES GEOTECHNICIAL** 

Enc. Drawing showing lateral extent of controlled filling

April 2020



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## **BULK FILL OPERATIONS TESTING CERTIFICATE** (As per AS3798-2007 - Level 1)

# Riverbank Estate Stage 19B - Lot 1008 Waterside Esplanade, Caboolture South Lot 925

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

The earthworks at the time of completion have been carried out to meet the requirements of Level 1 Certification as per AS3798 – 2007 "Guidelines on Earthworks for Commercial and Residential Development".

This level one certificate verifies that supervised fill was placed and meets the minimum requirements of 95% standard compaction where applicable as per drawing numbered 17-002277.4 - 200.

This level one certificate makes no reference to previous filling works if any or natural ground and its suitability to future design beyond its acceptance of passing proof rolling.

This level one certificate does not cover any fill placed by others prior to or after Ryan & Associates controlled filling works.

Unless otherwise stated, this Level 1 Certification does not address any other geotechnical issues which may be relevant to building construction and serviceability.

This Level 1 Certification does not include backfill to service trenches or retaining walls.

A full geotechnical site investigation/classification and foundation design for the specific ground conditions should be carried out by a suitably qualified and experienced professional, prior to building when the structure type and location is known.

**Stephen Roberts** for and on behalf of **RYAN & ASSOCIATES GEOTECHNICIAL** 

Enc. Drawing showing lateral extent of controlled filling

April 2020

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#### **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 916

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction.

Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

Details of testing results, daily site visit reports and certification of the filling works can be found in the SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019.

Refer to section 1 to 6 of the SGS report for details of:

- 1 General Introduction
- 2 Works and Specifications
- 3 Fill Foundation
- 4 Compliance Testing
- 5 Fill Certification
- 6 Limitations

Ryan & Associates gives no assurances or takes any responsibility for any of the filling works, testing reports, inspection reports & compliance statements within the SGS report.

Refer to SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019 for details of completed works and for future building work recommendations.

Stephen Hunter for and on behalf of RYAN & ASSOCIATES GEOTECHNICIAL

May 2020

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#### **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 917

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction.

Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

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#### **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 918

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction.

Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

Details of testing results, daily site visit reports and certification of the filling works can be found in the SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019.

Refer to section 1 to 6 of the SGS report for details of:

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#### **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 886

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction.

Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

Details of testing results, daily site visit reports and certification of the filling works can be found in the SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 887

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction. Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 888

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction.

Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

Details of testing results, daily site visit reports and certification of the filling works can be found in the SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

## Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 889

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction.

Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 890

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction.

Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 891

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction.

Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

Details of testing results, daily site visit reports and certification of the filling works can be found in the SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019.

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Refer to SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019 for details of completed works and for future building work recommendations.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 892

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction. Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

Details of testing results, daily site visit reports and certification of the filling works can be found in the SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019.

Refer to section 1 to 6 of the SGS report for details of:

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Refer to SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019 for details of completed works and for future building work recommendations.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 893

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction. Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 894

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction. Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 897

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction. Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 898

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 899

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

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Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

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- 6 Limitations

Ryan & Associates gives no assurances or takes any responsibility for any of the filling works, testing reports, inspection reports & compliance statements within the SGS report.

Refer to SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019 for details of completed works and for future building work recommendations.

Stephen Hunter for and on behalf of RYAN & ASSOCIATES GEOTECHNICIAL

May 2020



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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 900

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction.

Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

Details of testing results, daily site visit reports and certification of the filling works can be found in the SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019.

Refer to section 1 to 6 of the SGS report for details of:

- 1 General Introduction
- 2 Works and Specifications
- 3 Fill Foundation
- 4 Compliance Testing
- 5 Fill Certification
- 6 Limitations

Ryan & Associates gives no assurances or takes any responsibility for any of the filling works, testing reports, inspection reports & compliance statements within the SGS report.

Refer to SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019 for details of completed works and for future building work recommendations.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 926

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction. Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

Details of testing results, daily site visit reports and certification of the filling works can be found in the SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019.

Refer to section 1 to 6 of the SGS report for details of:

- 1 General Introduction
- 2 Works and Specifications
- 3 Fill Foundation
- 4 Compliance Testing
- 5 Fill Certification
- 6 Limitations

Ryan & Associates gives no assurances or takes any responsibility for any of the filling works, testing reports, inspection reports & compliance statements within the SGS report.

Refer to SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019 for details of completed works and for future building work recommendations.

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## **BULK FILL OPERATIONS TESTING CERTIFICATE**

(As per SGS certification to AS3798 Level one)

# Riverbank Estate Stage 19 – Lot 1008 Market Drive, Caboolture South Lot 927

Ryan & Associates were engaged by Naric civil, on behalf of Calibre Engineering, to provide individual lot certificates for level one filling works carried out by SGS.

Individual allotment certificates cannot be supplied by SGS as this company is no longer in business.

The SGS level one report dated 8<sup>th</sup> April 2019 has no individual lot certification due to the final allotment layout being unavailable at that time of construction.

Allotment numbers listed within the SGS level one report relate to a concept plan used during the construction phase.

Section 5 of the SGS Level one report states that individual certificates may be required in the future once final lot configurations had been allocated.

The purpose of this certificate is to identify the finalised lot configuration numbers.

Details of testing results, daily site visit reports and certification of the filling works can be found in the SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019.

Refer to section 1 to 6 of the SGS report for details of:

- 1 General Introduction
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Ryan & Associates gives no assurances or takes any responsibility for any of the filling works, testing reports, inspection reports & compliance statements within the SGS report.

Refer to SGS level one report, project No. SGS/17/060 dated 8<sup>th</sup> April 2019 for details of completed works and for future building work recommendations.

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