STRUCterre consulting

Post Earthworks Completion Report

Job No: S1168912_W25-02435

MGC Civil

Lot 102 Arabian Court, Champion Lakes

12 May 2025

Table of Contents

1. Introduction

At the request of Ashim Chettri of MGC Civil, a representative from Structerre Consulting Engineers regularly attended the above site from August 2024 to May 2025 to undertake earthworks verification assessments. The purpose of this assessment is to provide a Site Classification in accordance with AS 2870-2011 Residential slabs and footings and Geotechnical Certification after completion of bulk earthworks.

Structerre Consulting have previously conducted a Geotechnical Investigation of the site in January 2024 and provided earthworks recommendations for the development (refer to Structerre Consulting Geotechnical Investigation Report, J554074, Rev 0, January 2024).

The specification for the project has been provided by Cossill & Webley Consulting Engineers Ref Section 2 Earthworks, dated August 2017.

A copy of the plan outlining the development is attached to this letter.

2. Initial Site Classification & Recommendations

Structerre Consulting classified the site as Class 'A' in accordance with AS2870-2011, providing the following relevant summarised earthworks recommendations were undertaken:

Site Preparation

- Clear and remove all unsuitable materials including vegetation and topsoil prior to excavation of foundation and/or placement of fill.
- Rake to a depth of 0.5m to remove any remaining tree root within the proposed building envelopes and pavement areas and replace and compact with similar materials.
- A minimum of 1.5m of sand cover is to be provided or maintained above the reactive (clayey) material to achieve Class "A" Lots.
- Proof compact the exposed surface to achieve the compaction requirements as per section 4.3 of the Geotechnical Report.

3. Fieldwork

3.1 Fieldwork by Structerre

A representative from Structerre Consulting, (Structerre), attended the site during and at the completion of the project to assess works. Field testing comprising of hand auger boreholes, Nuclear Density Testing (in accordance with AS 1289.5.8.1) and Perth Sand Penetrometer (PSP) tests (in accordance with AS 1289 6.3.3). Testing was conducted by Structerre to confirm the following:

- Adequate removal of deleterious matter, topsoils and vegetation.

- Inspection of stripped surface for material suitability.
- Assessment of stripped surface for compaction.
- Assessment of import fill.
- Audit of compaction of fill materials placed.
- Audit boreholes to confirm thickness of inert fill and or in-situ sand.

Ground conditions of the site at completion of the earthworks were obtained by hand auger and are summarised below;

Location	Depth	Description
BH 1	0-500mm	SAND SP, brown, fine to medium grained, non-plastic.
	500-1000mm	SAND SP, yellow, fine to medium grained, non-plastic.
	1000-1800mm	SAND SP, brown, fine to medium grained, non-plastic.
BH 2	0-1200mm	SAND SP, brown, fine to medium grained, non-plastic.
	1200-1500mm	SAND SP, yellow, fine to medium grained, non-plastic. 1500mm+ Refusal (Gravel)
BH 3	0-100mm	SAND SP, brown, fine to medium grained, non-plastic.
	100-1300mm	SAND SP, yellow, fine to medium grained, non-plastic.
	1300-1500mm	SAND SP, grey, fine to medium grained, non-plastic.
	1500-1700mm	SAND trace gravel SP, brown, fine to medium grained, non-plastic. 1700mm+ Refusal (Gravel).

General observations and the subsequent results obtained from Structerre's audit testing on site indicate the earthworks were conducted in accordance with AS 3798-2007 Guidelines on earthworks for commercial and residential developments, provided drawings, the Technical Specification provided by Cossill & Webley Consulting Engineers Ref Section 2 Earthworks, dated August 2017 and the Structerre Consulting Geotechnical Investigation Report, J554074, Rev 0, January 2024.

3.2 Fieldwork by Others

During the earthworks, the Contractor performed regular compaction testing using a PSP to test the compaction of placed fill materials. These test results form part of the assessment in determining site classification for the stage.

4. Site Classification

AS 2870-2011 provides the site classification based on the determination of potential surface movements from seasonal moisture change. Based on the site testing and observations performed by Structerre, in addition to the information forwarded by MGC Civil, Lot 102 Arabian Court, Champion Lakes can be classified as:

Site Classification	Class 'A'.

- Lots 11 to 54 - Class A as determined by AS 2870-2011 for areas over the natural sands.
- Lots 1 to 10 - Class A with a B1 detail as determined by AS 2870-2011 for areas over reactive fill.

These assessments are based on the following:

- All stormwater runoff from roofs and paved areas is disposed of as far as practical from structures to reduce the risk of differential settlements.

5. Conclusion

This assessment is based on the site condition at the time of testing by Structerre. No allowance has been made for future disturbance for installation of underground services, or additional earthworks by builders or others. Builders should carry out their own compaction checks on a lot-by-lot basis, compacting any localised loose areas where necessary.

Please note that the horizontal and vertical limits of the earthworks were determined by others, and as such, Structerre does not provide any comment as to whether these aspects are compliant with the plans and specifications for the project. Structerre does not guarantee earthwork construction, nor relieve the earthwork contractor of their responsibility to perform the earthworks in accordance to the contract plans and specifications.

We trust this meets with your requirements. Should you require any additional information, or clarification of the above, please contact the undersigned.

For and behalf of Structerre Consulting.

Jacob Pritchard
Laboratory Supervisor

12 May 2025

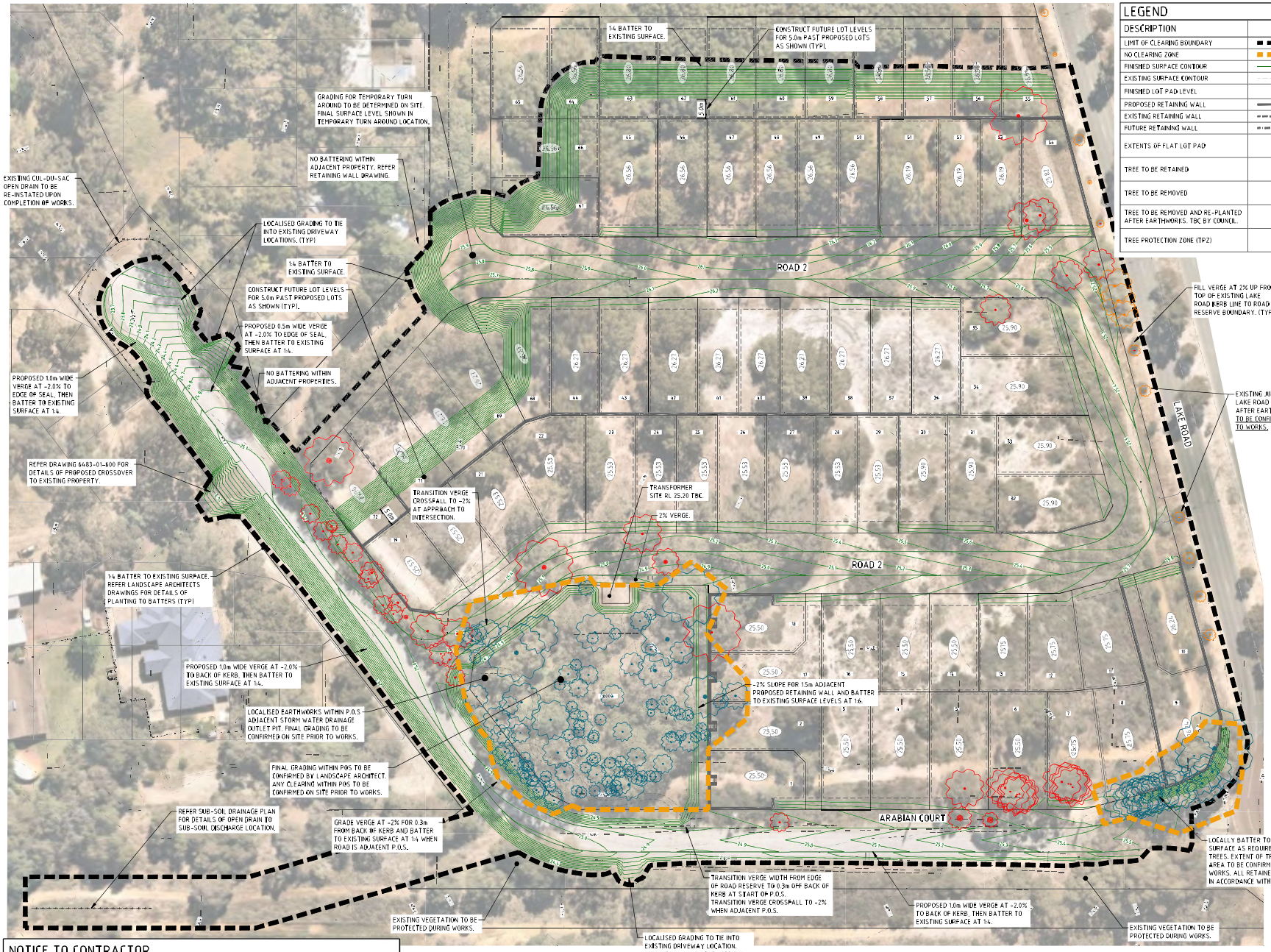
6. References

AS2870-2011 Residential Slabs and Footing

AS3798-2007 Guidelines on earthworks for commercial and residential developments

AS1289 Method of Testing Soil for Engineering Purposes

Appendix A – Site Plan

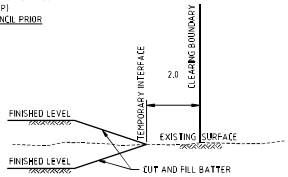


LEGEND

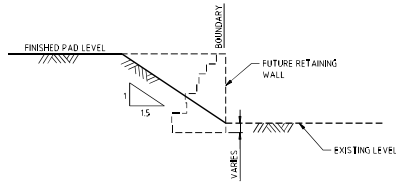
DESCRIPTION	SYMBOL
LIMIT OF CLEARING BOUNDARY	
NO CLEARING ZONE	
FINISHED SURFACE CONTOUR	22.50
EXISTING SURFACE CONTOUR	22.50
FINISHED LOT PAD LEVEL	25.00
PROPOSED RETAINING WALL	
EXISTING RETAINING WALL	
FUTURE RETAINING WALL	
EXTENTS OF FLAT LOT PAD	
TREE TO BE RETAINED	
TREE TO BE REMOVED	
TREE TO BE REMOVED AND RE-PLANTED AFTER EARTHWORKS. TBC BY COUNCIL.	
TREE PROTECTION ZONE (TPZ)	

NOTES

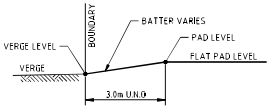
1. ALL LEVELS IN METRES TO AHD. SURVEY BY MNG.
2. BATTERS TO EXISTING SURFACE AT 1:3 (CUT) 1:4 (FILL) UNLESS NOTED OTHERWISE.
3. BATTER POSITION FOR FUTURE WALLS TO ENSURE CUT TO FILL EARTHWORKS BALANCE.
4. ALL UNSUITABLE MATERIAL TO BE REMOVED BY THE CONTRACTOR TO APPROVED TIPPING SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALL FEES TO BE PAID BY CONTRACTOR.
5. EXTENT OF CLEARING AND EARTHWORKS TO BE LIMITED TO THE STAGE CLEARING BOUNDARY UNLESS AGREED WITH THE SUPERINTENDENT.
6. ALL CLEARED MATERIAL TO BE MULCHED AND STOCKPILED ON SITE AS DIRECTED BY THE SUPERINTENDENT.
7. CONTRACTOR TO LOCATE ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORKS ON SITE.
8. CONTRACTOR TO GRADE EVENLY BETWEEN DESIGN CONTOURS AND MATCH INTO EXISTING SURFACE AT LIMIT OF EARTHWORKS BOUNDARY WHERE APPROPRIATE.
9. EXCESS CUT FROM EARTHWORKS SHALL BE PLACED ON SITE AS DIRECTED BY THE SUPERINTENDENT.
10. WHERE LIMESTONE IS WITHIN 600mm OF THE FINAL SURFACE LEVEL THE CONTRACTOR SHALL TREAT THE SITE IN ACCORDANCE WITH THE SPECIFICATION.
11. DESIGN LEVELS SHOWN SHALL BE ON THE FINISHED SURFACE INCLUDING TOPSOIL WHERE SPECIFIED.
12. THE CONTRACTOR SHALL LIMIT THE MOVEMENT OF EQUIPMENT AND MANPOWER TO THE MINIMUM AREA NECESSARY AND PROTECT ALL VEGETATION AND EXISTING SERVICES ON SITE.
13. ADJACENT RESIDENTS TO BE NOTIFIED OF THE WORKS AT LEAST TWO WEEKS IN ADVANCE. CONTRACTOR TO PROVIDE MOBILE NUMBER FOR SUPERVISOR AS PART OF NOTIFICATION.



TEMPORARY EARTHWORKS INTERFACE
SCALE: N.T.S



PROPOSED BOXOUT AND BATTER DETAIL FOR FUTURE RETAINING WALLS
SCALE: N.T.S



TYPICAL BATTER TO FRONT OF TRADITIONAL LOTS
SCALE: N.T.S

NOTICE TO CONTRACTOR

IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE THE NATURE AND LOCATION OF ALL SERVICES WHICH MAY BE ENCOUNTERED AND TO CONSULT WITH THE RELEVANT SERVICE AUTHORITIES PRIOR TO COMMENCEMENT OF EXCAVATIONS. FAILURE TO DO SO OR TO TAKE DUE CARE SHALL NOT LIMIT THE CONTRACTOR'S LIABILITY FOR REPAIR OF ALL SERVICES DAMAGED BY HIM DURING CONSTRUCTION WORKS. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY FOR THE PROTECTION OF ALL EXISTING SERVICES.

REV	DATE	DRN	CKD	APP	AMENDMENT
1	02.08.24	MT	AA		RETAINED TREES ADDED
0	23.07.24	MT	AA	T. BOEKEMAN	ISSUED FOR CONSTRUCTION
E	22.07.24	MT	AA	T. BOEKEMAN	MINOR AMENDMENTS
D	15.07.24	AC	AA	T. BOEKEMAN	ISSUED FOR APPROVAL
C	01.05.24	AC	TB	T. BOEKEMAN	ISSUED FOR APPROVAL

BEFORE YOU DIG www.byda.com.au

1:1000 0m 20 40 60m

Cossill & Webley CONSULTING ENGINEERS
Mailing Address: PO Box 680 Subiaco WA 6904
Street Address: B12 (Level 2) 431 Roberts Road Subiaco WA 6008
T (08) 9422 5800 F (08) 9422 5801 E admin@cosweb.com.au

CLIENT: CELSIUS PROPERTY GROUP PTY LTD
APPROVED: 23.07.24 TROY BOEKEMAN
DESIGNED: AC
SCALE: 1:1000

PROJECT: LAKE ROAD, CHAMPION LAKES - STAGE 01
TITLE: CLEARING & EARTHWORKS PLAN SHEET 1 OF 1
WAPC No. 162858
DRAWING No. 6483-01-200
REVISION 1
ORIGINAL SIZE A1

P:\6483 Arabian Court Champion Lakes\6483-01\Acad\6483-01-200.dwg, 2/09/2024 2:54:51 PM, mattal, Digital Signing (PDF.pc3, 1:1), - CW Reference

Appendix B – Test Results

Malaga Laboratory
44 Crocker Drive, Malaga, WA 6090
Post: PO Box 792, Balcatta WA 6914
Ph : (08) 9205 4500
Email: wageotechlab@structerre.com.au
Website: www.structerre.com.au
ABN: 71 349 772 837 / ACN: 008 966 283

Report Number: DDR:W24-03777
Date of Issue09/09/2024
Issue Number: 1

Dry Density Ratio Report

Client:	MGC Civil
Client Address:	Unit 7, 56 Prindiville Drive Wangara WA 6065
Project:	Arabian Court, Champion Lakes
Project No:	D342194

Accreditation Number 18742

NATA WORLD RECOGNISED ACCREDITATION

Approved Signatory: Pethreux Simon Cabral

Accredited for compliance with ISO/IEC 17025

Sample Details

Location:	Arabian Court, Champion Lakes - Stage 01
Field Test Procedures:	AS 1289.5.8.1
Laboratory Test Procedures:	AS 1289.2.1.1, AS 1289.5.2.1, AS 1289.5.4.1
TRN:	-
Work Order ID:	W24-03777
Sampling Method:	AS1289 1.2.1 6.4 (b) - compacted
Material:	Clayey Sand

Sample Data

Sample ID	24S-09621	24S-09622
Field Sample ID	Site 1	Site 2
Date Sampled	03/09/2024	03/09/2024
Time Tested	09:08	09:12

Field and Laboratory Data

Sample ID	24S-09621	24S-09622
Depth of Test (mm)	275	275
Depth of Layer (mm)	300	300
AS Sieve Size (mm)	19.0	19.0
Oversize Wet (%)	2	0
Oversize Dry (%)	2	0
Field Moisture Content (%)	11.4	11.7
Field Wet Density (t/m³)	2.22	2.14
Field Dry Density (t/m³)	1.99	1.91
Lab Result from Test No.	24S-09621	24S-09622
Maximum Dry Density (t/m³)	1.98	1.92
Optimum Moisture Content (%)	10.0	11.0
Compactive Effort	Modified	Modified
Moisture Ratio (%)	114.5	106.5
Moisture Variation	1.5 wet	0.5 wet
Density Ratio (%)	**100.5**	**99.5**

Comments

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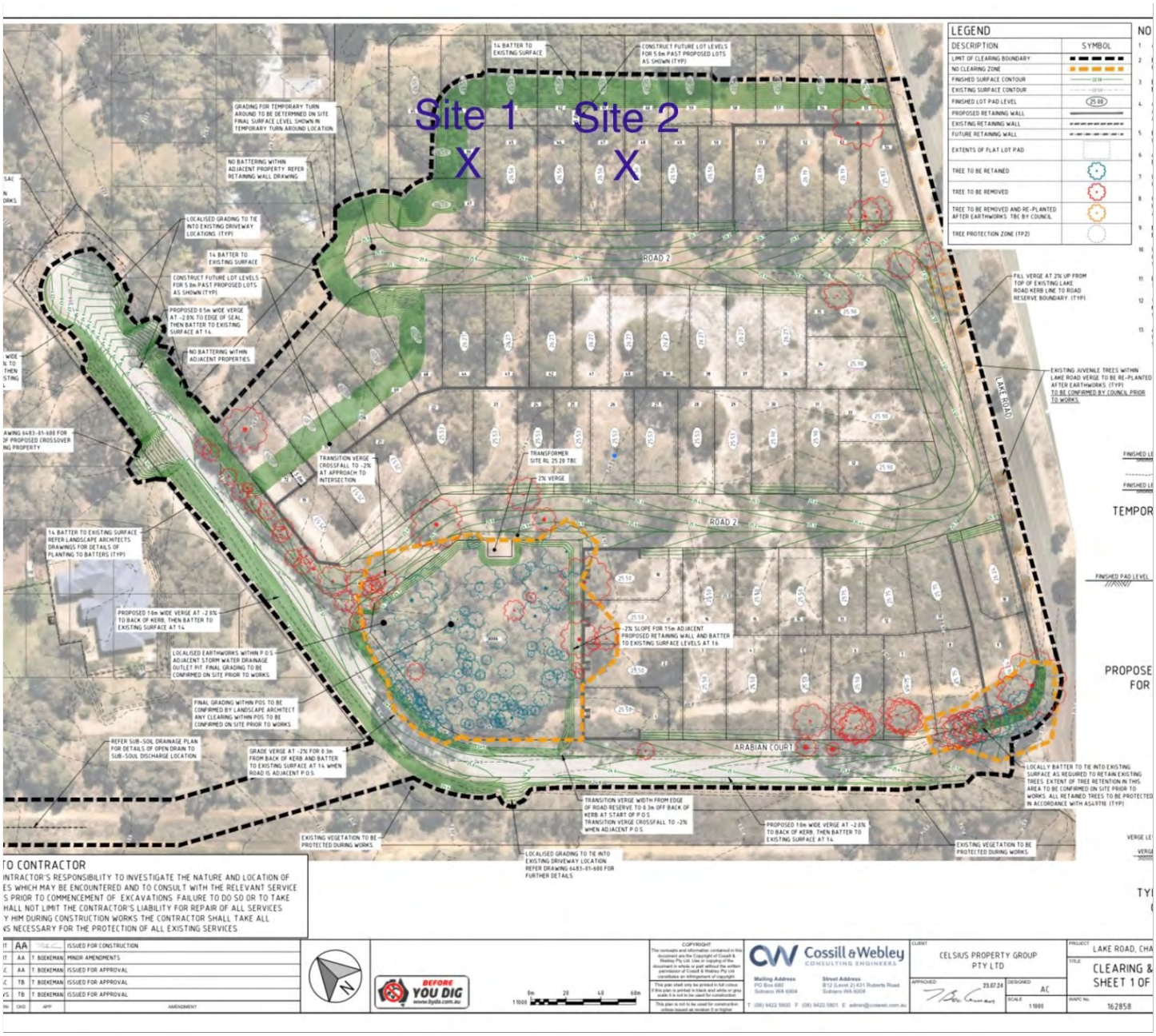

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Daily Summary Field Report

Report No.: DSFR:W24-03255
Issue No.: 1

Client: MGC Civil
Unit 7, 56 Prindiville Drive, Po Box 1639
Wangara WA 6947
Wangara, WA 6065

Project: D342194 - Arabian Court, Champion Lakes
Champion Lakes, WA 6111

Reviewed By: Wayne Rozmianiec
Review Date: 8/6/2024

General Information

Work Date:	8/5/2024	**Representative:**	Wayne Rozmianiec
Weather:	Fine	**Time Arrived:**	10:00 AM
Time Departed:	11:00 AM	**Time on Site (h):**	1.00
Contractor:	MGC Civil		

Other Observations

Site Inspection

At the request of MGC Civil, Structerre Consulting Engineers have attended the above to conduct an inspection on the stripped and blended surface.

Area noted on the attached plan have been adequately stripped of vegetation and the topsoil blended with the underlying 500mm of natural materials. Once proof compaction is complete, fill operations may continue - refer to note below.

Note: test pitting carried out in lots 1-10 noted clayey sands at or near surface. In order to achieve an A class site, the reactive materials will need to be removed to ensure there is a minimum of 1.8m of sand cover.

44 Crocker Drive, Malaga, WA 6090
Post: PO Box 792, Balcatta WA 6914
Ph : (08) 9205 4500
Email: wageotechlab@structerre.com.au
Website: www.structerre.com.au
ABN: 71 349 772 837 / ACN: 008 966 283

Daily Summary Field Report

Report No.: DSFR:W24-03255
Issue No.: 1

Client: MGC Civil
Unit 7, 56 Prindiville Drive, Po Box 1639
Wangara WA 6947
Wangara, WA 6065

Project: D342194 - Arabian Court, Champion Lakes
Champion Lakes, WA 6111

Reviewed By: Wayne Rozmianiec
Review Date: 8/6/2024

Stripped and blended surface

Description:

Stripped and blended surface

Description:

44 Crocker Drive, Malaga, WA 6090
Post: PO Box 792, Balcatta WA 6914
Ph : (08) 9205 4500
Email: wageotechlab@structerre.com.au
Website: www.structerre.com.au
ABN: 71 349 772 837 / ACN: 008 966 283

Daily Summary Field Report

Report No.: DSFR:W24-03255
Issue No.: 1

Client: MGC Civil
Unit 7, 56 Prindiville Drive, Po Box 1639
Wangara WA 6947
Wangara, WA 6065

Project: D342194 - Arabian Court, Champion Lakes
Champion Lakes, WA 6111

Reviewed By: Wayne Rozmianiec
Review Date: 8/6/2024

Clayey sand at near surface - lots 1-10

Description:

Clayey sand at near surface - lots 1-10

Description:

44 Crocker Drive, Malaga, WA 6090
Post: PO Box 792, Balcatta WA 6914
Ph : (08) 9205 4500
Email: wageotechlab@structerre.com.au
Website: www.structerre.com.au
ABN: 71 349 772 837 / ACN: 008 966 283

Daily Summary Field Report

Report No.: DSFR:W24-03255
Issue No.: 1

Client: MGC Civil
Unit 7, 56 Prindiville Drive, Po Box 1639
Wangara WA 6947
Wangara, WA 6065

Project: D342194 - Arabian Court, Champion Lakes
Champion Lakes, WA 6111

Reviewed By: Wayne Rozmianiec
Review Date: 8/6/2024

Location plan

Description:

44 Crocker Drive, Malaga, WA 6090
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Ph : (08) 9205 4500
Email: wageotechlab@structerre.com.au
Website: www.structerre.com.au
ABN: 71 349 772 837 / ACN: 008 966 283

Daily Summary Field Report

Report No.: DSFR:W24-03493
Issue No.: 1

Client: MGC Civil
Unit 7, 56 Prindiville Drive, Po Box 1639
Wangara WA 6947
Wangara, WA 6065

Project: D342194 - Arabian Court, Champion Lakes
Champion Lakes, WA 6111

Reviewed By: Wayne Rozmianiec
Review Date: 8/15/2024

General Information

Work Date:	8/15/2024	**Representative:**	
Weather:	Rainy	**Time Arrived:**	7:15 AM
Time Departed:	8:00 AM	**Time on Site (h):**	0.75
Contractor:	MGC Civil		

Other Observations

Site Inspection

At the request of MGC Civil, Structerre Consulting have attended the above site to assess removal of reactive materials.

Reactive materials (clayey sands) have been removed in lots 9 and 10 to ensure minimum 1.5m of non reactive sand cover and fill sand placed.

Reactive materials (clayey sands) have been removed in lots 6, 7 and 8, however overnight night rain has saturated the surface. Recommend skimming the saturated surface to expose the from materials underneath prior to placement of fill.

Small location in lot 9/10 indicated signs of deformation and requires localised remediation as per same procedure above.

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Post: PO Box 792, Balcatta WA 6914
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Email: wageotechlab@structerre.com.au
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ABN: 71 349 772 837 / ACN: 008 966 283

Daily Summary Field Report

Report No.: DSFR:W24-03493
Issue No.: 1

Client: MGC Civil
Unit 7, 56 Prindiville Drive, Po Box 1639
Wangara WA 6947
Wangara, WA 6065

Project: D342194 - Arabian Court, Champion Lakes
Champion Lakes, WA 6111

Reviewed By: Wayne Rozmianiec
Review Date: 8/15/2024

Saturated exposed surface

Description:
Lots 6, 7 and 8

Placed fill

Description:
Lot 9 and 10

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ABN: 71 349 772 837 / ACN: 008 966 283

Daily Summary Field Report

Report No.: DSFR:W24-03493
Issue No.: 1

Client: MGC Civil
Unit 7, 56 Prindiville Drive, Po Box 1639
Wangara WA 6947
Wangara, WA 6065

Project: D342194 - Arabian Court, Champion Lakes
Champion Lakes, WA 6111

Reviewed By: Wayne Rozmianiec
Review Date: 8/15/2024

Soft location

Description:
Lot 9/10

Skimmed surface

Description:
Lot 8

44 Crocker Drive, Malaga, WA 6090
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ABN: 71 349 772 837 / ACN: 008 966 283

Daily Summary Field Report

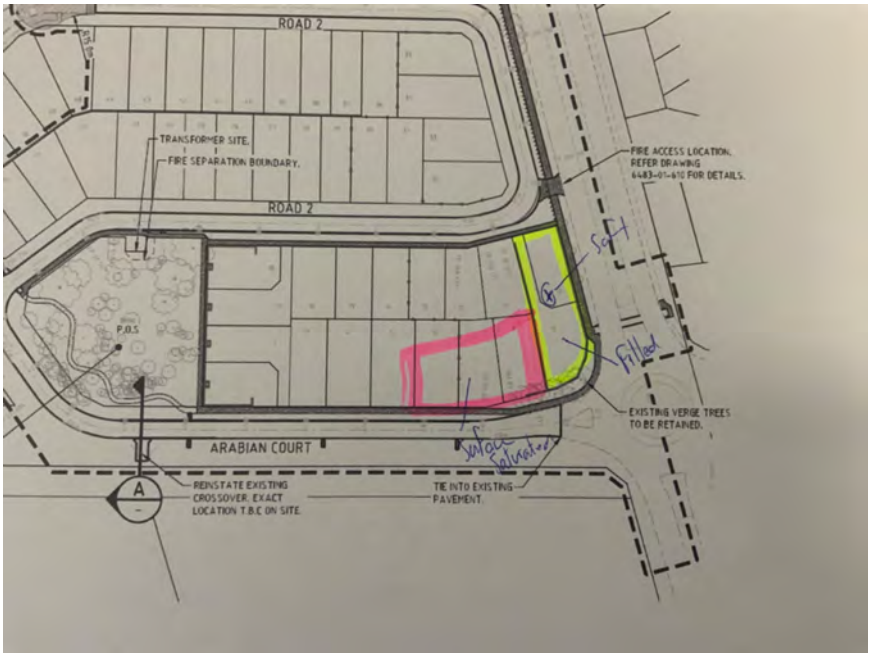
Report No.: DSFR:W24-03493
Issue No.: 1

Client: MGC Civil
Unit 7, 56 Prindiville Drive, Po Box 1639
Wangara WA 6947
Wangara, WA 6065

Project: D342194 - Arabian Court, Champion Lakes
Champion Lakes, WA 6111

Reviewed By: Wayne Rozmianiec
Review Date: 8/15/2024

Plan



Description:

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Email: wageotechlab@structerre.com.au
Website: www.structerre.com.au
ABN: 71 349 772 837 / ACN: 008 966 283

Daily Summary Field Report

Report No.: DSFR:W24-03641
Issue No.: 1

Client: MGC Civil
Unit 7, 56 Prindiville Drive, Po Box 1639
Wangara WA 6947
Wangara, WA 6065

Project: D342194 - Arabian Court, Champion Lakes
Champion Lakes, WA 6111

Reviewed By: Wayne Rozmianiec
Review Date: 8/27/2024

General Information

Work Date:	8/26/2024	**Representative:**	
Weather:	Overcast	**Time Arrived:**	10:00 AM
Time Departed:	10:30 AM	**Time on Site (h):**	0.50
Contractor:	MGC Civil		

Other Observations

Site Inspection

At the request of MGC Civil, Structerre Consulting have attended the above site to conduct an inspection of the stripped and blended surface prior to proof compaction placement of fill.

Areas noted noted on the attached plan have been adequately stripped of vegetation and the topsoil. Once proof compaction is complete, fill may be placed as required.

Note: clay fill area marked on plan, clay fill to be placed using the materials removed from lots 4-10.

44 Crocker Drive, Malaga, WA 6090
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Website: www.structerre.com.au
ABN: 71 349 772 837 / ACN: 008 966 283

Daily Summary Field Report

Report No.: DSFR:W24-03641
Issue No.: 1

Client: MGC Civil
Unit 7, 56 Prindiville Drive, Po Box 1639
Wangara WA 6947
Wangara, WA 6065

Project: D342194 - Arabian Court, Champion Lakes
Champion Lakes, WA 6111

Reviewed By: Wayne Rozmianiec
Review Date: 8/27/2024

Stripped and blended surface

Description:
Clay fill area

Placed fill

Description:
Central section between road 2

44 Crocker Drive, Malaga, WA 6090
Post: PO Box 792, Balcatta WA 6914
Ph : (08) 9205 4500
Email: wageotechlab@structerre.com.au
Website: www.structerre.com.au
ABN: 71 349 772 837 / ACN: 008 966 283

Daily Summary Field Report

Report No.: DSFR:W24-03641
Issue No.: 1

Client: MGC Civil
Unit 7, 56 Prindiville Drive, Po Box 1639
Wangara WA 6947
Wangara, WA 6065

Project: D342194 - Arabian Court, Champion Lakes
Champion Lakes, WA 6111

Reviewed By: Wayne Rozmianiec
Review Date: 8/27/2024

Placed fill and clay stockpile

Description:
Lots 4-10

Plan

Description:

Malaga Laboratory
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ABN: 71 349 772 837 / ACN: 008 966 283

Determination of the Penetration Resistance of Soil - AS 1289.6.3.3

Report Number: PSP:24S-08186
Date of issue: 06/08/2024
Issue Number: 1

Client:	MGC Civil
Client Address:	Unit 7, 56 Prindiville Drive Wangara WA 6065
Project:	Arabian Court, Champion Lakes
Project No:	D342194

Accreditation Number 18742

NATA WORLD RECOGNISED ACCREDITATION

Approved Signatory: Jacob Pritchard

Accredited for compliance with ISO/IEC 17025-Testing

Location:	Proof Roll		
Proposed Use:	Foundation	**Work Order ID:**	W24-03256
Material Type:	Sand	**Sample ID:**	24S-08186
Site Selection Method:	Client	**Depth of Test (mm):**	1050
		Layer Thickness (mm):	-
Sampling Method:	**N/A**		
Date Tested:	**05/08/2024**		

Test Results

Test Site No.	1	2	3	4	5	6	7	8		
Moisture Condition										
Depth Groundwater										
Depth of Test (mm)	**Blows/300 mm**									
0 - 150	**Set Depth**									
150 - 450	8	8	8	8	8	8	8	8		
450 - 750	10	10	10	10	10	13	10	13		
750 - 1050	12	12	14	12	12	13	12	22		
1050 - 1350										
1350 - 1650										
1650 - 1950										

Test Results

Test Site No.										
Moisture Condition										
Depth Groundwater										
Depth of Test (mm)	**Blows/300 mm**									
0 - 150	**Set Depth**									
150 - 450										
450 - 750										
750 - 1050										
1050 - 1350										
1350 - 1650										
1650 - 1950										

Comments

Testing carried in accordance with the methods described in AS 1289.6.3.2 – depth greater than 450mm total penetration tested.

Malaga Laboratory
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Report Number: PSP:24S-08186
Date of Issue06/08/2024
Issue Number: 1

PSP Report

Client:	MGC Civil
Client Address:	Unit 7, 56 Prindiville Drive Wangara WA 6065
Project:	Arabian Court, Champion Lakes
Project No:	D342194

Accreditation Number 18742

WORLD RECOGNISED ACCREDITATION

Approved Signatory: Jacob Pritchard

Accredited for compliance with ISO/IEC 17025

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Determination of the Penetration Resistance of Soil - AS 1289.6.3.3

Report Number: PSP:25S-05817
Date of issue: 12/05/2025
Issue Number: 1

Client:	MGC Civil
Client Address:	Unit 7, 56 Prindiville Drive Wangara WA 6065
Project:	Arabian Court, Champion Lakes
Project No:	D342194

Accreditation Number 18742

NATA WORLD RECOGNISED ACCREDITATION

Approved Signatory: Pethreux Simon Cabral

Accredited for compliance with ISO/IEC 17025-Testing

Location:	Earthworks Completion		
Proposed Use:	Fill	**Work Order ID:**	W25-02436
Material Type:	Sand	**Sample ID:**	25S-05817
Site Selection Method:	Client	**Depth of Test (mm):**	1050
		Layer Thickness (mm):	-
Sampling Method:	**N/A**		
Date Tested:	**07/05/2025**		

Test Results

Test Site No.	1	2	3	4	5	6	7	8	9	10
Moisture Condition										
Depth Groundwater										
Depth of Test (mm)	**Blows/300 mm**									
0 - 150	**Set Depth**									
150 - 450	7	10	7	7	7	7	7	9	7	7
450 - 750	10	17	16	15	16	18	20	15	15	9
750 - 1050	25	17	25+	25+	16	10	17	13	10	11
1050 - 1350										
1350 - 1650										
1650 - 1950										

Test Results

Test Site No.	11	12	13	14	15	16	17	18	19	20
Moisture Condition										
Depth Groundwater										
Depth of Test (mm)	**Blows/300 mm**									
0 - 150	**Set Depth**									
150 - 450	7	7	7	7	12	9	9	7	9	7
450 - 750	15	14	15	13	13	17	14	9	16	11
750 - 1050	25+	13	14	11	12	13	12	11	12	12
1050 - 1350										
1350 - 1650										
1650 - 1950										

Comments

Testing carried in accordance with the methods described in AS 1289.6.3.2 – depth greater than 450mm total penetration tested.

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Determination of the Penetration Resistance of Soil - AS 1289.6.3.3

Report Number: PSP:25S-05818
Date of issue: 12/05/2025
Issue Number: 1

Accreditation Number 18742

WORLD RECOGNISED ACCREDITATION

Approved Signatory: Pethreux Simon Cabral

Accredited for compliance with ISO/IEC 17025-Testing

Client:	MGC Civil
Client Address:	Unit 7, 56 Prindiville Drive Wangara WA 6065
Project:	Arabian Court, Champion Lakes
Project No:	D342194

Location:	Earthworks Completion		
Proposed Use:	Fill	**Work Order ID:**	W25-02436
Material Type:	Sand	**Sample ID:**	25S-05818
Site Selection Method:	Client	**Depth of Test (mm):**	1050
		Layer Thickness (mm):	-
Sampling Method:	**N/A**		
Date Tested:	**07/05/2025**		

Test Results

Test Site No.	21	22	23	24	25	26	27	28	29	30
Moisture Condition										
Depth Groundwater										
Depth of Test (mm)	Blows/300 mm									
0 - 150	Set Depth									
150 - 450	7	7	8	12	9	9	13	15	15	12
450 - 750	14	18	18	25+	23	25	25+	25+	25+	25+
750 - 1050	12	15	17		25+	25+				
1050 - 1350										
1350 - 1650										
1650 - 1950										

Test Results

Test Site No.	31	32	33	34	35	36	37	38	39	40
Moisture Condition										
Depth Groundwater										
Depth of Test (mm)	Blows/300 mm									
0 - 150	Set Depth									
150 - 450	13	12	10	16	18	18	13	10	13	13
450 - 750	25+	25+	19	25+	25+	25+	25+	25+	25+	25+
750 - 1050			14							
1050 - 1350										
1350 - 1650										
1650 - 1950										

Comments

Testing carried in accordance with the methods described in AS 1289.6.3.2 – depth greater than 450mm total penetration tested.

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Determination of the Penetration Resistance of Soil - AS 1289.6.3.3

Report Number: PSP:25S-05923
Date of issue: 12/05/2025
Issue Number: 1

Accreditation Number 18742

Approved Signatory: Pethreux Simon Cabral

Accredited for compliance with ISO/IEC 17025-Testing

Client:	MGC Civil
Client Address:	Unit 7, 56 Prindiville Drive Wangara WA 6065
Project:	Arabian Court, Champion Lakes
Project No:	D342194

Location:	Earthworks Completion		
Proposed Use:	Fill	**Work Order ID:**	W25-02436
Material Type:	Sand	**Sample ID:**	25S-05923
Site Selection Method:	Client	**Depth of Test (mm):**	1050
		Layer Thickness (mm):	-
Sampling Method:	**N/A**		
Date Tested:	**07/05/2025**		

Test Results

Test Site No.	41	42	43	44	45	46	47	48	49	50
Moisture Condition										
Depth Groundwater										
Depth of Test (mm)	**Blows/300 mm**									
0 - 150	**Set Depth**									
150 - 450	13	16	17	16	10	14	11	13	18	15
450 - 750	25+	25	25+	25+	25+	25+	25+	25+	25+	25+
750 - 1050		25+								
1050 - 1350										
1350 - 1650										
1650 - 1950										

Test Results

Test Site No.										
Moisture Condition										
Depth Groundwater										
Depth of Test (mm)	**Blows/300 mm**									
0 - 150	**Set Depth**									
150 - 450										
450 - 750										
750 - 1050										
1050 - 1350										
1350 - 1650										
1650 - 1950										

Comments

Testing carried in accordance with the methods described in AS 1289.6.3.2 – depth greater than 450mm total penetration tested.

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Report Number: PSP:25S-05923
Date of Issue12/05/2025
Issue Number: 1

PSP Report

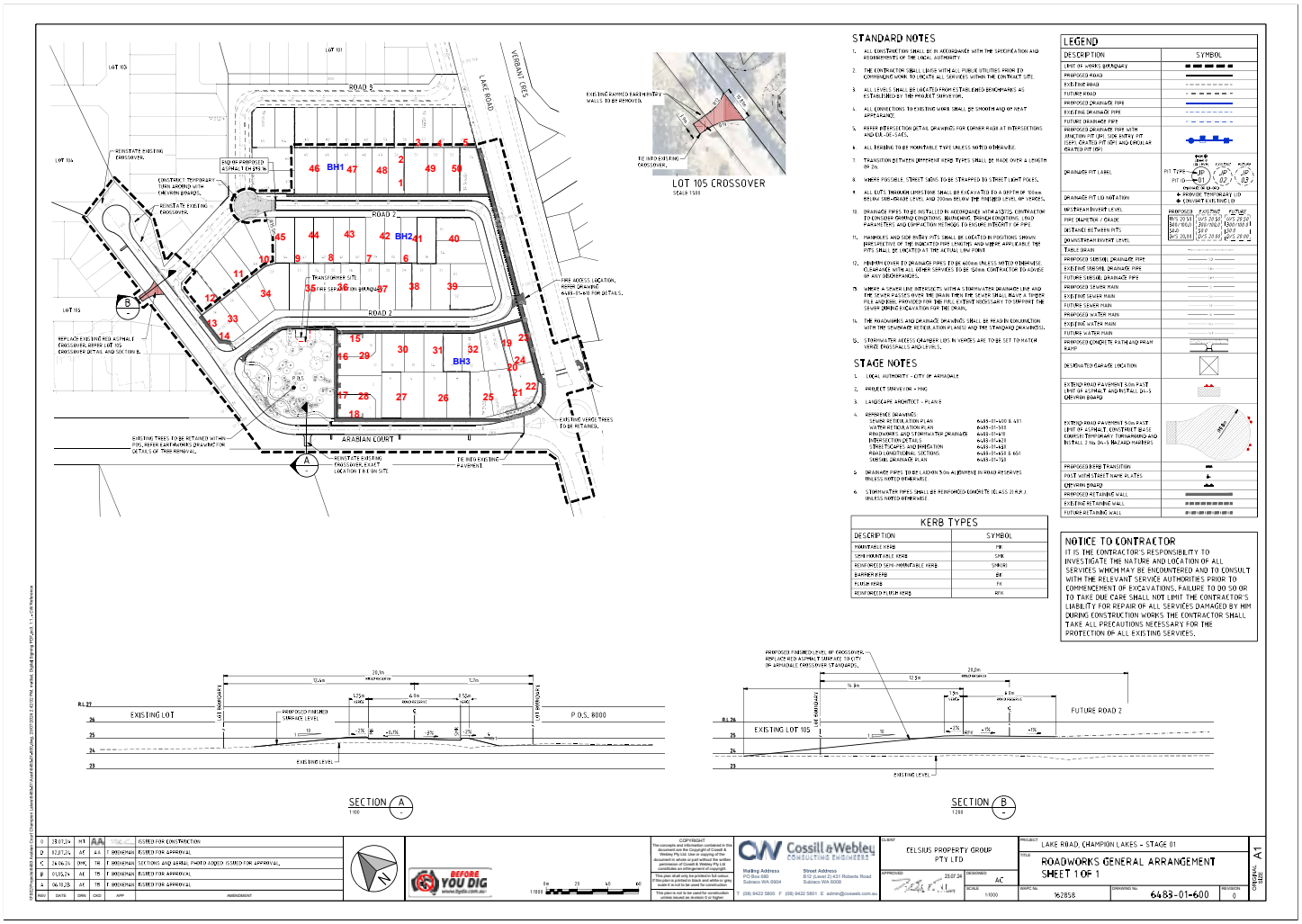
Client:	MGC Civil
Client Address:	Unit 7, 56 Prindiville Drive Wangara WA 6065
Project:	Arabian Court, Champion Lakes
Project No:	D342194

Accreditation Number 18742

NATA WORLD RECOGNISED ACCREDITATION

Approved Signatory: Pethreux Simon Cabral

Accredited for compliance with ISO/IEC 17025



Correlation Report

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Compaction Correlation Report

Report Number CCR:W24-03257
19/08/2024
Issue 1

Client:	MGC Civil
Client Address:	Unit 7, 56 Prindiville Drive, Wangara 6065
Project:	Arabian Court, Champion Lakes
Project No:	D342194

Authorised Signatory Jacob Pritchard

Sample Details

Location	PSP Correlation - Import Fill
Laboratory Test Procedures	AS 1289.5.2.1,AS 1289.5.8.1
Field Test Procedures	AS 1289.5.8.1
Sampling Method	AS1289.1.2.1 6.4(b) -Compacted
Date of Test	0 Jan 1900

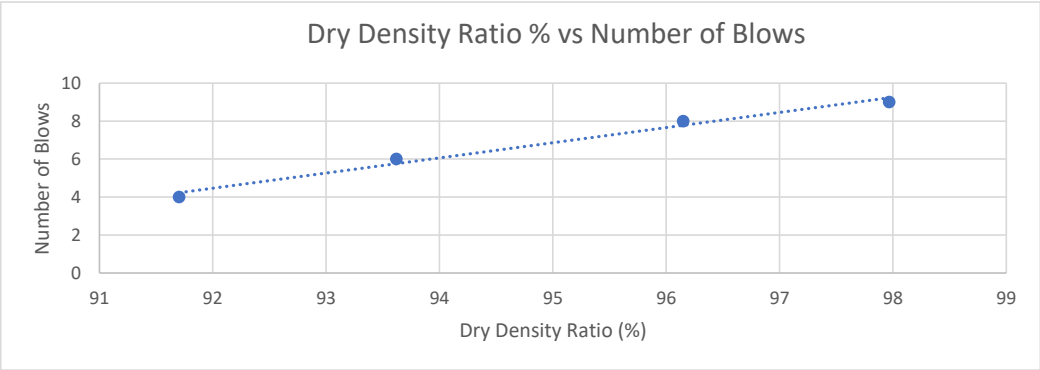
Field Test Results

Field Sample ID	1	2	3	4
Wet density (t/m³)	1.86	1.90	1.90	1.94
Depth of Test (mm)	300	0	0	0
Thickness of the Layer (mm)	-	0	0	0
AS Sieve Size (mm)	19	19	19	19
Oversize Wet (%)	0	0	0	0
Oversize Dry (%)	0	0	0	0
Moisture content (%)	14.6	14.8	11.7	11.9
Dry density (t/m³)	1.62	1.66	1.70	1.73
Moisture Ratio (%)	107.5	109.0	86.0	88.0
Moisture Variation (%)	-1.0 WET	-1.0 WET	2.0 DRY	1.5 DRY
Dry Density Ratio (%)	91.5	93.5	96.0	98.0
Number of Blows	4	6	8	9

Laboratory Test Results

Sample ID	24S-08188	**Maximum Dry Density (t/m³)**	1.77
Material	Sand	**Optimum Moisture Content (%)**	13.5
Proposed Use	Fill		

Correlation



The results indicate that 7 blows are required to obtain a Dry Density Ratio of 95 %

Comments