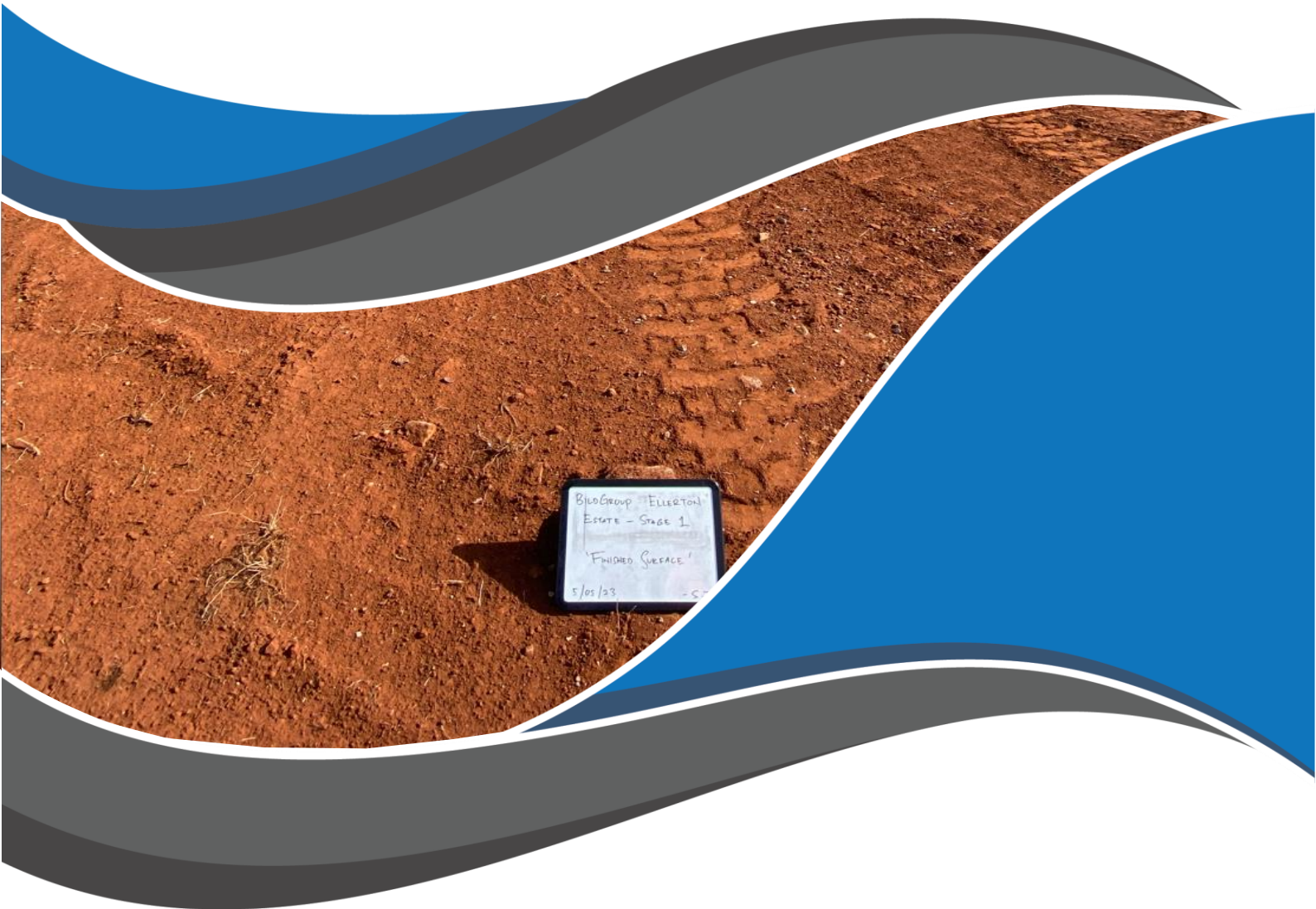


Ellerton Estate - Stage 1, Melton South

Level 1 Inspection & Testing Report

Reference: 1120 0347-1



Prepared for:

Bild Group

June 2023



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GEOTECHNICAL ENGINEERING CONSULTANTS

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Project reference number	1120 0347-1				
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ENGINEERS
AUSTRALIA
Professional Engineer
MEMBER

Disclaimer

The findings and conclusions contained in this report are made based on site conditions that existed at the time this work was conducted. The conclusions present in this report are relevant to the conditions of the site and the state of legislation currently enacted as at the date of this report.

Findings and conclusions are made assuming that the soil, groundwater, geological and chemical conditions detailed within this report are accurate and remain applicable to the site at the time of writing. No other warranties are made or intended.

A&Y Associates (A&Y) Pty Ltd has used a degree of skill and care ordinarily exercised by reputable members of our profession practicing in the same or similar locality.

A&Y does not make any representation or warranty that the conclusions in this report will be applicable in the future as there may be changes in the condition of the site, applicable legislation or other factors that would affect the conclusions contained in this report.

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Applicability

This report has been prepared for the benefit for our client with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement.

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1 Introduction

This report presents the results of the Level 1 Inspection and Testing for the construction of the fill platforms located in Ellerton Estate - Stage 1, Melton South.

2 Project Summary

It is understood that Bild Group require the fill platforms within Stage 1 to be constructed under Level 1 Inspection and Testing undertaken by a Geotechnical Inspection and Testing Authority (GITA).

Level 1 Inspection and Testing, as defined in AS3798-2007 "Guidelines on Earthworks for Commercial and Residential Development," provides for full time inspection of the construction of controlled fill and field and laboratory testing in accordance with AS1289 "Methods of Testing Soils for Engineering Purposes".

The Level 1 inspection was undertaken by a Geotechnician from A&Y Associates over a period of **12 working days** from the **20th of July 2022 to 20th of April 2023**.

This report is applicable for fill placed by Bild Group for the following lots located in Ellerton Estate - Stage 1 of Melton South, as shown in Appendix A – Site Plan.

- Lot 6 – 9
- Lot 29 – 43
- Lot 10 – 11 (Excavated pit backfilling works)

3 Project Specifications

The supervision and inspections were performed based on AS3798 and the specifications provided in the geotechnical report (ref: "Geotechnical Investigation, Proposed Subdivision, 171 – 211 Alfred Road, Melton South"; Report No. IE200921, by Johnson Geotech Pty Ltd, Dated 6/10/2020).

A short summary of the requirements outline in AS3798 is provided below:

- All filling in excess of 300mm depth within the building envelope of allotments shall be undertaken to specifications satisfying the requirements of AS3798.
- Material to be used for fill construction shall satisfy the requirements of AS3798-2007 "Guidelines on Earthworks for Commercial and Residential Developments". Material used shall be free of:
 - Organic soils, such as topsoils, severely root affected subsoil and peat;
 - Contaminated soils;
 - Materials which undergo volume change or loss of strength when disturbed and exposed to moisture;
 - Silts, or materials that have deleterious engineering properties of silt;
 - Fill that contains wood, metal, plastic, boulders, or other deleterious material, in sufficient proportions to affect the required performance of fill;
 - The maximum particle size of any rocks or other lump, within the layer, has not exceeded two-thirds (2/3) of the compacted layer thickness.
- Compaction to achieve a dry density ratio of at least 98% Standard, as the project was classified as **Residential**.

4 Subgrade Assessment

The subgrade was assessed by A&Y Associates following the topsoil removal and before any fill was placed. The subgrade assessment was undertaken on the **19th of July 2022**, as mentioned in the report **1120 0347-1 (SS11)**.

The exposed subgrade material comprised of silty clay. No wet or soft patches were found during the inspection. No evidence of deleterious material was found during the inspection.

5 Earthworks

The earthworks for this project included stripping of topsoil, removing of tree roots, proof rolling the subgrade and placement and compaction of fill to construct engineered platforms.

Based on design plans and site inspection, it appears that the fill thickness placed is approximately 200mm – 1000mm. The fill layers or thickness nominated in this report are provided as a guide on the amounts of fill placed and do not necessarily reflect an accurate survey of the fill levels.

6 Fill Material

The fill material used for the platform consisted of site derived material. The material was predominantly comprising of Silty Clay.

7 Testing

Field density testing was undertaken on the compacted fill at a frequency of a minimum of 3 tests per lot (AS3798 Table 8.1).

Tests were performed using a Nuclear Density Gauge for field density determination as per AS 1289.5.8.1. Testing was completed at a minimum rate of 3 field density tests per day's production based on the minimum requirements of AS 3798-2007 and taken from each layer of fill placed.

A total of 44 field density tests were performed during the earthworks including re-tested locations.

The locations of the 44 field density tests are shown in Appendix B – Test Locations. A summary of the test results obtained from the field density testing is presented in Appendix C – Test Results Summary. The laboratory test reports of the field density tests are presented in Appendix D – NATA Test Results.

8 Finished Surface Levels

It should be noted that even though the final fill layer meets the specification requirements, over time, the material may be subject to adverse weather conditions resulting in either surface softening or drying and cracking. The top 150mm – 200mm of the fill will deteriorate with time and should be considered by the foundation engineer.

9 Exclusion

A&Y Associates was not involved in monitoring and testing the following works and as such are not included in the Level 1 report.

- Any trenches excavated and backfilled on site for the installation of underground services such as sewers, electrical conduits, water mains etc.
- Footpaths in front of the lots that may be excavated and filled after the Level 1 supervision conducted by A&Y Associates.
- Uncontrolled fill and topsoil that may have been placed as part of the landscaping of the site following the completion of the engineered fill construction.

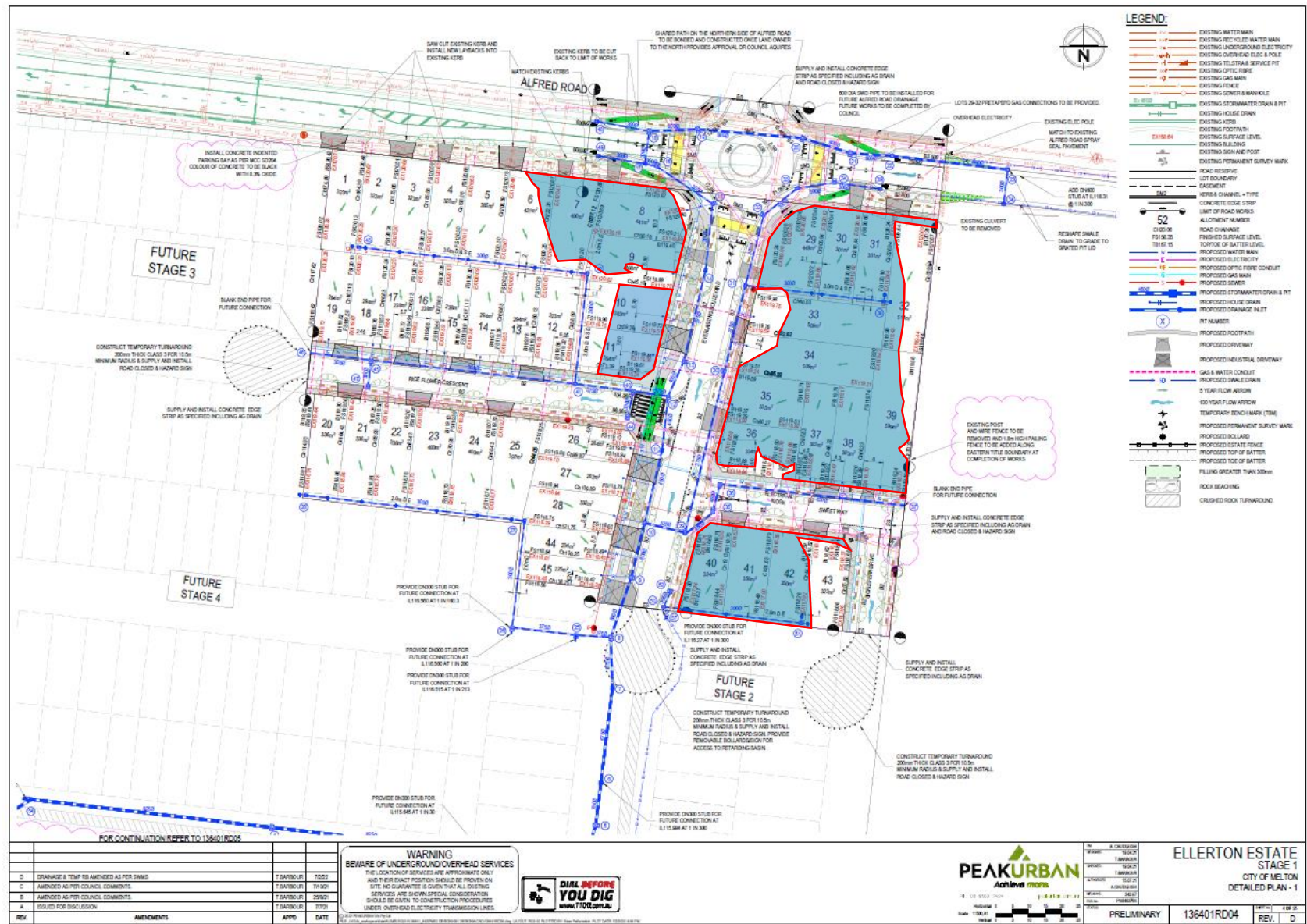
10 Conclusion

On the completion of the earthworks and after analysing the materials used, it has been concluded that the filling procedure conducted by Bild Group appears to be consistent with the requirements of AS 3798 in regards to the placement of fill materials on a project under Level 1 Supervision and in accordance with the project specification as provided to A&Y Associates.

Appendix A - Site Plan



Area Inspected and Tested



REV	DESCRIPTION	APPD	DATE
D	DRAINAGE & TEMP TO AMEND AS PER SWMS	T	25/02/2022
C	AMENDED AS PER COUNCIL COMMENTS	T	15/01/2021
B	AMENDED AS PER COUNCIL COMMENTS	T	29/01/2021
A	ISSUED FOR DISCUSSION	T	10/01/2021

WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVIDED ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATIONS SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.



ELLERTON ESTATE
STAGE 1
CITY OF MELTON
DETAILED PLAN - 1

PRELIMINARY 136401RD04

PROJECT:
Ellerton Estate – Stage 1 (Level 1)

CLIENT:
Bild Group

LOCATION:
Melton South

PROJECT No.:
1120 0347-1

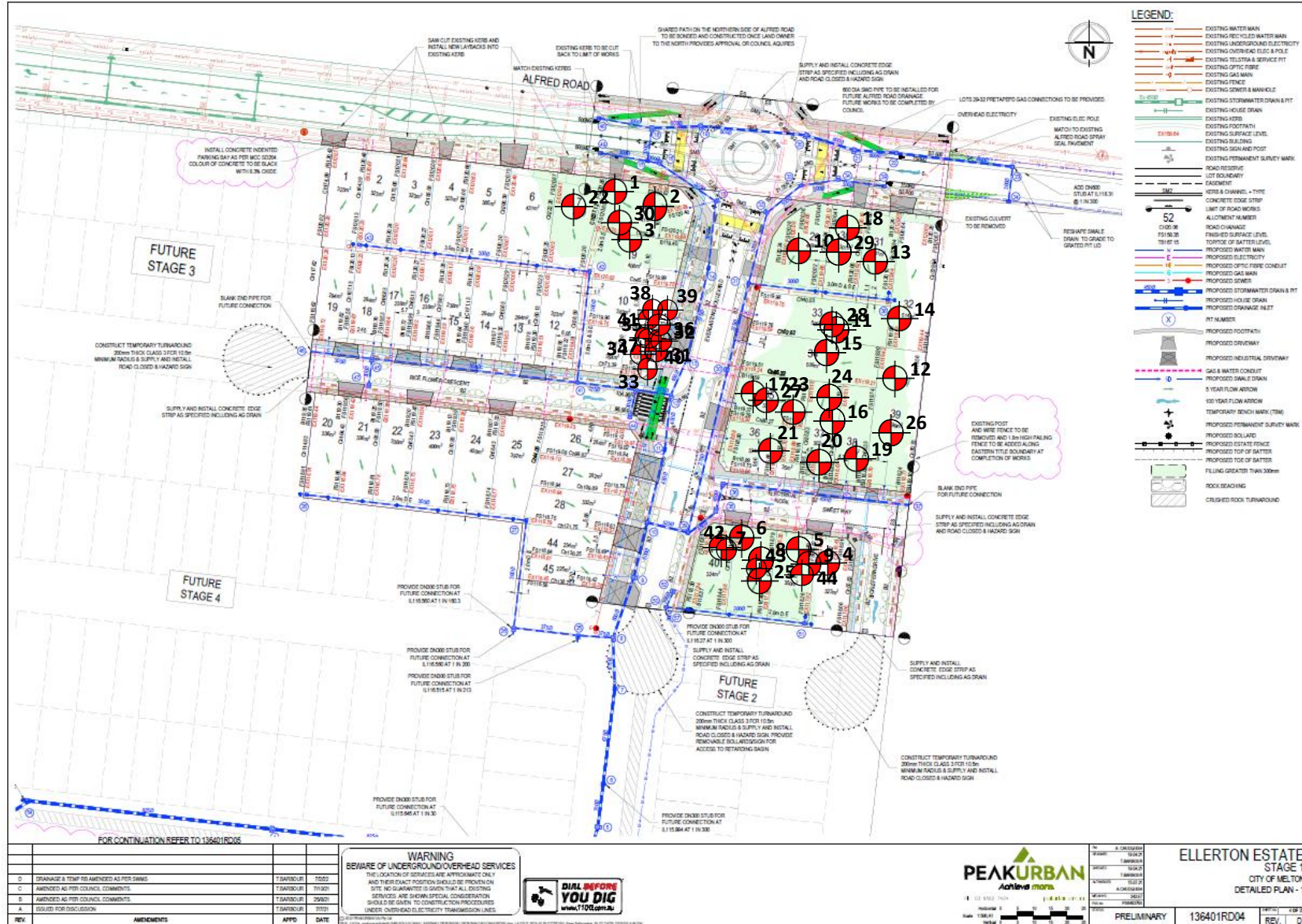
SITE PLAN SKETCH—NOT TO SCALE



Appendix B – Test Locations



Indicative Test Location



PROJECT:
Ellerton Estate – Stage 1 (Level 1)

CLIENT:
Bild Group

LOCATION:
Melton South

PROJECT No.:
1120 0347-1

SITE PLAN SKETCH—NOT TO SCALE



Appendix C – Test Results Summary

Project No		1120 0348-1			Client	Bild Group				
Project Name		Ellerton Estate - Stage 1 - Level 1			Specification			Density Ratio \geq 98% of Peak Wet Density		
Location		Melton South								
Test No	Retest of Test	Date	Location	Layer	Oversize	Density Ratio	Moisture Ratio	Moisture Variation	Pass / Fail	Retest
#	#		Lot #	#	%	%	%	%		Pass / Fail
1	-	20/07/2022	-	1	0.0	98.0	95.5	-1.0	Pass	-
2	-	20/07/2022	-	1	0.0	99.0	97.0	-0.5	Pass	-
3	-	20/07/2022	-	1	0.0	98.0	107.5	1.5	Pass	-
4	-	3/08/2022	-	1	0.0	98.5	96.5	-0.5	Pass	-
5	-	3/08/2022	-	1	0.0	98.0	97.5	-0.5	Pass	-
6	-	3/08/2022	-	1	0.0	98.5	98.0	-0.5	Pass	-
7	-	4/08/2022	-	2	0.0	95.5	97.0	-1.0	Fail	-
8	-	4/08/2022	-	2	0.0	96.0	97.5	-1.0	Fail	-
9	-	4/08/2022	-	2	0.0	96.0	96.0	-1.0	Fail	-
10	-	20/10/2022	-	1	0.0	98.5	97.0	-1.0	Pass	-
11	-	20/10/2022	-	1	0.0	98.5	97.0	-1.0	Pass	-
12	-	20/10/2022	-	1	0.0	98.5	98.5	-0.5	Pass	-
13	-	24/10/2022	-	1	0.0	99.0	97.5	-0.5	Pass	-
14	-	24/10/2022	-	1	0.0	99.5	98.0	-1.0	Pass	-
15	-	24/10/2022	-	1	0.0	100.0	98.5	-0.5	Pass	-
16	-	25/10/2022	-	1	0.0	100.0	98.0	-0.5	Pass	-
17	-	25/10/2022	-	1	0.0	99.0	97.5	-0.5	Pass	-
18	-	25/10/2022	-	1	0.0	99.0	99.0	-0.5	Pass	-
19	-	26/10/2022	-	FSL	0.0	99.0	96.5	-0.5	Pass	-
20	-	26/10/2022	-	FSL	0.0	99.5	98.0	-0.5	Pass	-
21	-	26/10/2022	-	FSL	0.0	99.0	97.5	-0.5	Pass	-
22	-	27/10/2022	-	1	0.0	99.5	98.5	-0.5	Pass	-
23	-	27/10/2022	-	2	0.0	100.0	96.5	-0.5	Pass	-
24	-	27/10/2022	-	FSL	0.0	99.5	98.0	-0.5	Pass	-

** Negative (-) value indicates that the field moisture content is drier than the optimum moisture content (OMC)

** Positive (+) value indicates that the field moisture content is wetter than the optimum moisture content (OMC)

25	-	28/10/2022	-	FSL	0.0	100.0	97.5	-1.0	Pass	-
26	-	28/10/2022	-	FSL	0.0	100.0	98.5	-0.5	Pass	-
27	-	28/10/2022	-	FSL	0.0	100.0	98.0	-0.5	Pass	-
28	-	18/04/2023	-	FSL	0.0	98.5	97.0	-0.5	Pass	-
29	-	18/04/2023	-	FSL	0.0	98.5	97.5	-0.5	Pass	-
30	-	18/04/2023	-	FSL	0.0	98.5	98.5	-0.5	Pass	-
31	-	19/04/2023	-	1	0.0	98.5	97.0	-0.5	Pass	-
32	-	19/04/2023	-	2	0.0	98.5	96.5	-1.0	Pass	-
33	-	19/04/2023	-	3	0.0	98.5	98.0	-0.5	Pass	-
34	-	19/04/2023	-	4	0.0	98.5	98.0	-0.5	Pass	-
35	-	19/04/2023	-	FSL	0.0	98.5	97.0	-0.5	Pass	-
36	-	19/04/2023	-	1	0.0	98.5	96.5	-0.5	Pass	-
37	-	19/04/2023	-	2	0.0	98.5	96.5	-0.5	Pass	-
38	-	19/04/2023	-	3	0.0	98.5	98.5	-0.5	Pass	-
39	-	19/04/2023	-	4	0.0	98.5	97.5	-0.5	Pass	-
40	-	19/04/2023	-	5	0.0	98.5	98.0	-0.5	Pass	-
41	-	19/04/2023	-	FSL	0.0	98.5	97.5	-0.5	Pass	-
42	-	20/04/2023	-	2	0.0	98.5	98.5	-0.5	Pass	-
43	-	20/04/2023	-	2	0.0	98.5	96.5	-1.0	Pass	-
44	-	20/04/2023	-	2	0.0	98.5	98.5	-0.5	Pass	-

** Negative (-) value indicates that the field moisture content is drier than the optimum moisture content (OMC)

** Positive (+) value indicates that the field moisture content is wetter than the optimum moisture content (OMC)

Appendix D – NATA Test Results

Field Density Test Results AS1289.5.7.1

Client:	Bild Group	Job No:	BTU2343
Project:	Ellerton Estate - Stage 1 (Level 1)	Report:	1
Location:	Melton South		

Sample No	1	2	3			
Date Tested	20/07/2022	20/07/2022	20/07/2022			
Time Tested	PM	PM	PM			

Test Location	Refer to Plan	Refer to Plan	Refer to Plan			
Level/Layer	Layer 1	Layer 1	Layer 1			
Layer Thickness	mm 200	mm 200	mm 200			
Test Depth	mm 175	mm 175	mm 175			
Field Wet Density	t/m ³ 1.84	t/m ³ 1.85	t/m ³ 1.80			
Field Moisture Content	% 22.0	% 21.8	% 24.2			
Material:	Site Derived Clay Fill	Site Derived Clay Fill	Site Derived Clay Fill			

Oversize Material	WET, %	0.0	0.0	0.0		
Sieve Size	mm	19	19	19		
Peak Converted Wet Density	t/m ³	1.87	1.87	1.83		
Optimum Moisture Content	%	23	22.5	22.5		

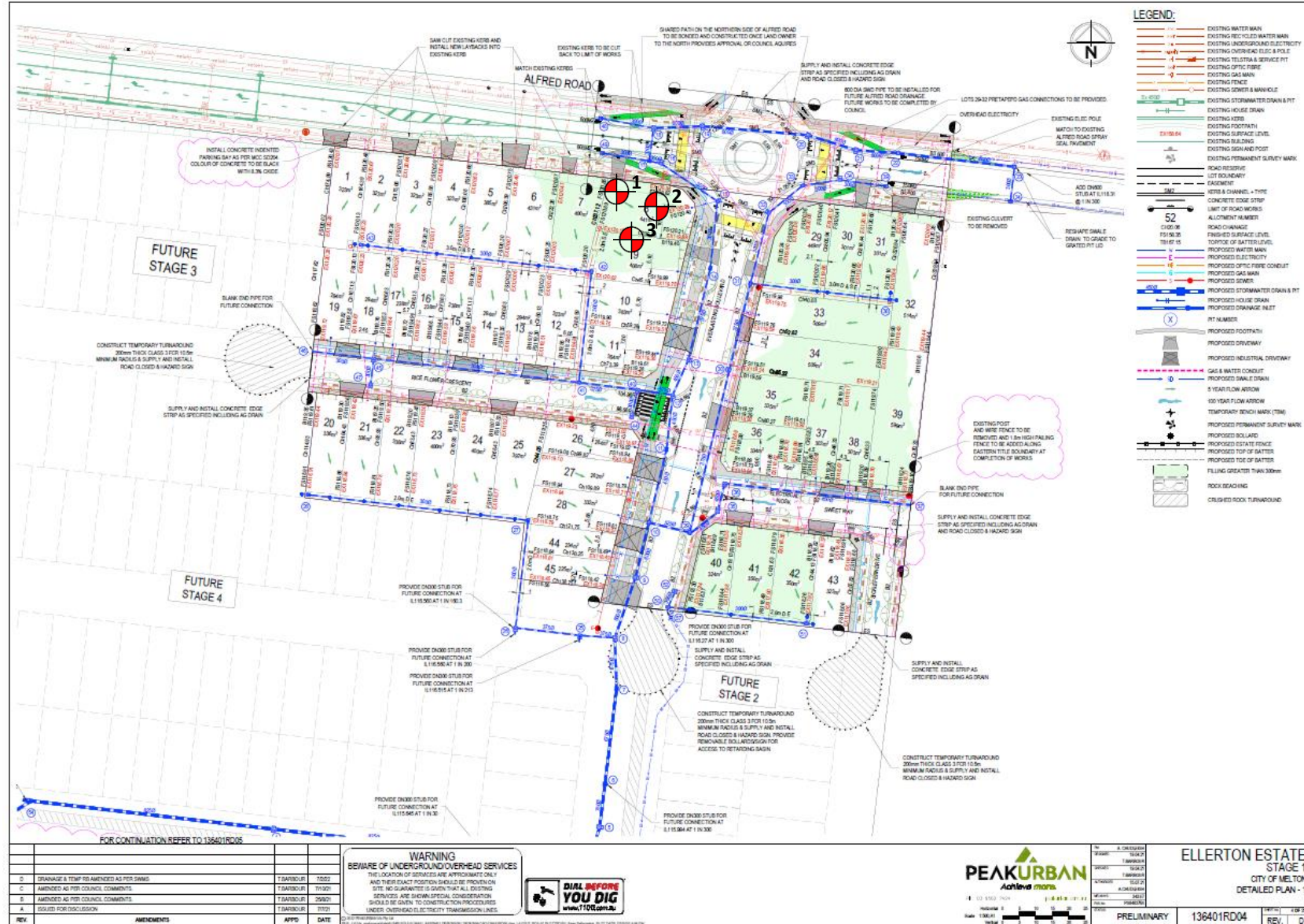
Moisture Ratio	%	95.5	97	107.5		
Moisture Variation from OMC	%	-1.0 Drier	-0.5 Drier	1.5 Wetter		
Density Ratio	%	98.0	99.0	98.0		

Specification:	95% STD	Test Selection:	N/A
Notes:	Ref : 1120 0347-1 (SI01)		
Test Method	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	Sampling Method:	AS 1289 1.2.1 6.4(b)

 <p>NATA WORLD RECOGNISED ACCREDITATION</p>	<p>NATA Accredited Laboratory No. 20172</p> <p>Accreditation for compliance with ISO/IEC 17025 - Testing</p> <p>The results of tests, calibrations and/or measurements included in this document, are traceable to Australian / National Standards</p>	<p>Approved Signatory:</p> <div style="text-align: center;">  David Burns </div> <p>Date: 28/07/2022</p>
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Test Location



PROJECT: Ellerton Estate – Stage 1 (Level 1)
LOCATION: Melton South

CLIENT: Bild Group	PROJECT No: 1120 0347-1 (SI01)
------------------------------	--

DATE: 20/07/2022	SITE PLAN SKETCH—NOT TO SCALE
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A&Y ASSOCIATES
GEOTECHNICAL ENGINEERING CONSULTANTS

Field Density Test Results

AS1289.5.7.1

Client:	Bild Group	Job No:	BTU2343
Project:	Ellerton Estate - Stage 1 (Level 1)	Report:	2
Location:	Melton South		

Sample No	4	5	6			
Date Tested	03/08/2022	03/08/2022	03/08/2022			
Time Tested	PM	PM	PM			

Test Location	Refer to Plan	Refer to Plan	Refer to Plan			
Level/Layer	Layer 1	Layer 1	Layer 1			
Layer Thickness	mm 200	mm 200	mm 200			
Test Depth	mm 175	mm 175	mm 175			
Field Wet Density	t/m ³ 1.88	t/m ³ 1.85	t/m ³ 1.81			
Field Moisture Content	% 25.6	% 26.8	% 26.0			
Material:	Site Derived Clay Fill	Site Derived Clay Fill	Site Derived Clay Fill			

Oversize Material	WET, %	0.0	0.0	0.0		
Sieve Size	mm	19	19	19		
Peak Converted Wet Density	t/m ³	1.91	1.88	1.84		
Optimum Moisture Content	%	26.5	27.5	26.5		

Moisture Ratio	%	96.5	97.5	98		
Moisture Variation from OMC	%	-0.5	-0.5	-0.5		
Density Ratio	%	98.5	98.0	98.5		

Specification:	95% STD	Test Selection:	N/A
Notes:	Ref : 1120 0347-1 (SI02)		
Test Method	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	Sampling Method:	AS 1289 1.2.1 6.4(b)



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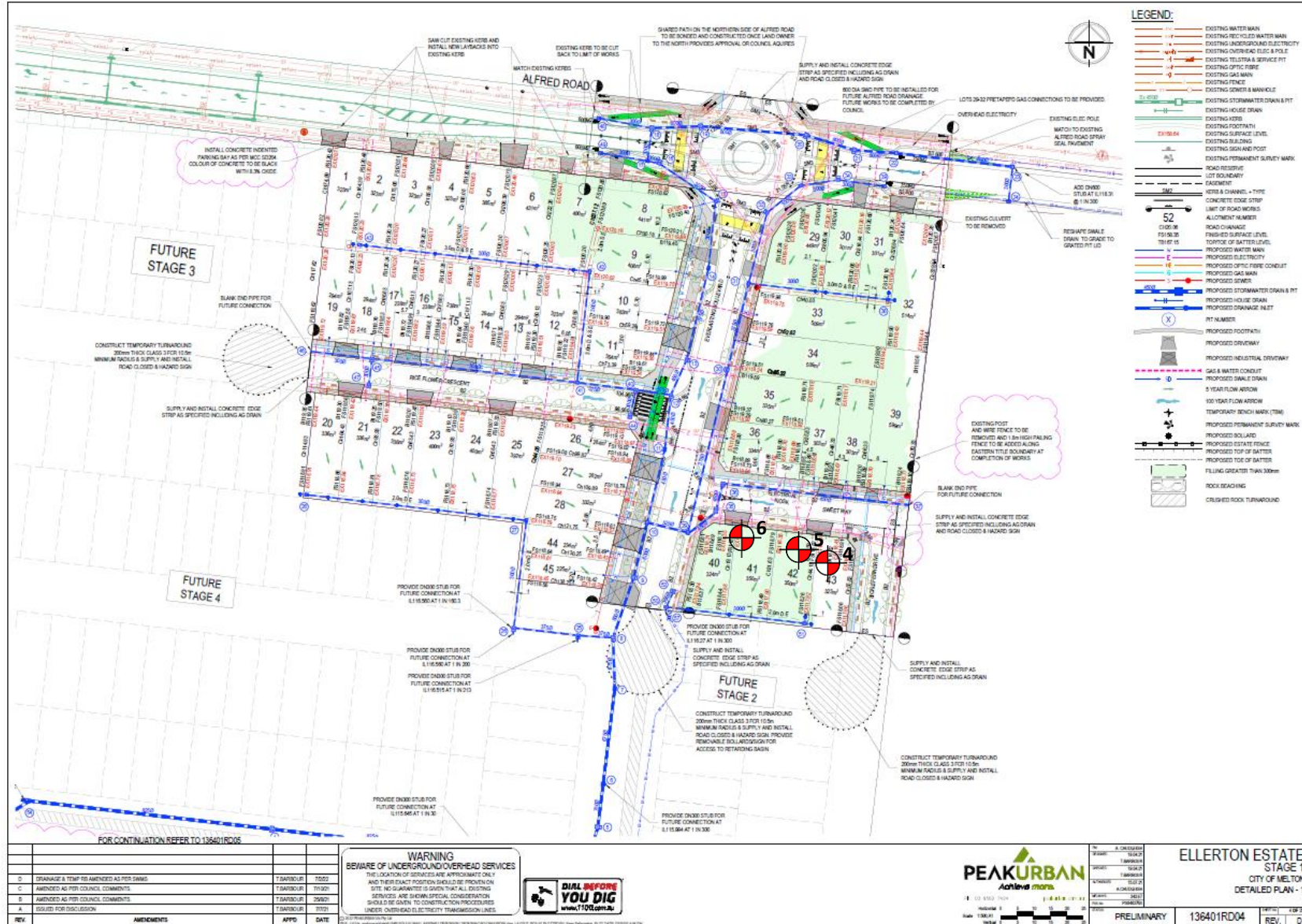


David Burns

Date: 05/08/2022



Test Location



PROJECT:
Ellerton Estate – Stage 1 (Level 1)

CLIENT:
Bild Group

DATE:
03/08/2022

LOCATION:
Melton South

PROJECT No:
1120 0347-1 (SI02)

SITE PLAN SKETCH—NOT TO SCALE



Field Density Test Results AS1289.5.7.1

Client:	Bild Group	Job No:	BTU2343
Project:	Ellerton Estate - Stage 1 (Level 1)	Report:	3
Location:	Melton South		

Sample No	7	8	9			
Date Tested	04/08/2022	04/08/2022	04/08/2022			
Time Tested	PM	PM	PM			

Test Location	Refer to Plan	Refer to Plan	Refer to Plan			
Level/Layer	Layer 2	Layer 2	Layer 2			
Layer Thickness	mm 200	mm 200	mm 200			
Test Depth	mm 175	mm 175	mm 175			
Field Wet Density	t/m ³ 1.65	t/m ³ 1.64	t/m ³ 1.65			
Field Moisture Content	% 27.1	% 26.8	% 27.4			
Material:	Site Derived Clay Fill	Site Derived Clay Fill	Site Derived Clay Fill			

Oversize Material	WET, %	0.0	0.0	0.0		
Sieve Size	mm	19	19	19		
Peak Converted Wet Density	t/m ³	1.73	1.72	1.71		
Optimum Moisture Content	%	28	27.5	28.5		

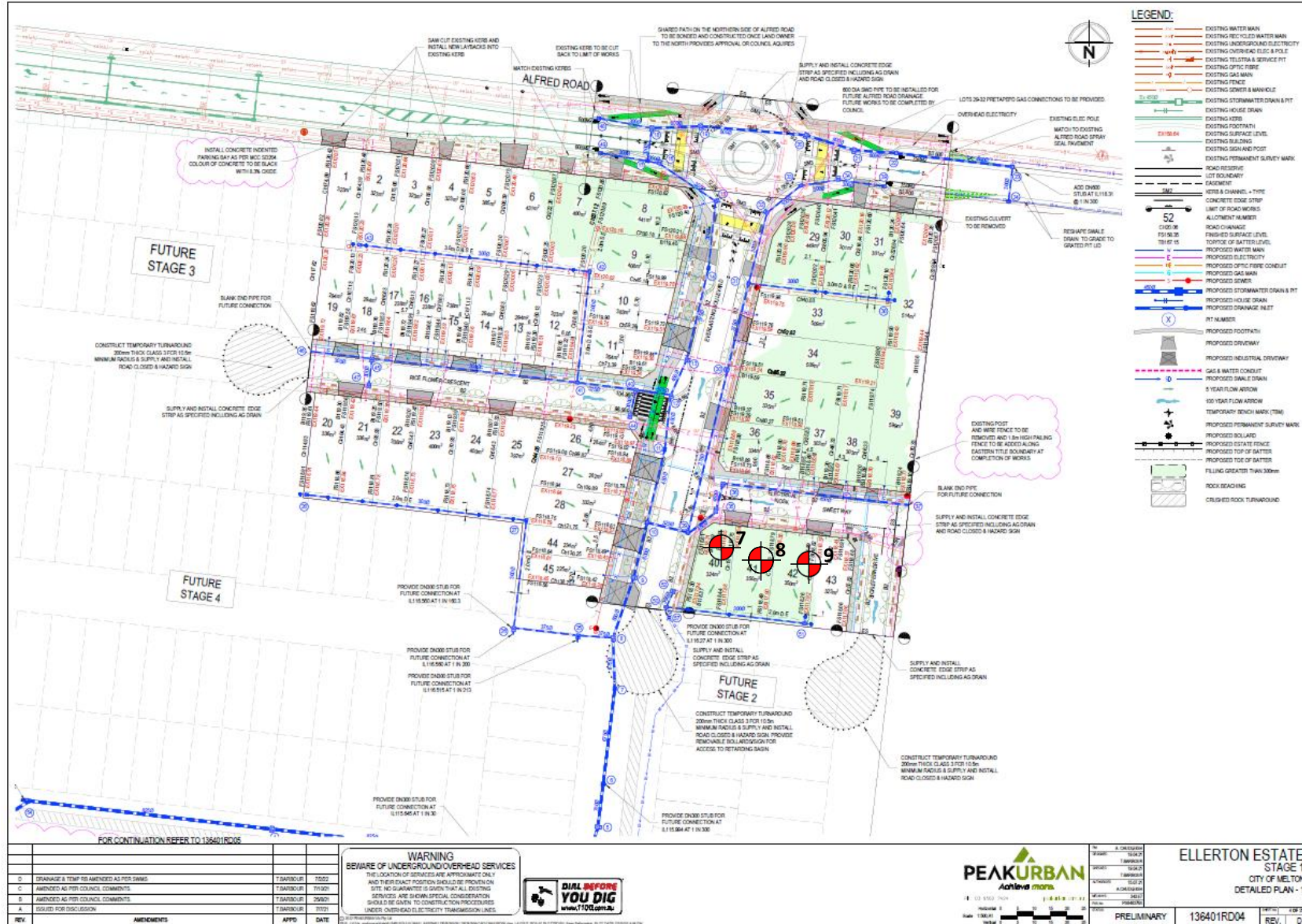
Moisture Ratio	%	97	97.5	96		
Moisture Variation from OMC	%	-1.0	-1.0	-1.0		
Density Ratio	%	95.5	96.0	96.0		

Specification:	95% STD	Test Selection:	N/A
Notes:	Ref : 1120 0347-1 (SI03)		
Test Method	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	Sampling Method:	AS 1289 1.2.1 6.4(b)

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Test Location



PROJECT:
Ellerton Estate – Stage 1 (Level 1)

LOCATION:
Melton South

CLIENT:
Bild Group

PROJECT No:
1120 0347-1 (SI03)

DATE:
04/08/2022

SITE PLAN SKETCH—NOT TO SCALE



Field Density Test Results

AS1289.5.7.1

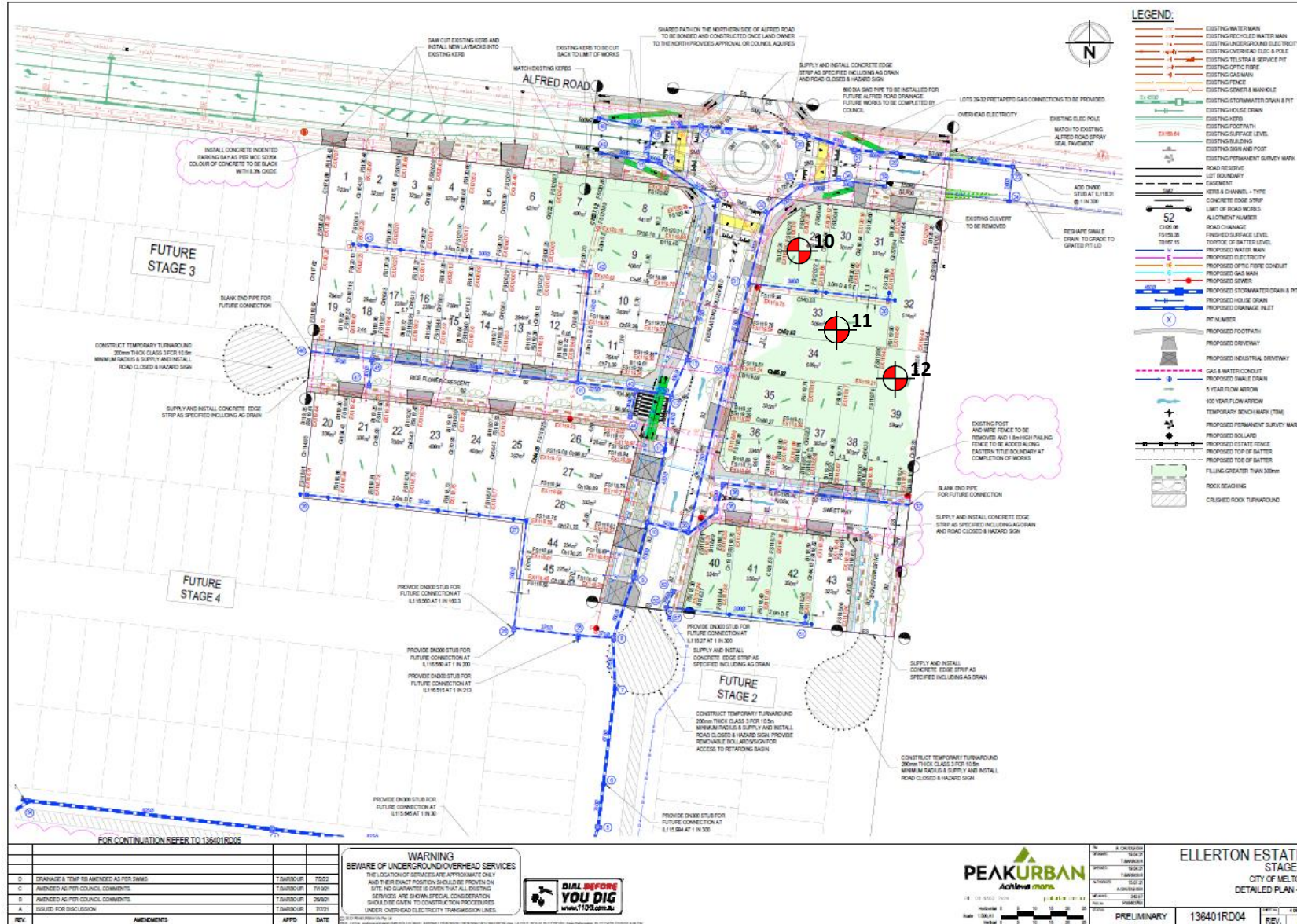
Client:	Bild Group	Job No:	BTU2343
Project:	Ellerton Estate - Stage 1 (Level 1)	Report:	4
Location:	Melton South		
Sample No	10	11	12
Date Tested	20/10/2022	20/10/2022	20/10/2022
Time Tested	AM	PM	PM
Test Location	Refer to Plan	Refer to Plan	Refer to Plan
Level/Layer	1	1	1
Layer Thickness	mm 200	mm 200	mm 200
Test Depth	mm 175	mm 175	mm 175
Field Wet Density	t/m ³ 1.78	t/m ³ 1.77	t/m ³ 1.79
Field Moisture Content	% 27.2	% 28.7	% 26.6
Material:	Site Derived Clay Fill	Site Derived Clay Fill	Site Derived Clay Fill
Oversize Material	WET, % 0.0	WET, % 0.0	WET, % 0.0
Sieve Size	mm 19	mm 19	mm 19
Peak Converted Wet Density	t/m ³ 1.81	t/m ³ 1.80	t/m ³ 1.82
Optimum Moisture Content	% 28	% 29.5	% 27
Moisture Ratio	% 97	% 97	% 98.5
Moisture Variation from OMC	% -1.0 Drier	% -1.0 Drier	% -0.5 Drier
Density Ratio	% 98.5	% 98.5	% 98.5

Specification:	98% STD	Test Selection:	N/A
Notes:	Ref : 1120 0347-1 (SI04)		
Test Method	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	Sampling Method:	AS 1289 1.2.1 6.4(b)

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Test Location



PROJECT:
Ellerton Estate – Stage 1 (Level 1)

CLIENT:
Bild Group

DATE:
20/10/2022

LOCATION:
Melton South

PROJECT No.:
1120 0347-1 (S104)

SITE PLAN SKETCH—NOT TO SCALE



Field Density Test Results AS1289.5.7.1

Client:	Bild Group	Job No:	BTU2343
Project:	Ellerton Estate - Stage 1 (Level 1)	Report:	5
Location:	Melton South		



Sample No	13	14	15			
Date Tested	24/10/2022	24/10/2022	24/10/2022			
Time Tested	AM	AM	AM			

Test Location	Refer to Plan	Refer to Plan	Refer to Plan			
Level/Layer	1	1	1			
Layer Thickness	mm 200	mm 200	mm 200			
Test Depth	mm 175	mm 175	mm 175			
Field Wet Density	t/m ³ 1.77	t/m ³ 1.76	t/m ³ 1.84			
Field Moisture Content	% 26.8	% 26.4	% 25.1			
Material:	Site Derived Clay	Site Derived Clay	Site Derived Clay			

Oversize Material	WET, % 0.0	0.0	0.0			
Sieve Size	mm 19	mm 19	mm 19			
Peak Converted Wet Density	t/m ³ 1.79	t/m ³ 1.77	t/m ³ 1.84			
Optimum Moisture Content	% 27.5	% 27	% 25.5			

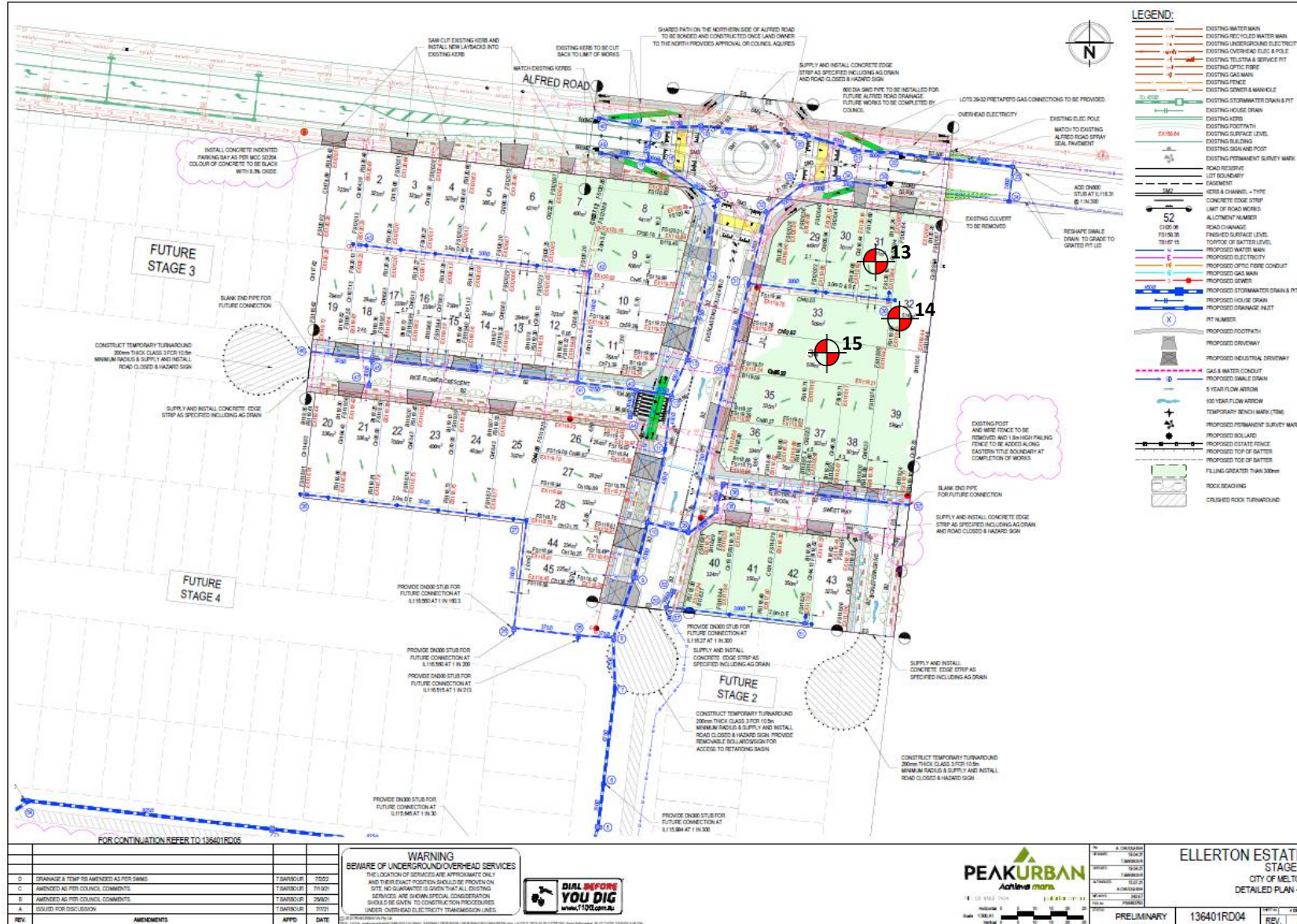
Moisture Ratio	97.5	98	98.5			
Moisture Variation from OMC	% -0.5 Drier	% -1.0 Drier	% -0.5 Drier			
Density Ratio	% 99.0	% 99.5	% 100.0			

Specification:	98% STD	Test Selection:	N/A
Notes:	Ref : 1120 0347-1 (SI05)		
Test Method	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	Sampling Method:	AS 1289 1.2.1 6.4(b)

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Test Location



PROJECT:
Ellerton Estate – Stage 1 (Level 1)

LOCATION:
Melton South

CLIENT:
Bild Group

PROJECT No:
1120 0347-1 (S105)

DATE:
24/10/2022

SITE PLAN SKETCH—NOT TO SCALE



Field Density Test Results AS1289.5.7.1

Client:	Bild Group	Job No:	BTU2343
Project:	Ellerton Estate - Stage 1 (Level 1)	Report:	6
Location:	Melton South		



Sample No	16	17	18			
Date Tested	25/10/2022	25/10/2022	25/10/2022			
Time Tested	AM	AM	AM			

Test Location	Refer to Plan	Refer to Plan	Refer to Plan			
Level/Layer	1	1	1			
Layer Thickness	mm 200	mm 200	mm 200			
Test Depth	mm 175	mm 175	mm 175			
Field Wet Density	t/m ³ 1.79	t/m ³ 1.85	t/m ³ 1.81			
Field Moisture Content	% 26.4	% 25.4	% 25.7			
Material:	Site Derived Clay	Site Derived Clay	Site Derived Clay			

Oversize Material	WET, %	0.0	0.0	0.0		
Sieve Size	mm	19	19	19		
Peak Converted Wet Density	t/m ³	1.79	1.86	1.82		
Optimum Moisture Content	%	27	26	26		

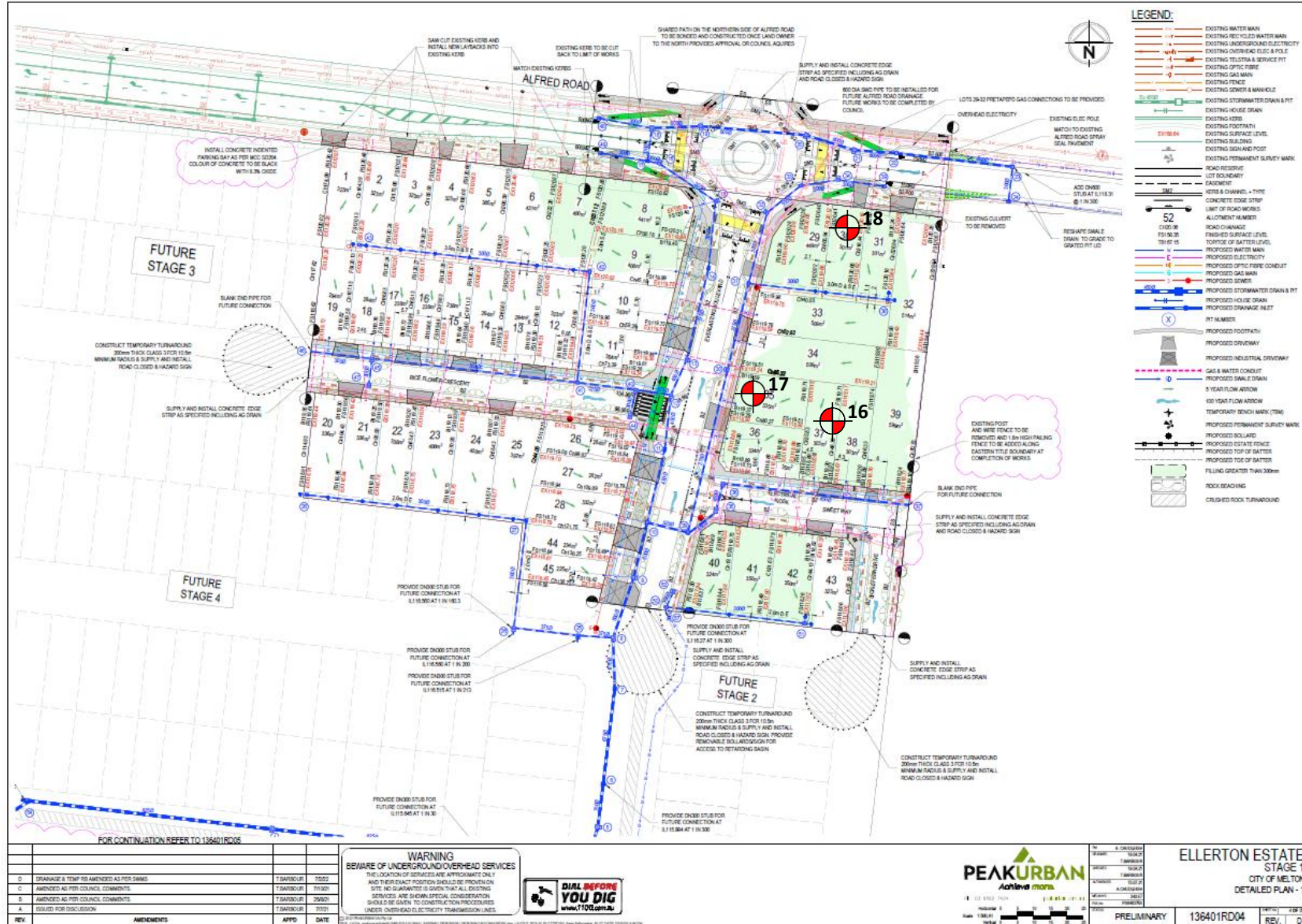
Moisture Ratio	%	98	97.5	99		
Moisture Variation from OMC	%	-0.5 Drier	-0.5 Drier	-0.5 Drier		
Density Ratio	%	100.0	99.0	99.0		

Specification:	98% STD	Test Selection:	N/A
Notes:	Ref : 1120 0347-1 (SI06)		
Test Method	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	Sampling Method:	AS 1289 1.2.1 6.4(b)

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Test Location



PROJECT:
Ellerton Estate – Stage 1 (Level 1)

CLIENT:
Bild Group

DATE:
25/10/2022

LOCATION:
Melton South

PROJECT No.:
1120 0347-1 (S106)

SITE PLAN SKETCH—NOT TO SCALE



Field Density Test Results AS1289.5.7.1

Client:	Bild Group	Job No:	BTU2343
Project:	Ellerton Estate - Stage 1 (Level 1)	Report:	7
Location:	Melton South		



Sample No	19	20	21			
Date Tested	26/10/2022	26/10/2022	26/10/2022			
Time Tested	AM	AM	AM			

Test Location	Refer to Plan	Refer to Plan	Refer to Plan			
Level/Layer	FSL	FSL	FSL			
Layer Thickness	mm 200	mm 200	mm 200			
Test Depth	mm 175	mm 175	mm 175			
Field Wet Density	t/m ³ 1.83	t/m ³ 1.85	t/m ³ 1.89			
Field Moisture Content	% 25.1	% 25.5	% 24.4			
Material:	Site Derived Clay	Site Derived Clay	Site Derived Clay			

Oversize Material	WET, % 0.0	0.0	0.0			
Sieve Size	mm 19	mm 19	mm 19			
Peak Converted Wet Density	t/m ³ 1.85	t/m ³ 1.85	t/m ³ 1.91			
Optimum Moisture Content	% 26	% 26	% 25			

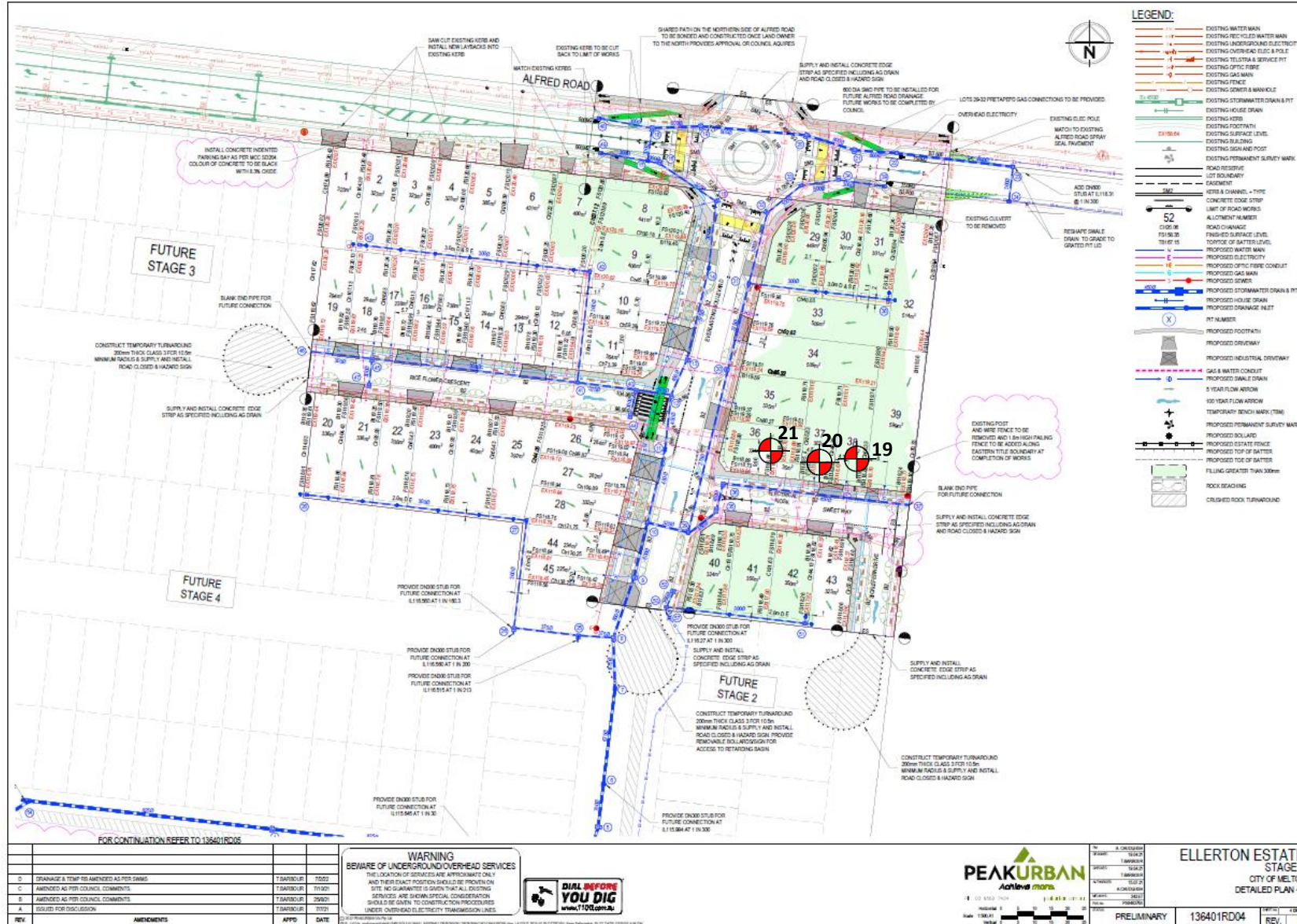
Moisture Ratio	96.5	98	97.5			
Moisture Variation from OMC	% -0.5 Drier	% -0.5 Drier	% -0.5 Drier			
Density Ratio	% 99.0	% 99.5	% 99.0			

Specification:	98% STD	Test Selection:	N/A
Notes:	Ref : 1120 0347-1 (SI07)		
Test Method	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	Sampling Method:	AS 1289 1.2.1 6.4(b)

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Test Location



REV	DESCRIPTION	DATE
D	DRAINAGE & TEMP TO AMEND AS PER DWGS	7/2022
C	AMENDED AS PER COUNCIL COMMENTS	17/10/21
B	AMENDED AS PER COUNCIL COMMENTS	29/01/21
A	ISSUED FOR DISCUSSION	17/01/21

WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVIDED ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.



ELLERTON ESTATE STAGE 1 CITY OF MELTON DETAILED PLAN - 1	
PRELIMINARY	136401RD04
REV: D	

PROJECT:
Ellerton Estate – Stage 1 (Level 1)

LOCATION:
Melton South

CLIENT:
Bild Group

PROJECT No:
1120 0347-1 (S107)

DATE:
26/10/2022

SITE PLAN SKETCH—NOT TO SCALE



Field Density Test Results AS1289.5.7.1

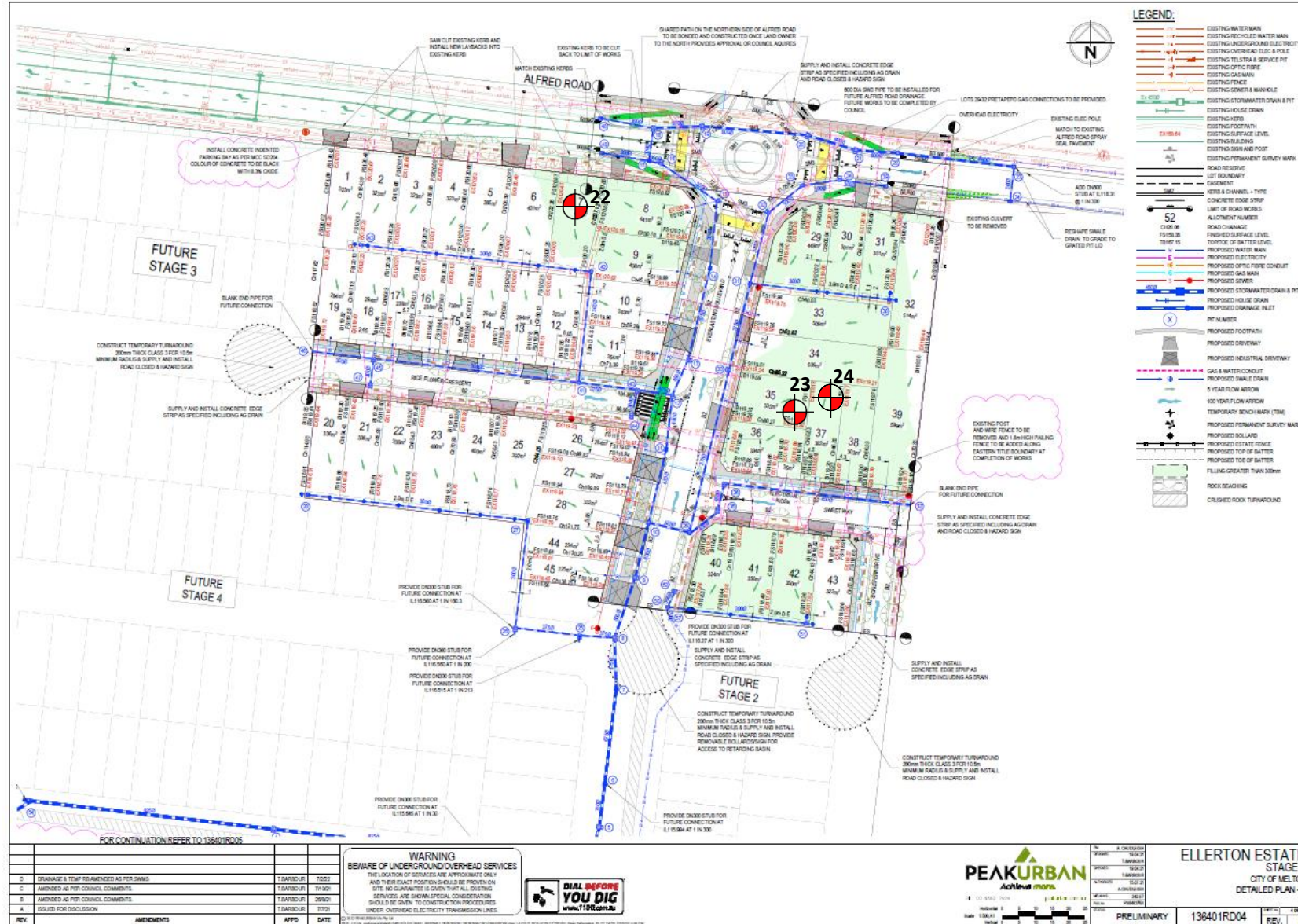
Client:	Bild Group	Job No:	BTU2343
Project:	Ellerton Estate - Stage 1 (Level 1)	Report:	8
Location:	Melton South		
Sample No	22	23	24
Date Tested	27/10/2022	27/10/2022	27/10/2022
Time Tested	PM	PM	PM
Test Location	Refer to Plan	Refer to Plan	Refer to Plan
Level/Layer	1	2	FSL
Layer Thickness	mm 200	mm 200	mm 200
Test Depth	mm 175	mm 175	mm 175
Field Wet Density	t/m ³ 1.91	t/m ³ 1.95	t/m ³ 1.93
Field Moisture Content	% 26.6	% 25.6	% 26.0
Material:	Site Derived Clay	Site Derived Clay	Site Derived Clay
Oversize Material	WET, % 0.0	WET, % 0.0	WET, % 0.0
Sieve Size	mm 19	mm 19	mm 19
Peak Converted Wet Density	t/m ³ 1.92	t/m ³ 1.95	t/m ³ 1.94
Optimum Moisture Content	% 27	% 26.5	% 26.5
Moisture Ratio	% 98.5	% 96.5	% 98
Moisture Variation from OMC	% -0.5 Drier	% -0.5 Drier	% -0.5 Drier
Density Ratio	% 99.5	% 100.0	% 99.5

Specification:	98% STD	Test Selection:	N/A
Notes:	Ref : 1120 0347-1 (SI08)		
Test Method	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	Sampling Method:	AS 1289 1.2.1 6.4(b)

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Test Location



REV	DESCRIPTION	DATE
D	DRAINAGE & TEMP TO AMEND AS PER DWGS	7/20/22
C	AMENDED AS PER COUNCIL COMMENTS	17/10/22
B	AMENDED AS PER COUNCIL COMMENTS	29/01/22
A	ISSUED FOR DISCUSSION	17/01/22

WARNING
BEWARE OF UNDERGROUND/OVERHEAD SERVICES
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PROJECT	ELLERTON ESTATE STAGE 1
CITY	CITY OF MELTON
PLAN	DETAILED PLAN - 1
DATE	27/10/2022
SCALE	AS SHOWN
STATUS	PRELIMINARY
PROJECT NO.	136401RD04
REV.	D

PROJECT:
Ellerton Estate – Stage 1 (Level 1)

LOCATION:
Melton South

CLIENT:
Bild Group

PROJECT No:
1120 0347-1 (SI08)

DATE:
27/10/2022

SITE PLAN SKETCH—NOT TO SCALE



Field Density Test Results AS1289.5.7.1

Client:	Bild Group	Job No:	BTU2343
Project:	Ellerton Estate - Stage 1 (Level 1)	Report:	9
Location:	Melton South		

Sample No	25	26	27			
Date Tested	28/10/2022	28/10/2022	28/10/2022			
Time Tested	PM	PM	PM			

Test Location	Refer to Plan	Refer to Plan	Refer to Plan			
Level/Layer	FSL	FSL	FSL			
Layer Thickness	mm 200	mm 200	mm 200			
Test Depth	mm 175	mm 175	mm 175			
Field Wet Density	t/m ³ 1.91	t/m ³ 1.82	t/m ³ 1.91			
Field Moisture Content	% 23.9	% 28.1	% 24.0			
Material:	Site Derived Clay	Site Derived Clay	Site Derived Clay			

Oversize Material	WET, % 0.0	0.0	0.0			
Sieve Size	mm 19	mm 19	mm 19			
Peak Converted Wet Density	t/m ³ 1.90	t/m ³ 1.82	t/m ³ 1.91			
Optimum Moisture Content	% 24.5	% 28.5	% 24.5			

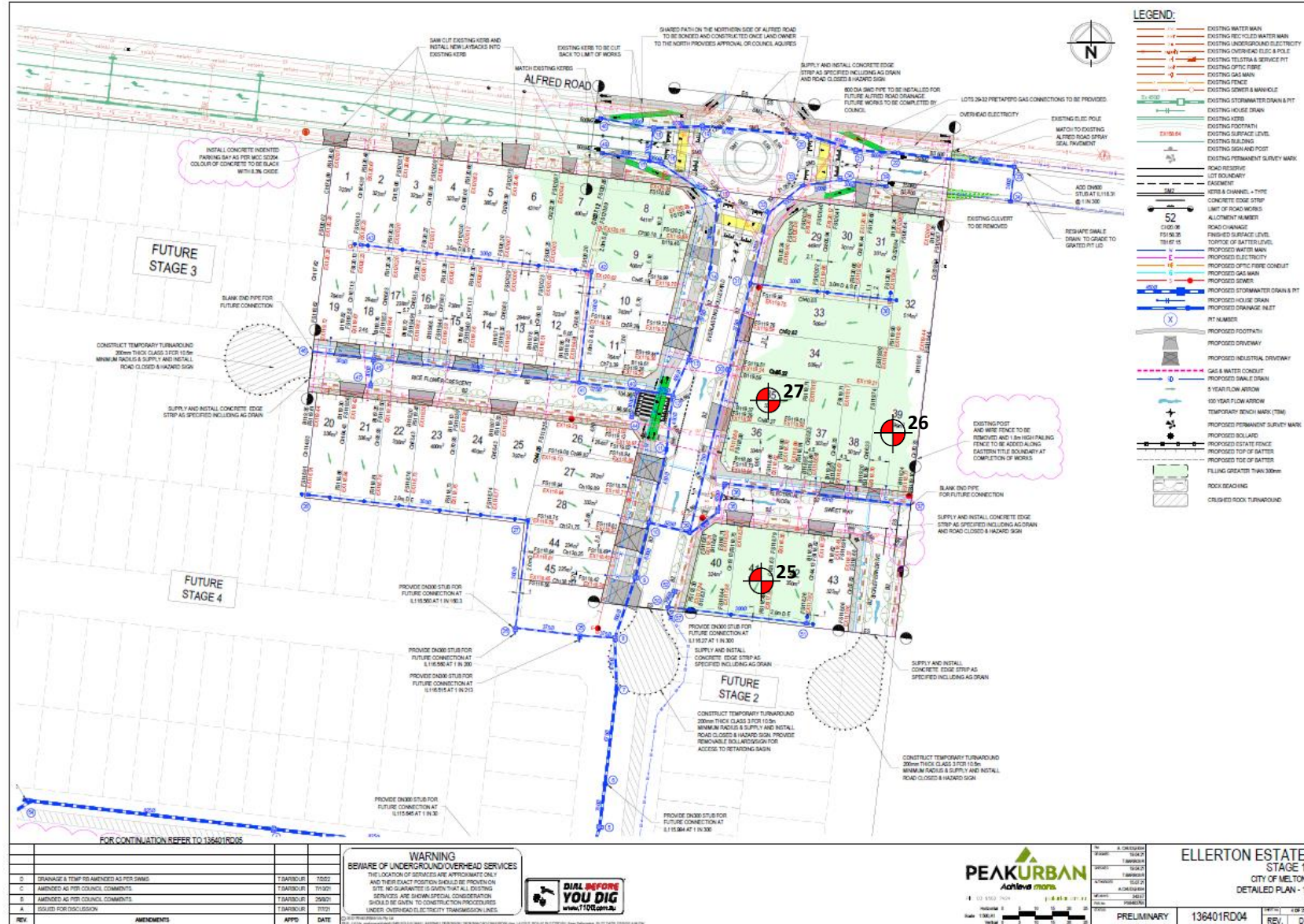
Moisture Ratio	97.5	98.5	98			
Moisture Variation from OMC	% -1.0 Drier	% -0.5 Drier	% -0.5 Drier			
Density Ratio	% 100.0	% 100.0	% 100.0			

Specification:	98% STD	Test Selection:	N/A
Notes:	Ref : 1120 0347-1 (SI09)		
Test Method	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	Sampling Method:	AS 1289 1.2.1 6.4(b)

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Test Location



PROJECT:
Ellerton Estate – Stage 1 (Level 1)

LOCATION:
Melton South

CLIENT:
Bild Group

PROJECT No:
1120 0347-1 (SI09)

DATE:
28/10/2022

SITE PLAN SKETCH—NOT TO SCALE



Field Density Test Results

AS1289.5.7.1

Client:	Bild Group	Job No:	BTU2343
Project:	Ellerton Estate - Stage 1 (Level 1)	Report:	10
Location:	Melton South		

Sample No	28	29	30		
Date Tested	18/04/2023	18/04/2023	18/04/2023		
Time Tested	PM	PM	PM		

Test Location	Refer to Plan	Refer to Plan	Refer to Plan		
Level/Layer	FSL	FSL	FSL		
Layer Thickness	mm 200	mm 200	mm 200		
Test Depth	mm 175	mm 175	mm 175		
Field Wet Density	t/m ³ 1.89	t/m ³ 1.97	t/m ³ 1.92		
Field Moisture Content	% 26.2	% 24.4	% 25.1		
Material:	Site Derived Clay	Site Derived Clay	Site Derived Clay		

Oversize Material	WET, %	0.0	0.0	0.0	
Sieve Size	mm	19	19	19	
Peak Converted Wet Density	t/m ³	1.92	2.00	1.95	
Optimum Moisture Content	%	27	25	25.5	

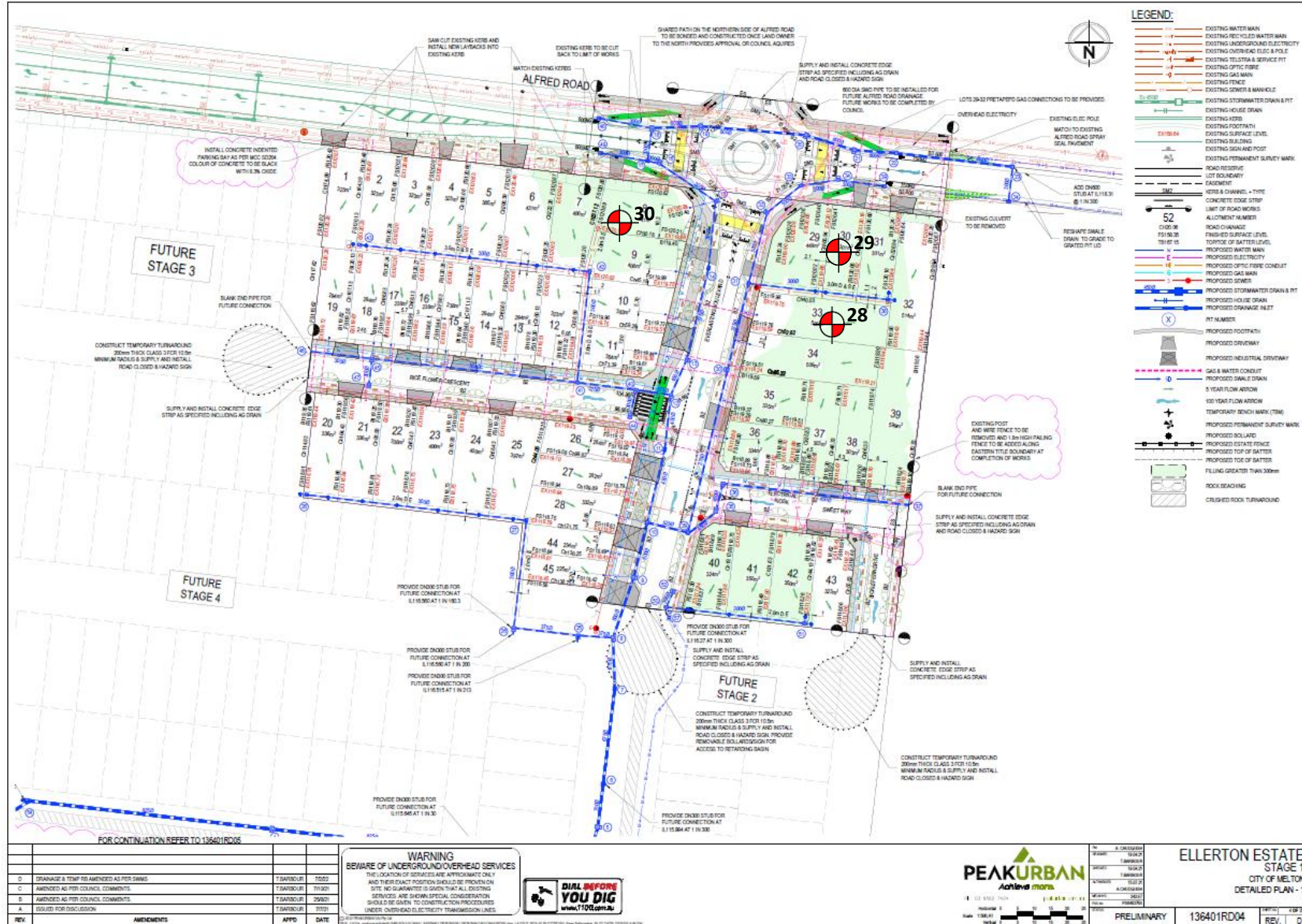
Moisture Ratio	%	97	97.5	98.5	
Moisture Variation from OMC	%	-0.5	-0.5	-0.5	
Density Ratio	%	98.5	98.5	98.5	

Specification:	98% STD	Test Selection:	N/A
Notes:	Ref : 1120 0347-1 (SI10)		
Test Method	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	Sampling Method:	AS 1289 1.2.1 6.4(b)

 <p style="font-size: small;">WORLD RECOGNISED ACCREDITATION</p>	<p style="font-size: x-small;">NATA Accredited Laboratory No. 20172</p> <p style="font-size: x-small;">Accreditation for compliance with ISO/IEC 17025 - Testing</p>	<p style="font-size: x-small;">Approved Signatory:</p> 	
		<p>David Burns</p>	
		<p>Date: 04/05/2023</p>	



Test Location



PROJECT:
Ellerton Estate – Stage 1 (Level 1)

LOCATION:
Melton South

CLIENT:
Bild Group

PROJECT No:
1120 0347-1 (S110)

DATE:
18/04/2023

SITE PLAN SKETCH—NOT TO SCALE



Field Density Test Results AS1289.5.7.1

Client:	Bild Group	Job No:	BTU2343
Project:	Ellerton Estate - Stage 1 (Level 1)	Report:	11
Location:	Melton South		



Sample No	31	32	33	34	35	
Date Tested	19/04/2023	19/04/2023	19/04/2023	19/04/2023	19/04/2023	
Time Tested	AM	AM	AM	PM	PM	

Test Location	Refer to Plan	Refer to Plan	Refer to Plan	Refer to Plan	Refer to Plan	
Level/Layer	1	2	3	4	FSL	
Layer Thickness	mm 200	200	200	200	200	
Test Depth	mm 175	175	175	175	175	
Field Wet Density	t/m ³ 1.88	1.91	1.97	1.90	1.91	
Field Moisture Content	% 26.2	24.1	21.1	25.5	24.7	
Material:	Site Derived Clay	Site Derived Clay	Site Derived Clay	Site Derived Clay	Site Derived Clay	

Oversize Material	WET, % 0.0	0.0	0.0	0.0	0.0	
Sieve Size	mm 19	19	19	19	19	
Peak Converted Wet Density	t/m ³ 1.91	1.94	2.01	1.93	1.94	
Optimum Moisture Content	% 27	25	21.5	26	25.5	

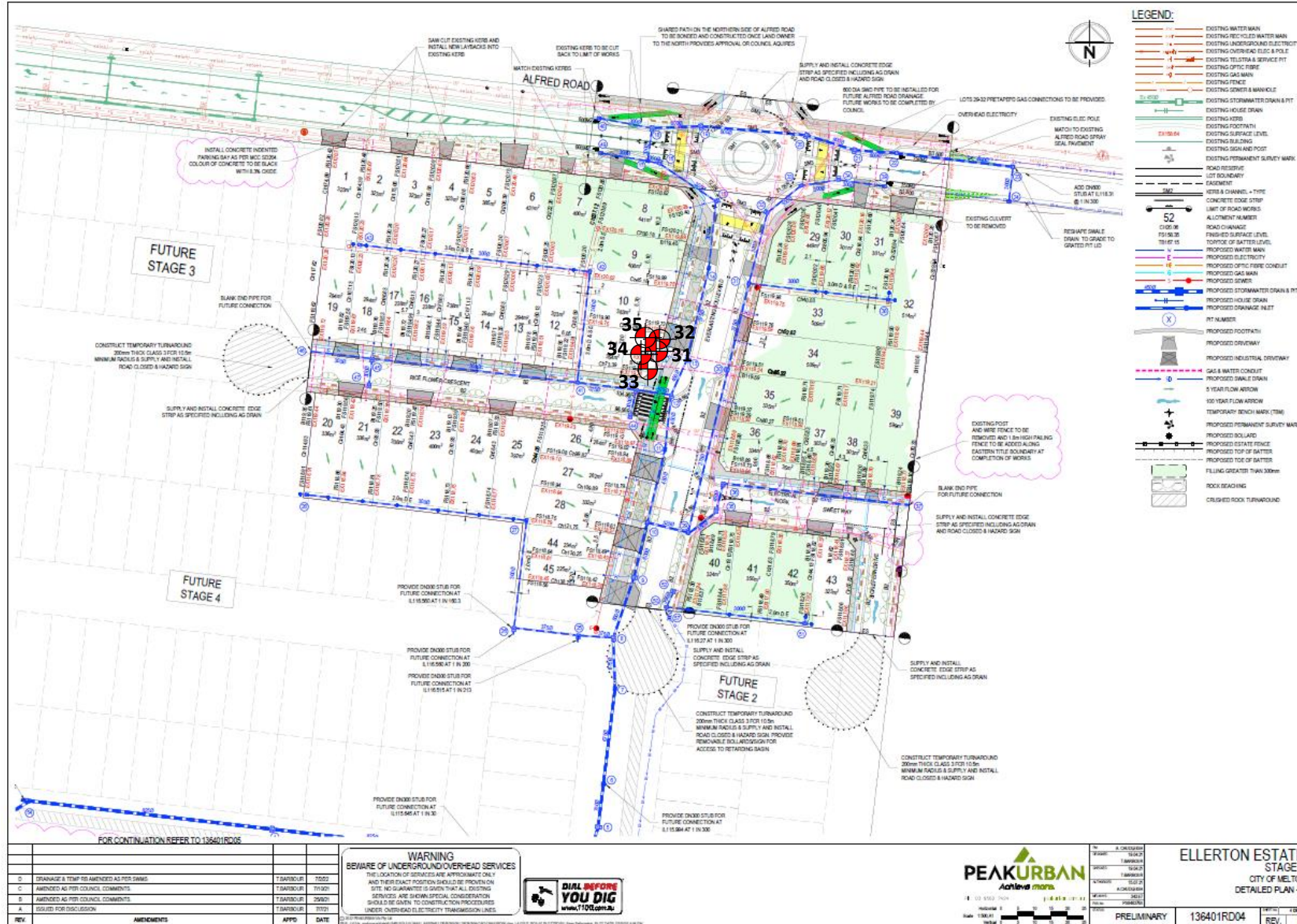
Moisture Ratio	%	97	96.5	98	98	97	
Moisture Variation from OMC	%	-0.5	-1.0	-0.5	-0.5	-0.5	
Density Ratio	%	98.5	98.5	98.5	98.5	98.5	

Specification:	98% STD	Test Selection:	N/A
Notes:	Ref : 1120 0347-1 (SI11)		
Test Method	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	Sampling Method:	AS 1289 1.2.1 6.4(b)

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Test Location



PROJECT:
Ellerton Estate – Stage 1 (Level 1)

LOCATION:
Melton South

CLIENT:
Bild Group

PROJECT No:
1120 0347-1 (S111)

DATE:
19/04/2023

SITE PLAN SKETCH—NOT TO SCALE



Field Density Test Results

AS1289.5.7.1

Client:	Bild Group	Job No:	BTU2343
Project:	Ellerton Estate - Stage 1 (Level 1)	Report:	12
Location:	Melton South		

Sample No	36	37	38	39	40	41
Date Tested	19/04/2023	19/04/2023	19/04/2023	19/04/2023	19/04/2023	19/04/2023
Time Tested	AM	AM	AM	PM	PM	PM

Test Location	Refer to Plan	Refer to Plan	Refer to Plan	Refer to Plan	Refer to Plan	Refer to Plan
Level/Layer	1	2	3	4	5	FSL
Layer Thickness	mm 200	200	200	200	200	200
Test Depth	mm 175	175	175	175	175	175
Field Wet Density	t/m ³ 1.95	1.96	1.89	1.83	1.90	1.96
Field Moisture Content	% 23.2	23.2	26.1	26.8	25.5	21.9
Material:	Site Derived Clay	Site Derived Clay	Site Derived Clay	Site Derived Clay	Site Derived Clay	Site Derived Clay

Oversize Material	WET, %	0.0	0.0	0.0	0.0	0.0
Sieve Size	mm	19	19	19	19	19
Peak Converted Wet Density	t/m ³	1.98	1.99	1.91	1.86	1.93
Optimum Moisture Content	%	24	24	26.5	27.5	26

Moisture Ratio	%	96.5	96.5	98.5	97.5	98	97.5
Moisture Variation from OMC	%	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Density Ratio	%	98.5	98.5	98.5	98.5	98.5	98.5

Specification:	98% STD	Test Selection:	N/A
Notes:	Ref : 1120 0347-1 (SI12)		
Test Method	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	Sampling Method:	AS 1289 1.2.1 6.4(b)



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Approved Signatory:

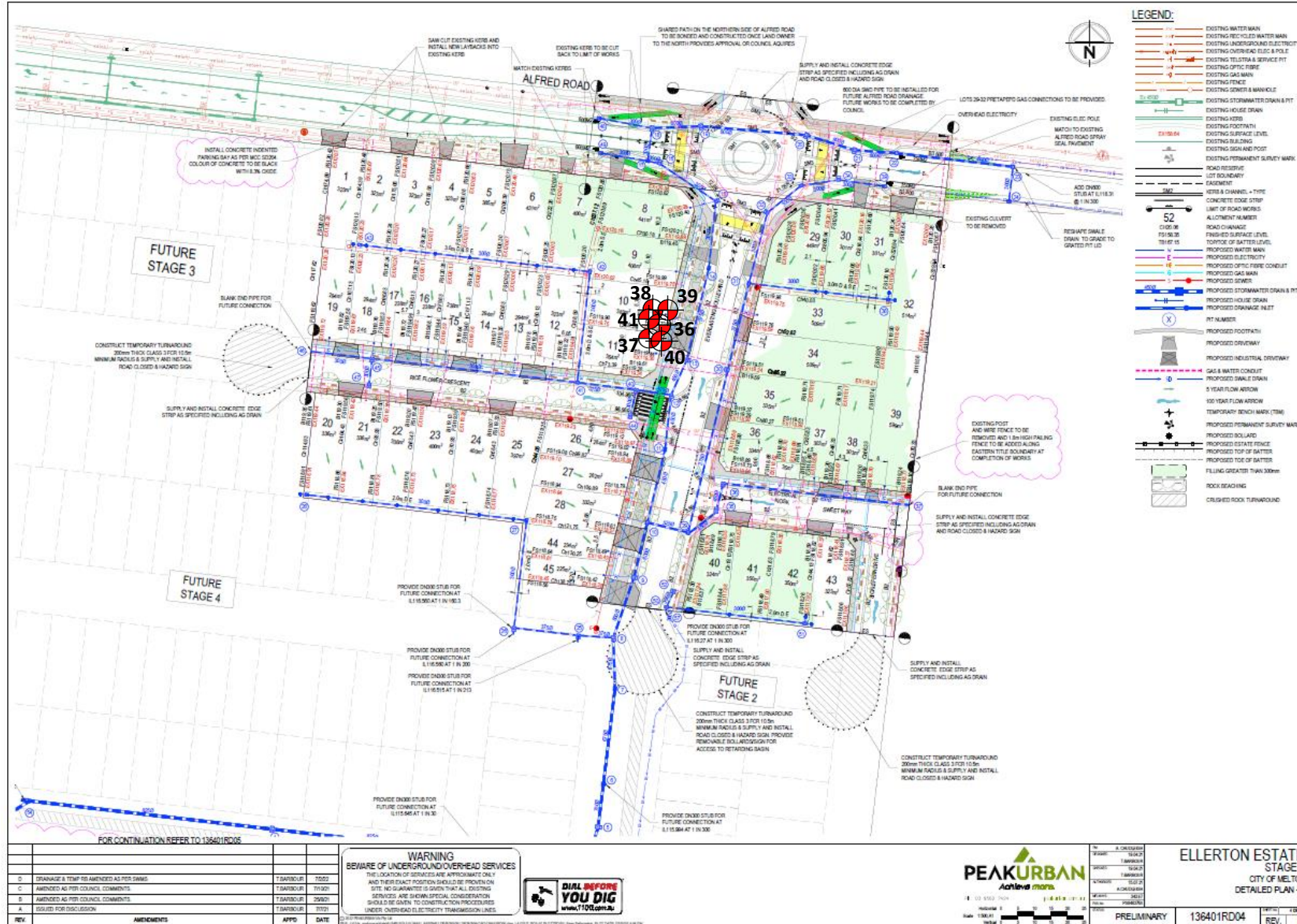


David Burns

Date: 04/05/2023



Test Location



PROJECT:
Ellerton Estate – Stage 1 (Level 1)

CLIENT:
Bild Group

DATE:
19/04/2023

LOCATION:
Melton South

PROJECT No:
1120 0347-1 (S112)

SITE PLAN SKETCH—NOT TO SCALE

