



Job No: 8599/71
Our Ref: 8599/71-AB
23 January 2023

Daracon Contractors Pty Ltd
184 Adderley Street West
AUBURN NSW 2144
Email: Sabina.Moktan@daracon.com.au

Attention: Ms S Moktan

Dear Madam

Re: **Residential Development Newpark Precinct 7 Stage 7B-Woorong Park- Marsden Park Precinct 7, part of the BEW (DA-15-02273 / CC-16-04410) and Practical Completion Compliance Certificate Precinct 7 - Stage 7B (SPP-17-00046 / SWC-21-00079) Site Fill Testing- Bulk Earthworks**

Geotech Testing Pty Ltd has provided site supervision and compaction control testing during placement of fill at the above project.

Land Filling and Compaction

Site supervision and compaction control tests were undertaken within the terms of our NATA accreditation at the dates and to the procedures shown on the test results sheets, copies of which were submitted monthly during the duration of the project. Fifty-one FDT tests were carried out. Based on the fill quantities/survey data provided by the client, the frequency of field density and compaction tests is in accordance with Level 1 as defined in AS3798 "Guidelines on Earthworks for Commercial & Residential Development". Based on the foregoing, it is considered that the fill placed at the above project is classified as "CONTROLLED FILL" and that the specified compaction level has been achieved within the lots and road reserves.

Salinity Certification

Based on the Bulk Earthworks Plan, the site was filled, with some areas of cut. All site works were carried out in accordance with the Soil Management Plan included in Geotechnique Pty Ltd Land Capability Study (Report 12576/1-AA dated 27 February 2012). The salinity of the imported fill was confirmed as non to slightly saline soils, thus reducing the overall effect of any saline soils on ground concrete structures such as footings. Based on the foregoing, it is our opinion that the works completed at Precinct 7B comply with the salinity report.

Validation of Imported Fill

Imported fill, if any, have been assessed as VENM, as per Geotech Testing Report 8599/61-AC dated 25 March 2022. Based on the foregoing, it is our opinion that the site is validated in accordance with the Environment Protection Authority guidelines (*Contaminated Land Sites*). No contaminants were encountered during bulk earthworks, other than that noted in the RAP report.

Newpark Precinct 7 Stage 7B is suitable for the intended land use consistent with NEPM 2013 Residential A - Residential with Garden / Accessible soil.

8599/71-AB
Newpark Precinct 7 Stage 7B - Marsden Park

If you have any questions, please do not hesitate to contact the undersigned.

Yours faithfully
GEOTECH TESTING PTY LTD



EMGED RIZKALLA
Director

Attached Density Test Results 8599/71 Nos 1 to 51
 Drawing No 8599/71-1 & 2 & 3

FIELD DENSITY RESULTS

DARACON CONTRACTORS PTY LTD
184 ADDERLEY STREET WEST
AUBURN NSW 2144

Laboratory: Penrith
Job No: 8599/71
Date: 24/11/2021

PROJECT: SITE FILL TESTING
RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT, NEWPARK PRECINCT 7 STAGE 7B

Page 1 of 1

TEST NUMBER	1	2	3	4	5	6	7	8		
DATE TESTED & SAMPLED	18/11/2021				19/11/2021					
RESULTS										
Hilf Density Ratio	Standard	%	100.5	100.5	100.5	101	101	101	99	99.5
Moisture Variation from OMC (-Drier/+Wetter)	%	0.0	0.0	0.5	0.5	0.0	0.0	0.5	0.5	
Specification	Density Ratio (Standard)	≥95%	Specification Moisture Variance from OMC				±2%			
TEST LOCATION										
Chainage (Carriageway L/R)	m	-	-	-	-	-	-	-		
Shown on Drawing No	8599/71-1									
Retested by Test	m	-	-	-	-	-	-	-		
Reduced Level	m	18.23	18.57	18.61	18.90	18.69	19.10	19.69	19.39	
FIELD & LABORATORY DATA										
Field Wet Density	t/m ³	2.17	2.16	2.18	2.17	2.17	2.17	2.15	2.16	
Field Moisture Content	%	15.0	16.0	16.5	18.0	16.5	17.0	18.0	16.0	
Material retained on 19mm Sieve (wet)	%	<5	<5	<5	<5	<5	<5	<5	<5	
Lab Compaction result from test number		1	2	3	4	5	6	7	8	
Lab Compaction Date Tested		23/11/2021	23/11/2021	23/11/2021	23/11/2021	23/11/2021	23/11/2021	23/11/2021	23/11/2021	
Peak Converted Wet Density	t/m ³	2.16	2.15	2.17	2.15	2.15	2.15	2.17	2.17	
Apparent Optimum Moisture Content	%	14.5	15.5	16.5	17.5	16.5	16.5	17.5	16.0	
Number of Compaction Points		3	3	3	3	3	3	3	3	
Test Procedures - See Note Number		12	12	12	12	12	12	12	12	
Material Description - see below		2	2	2	2	2	2	2	2	
Notes										
1: Assigned Values have been obtained from our Penrith laboratory – Accreditation No 2734			10: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.5.1, 5.6.1							
2: Assigned Values have been obtained from our Prestons laboratory – Accreditation No 14234			11: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.7.1							
3: Results have been calculated using infinite decimal places. Therefore, calculated values may vary from those shown										
4: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.1.1, 5.3.1, 5.4.1			12: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.7.1, 5.8.1							
5: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.3.1, 5.4.1			13: RMS T111, T119, T120, T166							
6: AS 1289 1.2.1 clause 6.4			14: RMS T111, T120, T166, T173							
7: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.4.1, 5.8.1			15: RMS T120, T119, T162							
8: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.5.1, 5.6.1, 5.8.1			16: RMS T120, T162, T173							
9: Full details of Test Procedure 5.8.1 available on request			17: RMS T120, T164, T173							
Material Description										
1. CL-Clays of low plasticity, gravelly clays, silty clays			11. DGS40			* Cement Stabilised				
2. CI-Clay of medium plasticity, gravelly clays, sandy clays, silty clays			12. FCR20			# Lime Stabilised				
3. CH-Clays of high plasticity			13. FCR40			\$ Gypsum Stabilised				
4. SC-Clayey sands, sand-clay mixtures			14. RC - Recycled Concrete							
5. SM-Silty sands, sand-silt mixtures			15. Recycled Roadbase							
6. GC-Clayey gravels, gravel-sand-clay mixtures			16. RSB - Recycled Sub-base							
7. SP-Sand, crushed dust, filling sand, washed sand			17. CSS - Crushed Sandstone							
8. DGB20			18. RSS - Ripped Sandstone							
9. DGB40			19. Cowels Brown							
10. DGS20										

Form No R 020 Version 10 10/20 - issued by ER



Accreditation Number 2734
Corporate Site Number 2727

Accredited for compliance with
ISO/IEC 17025 - Testing.

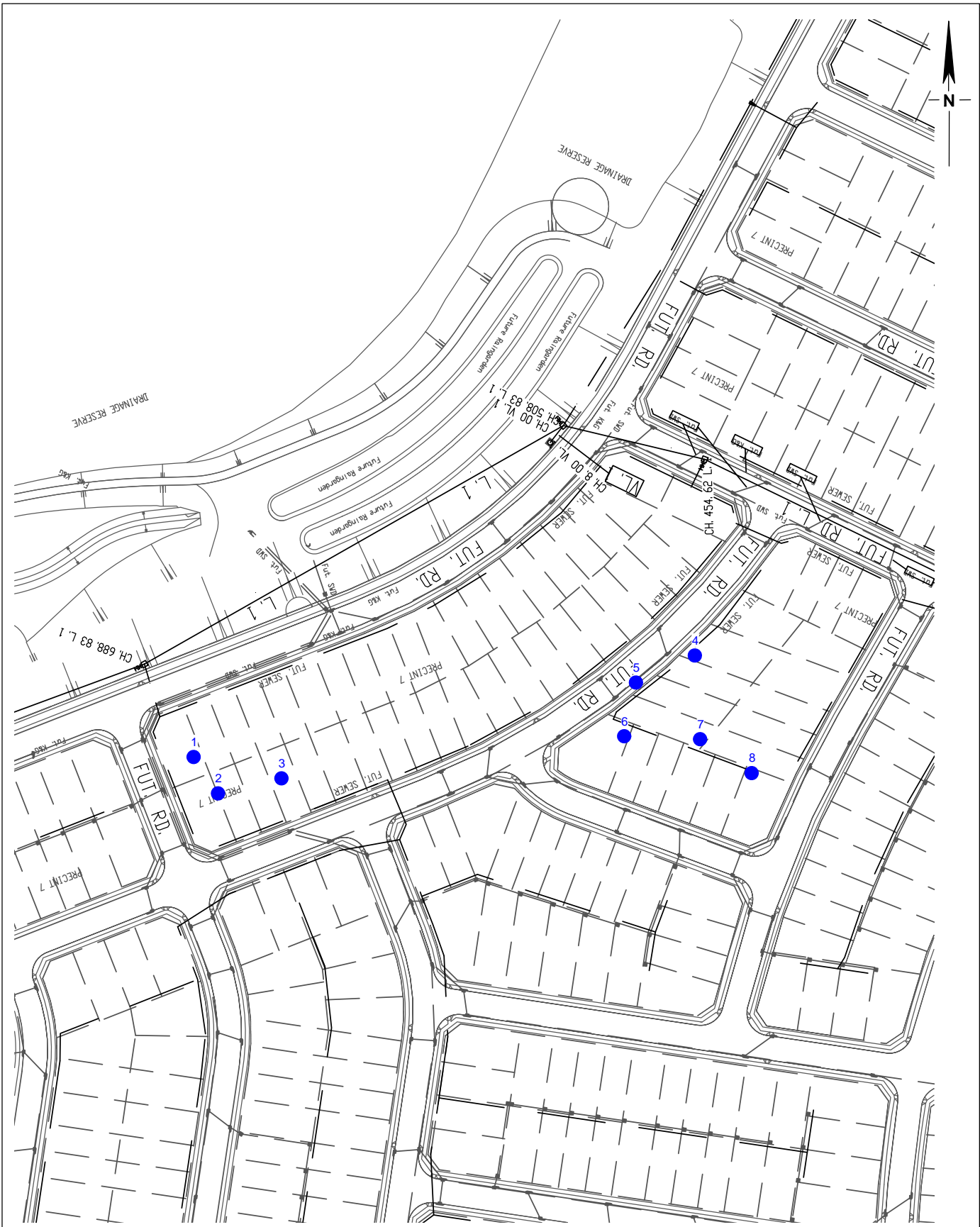
A Kench 24/11/2021

Approved Signatory

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Unit 4, 18-20 Whyalla Place, Prestons NSW 2170
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LEGEND

● Density Test

PREPARED BY:



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Daracon Contractors Pty Ltd
Residential Development
Woorong Park
Newpark 7B

Drawing No: 8599/71-1
Job No: 8599/71
Drawn By: MH
Date: 24 November 2021
Checked By: BN/AK

Locations of Field Density Tests

File No: 8599-71
Layers: 0, Lay1

FIELD DENSITY RESULTS

DARACON CONTRACTORS PTY LTD
184 ADDERLEY STREET WEST
AUBURN NSW 2144

Laboratory: Penrith
Job No: 8599/71
Date: 25/12/2021

PROJECT: SITE FILL TESTING
RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT, NEWPARK PRECINCT 7 STAGE 7B

Page 1 of 4

TEST NUMBER	9	10	11	12	13	14	15	16		
DATE TESTED & SAMPLED	26/11/2021	28/11/2021			29/11/2021					
RESULTS										
Hilf Density Ratio	Standard	%	101	101.5	101	101	102	101	101.5	101.5
Moisture Variation from OMC (-Drier/+Wetter)		%	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5
Specification	Density Ratio (Standard)	≥95%	Specification				Moisture Variance from OMC			±2%
TEST LOCATION										
Chainage	(Carriageway L/R)	m	-	-	-	-	-	-	-	-
Shown on Drawing No	8599/71-2									
Retested by Test	-	-	-	-	-	-	-	-	-	-
Reduced Level	m	19.71	19.68	20.22	20.19	19.73	19.89	19.80	19.77	
FIELD & LABORATORY DATA										
Field Wet Density	t/m ³	2.15	2.14	2.14	2.15	2.17	2.13	2.14	2.13	
Field Moisture Content	%	17.0	16.0	16.5	16.5	17.0	15.5	16.5	16.0	
Material retained on 19mm Sieve (wet)	%	<5	<5	<5	<5	<5	<5	<5	<5	
Lab Compaction result from test number		9	10	11	12	13	14	15	16	
Lab Compaction Date Tested		03/12/2021	03/12/2021	03/12/2021	03/12/2021	03/12/2021	03/12/2021	03/12/2021	03/12/2021	03/12/2021
Peak Converted Wet Density	t/m ³	2.13	2.11	2.12	2.13	2.13	2.11	2.11	2.10	
Apparent Optimum Moisture Content	%	16.5	15.5	16.5	16.5	16.5	15.0	16.0	15.5	
Number of Compaction Points		3	3	3	3	3	3	3	3	
Test Procedures - See Note Number		12	12	12	12	12	12	12	12	
Material Description - see below		2	2	2	2	2	2	2	2	
Notes										
1: Assigned Values have been obtained from our Penrith laboratory – Accreditation No 2734			10: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.5.1, 5.6.1							
2: Assigned Values have been obtained from our Prestons laboratory – Accreditation No 14234			11: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.7.1							
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5: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.3.1, 5.4.1			13: RMS T111, T119, T120, T166							
6: AS 1289 1.2.1 clause 6.4			14: RMS T111, T120, T166, T173							
7: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.4.1, 5.8.1			15: RMS T120, T119, T162							
8: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.5.1, 5.6.1, 5.8.1			16: RMS T120, T162, T173							
9: Full details of Test Procedure 5.8.1 available on request										
17: RMS T120, T164, T173										
Material Description										
1. CL-Clays of low plasticity, gravelly clays, sandy clays, silty clays			11. DGS40			* Cement Stabilised				
2. CI-Clay of medium plasticity, gravelly clays, sandy clays, silty clays			12. FCR20			# Lime Stabilised				
3. CH-Clays of high plasticity			13. FCR40			\$ Gypsum Stabilised				
4. SC-Clayey sands, sand-clay mixtures			14. RC - Recycled Concrete							
5. SM-Silty sands, sand-silt mixtures			15. Recycled Roadbase							
6. GC-Clayey gravels, gravel-sand-clay mixtures			16. RSB - Recycled Sub-base							
7. SP-Sand, crushed dust, filling sand, washed sand			17. CSS - Crushed Sandstone							
8. DGB20			18. RSS - Ripped Sandstone							
9. DGB40			19. Coal Wash							
10. DGS20										

Form No R 020 Version 10 10/20 - issued by ER



Accreditation Number 2734
Corporate Site Number 2727

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A Kench 25/12/2021
Approved Signatory

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FIELD DENSITY RESULTS

DARACON CONTRACTORS PTY LTD
184 ADDERLEY STREET WEST
AUBURN NSW 2144

Laboratory: Penrith
Job No: 8599/71
Date: 25/12/2021

PROJECT: SITE FILL TESTING
RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT, NEWPARK PRECINCT 7 STAGE 7B

Page 2 of 4

TEST NUMBER	17	18	19	20	21	22	23	24
DATE TESTED & SAMPLED	29/11/2021	30/11/2021			01/12/2021			02/12/2021
RESULTS								
Hilf Density Ratio	Standard	%	102	101.5	101.5	101.5	101.5	101
Moisture Variation from OMC (-Drier/+Wetter)		%	0.5	0.5	0.5	0.5	0.5	0.5
Specification	Density Ratio (Standard)	≥95%	Specification Moisture Variance from OMC				±2%	
TEST LOCATION								
Chainage (Carriageway L/R)	m	-	-	-	-	-	-	-
Shown on Drawing No		8599/71-2						
Retested by Test	m	-	-	-	-	-	-	-
Reduced Level	m	18.99	19.61	19.29	18.94	18.83	18.82	18.39
FIELD & LABORATORY DATA								
Field Wet Density	t/m ³	2.15	2.15	2.14	2.14	2.13	2.14	2.14
Field Moisture Content	%	17.0	17.0	16.5	17.0	16.5	16.0	16.0
Material retained on 19mm Sieve (wet)	%	<5	<5	<5	<5	<5	<5	<5
Lab Compaction result from test number		17	18	19	20	21	22	23
Lab Compaction Date Tested		03/12/2021	03/12/2021	03/12/2021	03/12/2021	03/12/2021	03/12/2021	03/12/2021
Peak Converted Wet Density	t/m ³	2.11	2.12	2.11	2.11	2.10	2.11	2.11
Apparent Optimum Moisture Content	%	16.5	16.5	16.0	17.0	16.0	16.0	15.5
Number of Compaction Points		3	3	3	3	3	3	3
Test Procedures - See Note Number		12	12	12	12	12	12	12
Material Description - see below		2	2	2	2	2	2	2
Notes								
1: Assigned Values have been obtained from our Penrith laboratory – Accreditation No 2734			10: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.5.1, 5.6.1					
2: Assigned Values have been obtained from our Prestons laboratory – Accreditation No 14234			11: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.7.1					
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5: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.3.1, 5.4.1			13: RMS T111, T119, T120, T166					
6: AS 1289 1.2.1 clause 6.4			14: RMS T111, T120, T166, T173					
7: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.4.1, 5.8.1			15: RMS T120, T119, T162					
8: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.5.1, 5.6.1, 5.8.1			16: RMS T120, T162, T173					
9: Full details of Test Procedure 5.8.1 available on request								
Material Description								
1. CL-Clays of low plasticity, gravelly clays, sandy clays, silty clays			11. DGS40			* Cement Stabilised		
2. CI-Clay of medium plasticity, gravelly clays, sandy clays, silty clays			12. FCR20			# Lime Stabilised		
3. CH-Clays of high plasticity			13. FCR40			\$ Gypsum Stabilised		
4. SC-Clayey sands, sand-clay mixtures			14. RC - Recycled Concrete					
5. SM-Silty sands, sand-silt mixtures			15. Recycled Roadbase					
6. GC-Clayey gravels, gravel-sand-clay mixtures			16. RSB - Recycled Sub-base					
7. SP-Sand, crushed dust, filling sand, washed sand			17. CSS - Crushed Sandstone					
8. DGB20			18. RSS - Ripped Sandstone					
9. DGB40			19. Coal Wash					
10. DGS20								

Form No R 020 Version 10 10/20 - issued by ER



Accreditation Number 2734
Corporate Site Number 2727

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FIELD DENSITY RESULTS

DARACON CONTRACTORS PTY LTD
184 ADDERLEY STREET WEST
AUBURN NSW 2144

Laboratory: Penrith
Job No: 8599/71
Date: 25/12/2021

PROJECT: SITE FILL TESTING
RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT, NEWPARK PRECINCT 7 STAGE 7B

Page 3 of 4

TEST NUMBER	25	26	27	28	29	30	31	32		
DATE TESTED & SAMPLED	02/12/2021		09/12/2021		13/12/2021					
RESULTS										
Hilf Density Ratio	Standard	%	101	101.5	99	98.5	100	100.5	99.5	99.5
Moisture Variation from OMC (-Drier/+Wetter)	%	%	0.5	0.0	0.5	0.5	0.0	0.0	0.0	0.0
Specification	Density Ratio (Standard)	≥95%	Specification Moisture Variance from OMC				±2%			
TEST LOCATION										
Chainage (Carriageway L/R)	m	-	-	-	-	-	-	-		
Shown on Drawing No	m	8599/71-2								
Retested by Test	m	-	-	-	-	-	-	-		
Reduced Level	m	18.84	18.46	18.63	18.50	19.19	18.98	19.09	19.57	
FIELD & LABORATORY DATA										
Field Wet Density	t/m ³	2.13	2.14	2.13	2.13	2.14	2.14	2.15	2.13	
Field Moisture Content	%	16.0	19.0	16.0	16.5	17.0	17.0	18.0	16.5	
Material retained on 19mm Sieve (wet)	%	<5	<5	<5	<5	<5	<5	<5	<5	
Lab Compaction result from test number		25	26	27	28	29	30	31	32	
Lab Compaction Date Tested		03/12/2021	03/12/2021	14/12/2021	14/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	
Peak Converted Wet Density	t/m ³	2.11	2.11	2.15	2.16	2.14	2.13	2.16	2.14	
Apparent Optimum Moisture Content	%	15.5	18.5	16.0	16.0	17.0	17.0	17.5	16.5	
Number of Compaction Points		3	3	3	3	3	3	3	3	
Test Procedures - See Note Number		12	12	12	12	12	12	12	12	
Material Description - see below		2	2	2	2	2	2	2	2	
Notes										
1: Assigned Values have been obtained from our Penrith laboratory – Accreditation No 2734			10: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.5.1, 5.6.1							
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4: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.1.1, 5.3.1, 5.4.1			12: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.7.1, 5.8.1							
5: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.3.1, 5.4.1			13: RMS T111, T119, T120, T166							
6: AS 1289 1.2.1 clause 6.4			14: RMS T111, T120, T166, T173							
7: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.4.1, 5.8.1			15: RMS T120, T119, T162							
8: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.5.1, 5.6.1, 5.8.1			16: RMS T120, T162, T173							
9: Full details of Test Procedure 5.8.1 available on request										
17: RMS T120, T164, T173										
Material Description										
1. CL-Clays of low plasticity, gravelly clays, sandy clays, silty clays			11. DGS40			* Cement Stabilised				
2. CI-Clay of medium plasticity, gravelly clays, sandy clays, silty clays			12. FCR20			# Lime Stabilised				
3. CH-Clays of high plasticity			13. FCR40			\$ Gypsum Stabilised				
4. SC-Clayey sands, sand-clay mixtures			14. RC - Recycled Concrete							
5. SM-Silty sands, sand-silt mixtures			15. Recycled Roadbase							
6. GC-Clayey gravels, gravel-sand-clay mixtures			16. RSB - Recycled Sub-base							
7. SP-Sand, crushed dust, filling sand, washed sand			17. CSS - Crushed Sandstone							
8. DGB20			18. RSS - Ripped Sandstone							
9. DGB40			19. Coal Wash							
10. DGS20										

Form No R 020 Version 10 10/20 - issued by ER



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Corporate Site Number 2727

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Laboratory: Penrith
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RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT, NEWPARK PRECINCT 7 STAGE 7B

TEST NUMBER	33	34	35	36	37	38	39	40		
DATE TESTED & SAMPLED	14/12/2021				15/12/2021					
RESULTS										
Hiif Density Ratio	Standard	%	101	101.5	100	100	100	99.5	99.5	99
Moisture Variation from OMC (-Drier/+Wetter)		%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Specification	Density Ratio (Standard)	≥95%	Specification Moisture Variance from OMC				±2%			
TEST LOCATION										
Chainage (Carriageway L/R)	m	-	-	-	-	-	-	-	-	
Shown on Drawing No		8599/71-2								
Retested by Test		-	-	-	-	-	-	-	-	
Reduced Level	m	19.09	19.46	18.64	18.57	19.11	18.83	18.63	18.54	
FIELD & LABORATORY DATA										
Field Wet Density	t/m ³	2.15	2.13	2.15	2.13	2.14	2.16	2.16	2.14	
Field Moisture Content	%	14.5	17.0	16.0	16.5	17.0	17.0	16.0	17.5	
Material retained on 19mm Sieve (wet)	%	<5	<5	<5	<5	<5	<5	<5	<5	
Lab Compaction result from test number		33	34	35	36	37	38	39	40	
Lab Compaction Date Tested		15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	
Peak Converted Wet Density	t/m ³	2.13	2.10	2.15	2.13	2.14	2.17	2.17	2.16	
Apparent Optimum Moisture Content	%	14.5	17.0	16.0	16.5	17.0	16.5	15.5	17.5	
Number of Compaction Points		3	3	3	3	3	3	3	3	
Test Procedures - See Note Number		12	12	12	12	12	12	12	12	
Material Description - see below		2	2	2	2	2	2	2	2	
Notes										
1: Assigned Values have been obtained from our Penrith laboratory – Accreditation No 2734			10: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.5.1, 5.6.1							
2: Assigned Values have been obtained from our Prestons laboratory – Accreditation No 14234			11: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.7.1							
3: Results have been calculated using infinite decimal places. Therefore, calculated values may vary from those shown										
4: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.1.1, 5.3.1, 5.4.1			12: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.7.1, 5.8.1							
5: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.3.1, 5.4.1			13: RMS T111, T119, T120, T166							
6: AS 1289 1.2.1 clause 6.4			14: RMS T111, T120, T166, T173							
7: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.4.1, 5.8.1			15: RMS T120, T119, T162							
8: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.5.1, 5.6.1, 5.8.1			16: RMS T120, T162, T173							
9: Full details of Test Procedure 5.8.1 available on request										
17: RMS T120, T164, T173										
Material Description										
1. CL-Clays of low plasticity, gravelly clays, sandy clays, silty clays			11. DGS40			* Cement Stabilised				
2. CI-Clay of medium plasticity, gravelly clays, sandy clays, silty clays			12. FCR20			# Lime Stabilised				
3. CH-Clays of high plasticity			13. FCR40			\$ Gypsum Stabilised				
4. SC-Clayey sands, sand-clay mixtures			14. RC - Recycled Concrete							
5. SM-Silty sands, sand-silt mixtures			15. Recycled Roadbase							
6. GC-Clayey gravels, gravel-sand-clay mixtures			16. RSB - Recycled Sub-base							
7. SP-Sand, crushed dust, filling sand, washed sand			17. CSS - Crushed Sandstone							
8. DGB20			18. RSS - Ripped Sandstone							
9. DGB40			19. Coal Wash							
10. DGS20										

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Accreditation Number 2734
Corporate Site Number 2727

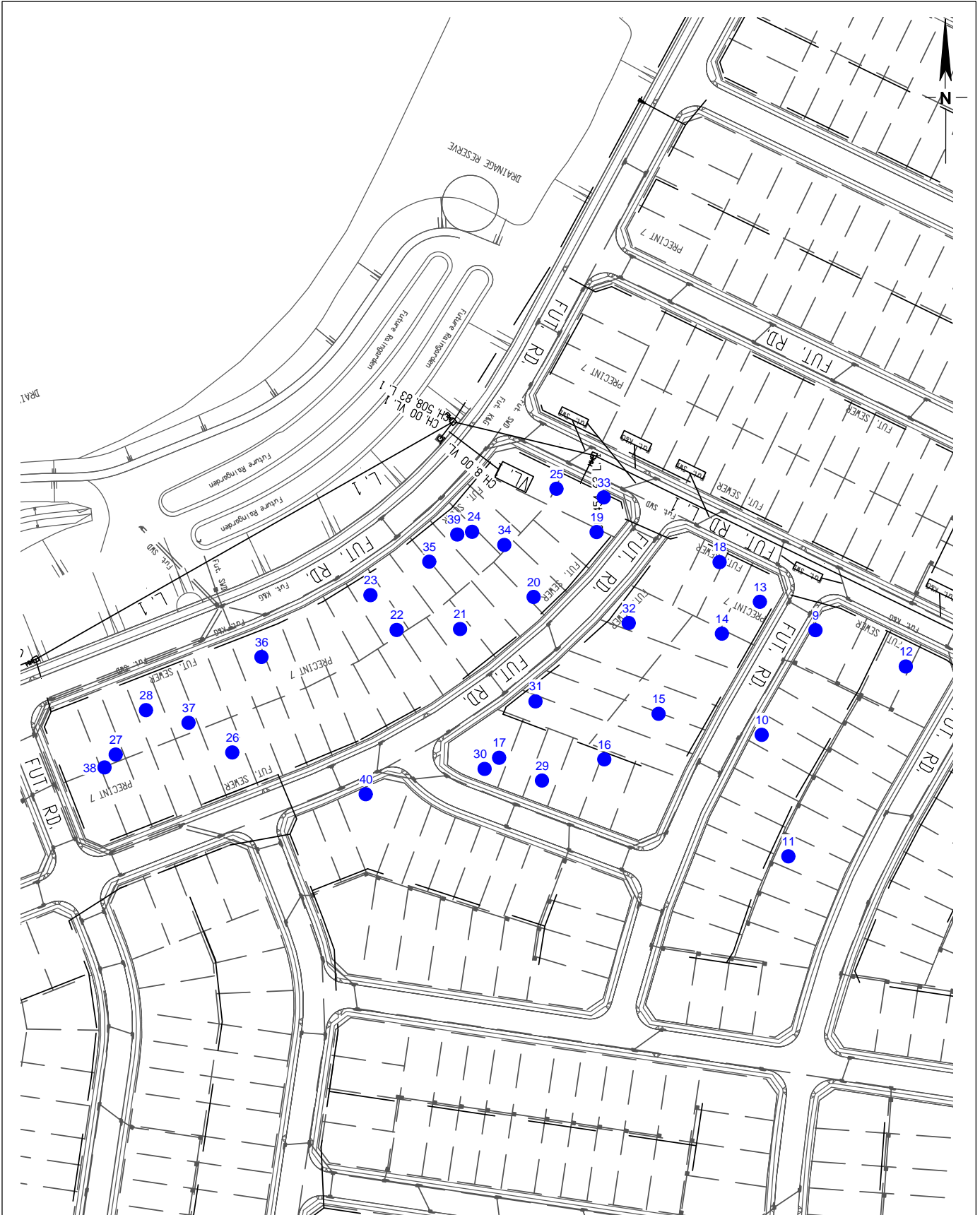
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A Kench 25/12/2021
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LEGEND

● Density Test

PREPARED BY:



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Daracon Contractors Pty Ltd
Residential Development
Woorong Park
Newpark 7B

Locations of Field Density Tests

Drawing No: 8599/71-2
Job No: 8599/71
Drawn By: MH
Date: 25 January 2022
Checked By: BN/AK

File No: 8599-71
Layers: 0, Lay2

FIELD DENSITY RESULTS

DARACON CONTRACTORS PTY LTD
184 ADDERLEY STREET WEST
AUBURN NSW 2144

Laboratory: Penrith
Job No: 8599/71

PROJECT: SITE FILL TESTING
RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT, NEWPARK PRECINCT 7 STAGE 7B

Page 1 of -3

TEST NUMBER	41	42	43	44	45	46	47	48		
DATE TESTED & SAMPLED	10/01/2023									
RESULTS										
Hiif Density Ratio	Standard	%	105	104.5	103	101.5	99.5	99	100	99
Moisture Variation from OMC (-Drier/+Wetter)	%	-2.0	-1.0	-1.0	-1.0	0.5	0.0	0.0	0.0	0.0
Specification	Density Ratio (Standard)	≥95%	Specification				Moisture Variance from OMC	±2%		
TEST LOCATION										
Chainage	(Carriageway L/R)	m	-	-	-	-	-	-	-	-
Shown on Drawing No	8599/71-3									
Retested by Test	-									
Layer Thickness	mm	150	150	150	150	150	150	150	150	
Reduced Level	Finished Surface Level									
FIELD & LABORATORY DATA										
Field Wet Density	t/m ³	2.12	2.13	2.14	2.13	2.14	2.13	2.13	2.14	
Field Moisture Content	%	17.0	14.5	15.5	13.5	14.5	15.5	18.0	15.0	
Material retained on 19mm Sieve (wet)	%	<5	<5	<5	<5	<5	<5	<5	<5	
Lab Compaction result from test number		41	42	43	44	45	46	47	48	
Lab Compaction Date Tested		12/01/2023	12/01/2023	12/01/2023	12/01/2023	16/01/2023	16/01/2023	16/01/2023	16/01/2023	
Peak Converted Wet Density	t/m ³	2.02	2.04	2.08	2.10	2.15	2.15	2.13	2.15	
Apparent Optimum Moisture Content	%	18.5	15.5	16.5	14.5	14.5	15.5	18.0	14.5	
Number of Compaction Points		3	3	3	3	3	3	3	3	
Test Procedures - See Note Number		12	12	12	12	12	12	12	12	
Material Description - see below		2	2	2	2	2	2	2	2	
Notes										
1: Assigned Values have been obtained from our Penrith laboratory – Accreditation No 2734			10: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.5.1, 5.6.1							
2: Assigned Values have been obtained from our Prestons laboratory – Accreditation No 14234			11: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.7.1							
3: Results have been calculated using infinite decimal places. Therefore, calculated values may vary from those shown			12: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.7.1, 5.8.1							
4: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.1.1, 5.3.1, 5.4.1			13: RMS T111, T119, T120, T166							
5: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.3.1, 5.4.1			14: RMS T111, T120, T166, T173							
6: AS 1289 1.2.1 clause 6.4			15: RMS T120, T119, T162							
7: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.4.1, 5.8.1			16: RMS T120, T162, T173							
8: AS 1289 1.2.1 clause 6.4 (b), 2.1.1., 5.5.1, 5.6.1, 5.8.1			17: RMS T120, T164, T173							
9: Full details of Test Procedure 5.8.1 available on request										
Material Description										
1. CL-Clays of low plasticity, gravelly clays, sandy clays, silty clays			11. DGS40			* Cement Stabilised				
2. CI-Clay of medium plasticity, gravelly clays, sandy clays, silty clays			12. FCR20			# Lime Stabilised				
3. CH-Clays of high plasticity			13. FCR40			\$ Gypsum Stabilised				
4. SC-Clayey sands, sand-clay mixtures			14. RC - Recycled Concrete							
5. SM-Silty sands, sand-silt mixtures			15. Recycled Roadbase							
6. GC-Clayey gravels, gravel-sand-clay mixtures			16. RSB - Recycled Sub-base							
7. SP-Sand, crushed dust, filling sand, washed sand			17. CSS - Crushed Sandstone							
8. DGB20			18. RSS - Ripped Sandstone							
9. DGB40			19. Cowels Brown							
10. DGS20										

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Report Date
23/01/2022



Accreditation Number 2734
Corporate Site Number 2727

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FIELD DENSITY RESULTS

DARACON CONTRACTORS PTY LTD
184 ADDERLEY STREET WEST
AUBURN NSW 2144

Laboratory: Penrith
Job No: 8599/71

PROJECT: SITE FILL TESTING
RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT, NEWPARK PRECINCT 7 STAGE 7B

Page 2 of -3

TEST NUMBER		49	50	51				
DATE TESTED & SAMPLED		10/01/2023						
RESULTS								
Hilf Density Ratio	Standard	%	98	98.5	98.5			
Moisture Variation from OMC (-Drier/+Wetter)		%	0.5	0.0	0.0			
Specification	Density Ratio (Standard)	≥95%	Specification Moisture Variance from OMC			±2%		
TEST LOCATION								
Chainage	(Carriageway L/R)	m	-	-	-			
Shown on Drawing No			8599/71-3					
Retested by Test			-	-	-			
Layer Thickness		mm	150	150	150			
Reduced Level			Finished Surface Level					
FIELD & LABORATORY DATA								
Field Wet Density		t/m ³	2.13	2.13	2.14			
Field Moisture Content		%	15.0	15.0	14.0			
Material retained on 19mm Sieve (wet)		%	<5	<5	<5			
Lab Compaction result from test number			49	50	51			
Lab Compaction Date Tested			12/01/2023	12/01/2023	12/01/2023			
Peak Converted Wet Density		t/m ³	2.17	2.16	2.17			
Apparent Optimum Moisture Content		%	14.5	15.0	14.0			
Number of Compaction Points			3	3	3			
Test Procedures - See Note Number			12	12	12			
Material Description - see below			2	2	2			
Notes								
1: Assigned Values have been obtained from our Penrith laboratory – Accreditation No 2734			10: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.5.1, 5.6.1					
2: Assigned Values have been obtained from our Prestons laboratory – Accreditation No 14234			11: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.3.1, 5.7.1					
3: Results have been calculated using infinite decimal places. Therefore, calculated values may vary from those shown			12: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.7.1, 5.8.1					
4: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.1.1, 5.3.1, 5.4.1			13: RMS T111, T119, T120, T166					
5: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.3.1, 5.4.1			14: RMS T111, T120, T166, T173					
6: AS 1289 1.2.1 clause 6.4 (b),			15: RMS T120, T119, T162					
7: AS 1289 1.2.1 clause 6.4 (b), 2.1.1, 5.2.1, 5.4.1, 5.8.1			16: RMS T120, T162, T173					
8: AS 1289 1.2.1 clause 6.4 (b), 2.1.1., 5.5.1, 5.6.1, 5.8.1			17: RMS T120, T164, T173					
9: Full details of Test Procedure 5.8.1 available on request								
Material Description								
1. CL-Clays of low plasticity, gravelly clays, sandy clays, silty clays			11. DGS40			* Cement Stabilised		
2. CI-Clay of medium plasticity, gravelly clays, sandy clays, silty clays			12. FCR20			# Lime Stabilised		
3. CH-Clays of high plasticity			13. FCR40			\$ Gypsum Stabilised		
4. SC-Clayey sands, sand-clay mixtures			14. RC - Recycled Concrete					
5. SM-Silty sands, sand-silt mixtures			15. Recycled Roadbase					
6. GC-Clayey gravels, gravel-sand-clay mixtures			16. RSB - Recycled Sub-base					
7. SP-Sand, crushed dust, filling sand, washed sand			17. CSS - Crushed Sandstone					
8. DGB20			18. RSS - Ripped Sandstone					
9. DGB40			19. Cowels Brown					
10. DGS20								

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Report Date
23/01/2022



Accreditation Number 2734
Corporate Site Number 2727

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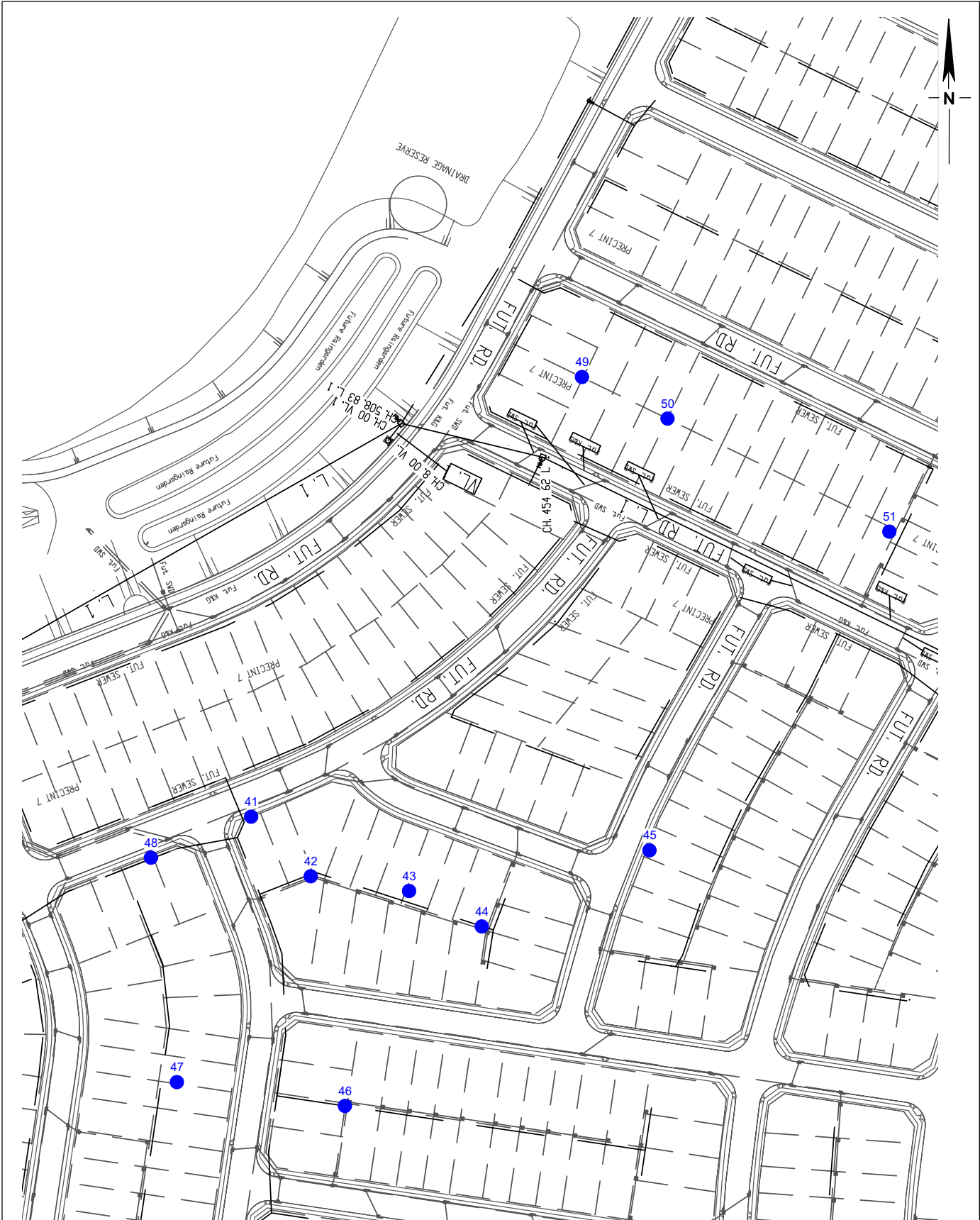
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LEGEND

● Density Test

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Locations of Field Density Tests

Drawing No: 8599/71-3
Job No: 8599/71
Drawn By: MH
Date: 11 January 2023
Checked By: BN

File No: 8599-71
Layers: 0, Lay3