PROJECT:	Rose Manor Stages 9A		
CLIENT:	Deluxe Property Group Ltd		
REF:	7756	Eng:	R Evans
Date:	05-12-22	Page:	1 of 1

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SmartAlliances Ltd
PO Box 546
Blenheim, 7240

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E: info@smartalliances.co.nz
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SCHEDULE 2A

STATEMENT OF PROFESSIONAL OPINION: SUITABILITY OF LAND FOR BUILDINGS CONSTRUCTION

DEVELOPMENT: ROSE MANOR RESIDENTIAL SUBDIVISION – Stages 9A

DEVELOPER: Deluxe Property Group Ltd

LOCATION: 68 OLD RENWICK ROAD, BLENHEIM

I Richard Evans on behalf of SMART ALLIANCES LTD

Hereby confirm that:

1. I am a Chartered Professional Engineer (Geotechnical)
2. A geotechnical report has been carried out by Smart Alliances Ltd dated June 2022 and this has been reviewed in preparation of this statement.
3. Additional testing has been conducted following completion of the development and this is reported on in Smart Alliances' letter dated 05 December 2022.
4. The site is located in Liquefaction Zone C. Suitable geotechnical investigation and testing has been completed in June 2022 and December 2022.
5. In my professional opinion, not to be construed as a guarantee, I consider that:
   a) The tested ground is suitable for construction of residential buildings on specific engineer design foundation systems designed for 200kPa (ultimate bearing capacity). The designs should allow for liquefaction induced vertical settlements of up to 50mm (ULS). Specific foundation requirements of the proposed development on each site should be addressed at building consent application stage.
6. This professional opinion is furnished to Marlborough District Council and to Deluxe Property Group Ltd for the purposes of satisfying conditions of subdivision.
7. The certificate shall be read in conjunction with the Smart Alliances Ltd report noted in #2 above.

Signed on behalf of Smart Alliances Ltd

…… Date: 05 December 2022
(Signature of Designer)

Qualifications and experience:

BSc Eng (Civil), CPEng(Civil, Structural, Geotechnical)

PROJECT:	Rose Manor Stages 9A		
CLIENT:	Deluxe Property Group Ltd		
REF:	7756	Eng:	R Evans
Date:	05-12-22	Page:	1 of 1

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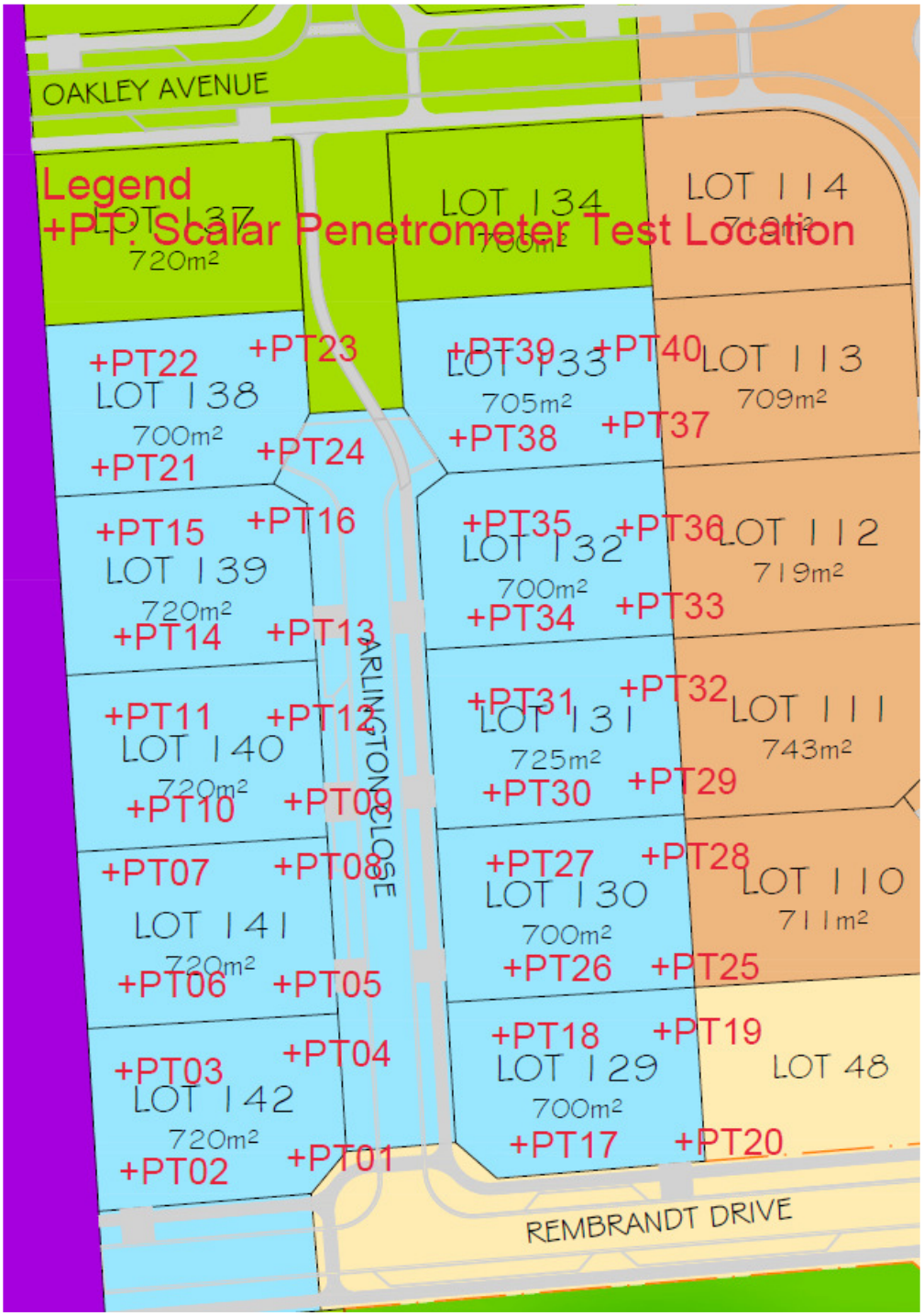
PT Test Plan:



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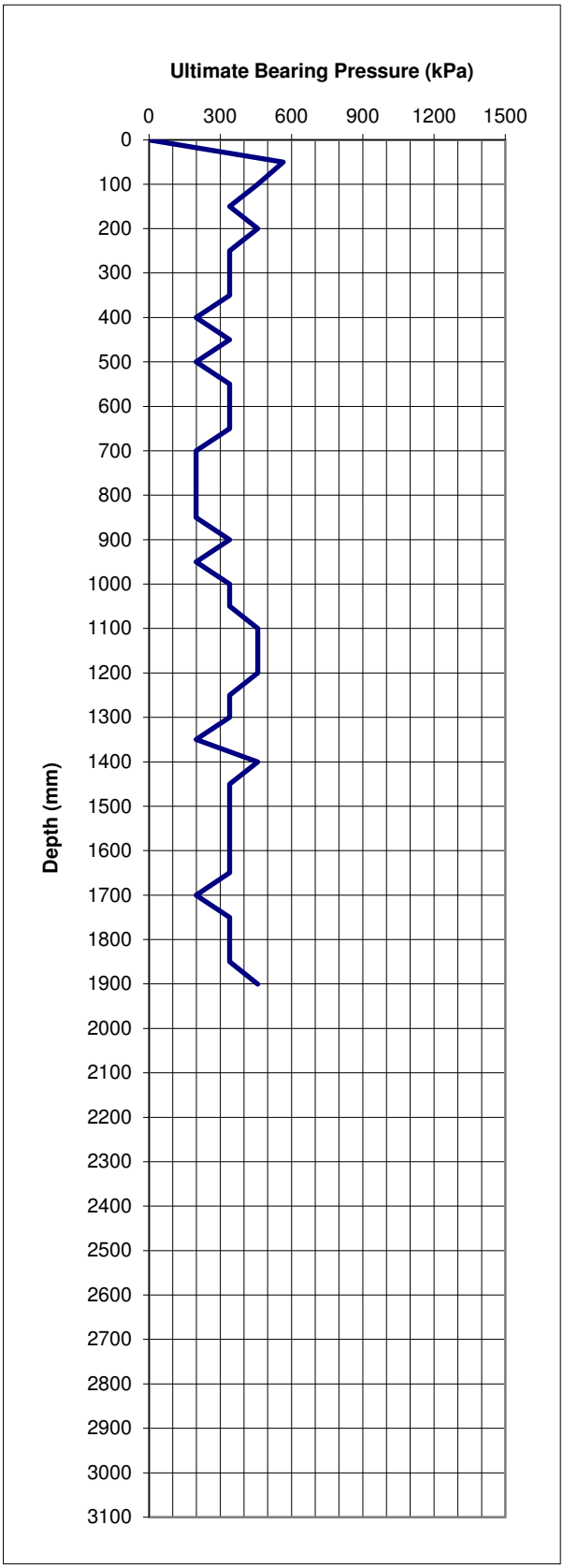
Project:	**Rose Manor Stage 9A**		
Client:	**Deluxe Property Group Ltd**		
Ref:	**7756**	**Eng:**	**BS**
Penetrometer Test Number:			**PT01**
Date:	**9/11/2022**	**Sheet:**	**1 of 40**

PENETROMETER TEST RESULTS

Notes: Lot 142. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
4	13	**565**	50
3	17	**458**	100
2	25	**339**	150
3	17	**458**	200
2	25	**339**	250
2	25	**339**	300
2	25	**339**	350
1	50	**198**	400
2	25	**339**	450
1	50	**198**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
1	50	**198**	700
1	50	**198**	750
1	50	**198**	800
1	50	**198**	850
2	25	**339**	900
1	50	**198**	950
2	25	**339**	1000
2	25	**339**	1050
3	17	**458**	1100
3	17	**458**	1150
3	17	**458**	1200
2	25	**339**	1250
2	25	**339**	1300
1	50	**198**	1350
3	17	**458**	1400
2	25	**339**	1450
2	25	**339**	1500
2	25	**339**	1550
2	25	**339**	1600
2	25	**339**	1650
1	50	**198**	1700
2	25	**339**	1750
2	25	**339**	1800
2	25	**339**	1850
3	17	**458**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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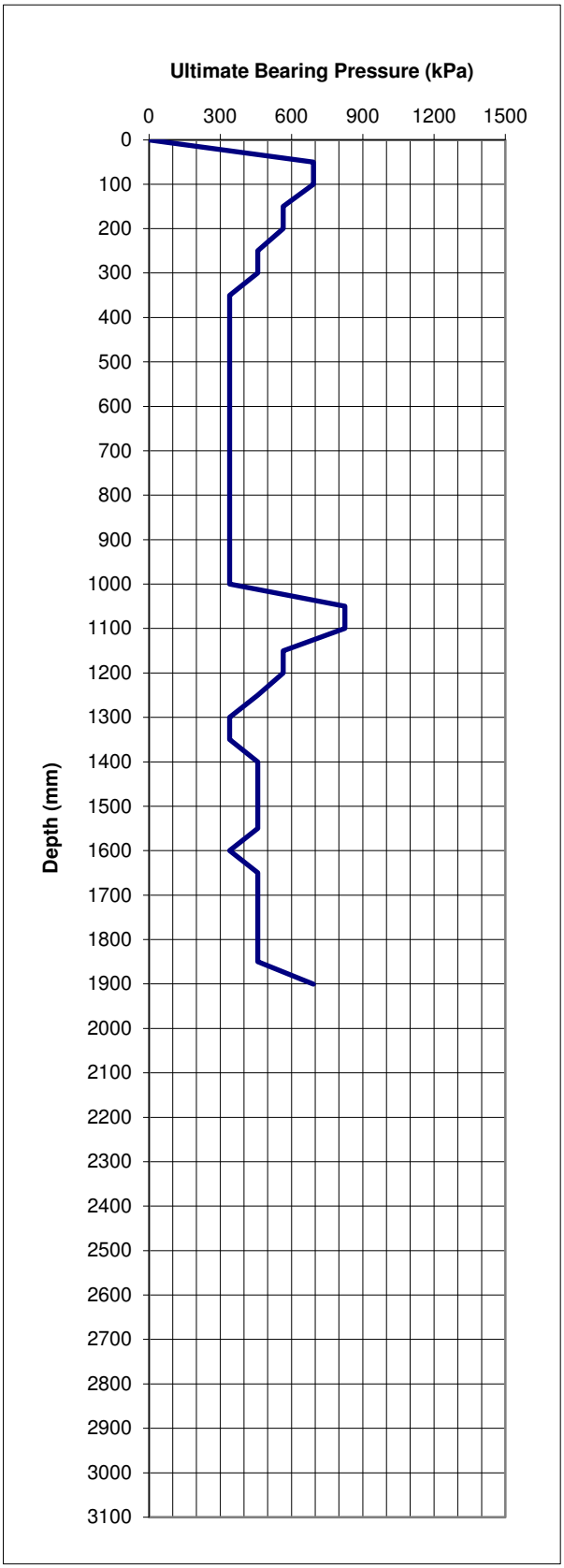
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT02
Date:	9/11/2022	Sheet:	2 of 40

PENETROMETER TEST RESULTS

Notes: Lot 142. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
5	10	**693**	50
5	10	**693**	100
4	13	**565**	150
4	13	**565**	200
3	17	**458**	250
3	17	**458**	300
2	25	**339**	350
2	25	**339**	400
2	25	**339**	450
2	25	**339**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
2	25	**339**	700
2	25	**339**	750
2	25	**339**	800
2	25	**339**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
6	8	**824**	1050
6	8	**824**	1100
4	13	**565**	1150
4	13	**565**	1200
3	17	**458**	1250
2	25	**339**	1300
2	25	**339**	1350
3	17	**458**	1400
3	17	**458**	1450
3	17	**458**	1500
3	17	**458**	1550
2	25	**339**	1600
3	17	**458**	1650
3	17	**458**	1700
3	17	**458**	1750
3	17	**458**	1800
3	17	**458**	1850
5	10	**693**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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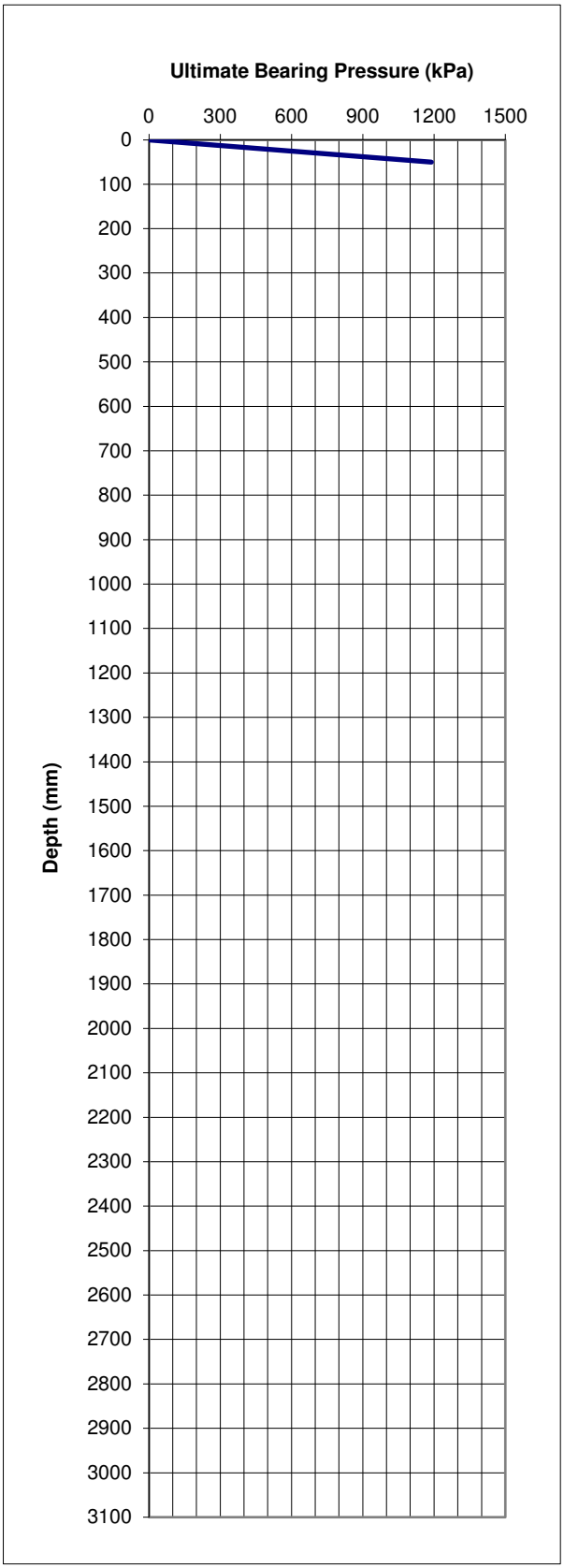
Project:	**Rose Manor Stage 9A**		
Client:	**Deluxe Property Group Ltd**		
Ref:	**7756**	**Eng:**	**BS**
Penetrometer Test Number:			**PT03**
Date:	**9/11/2022**	**Sheet:**	**3 of 40**

PENETROMETER TEST RESULTS

Notes: Lot 142. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
10	5	**1189**	50
			100
			150
			200
			250
			300
			350
			400
			450
			500
			550
			600
			650
			700
			750
			800
			850
			900
			950
			1000
			1050
			1100
			1150
			1200
			1250
			1300
			1350
			1400
			1450
			1500
			1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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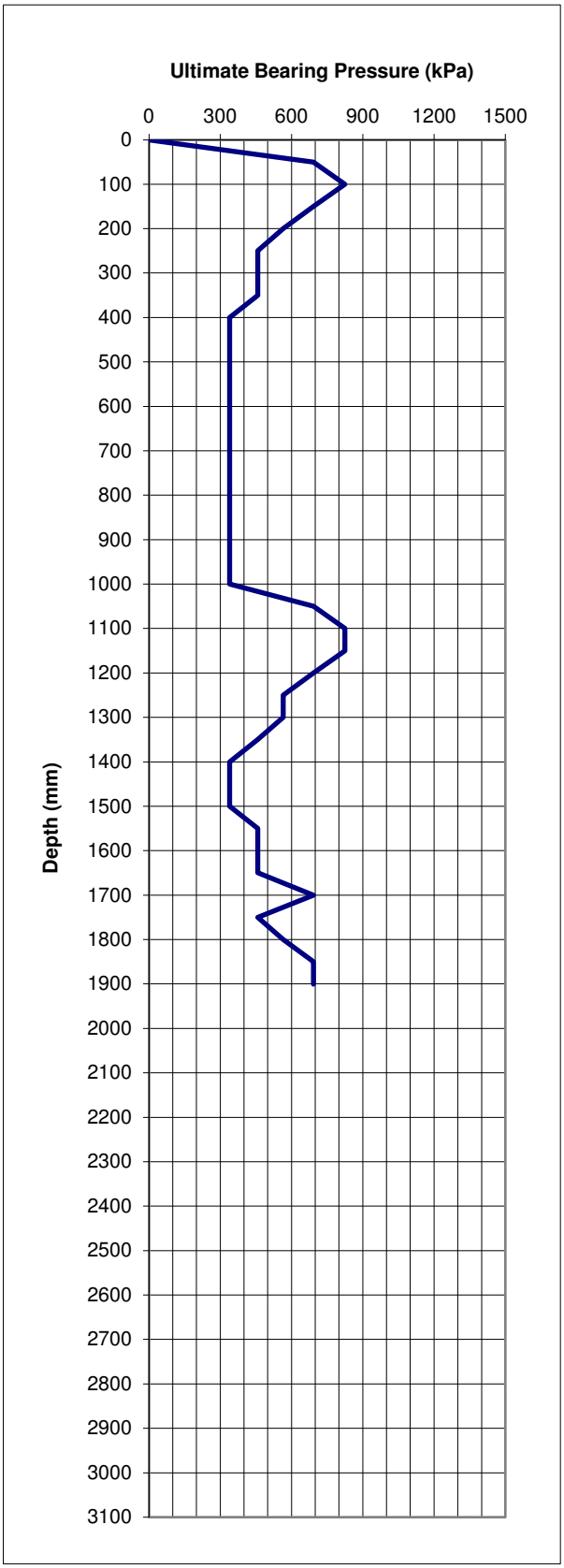
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT04
Date:	9/11/2022	Sheet:	4 of 40

PENETROMETER TEST RESULTS

Notes: Lot 142. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
5	10	**693**	50
6	8	**824**	100
5	10	**693**	150
4	13	**565**	200
3	17	**458**	250
3	17	**458**	300
3	17	**458**	350
2	25	**339**	400
2	25	**339**	450
2	25	**339**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
2	25	**339**	700
2	25	**339**	750
2	25	**339**	800
2	25	**339**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
5	10	**693**	1050
6	8	**824**	1100
6	8	**824**	1150
5	10	**693**	1200
4	13	**565**	1250
4	13	**565**	1300
3	17	**458**	1350
2	25	**339**	1400
2	25	**339**	1450
2	25	**339**	1500
3	17	**458**	1550
3	17	**458**	1600
3	17	**458**	1650
5	10	**693**	1700
3	17	**458**	1750
4	13	**565**	1800
5	10	**693**	1850
5	10	**693**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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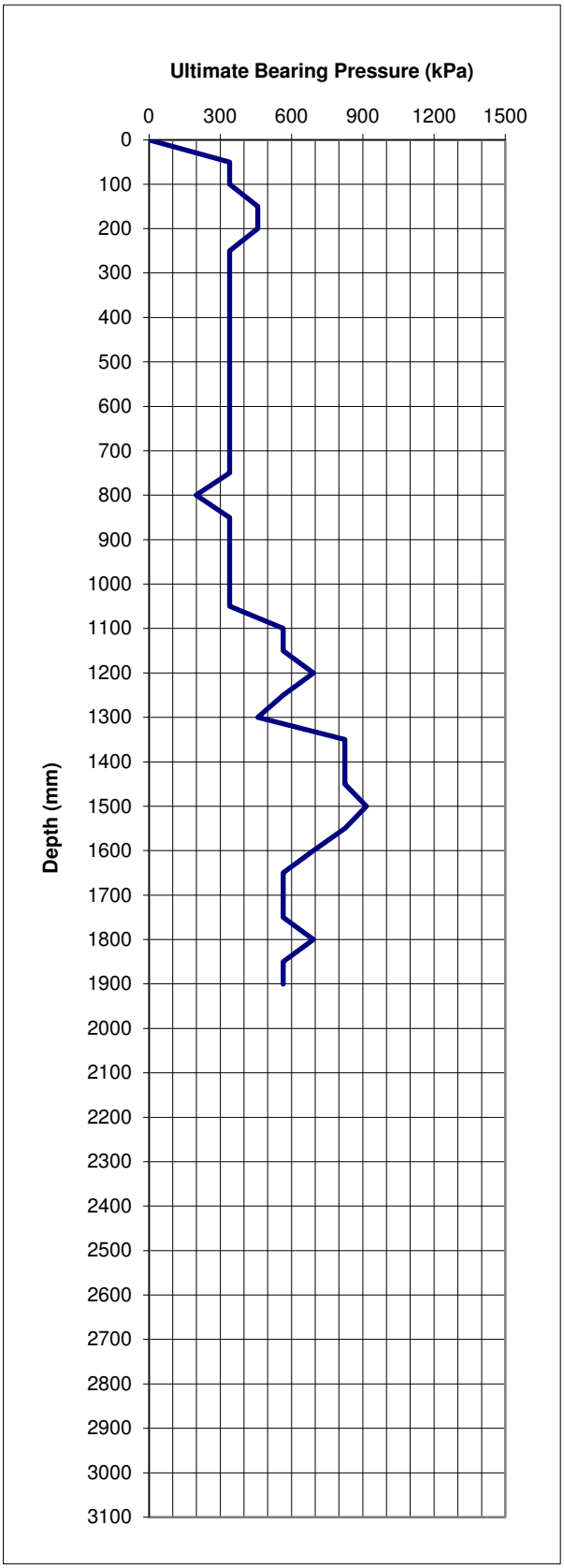
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT05
Date:	9/11/2022	Sheet:	5 of 40

PENETROMETER TEST RESULTS

Notes: Lot 141. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
2	25	**339**	100
3	17	**458**	150
3	17	**458**	200
2	25	**339**	250
2	25	**339**	300
2	25	**339**	350
2	25	**339**	400
2	25	**339**	450
2	25	**339**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
2	25	**339**	700
2	25	**339**	750
1	50	**198**	800
2	25	**339**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
2	25	**339**	1050
4	13	**565**	1100
4	13	**565**	1150
5	10	**693**	1200
4	13	**565**	1250
3	17	**458**	1300
6	8	**824**	1350
6	8	**824**	1400
6	8	**824**	1450
7	7	**915**	1500
6	8	**824**	1550
5	10	**693**	1600
4	13	**565**	1650
4	13	**565**	1700
4	13	**565**	1750
5	10	**693**	1800
4	13	**565**	1850
4	13	**565**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT06
Date:	9/11/2022	Sheet:	6 of 40

PENETROMETER TEST RESULTS

Notes: Lot 141. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
4	13	**565**	50
4	13	**565**	100
3	17	**458**	150
4	13	**565**	200
3	17	**458**	250
3	17	**458**	300
3	17	**458**	350
2	25	**339**	400
2	25	**339**	450
3	17	**458**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
2	25	**339**	700
3	17	**458**	750
2	25	**339**	800
1	50	**198**	850
1	50	**198**	900
2	25	**339**	950
2	25	**339**	1000
4	13	**565**	1050
4	13	**565**	1100
4	13	**565**	1150
3	17	**458**	1200
3	17	**458**	1250
3	17	**458**	1300
3	17	**458**	1350
3	17	**458**	1400
3	17	**458**	1450
2	25	**339**	1500
3	17	**458**	1550
4	13	**565**	1600
3	17	**458**	1650
3	17	**458**	1700
3	17	**458**	1750
3	17	**458**	1800
6	8	**824**	1850
5	10	**693**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
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			2800
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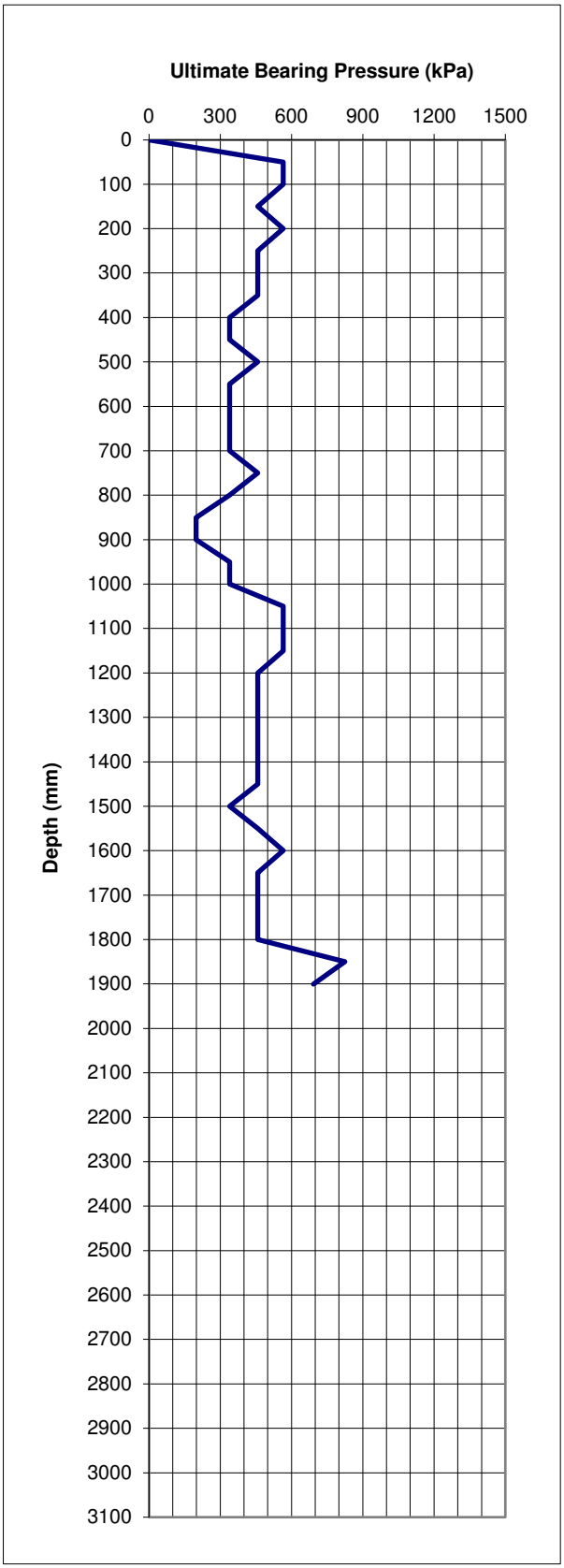
			2900
			2950
			3000
			3050
			3100



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Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT07
Date:	9/11/2022	Sheet:	7 of 40

PENETROMETER TEST RESULTS

Notes: Lot 141. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
1	50	**198**	50
3	17	**458**	100
6	8	**824**	150
4	13	**565**	200
4	13	**565**	250
4	13	**565**	300
3	17	**458**	350
3	17	**458**	400
2	25	**339**	450
3	17	**458**	500
3	17	**458**	550
2	25	**339**	600
2	25	**339**	650
3	17	**458**	700
2	25	**339**	750
2	25	**339**	800
1	50	**198**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
5	10	**693**	1050
6	8	**824**	1100
5	10	**693**	1150
4	13	**565**	1200
4	13	**565**	1250
4	13	**565**	1300
4	13	**565**	1350
4	13	**565**	1400
6	8	**824**	1450
6	8	**824**	1500
6	8	**824**	1550
6	8	**824**	1600
6	8	**824**	1650
10	5	**1189**	1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
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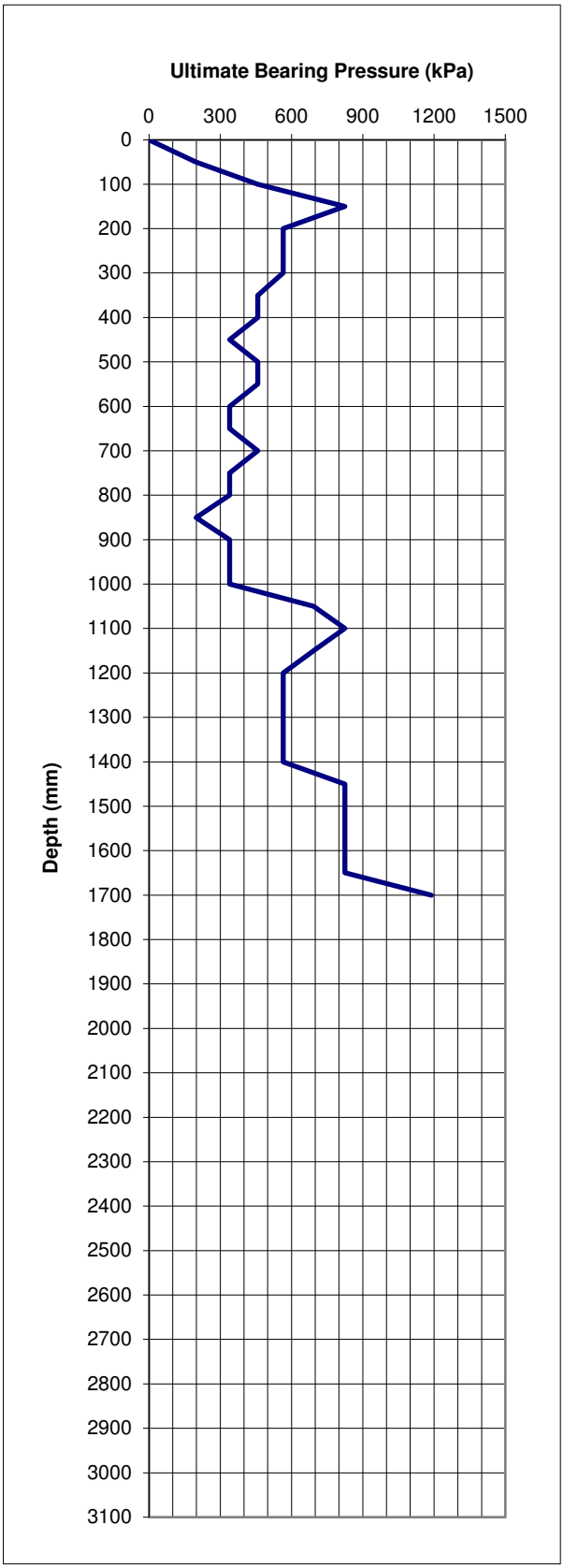
			3000
			3050
			3100



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Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT08
Date:	9/11/2022	Sheet:	8 of 40

PENETROMETER TEST RESULTS

Notes: Lot 141. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
4	13	**565**	100
5	10	**693**	150
6	8	**824**	200
5	10	**693**	250
4	13	**565**	300
5	10	**693**	350
4	13	**565**	400
4	13	**565**	450
3	17	**458**	500
3	17	**458**	550
2	25	**339**	600
2	25	**339**	650
1	50	**198**	700
2	25	**339**	750
2	25	**339**	800
1	50	**198**	850
0.5	100	**115**	900
0.5	100	**115**	950
1	50	**198**	1000
2	25	**339**	1050
5	10	**693**	1100
4	13	**565**	1150
4	13	**565**	1200
4	13	**565**	1250
5	10	**693**	1300
4	13	**565**	1350
4	13	**565**	1400
4	13	**565**	1450
3	17	**458**	1500
3	17	**458**	1550
2	25	**339**	1600
2	25	**339**	1650
3	17	**458**	1700
4	13	**565**	1750
3	17	**458**	1800
3	17	**458**	1850
2	25	**339**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
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			2800
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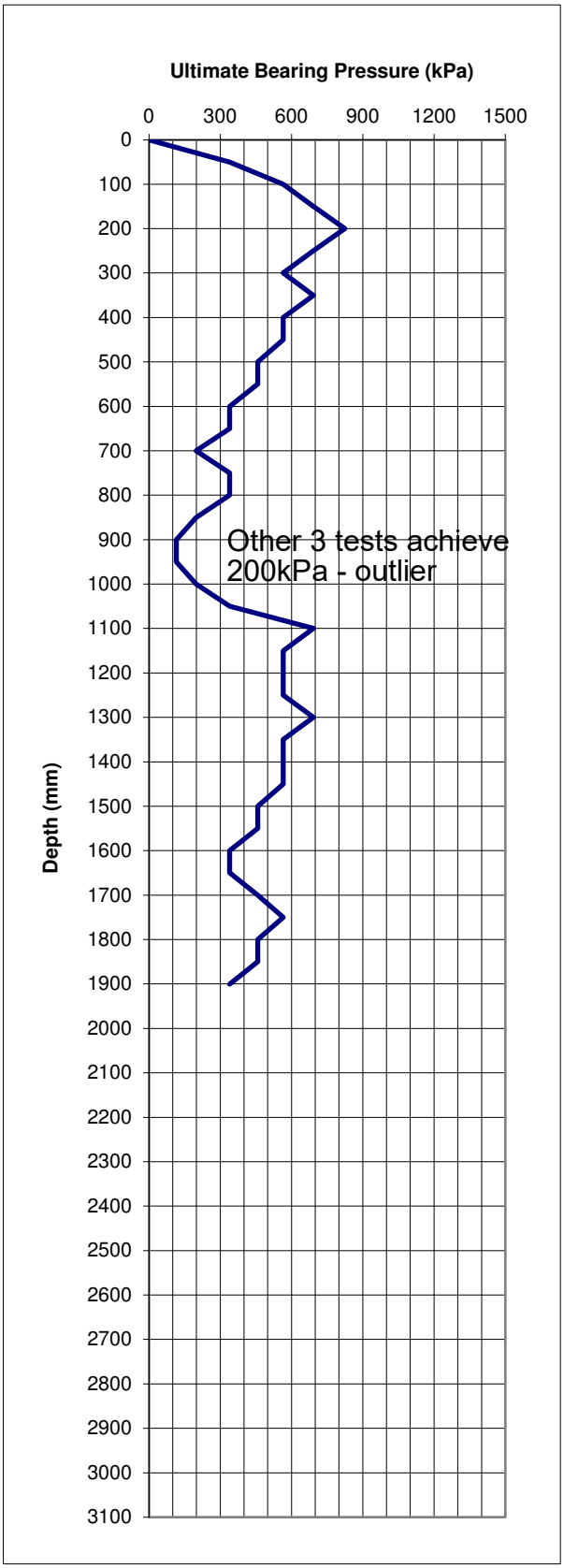
			2900
			2950
			3000
			3050
			3100



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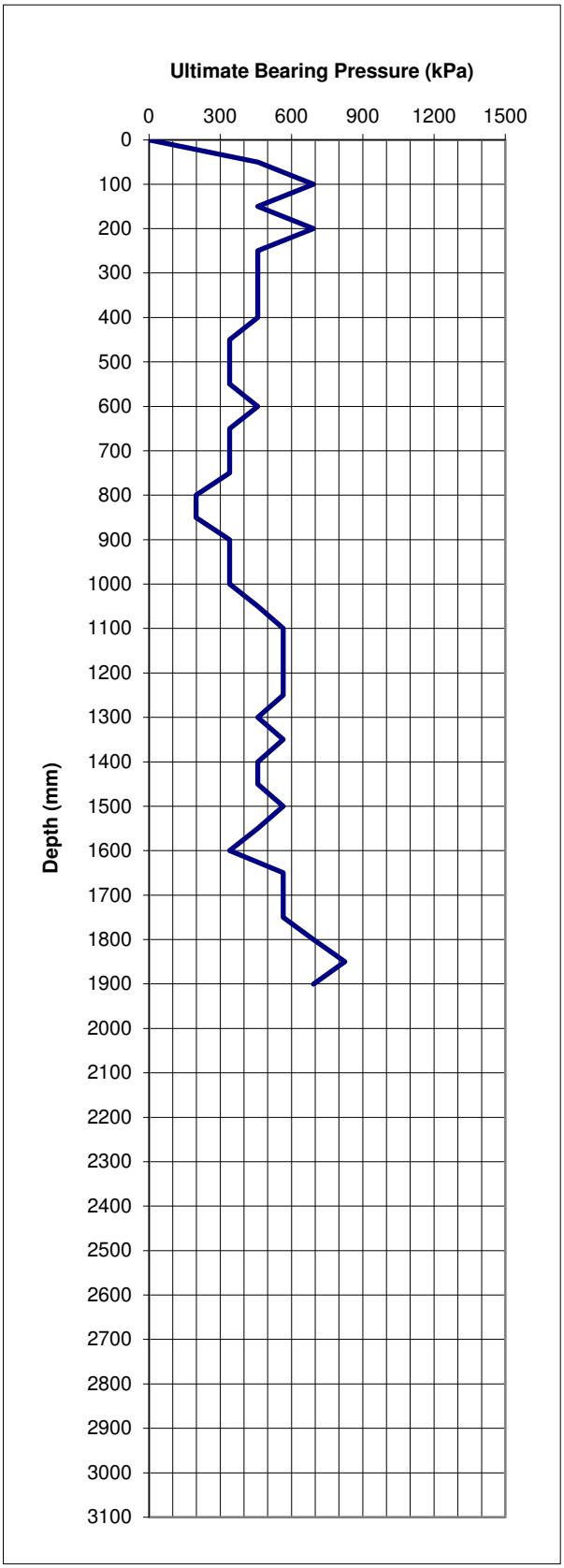
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT09
Date:	9/11/2022	Sheet:	9 of 40

PENETROMETER TEST RESULTS

Notes: Lot 140. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
3	17	**458**	50
5	10	**693**	100
3	17	**458**	150
5	10	**693**	200
3	17	**458**	250
3	17	**458**	300
3	17	**458**	350
3	17	**458**	400
2	25	**339**	450
2	25	**339**	500
2	25	**339**	550
3	17	**458**	600
2	25	**339**	650
2	25	**339**	700
2	25	**339**	750
1	50	**198**	800
1	50	**198**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
3	17	**458**	1050
4	13	**565**	1100
4	13	**565**	1150
4	13	**565**	1200
4	13	**565**	1250
3	17	**458**	1300
4	13	**565**	1350
3	17	**458**	1400
3	17	**458**	1450
4	13	**565**	1500
3	17	**458**	1550
2	25	**339**	1600
4	13	**565**	1650
4	13	**565**	1700
4	13	**565**	1750
5	10	**693**	1800
6	8	**824**	1850
5	10	**693**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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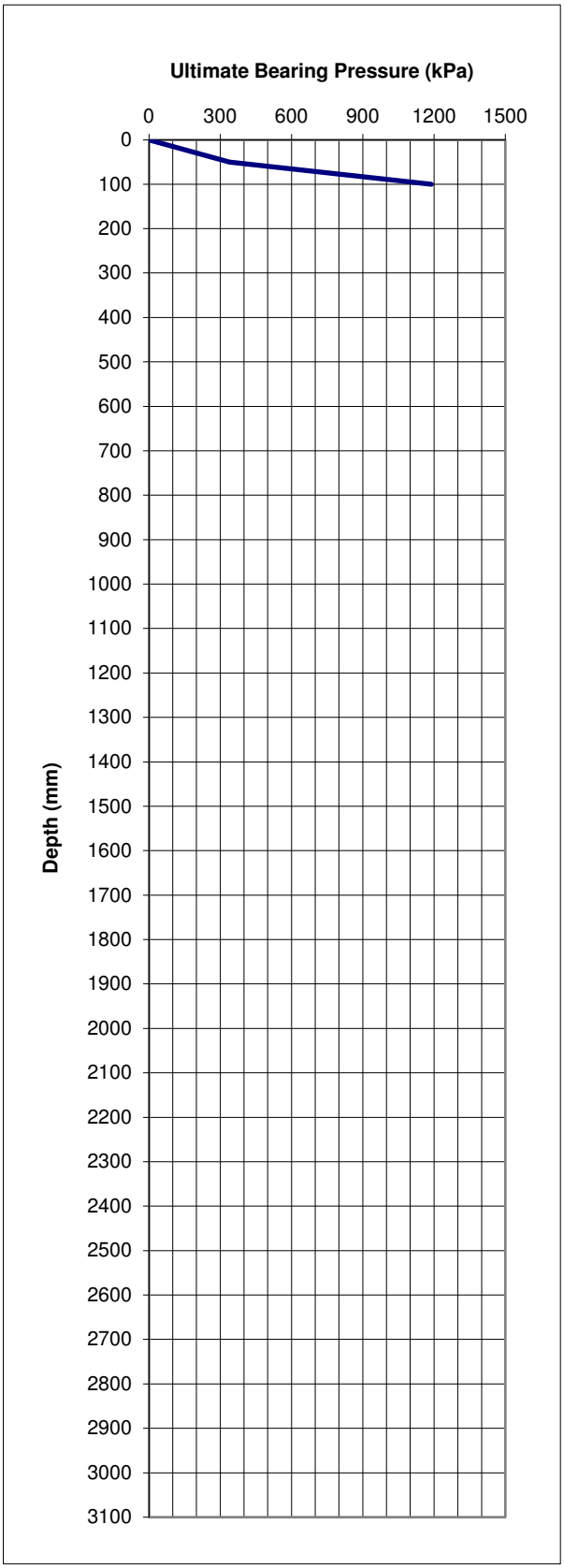
Project:	**Rose Manor Stage 9A**		
Client:	**Deluxe Property Group Ltd**		
Ref:	**7756**	**Eng:**	**BS**
Penetrometer Test Number:			**PT10**
Date:	**9/11/2022**	**Sheet:**	**10 of 40**

PENETROMETER TEST RESULTS

Notes: Lot 140. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
10	5	**1189**	100
			150
			200
			250
			300
			350
			400
			450
			500
			550
			600
			650
			700
			750
			800
			850
			900
			950
			1000
			1050
			1100
			1150
			1200
			1250
			1300
			1350
			1400
			1450
			1500
			1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT11
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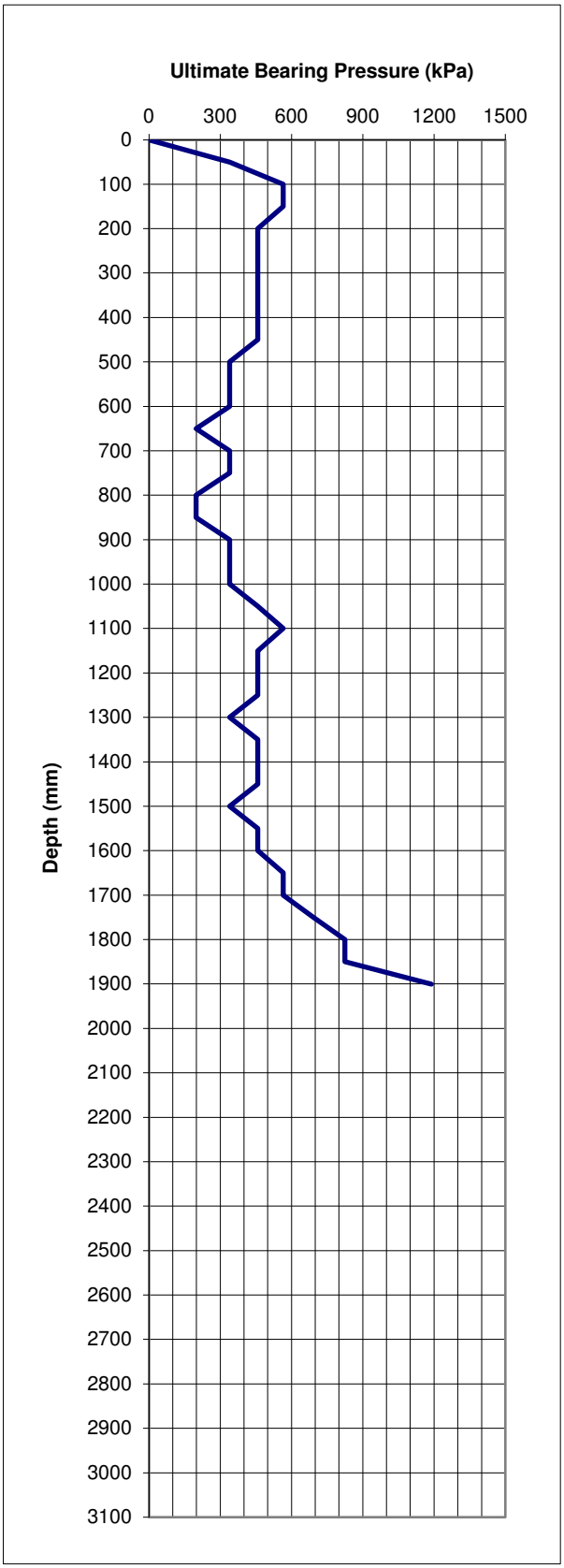
PENETROMETER TEST RESULTS

Notes: Lot 140. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
4	13	**565**	100
4	13	**565**	150
3	17	**458**	200
3	17	**458**	250
3	17	**458**	300
3	17	**458**	350
3	17	**458**	400
3	17	**458**	450
2	25	**339**	500
2	25	**339**	550
2	25	**339**	600
1	50	**198**	650
2	25	**339**	700
2	25	**339**	750
1	50	**198**	800
1	50	**198**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
3	17	**458**	1050
4	13	**565**	1100
3	17	**458**	1150
3	17	**458**	1200
3	17	**458**	1250
2	25	**339**	1300
3	17	**458**	1350
3	17	**458**	1400
3	17	**458**	1450
2	25	**339**	1500
3	17	**458**	1550
3	17	**458**	1600
4	13	**565**	1650
4	13	**565**	1700
5	10	**693**	1750
6	8	**824**	1800
6	8	**824**	1850
10	5	**1189**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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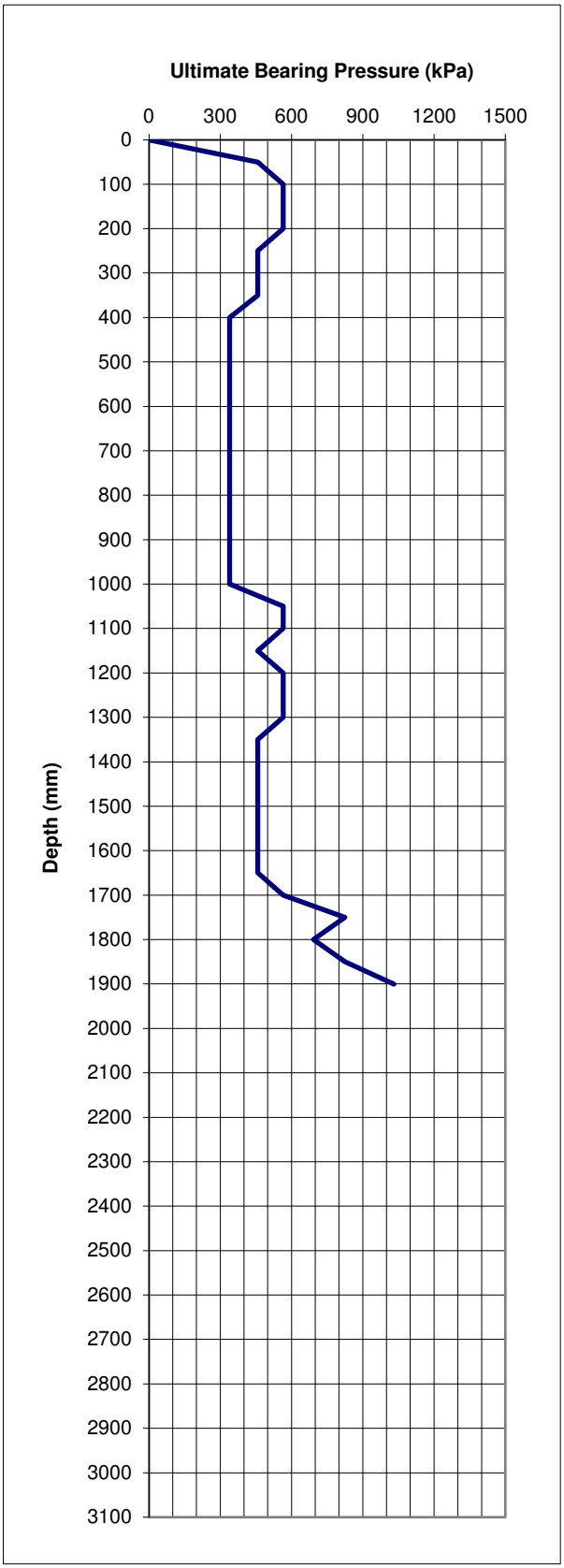
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT12
Date:	9/11/2022	Sheet:	12 of 40

PENETROMETER TEST RESULTS

Notes: Lot 140. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
3	17	**458**	50
4	13	**565**	100
4	13	**565**	150
4	13	**565**	200
3	17	**458**	250
3	17	**458**	300
3	17	**458**	350
2	25	**339**	400
2	25	**339**	450
2	25	**339**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
2	25	**339**	700
2	25	**339**	750
2	25	**339**	800
2	25	**339**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
4	13	**565**	1050
4	13	**565**	1100
3	17	**458**	1150
4	13	**565**	1200
4	13	**565**	1250
4	13	**565**	1300
3	17	**458**	1350
3	17	**458**	1400
3	17	**458**	1450
3	17	**458**	1500
3	17	**458**	1550
3	17	**458**	1600
3	17	**458**	1650
4	13	**565**	1700
6	8	**824**	1750
5	10	**693**	1800
6	8	**824**	1850
9	6	**1031**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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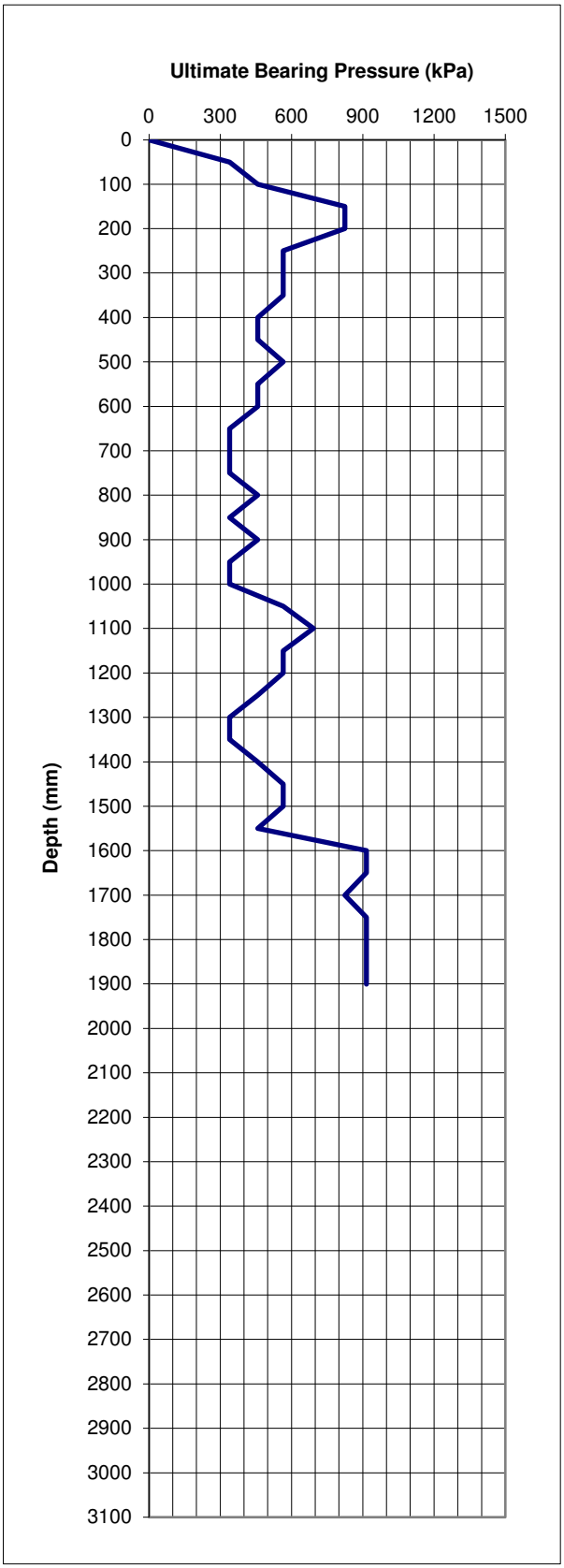
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT13
Date:	9/11/2022	Sheet:	13 of 40

PENETROMETER TEST RESULTS

Notes: Lot 139. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
3	17	**458**	100
6	8	**824**	150
6	8	**824**	200
4	13	**565**	250
4	13	**565**	300
4	13	**565**	350
3	17	**458**	400
3	17	**458**	450
4	13	**565**	500
3	17	**458**	550
3	17	**458**	600
2	25	**339**	650
2	25	**339**	700
2	25	**339**	750
3	17	**458**	800
2	25	**339**	850
3	17	**458**	900
2	25	**339**	950
2	25	**339**	1000
4	13	**565**	1050
5	10	**693**	1100
4	13	**565**	1150
4	13	**565**	1200
3	17	**458**	1250
2	25	**339**	1300
2	25	**339**	1350
3	17	**458**	1400
4	13	**565**	1450
4	13	**565**	1500
3	17	**458**	1550
7	7	**915**	1600
7	7	**915**	1650
6	8	**824**	1700
7	7	**915**	1750
7	7	**915**	1800
7	7	**915**	1850
7	7	**915**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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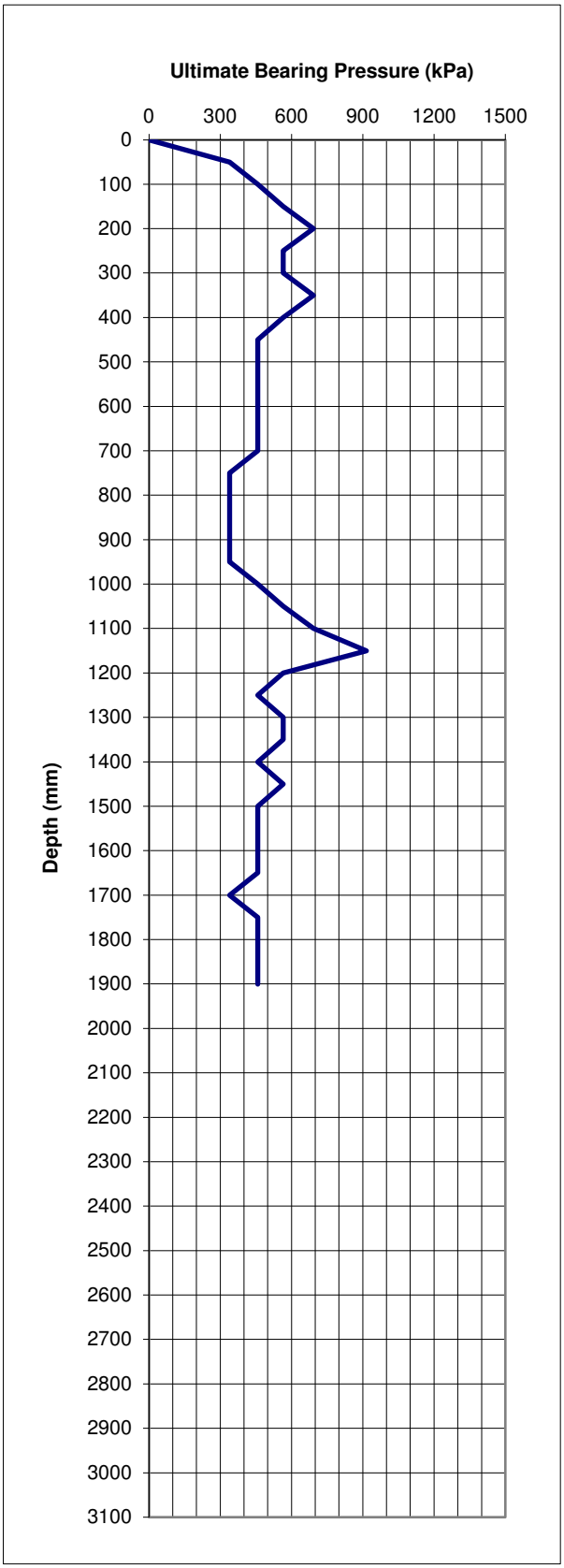
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT14
Date:	9/11/2022	Sheet:	14 of 40

PENETROMETER TEST RESULTS

Notes: Lot 139. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
3	17	**458**	100
4	13	**565**	150
5	10	**693**	200
4	13	**565**	250
4	13	**565**	300
5	10	**693**	350
4	13	**565**	400
3	17	**458**	450
3	17	**458**	500
3	17	**458**	550
3	17	**458**	600
3	17	**458**	650
3	17	**458**	700
2	25	**339**	750
2	25	**339**	800
2	25	**339**	850
2	25	**339**	900
2	25	**339**	950
3	17	**458**	1000
4	13	**565**	1050
5	10	**693**	1100
7	7	**915**	1150
4	13	**565**	1200
3	17	**458**	1250
4	13	**565**	1300
4	13	**565**	1350
3	17	**458**	1400
4	13	**565**	1450
3	17	**458**	1500
3	17	**458**	1550
3	17	**458**	1600
3	17	**458**	1650
2	25	**339**	1700
3	17	**458**	1750
3	17	**458**	1800
3	17	**458**	1850
3	17	**458**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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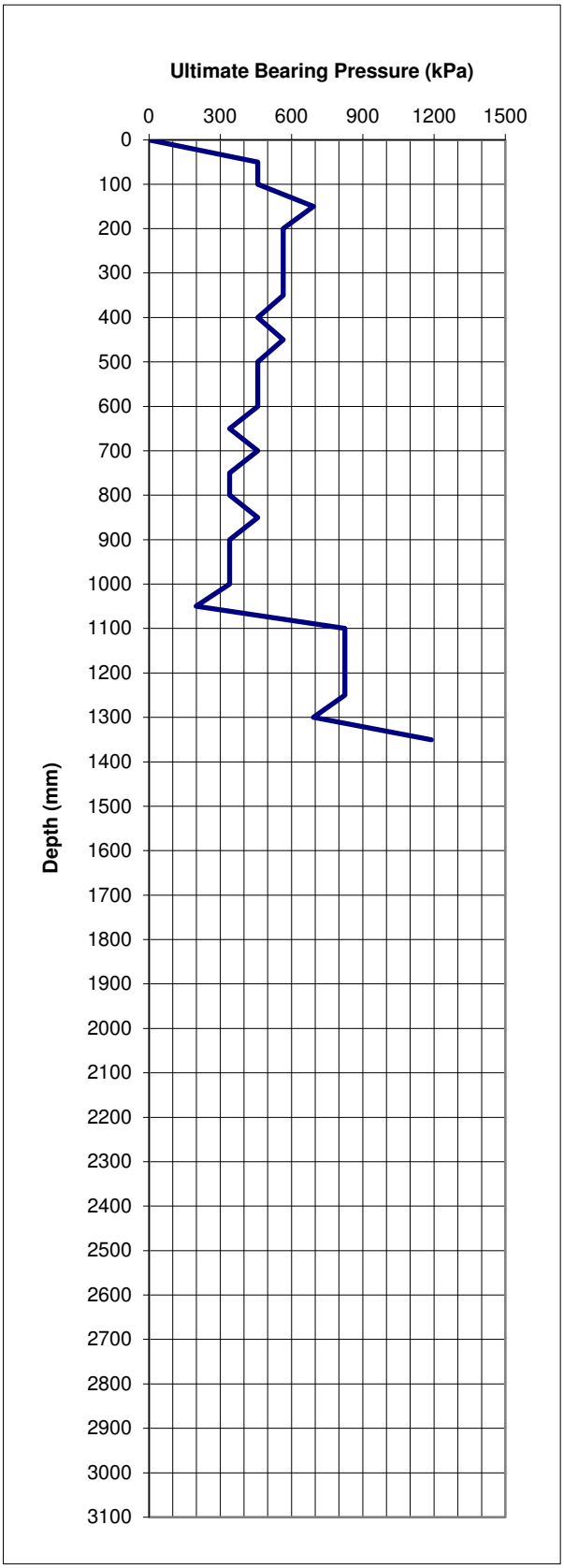
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT15
Date:	9/11/2022	Sheet:	15 of 40

PENETROMETER TEST RESULTS

Notes: Lot 139. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
3	17	**458**	50
3	17	**458**	100
5	10	**693**	150
4	13	**565**	200
4	13	**565**	250
4	13	**565**	300
4	13	**565**	350
3	17	**458**	400
4	13	**565**	450
3	17	**458**	500
3	17	**458**	550
3	17	**458**	600
2	25	**339**	650
3	17	**458**	700
2	25	**339**	750
2	25	**339**	800
3	17	**458**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
1	50	**198**	1050
6	8	**824**	1100
6	8	**824**	1150
6	8	**824**	1200
6	8	**824**	1250
5	10	**693**	1300
10	5	**1189**	1350
			1400
			1450
			1500
			1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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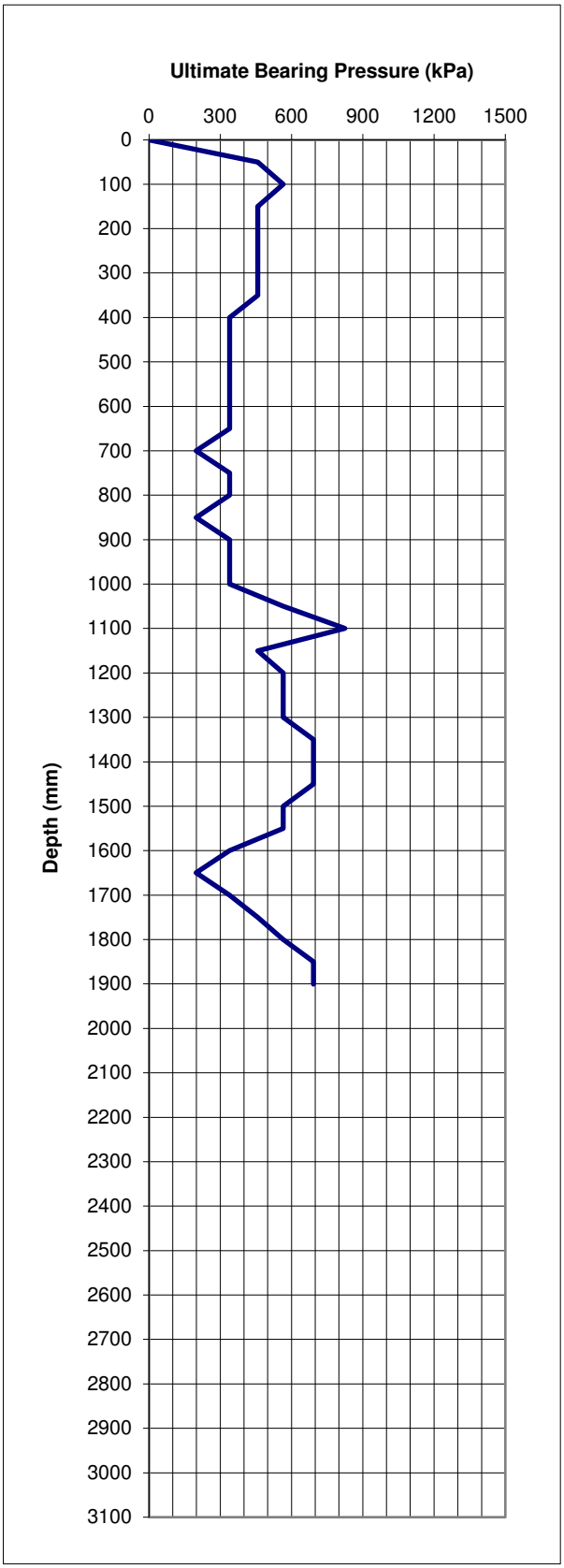
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT16
Date:	9/11/2022	Sheet:	16 of 40

PENETROMETER TEST RESULTS

Notes: Lot 139. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
3	17	**458**	50
4	13	**565**	100
3	17	**458**	150
3	17	**458**	200
3	17	**458**	250
3	17	**458**	300
3	17	**458**	350
2	25	**339**	400
2	25	**339**	450
2	25	**339**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
1	50	**198**	700
2	25	**339**	750
2	25	**339**	800
1	50	**198**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
4	13	**565**	1050
6	8	**824**	1100
3	17	**458**	1150
4	13	**565**	1200
4	13	**565**	1250
4	13	**565**	1300
5	10	**693**	1350
5	10	**693**	1400
5	10	**693**	1450
4	13	**565**	1500
4	13	**565**	1550
2	25	**339**	1600
1	50	**198**	1650
2	25	**339**	1700
3	17	**458**	1750
4	13	**565**	1800
5	10	**693**	1850
5	10	**693**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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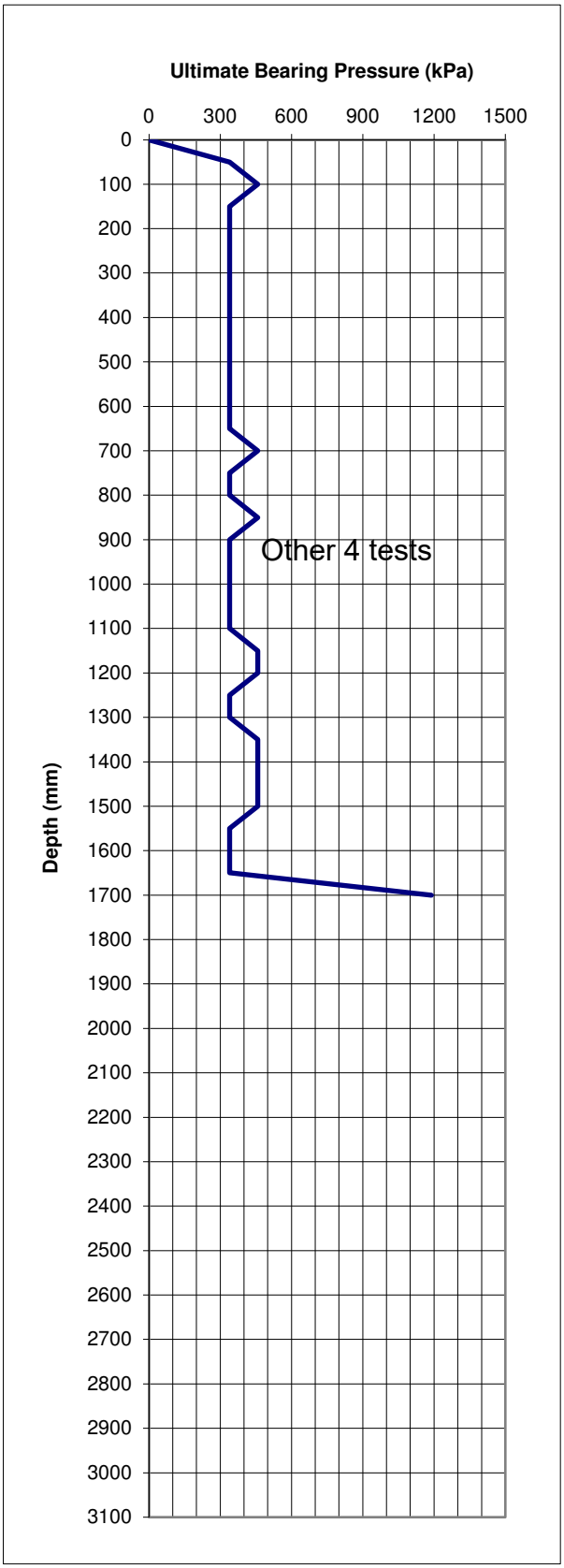
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT17
Date:	10/11/2022	Sheet:	17 of 40

PENETROMETER TEST RESULTS

Notes: Lot 129. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
3	17	**458**	100
2	25	**339**	150
2	25	**339**	200
2	25	**339**	250
2	25	**339**	300
2	25	**339**	350
2	25	**339**	400
2	25	**339**	450
2	25	**339**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
3	17	**458**	700
2	25	**339**	750
2	25	**339**	800
3	17	**458**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
2	25	**339**	1050
2	25	**339**	1100
3	17	**458**	1150
3	17	**458**	1200
2	25	**339**	1250
2	25	**339**	1300
3	17	**458**	1350
3	17	**458**	1400
3	17	**458**	1450
3	17	**458**	1500
2	25	**339**	1550
2	25	**339**	1600
2	25	**339**	1650
10	5	**1189**	1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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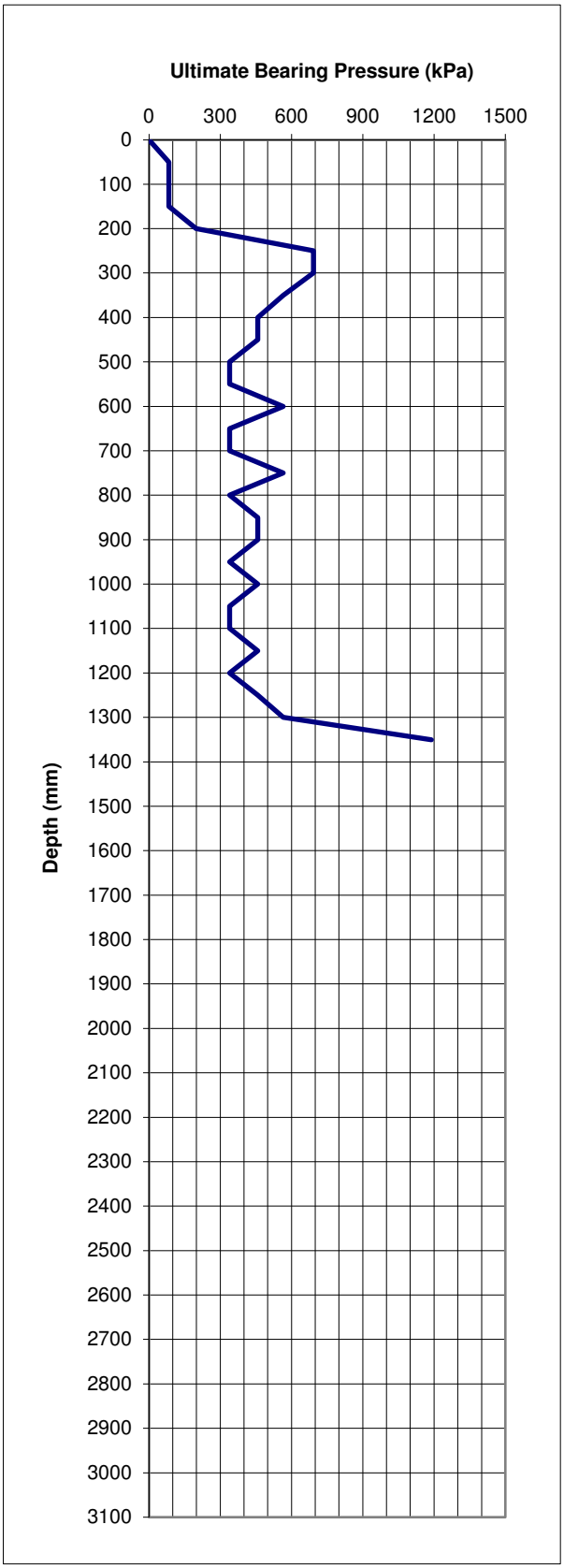
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT18
Date:	10/11/2022	Sheet:	18 of 40

PENETROMETER TEST RESULTS

Notes: Lot 129. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
0.33	152	**83**	50
0.33	152	**83**	100
0.33	152	**83**	150
1	50	**198**	200
5	10	**693**	250
5	10	**693**	300
4	13	**565**	350
3	17	**458**	400
3	17	**458**	450
2	25	**339**	500
2	25	**339**	550
4	13	**565**	600
2	25	**339**	650
2	25	**339**	700
4	13	**565**	750
2	25	**339**	800
3	17	**458**	850
3	17	**458**	900
2	25	**339**	950
3	17	**458**	1000
2	25	**339**	1050
2	25	**339**	1100
3	17	**458**	1150
2	25	**339**	1200
3	17	**458**	1250
4	13	**565**	1300
10	5	**1189**	1350
			1400
			1450
			1500
			1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT19
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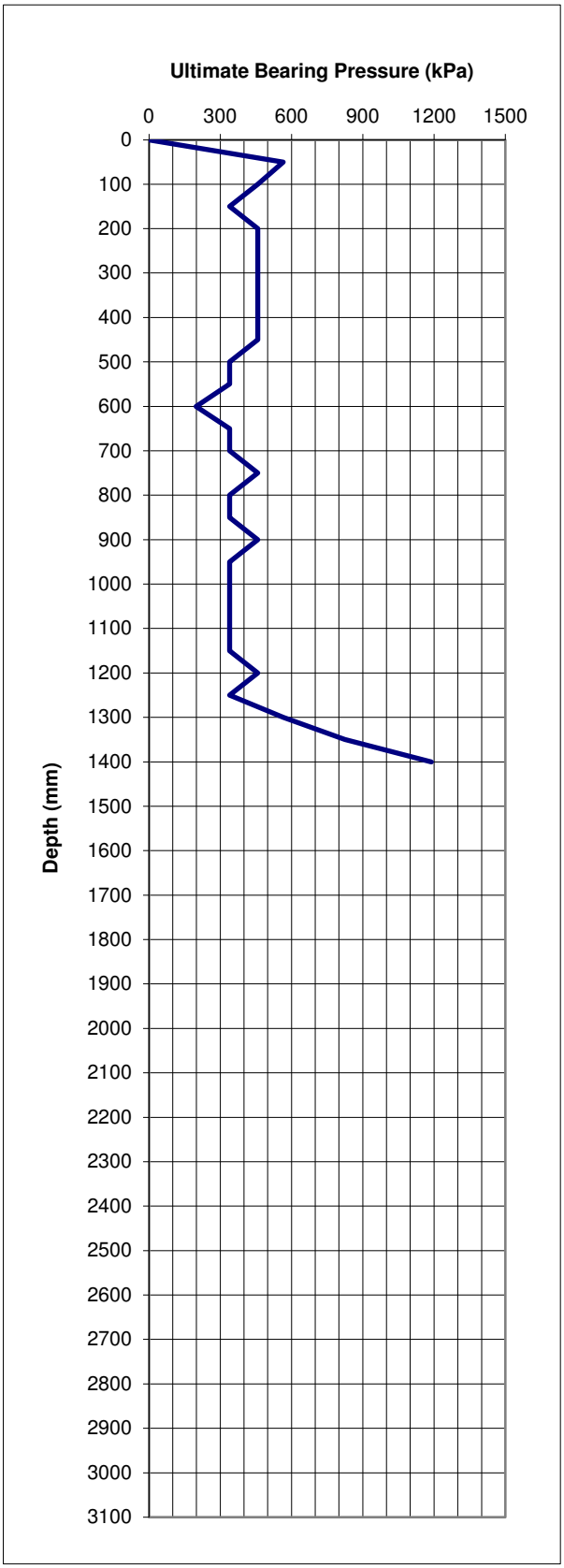
PENETROMETER TEST RESULTS

Notes: Lot 129. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
4	13	**565**	50
3	17	**458**	100
2	25	**339**	150
3	17	**458**	200
3	17	**458**	250
3	17	**458**	300
3	17	**458**	350
3	17	**458**	400
3	17	**458**	450
2	25	**339**	500
2	25	**339**	550
1	50	**198**	600
2	25	**339**	650
2	25	**339**	700
3	17	**458**	750
2	25	**339**	800
2	25	**339**	850
3	17	**458**	900
2	25	**339**	950
2	25	**339**	1000
2	25	**339**	1050
2	25	**339**	1100
2	25	**339**	1150
3	17	**458**	1200
2	25	**339**	1250
4	13	**565**	1300
6	8	**824**	1350
10	5	**1189**	1400
			1450
			1500
			1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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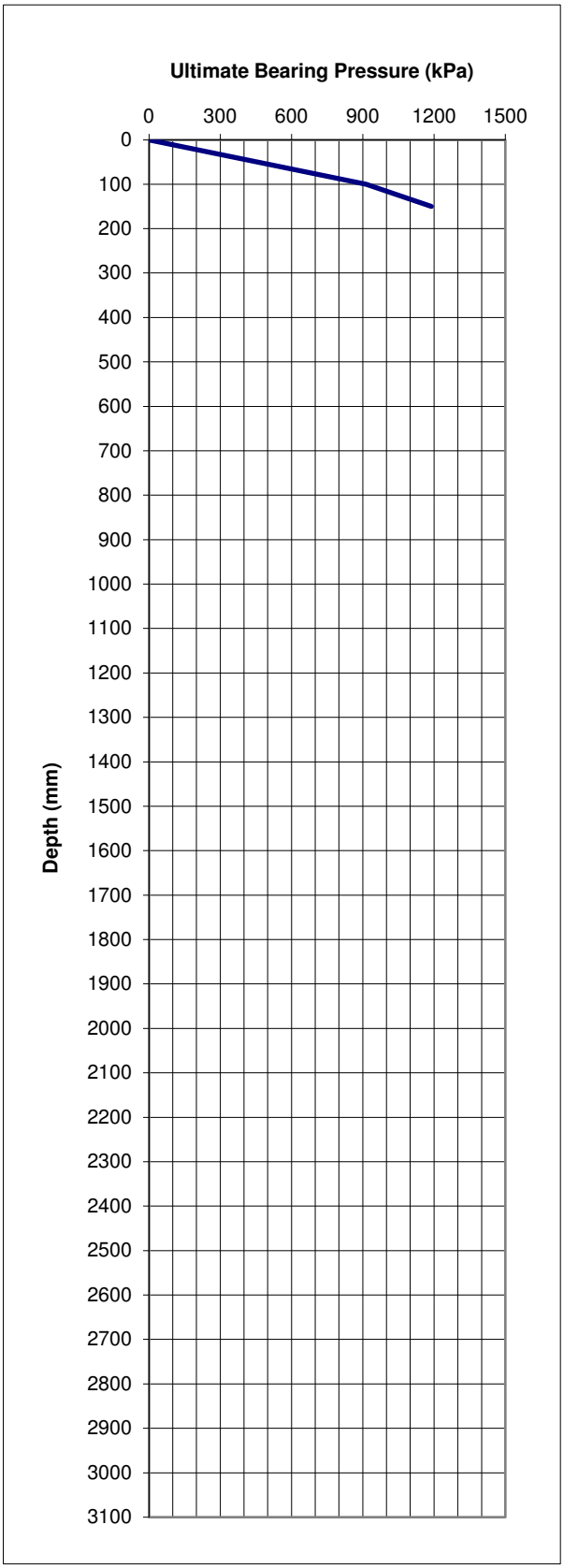
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT20
Date:	10/11/2022	Sheet:	20 of 40

PENETROMETER TEST RESULTS

Notes: Lot 129. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
3	17	**458**	50
7	7	**915**	100
10	5	**1189**	150
			200
			250
			300
			350
			400
			450
			500
			550
			600
			650
			700
			750
			800
			850
			900
			950
			1000
			1050
			1100
			1150
			1200
			1250
			1300
			1350
			1400
			1450
			1500
			1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT21
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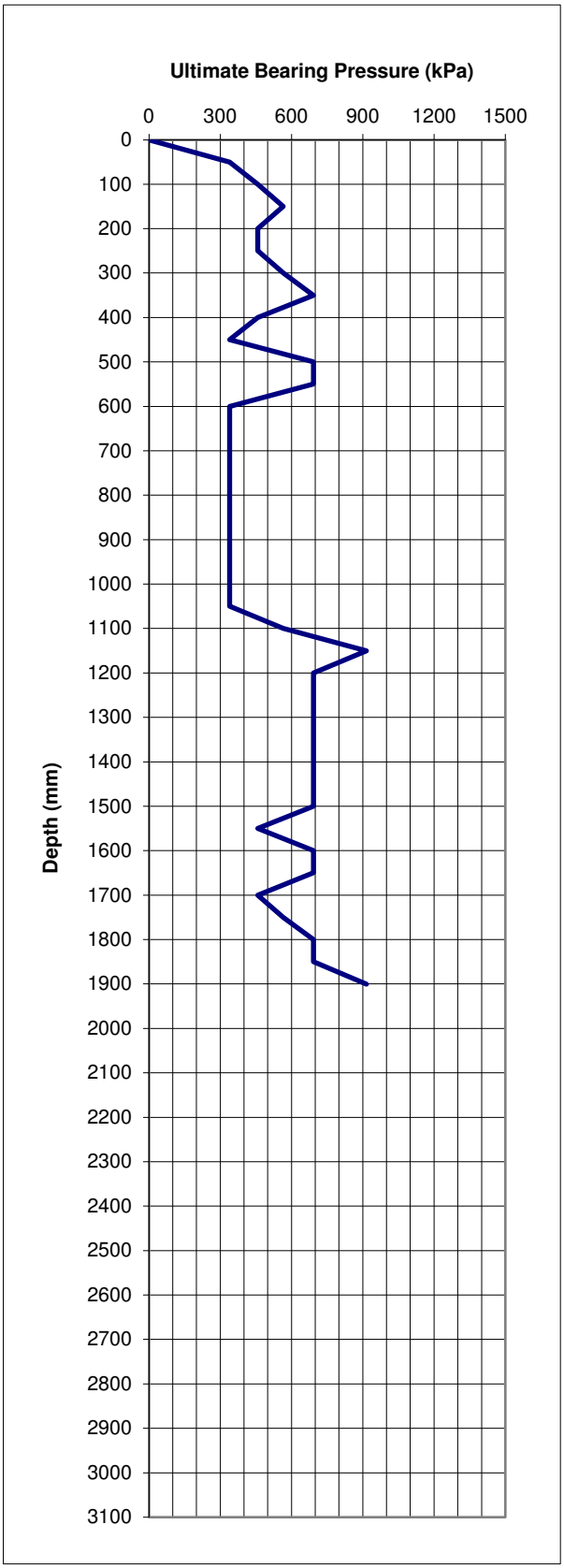
PENETROMETER TEST RESULTS

Notes: Lot 138. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
3	17	**458**	100
4	13	**565**	150
3	17	**458**	200
3	17	**458**	250
4	13	**565**	300
5	10	**693**	350
3	17	**458**	400
2	25	**339**	450
5	10	**693**	500
5	10	**693**	550
2	25	**339**	600
2	25	**339**	650
2	25	**339**	700
2	25	**339**	750
2	25	**339**	800
2	25	**339**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
2	25	**339**	1050
4	13	**565**	1100
7	7	**915**	1150
5	10	**693**	1200
5	10	**693**	1250
5	10	**693**	1300
5	10	**693**	1350
5	10	**693**	1400
5	10	**693**	1450
5	10	**693**	1500
3	17	**458**	1550
5	10	**693**	1600
5	10	**693**	1650
3	17	**458**	1700
4	13	**565**	1750
5	10	**693**	1800
5	10	**693**	1850
7	7	**915**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT22
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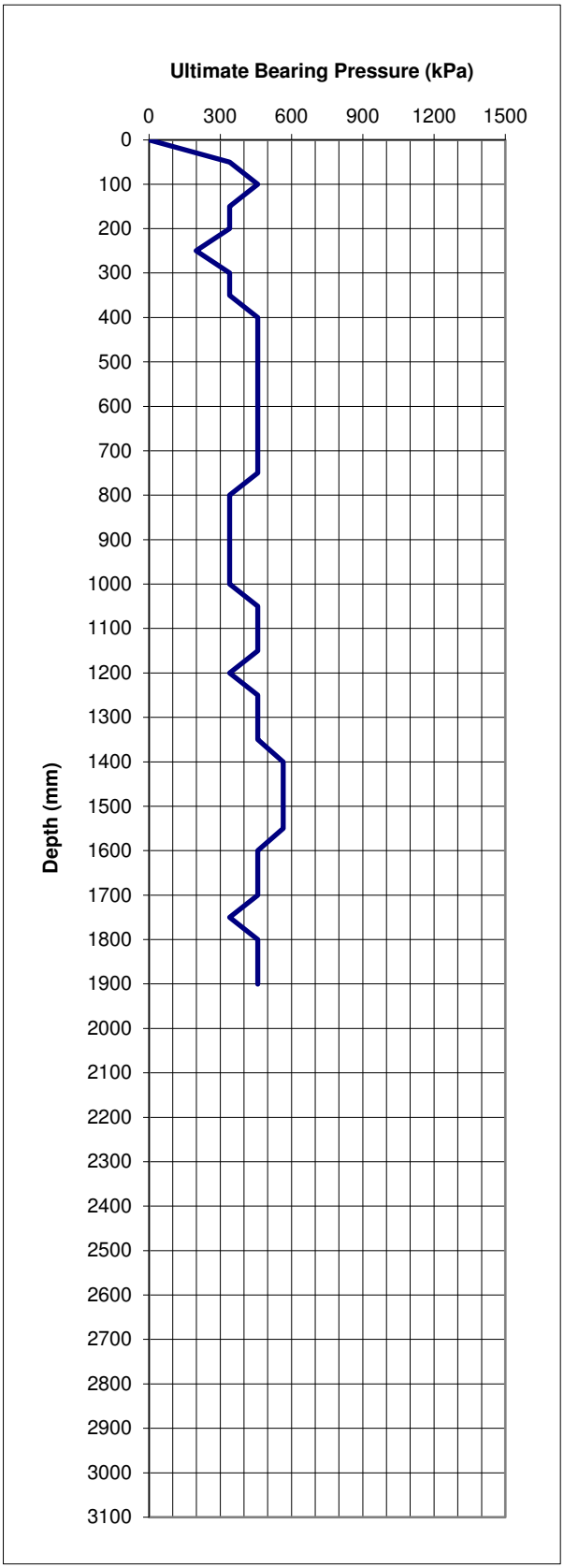
PENETROMETER TEST RESULTS

Notes: Lot 138. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
3	17	**458**	100
2	25	**339**	150
2	25	**339**	200
1	50	**198**	250
2	25	**339**	300
2	25	**339**	350
3	17	**458**	400
3	17	**458**	450
3	17	**458**	500
3	17	**458**	550
3	17	**458**	600
3	17	**458**	650
3	17	**458**	700
3	17	**458**	750
2	25	**339**	800
2	25	**339**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
3	17	**458**	1050
3	17	**458**	1100
3	17	**458**	1150
2	25	**339**	1200
3	17	**458**	1250
3	17	**458**	1300
3	17	**458**	1350
4	13	**565**	1400
4	13	**565**	1450
4	13	**565**	1500
4	13	**565**	1550
3	17	**458**	1600
3	17	**458**	1650
3	17	**458**	1700
2	25	**339**	1750
3	17	**458**	1800
3	17	**458**	1850
3	17	**458**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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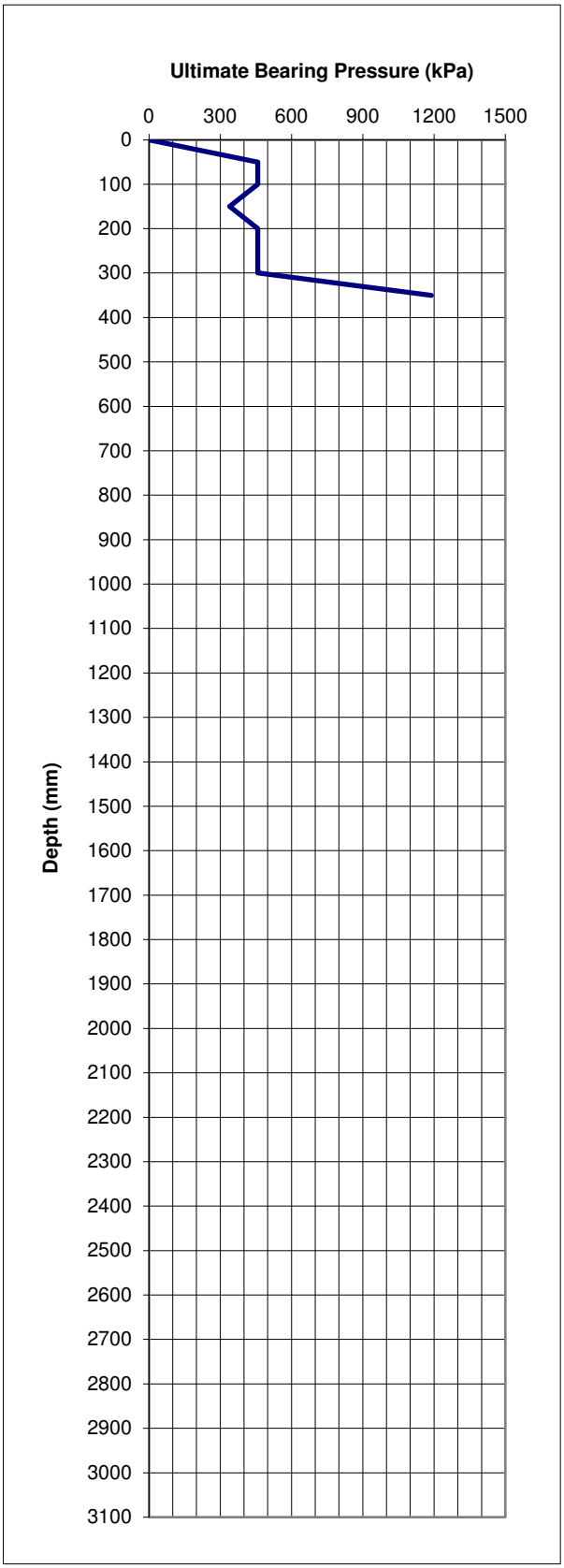
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT23
Date:	10/11/2022	Sheet:	23 of 40

PENETROMETER TEST RESULTS

Notes: Lot 138. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
3	17	**458**	50
3	17	**458**	100
2	25	**339**	150
3	17	**458**	200
3	17	**458**	250
3	17	**458**	300
10	5	**1189**	350
			400
			450
			500
			550
			600
			650
			700
			750
			800
			850
			900
			950
			1000
			1050
			1100
			1150
			1200
			1250
			1300
			1350
			1400
			1450
			1500
			1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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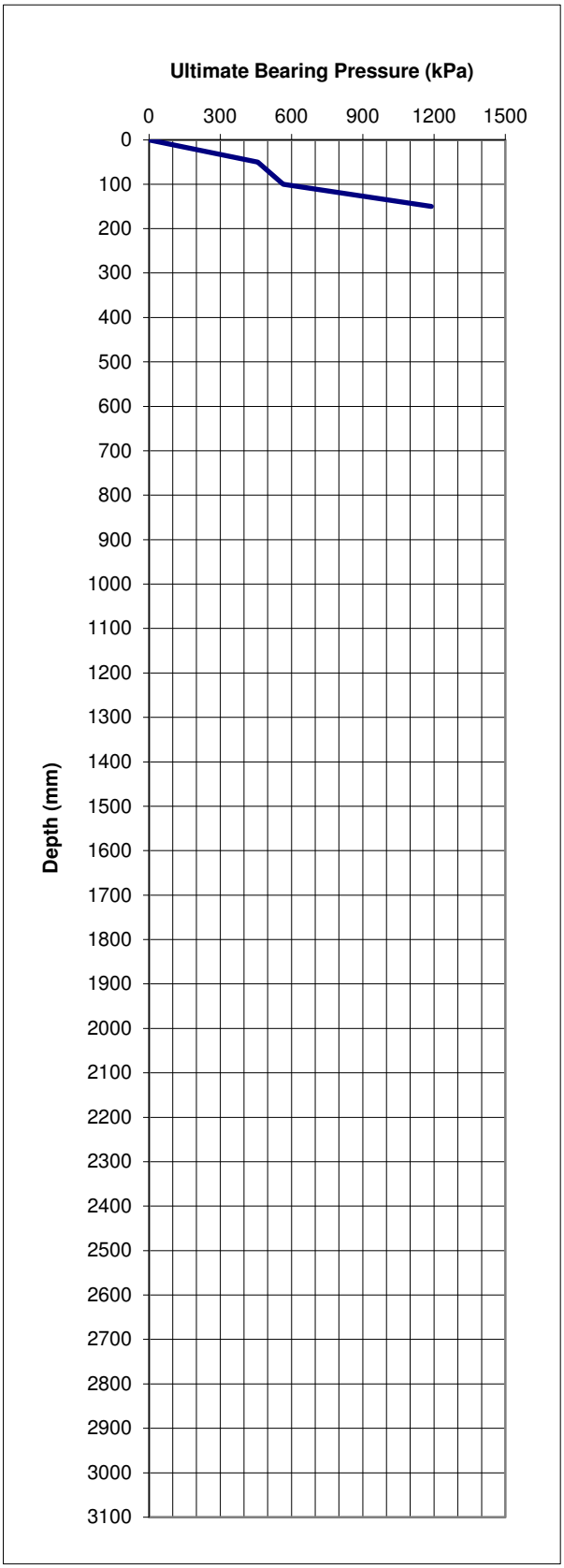
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT24
Date:	10/11/2022	Sheet:	24 of 40

PENETROMETER TEST RESULTS

Notes: Lot 138. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
3	17	**458**	50
4	13	**565**	100
10	5	**1189**	150
			200
			250
			300
			350
			400
			450
			500
			550
			600
			650
			700
			750
			800
			850
			900
			950
			1000
			1050
			1100
			1150
			1200
			1250
			1300
			1350
			1400
			1450
			1500
			1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT25
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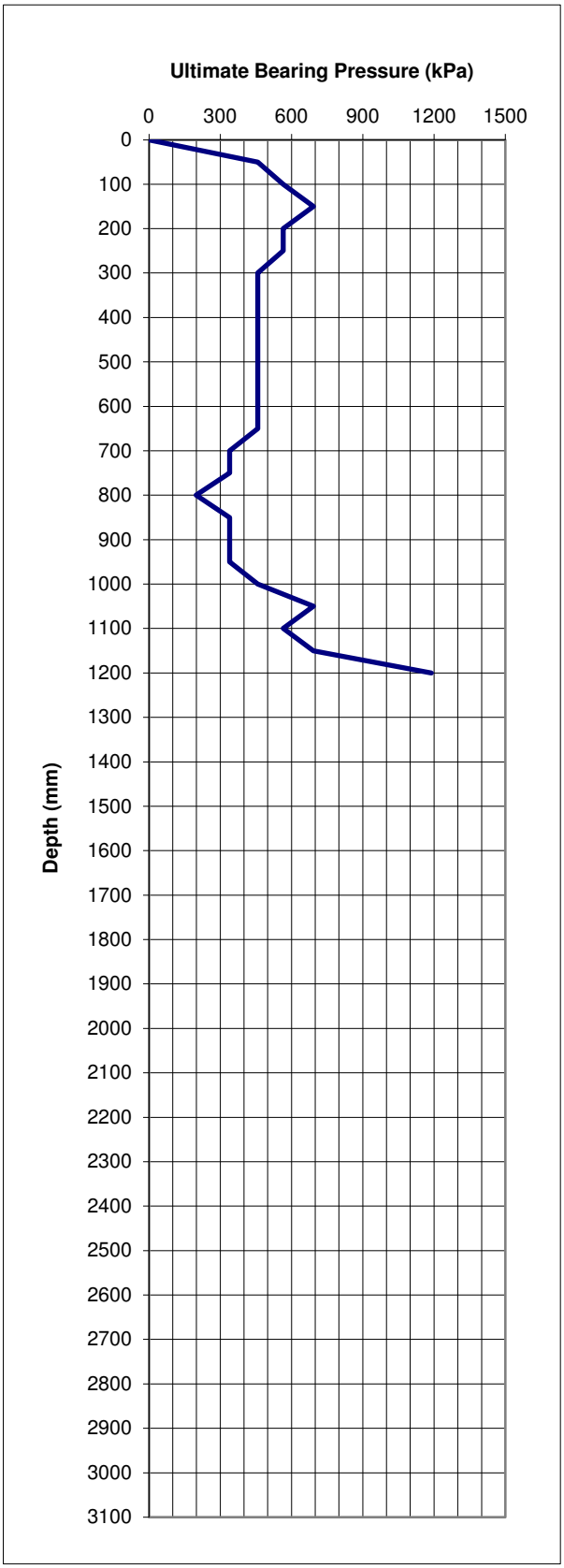
PENETROMETER TEST RESULTS

Notes: Lot 130. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
3	17	**458**	50
4	13	**565**	100
5	10	**693**	150
4	13	**565**	200
4	13	**565**	250
3	17	**458**	300
3	17	**458**	350
3	17	**458**	400
3	17	**458**	450
3	17	**458**	500
3	17	**458**	550
3	17	**458**	600
3	17	**458**	650
2	25	**339**	700
2	25	**339**	750
1	50	**198**	800
2	25	**339**	850
2	25	**339**	900
2	25	**339**	950
3	17	**458**	1000
5	10	**693**	1050
4	13	**565**	1100
5	10	**693**	1150
10	5	**1189**	1200
			1250
			1300
			1350
			1400
			1450
			1500
			1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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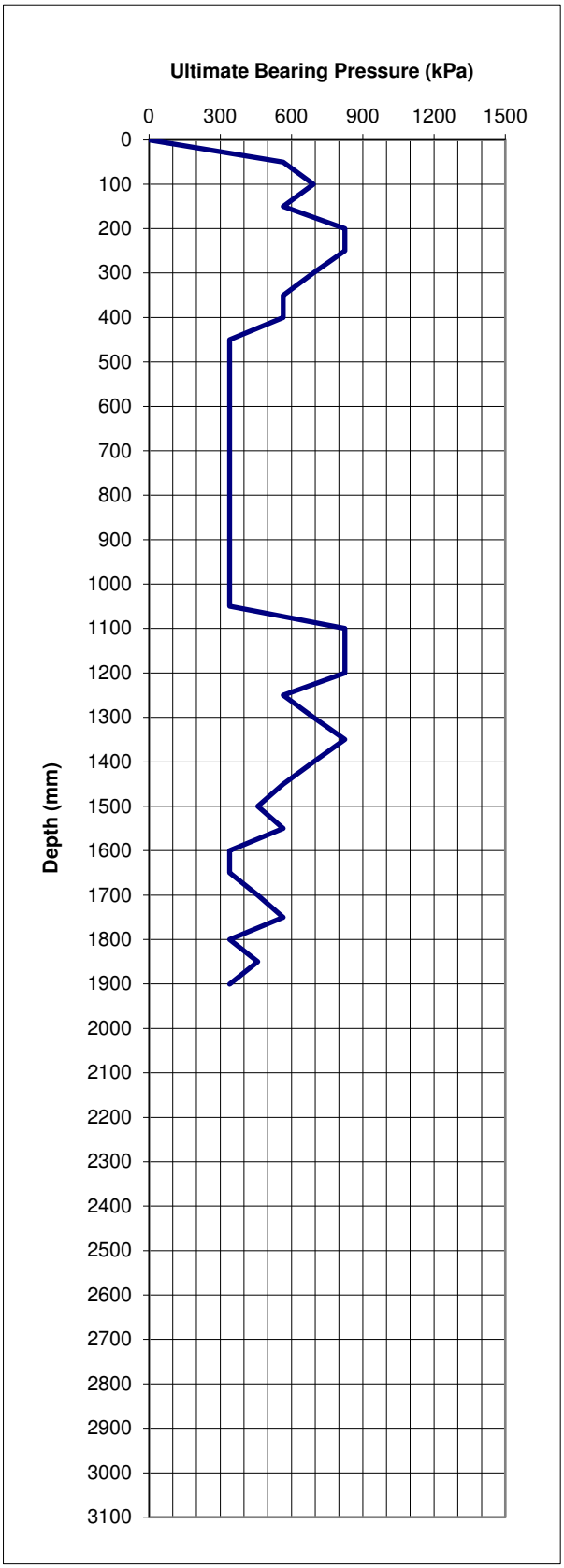
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT26
Date:	10/11/2022	Sheet:	26 of 40

PENETROMETER TEST RESULTS

Notes: Lot 130. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
4	13	**565**	50
5	10	**693**	100
4	13	**565**	150
6	8	**824**	200
6	8	**824**	250
5	10	**693**	300
4	13	**565**	350
4	13	**565**	400
2	25	**339**	450
2	25	**339**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
2	25	**339**	700
2	25	**339**	750
2	25	**339**	800
2	25	**339**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
2	25	**339**	1050
6	8	**824**	1100
6	8	**824**	1150
6	8	**824**	1200
4	13	**565**	1250
5	10	**693**	1300
6	8	**824**	1350
5	10	**693**	1400
4	13	**565**	1450
3	17	**458**	1500
4	13	**565**	1550
2	25	**339**	1600
2	25	**339**	1650
3	17	**458**	1700
4	13	**565**	1750
2	25	**339**	1800
3	17	**458**	1850
2	25	**339**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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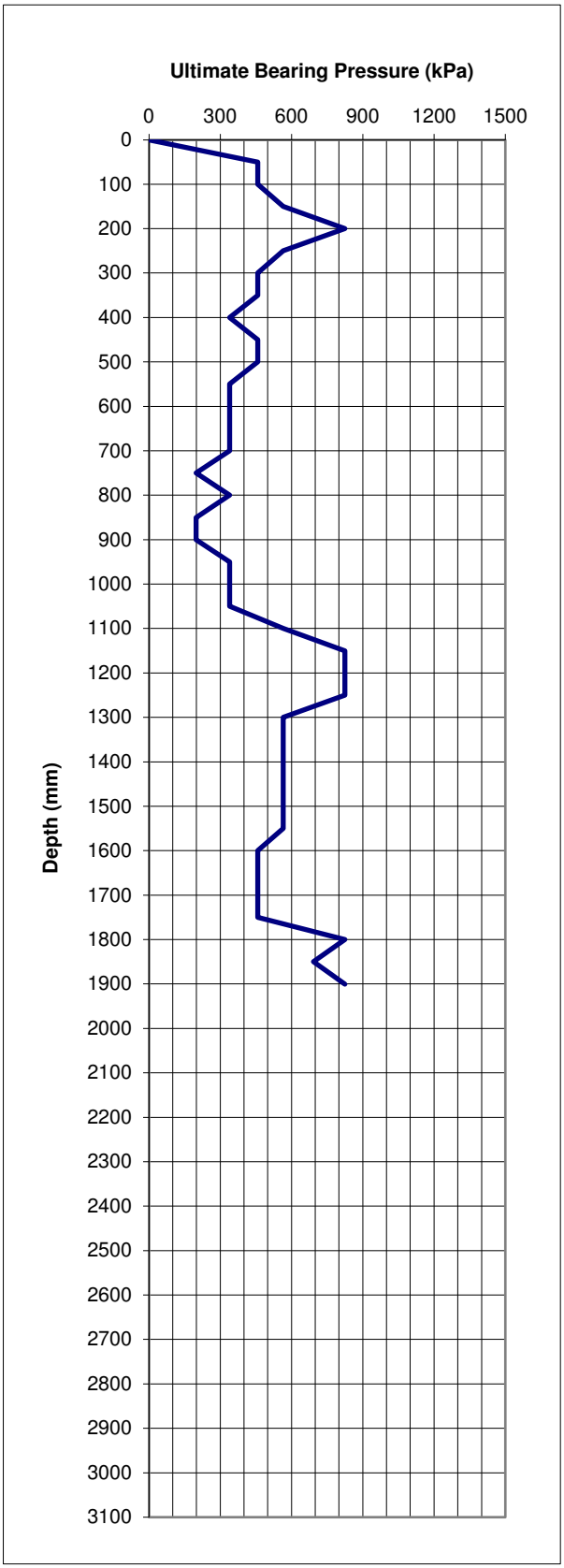
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT27
Date:	10/11/2022	Sheet:	27 of 40

PENETROMETER TEST RESULTS

Notes: Lot 130. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
3	17	**458**	50
3	17	**458**	100
4	13	**565**	150
6	8	**824**	200
4	13	**565**	250
3	17	**458**	300
3	17	**458**	350
2	25	**339**	400
3	17	**458**	450
3	17	**458**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
2	25	**339**	700
1	50	**198**	750
2	25	**339**	800
1	50	**198**	850
1	50	**198**	900
2	25	**339**	950
2	25	**339**	1000
2	25	**339**	1050
4	13	**565**	1100
6	8	**824**	1150
6	8	**824**	1200
6	8	**824**	1250
4	13	**565**	1300
4	13	**565**	1350
4	13	**565**	1400
4	13	**565**	1450
4	13	**565**	1500
4	13	**565**	1550
3	17	**458**	1600
3	17	**458**	1650
3	17	**458**	1700
3	17	**458**	1750
6	8	**824**	1800
5	10	**693**	1850
6	8	**824**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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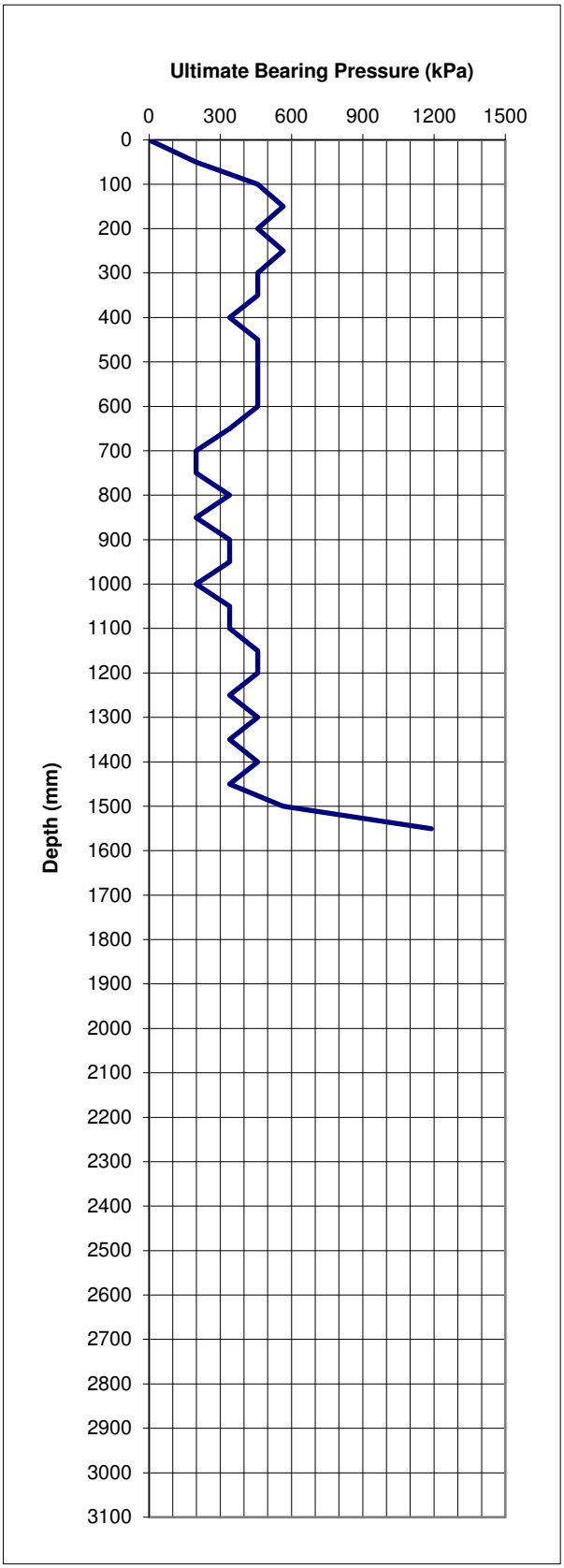
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT28
Date:	10/11/2022	Sheet:	28 of 40

PENETROMETER TEST RESULTS

Notes: Lot 130. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
1	50	**198**	50
3	17	**458**	100
4	13	**565**	150
3	17	**458**	200
4	13	**565**	250
3	17	**458**	300
3	17	**458**	350
2	25	**339**	400
3	17	**458**	450
3	17	**458**	500
3	17	**458**	550
3	17	**458**	600
2	25	**339**	650
1	50	**198**	700
1	50	**198**	750
2	25	**339**	800
1	50	**198**	850
2	25	**339**	900
2	25	**339**	950
1	50	**198**	1000
2	25	**339**	1050
2	25	**339**	1100
3	17	**458**	1150
3	17	**458**	1200
2	25	**339**	1250
3	17	**458**	1300
2	25	**339**	1350
3	17	**458**	1400
2	25	**339**	1450
4	13	**565**	1500
10	5	**1189**	1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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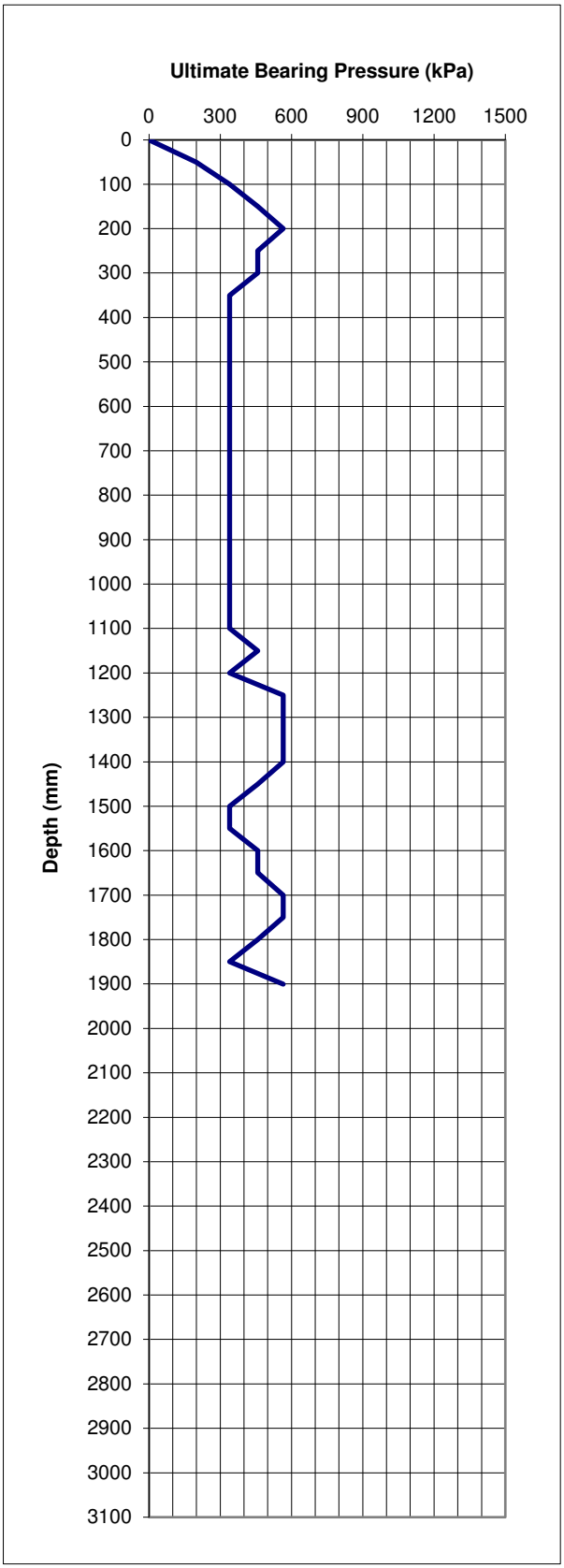
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT29
Date:	14/11/2022	Sheet:	29 of 40

PENETROMETER TEST RESULTS

Notes: Lot 131. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
1	50	**198**	50
2	25	**339**	100
3	17	**458**	150
4	13	**565**	200
3	17	**458**	250
3	17	**458**	300
2	25	**339**	350
2	25	**339**	400
2	25	**339**	450
2	25	**339**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
2	25	**339**	700
2	25	**339**	750
2	25	**339**	800
2	25	**339**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
2	25	**339**	1050
2	25	**339**	1100
3	17	**458**	1150
2	25	**339**	1200
4	13	**565**	1250
4	13	**565**	1300
4	13	**565**	1350
4	13	**565**	1400
3	17	**458**	1450
2	25	**339**	1500
2	25	**339**	1550
3	17	**458**	1600
3	17	**458**	1650
4	13	**565**	1700
4	13	**565**	1750
3	17	**458**	1800
2	25	**339**	1850
4	13	**565**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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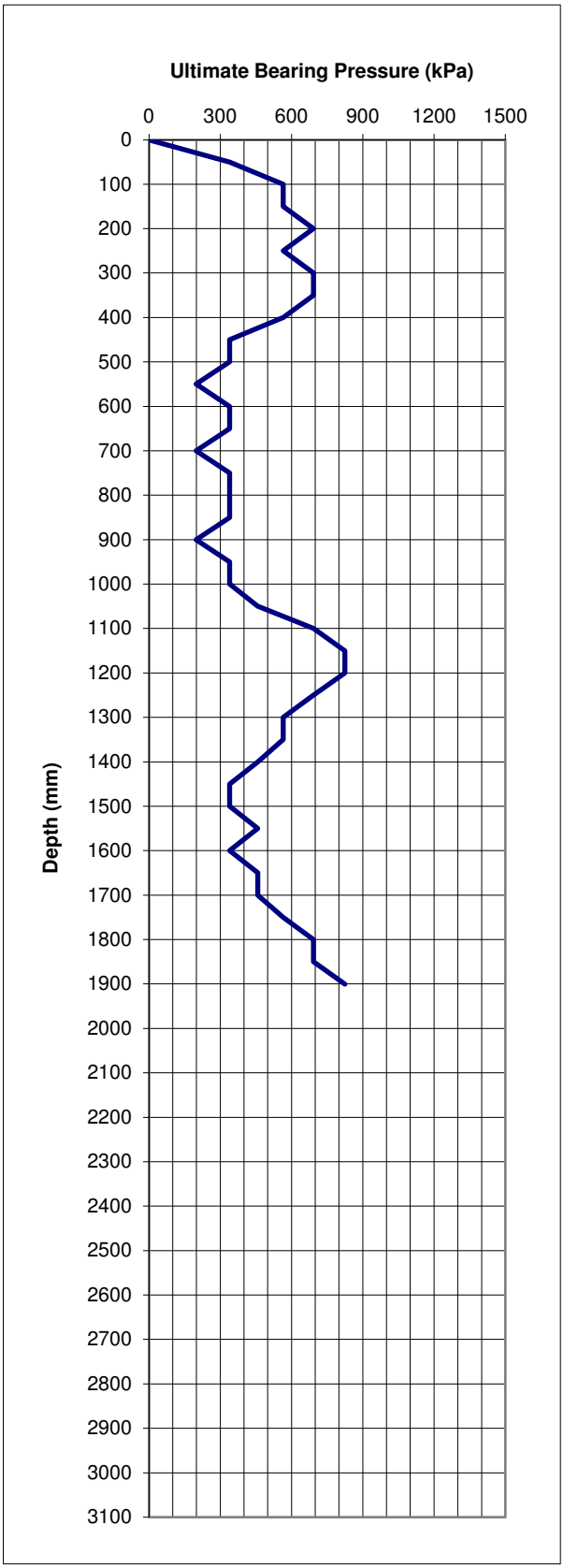
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT30
Date:	14/11/2022	Sheet:	30 of 40

PENETROMETER TEST RESULTS

Notes: Lot 131. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
4	13	**565**	100
4	13	**565**	150
5	10	**693**	200
4	13	**565**	250
5	10	**693**	300
5	10	**693**	350
4	13	**565**	400
2	25	**339**	450
2	25	**339**	500
1	50	**198**	550
2	25	**339**	600
2	25	**339**	650
1	50	**198**	700
2	25	**339**	750
2	25	**339**	800
2	25	**339**	850
1	50	**198**	900
2	25	**339**	950
2	25	**339**	1000
3	17	**458**	1050
5	10	**693**	1100
6	8	**824**	1150
6	8	**824**	1200
5	10	**693**	1250
4	13	**565**	1300
4	13	**565**	1350
3	17	**458**	1400
2	25	**339**	1450
2	25	**339**	1500
3	17	**458**	1550
2	25	**339**	1600
3	17	**458**	1650
3	17	**458**	1700
4	13	**565**	1750
5	10	**693**	1800
5	10	**693**	1850
6	8	**824**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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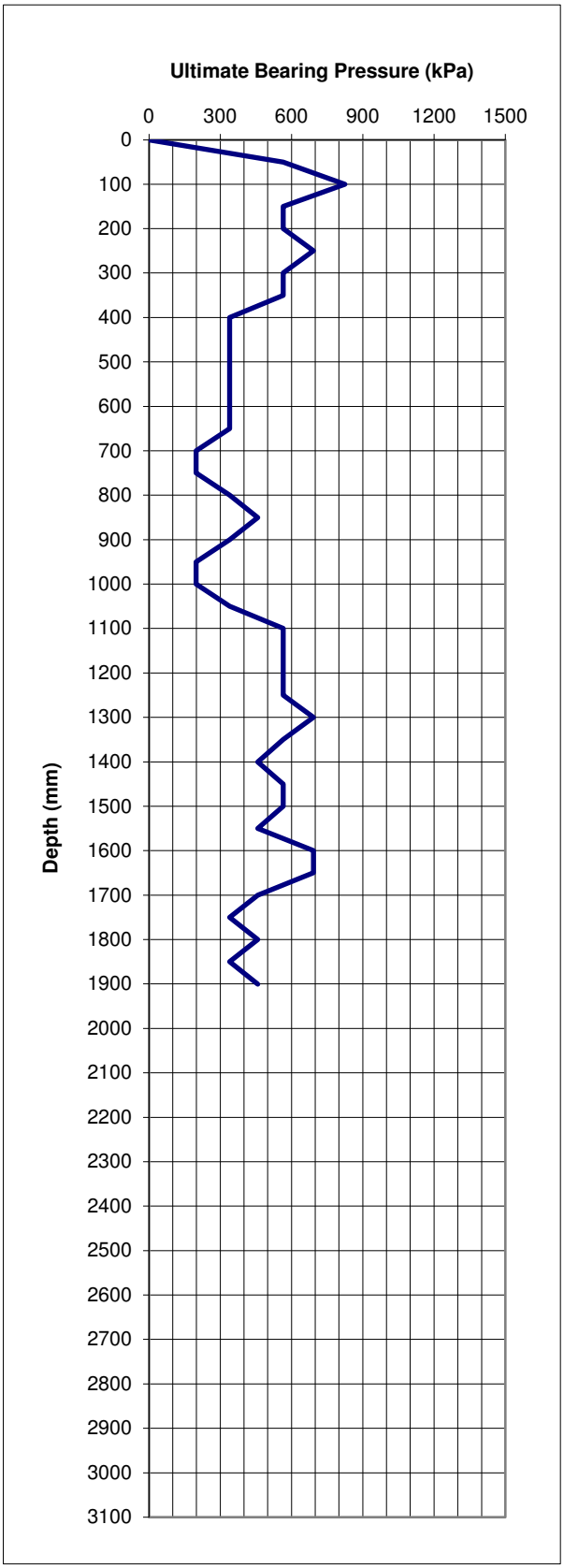
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT31
Date:	14/11/2022	Sheet:	31 of 40

PENETROMETER TEST RESULTS

Notes: Lot 131. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
4	13	**565**	50
6	8	**824**	100
4	13	**565**	150
4	13	**565**	200
5	10	**693**	250
4	13	**565**	300
4	13	**565**	350
2	25	**339**	400
2	25	**339**	450
2	25	**339**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
1	50	**198**	700
1	50	**198**	750
2	25	**339**	800
3	17	**458**	850
2	25	**339**	900
1	50	**198**	950
1	50	**198**	1000
2	25	**339**	1050
4	13	**565**	1100
4	13	**565**	1150
4	13	**565**	1200
4	13	**565**	1250
5	10	**693**	1300
4	13	**565**	1350
3	17	**458**	1400
4	13	**565**	1450
4	13	**565**	1500
3	17	**458**	1550
5	10	**693**	1600
5	10	**693**	1650
3	17	**458**	1700
2	25	**339**	1750
3	17	**458**	1800
2	25	**339**	1850
3	17	**458**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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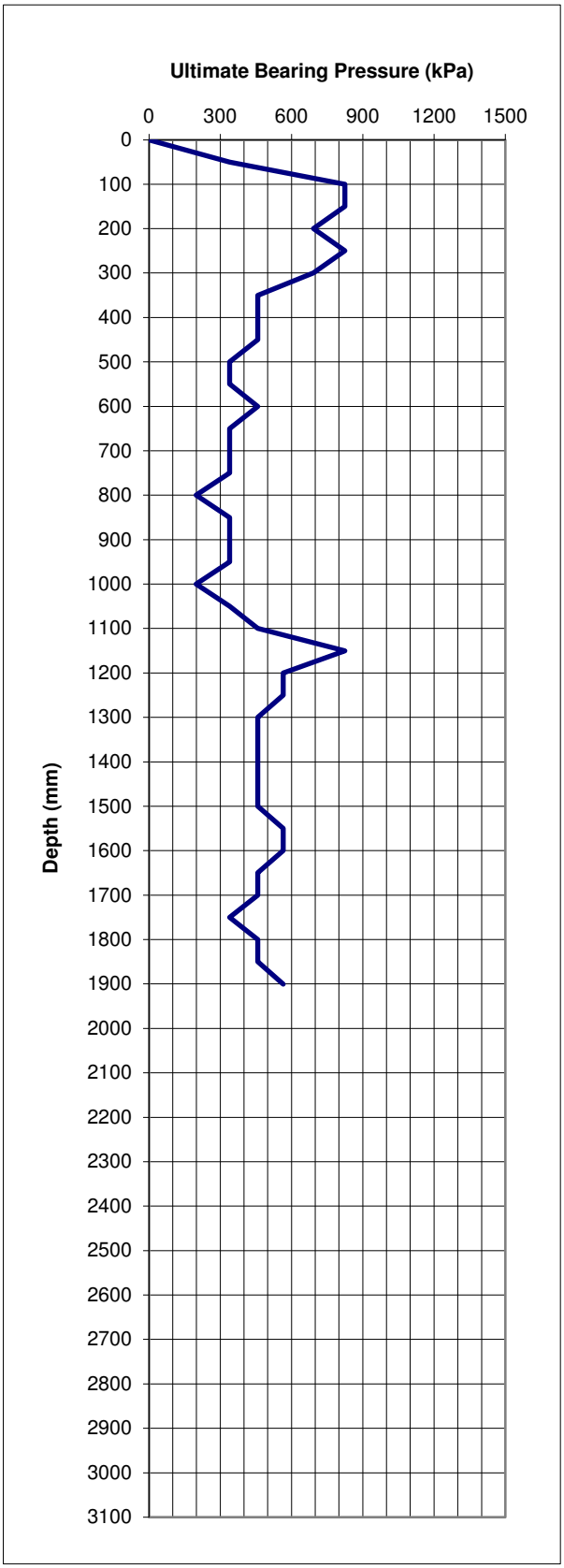
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT32
Date:	14/11/2022	Sheet:	32 of 40

PENETROMETER TEST RESULTS

Notes: Lot 131. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
6	8	**824**	100
6	8	**824**	150
5	10	**693**	200
6	8	**824**	250
5	10	**693**	300
3	17	**458**	350
3	17	**458**	400
3	17	**458**	450
2	25	**339**	500
2	25	**339**	550
3	17	**458**	600
2	25	**339**	650
2	25	**339**	700
2	25	**339**	750
1	50	**198**	800
2	25	**339**	850
2	25	**339**	900
2	25	**339**	950
1	50	**198**	1000
2	25	**339**	1050
3	17	**458**	1100
6	8	**824**	1150
4	13	**565**	1200
4	13	**565**	1250
3	17	**458**	1300
3	17	**458**	1350
3	17	**458**	1400
3	17	**458**	1450
3	17	**458**	1500
4	13	**565**	1550
4	13	**565**	1600
3	17	**458**	1650
3	17	**458**	1700
2	25	**339**	1750
3	17	**458**	1800
3	17	**458**	1850
4	13	**565**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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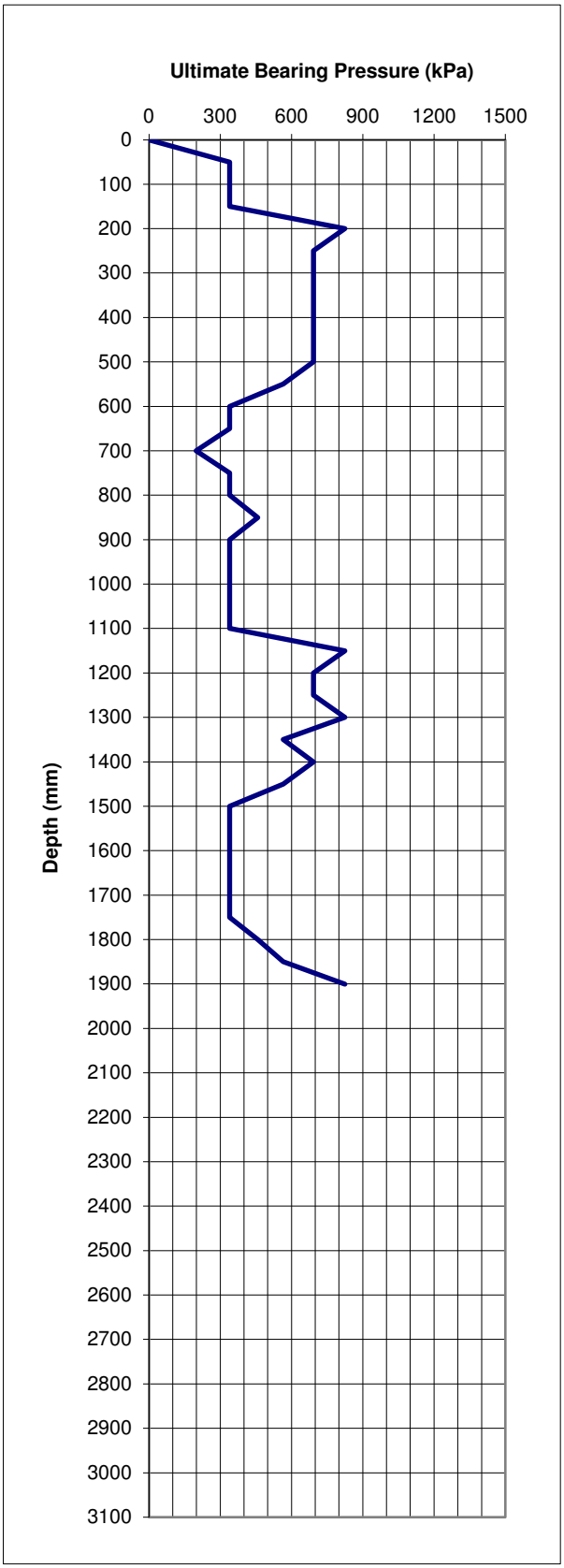
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT33
Date:	14/11/2022	Sheet:	33 of 40

PENETROMETER TEST RESULTS

Notes: Lot 132. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
2	25	**339**	100
2	25	**339**	150
6	8	**824**	200
5	10	**693**	250
5	10	**693**	300
5	10	**693**	350
5	10	**693**	400
5	10	**693**	450
5	10	**693**	500
4	13	**565**	550
2	25	**339**	600
2	25	**339**	650
1	50	**198**	700
2	25	**339**	750
2	25	**339**	800
3	17	**458**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
2	25	**339**	1050
2	25	**339**	1100
6	8	**824**	1150
5	10	**693**	1200
5	10	**693**	1250
6	8	**824**	1300
4	13	**565**	1350
5	10	**693**	1400
4	13	**565**	1450
2	25	**339**	1500
2	25	**339**	1550
2	25	**339**	1600
2	25	**339**	1650
2	25	**339**	1700
2	25	**339**	1750
3	17	**458**	1800
4	13	**565**	1850
6	8	**824**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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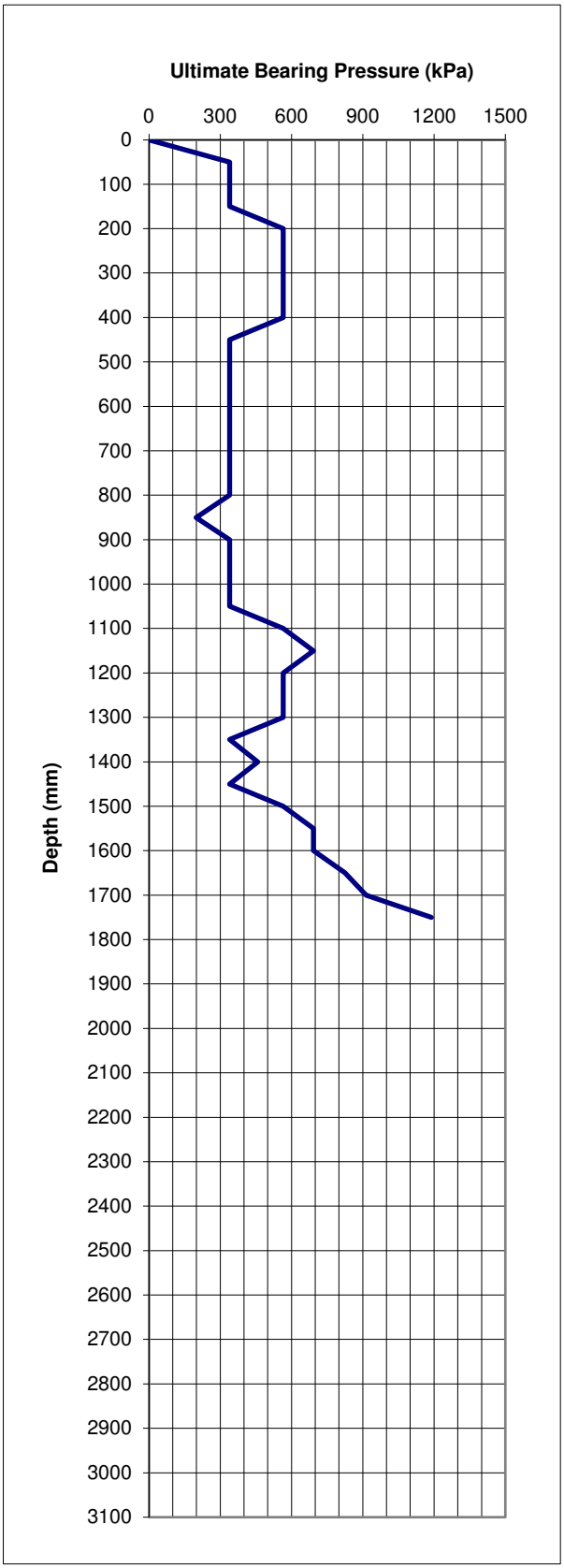
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT34
Date:	14/11/2022	Sheet:	34 of 40

PENETROMETER TEST RESULTS

Notes: Lot 132. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
2	25	**339**	100
2	25	**339**	150
4	13	**565**	200
4	13	**565**	250
4	13	**565**	300
4	13	**565**	350
4	13	**565**	400
2	25	**339**	450
2	25	**339**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
2	25	**339**	700
2	25	**339**	750
2	25	**339**	800
1	50	**198**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
2	25	**339**	1050
4	13	**565**	1100
5	10	**693**	1150
4	13	**565**	1200
4	13	**565**	1250
4	13	**565**	1300
2	25	**339**	1350
3	17	**458**	1400
2	25	**339**	1450
4	13	**565**	1500
5	10	**693**	1550
5	10	**693**	1600
6	8	**824**	1650
7	7	**915**	1700
10	5	**1189**	1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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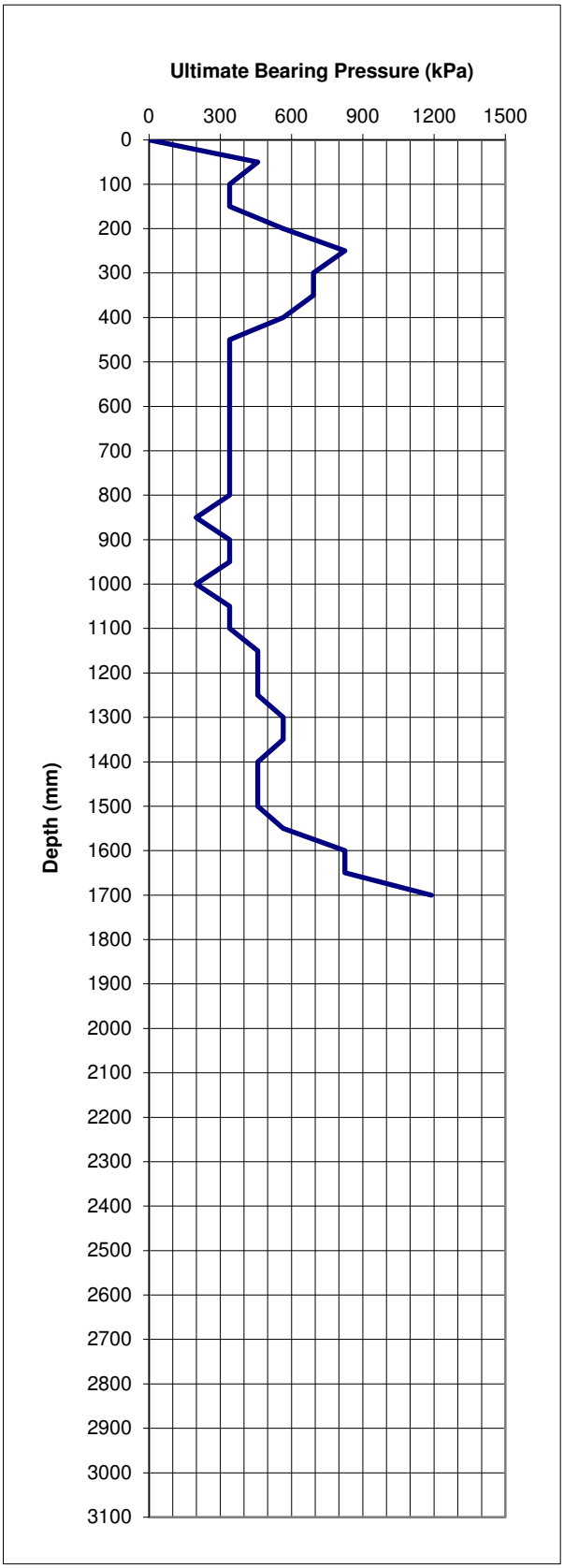
Project:	**Rose Manor Stage 9A**		
Client:	**Deluxe Property Group Ltd**		
Ref:	**7756**	**Eng:**	**BS**
Penetrometer Test Number:			**PT35**
Date:	**14/11/2022**	**Sheet:**	**35 of 40**

PENETROMETER TEST RESULTS

Notes: Lot 132. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
3	17	**458**	50
2	25	**339**	100
2	25	**339**	150
4	13	**565**	200
6	8	**824**	250
5	10	**693**	300
5	10	**693**	350
4	13	**565**	400
2	25	**339**	450
2	25	**339**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
2	25	**339**	700
2	25	**339**	750
2	25	**339**	800
1	50	**198**	850
2	25	**339**	900
2	25	**339**	950
1	50	**198**	1000
2	25	**339**	1050
2	25	**339**	1100
3	17	**458**	1150
3	17	**458**	1200
3	17	**458**	1250
4	13	**565**	1300
4	13	**565**	1350
3	17	**458**	1400
3	17	**458**	1450
3	17	**458**	1500
4	13	**565**	1550
6	8	**824**	1600
6	8	**824**	1650
10	5	**1189**	1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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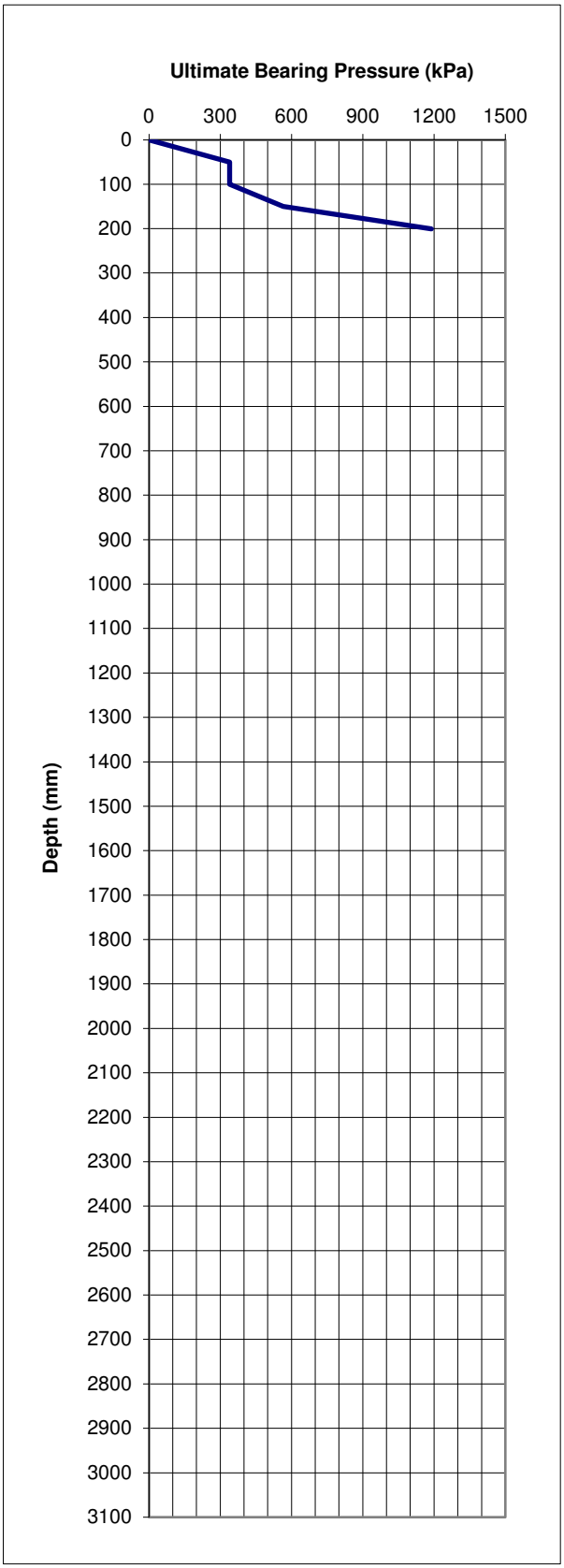
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT36
Date:	14/11/2022	Sheet:	36 of 40

PENETROMETER TEST RESULTS

Notes: Lot 132. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
2	25	**339**	100
4	13	**565**	150
10	5	**1189**	200
			250
			300
			350
			400
			450
			500
			550
			600
			650
			700
			750
			800
			850
			900
			950
			1000
			1050
			1100
			1150
			1200
			1250
			1300
			1350
			1400
			1450
			1500
			1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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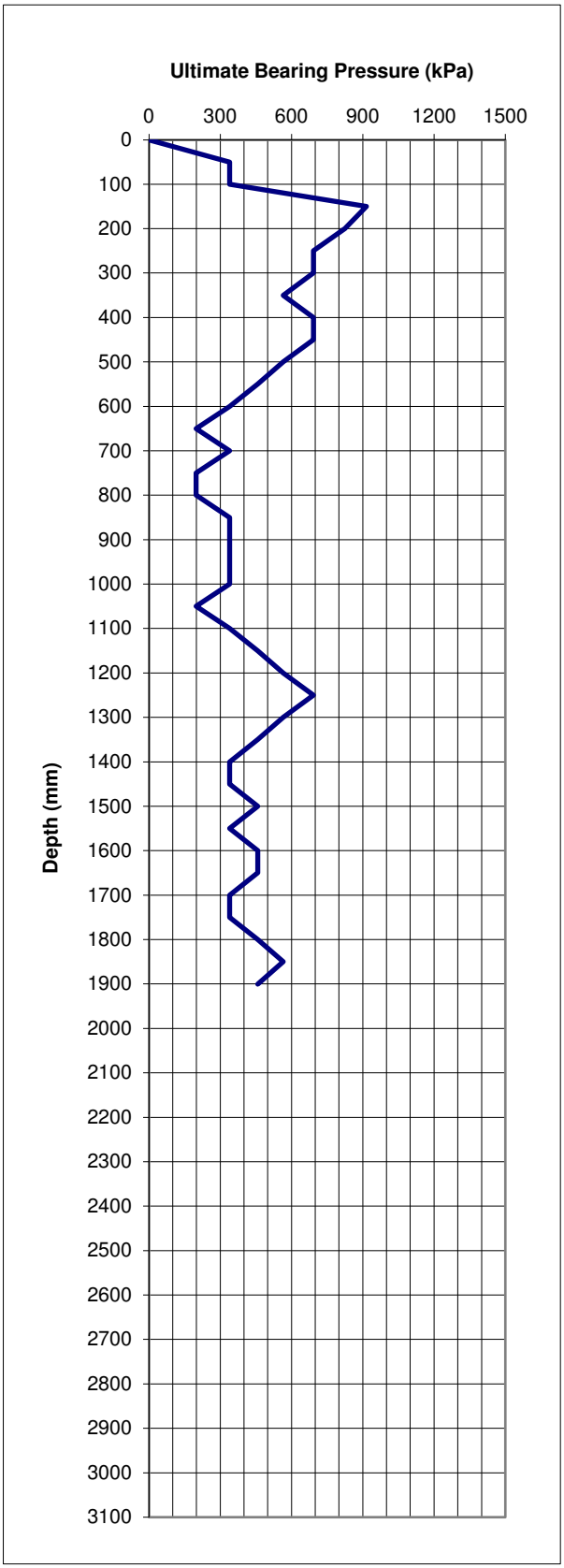
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT37
Date:	14/11/2022	Sheet:	37 of 40

PENETROMETER TEST RESULTS

Notes: Lot 133. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
2	25	**339**	100
7	7	**915**	150
6	8	**824**	200
5	10	**693**	250
5	10	**693**	300
4	13	**565**	350
5	10	**693**	400
5	10	**693**	450
4	13	**565**	500
3	17	**458**	550
2	25	**339**	600
1	50	**198**	650
2	25	**339**	700
1	50	**198**	750
1	50	**198**	800
2	25	**339**	850
2	25	**339**	900
2	25	**339**	950
2	25	**339**	1000
1	50	**198**	1050
2	25	**339**	1100
3	17	**458**	1150
4	13	**565**	1200
5	10	**693**	1250
4	13	**565**	1300
3	17	**458**	1350
2	25	**339**	1400
2	25	**339**	1450
3	17	**458**	1500
2	25	**339**	1550
3	17	**458**	1600
3	17	**458**	1650
2	25	**339**	1700
2	25	**339**	1750
3	17	**458**	1800
4	13	**565**	1850
3	17	**458**	1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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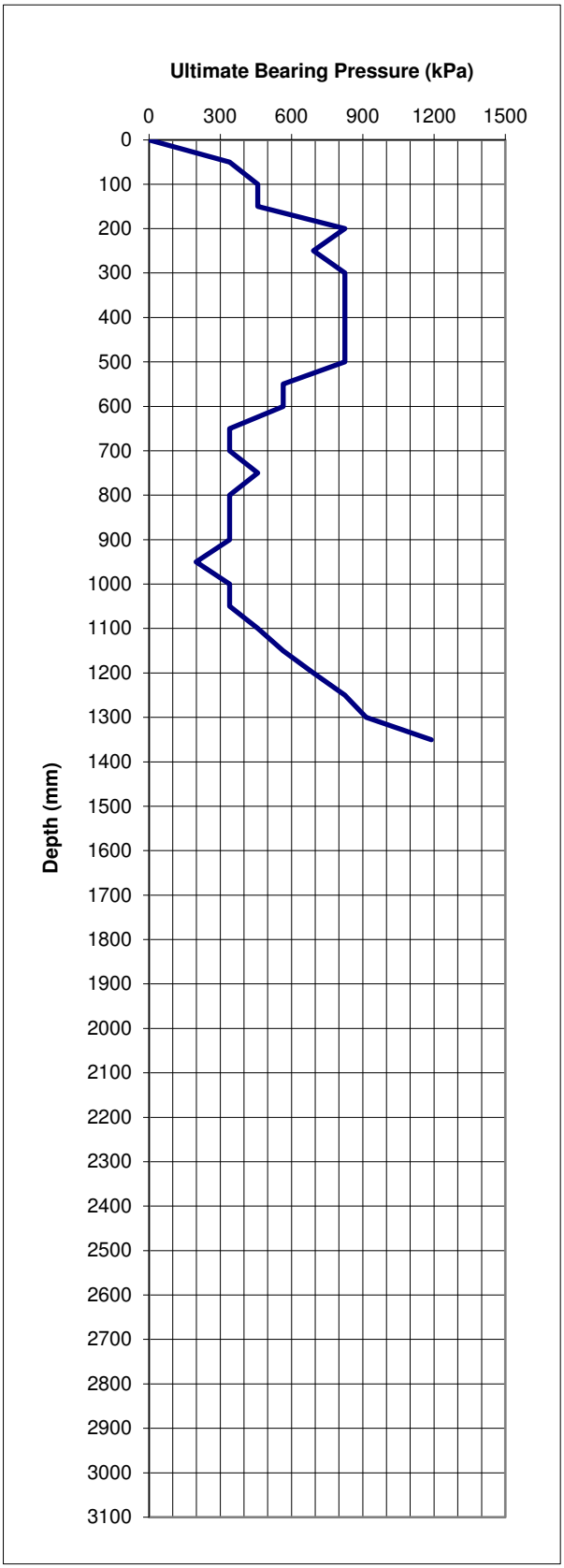
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT38
Date:	14/11/2022	Sheet:	38 of 40

PENETROMETER TEST RESULTS

Notes: Lot 133. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
3	17	**458**	100
3	17	**458**	150
6	8	**824**	200
5	10	**693**	250
6	8	**824**	300
6	8	**824**	350
6	8	**824**	400
6	8	**824**	450
6	8	**824**	500
4	13	**565**	550
4	13	**565**	600
2	25	**339**	650
2	25	**339**	700
3	17	**458**	750
2	25	**339**	800
2	25	**339**	850
2	25	**339**	900
1	50	**198**	950
2	25	**339**	1000
2	25	**339**	1050
3	17	**458**	1100
4	13	**565**	1150
5	10	**693**	1200
6	8	**824**	1250
7	7	**915**	1300
10	5	**1189**	1350
			1400
			1450
			1500
			1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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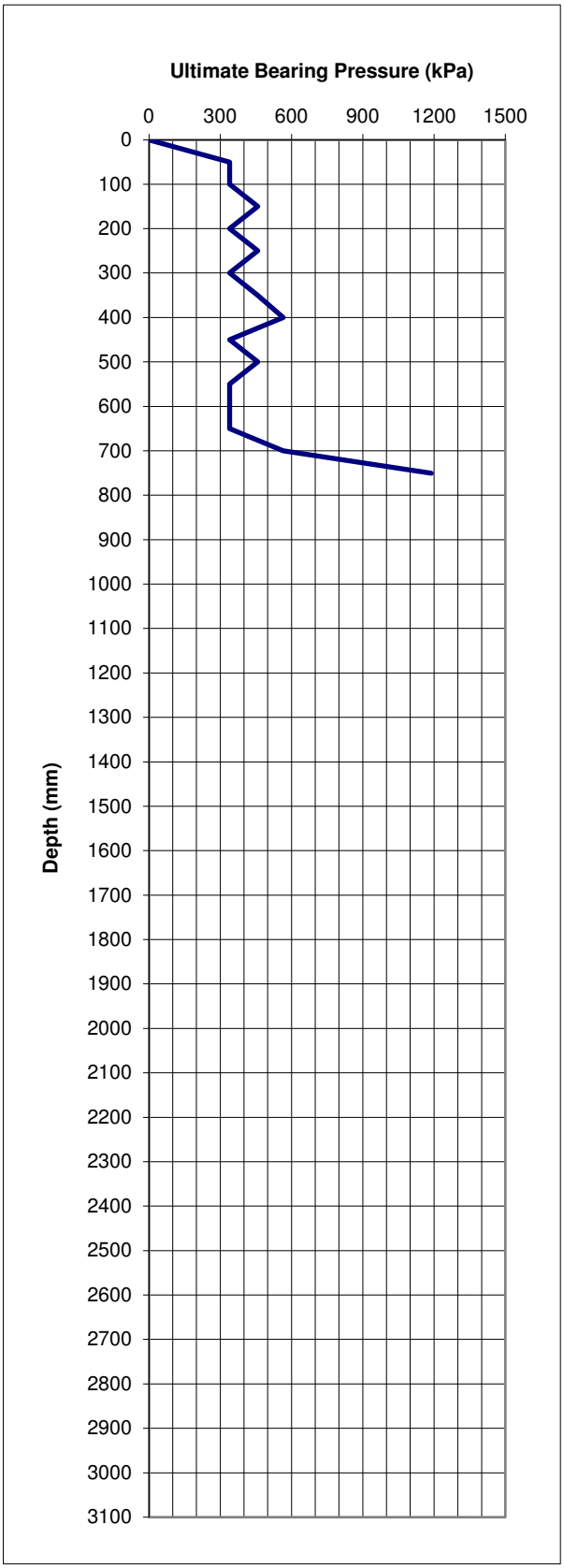
Project:	Rose Manor Stage 9A		
Client:	Deluxe Property Group Ltd		
Ref:	7756	Eng:	BS
Penetrometer Test Number:			PT39
Date:	14/11/2022	Sheet:	39 of 40

PENETROMETER TEST RESULTS

Notes: Lot 133. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
2	25	**339**	50
2	25	**339**	100
3	17	**458**	150
2	25	**339**	200
3	17	**458**	250
2	25	**339**	300
3	17	**458**	350
4	13	**565**	400
2	25	**339**	450
3	17	**458**	500
2	25	**339**	550
2	25	**339**	600
2	25	**339**	650
4	13	**565**	700
10	5	**1189**	750
			800
			850
			900
			950
			1000
			1050
			1100
			1150
			1200
			1250
			1300
			1350
			1400
			1450
			1500
			1550
			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100



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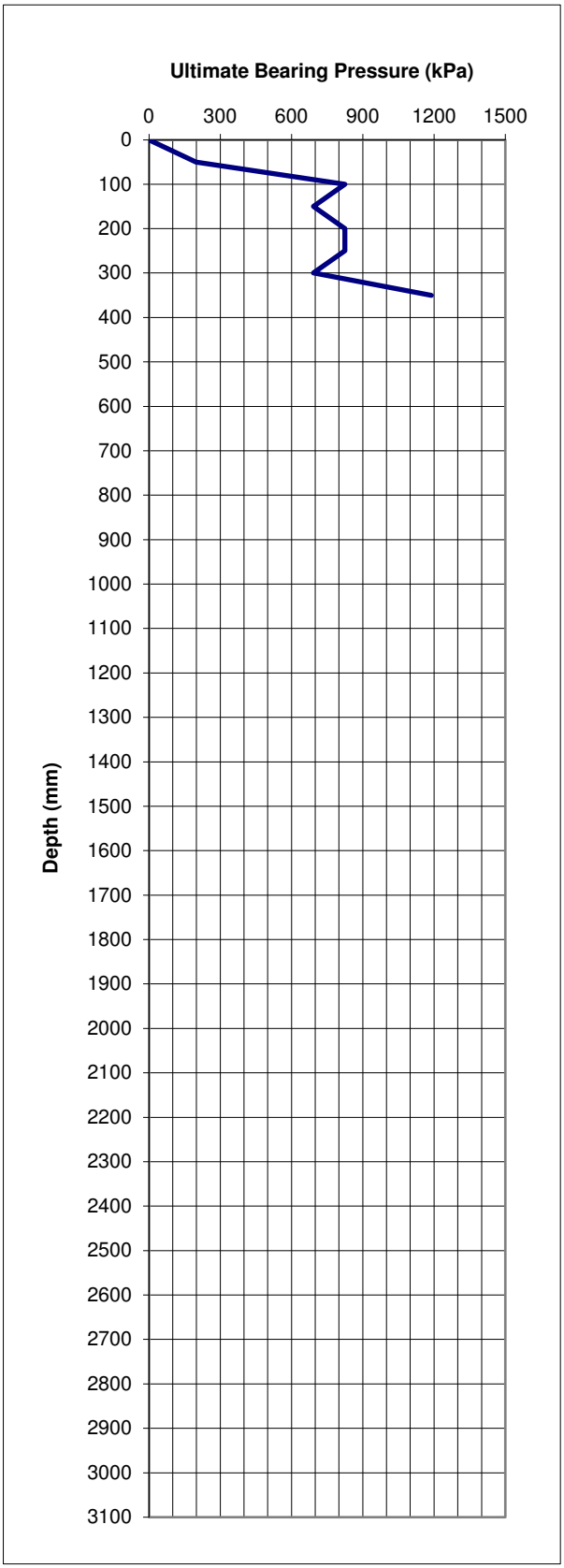
Project:	**Rose Manor Stage 9A**		
Client:	**Deluxe Property Group Ltd**		
Ref:	**7756**	**Eng:**	**BS**
Penetrometer Test Number:			**PT40**
Date:	**14/11/2022**	**Sheet:**	**40 of 40**

PENETROMETER TEST RESULTS

Notes: Lot 133. No groundwater encountered. Stockwell Method 1977 used to determine Ultimate Bearing Capacity - Allowable Bearing Capacity with a factor of safety of 3 applied.

No. of Blows	e (mm/blow)	Soil bearing resistance (kPa)	Depth (mm)
0	0	**0**	0
1	50	**198**	50
6	8	**824**	100
5	10	**693**	150
6	8	**824**	200
6	8	**824**	250
5	10	**693**	300
10	5	**1189**	350
			400
			450
			500
			550
			600
			650
			700
			750
			800
			850
			900
			950
			1000
			1050
			1100
			1150
			1200
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			1600
			1650
			1700
			1750
			1800
			1850
			1900
			1950
			2000
			2050
			2100
			2150
			2200
			2250
			2300
			2350
			2400
			2450
			2500
			2550
			2600
			2650
			2700
			2750
			2800
			2850
			2900
			2950
			3000
			3050
			3100