

Project:
Sample project

Job No. :
123456

Location:
Sample location

Client:
Sample Client

Borehole:
BH1

Soil Type:
Coarse and Fine

Parameter:
Allowable Bearing Capacity (kPa)

Reference	Note	N	N60	(N1)60	Effective stress (kPa)	Depth (m)	Value	Formula
Meyerhof Method	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 25 CW1 = 0.77 CW2 = 1.00	34	22	37	4.95	0.30	379.5288	$Q_a(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 23 CW1 = 0.70 CW2 = 1.00	12	8	14	10.06	0.61	398.9328	$Q_a(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 24 CW1 = 0.63 CW2 = 1.00	18	12	20	15.02	0.91	466.5325	$Q_a(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 24 CW1 = 0.56 CW2 = 1.00	26	17	29	20.13	1.22	518.4625	$Q_a(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 23 CW1 = 0.50 CW2 = 0.99	23	16	27	24.88	1.52	544.2181	$Q_a(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$

Reference	Note	N	N60	(N1)60	Effective stress (kPa)	Depth (m)	Value	Formula
Meyerhof Method	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 23 CW1 = 0.50 CW2 = 0.91	25	17	29	26.96	1.83	581.5428	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 23 CW1 = 0.50 CW2 = 0.85	39	27	46	28.97	2.13	617.6635	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 20 CW1 = 0.50 CW2 = 0.81	22	15	25	31.05	2.44	569.5549	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 19 CW1 = 0.50 CW2 = 0.77	21	16	26	33.06	2.74	570.9160	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 20 CW1 = 0.50 CW2 = 0.75	17	13	21	35.24	3.05	633.4205	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 19 CW1 = 0.50 CW2 = 0.72	18	13	20	37.92	3.35	631.5883	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$

Reference	Note	N	N60	(N1)60	Effective stress (kPa)	Depth (m)	Value	Formula
Meyerhof Method	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 20 CW1 = 0.50 CW2 = 0.70	20	15	23	40.67	3.66	697.2860	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 21 CW1 = 0.50 CW2 = 0.69	19	14	21	43.34	3.96	765.1301	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 21 CW1 = 0.50 CW2 = 0.68	25	19	28	46.10	4.27	799.2091	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 20 CW1 = 0.50 CW2 = 0.66	16	13	18	50.82	4.80	816.6413	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 21 CW1 = 0.50 CW2 = 0.65	22	18	25	52.60	5.00	879.4598	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 20 CW1 = 0.50 CW2 = 0.63	16	13	17	57.94	5.60	900.3994	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$

Reference	Note	N	N60	(N1)60	Effective stress (kPa)	Depth (m)	Value	Formula
Meyerhof Method	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 18 CW1 = 0.50 CW2 = 0.63	26	22	28	61.02	6.00	848.0506	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 16 CW1 = 0.50 CW2 = 0.61	21	17	21	67.18	6.80	820.8292	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 14 CW1 = 0.50 CW2 = 0.60	15	12	14	73.62	7.50	769.5274	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 14 CW1 = 0.50 CW2 = 0.59	11	9	10	80.45	8.11	814.2332	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
	Based on shear failure criteria (FS = 3) B(m) = 1.50 N = Average uncorrected spt blow count to 1.5B depth below footing N = 16 CW1 = 0.50 CW2 = 0.59	16	13	14	84.82	8.50	963.2179	$Qa(kPa) = 314.0928(NB/10(C_{u1} + C_{u2}D_f/B))/FS$
Anagnostopoulos et al. (1991)	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 23	34	22	37	4.95	0.30	817.7961	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$

Reference	Note	N	N60	(N1)60	Effective stress (kPa)	Depth (m)	Value	Formula
Anagnostopoulos et al. (1991)	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 21	12	8	14	10.06	0.61	721.3574	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 26	18	12	20	15.02	0.91	968.4721	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 27	26	17	29	20.13	1.22	1,020.2218	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 26	23	16	27	24.88	1.52	968.4721	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 25	25	17	29	26.96	1.83	917.4721	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 23	39	27	46	28.97	2.13	817.7961	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 20	22	15	25	31.05	2.44	674.4098	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$

Reference	Note	N	N60	(N1)60	Effective stress (kPa)	Depth (m)	Value	Formula
Anagnostopoulos et al. (1991)	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 19	21	16	26	33.06	2.74	628.3445	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 20	17	13	21	35.24	3.05	674.4098	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 20	18	13	20	37.92	3.35	674.4098	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 20	20	15	23	40.67	3.66	674.4098	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 20	19	14	21	43.34	3.96	674.4098	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 20	25	19	28	46.10	4.27	674.4098	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 20	16	13	18	50.82	4.80	674.4098	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$

Reference	Note	N	N60	(N1)60	Effective stress (kPa)	Depth (m)	Value	Formula
Anagnostopoulos et al. (1991)	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 21	22	18	25	52.60	5.00	721.3574	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 21	16	13	17	57.94	5.60	721.3574	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 21	26	22	28	61.02	6.00	721.3574	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 16	21	17	21	67.18	6.80	495.7411	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 14	15	12	14	73.62	7.50	412.3500	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 14	11	9	10	80.45	8.11	412.3500	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average uncorrected spt blow count to 1B depth below footing N = 16	16	13	14	84.82	8.50	495.7411	$Qa(kPa) = \left(\frac{SN^{1.2}}{2.37B^{0.7}} \right)^{1/0.87}$

Reference	Note	N	N60	(N1)60	Effective stress (kPa)	Depth (m)	Value	Formula
Burland and Burbidge (1985)	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 25	34	22	37	4.95	0.30	999.5698	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 24	12	8	14	10.06	0.61	944.0453	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 30	18	12	20	15.02	0.91	1,290.229 2	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 31	26	17	29	20.13	1.22	1,350.838 6	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 31	23	16	27	24.88	1.52	1,350.838 6	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 29	25	17	29	26.96	1.83	1,230.422 6	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$

Reference	Note	N	N60	(N1)60	Effective stress (kPa)	Depth (m)	Value	Formula
Burland and Burbidge (1985)	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 28	39	27	46	28.97	2.13	1,171.4354	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 23	22	15	25	31.05	2.44	889.4388	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 22	21	16	26	33.06	2.74	835.7740	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 23	17	13	21	35.24	3.05	889.4388	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 23	18	13	20	37.92	3.35	889.4388	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 23	20	15	23	40.67	3.66	889.4388	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$

Reference	Note	N	N60	(N1)60	Effective stress (kPa)	Depth (m)	Value	Formula
Burland and Burbidge (1985)	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 23	19	14	21	43.34	3.96	889.4388	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 22	25	19	28	46.10	4.27	835.7740	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 22	16	13	18	50.82	4.80	835.7740	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 23	22	18	25	52.60	5.00	889.4388	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 22	16	13	17	57.94	5.60	835.7740	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 24	26	22	28	61.02	6.00	944.0453	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$

Reference	Note	N	N60	(N1)60	Effective stress (kPa)	Depth (m)	Value	Formula
Burland and Burbidge (1985)	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 15	21	17	21	67.18	6.80	488.9054	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 13	15	12	14	73.62	7.50	400.1454	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 12	11	9	10	80.45	8.11	357.7263	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$
	Based on allowable settlement (25.00mm) B(m) = 1.50 N = Average corrected spt blow count to 1.4*Br* (B/Br)^0.75 depth below footing Br = 0.3m N = 14	16	13	14	84.82	8.50	443.8910	$Q_a(kPa) = \frac{SN^{1.4}}{1.706B^{0.7}}$

