

BORING NO. BH-1

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G.W.L: 4.60m below ERL

G.W Time: 8:30 AM

SAMPLE TYPE	SAMPLE No.	BLOWS/15cm.	BLOWS/15cm.	BLOWS/15cm.	N 30 VALUES	DEPTH METERS	SYMBOLS	DESCRIPTION
SPT	1	-	-	-	-	0.5		
SPT	2	14	12	15	27	1.0	SC-SM	Medium dense, silty clayey sand, fine to medium grained, traces of strong & weak-cementation particles, strong HCL reaction, light brown color, dry.
SPT	3	7	9	8	17	1.5		
SPT	4	5	6	5	11	2.0		
SPT	5	6	5	5	10	2.5		
SPT	6	4	4	5	9	3.0		Loose.
SPT	7	1	2	1	3	4.0		Very loose, more clay contains, moist.
SPT	8	4	5	9	14	5.0	SP-SM	Medium dense, poorly graded sand with silt, fine to medium grained, strong HCL-reaction, light brown color, wet.
SPT	9	9	29	50 for 13	79 for 28	6.0	SP	Medium dense, poorly graded sand, fine to medium grained, strong HCL reaction, light brown color.
SPT	10	-	-	-	-	7.0		END OF BOREHOLE
SPT	11	-	-	-	-	8.0		
SPT	12	-	-	-	-	9.0		
SPT	13	-	-	-	-	10.0		

- 1 The Level of Ground Water (G.W.L) recorded at specified time shall be considered approximate only, due to variation of water Level upto 3m (low tide and high tide) as per Kuwait Ports Authority -Tide Tables and refer to MPW - General Notes attached Plate: 4 (Item 1.5).
- 2 All depth measurement are from the nearest road level. (ERL : Existing Road Level)
- 3 E.G.L = Existing Ground Level
- 4 G.W.L = Ground Water Level
- 5 B.G.L = Below Ground Level
- 6 N.G.L = Natural Ground Level
- 7 N.A = Not Available
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- 9 Due to the presence of cohesionless soil (SP, SP-SM) in BH 1, it is the responsibility of the Designer to ensure if the existing foundation is suitable for unstable or collapsible soil (SP, SP-SM), taking into consideration the note mentioned in the General Notes (Plate 4, Item 3.2)

Allowable Bearing Capacity (qall) Table

Depth (m)	N 30 Values	qall (Kg/cm ²)		
		Footing width (m)		
		1.5	2.0	3.0
0.5	-	-	-	-
1.0	27	3.0	2.8	2.6
1.5	17	1.8	1.6	1.5
2.0	11	1.1	1.0	0.9
2.5	10	1.0	0.9	0.8
3.0	9	0.9	0.8	0.7
4.0	3	-	-	-
5.0	14	1.5	1.3	1.2
6.0	79for28	3.0	3.0	3.0
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

SAMPLE TYPE	SAMPLE No.	BLOWS/15cm	BLOWS/15cm	BLOWS/15cm	N 30 VALUES	DEPTH METERS	BORING NO. BH-2		Page	1/1
							Elevation: ERL			
							SYMBOLS		DESCRIPTION	
SPT	1	-	-	-	-	0.5				
SPT	2	5	6	5	11	1.0	SC-SM	Medium dense, silty clayey sand, fine to medium grained, traces of strong & weak cementation particles, strong HCL reaction, light brown color, dry.		
SPT	3	4	5	5	10	1.5				
SPT	4	3	6	7	13	2.0				
SPT	5	4	4	5	9	2.5		Loose.		
SPT	6	5	7	7	14	3.0		Medium dense, more clay contains.		
SPT	7	6	8	10	18	4.0		Light reddish brown color, moist.		
						4.50	GWL			
SPT	8	7	9	12	21	5.0	SP-SM	Medium dense, poorly graded sand with silt, fine to medium grained, weak HCL-reaction, light reddish brown color, wet.		
SPT	9	10	17	28	45	6.0		Dense, strong HCL reaction, light brown color.		
SPT	10	-	-	-	-	7.0			END OF BOREHOLE	
SPT	11	-	-	-	-	8.0				
SPT	12	-	-	-	-	9.0				
SPT	13	-	-	-	-	10.0				

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- All depth measurement are from the nearest road level. (ERL : Existing Road Level)
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- Due to the presence of cohesionless soil (SP, SP-SM) in BH 1, it is the responsibility of the Designer to ensure if the existing foundation is suitable for unstable or collapsible soil (SP, SP-SM), taking into

Depth (m)	N 30 Values	qall (Kg/cm ²)		
		Footing width (m)		
		1.5	2.0	3.0
0.5	-	-	-	-
1.0	11	1.1	1.0	0.9
1.5	10	1.0	0.9	0.8
2.0	13	1.4	1.2	1.1
2.5	9	0.9	0.8	0.7
3.0	14	1.5	1.3	1.2
4.0	18	1.9	1.8	1.6
5.0	21	2.2	2.1	1.9
6.0	45	3.0	3.0	3.0
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

SAMPLE TYPE	SAMPLE No.	BLOWS/15cm.	BLOWS/15cm.	BLOWS/15cm.	N 30 VALUES	DEPTH METERS	BORING NO. BH-3		Page	1/1	
							Date: November 30, 2022	Drilling (6m)	CO-ORDINATES		
							Elevation: ERL				
							G.W.L: 4.40m below ERL				
							G.W Time: 11:50 AM				
							SYMBOLS	DESCRIPTION			
SPT	1	-	-	-	-	0.5					
SPT	2	8	7	8	15	1.0	SC-SM	Medium dense, silty clayey sand, fine to medium grained, traces of strong & weak - cementation particles, strong HCL reaction, light brown color, dry.			
SPT	3	5	6	6	12	1.5					
SPT	4	3	3	4	7	2.0		Loose.			
SPT	5	4	5	6	11	2.5		Medium dense.			
SPT	6	5	6	7	13	3.0		More clay contains.			
SPT	7	1	1	1	2	4.0		Very loose, moist.			
SPT	8	3	3	5	8	5.0		Loose, pale grayish brown color, wet.			
SPT	9	2	2	3	5	6.0		Less clay contains.			
SPT	10	-	-	-	-	7.0		END OF BOREHOLE			
SPT	11	-	-	-	-	8.0					
SPT	12	-	-	-	-	9.0					
SPT	13	-	-	-	-	10.0					

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Allowable Bearing Capacity (qall) Table				
Depth (m)	N 30 Values	qall (Kq/cm ²)		
		Footing width (m)		
		1.5	2.0	3.0
0.5	-	-	-	-
1.0	15	1.6	1.4	1.3
1.5	12	1.2	1.1	1.0
2.0	7	0.7	0.6	0.5
2.5	11	1.1	1.0	0.9
3.0	13	1.4	1.2	1.1
4.0	2	-	-	-
5.0	8	0.8	0.7	0.6
6.0	5	0.4	0.3	0.3
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

SAMPLE TYPE	SAMPLE No.	BLOWS/15cm.	BLOWS/15cm.	BLOWS/15cm.	N 30 VALUES	DEPTH METERS	BORING NO. BH-4		Page	1/1
							Date: November 30, 2022	Drilling (6m)	CO-ORDINATES	
							Elevation: ERL			
							G.W.L: 5.20m below ERL			
							G.W Time: 1:30 PM			
							SYMBOLS	DESCRIPTION		
SPT	1	-	-	-	-	0.5				
SPT	2	10	11	10	21	1.0	SC-SM	Medium dense, silty clayey sand, fine to medium grained, traces of strong & weak cementation particles, strong HCL reaction, light brown color, dry.		
SPT	3	8	7	8	15	1.5				
SPT	4	5	6	4	10	2.0				
SPT	5	4	5	7	12	2.5				
SPT	6	3	4	5	9	3.0		Loose.		
SPT	7	1	1	1	2	4.0		Very loose, moist.		
SPT	8	3	2	2	4	5.0		Light brownish gray color, wet.		
SPT	9	1	2	1	3	6.0		Light brown color.		
SPT	10	-	-	-	-	7.0		END OF BOREHOLE		
SPT	11	-	-	-	-	8.0				
SPT	12	-	-	-	-	9.0				
SPT	13	-	-	-	-	10.0				

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Depth (m)	N 30 Values	qall (Kg/cm ²)		
		Footing width (m)		
		1.5	2.0	3.0
0.5	-	-	-	-
1.0	21	2.2	2.1	1.9
1.5	15	1.6	1.4	1.3
2.0	10	1.0	0.9	0.8
2.5	12	1.2	1.1	1.0
3.0	9	0.9	0.8	0.7
4.0	2	-	-	-
5.0	4	-	-	-
6.0	3	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-