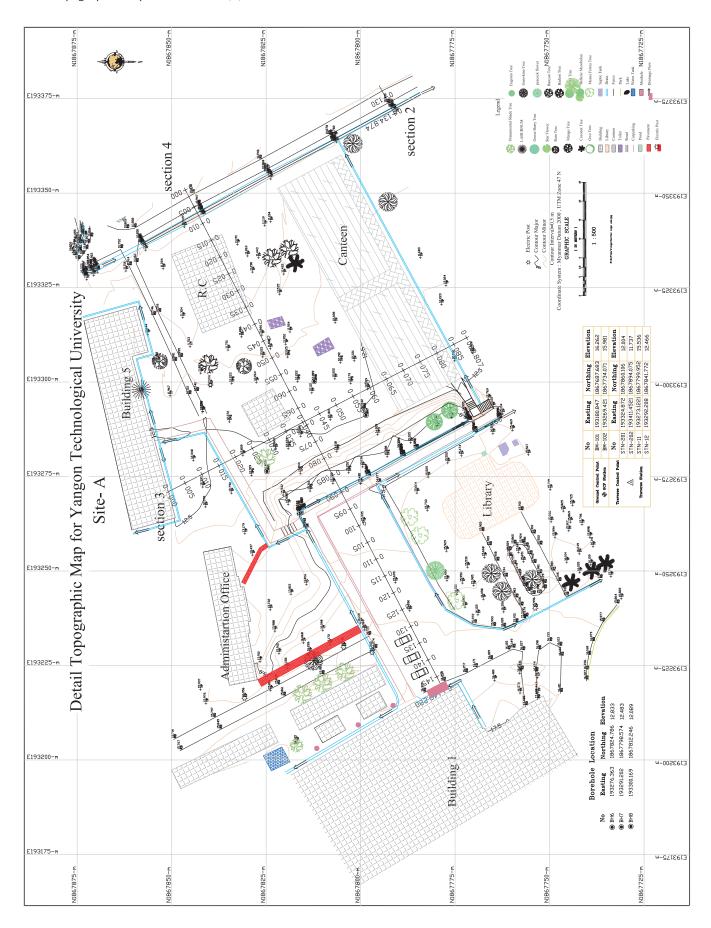
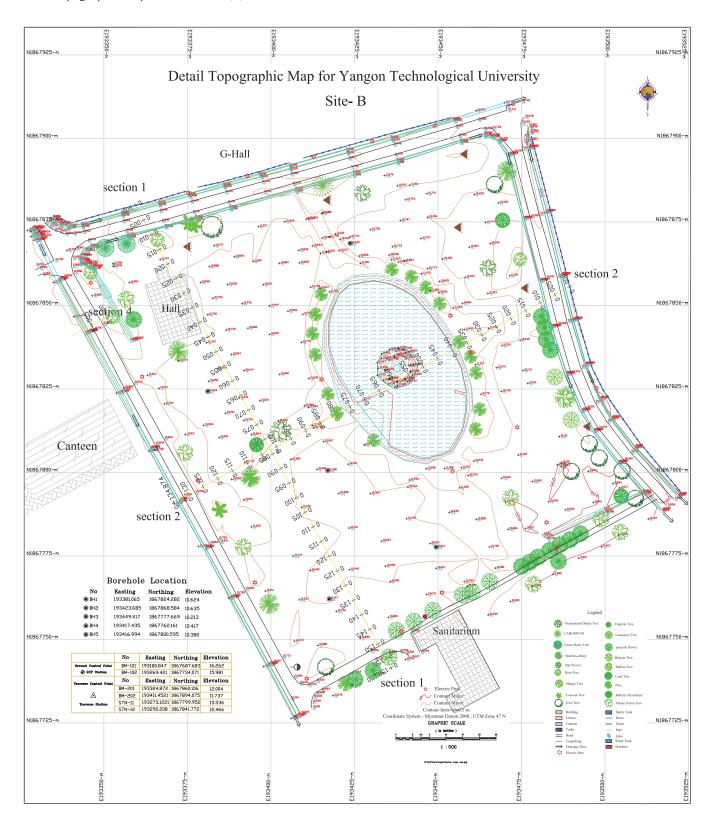
Appendix 5. Other Relevant Data

No.	Name of Document	Туре	Original Copy	Issued by	Date
1	Organization chart of MOST	Book	Copy	MOST	
2	National Comprehensive Development Plan Plans of Development Sector of Human Resource (2011-2012 to 2030-2031)	Book	Сору	MOST	2012
3	Annual budget plan of MOST, DUST, YTU, MTU (2011/12, 2012/13, 2013/14)	Book	Сору	MOST	
4	Outline of Myanmar Scientific and Technological Research Department	Book	Сору	MOST	2013
5	Technical and Vocational Education in Myanmar	Presentation	Сору	MOST	2013
6	No. of Universities under 12 Ministries in Myanmar	Book	Сору	МоЕ	2013
7	List of 168 Universities, Degree Colleges and Colleges under 12 Ministries in Myanmar	Book	Сору	МоЕ	2013
8	Implementation of Pragmatic Education Reform in the Higher Education Sector	Presentation	Сору	МоЕ	2013
9	Outline of Yangon Technological University	Presentation	Сору	YTU	2013
10	Outline of Mandalay Technological University	Presentation	Сору	MTU	2013
11	The National Comprehensive Development Plan (NCDP) draft preliminary plan	Presentation	Сору	Ministry of National Planning and Economic Development	2014



6-1. Topographic Map of the Site (2)



6-2. Boring Data of the Site

Location of Bore Hole (BH)

Soil Investigation work for Research Center Construction Project YTU Campus, Insein Township, Yangon Region.

2.3 Location of Boring Points

The locations, levels and coordinates of investigation points of boring points were designated by the client. The locations of boreholes are presented in Figure - 2.3.

BH5
BH3
BH3
BH1

BH1

BH3
BH1

Google earth

Figure - 2.3 : Plan Map of Investigation Boring Points

Table - 2.2: Coordinates of Borehole Points

BH No.	N	Е	Elevation
BH-1	16°52' 33.1"	96° 07' 09.2"	natural GL
BH-2	16°52' 35.0"	96° 07' 07.9"	natural GL
BH-3	16°52' 34.3"	96° 07' 09.1"	natural GL
BH-4	16°52' 33.8"	96° 07' 10.2"	natural GL
BH-5	16°52' 36.5"	96° 07' 09.3"	natural GL
BH-6	16°52' 34.9"	96° 07' 04.5"	natural GL
BH-7	16°52' 34.2"	96° 07' 04.8"	natural GL
BH-8	16°52' 34.7"	96° 07' 05.1"	natural GL

(1) Soil Profile of BH-1

во	RE H	OLE N	о. В	H - 1			<u>B</u> C	RING LOG (FOR DESIG	N PAR	AME	TEI	RS	CON	SIDEF	RAT	ION)			She	eet No.	1 0	0F 1
1		NAME	_				TU Resear	ch Centre	BORING I				: <u>TOH</u>				DATE		12/13 ~ 2			-
1	CATIO	N LEVEL					ip, Yangon		BORING N ORIENTA		D			Drilling N		CLIENT	LOGGED B	Y : <u>Z</u>	in Lin Cl	10		
1	ORDIN				round level 1", E: 96° 07		DEPTH :	20.45 m	GROUND		LEVE	EL	: <u>Vertic</u>	n from GL	-	lr	item Con	sulting	lnc			
Н										1 .	_			TANDARD	PENETI	RATION 1	TEST			PLING		Н
	e l		6			NSITY				H(m)	DIAMETER (mm))	H(m)	_	TEST ME		E OF BLO	-	Г			\top	┨
î	NOL	OL -(m	VESS (r	M.	_ ∠	IVE DE	NAME	SOIL DESCRIPTION		DEPT :	TETER I	DEPT	E	30cm)	CORV	N-Value		SAMPLE (Type & No.)	J (m		_ _	(E)
SCALE (ELEVATION (m)	DEPTH GL - (m)	THICKNESS (m)	DIAGRAM	COLOUR	RELATIVE DENSITY (or) CONSISTENCY	N TIOS			DATE & DEPTH (m)	DIA	WATER DEPTH (m)	DEPTH GL - (m)	N-Value (Blows / 30cm)		8lows / 30	cm)	SAN (Type	DEPTH GL - (m)	TCR (%)	SCR (%)	SCALE (m)
H		_	`	Ť	Reddish		CLAY	Top soil layer, reddish brown color, CLAY		+	+				1		T 100	\vdash	0.45	\dashv	+	Ť
1	-1.00	1.00	1.00		brown			· · · · · · · · · · · · · · · · · · ·			L	▽	1.0	8/30				SPT-1	1.0 1.45			_1
2				FEE	Yellowish	Firm	Fat	Firm to stiff, yellowish brown mottled gr	ay		1	1.26	2.0	12/30	,			SPT-2	2.0			_2
3					brown and	to stiff	CLAY-I	color, high plasticity, Fat CLAY-I.	,		3.0		3.0	- 11				CDT 3	3.0			- 3
1 🖥					Gray					•	110	ı		10/30				SPT-3	3.45			- 1
4	-4.00	4.00	3.00									ł	4.0	55/55				UD-1	4.45			L ⁴
5					Yellowish brown								5.0	8/30				SPT-4	5.0			_5
6					and Gray					712/13			6.0	6/30				SPT-5	5.45 6.0			_6
													7.0						6.45 7.0			- ,
4												Ì		5/30				SPT-6	7.45			[]
8													8.0	5/30				SPT-7	8.0 8.45			-8
9						Firm	Lean	Firm to stiff, yellowish brown mottled gr					9.0	6/30				SPT-8	9.0			_9
1 <u>0</u>						to stiff	CLAY	color, low plasticity, Lean CLAY (with a of fine sand, peat and mica).	trace				10.0	7/30				SPT-9	9.45			<u>1</u> 0
													11.0						10.45			[
"					Gray							ı	11.0	8/30				SPT-10	11.45			
1 <u>2</u>												ŀ	12.0	7/30				SPT-11	12.0 12.45			<u>1</u> 2
13													13.0	7/30				SPT-12	13.0			<u>1</u> 3
14													14.0	10/30				SPT-13	13.45			14
17									23/	4.45		ı		10/30	d III			SF 1-13	14.45			FI
15	-15.00	15.00	11.00									ŀ	15.0	19/30	1			SPT-14	15.0 15.45			<u>1</u> 5
1 <u>6</u>					Greenish	Very	Fat	Very stiff to hard, greenish gray spotted by	rown			ŀ	16.0	25/30	1			SPT-15	16.0 16.45			<u>1</u> 6
17					gray	stiff to	CLAY-II	color, Low plasticity, Fat CLAY-II.					17.0	51/30				SPT-16	17.0			<u>1</u> 7
18	-18.00	18.00	3.00			hard							18.0	70/26		\mathbb{I}		SPT-17	17.45			18
П				× ×										70/20		1		31 1-17	18.45			FI
19				× ×	Brownish gray	Hard	SILT	Hard, Brownish gray color, low to high plasticity, SILT.				ł	19.0	70/18				SPT-18	19.0 19.45			<u>1</u> 9
2 <u>0</u>	20.45	20.45	2.45	××					20	0.45			20.0	60/10		4		SPT-19	20.0			<u>2</u> 0
21	-20.45	20.45	2.45	X X						/12/13			21.0						20.45			<u>2</u> 1
22													22.0						21.45 22.0			22
14												ı							22.45			FI
23												ŀ	23.0						23.0 23.45			23
24													24.0						24.0			<u>2</u> 4
2 <u>5</u>													25.0						24.45 25.0			<u>2</u> 5
26													26.0						25.45 26.0			26
												İ							26.45			-
27												ł	27.0						27.0 27.45			27
28													28.0						28.0			28
2 <u>9</u>													29.0						28.45			<u>2</u> 9
30													30.0						29.45 30.0			30
												Ì							30.45			ĔĬ
ᅢ	NOTI			L	I		<u> </u>	Sample key			er structu					continuiti		<u> </u>	Н	63	3	쒸
		lative den		ΓN-Value	Consistenc	ency descrip	Γ N-Value	Disturbed sample (SPT sample) Rock core sample (Core lost)	Very	erm y thick			2000	Very w	Term idely spi		Spacing (m > 200	0	Geneticion	ls Engine	ing & over	struction
	Ver	y loose		(mess) 0 - 3	Very soft	,	ander 2	Undisturbed Sample Water sample W-1	Me	hick edium	20	00 - 2	500	Medi	ely space um spac	ed	600 - 200 200 - 600)	Geo-frienc	Co.,I Co.,I : 951-561431 www.goo-l service@gee	. 959-420107 riends.com	767
	Mediu	oose ım dense	1	4 - 10	Soft Firm		5 - 8	Undisturbed Sample (Denison sampler) Rock core sample ROD (%) Term 0 - 25 Very po	oor Ve	Thin ry thin	2	60 - 2 20 - 6	60	Very cl	ely space osely spa	iced	60 - 200 20 - 60		Revision Revision	No.	friends.com Rev 06/0	>-0
		ense dense	$\overline{}$	1 - 50 over 50	Stiff Very stiff		9 - 15	(Single core tube) 25 - 50 Poor 50 - 75 Fair 7 Fair	Thinly	laminated laminated		6 - 2 < 6	_	<u>Remarks</u>	y closely	spaced	< 20	\dashv	Site Geog	golist : Z	in Lin Ch	10
			_	[Hard		over 30	(Double core tube) 75 - 90 Good 90 - 100 Excelle					_						Operator Checked		Kyaw Ta y Thu	nı Ha
			-	-	-	_	_		-			_		_			_				-	

(2) Soil Profile of BH-2

BOR	RE HO	OLE N	o. B	H - 2			<u>B C</u>	RING LOG (FOR DESIG	N PARA	MET.	ERS	CON	SIDE	RATI	(ON)			She	et No.	1 O.	F I
		NAME	_				TU Resear	ch Centre	BORING E		Т	: TOHO			_	ATE		12/13 ~ 23			_
	CATIO	N LEVEL				Townsh	ip, Yangon		BORING M ORIENTAT				y Drilling		LIENT	OGGED B	Y : N	yi Nyi Za	iw		
	ORDIN		_		ound level 0", E: 96° 07	' 07.9"	DEPTH :	20.45 m	GROUND V		EVEL	: <u>Vertic</u>	m from Gl	_ _	 Inte	em Cons	sulting	·lnc			
T					I .						_		TANDARI	PENETE	ATION TE			SAMI			$\overline{}$
						SITY			()	TH (m) &	(ii)	\vdash	TEST M		BS 5930)		_	SAMI	LING	_	-
2	ELEVATION (m)	(B)	THICKNESS (m)	-		RELATIVE DENSITY (or) CONSISTENCY	ME	SOIL DESCRIPTION	DATE & DEPTH (m)	DEPT	WATER DEPTH (m)	(m)	ocm)	CURV	E OF BLOV	v •	9 E	(ii)			-
SCALE (m)	EVATI	DEPTH GL - (m)	ICKNE	DIAGRAM	COLOUR	LATIV r) CON	IL NAME		8 2	CASING (DEPT DIAMETER (TER	DEPTH GL - (m)	N-Value (Blows / 30cm)	(E	N-Value llows / 30cm	n)	SAMPLE (Type & No.)	DEPTH GL - (m)	TCR (%)	RQD (%)	SCALE (m)
Š	B	DE	HL	/IG		RE (o	SOIL		-	S 5	/A	DE	ē 0	20 4	9 60 8	80 100			DI I	8	SC.
1	1.00	1.00	1.00		Yellowish brown		CLAY	Top soil layer, yellowish brown color, CL	AY.			1.0					SPT-1	1.0			+,
T													6/30				SF1-1	1.45			F
2				-1-1-1	NZ - 11 1 - 1-			Firm to 4000 all middle many and discount	.		2.03	2.0	10/30				SPT-2	2.0			- ²
3					Yellowish brown	Firm to	Fat CLAY-I	Firm to stiff, yellowish brown mottled gray color, high plasticity, Fat CLAY-I.	y	3.0		3.0	70/90				UD-1	3.0			12
4					and Gray	stiff				ф110		-	,					3.45			+
7												4.0	9/30				SPT-3	4.45			F ⁴
5 -:	5.00	5.00	4.00									5.0	6/30				SPT-4	5.0			F:
6												6.0	11/30				SPT-5	5.45 6.0			Le
]													11/30					6.45			F
7					Gray	Firm	Lean CLAY	Firm to stiff, gray, low plasticity, Lean CL	AY.			7.0	7/30				SPT-6	7.0			+
8						to stiff	CLAY					8.0	10/30				SPT-7	8.0			Ŀ
-										45 2/13		9.0					l	9.0			+ 6
7													12/30				SPT-8	9.45			Ţ,
0 -	10.00	10.00	5.00	- ××	Dark	Dense	Silty	Dense, dark gray color, fine to coarse grain	ned			10.0	31/30				SPT-9	10.0 10.45			10
1 -1	11.00	11.00	1.00	×××	gray	Delise	SAND	sand, Silty SAND.				11.0	8/30				SPT-10	11.0			11
-												12.0						11.45			+,,
1												12.0	9/30				SPT-11	12.0 12.45			F.
3												13.0	7/30				SPT-12	13.0			1:
4					Gray	Firm	Fat	Firm to stiff, gray color, high plasticity, Fa	ıt			14.0	8/30				SPT-13	13.45			14
]						to stiff	CLAY-I	CLAY-I.					0/30				1-13	14.45			F
5												15.0	9/30				SPT-14	15.0 15.45			1:
6												16.0	15/30	/			SPT-15	16.0			16
7 -1	17.00	17.00	6.00									17.0	26/28				CDT 10	16.45 17.0			17
-		27.00	5.00	X X								1	26/30				SPT-16	17.45			Ė.
8				×××	Gray	Medium dense	Silty SAND	Medium dense, gray color, fine to coarse g sand, Silty SAND.	rained			18.0	25/30				SPT-17	18.45			18
9 -1	19.00	19.00	2.00	××								19.0	55/30				SPT-18	19.0			1
_					Gray mottled	Hard	Fat CLAY-II	Hard, gray mottled brown color, high plasticity, Fat CLAY-II.				20.0						19.45			F.,
	20.45	20.45	1.45		brown			F	20.			20.0	47/30		4		SPT-19	20.45			ľ
1									23/1	2/13		21.0						21.0			2
2												22.0						21.45			2
4																		22.45			-
3												23.0						23.0			2
4												24.0						24.0			2
5												25.0						24.45			2
																		25.45			F
6												26.0						26.0 26.45			2
27												27.0						27.0			2
8												28.0						27.45 28.0			+,
8												∠0.0						28.45			2
9												29.0						29.0			2
0												30.0						29.45 30.0			3
-																		30.45			F
_	NOTE						<u> </u>	Sample key		Planner str					continuities	шшш	<u> </u>	Н	630	<u> </u>	
F		ative den	_	iption N-Value		ency descrip	otion Γ N-Value	Disturbed sample Rock core sample (SPT sample) (Core lost)	Ter Very			2000	Very	Term widely spa	-	Spacing (mr > 2000	0		Car.	9	
-		e density / loose		(meas) 0 - 3	Consistency Very soft	,	inder 2	Undisturbed Sample Water sample (Piston sampler)	Thi Med		600 - 200 -			dely space lium space		600 - 200 200 - 600	_	Geo-friend Tet	Co.,L	d.	
F	Lo	oose m dense		4 - 10	Soft Firm		2 - 4	Undisturbed Sample (Denison sampler) RQD (%) Term 0 - 25 Very po	Th		60 -	200	Clo	sely space	d	60 - 200 20 - 60		Revision 1	951-581431, www.geo-fr service@geo- Vo.	riends.com Rev-	
þ	De	ense	3	1 - 50	Stiff		9 - 15	Rock core sample (Single core tube) 25 - 50 Poor	Thickly I	laminated	6 -	20	Extreme	ly closely		< 20		Revision I	Date	06/01.	/14
L	Very	dense	0	ver 50	Very stiff Hard		6 - 30 over 30	Rock core sample (Double core tube) 50 - 75 Fair 75 - 90 Good		aminated	<	0	Remarks					Operator	: Hla	Min Htu	
								90 - 100 Excelle	nt				1					Checked b	y : Ma	Thu	

(3) Soil Profile of BH-3

PROJ				H - 3				ORING LOG (FOR DESIG	NFAKA	11011	LKS	CUN	SIDE	KAI	ION)	-			eet No.	1 0.	F 1
v		NAME	_				TU Resear		BORING EQ		Г	: <u>TOH</u>				DATE		12/13 ~ 2			-
GRO		N LEVEI			pus, Insein round level		ip, Yangon		BORING ME ORIENTATIO			: Rotar	y Drilling cal		CLIENT	LOGGED	BY :	Zaw Myo	Win		
	RDIN						DEPTH :	20.45 m	GROUND W.		VEL		m from GI	_	lr	ntem Cor	nsulting	g Inc			
						ŽĮ Å.				(m) &	0		STANDARD TEST M	PENET ETHOD	RATION ' (BS 5930	TEST)		SAM	PLING		П
	(E)	-(m)	S (m)			RELATIVE DENSITY (or) CONSISTENCY	Щ	SOIL DESCRIPTION	DATE & DEPTH (m)	CASING (DEPTH (m) DIAMETER (mm))	WATER DEPTH (m)	(m)	(iii)	CURV	E OF BL	ow •	E 40.)	(iii)]
SCALE (m)	ELEVATION (m)	DEPTH GL -(m)	THICKNESS (m)	DIAGRAM	COLOUR	LATIVE 0 CONS	L NAME		TE & D	SING (1	TER DI	DEPTH GL - (m)	N-Value (Blows / 30cm)	(N-Valu Blows / 30	e Icm)	SAMPLE (Type & No.)	DEPTH GL - (m)	TCR (%)	RQD (%)	SCALE (m)
S :	급	DE	F	70	Reddish	RE	g CLAY	Top soil layer, Reddish brown color, CLA		5	×.	DE	≅ 0	20 4	0 60	80 100		0.45	5 8	3 2	SC
1 -1	.00	1.00	1.00		brown		CLAI	(lateritic soil)				1.0	3/30				SPT-1	1.0			1
2					Reddish	Soft	T	Soft to firm, reddish brown and yellowish				2.0	5/30				SPT-2	2.0			_2
3					& Yellowish	to firm	Lean CLAY	brown mottled gray color, low plasticity, CLAY (with a trace of laterite fragments).	Lean	3.0	2.85	3.0	5/30				SPT-3	3.0			- 3
4					brown and			(·············)·		ф110	2.03	4.0	- 11					3.45			F
5 -5		5.00			Gray								50/50	١			UD-1	4.45			-
Ţ	5.00	5.00	4.00									5.0	18/30	Ĭ			SPT-4	5.45			-
6					Yellowish brown	Stiff to	Fat CLAY-I	Stiff to very stiff, yellowish brown mottled gray color, high plasticity, Fat CLAY-I.	1			6.0	13/30	f			SPT-5	6.45			-6
7					and Gray	very stiff						7.0	11/30	.			SPT-6	7.0			-7
8 -8	3.00	8.00	3.00									8.0	5/30				SPT-7	8.0 8.45			_8
9												9.0	6/30				SPT-8	0.0			[-9]
10					Gray	Firm	Lean CLAY	Firm, gray color, low plasticity, Lean CLA		_		10.0	7/30				SPT-9	10.0			10
넵							CLAI		10.4 27/12/			11.0	7/30				SPT-10	10.45 11.0			<u>1</u> 1
12 -1:	2.00	12.00	4.00									12.0	25/30				SPT-1	11.45			12
13 -1:	3.00	13.00	1.00	× ×	Gray	Medium dense	Silty SAND	Medium dense, grey color, fine to coarse grained sand, Silty SAND.				13.0		1			SPT-12	12.45			13
14												14.0	9/30					13.45			14
<u>'</u>													8/30				SPT-13	14.45			FI
15					Dark gray							15.0	7/30				SPT-14	15.45			<u>1</u> 5
16						F.'		E: 4 (00 1 1 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1				16.0	5/30				SPT-1:	16.0 16.45			16
1 <u>7</u>						Firm to stiff	Lean CLAY	Firm to stiff, dark to bluish gray color, low plasticity, Lean CLAY.				17.0	12/30				SPT-10	17.0 17.45			<u>1</u> 7
1 <u>8</u>					District	5011						18.0	8/30				SPT-1	7 18.0 18.45			18
19					Bluish gray							19.0	15/30)			SPT-18				19
20												20.0	10/30	(SPT-19	20.0			20
21	0.45	20.45	7.45						20.4			21.0						20.45			21
22												22.0						21.45 22.0			22
23												23.0						22.45			23
-												24.0						23.45			FI
24																		24.45			24
25												25.0						25.0 25.45			25
26												26.0						26.0 26.45			26
27												27.0						27.0 27.45			27
28												28.0						28.0 28.45			28
2 <u>9</u>												29.0						29.0			29
30												30.0						30.0			30
1	V.C.	76																30.45		\perp	上
	Rela Rela	ES ative den	_		Consist	ency descrip		Sample key	Term Very thi		Spacing		V	<u>Di</u> : Term widely sp	scontinuiti	Spacing (
L		e density y loose		Γ N-Value (mess) 0 - 3	Consistenc Very soft		N-Value (mess)	Undisturbed Sample Water sample (Core toxt) Water sample	Thick Medius		600 - 200 -		Wic	videly sp lely spac lium spac	ed	> 20 600 - 20 200 - 60	000	1	ls Engineerir Co.,Lte : 951-551431, s	1.	
F	Lo	oose ım dense	1	4 - 10	Soft Firm		2 - 4	Undisturbed Sample (Denison sampler) RQD (%) Term 0 - 25 Very po	Thin or Very tl	in	60 - 20 -	200 60	Clo: Very c	sely spac losely sp	ed aced	60 - 20 20 - 60	00	Revision .		Rev-	-0
		ense / dense	_	31 - 50 over 50	Stiff Very stiff	1	9 - 15	Rock core sample (Single core tube) 25 - 50 Poor	Thickly lan	_	6 -		Extreme Remarks	ly closely	spaced	< 20			olist : Za		Vin
				L	Hard		over 30	(Double core tube) 75 - 90 Good 90 - 100 Excelled	ıt									Operator Checked	: Ko i by : May	Kyaw Th Thu	i Ha

(4) Soil Profile of BH-4

BOI	RE HO	OLE N	lo. B	H - 4			<u>B</u> C	ORING LOG (FOR DESIGN	N PARAN	1ETI	ERS	CON	SIDE	RAT	ION	<u>)</u>		Sh	eet No.	1 ()F 1
		NAME	_				TU Resear		BORING EQU		Г	: TOH			_	DATE	_	/12/13 ~ 2			_
	CATIO	N LEVEL					ip, Yangon		BORING MET ORIENTATIO				y Drilling		CLIENT	LOGGED	BY :2	Zin Lin Ch	10		
	ORDIN		_		round level 8". E: 96° 07		DEPTH :		GROUND WA		VEL	: <u>Verti</u>	m from G	—		- ntem Coi	nsulting	o Inc			
Т	1			I	I		T		1	_	T		STANDARI								\neg
						SITY			(E)	CASING (DEPTH (m) & DIAMETER (mm))	(E)			1ETHOD	(BS 593))	1	SAM	PLING	_	4
	ELEVATION (m)	(m)	THICKNESS (m)			RELATIVE DENSITY (or) CONSISTENCY	Æ	SOIL DESCRIPTION	DATE & DEPTH (m)	DEPTH TER (0	WATER DEPTH (m)	(iii	cm)	CUR	VE OF BI	.ow •	9 P	(E)			١,
SCALE (m)	VATIC	DEPTH GL - (m)	CKNE	DIAGRAM	COLOUR	ATIVI CON	L NAME		TE & D	ING (IER D	DEPTH GL - (m)	N-Value (Blows/30cm)		N-Valı (Blows / 3		SAMPLE (Type & No.)	DEPTH GL - (m)	TCR (%)	SCR (%)	RQD (%)
Ś	EE	DEP	THI	DIA		REI (or	SOIL		DAC	CAS	××	DEF	¯ĕ ρ	20	40 60	80 100	- F	DEP	TCR	SC SC	Ž Š
,	1.00	1.00	1.00		Reddish brown		CLAY	Top soil layer, Reddish brown color, CLAY				1.0	1					0.45			-
十	1.00	1.00	1.00									1.0	5/30				SPT-I	1.45			F
2					Yellowish brown	Firm to	Lean CLAY	Firm to stiff, yellowish brown mottled gray color, low plasticity, Lean CLAY with a trace	e.		▽ 1.98	2.0	7/30	,			SPT-2				F
3					and	stiff	CEITI	of laterite gravels.		3.0		3.0	9/30				SPT-3	2.45			ŀ
]					Gray					ф110	1		9/30	\			31 1	3.45			F
4-	4.00	4.00	3.00						_			4.0	14/30	 			SPT-4	4.45			H
5					Yellowish brown	Stiff	Fat CLAY-I	Stiff, Brownish gray mottled light bluish gra color, high plasticity, Fat CLAY-I with a tra				5.0	15/30				SPT-5				Ĺ
6					and Brownish		CLAT-	of laterite gravels.				6.0		/				5.45			-
1					gray							0.0	9/30				SPT-6	6.45			F
7 -	7.00	7.00	3.00						\dashv			7.0	80/90				UD-1	7.45			-
3												8.0	8/30				SPT-7	0.0			Ł
2																		8.45			F
]									5.45 25/12/1			9.0	8/30	•			SPT-8	9.0			
0									25/12/1	3		10.0	7/30	,			SPT-9				[1
1												11.0	0/20				SPT-1	10.45 0 11.0			1
]													9/30				SP1-l	11.45			ţ
2					Gray	Firm to	Lean CLAY	Firm to stiff, gray color, low plasticity, Lean CLAY.				12.0	10/30				SPT-1	1 12.0 12.45			1
3						stiff	CLAY	C				13.0	11/30				SPT-1	10.0			1
4												14.0						13.45			ŀ,
1												14.0	12/30	•			SPT-1	3 14.0 14.45			Ľ
5												15.0	11/30	4			SPT-1	4 15.0 15.45			1
6												16.0	15/30				SPT-1	160			1
-													15/50					16.45			-
7-	17.00	17.00	10.00	(X X X								17.0	33/30	1			SPT-1	6 17.0 17.45			1
8				('X ')								18.0	44/30		\		SPT-1	7 18.0			1
,				(×)	Dark bluish	Dense to	Silty SAND	Dense to very dense, dark bluish gray color, fine to coarse grained sand, Silty SAND.				19.0					SPT-1	18.45 8 19.0			ŀı
				(: X : >	gray	very dense	JAND	The to course grained said, Sity SAVE.					46/30		1		SP1-1	19.45			Ė
0	20.45	20.45	3.45	(20,45			20.0	52/30		9		SPT-1	9 20.0 20.45			2
1	20.10	20.10	5.15	N . X /					26/12/1	3		21.0						21.0			2
+												22.0						21.45 22.0			2
2												22.0						22.45			L
3												23.0						23.45			2
4												24.0						24.0			2
ı												25.0						24.45			F
												25.0						25.0 25.45			2
												26.0						26.0			2
7												27.0						26.45 27.0			2
1																		27.45			F
8												28.0						28.45			2
9												29.0						29.0			2
1												30.0						29.45 30.0			3
30												30.0						30.45			ľ
	NOTE	ES				<u> </u>		Sample key	P	lanner stru	ucture			D D	iscontinui	ies					\perp
		lative den		_	Consist	tency descrip		Disturbed sample Rock core sample	Term		Spacing		1/	Term		Spacing (_		6		
		e density		N-Value	Consistenc	,	(meas)	Undisturbed Sample (Core lost) Undisturbed Sample Water sample W-1	Very thick	\pm	600 -		Wi	widely space	ed	> 20 600 - 2	000		ls Engineer Co.,I	.td.	
E	L	y loose oose		0 - 3 4 - 10	Very soft Soft		nder 2 2 - 4	Undisturbed Sample RQD (%) Term	Medium Thin	\perp	200 - 60 -	200	Clo	dium spa osely spa	ced	200 - 6 60 - 2	00		: 951-561431 www.ges-f service@geo		
F		ım dense ense		1 - 30 1 - 50	Firm Stiff	_	5 - 8 9 - 15	Rock core sample (Single core tube) 0 - 25 Very poor	Very thi Thickly lami	_	20 -			closely s ely closel	paced y spaced	20 - 6		Revision Revision	Date	06/0	2v-0 01/14
		dense		ver 50	Very stiff Hard		6 - 30 over 30	Rock core sample	Thinly lamin	ated	<		Remarks			-		Site Geog Operator	: Ke	in Lin C Kyaw T 'vaw Swe	
				L				90 - 100 Excellent	1				1					Checked .			

(5) Soil Profile of BH-5

ВС	RE H	OLE N	ю. В	H - 5			<u>B</u> C	RING LOG (FOR DESIG	N PARA	MET	ERS	CON	SIDE	RAT	ION)		She	eet No.	1 0.	F 1
		NAME	_				TU Resear		BORING EQ		lΤ	: <u>TOH</u>				DATE		12/13 ~ 2			-
	OCATIO ROUND	N LEVEL			ous, Insein ound level		p, Yangon		BORING MI ORIENTATI			: Rota : Vert	ry Drilling ical	Metho	<u>CLIEN</u>	LOGGED I	3Y : <u>N</u>	lyi Nyi Za	ıw		
	OORDIN						DEPTH :	20.45 m	GROUND W		EVEL		m from GI		1	Intem Con	sulting	lnc			
						X.E			e	(m) &	9		STANDARI TEST M	PENE ETHOL	TRATION (BS 593	TEST (0)		SAM	PLING		П
	(m) N(-(m)	SS (m)			RELATIVE DENSITY (or) CONSISTENCY	E E	SOIL DESCRIPTION	DATE & DEPTH (m)	DEPTH (m)	WATER DEPTH (m)	(m)	(ii)	CUR	VE OF B	LOW •	No.)	(m)			
SCALE (m)	ELEVATION (m)	DEPTH GL - (m)	THICKNESS (m)	DIAGRAM	COLOUR	LATIVI or) CON	IL NAME		TE & D	ASING (1	ATER D	DEPTH GL - (m)	N-Value (Blows / 30cm)		N-Val (Blows / :	ue 30cm)	SAMPLE (Type & No.)	DEPTH GL - (m)	TCR (%)	RQD (%)	SCALE (m)
S	EI	DE	Ï	Ī	8 Yellowish	R. S.	Sandy	Top soil layer, Yellowish brown color,	Dv	V.	×	ă	<u> </u>	20	40 60	80 100	Ť	0.45	7 3	1 2	SC
4	-1.00	1.00	1.00		brown		CLAY	Sandy CLAY			1.30	1.0	3/30				SPT-1	1.0			_1
2					Yellowish brown	Firm	Lean	Firm to stiff, yellowish brown mottled gray color, low plasticity, Lean CLAY with a tra			1.30	2.0	7/30				SPT-2	2.0			_2
3					and Gray	to stiff	CLAY	of laterite gravels.	acc	3.0		3.0	8/30				SPT-3	3.0			_3
4	-4.00	4.00	3.00		Giay					ф110		4.0	- 11	$\langle \cdot \cdot \rangle$				3.45 4.0			- 4
													45/45	١			UD-1	4.45			- 1
5 -					Gray mottled							5.0	17/30	*			SPT-4	5.45			-
6					brown							6.0	11/30				SPT-5	6.0			F ⁶
7						Firm	Ea+	Firm to very stiff, gray mottled brown colo	or. 7.4	5		7.0	5/30				SPT-6	7.0 7.45			$\left[-7\right]$
8						Firm to very	Fat CLAY-I	high plasticity, Fat CLAY-I with trace of p at GL-7.0 ~ 10.0 m.				8.0	6/30				SPT-7	8.0			_8
9					Gray	stiff		· · · · · · · · · · · · · · · · · ·				9.0	6/30				SPT-8	9.0			_9
10					ыау							10.0	6/30				SPT-9	9.45			10
																		10.45			F.,
11												11.0	7/30				SPT-10	11.45			-
12	-12.00	12.00	8.00									12.0	9/30				SPT-1	12.0 12.45			12
1 <u>3</u>												13.0	9/30	•			SPT-12	13.0			13
1 <u>4</u>					Yellowish brown	Firm to	Lean CLAY	Firm to stiff, yellowish brown mottled gray color, low plasticity, Lean CLAY with a tra				14.0	9/30				SPT-13				<u>1</u> 4
1 <u>5</u>					and Gray	stiff	CLAI	of laterite gravels.				15.0	6/30				SPT-14	15.0			<u>1</u> 5
1 <u>6</u>												16.0					SPT-1:	15.45 16.0			<u>1</u> 6
17	-17.00	17.00	5.00									17.0	9/30					16.45			
18	-18.00	18.00	1.00		Gray	Medium dense	Clayey SAND	Medium dense, gray color, fine to coarse grained sand, Clayey SAND.				18.0	21/30	1			SPT-10	17.45			18
17	-10.UU	10.00	1.00										12/30				SPT-17	18.45			FI
1 <u>9</u>					Gray	Stiff	Lean CLAY	Stiff, gray color, low plasticity, Lean CLA	Y.			19.0	13/30	•			SPT-18	19.0 19.45			<u>1</u> 9
20	-20.45	20.45	2.45						20.4	15		20.0	14/30				SPT-19	20.0			20
21									26/12			21.0						21.0			21
22												22.0						21.45			22
2 <u>3</u>												23.0						22.45			23
2 <u>4</u>												24.0						23.45 24.0			24
Н												25.0						24.45 25.0			25
2 <u>5</u>												-						25.45			F
2 <u>6</u>												26.0						26.0 26.45			26
27												27.0						27.0 27.45			27
2 <u>8</u>												28.0						28.0			28
2 <u>9</u>												29.0						28.45			<u>2</u> 9
3 <u>0</u>												30.0						29.45 30.0			30
												-						30.45			F
Г	NOT Re	ES lative den	sity desc	ription	Consist	ency descrip	tion	Sample key Disturbed sample Rock core sample	Terr	Planner st	ructure Spacing	g (mm)		<u>D</u> Term	iscontinui	Spacing (n	nm)				
		e density		N-Value	Consistenc	- cm	N-Value	(Core lost) U T 1 Undisturbed Sample Water sample	Very the	iick		2000		widely s dely spa		> 20 600 - 20	00	1	ls Engineerii Co.,Lt	1.	
	L	y loose oose		0 - 3	Very soft Soft		nder 2 2 - 4	(Piston sampler) Undisturbed Sample D-1 (Denison sampler) RQD (%) Term			200 -	200	Clo	dium spa	ced	200 - 60	0		: 951-561431, 9 www.goo-frie service@geo-fi		
	D	ense	3	1 - 30	Firm Stiff		5 - 8 9 - 15	Rock core sample (Single core tube) 0 - 25 Very po	Thickly la	minated	20 -	20	Extreme		paced ly spaced	20 - 60		Revision . Revision . Site Geog		Rev- 06/01 i Nyi Zav	/14
	Ver	y dense	1 0	over 50	Very stiff Hard		6 - 30 over 30	Rock core sample (Double core tube) 50 - 75 Fair 75 - 90 Good 90 - 100 Exceller		iimated	<	0	Remarks					Operator	: Hla	Min Htu	_
Щ								90 - 100 Exceller	п									Checked i	by : May	Inu	

(6) Soil Profile of BH-6

во	RE H	OLE N	o. B	Н -6			<u>B</u> (RING LOG (FOR DESIG	N PARAN	1ETI	ERS	CON	SIDE	RATI	ON)			She	eet No.	1	OF 1
PR	OJECT	NAME	:_S	Soil Investi	igation Wo	orks for Y	TU Resear	ch Centre	BORING EQU	IPMEN'	Γ	: <u>TOH</u>	O - D5		D.	ATE	: 27/	12/13 ~ 2	9/12/13		
	CATIC			-			ip, Yangon		BORING MET				ry Drilling !		LIENT	OGGED E	8Y : <u>N</u>	lyi Nyi Za	aw		
	OUND	LEVEL	_		ound level		DEPTH :	20.45 m	ORIENTATIO GROUND WA		VEL	: <u>Verti</u>	m from GL	— I [_]		em Con	cultino	lnc			
	OKDI	NAIE	: <u>N</u>	:10 32 34.5	9 , E: 90° 07	04.3	DEFIR :	20.43 III	GROUND WA	_	VEL		STANDARD				sutting				_
						KCY KCY			(E)	I (m) &	<u>a</u>		TEST MI	THOD (BS 5930)		_	SAMI	PLING		_
	ELEVATION (m)	(m)	SS (m)			RELATIVE DENSITY (or) CONSISTENCY	9	SOIL DESCRIPTION	DATE & DEPTH (m)	ASING (DEPTH (m) DIAMETER (mm))	WATER DEPTH (m)	Œ)	cm)	CURVE	OF BLOV	v •	No.)	(iii			
SCALE (m)	EVATIC	DEPTH GL - (m)	THICKNESS (m)	DIAGRAM	COLOUR	CATIV	L NAME		TE & I	SING (TERD	DEPTH GL - (m)	N-Value (Blows / 30cm)	(Bl	N-Value lows / 30cn	n)	SAMPLE (Type & No.)	DEPTH GL - (m)	TCR (%)	SCR (%)	RQD (%) SCALE (m)
SC.	BE	ΒE	TH	/IG		RE (o	SOIL	Transition Delicition of A		S.	//	DE	ē 0	20 40	60 8	80 100		_	2	S	S. S.
1	-1.00	1.00	1.00		Reddish brown		CLAY	Top soil layer, Reddish brown color, CLA (lateritic soil)	. Ү			1.0	6/30				SPT-1	1.0			-
1					Reddish							Г.,	6/30				31 1-1	1.45			F
2					brown mottled	Firm	Fat	Firm to stiff, light gray mottled brown co	2.43			2.0	13/30				SPT-2	2.0			
3					gray Brown	to stiff	CLAY-I	high plasticity, Fat CLAY-I.	27/12/1	3.0 \$\psi 110	-	3.0	12/30	•			SPT-3				
4	-4.00	4.00	3.00		& gray					Ψ110	▽ 3.48	4.0	8/30				SPT-4	3.45 4.0			- 4
-					Brown & gray													4.45			F
4												5.0	90/90				UD-1	5.0 5.45			F
6												6.0	7/30				SPT-5	6.0			F
7												7.0	9/30				SPT-6	7.0			1
8												8.0					SPT-7	7.45 8.0			۱,
						Firm	Lean	Firm to stiff, gray mottled with brown and					11/30				SF1-/	8.45			F
9						to stiff	CLAY	gray color, Low plasticity, Lean CLAY.				9.0	10/30				SPT-8	9.0 9.45			F
10					Gray							10.0	8/30				SPT-9	10.0			10
11												11.0	10/30				SPT-10	11.0			1
12												12.0						11.45			10
٦													10/30				SPT-11	12.45			1
13	-13.00	13.00	9.00	ا الله الله الله الله الله الله الله ال					\longrightarrow			13.0	19/30	1			SPT-12	13.0			13
14												14.0	24/30				SPT-13	14.0			14
15					Gray	Very	Sandy	Very stiff, gray color, fine to coarse graine sand, Sandy Lean CLAY.	i			15.0	23/30				SPT-14	14.45			15
16						stiff	Lean CLAY	said, Saidy Lean CLAT.				160		Ĭ				15.45			
16												16.0	22/30	<i> </i> *			SPT-15	16.0 16.45			۲,
17	-17.00	17.00	4.00						17.45			17.0	9/30				SPT-16	17.45			17
18									28/12/1			18.0	11/30				SPT-17	18.0			18
19					Gray	Stiff to	Lean CLAY	Stiff to very stiff, gray color, low plasticity Lean CLAY with trace of peat.	,			19.0	9/30				SPT-18	18.45			19
_						very stiff							9/30				31 1-10	19.45			Ę.
20	-20.45	20.45	2.45						20.45			20.0	16/30	9			SPT-19	20.0			[20
21									29/12/1	3		21.0						21.0			2
22												22.0						22.0			22
23												23.0						22.45			2:
4																		23.45			-
24												24.0						24.0 24.45			24
25												25.0						25.0			2:
26												26.0						25.45 26.0			20
27												27.0						26.45 27.0			2
4																		27.45			F
28												28.0						28.45			28
29												29.0						29.0			29
30												30.0						29.45 30.0			30
7																		30.45			F
	NOT			l I				Sample key		lanner stru		(mm)			ontinuities	Spacing (m)		6		
		ative dens	i —	N-Value	Consistenc	ency descrip	Γ N-Value	Disturbed sample (SPT sample) Rock core sample (Core lost) Undisturbed Sample	Very thic			2000	Very v	Term ridely space	ced	> 200	10	Geo-friend	ls Enginee	ring & co	nstruction
	Ver	y loose	_	(mess) 0 - 3	Very soft	1	inder 2	O 1-1 (Piston sampler) W-1	Thick Medium	\downarrow	600 - 200 -	600	Med	um spaced	d	200 - 600)	1	Co., : 951-56143 www.gro- service@ge	Ltd.	
	Medi	oose ım dense	1	4 - 10	Soft Firm		2 - 4 5 - 8	(Denison sampler) 0 - 25 Very p	oor Very thi		20 -	60	Very c	osely spaced	ced	20 - 60		Revision :	No.	Re	v-0 1/14
ŀ		ense dense		1 - 50 over 50	Stiff Very stiff	1	9 - 15	(Single core tube) 23 - 30 Foot 8 Rock core sample 50 - 75 Fair	Thinly lamin		6 -		Extremel Remarks	y closely s	spaced	< 20	\dashv	Site Geog	olist :	Vyi Nyi 2	Zaw
					Hard		over 30	(Double core tube) 75 - 90 Good 90 - 100 Excelle	_									Operator Checked l		la Min F ay Thu	etut
																	_				

(7) Soil Profile of BH-7

ВО	RE H	OLE N	o. B	H - 7			<u>B</u> (ORING LOG (FOR DESIG	N PARA	меті	ERS	CON	SIDER	ATIO	<u>N)</u>		Sh	eet No.	1 (OF 1
		NAME	-				TU Resear		BORING EQU BORING ME		Г	: TOH		a 1	DATE		12/13 ~ 3			-
1	CATIC	LEVEL			ous, Insein ound level		ip, Yangon		ORIENTATIO			: Rotar	y Drilling M cal		LOGGED ENT	BY : _ P	Nyi Nyi Z	aw		
CC	ORDIN	NATE	: <u>N</u>	1:16°52' 34.2	2", E: 96° 07	7 04.8"	DEPTH :	20.45 m	GROUND WA	TER LE	VEL		m from GL	-	Intem Co	nsulting	g Inc			
П						ŽĮ.			· ·	(ii) &	6		STANDARD P TEST MET	ENETRAT HOD (BS	ION TEST 5930)		SAM	IPLING		
	N (m)	(iii)	(m) S			RELATIVE DENSITY (or) CONSISTENCY	<u> </u>	SOIL DESCRIPTION	DATE & DEPTH (m)	CASING (DEPTH (m) DIAMETER (mm))	WATER DEPTH (m)	- (m)	(ms	CURVE O	F BLOW •	E (0.)	(iii)			
SCALE (m)	ELEVATION (m)	DEPTH GL - (m)	THICKNESS (m)	DIAGRAM	COLOUR	ATIVE (L NAME		TE & DI	SING (I	TER DE	DEPTH GL - (m)	N-Value (Blows / 30cm)	N- (Blow	-Value /s / 30cm)	SAMPLE (Type & No.)	DEPTH GL - (m)	TCR (%)	SCR (%)	SCALE (m)
SC/	ELE	DEF	H	DIA			SOIL	Top soil layer, Yellowish brown color,	DA	CAS	₩	DEF	ĕ o .	20 40	60 80 100		_	TOF	SCI	SC/
	-1.00	1.00	1.00		Yellowish brown		CLAY	CLAY				1.0	4/30			SPT-1	1.0			
,-									2.45			2.0					1.45			+,
٦					Brownish		Fat	Firm to stiff, Brownish gray color, high	29/12/	3			6/30			SPT-2	2.45			[]
3					gray	to stiff	CLAY-I	plasticity, Fat CLAY-I.		3.0 \$110		3.0	8/30			SPT-3	3.0			-3
4	-4.00	4.00	3.00		Brownish							4.0	7/30			SPT-4	4.0			-4
5					gray							5.0	70/90			UD-1	5.0			_5
6												6.0	9/30			SPT-5				_6
7												7.0	9/30			SPT-6	6.45			₇
[]												8.0					7.45			F.I
"													8/30			SPT-7	8.45			
9												9.0	9/30			SPT-8	9.0			[-9]
1 <u>0</u>												10.0	11/30			SPT-9	10.0			10
11												11.0	9/30			SPT-1	11.0			11
1 <u>2</u>						Firm to	Lean CLAY	Firm to very stiff, brownish gray and gray color, low plasticity, Lean CLAY.	·			12.0	11/30			SPT-1	11.45 1 12.0			12
13					Gray	very stiff						13.0	9/30			SPT-1:	12.45			13
IJ													9/30				13.45			ΓI
14												14.0	9/30			SPT-1	3 14.0 14.45			14
1 <u>5</u>												15.0	10/30			SPT-1	15.0 15.45			15
1 <u>6</u>												16.0	11/30			SPT-1	16.45			16
17									1.5.4			17.0	12/30			SPT-1	6 17.0			17
1 <u>8</u>									30/12/			18.0	12/30			SPT-1	17.45 7 18.0			18
19												19.0				SPT-1	18.45 19.0			19
17													21/30	1			19.45			FI
20	-20.45	20.45	16.45						20.45			20.0	10/30			SPT-1	20.0			20
21									31/12/	13		21.0					21.45			21
22												22.0					22.0			22
23												23.0					23.0			23
2 <u>4</u>												24.0					23.45			24
2 <u>5</u>												25.0					24.45 25.0			25
																	25.45			-
26												26.0					26.0 26.45			26
27												27.0					27.0 27.45			27
28												28.0					28.0			28
2 <u>9</u>												29.0					28.45			29
30												30.0					29.45 30.0			30
17																	30.45			F
H	NOT:	ES lative dens	ity desc	ription	Consist	tency descrip	otion	Sample key Disturbed sample Rock core sample	Term	Planner stru	acture Spacing	(mm)		<u>Discont</u> erm	inuities Spacing (mm)				
		e density	_	Γ N-Value	Consistenc	CDV	Γ N-Value	(SPT sample) (Core lost) U T Undisturbed Sample Water sample	Very thic			2000	Very wi	lely spaced y spaced		000	Geo-frien	ds Enginee Co.,l	ring & con	struction
		y loose oose		0 - 3 4 - 10	Very soft Soft		ınder 2 2 - 4	Undisturbed Sample Undisturbed Sample (Penison sampler) RQD (%) Term	Medium Thin		200 - 60 -	600 200	Mediu Close	m spaced y spaced	200 - 6 60 - 2	00		# 951-561431 # www.geo-l service@geo	, 959-420107 Friends.com Friends.com	
	D	ım dense lense	3	1 - 30	Firm Stiff		5 - 8 9 - 15	(Denison sampler)	or Very th Thickly lant	inated	20 - 6 -	20	Very clo Extremely	sely spaced closely spa			Revision Revision Site Geo		Re 06/0 Ivi Nvi Zi	1/14
	Ver	y dense		over 50	Very stiff Hard		6 - 30 over 30	Rock core sample 50 - 75 Fair		nated	<	6	Remarks				Operator	: H	a Min Ht	-
Ш								90 - 100 Excelle	nt								Checked	by : Ma	ay Thu	

(8) Soil Profile of BH-8

во	RE H	OLE N	o. B	H - 8			<u>B</u> (RING LOG (FOR DESIG	N PARA	MET	ERS	CON	SIDE	RATIO	<u>N)</u>		She	et No.	1 G	F 1
		NAME	: <u>S</u>	oil Invest	igation Wo	rks for Y	TU Resear	ch Centre	BORING E		NT	: <u>TOH</u>			DATE		12/13 ~ 3			_
	CATIC	N LEVEI			ound level	Townsh	ip, Yangon		BORING M ORIENTAT			: <u>Rotar</u> : Verti	y Drilling	Method CLII	LOGGED I	3Y : <u>Z</u>	in Lin Ch	0		
	ORDIN		_			' 05.1"	DEPTH :	20.45 m	GROUND V		EVEL		m from GI	_	Intem Consultin	ıg Inc				
П						>~				3 (6)	T		STANDARE TEST M	PENETRATI ETHOD (BS	ON TEST 5930)		SAMI	PLING		Τ
	(iii	â	(ii)			RELATIVE DENSITY (or) CONSISTENCY			DATE & DEPTH (m)	CASING (DEPTH (m) & DIAMETER (mm))	WATER DEPTH (m)	â	- F	CURVE O	BLOW •		(ii)	Т	Т	1
E (m)	ELEVATION (m)	DEPTH GL - (m)	THICKNESS (m)	DIAGRAM	JO N	CONSIS	NAME	SOIL DESCRIPTION	9	JQ JQ	ER DEP	DEPTH GL - (m)	N-Value (Blows / 30cm)	N-	Value	SAMPLE (Type & No.)	DEPTH GL - (m)	(%	? <u>?</u>	E (m)
SCALE (m)	ELEV	DEPT	THIC	DIAG	COLOUR	REL/	SOIL		TAG	CASI	WAT	DEPT	Ż ⊗ glg) 0	20 40	s / 30cm) 60 80 100	,s €	DEPTI	TCR (%)	SCK (%)	SCALE (m)
-	-1.00	1.00	1.00		Yellowish brown		CLAY	Top soil layer, Yellowish brown color, CLAY				1.0	\				0.45 1.0			-,
+	-1.00	1.00	1.00										10/30			SPT-1	1.45			ļ-^
2												2.0	11/30			SPT-2	2.0			
3					Yellowish brown	Firm	Fat CLAY-I	Firm to stiff, Yellowish brown and gray co high plasticity, Fat CLAY-I.	lor,	3.0 \$11	0	3.0	14/30	}		SPT-3	3.0			_3
4					and gray	stiff					▽	4.0	7/30			SPT-4	4.0			_4
5	-5.00	5.00	4.00								4.00	5.0	70/90			UD-1	4.45 5.0			- 5
6												6.0	- li				5.45			F
-													8/30			SPT-5	6.45			۲
7												7.0	9/30			SPT-6	7.0			F ⁷
8												8.0	11/30			SPT-7	8.0 8.45			F
9												9.0	9/30			SPT-8	9.0			_9
10												10.0	12/30			SPT-9	9.45			10
11					Gray	Firm to	Lean CLAY	Firm to very stiff, gray color, low plasticity Lean CLAY.	,			11.0					10.45			-
4						very stiff	CEITI	Dami elimi					10/30			SPT-10	11.45			ļ.,
12									12			12.0	13/30	<u> </u>		SPT-1	1 12.0			12
13									30/1	2/13		13.0	21/30	}		SPT-12	13.0			13
14	-14.00	14.00	9.00									14.0	20/30			SPT-1	3 14.0			14
15					Gray	Very stiff	Sandy	Very stiff, gray color, fine to coarse grained sand, Sandy Lean CLAY.				15.0	22/30			SPT-1	14.45 4 15.0			15
16	-16.00	16.00	2.00			suif	Lean CLAY	sand, Sandy Leali CLA1.				16.0					15.45			16
Ţ		17.00		('x x ;	Gray	Medium dense	Silty SAND	Medium dense, gray color, fine to coarse grained sand, Silty SAND.				L	30/30	/ *		SPT-1:	16.45			F.
1/1	-17.00	1/.00	1.00					• •	\neg			17.0	10/30	f		SPT-10	6 17.0 17.45			۲'
18								and the second s				18.0	11/30	 		SPT-1	7 18.0 18.45			18
19					Gray	Stiff	Lean CLAY	Stiff, gray color, low plasticity, Lean CLAY	·			19.0	9/30			SPT-1	8 19.0			19
2 <u>0</u>												20.0	9/30			SPT-19	19.45 9 20.0			20
21	-20.45	20.45	3.45						20. 31/1	.45 2/13		21.0					20.45			21
7												22.0					21.45			F
22												Г.,					22.45			22
23												23.0					23.0 23.45			23
24												24.0					24.0			24
2 <u>5</u>												25.0					25.0			25
2 <u>6</u>												26.0					25.45 26.0			26
-												27.0					26.45 27.0			-
27												Г.,					27.45			27
28												28.0					28.0 28.45			28
2 <u>9</u>												29.0					29.0 29.45			29
3 <u>0</u>												30.0					30.0			30
-																	30.45			<u> </u>
-	NOT Re	ES lative den	sity descr	iption	Consist	ency descrip	otion	Sample key Disturbed sample Rock core sample	Ter		Spacin	g (mm)		<u>Discont</u> Term	Spacing (n			Car.	À	
		e density		N-Value	Consistency		N-Value	Undisturbed Sample Undisturbed Sample (Core lost) Water sample Water sample	Very Thi	ck	600 -		Wie	videly spaced lely spaced	> 200 600 - 20	00	1	ls Engineer Co.,L	td.	
	L	y loose oose		0 - 3 4 - 10	Very soft Soft		2 - 4 5 8	Undisturbed Sample RQD (%) Term	Med Th	in	200 - 60 -	200	Clo	ium spaced sely spaced	200 - 60 60 - 20	0	Revision :	951-561431, www.geo-fr service@geo- No.	959-4201077 lends.com friends.com Rev	
	D	am dense Jense y dense	3	1 - 30 1 - 50 ver 50	Firm Stiff Very stiff	_	5 - 8 9 - 15 6 - 30	Rock core sample (Single core tube) 0 - 25 Very poor 25 - 50 Poor 50 75 Fair	Thickly I	thin aminated aminated		60 20 6	Extreme	losely spaced ly closely spac	20 - 60 red < 20		Revision I	Date olist : Zi	06/1. n Lin Ch	/14 o
ı	+ 01,	,	1 0		Hard	-	over 30	Rock core sample] '				Remarks				Operator Checked I	Kyy	Kyaw Th. w Swar y Thu	iha &
								70 TOO EXCERT									1 necken t	. 1911		

YANGON TECHNOLOGICAL UNIVERSITY DEPARTMENT OF CIVIL ENGINEERING ENVIRONMENTAL ENGINEERING LABORATORY

Sender:	YTU Campus
Nature of Wat	er: BPI Tube well (No. 1)
Location:	
	of collection: <u>Jo-5J-J052</u>
Date and Time	of arrival at Laboratory: ၂၀–၁၂–၂၀၁၃
Date and Time	of Commencing examination:

Report on Water Analysis

		WHO Guideline	Result
рН	_	6.5~8.5	6.27
Colour (True)	TCU	15 TCU	Nil
Turbidity	FTU	5 FTU	Nil
Conductivity	micromho/cm		
Iron	mg/1	0.3mg/l	0.12
Total Hardness	mg/1 as CaCO ₃	500mg/1 as CaCO ³	51.8
Total Alkalinity	mg/1 as CaCO ₃		68
Phenolphthalein Alkalinity	mg/1 as CaCO ₃		Nil
Calcium Hardness	mg/1 as CaCO ₃		27.8
Magnesium Hardness	mg/1 as CaCO ₃		24.0
Carbonate $(CO_3^=)$	mg/1 as CaCO ₃		Nil
Chloride(as Cl ⁻)	mg/1	250 mg/1	18.5
Sodium Chloride (as NaCl)	mg/1		30.5
Bicarbonate $(HCO_3^=)$	mg/1 as CaCO ₃		68
Sulphate $as\left(SO_4^-\right)$	mg/1	200 mg/1	5
Total Solids	mg/1	1500 mg/1	112
Suspended Solids	mg/1		Nil
Dissolved Solids	mg/1	1000 mg/1	112

Lab: Technician Lab: Incharge Head of the Department

YANGON TECHNOLOGICAL UNIVERSITY DEPARTMENT OF CIVIL ENGINEERING ENVIRONMENTAL ENGINEERING LABORATORY

Sender:	YTU Campus
Nature of Water	: YTU Campus (No. 2)
Location:	
Date and Time of	of collection: <u>၂၀–၁၂–၂၀၁၃</u>
Date and Time o	of arrival at Laboratory: ၂၀–၁၂–၂၀၁၃
Date and Time o	of Commencing examination: ၂၀–၁၂–၂၀၁၃

Report on Water Analysis

		WHO Guideline	Result
рН	=	6.5~8.5	6.76
Colour (True)	TCU	15 TCU	Nil
Turbidity	FTU	5 FTU	5
Conductivity	micromho/cm		
Iron	mg/1	0.3mg/l	0.55
Total Hardness	mg/1 as CaCO ₃	500mg/1 as CaCO ³	46.2
Total Alkalinity	mg/1 as CaCO ₃		74
Phenolphthalein Alkalinity	mg/1 as CaCO ₃		Nil
Calcium Hardness	mg/1 as CaCO ₃		33.0
Magnesium Hardness	mg/1 as CaCO ₃		13.2
Carbonate $(CO_3^=)$	mg/1 as CaCO ₃		Nil
Chloride(as Cl ⁻)	mg/1	250 mg/1	20.5
Sodium Chloride (as NaCl)	mg/1		33.8
Bicarbonate $(HCO_3^=)$	mg/1 as CaCO ₃		74
Sulphate $as\left(SO_4^{-}\right)$	mg/1	200 mg/1	5
Total Solids	mg/1	1500 mg/1	133
Suspended Solids	mg/1		2
Dissolved Solids	mg/1	1000 mg/1	131

Lab: Technician Lab: Incharge Head of the Department မြို့ပြအင်ချင်နီယာဌာန ရန်ကုန်နည်းပညာတက္ကသိုလ်

