

7-2-2 ボーリング柱状図



# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 2,436 m

DATE OF INVESTIGATION 14 FEB '94

Saral, Banskhali, Chittagong

DEPTH TO GROUND WATER  
LEVEL IN HOLE -1,856 m

INVESTIGATED BY

BOLING HOLE No. U-1 (1)

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION			STANDARD PENETRATION TEST										SAMPLING										
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER-PENE cm	Num of Blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method						
1								1.00																			
								1.45																			
2								2.00	5/30	2	2	3															U-1
								2.45																			
3								3.00	4/30	2	2	2															
								3.45																			
4								4.00	3/30	1	1	2															
	2.36	4.00	4.80		silt	Grey		4.45																			
5								5.00	2/30	1	1	1															
								5.45																			
6								6.00	2/30	1	1	1															
								6.45																			
7								7.00	3/30	1	1	2															
								7.45																			
8								8.00	4/30	2	2	2															
	6.26	0.70	3.90		sand	Grey		8.45																			
9								9.00	5/30	2	2	3															
								9.45																			
10								10.00	16/30	6	8	8															
	8.36	10.00	2.10		silt	Grey		10.45																			
11								11.00	12/30	6	7	5															
								11.45																			
12								12.00	5/30	3	3	2															
								12.45																			
13								13.00	4/30	2	2	2															
	11.16	13.60	2.80		Clayey silt	Grey		13.45																			
14								14.00	7/30	3	4	3															
								14.45																			
15								15.00	6/30	3	3	3															U-2
								15.45																			
16								16.00	7/30	3	3	4															
								16.45																			
17								17.00	8/30	3	4	4															
								17.45																			
18								18.00	7/30	4	3	4															
	16.16	18.60	5.00		silt	Grey		18.45																			
19								19.00	7/30	4	4	3															
	19.36	19.80	1.20		silt	Grey		19.45																			
20								20.00	5/30	3	4	3															
								20.45																			
21								21.00	35/30	12	15	20															
	19.31	21.75	1.95		sand	Grey		21.45																			
22								22.00	35/30	10	10	17															
								22.45																			
23								23.00	24/30	14	14	10															
	21.36	23.00	2.05		sand	Grey		23.45																			
24								24.00	20/30	8	10	10															
	22.26	24.70	0.90		silt	Grey		24.45																			
25								25.00	17/30	9	9	8															
								25.45																			
26								26.00	19/30	8	6	1															
	24.01	26.45	1.75		Silty sand	Grey		26.45																			
27								27.00	50/30	15	20	30															
								27.45																			
28								28.00																			
								28.45																			
29								29.00																			
								29.45																			
30								30.00																			



# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION  
Sadhompur, Bamaldhali, Chittagong  
BORING HOLE No. 11-2 (1)

GROUND ELEVATION 3.050 m DATE OF INVESTIGATION 08 FEB '94  
DEPTH TO GROUND WATER LEVEL IN HOLE -2.35 m INVESTIGATED BY

STAFF m	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION				STANDARD PENETRATION TEST										SAMPLING								
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER- PENE cm	Nums of blow Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method					
										15 cm	30 cm	45 cm	0	10	20	30	40	50				60				
1				[Stippled pattern]		Grey	soft SILT with clay trace fine sand	1.00																		
2	0.55	2.50	2.50				silt	Grey		2/30	1	1	1													U-1
3				[Stippled pattern]		Grey	very loose to loose fine SAND with silt & clay	3.00	1/30	0	0	1														
4							sand	Grey		2/30	1	1	1													
5	1.05	4.90	2.40	[Stippled pattern]		Grey		5.00	5/30	2	2	3														
6										6.00	5/30	2	2	3												
7				[Stippled pattern]		Grey	stiff to stiff SILT & fine to med. SAND trace clay	7.00	6/30	2	3	3														
8										8.00	9/30	4	4	5												
9				[Stippled pattern]		Grey		9.00	11/30	4	5	6														
10	7.65	10.70	5.00				silt	Grey		10.00	13/30	5	6	7												
11				[Diagonal lines]		Grey		11.00	23/30	9	10	13														
12										12.00	33/30	16	15	18												
13				[Diagonal lines]		Grey	very stiff to hard fine sandy SILT	13.00	39/30	14	19	20														
14										14.00	45/30	17	20	22												
15	12.4	15.45	4.75	[Diagonal lines]		Grey	sandy silt	15.00	42/30	20	20	22														
16										16.00	46/30	22	23	23												
17								17.00																		
18								18.00																		
19								19.00																		
20								20.00																		
21								21.00																		
22								22.00																		
23								23.00																		
24								24.00																		
25								25.00																		
26								26.00																		
27								27.00																		
28								28.00																		
29								29.00																		
30								30.00																		

## BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 3,469 m

DATE OF INVESTIGATION 00 FEB '94

Sadhonpur, Barakhalai, Chittagong

DEPTH TO GROUND WATER

LEVEL IN HOLE -2.35 m

BORING HOLE No. 11-2 (2)

INVESTIGATED BY

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION			STANDARD PENETRATION TEST										SAMPLING						
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER-PENE cm	Num of Blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method		
										15	30	45	0	10	20	30	40	50	60				
1	2.17	1.30	1.30		clay	Brown	soft CLAY with silt	0.45															
								1.00															
								1.45															1.50
2							very soft SILT with clay trace	2.00	3/30	1	1	2											U-1
3	0.07	3.40	2.10		silt	Grey	fine sand	2.45															
								3.00	1/30	0	0	1											
								3.45															
4								4.00	1/30	1	0	1											
								4.45															
5								5.00	1/30	1	0	1											
								5.45															
6								6.00	5/30	1	2	3											
								6.45															
7								7.00	7/30	2	3	4											
								7.45															
8							very soft to med. stiff SILT with fine sand trace clay	8.00	6/30	4	3	3											
								8.45															
9								9.00	7/30	3	3	4											
								9.45															
10	6.33	9.80	6.40		silt	Grey		10.00	8/30	4	4	4											
								10.45															
11								11.00	11/30	4	5	6											
								11.45															
12								12.00	13/30	5	6	5											
								12.45															
13								13.00	14/30	4	7	7											
								13.45															
14								14.00	15/30	7	7	8											
								14.45															
15								15.00	13/30	6	6	7											
								15.45															
16								16.00	18/30	5	8	10											
								16.45															
17								17.00	35/30	15	15	20											
								17.45															
18							very stiff & hard fine to med sandy SILT trace clay	18.00	30/30	15	18	20											
								18.45															
19	15.98	19.45	9.65		silt	Grey		19.00	42/30	20	20	22											
								19.45															
20								20.00	49/30	20	22	27											
								20.45															
21								21.00															
								21.45															
22								22.00															
								22.45															
23								23.00															
								23.45															
24								24.00															
								24.45															
25								25.00															
								25.45															
26								26.00															
								27.00															
27								28.00															
								29.00															
28								30.00															
29																							
30																							

# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
 PROJECT LOCATION: Jakti, Barsaldali, Chittagong GROUND ELEVATION: 3.332 m DATE OF INVESTIGATION: 10 FEB '94  
 BORING HOLE No. 11-3 (1) DEPTH TO GROUND WATER LEVEL IN HOLE: -1.682 m INVESTIGATED BY: \_\_\_\_\_

STAFF	ELEVATION	DEPTH	THICKNESS	FIELD OBSERVATIONAL DESCRIPTION			STANDARD PENETRATION TEST											SAMPLING					
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth	N INTER-PENE	Num of blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth	Method		
m	m	m	m					m	cm	15 cm	30 cm	45 cm	0	10	20	30	40	50	60		m		
1				/ / /			very soft clayey SILT	1.00															
2												1.45											
				/ / /	clayey silt	Grey		2.00	3/30	1	1	2											
												2.45											
3	-0.02	3.55	3.55	/ / /				3.00															
												3.45											
4				/ / /			stiff SILT with clay trace fine sand	4.00	1/30	0	0	1											
												4.45											
5				/ / /				5.00	4/30	2	2	2											
												5.45											
6				/ / /	silt	Grey		6.00	5/30	2	2	3											
	-3.47	6.80	3.25									6.45											
7				/ / /			stiff to very stiff Clayey SILT	7.00	8/30	3	3	5											
												7.45											
8				/ / /				8.00	11/30	4	5	6											
												8.45											
9				/ / /	silt	Grey		9.00	14/30	5	7	7											
	-6.37	6.00	3.25									9.45											
10				/ / /			dense fine to med. SAND with silt	10.00	16/30	7	8	8											
												10.45											
11				/ / /				11.00	18/30	7	7	11											
												11.45											
12				/ / /				12.00	36/30	13	17	19											
												12.45											
13				/ / /				13.00	36/30	19	18	18											
												13.45											
14				/ / /	sand	Grey		14.00	32/30	17	15	17											
												14.45											
15				/ / /			very stiff SILT with fine sand trace clay	15.00	49/30	20	28	21											
	-11.52	14.85	5.15									15.45											
16				/ / /				16.00	13/30	8	6	7											
												16.45											
17				/ / /				17.00															
												17.45											
18				/ / /				18.00	15/30	6	7	8											
												18.45											
19				/ / /	silt	Grey		19.00	28/30	8	12	16											
	-16.27	19.60	4.75									19.45											
20				/ / /			very dense fine to med. SAND with silt	20.00	32/30	15	16	16											
												20.45											
21				/ / /				21.00	36/30	16	17	19											
												21.45											
22				/ / /				22.00	40/30	19	19	21											
												22.45											
23				/ / /				23.00	43/30	20	20	23											
												23.45											
24				/ / /	sand	Grey		24.00	75/30	30	34	41											
	-21.12	24.45	4.85									24.45											
25				/ / /				25.00	90/30	43	45	45											
												26.00											
26				/ / /				27.00															
												28.00											
27				/ / /				29.00															
												30.00											

# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 4.190 m

DATE OF INVESTIGATION 11 FEB '94

Jaldi, Barakhal, Chittagong

DEPTH TO GROUND WATER

LEVEL IN HOLE -3.04 m

INVESTIGATED BY

BORING HOLE No. 11-3 (2)

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION				STANDARD PENETRATION TEST											SAMPLING								
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N/INTER-PENE cm	Num of Blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method						
1				[Dotted pattern]			stiff to soft clayey SILT	1.00																			
												1.45															
2	1.65	2.55	2.55	[Dotted pattern]	silt	Grey		2.00	5/30	1	2	3															
												2.45															
3				[Dotted pattern]			stiff clayey SILT	3.00																			
												3.45															
4	0.40	4.65	2.10	[Dotted pattern]	silt	Grey		4.00	3/30	1	1	2															
												4.45															
5				[Dotted pattern]			stiff SILT with clay trace fine sand	5.00	5/30	2	2	3															
												5.45															
6				[Dotted pattern]				6.00	4/30	2	2	2															
												6.45															
7	2.61	6.80	2.15	[Dotted pattern]	silt	Grey		7.00	5/30	2	2	3															
												7.45															
8				[Dotted pattern]			stiff to stiff & very stiff clayey silt	8.00	6/30	2	3	3															
												8.45															
9				[Dotted pattern]				9.00	7/30	3	3	4															
												9.45															
10				[Dotted pattern]				10.00	13/30	5	6	7															
												10.45															
11	7.46	11.65	4.85	[Dotted pattern]	clayey silt	Grey		11.00	24/30	10	12	12															
												11.45															
12				[Dotted pattern]			SAND with silt	12.00	29/30	10	13	16															
												12.45															
13				[Dotted pattern]				13.00	46/30	20	22	24															
												13.45															
14				[Dotted pattern]				14.00	40/30	15	20	20															
												14.45															
15	11.41	15.60	4.85	[Dotted pattern]	sand	Grey		15.00	35/30	10	17	18															
												15.45															
16				[Dotted pattern]			soft clayey SILT	16.00	55/30	20	25	30															
												16.45															
17				[Dotted pattern]				17.00	30/30	12	14	16															
												17.45															
18	14.41	18.60	2.90	[Dotted pattern]	silt	Grey		18.00	2/30	1	1	1															
												18.45															
19				[Dotted pattern]			soft to very stiff & hard SILT with clay trace fine sand	19.00																			
												19.45															
20				[Dotted pattern]				20.00	2/30	1	1	1															
												20.45															
21				[Dotted pattern]				21.00	20/30	8	9	11															
												21.45															
22	18.26	22.45	6.85	[Dotted pattern]	silt	Grey		22.00	42/30	16	20	22															
												22.45															
23				[Dotted pattern]				23.00	62/30	30	30	32															
												23.45															
24				[Dotted pattern]				24.00																			
												24.45															
25				[Dotted pattern]				25.00																			
												25.45															
26				[Dotted pattern]				26.00																			
												27.00															
27				[Dotted pattern]				28.00																			
												29.00															
28				[Dotted pattern]				29.00																			
												30.00															

# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 4,609 m

DATE OF INVESTIGATION 07 FEB '94

Jalalabad, Sadar, Cox s Bazar  
BORING HOLE No. 11-4 (1)

DEPTH TO GROUND WATER  
LEVEL IN HOLE -0.63 m

INVESTIGATED BY

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION			STANDARD PENETRATION TEST										SAMPLING				
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER-PENE cm	Num of blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method
										15 cm	30 cm	45 cm	0	10	20	30	40	50			
1	3.21	1.40	1.40		sandy silt	Grey Brown	soft silt with fine sand	1.00	4/30	2	2	2									
2								2.00	2/30	1	1	1									
3								3.00	3/30	0	1	2							3.00		
								4.00	0/30	0	0	0							U-1 3.50		
4								5.00	1/30	0	0	1									
5								6.00	1/30	0	0	1							6.00		
6							soft to very soft silt with clay trace fine sand	7.00	1/30	0	0	1							U-2 6.50		
7								8.00	1/30	0	0	1									
8								9.00	2/30	0	0	1									
9	4.99	9.60	0.20		silt with clay	Grey Brown		10.00	4/30	2	2	4									
10					sand with silt	Grey	loose fine to medium SAND with silt	11.00	0/30	0	0	0									
11	6.49	11.10	1.50					12.00	0/30	0	0	0									
12							very soft SILT with clay trace fine sand	13.00	1/30	0	0	1									
13								14.00	1/30	0	0	1									
14	9.59	14.20	3.10		silt with clay	Grey		15.00	14/30	5	6	8									
15							very stiff SILT with clay	16.00	15/30	6	7	8									
16								17.00	16/30	5	7	9									
17								18.00	26/30	10	12	14									
18	14.24	18.85	4.65		silt with clay	Grey		19.00		10	50	Blow for 15cm									
19	14.79	19.40	0.55		fine sand	Grey	very dense med to fine SAND & SILT	20.00	60/30	8	20	32									
20								21.00	60/30	10	30	30									
21	16.5	21.20	1.80		silt with clay	Grey	hard SILT with clay & fine sand	22.00	53/30	8	26	27									
22	17.79	22.40	1.20		sandy silt	Grey	hard fine sandy SILT trace gravel	23.00	30/30	11	14	16									
23							hard clayey SILT	24.00	79/30	16	34	54									
24								25.00	95/30	16	45	50									
25								26.00	90/30	16	40	50									
26	22.39	27.00	4.60		clayey silt	Grey		27.00		18	50	Blow for 10cm									
27								28.00													
28								29.00													
29								30.00													
30																					

# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 4.596 m

DATE OF INVESTIGATION 07 FEB '94

Jalalabad, Sadar, Cox's Bazar

DEPTH TO GROUND WATER  
LEVEL IN HOLE -63 m

INVESTIGATED BY

BOLING HOLE No. 11-4 (2)

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION				STANDARD PENETRATION TEST											SAMPLING									
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER PENE cm	Num of Blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method							
										15 cm	30 cm	45 cm	0	10	20	30	40	50				60						
1							soft fine sandy SILT trace clay	1.00	4/30	2	2	2																
2	-2.30	2.30	2.30		sandy silt clay	Brown		2.00	2/30	1	1	1																
3								3.00	2/30	1	1	1																
4								4.00	1/30	0	0	1																
5							soft SILT with clay trace fine sand		5.00	0/30	0	0	1															
6								6.00	1/30	0	0	1																
7								7.00	1/30	0	0	1															7.10	
8	3.704	6.30	6.00		silt with fine sand	Grey		8.00	1/30	0	0	1														U-1	7.60	
9							stiff SILT with clay & fine sand		9.00	6/30	2	2	4													U-2	8.60	
10	5.004	10.40	2.10		silt with fine sand	Grey		10.00	7/30	2	2	5																
11								11.00	7/30	2	3	4																
12							stiff SILT with clay trace fine sand		12.00	6/30	2	2	4															
13								13.00	7/30	2	3	4																
14	9.04	14.40	4.00		silt with fine sand	Grey		14.00	12/30	4	5	7																
15								15.00	33/30	7	13	20																
16								16.00	32/30	8	12	20																
17							hard SILT with fine sand & clay		17.00	30/30	7	16	22															
18								18.00	35/30	7	15	20																
19								19.00	34/30	35	39	45																
20								20.00	34/30	8	16	18																
21								21.00	33/30	7	14	19																
22	17.90	22.50	3.10		silt with clay	Grey		22.00	56/30	8	25	31																
23								23.00	33/30	10	30	45																
24								24.00	90/30	19	40	50																
25							hard clayey SILT		25.00	20 50 BLOWS for 12cm																		
26								26.00	20 50 BLOWS for 10cm																			
27	22.40	27.00	4.50		clayey silt	Grey		27.00	20 50 BLOWS for 10cm																			
28								28.00																				
29								29.00																				
30								30.00																				

## BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 3.575 m

DATE OF INVESTIGATION 07 FEB '94

Jalalabad, Sudur, Cox's Bazar

DEPTH TO GROUND WATER  
LEVEL IN HOLE -2.15 m

INVESTIGATED BY

BOLING HOLE No. 11-5 (1)

STAFF m	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION				STANDARD PENETRATION TEST											SAMPLING								
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N/INTER-PENE cm	Num of blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method						
										15 cm	30 cm	45 cm	0	10	20	30	40	50				60					
1							soft SILT with fine to medium sand & clay	1.00	4/30	2	2	2															
2	1.00	2.50	2.50		silt	Grey Brown		2.00	2/30	1	1	1													2.17		
3								3.00	10/30	4	4	6														U-1	
4	0.93	4.50	2.00		sand	Grey	fine SAND with silt	4.00	23/30	4	10	13														2.70	
5								5.00	8/30	3	4	4															
6							sandy SILT with clay	6.00	8/30	3	4	4															
7								7.00	8/30	5	3	5															
8	4.03	6.40	3.90		sandy silt with clay	Grey		8.00	8/30	5	4	4															
9							fine SAND trace silt	9.00	26/30	7	11	15															
10	6.03	10.40	2.00		Sand	Grey		10.00	26/30	7	12	14															
11								11.00	23/30	6	10	13															
12								12.00	16/30	4	8	8															
13								13.00	16/30	4	7	9															
14								14.00	14/30	4	6	8															
15								15.00	12/30	4	4	8															
16								16.00	9/30	3	4	5															
17								17.00	9/30	3	4	5															
18								18.00	10/30	3	5	5															
19								19.00	11/30	3	5	6															
20								20.00	9/30	2	4	5															
21								21.00	10/30	3	4	6															
22								22.00	9/30	3	4	5															
23							very stiff to stiff SILT with clay trace fine sand	23.00	9/30	4	4	5															
24								24.00	8/30	3	4	4															
25								25.00	7/30	4	3	4															
26								26.00	10/30	3	5	5															
27								27.00	8/30	3	4	4															
28								28.00	9/30	3	4	5															
29								29.00	10/30	3	4	6															
30	26.43	30.00	19.60		silt fine sand	Grey		30.00	10/30	4	4	6															

## BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 3.573 m

DATE OF INVESTIGATION 03 FEB '94

Jakalabad, Sagar, Cox's Bazar

DEPTH TO GROUND WATER  
LEVEL IN HOLE -2.18 m

BOLING HOLE No. 11-5 (2)

INVESTIGATED BY

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION				STANDARD PENETRATION TEST											SAMPLING								
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER-PENE cm	Num of blow Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method						
										15 cm	30 cm	45 cm	0	10	20	30	40	50				60					
1							still to soft & stiff fine to med. sandy SILT with clay	1.00	7/30	2	3	4											U-1	2.10	2.65		
2			2.00					2/30	1	1	1																
3			3.00					4/30	1	2	2																
4	-0.83	4.40	4.40		sandy silt with clay	Grey Brown		4.00	13/30	3	5	8															
5	-1.53	5.10	0.70		Silt & sand	Grey	deice (up to med. SAND with silt	5.00	11/30	3	4	7															
6							sandy SILT trace clay	6.00	7/30	2	3	4											U-2	9.10	9.65		
7			7.00					4/30	1	2	2																
8	-4.03	6.40	3.30						sandy silt	Grey		8.00	5/30	2	2	3											
9							to fine SAND with silt	9.00	13/30	2	4	9											U-2	9.65			
10			10.00					13/30	2	5	8																
11	-7.70	11.35	2.95						sand with silt	Grey		11.00	12/30	3	5	7											
12								12.00	10/30	3	4	6															
13			13.00					7/30	3	3	4																
14			14.00					7/30	2	3	4																
15								15.00	8/30	2	4	4															
16			16.00					7/30	3	3	4																
17			17.00					9/30	3	4	5																
18								18.00	7/30	2	3	4															
19			19.00					7/30	3	3	4																
20			20.00					6/30	2	3	3																
21								21.00	8/30	3	3	5															
22			22.00					8/30	3	4	4																
23			23.00					7/30	3	3	4																
24								24.00	9/30	3	4	5															
25			25.00					9/30	3	4	5																
26			26.00					8/30	3	4	5																
27							stiff to stiff SILT with clay & fine sand	27.00	6/30	3	3	3															
28			28.00					8/30	3	4	4																
29			29.00					9/30	3	4	5																
30	-26.43	30.00	16.65		Silt with clay fine sand	Grey		30.00	8/30	3	3	5															

# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 7.469 m

DATE OF INVESTIGATION 11 FEB '94

Khoruski, Sadar, Coc's Bazar

DEPTH TO GROUND WATER

LEVEL IN HOLE -3.60 m

INVESTIGATED BY

BOLING HOLE No. 11-6 (1)

STAFF	ELEVATION	DEPTH	THICKNESS	FIELD OBSERVATIONAL DESCRIPTION				STANDARD PENETRATION TEST										SAMPLING										
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER-PENE. cm	Num of blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method							
										15 cm	30 cm	45 cm	0	10	20	30	40	50				60						
1							dense fine to med. SAND with silt	1.00	9/30	4	4	5																
2								2.00	14/30	4	7	7																
3	4.10	3.40	3.40		sand with silt	Brown Grey		3.00	7/30	2	3	4															3.10	
																											U-1	3.65
4								4.00	75/30	12	25	50																
5								5.00	78/30	18	28	50																
6							very dense silty fine to med. SAND with silt	6.00		21	50	Blows	for	11cm														
7								7.00		25	50	Blows	for	12cm														
8								8.00	63/30	18	28	35																
9	1.93	9.40	6.00		Sand	Grey		9.00	60/30	20	30	30																
10								10.00	91/30	25	41	50																
11								11.00	95/30	23	45	50																
12								12.00		31	50	Blows	for	15cm														
13								13.00		35	50	Blows	for	11cm														
14								14.00		36	50	Blows	for	12cm														
15								15.00		30	50	Blows	for	14cm														
16							very dense fine to med. SAND with silt	16.00		32	50	Blows	for	13cm														
17								17.00		35	50	Blows	for	12cm														
18								18.00		50		Blows	for	10cm														
19								19.00		50		Blows	for	8cm														
20								20.00		50		Blows	for	7cm														
21	13.53	21.00	11.60		Sand with silt	Grey Brown		21.00		50		Blows	for	8cm														
22								22.00																				
23								23.00																				
24								24.00																				
25								25.00																				
26								26.00																				
27								27.00																				
28								28.00																				
29								29.00																				
30								30.00																				

## BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)

PROJECT LOCATION

GROUND ELEVATION 7.322 m

DATE OF INVESTIGATION 13 FEB '94

Khorastan, Sadar, Cox's Bazar

DEPTH TO GROUND WATER

LEVEL IN HOLE -3.10 m

INVESTIGATED BY

BORING HOLE No. 11-6 (2)

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION			STANDARD PENETRATION TEST											SAMPLING					
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER-PENE cm	Num of blows Every 15cm	NUMBER OF BLOWS N						Sample No.	Depth m	Method				
										15	30	45	0	10	20	30	40	50	60				
1							loose fine to med.SAND with silt	1.00	7/30	2	3	4											
2								2.00	4/30	3	2	2											
3	3.72	3.60	3.60		Sand with Silt	Brown Grey		3.00	5/30	2	2	3										3.10	
4								4.00	27/30	12	15	12										U-1	3.65
5							dense to very dense fine to med.SAND with silt	5.00	60/30	11	19	49											
6								6.00		25	41	50											
7								7.00		30	50		Blows for	15cm									
8								8.00		35	50		Blows for	9cm									
9	2.08	9.40	5.80		Sand with Silt	Grey		9.00		36	50		Blows for	8cm									
10								10.00		38	50		Blows for	7cm									
11								11.00		31	50		Blows for	8cm									
12								12.00		35	50		Blows for	9cm									
13								13.00		32	50		Blows for	7cm									
14								14.00		30	50		Blows for	8cm									
15								15.00		32	50		Blows for	10cm									
16								16.00		28	50		Blows for	12cm									
17							very dense fine to med. SAND & SILT	17.00		29	50		Blows for	10cm									
18								18.00		31	50		Blows for	9cm									
19								19.00		35	50		Blows for	8cm									
20								20.00		50			Blows for	12cm									
21	13.68	21.00	11.60		Sand & Silt	Grey		21.00		50			Blows for	11cm									
22								22.00															
23								23.00															
24								24.00															
25								25.00															
26								26.00															
27								27.00															
28								28.00															
29								29.00															
30								30.00															

# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 3.227 m

DATE OF INVESTIGATION 09 FEB '94

East Boro Bheola, Chokoria, Cox's Bazar

DEPTH TO GROUND WATER  
LEVEL IN HOLE -1.50 m

INVESTIGATED BY

BOLING HOLE No. 11-7 (1)

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION				STANDARD PENETRATION TEST											SAMPLING										
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER- PENE- CIN	Num of Blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method								
										15 cm	30 cm	45 cm	0	10	20	30	40	50				60							
1	1.73	1.50	1.50	[diagonal lines]	sandy silt	light grey	sandy silt (loose)	1.00	4/30	1	2	2																	
2	0.93	2.30	0.80	[horizontal lines]	clay	light brown & grey	medium plastic CLAY (med stiff)	2.00	4/30	1	2	2																	
3				[horizontal lines]				3.00	2/30	0	1	1																	
4				[horizontal lines]			medium plastic CLAY (soft)	4.00	1/30	0	0	1																	
5				[horizontal lines]				5.00	1/30	0	0	0																	
6	3.27	6.50	4.20	[horizontal lines]	clay	Grey		6.00	2/30	0	1	1																	
7				[diagonal lines]			sandy CLAY	7.00	3/30	1	1	2																	
8	4.77	8.00	1.50	[diagonal lines]	sandy clay	Grey	medium plastic (soft)	8.00	3/30	0	1	2																	
9				[diagonal lines]			sandy CLAY (medium stiff to still)	9.00	5/30	1	2	3																	
10				[diagonal lines]				10.00	10/30	2	4	6																	
11	7.77	11.00	3.00	[diagonal lines]	sandy clay	Grey		11.00	11/30	2	5	6																	
12				[diagonal lines]			fine SAND, some silt (medium dense)	12.00	20/30	4	8	12																	
13	10.27	13.5	2.50	[diagonal lines]	sandy some silt	light grey		13.00	17/30	2	8	9																	
14				[horizontal lines]				14.00	5/30	2	2	3																	
15				[horizontal lines]			medium plastic CLAY, trace fine sand (med stiff)	15.00	4/30	1	2	2																	
16				[horizontal lines]				16.00	5/30	2	2	3																	
17				[horizontal lines]				17.00	5/30	2	2	3																	
18				[horizontal lines]				18.00	6/30	2	3	3																	
19				[horizontal lines]				19.00	5/30	2	3	3																	
20				[horizontal lines]				20.00	5/30	2	2	3																	
21	17.77	21.0	7.50	[horizontal lines]	chy, trace sand	Grey		21.00	6/30	2	2	4																	
22				[horizontal lines]			high plastic CLAY (medium stiff)	22.00	7/30	3	3	4																	
23	19.77	23.0	2.00	[horizontal lines]	cky	light grey		23.00	8/30	2	3	5																	
24				[horizontal lines]			high plastic CLAY (stiff)	24.00	9/30	2	3	6																	
25				[horizontal lines]				25.00	11/30	3	4	7																	
26	22.77	26.0	3.00	[horizontal lines]	cky	light brown & grey		26.00	10/30	3	4	6																	
27				[horizontal lines]			high plastic CLAY (stiff)	27.00	13/30	2	6	7																	
28				[horizontal lines]				28.00	13/30	2	6	7																	
29				[horizontal lines]				29.00	11/30	3	5	6																	
30	26.77	30.0	4.00	[horizontal lines]	cky	light grey		30.00	15/30	3	7	8																	

# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 2.969 m

DATE OF INVESTIGATION 09 FEB '94

East Boro Bheola, Chokoria, Cox's Bazar

DEPTH TO GROUND WATER  
LEVEL IN HOLE -1.75 m

INVESTIGATED BY

BORING HOLE No. 11-7 (2)

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION				STANDARD PENETRATION TEST											SAMPLING							
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER- PENE cm	Num of blows Every 15cm 15 30 45	NUMBER OF BLOWS N						Sample No.	Depth m	Method							
1	1.72	1.25	1.25	[diagonal lines]	silt	light brown & grey	medium compressible SILT	1.00	2/30	0	1	1														
2	0.67	2.30	1.05	[horizontal lines]	clay	Grey	medium plastic CLAY (med. stiff)	2.00	4/30	0	2	2														
3	0.53	3.50	1.20	[horizontal lines]	clay	Grey	soft CLAY with decomposed wood	3.00	1/30	0	0	1														
4				[horizontal lines]				4.00	1/30	0	0	1														
5	2.43	5.40	1.90	[horizontal lines]	clay	Grey	high plastic CLAY (very soft)	5.00	2/30	0	1	1														
6				[horizontal lines]				6.00	4/30	1	2	2														
7				[horizontal lines]			sandy CLAY (medium stiff)	7.00	5/30	2	2	3														
8				[horizontal lines]				8.00	3/30	1	1	2														
9				[horizontal lines]				9.00	5/30	2	2	3														
10	7.53	10.50	5.10	[horizontal lines]	clay	Grey		10.00																		
									7/30	3	3	4												U-1	10.00	10.50
11				[diagonal lines]			fine SAND, some silt (medium dense)	11.00	15/30	3	7	8														
12	9.20	12.25	1.75	[diagonal lines]	sand, some silt	Grey		12.00	25/30	6	12	13														
13				[diagonal lines]			sandy CLAY (medium stiff to stiff)	13.00	10/30	3	4	6														
14	11.13	14.10	1.85	[diagonal lines]	sandy clay	Grey		14.00	7/30	3	3	4														
15				[diagonal lines]			medium plastic CLAY, trace organic matter (stiff)	15.00	10/30	3	4	6														
16				[diagonal lines]				16.00	8/30	2	3	5														
17	14.33	17.30	3.20	[diagonal lines]	clay	Grey		17.00	11/30	4	5	6														
18				[diagonal lines]			high plastic CLAY, trace organic matter (stiff)	18.00	10/30	3	5	5														
19				[diagonal lines]				19.00	6/30	2	3	3														
20	17.03	20.00	2.70	[diagonal lines]	clay	Grey		20.00																		
									5/30	2	2	3												U-2	20.00	20.50
21				[diagonal lines]			high plastic CLAY (medium stiff to stiff)	21.00	7/30	2	3	4														
22				[diagonal lines]				22.00	9/30	3	4	5														
23	20.53	23.50	3.50	[diagonal lines]	clay	Brownish grey		23.00	10/30	3	5	5														
24				[diagonal lines]				24.00	11/30	2	5	6														
25				[diagonal lines]			high plastic CLAY (stiff)	25.00	13/30	3	6	7														
26	23.53	26.50	3.00	[diagonal lines]	clay	light brown & grey		26.00	16/30	4	6	10														
27				[diagonal lines]				27.00	14/30	3	5	9														
28				[diagonal lines]			medium plastic CLAY (very stiff)	28.00	15/30	4	7	8														
29				[diagonal lines]				29.00	18/30	5	7	11														
30	27.03	30.00	3.50	[diagonal lines]	clay	Light grey		30.00	18/30	4	7	10														

# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 1.311 m

DATE OF INVESTIGATION 06 FEB '94

Badarikhatt, Chokoria, Cox's Bazar

DEPTH TO GROUND WATER  
LEVEL IN HOLE -1.0 m

BOLING HOLE No. 11-8 (1)

INVESTIGATED BY

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION				STANDARD PENETRATION TEST												SAMPLING					
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER- PENE- CTR	Num of blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Meth- od				
										15 cm	30 cm	45 cm	0	10	20	30	40	50				60			
1							medium plastic CLAY, trace organic matter (very stiff)	1.00	1/30	0	0	1													
2								2.00	1/30	0	0	1													
3		2.19	3.50	3.50		clay	Grey	3.00	1/30	0	0	1													
4								4.00	1/30	0	0	1													
5								5.00	1/30	0	0	1													
6							medium plastic CLAY (very stiff)	6.00	1/30	0	0	1													
7								7.00	1/30	0	0	1													
8		7.19	8.50	5.00		clay	Grey	8.00	1/30	0	0	1													
9							medium plastic CLAY, trace sand (medium stiff)	9.00	4/30	0	2	2													
10		9.19	10.50	2.00		clay	Grey	10.00																10.00	
									3/30	1	1	2												U-1	10.50
11							sandy CLAY, medium plastic (medium stiff)	11.00	8/30	2	3	5													
12		11.19	12.50	2.00		clay	Grey	12.00	7/30	2	3	4													
13							fine SAND, some silt (medium stiff)	13.00	15/30	2	6	9													
14		12.69	14.00	1.50		sand, some silt	Grey	14.00	18/30	3	8	10													
15							sandy CLAY medium plastic (stiff)	15.00	12/30	3	6	7													
16								16.00	13/30	3	6	8													
17		15.69	17.00	3.00		sandy clay	Grey	17.00	16/30	2	7	9													
18							medium plastic CLAY (medium plastic)	18.00	6/30	2	3	3													
19								19.00	5/30	1	2	3													
20								20.00																	20.00
									4/30	1	2	2												U-2	20.50
21		19.69	21.00	4.00		clay	Grey	21.00	5/30	1	2	3													
22							sandy CLAY, medium plastic (medium stiff)	22.00	6/30	2	3	3													
23								23.00	5/30	1	2	3													
24								24.00	6/30	1	3	3													
25		23.69	25.00	4.00		sandy clay	Grey	25.00	12/30	2	6	7													
26							fine SAND, little silt (medium dense)	26.00	21/30	4	9	12													
27		26.69	27.00	2.00		sand, little silt	Grey	27.00	19/30	5	9	10													
28							high plastic CLAY, trace organic matter (very stiff)	28.00	16/30	5	8	9													
29								29.00	19/30	6	9	10													29.00
																								U-3	29.50
30		28.69	30.00	3.00		clay	Brownish grey	30.00	18/30	5	8	9													

## BORING LOG (Soil exploration)

MULTIPURPOSE CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION **1,301 m** DATE OF INVESTIGATION **07 FEB '94**

Badarkhali, Chokoria, Cox 's Bazar

DEPTH TO GROUND WATER  
LEVEL IN HOLE **-1.00 m**

BORING HOLE No. **11-8 (2)**

INVESTIGATED BY

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION			STANDARD PENETRATION TEST										SAMPLING				
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER-PENE cm	Num of blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method
										15 cm	30 cm	45 cm	0	10	20	30	40	50			
1							1.00	1/30	0	0	1										
2							2.00	1/30	0	0	1										
3	1.70	3.00	3.00		clay	Grey	3.00	1/30	0	0	1										
4							4.00	1/30	0	0	1										
5							5.00	1/30	0	0	1										
6							6.00	2/30	0	0	1										
7							7.00	1/30	0	0	1										
8							8.00	2/30	0	1	1										
9							9.00	3/30	0	1	2										
10	8.70	10.00	7.00		clay	Grey	10.00	7/30													
11									1	3	4									10.50	
11	10.20	11.50	1.50		sandy clay	Grey	11.00	6/30	1	3	3									U-1	11.00
12							12.00	13/30	3	6	7										
13	11.70	13.00	1.50		sand, some silt	Grey	13.00	15/30	3	6	9										
14							14.00	9/30	3	4	5										
14	13.20	14.50	1.50		sandy clay	Grey	15.00	10/30	2	4	6										
15							16.00	10/30	2	4	6										
16	14.70	16.00	1.50		sand, & silt	Grey	17.00	7/30	3	3	4										
17							18.00	4/30	1	2	2										
18							19.00	5/30	1	2	3										
19							20.00	4/30													
20							21.00	5/30	1	2	3									U-2	20.00
21	20.20	21.50	5.50		clay	Grey	22.00	7/30	2	3	4										
22							23.00	8/30	2	4	4										
23							24.00	5/30	1	2	3										
24							25.00	7/30	2	3	4										
25	24.20	25.50	4.00		clay	Grey	26.00	22/30	4	8	14										
26							27.00	20/30	4	9	11										
27	25.70	27.00	1.50		sand, little silt	Light Grey	28.00	9/30	2	4	5										
28							29.00	10/30	4	5	5										
29							30.00	11/30	4	5	6										
30	28.70	30.00	3.00		sandy clay	Light Grey														U-3	29.50
																					30.00

# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 3.225 m

DATE OF INVESTIGATION 06 FEB '94

Chhinga, Cokorin, Cox's Bazar

DEPTH TO GROUND WATER  
LEVEL IN HOLE -1.60 m

INVESTIGATED BY

BORING HOLE No. 11-9 (1)

STAFF	ELEVATION	DEPTH	THICKNESS	FIELD OBSERVATIONAL DESCRIPTION			STANDARD PENETRATION TEST										SAMPLING						
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth	N	Num of Blows Every 15cm			NUMBER OF BLOWS N						Sample	Depth	Method		
m	m	m	m					m	cm	15 cm	30 cm	45 cm	0	10	20	30	40	50	60	No.	m		
1							medium plastic CLAY (soft to medium stiff)	1.00	3/30	1	1	2											
2	0.86	2.40	2.40		clay	light brown & grey	CLAY (soft to medium stiff)	2.00	5/30	1	2	3											
3					clay, base sand	Grey	medium plastic CLAY, trace sand (soft)	3.00	3/30	1	2	3											
4	1.15	4.40	2.00				fine sand, some silt (loose to medium dense)	4.00	2/30	1	1	1											
5							fine sand, some silt (loose to medium dense)	5.00	9/30	2	4	5											
6							fine sand, some silt (loose to medium dense)	6.00	11/30	4	5	6											
7	4.05	7.30	2.90				fine sand, some silt (medium dense)	7.00	11/30	4	5	6											
8							fine SAND, some silt (medium dense)	8.00	23/30	8	11	12											
9	6.25	9.50	2.20				fine SAND, some silt (medium dense to dense)	9.00	20/30	7	10	10											
10							fine SAND, some silt (medium dense to dense)	10.00													U-1	10.00	
11	7.99	11.25	1.75				fine SAND, little silt (medium dense to dense)	11.00	31/30	10	14	17											
12							fine SAND, little silt (medium dense to dense)	12.00	20/30	8	11	17											
13							fine SAND, little silt (medium dense to dense)	13.00	39/30	15	19	20											
14	11.25	14.40	3.15				fine SAND, little silt (medium dense to dense)	14.00	29/30	11	14	15											
15							fine SAND, trace silt (dense)	15.00	44/30	19	21	23											
16	12.75	16.00	1.60				fine SAND, trace silt (dense)	16.00	12/30	18	21	21											
17							fine SAND, some silt, trace decomposed wood (medium dense)	17.00	35/30	14	17	18											
18	14.90	18.25	2.25				fine SAND, some silt, trace decomposed wood (medium dense)	18.00	17/30	6	8	9											
19							fine SAND, trace silt (dense to very dense)	19.00	11/30	4	5	6											
20							fine SAND, trace silt (dense to very dense)	20.00	57/30	23	27	30											
21	17.75	21.00	2.75				fine SAND, trace silt (medium dense to dense)	21.00	11/30	19	21	20									U-2	21.00	
22							fine SAND, little silt (medium dense to dense)	22.00	32/30	12	16	16											
23							fine SAND, little silt (medium dense to dense)	23.00	28/30	10	13	15											
24	20.75	24.00	3.00				fine SAND, little silt (medium dense to dense)	24.00	29/30	11	14	15											
25							high plastic CLAY (stiff)	25.00	32/30	14	16	16											
26	22.15	25.40	1.40				high plastic CLAY (stiff)	26.00	13/30	4	7	6											
27							medium plastic CLAY, trace sand (stiff)	27.00	11/30	4	5	6											
28	24.25	27.50	2.10				medium plastic CLAY, trace sand (stiff)	28.00	13/30	4	6	7											
29							high plastic CLAY (very stiff)	29.00	18/30	7	8	10											
30	26.75	30.00	2.50				high plastic CLAY (very stiff)	30.00	20/30	8	10	10									U-3	29.50	
							high plastic CLAY (very stiff)		19/30	6	9	10											

# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 3.353 m

DATE OF INVESTIGATION 07 FEB '94

Chiringa, Chokoria, Cox's Bazar

DEPTH TO GROUND WATER  
LEVEL IN HOLE -1.70 m

BOLING HOLE No. 11-9 (2)

INVESTIGATED BY

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION			STANDARD PENETRATION TEST											SAMPLING							
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER-PENE CH	Num of blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method				
										15 cm	30 cm	45 cm	0	10	20	30	40	50	60						
1							medium plastic CLAY (medium stiff)	1.00	4/30	2	2	2													
2							clay	2.00	8/30	3	4	4													
3	0.05	3.40	3.40			Light blown & grey		3.00	4/30	2	2	2													
4						medium plastic CLAY (soft)		4.00	3/30	1	1	2													
5	1.65	5.00	1.60			clay	Grey	5.00	2/30	1	1	1													
6	2.85	6.20	1.20			clay with sand	Grey	6.00	5/30	2	2	3													
7							sand & silt	7.00	7/30	2	3	4													
8	4.75	8.10	1.90			fine SAND & SILT (loose)		Grey	8.00	7/30	2	3	4												
9							fine SAND, some silt (medium dense to dense)	9.00	18/30	6	8	10													
10								10.00																9.50	
11								11.00	36/3	12	16	20												U-1	10.00
12								12.00	24/30	8	11	13													
13								13.00	29/30	12	14	15													
14							sand, some silt	14.00	21/30	10	10	11													
15	11.75	15.10	7.00			Grey		15.00	19/30	7	9	10													
16								16.00	33/30	14	16	17													
17	13.65	17.00	1.90			clay	Grey	17.00	6/30	2	3	3													
18	15.15	18.50	1.50			sand, little silt	Grey	18.00	12/30	3	5	7													
19	16.15	19.50	1.00			sand & silt	Grey	19.00	48/30	16	20	28													
20							fine sand, some silt (medium dense to dense)	20.00	15/30	4	6	9												19.50	
21								21.00																U-2	20.00
22								22.00	47/30	18	22	25													
23	19.45	22.80	3.30			sand, some silt	Grey	23.00	38/30	14	18	20													
24							high plastic CLAY (stiff)	24.00	35/30	12	16	19													
25	22.15	25.50	2.70			clay		Grey	25.00	11/30	5	5	6												
26							medium plastic CLAY (stiff)	26.00	13/30	3	6	7													
27								27.00	11/30	3	5	6													
28								28.00	10/30	3	5	6													
29								29.00	11/30	3	5	6													
30	26.65	30.00	4.50			clay		light grey	30.00	12/30	4	6	6											U-3	29.50
									14/30	3	6	8													

# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 5.616 m

DATE OF INVESTIGATION 07 FEB '94

Pataarkhal, Ranua, Cox's Bazar

DEPTH TO GROUND WATER  
LEVEL IN HOLE -2.50 m

INVESTIGATED BY

BOLING HOLE No. 11-19 (1)

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION				STANDARD PENETRATION TEST												SAMPLING				
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N/10cm PENET. cm	Num of Blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method			
										15 cm	30 cm	45 cm	0	10	20	30	40	50				60		
1	4.22	1.40	1.40		silt	Grey	soft SILT with fine sand trace clay & oxides filling	1.00	4/30	1	2	2												
2								2.00	2/30	1	1	1												
3								3.00	3/30	1	2	1												
4							soft SILT with clay trace fine sand	4.00	2/30	1	1	1										4.10		
5								5.00	3/30	1	1	2										U-1	4.65	
6								6.00	4/30	2	2	2											6.10	
7								7.00	3/30	1	1	2											6.65	
8	2.70	8.40	7.00		fine sand with clay	Grey		8.00	4/30	1	2	2												
9								9.00	20/30	6	8	20												
10								10.00	30/30	6	10	20												
11								11.00	40/30	8	15	25												
12								12.00	42/30	10	20	22												
13								13.00	64/30	20	31	33												
14							dense to dense & very dense med. to fine SAND with silt	14.00	90/30	14	40	50												
15								15.00	80/30	15	39	49												
16								16.00	81/30	16	31	50												
17								17.00		31	50	—	Blows for 12cm											
18								18.00		30	50	—	Blows for 14cm											
19								19.00		18	50	—	Blows for 13cm											
20	14.38	20.00	11.60		fine sand	Grey		20.00		26	50	—	Blows for 14cm											
21								21.00																
22								22.00																
23								23.00																
24								24.00																
25								25.00																
26								26.00																
27								27.00																
28								28.00																
29								29.00																
30								30.00																



# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)

PROJECT LOCATION

GROUND ELEVATION 7.177 m

DATE OF INVESTIGATION 11 FEB '94

Jalapa, Ukhta, Cox's Bazar

DEPTH TO GROUND WATER

LEVEL IN HOLE -2.10 m

INVESTIGATED BY

BOLING HOLE No.

11-11 (1)

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION			STANDARD PENETRATION TEST										SAMPLING							
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	INTER PENE CUIT	Num of blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method			
										15 cm	30 cm	45 cm	0	10	20	30	40	50	60					
1	5.78	1.40	1.40		fine sand with silt	Grey	loose fine SAND with silt	1.00	930	4	4	5												
2							very stiff SILT with clay trace fine sand	2.00	1530	5	7	8										U-1	2.10 2.65	
3	4.10	3.00	1.60		silt clay sand	Grey		3.00	1730	5	8	9												
4							stiff to very stiff & hard SILT with clay & fine sand	4.00	730	3	3	4											U-2	4.10 4.65
5								5.00	930	3	4	5												
6								6.00	1030	4	4	6												
7								7.00	630	3	3	3												
8								8.00	630	2	3	3												
9								9.00	730	2	3	4												
10							10.00	3330	12	13	20													
11	4.32	11.50	8.50		silt with clay & fine sand	Grey		11.00	2530	11	12	13												
12							very stiff fine sandy SILT trace clay	12.00	2730	13	13	14												
13	6.22	15.30	1.90		sandy silt	Grey		13.00	2930	10	14	15												
14							hard sandy SILT trace gravel	14.00	3230	11	16	16												
15	0.12	15.30	1.90		sandy silt	Grey		15.00	3730	10	17	20												
16							dense very fine SAND with silt	16.00	3930	12	18	21												
17	10.32	17.50	2.20		sand with silt	Grey		17.00	4330	11	19	24												
18							hard fine sandy SILT trace gravel	18.00		25	50	-	Blows for 9cm											
19								19.00		27	50	-	Blows for 7cm											
20								20.00		25	50	-	Blows for 5cm											
21								21.00		50	-	Blows for 15cm												
22	14.82	22.00	4.50		sandy silt & gravel	Grey			22.00		56	-	Blows for 15cm											
23								23.00																
24								24.00																
25								25.00																
26								26.00																
27								27.00																
28								28.00																
29								29.00																
30								30.00																

## BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 7.115 m

DATE OF INVESTIGATION 11 FEB '94

Jalapar, Ukhita, Cox's Bazar

DEPTH TO GROUND WATER

BORING HOLE No. 11-11 (2)

LEVEL IN HOLE -2.30 m

INVESTIGATED BY

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION			STANDARD PENETRATION TEST											SAMPLING										
							COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER-PENE cm	Num of blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method				
				15 cm	30 cm	45 cm							0	10	20	30	40	50	60									
1	5.72	1.40	1.40		silt sand	Grey	stiff fine sandy SILT	1.00	9/30	3	4	5																
2							very stiff to stiff SILT with fine to med. sand & chy	2.00	16/30	5	7	9															2.10	
3	4.12	3.00	1.60		clay sand	Grey		3.00	10/30	3	4	6															U-1	2.65
4							stiff SILT with chy & fine sand	4.00	8/30	3	4	4																
5								5.00	9/30	4	4	5																
6	0.02	6.30	3.30		silt chy sand	Grey		6.00	5/30	2	2	3																
7								7.00	6/30	2	3	3																
8							stiff to very stiff SILT with chy trace fine sand & organic matter	8.00	5/30	2	3	3																
9								9.00	5/30	3	2	3																
10								10.00	16/30	5	6	10																
11	4.22	11.30	5.00		stiff silt chy fine sand	Grey		11.00	19/30	6	7	12																
12							stiff SILT trace clay	12.00	9/30	3	4	5																
13	6.12	13.30	2.00		stiff silt trace chy	Grey		13.00	7/30	3	3	4																
14								14.00	30/30	8	12	18																
15								15.00	41/30	10	14	30																
16							very dense fine SAND & SILT trace gravel	16.00	49/30	11	14	35																
17								17.00	51/30	10	18	30																
18								18.00		23	50	—	Blows for 10cm															
19								19.00		36	51	—	Blows for 5cm															
20								20.00		51	—	—	Blows for 15cm															
21	13.09	21.00	7.70		silt gravel	Grey		21.00		60	—	—	Blows for 15cm															
22								22.00																				
23								23.00																				
24								24.00																				
25								25.00																				
26								26.00																				
27								27.00																				
28								28.00																				
29								29.00																				
30								30.00																				

## BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 2,618 m

DATE OF INVESTIGATION 11. FEB '94

Khotakhali, Chokoria, Cox 's Bazar

DEPTH TO GROUND WATER  
LEVEL IN HOLE -0.80 m

BOLING HOLE No. 11-12 (1)

INVESTIGATED BY

STAFF	ELE- VATION m	DE- PTH m	THICK- NESS m	FIELD OBSERVATIONAL DESCRIPTION				STANDARD PENETRATION TEST													SAMPLING							
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER-PENE cm	Num of blows Every 15cm	15 cm	30 cm	45 cm	NUMBER OF BLOWS N						Sample No.	Depth m	Method						
1	1.12	1.50	1.50		silt	Light brown & Grey	Medium compressible SILT (soft)	1.00	1/30	0	0	1																
2							Medium plastic CLAY (very soft)	2.00	1/30	0	0	1																
3	0.00	3.50	2.00		clay	Grey		3.00	1/30	0	0	1																
4							Medium to fine SAND, trace silt (loose to medium dense)	4.00	7/30	1	3	4																
5	2.70	5.40	1.90		sand, trace silt	Light Grey		5.00	20/30	5	13	15																
6							Medium to fine SAND, little silt (dense)	6.00	50/30	15	23	27																
7	4.60	7.30	1.90		sand, little silt	Whitish Grey		7.00	35/30	15	16	19																
8	5.30	8.00	0.70		sand, some silt	Light Grey	Fine SAND, some silt (medium dense)	8.00	23/30	10	10	13																
9							Fine SAND, little silt, (dense)	9.00	49/30	13	20	29																
10	7.60	10.30	2.30		sand, little silt	Whitish Grey		10.00																				
									45/30	16	20	25																
11							Fine SAND, some silt (dense)	11.00	24/30	11	11	13																
12	9.33	11.95	1.65		sand, little silt	Light Grey		12.00	23/30	10	10	13																
13	9.88	12.50	0.55		sandy clay	Br. & gr.	Sandy CLAY (very soft)	13.00	45/30	15	21	24																
14								14.00	42/30	16	21	21																
15	12.78	15.40	2.90		sand, some silt	Grey	Fine SAND, some silt (dense)	15.00	42/30	18	21	21																
16								16.00	29/30	16	13	16																
17	14.70	17.40	2.00		sand & silt	Grey	Fine SAND, & SILT (medium dense)	17.00	26/30	13	13	13																
18								18.00	37/30	14	17	20																
19							Fine SAND, some silt (dense)	19.00	44/30	18	21	23																
20	17.30	20.00	2.60		sand, some silt	Grey		20.00																				
									19/30	9	9	10																
21								21.00	21/30	9	10	11																
22	19.80	22.50	2.50		sandy silt	Light Grey	Laminated sandy SILT (medium dense)	22.00	15/30	8	7	8																
23								23.00	20/30	10	13	15																
24								24.00	33/30	11	15	18																
25								25.00	37/30	12	16	21																
26								26.00	41/30	18	20	21																
27							Fine SAND, little silt, (dense)	27.00	43/30	20	20	23																
28	25.30	28.00	5.50		sand, little silt	Light Grey		28.00	47/30	21	20	27																
29								29.00																				
30								30.00																				







# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 1.309 m

DATE OF INVESTIGATION 12 FEB '94

Magwanu, Chokoria, Cox's Bazar

DEPTH TO GROUND WATER

LEVEL IN HOLE -1.60 m

BORING HOLE No. 11-14 (I)

INVESTIGATED BY

STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION			STANDARD PENETRATION TEST											SAMPLING									
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER- PENE cm	Runs of blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method						
										15 cm	30 cm	45 cm	0	10	20	30	40	50				60					
1					silt clay sand	Grey	stiff to soft SILT with clay trace fine sand	1.00	8/30	3	4	4															
2			2.00					3/30	0	1	2													U-1	1.10 1.65		
3	-2.09	3.40	3.40					3.00	2/30	0	1	1													U-2	2.10 2.65	
4							stiff to stiff fine sandy SILT with clay	4.00	4/30	1	2	2															
5								5.00	5/30	1	2	3															
6								6.00	6/30	1	3	3															
7								7.00	4/30	1	2	2															
8								8.00	3/30	1	1	2															
9								9.00	4/30	1	2	2															
10								10.00	4/30	1	2	2															
11								11.00	4/30	2	2	2															
12								12.00	6/30	2	3	3															
13								13.00	5/30	2	2	3															
14				14.00	4/30	1	2	2																			
15				15.00	4/30	1	2	2																			
16				16.00	4/30	1	2	2																			
17				17.00	7/30	2	3	4																			
18				18.00	7/30	3	3	4																			
19				19.00	14/30	3	5	9																			
20				20.00	13/30	3	5	8																			
21	20.29	21.60	18.20	21.00	15/30	3	6	9																			
22				22.00	36/30	7	18	18																			
23				23.00	33/30	10	13	20																			
24	22.09	24.20	2.60	24.00	33/30	9	14	19																			
25				25.00	18/30	5	6	11																			
26				26.00	17/30	6	6	11																			
27				27.00	20/30	6	7	13																			
28				28.00	29/30	8	12	17																			
29				29.00	29/30	7	11	18																			
30	20.69	30.00	5.80	30.00	32/30	8	13	19																			



## BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 2.743 m

DATE OF INVESTIGATION 14 FEB '94

Magnama, Chokorin, Cox's Bazar

DEPTH TO GROUND WATER

BOLING HOLE No. 11-15 (1)

LEVEL IN HOLE -1.20 m

INVESTIGATED BY

STAFF m	ELE- VATION m	DE- PTH m	THICK- NESS m	FIELD OBSERVATIONAL DESCRIPTION			STANDARD PENETRATION TEST										SAMPLING								
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N INTER- PENE- cm	Num of blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method				
										15 cm	30 cm	45 cm	0	10	20	30	40	50				60			
1				[Pattern]			soft to very soft clayey SILT trace fine sand	1.00	4/30	2	2	2													
2									2.00	2/30	1	1	1												
3				[Pattern]	soft clayey silt trace fine sand	Grey		3.00	1/30	0	0	1													
4	-1.20	4.00	4.00						4.00	1/30	0	0	1												
5				[Pattern]	very soft SILT & fine SAND trace clay			5.00	1/30	0	0	1													
6	-3.81	6.55	2.55						6.00	3/30	1	1	2												
7				[Pattern]	silty fine sand			7.00	13/30	3	5	8												U-1	
8									8.00	12/30	3	5	7												
9				[Pattern]	fine sand	Grey		9.00	10/30	6	6	4												U-2	
10									10.00	15/30	3	6	9												
11	-8.56	11.30	4.75					11.00	20/30	8	10	10													
12				[Pattern]	very stiff silty fine to med. SAND			12.00	19/30	8	9	10													
13									13.00	30/30	10	18	20												
14				[Pattern]	sand	Grey		14.00	42/30	11	20	22													
15									15.00	42/30	10	21	21												
16	-13.46	16.20	4.90					16.00	30/30	8	14	16													
17				[Pattern]	SILT with clay trace fine sand			17.00	13/30	4	6	7													
18									18.00	10/30	4	5	5												
19	-16.76	19.50	3.30		silt sand	Grey		19.00	12/30	5	6	6													
20				[Pattern]	hard fine sandy SILT trace clay			20.00	78/30	10	30	43													
21									21.00	79/30	12	31	43												
22				[Pattern]	sandy silt clay	Grey		22.00	46/30	11	18	28													
23									23.00	50/30	13	20	30												
24				[Pattern]				24.00	55/30	14	25	30													
25	22.26	25.00	5.50						25.00	57/30	18	28	29												
26								26.00																	
27								27.00																	
28								28.00																	
29								29.00																	
30								30.00																	

# BORING LOG (Soil exploration)

MULTIPURPOS CYLONE SHELTER (PHASE-2)  
PROJECT LOCATION

GROUND ELEVATION 2.165 m

DATE OF INVESTIGATION 14 FEB '94

Magnana, Chokoria, Cox's Bazar

DEPTH TO GROUND WATER

BOLING HOLE No. 11-15 (2)

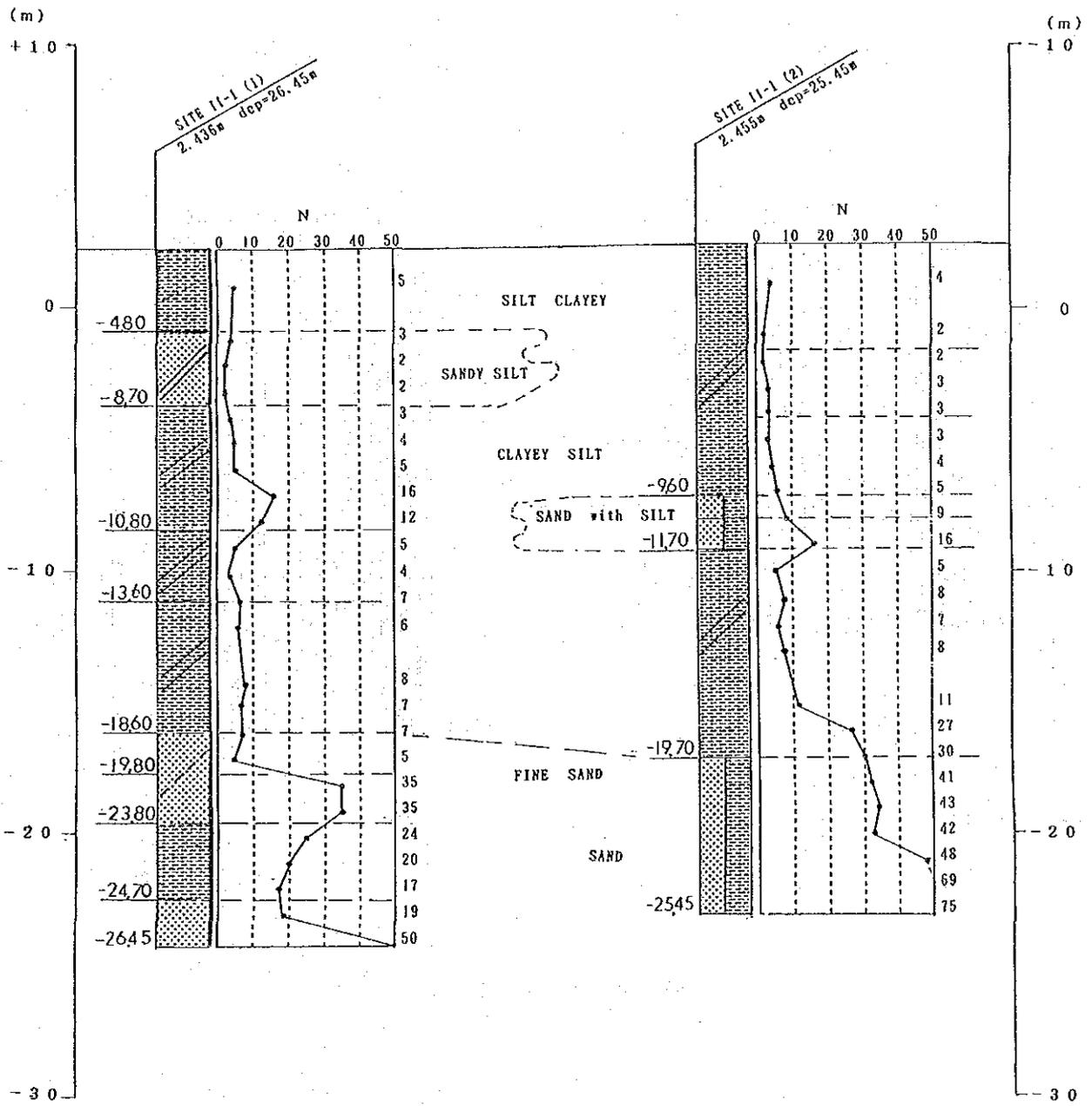
LEVEL IN HOLE -1.30 m

INVESTIGATED BY

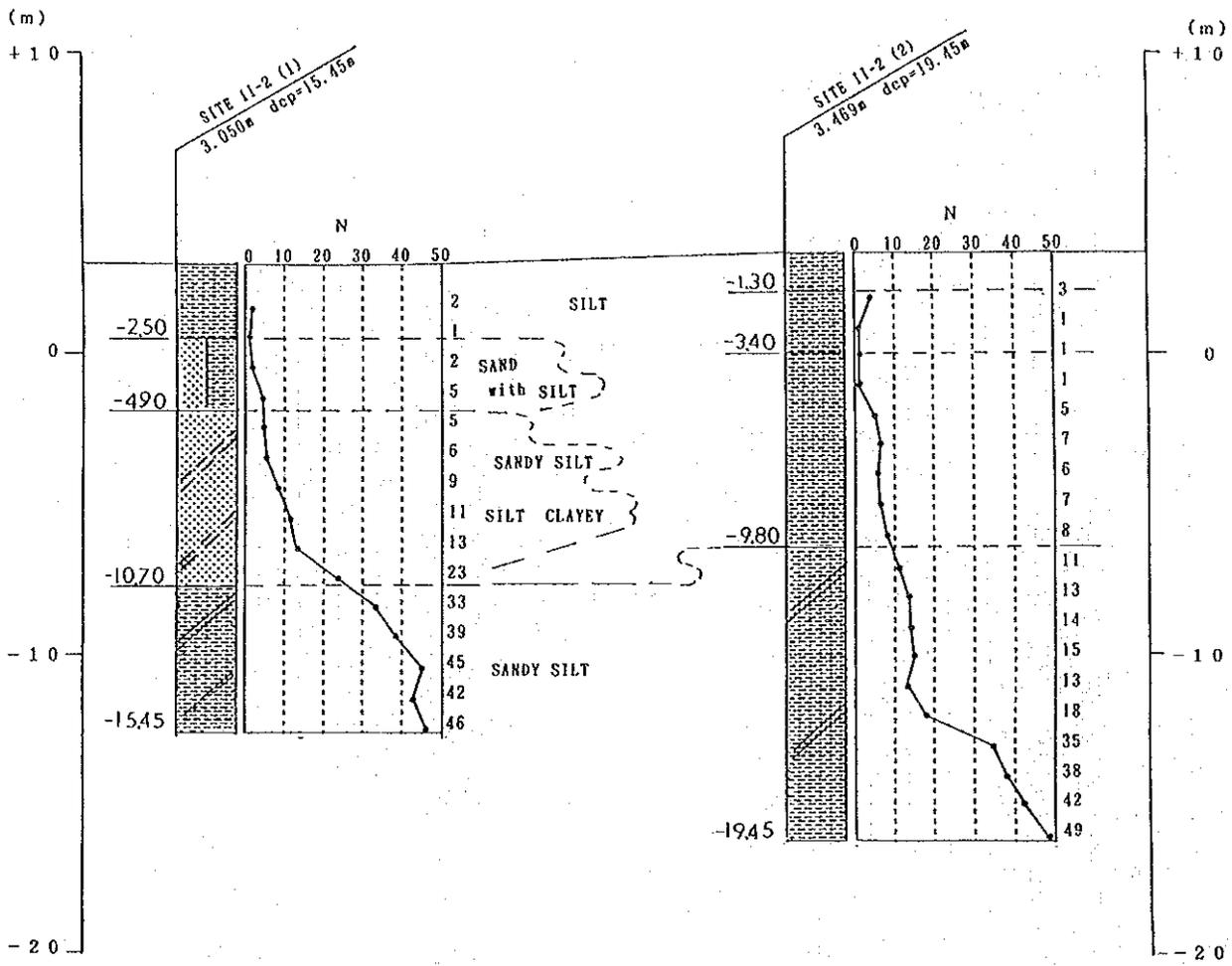
STAFF	ELEVATION m	DEPTH m	THICKNESS m	FIELD OBSERVATIONAL DESCRIPTION				STANDARD PENETRATION TEST										SAMPLING									
				COLUMN SECTION (Graphic mark)	Soil or Rock NAME OF CLASSIFICATION	COLOR TONE	DESCRIPTION	Depth m	N-INTER PERE cm	Num of Blows Every 15cm			NUMBER OF BLOWS N						Sample No.	Depth m	Method						
										15 cm	30 cm	45 cm	0	10	20	30	40	50				60					
1							soft to very soft SILT with clay	1.00	4/30	2	2	2															
2								2.00	1/30	0	0	1															
3	0.94	3.10	3.10		silt clay	Grey		3.00	2/30	1	1	1															
4							stiff SILT with fine sand & clay	4.00	5/30	1	2	3															
5	3.39	5.55	2.45		silt	Grey		5.00	6/30	2	3	3															
6	3.94	6.10	0.55		sand	Grey	loose fine SAND with silt	6.00	5/30	2	3	2															
7								7.00	5/30	1	2	3															
8							stiff to very stiff fine sandy SILT with clay	8.00	6/30	2	3	3															
9								9.00	14/30	3	5	9															
10	8.39	10.55	4.45		silt with clay	Grey		10.00	16/30	4	6	10															
11							stiff fine sandy SILT trace clay	11.00	23/30	10	11	12															
12								12.00	22/30	10	11	11															
13	11.04	13.20	2.65		sandy silt			13.00	44/30	11	18	26															
14	12.14	14.30	1.10		hard silt	Grey	hard SILT fine sand trace clay	14.00	48/30	12	20	28															
15							very dense fine to med. SAND with silt	15.00	51/30	9	21	30															
16								16.00	56/30	10	28	28															
17	15.14	17.30	3.00		sand with silt	Grey		17.00	64/30	11	28	36															
18							SILT with clay interlayered with fine sand	18.00	14/30	2	4	4															
19	17.04	19.20	1.90		silt with clay	Grey		19.00	10/30	4	4	6															
20								20.00	70/30	20	30	40															
21							hard SILT & fine SAND	21.00	89/30	20	40	49															
22								22.00	74/30	16	32	42															
23								23.00	72/30	12	30	42															
24								24.00	73/30	12	31	42															
25	22.84	25.00	5.00		hard silt sand	Grey		25.00	60/30	14	26	34															
26								26.00																			
27								27.00																			
28								28.00																			
29								29.00																			
30								30.00																			

7 - 2 - 3 地質推定断面図

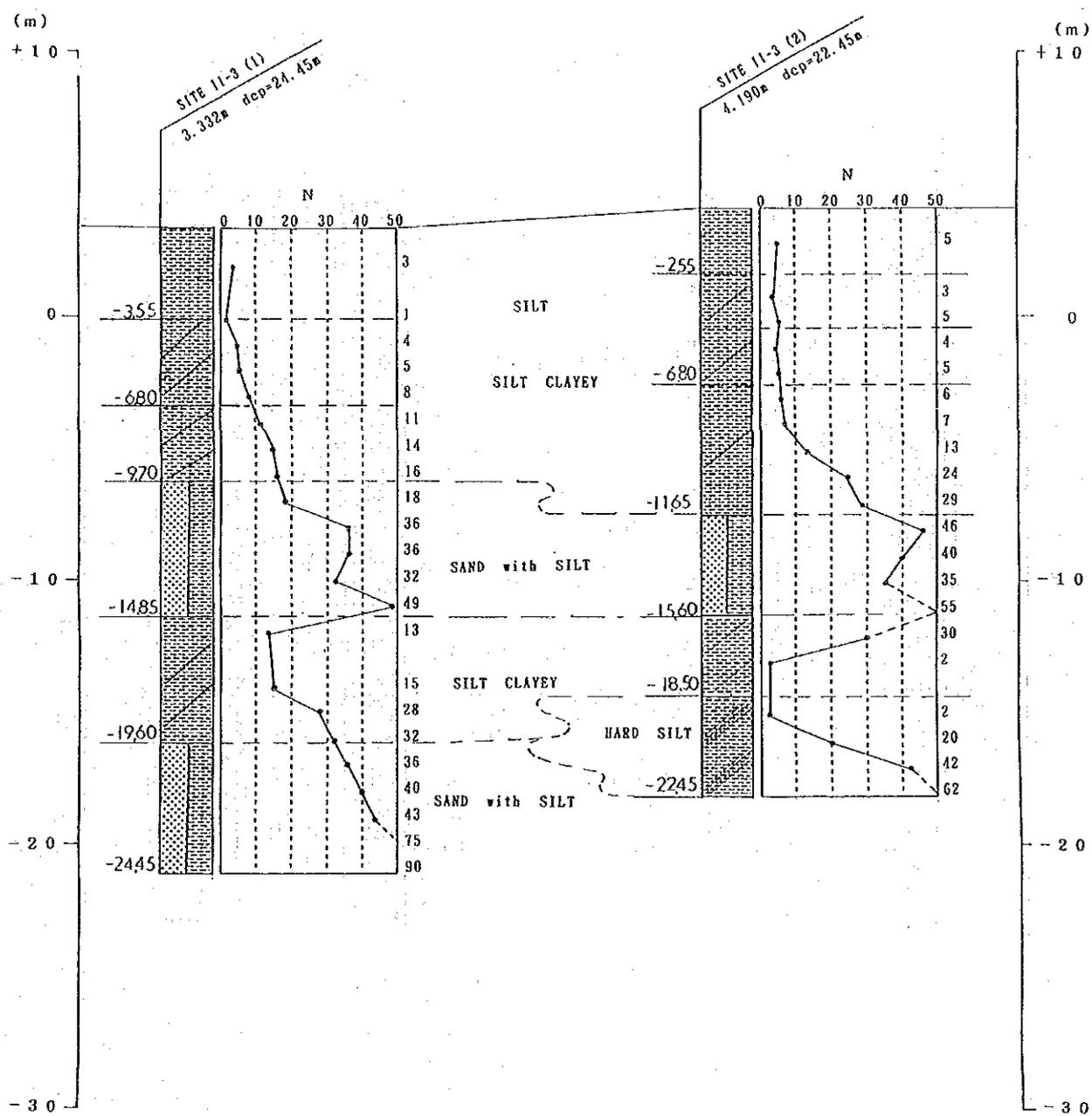




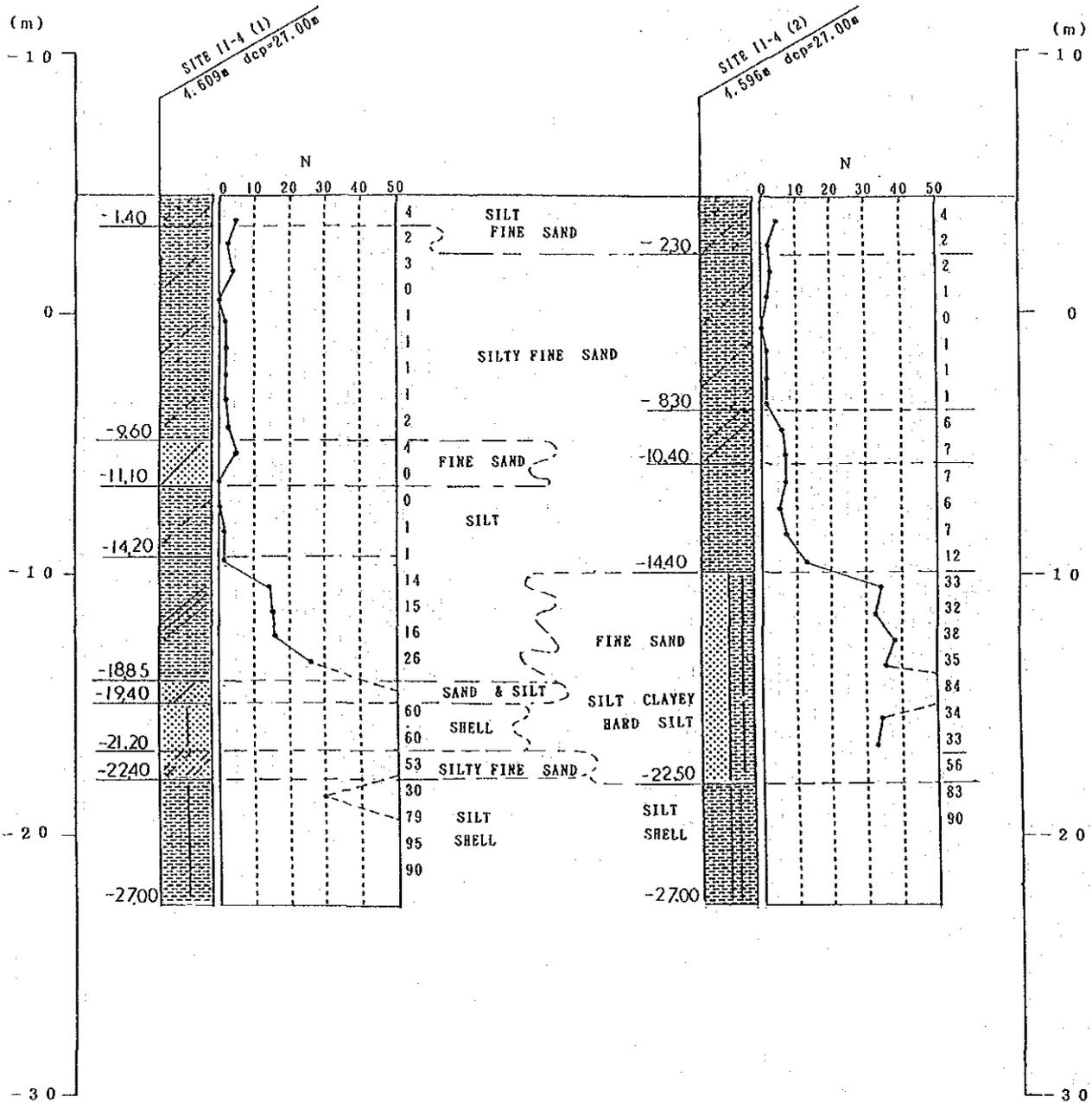
地質推定断面図 (サイト II-1)



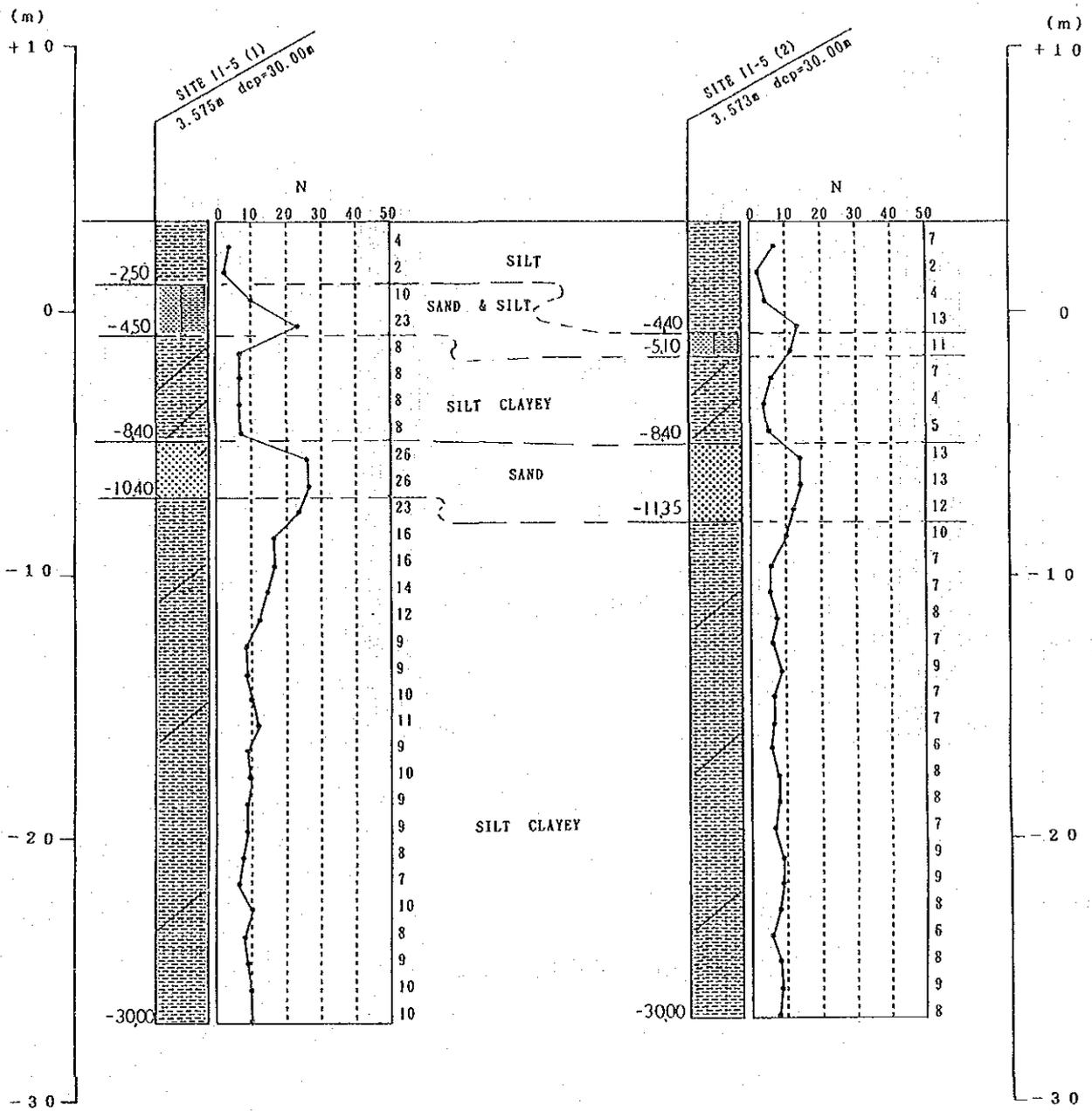
地質推定断面図 (サイトII-2)



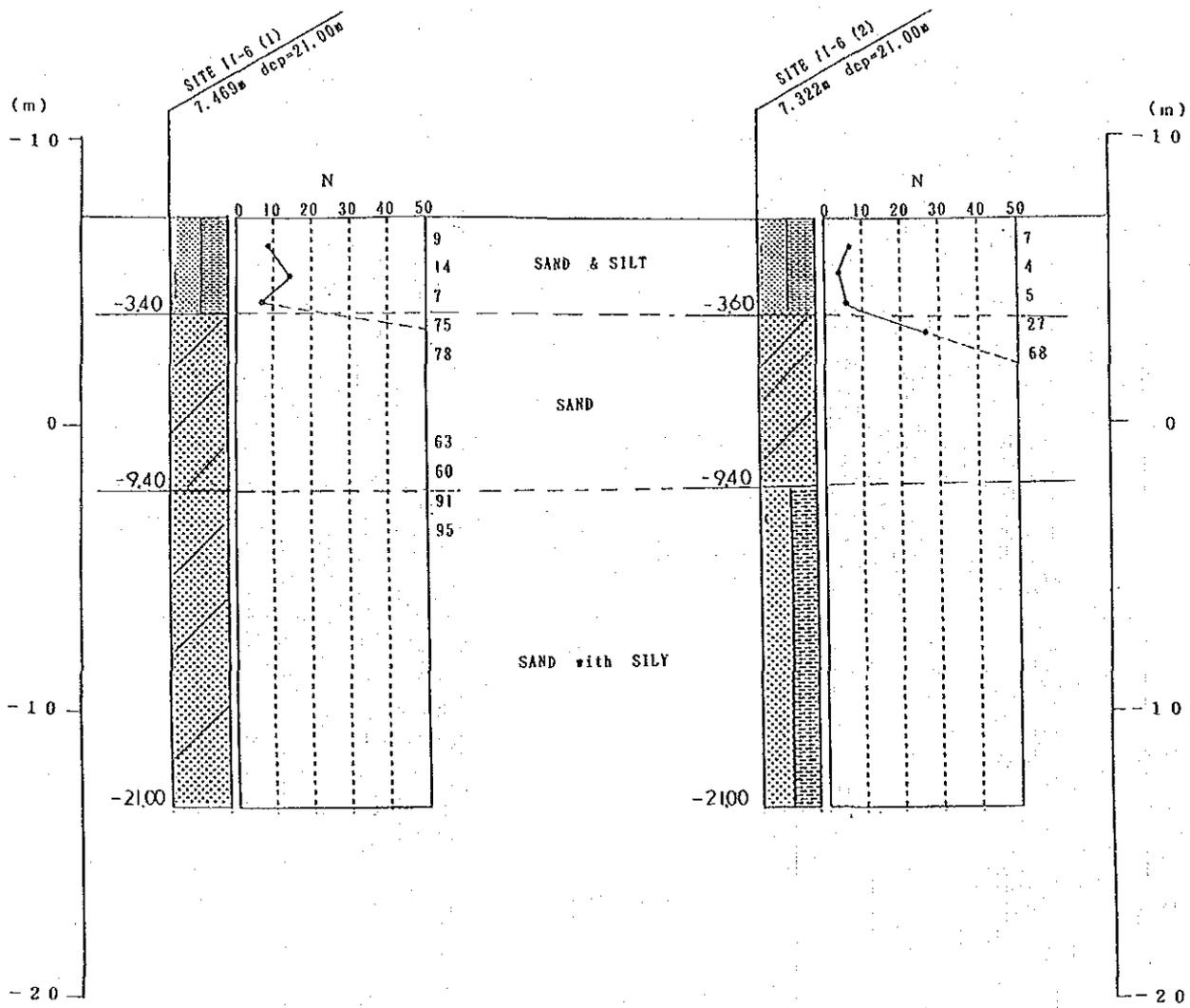
地質推定断面図 (サイトII-3)



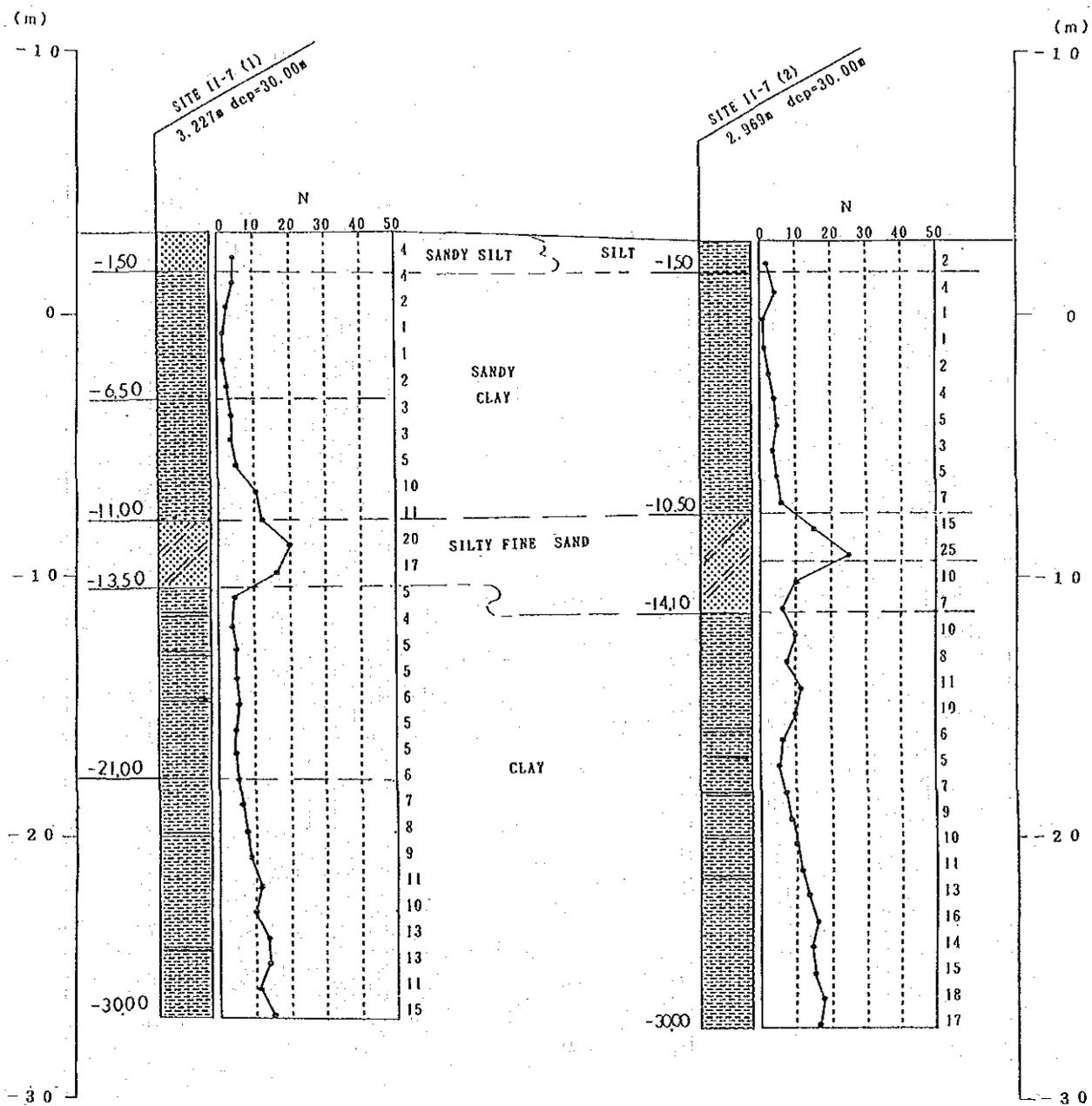
地質推定断面図 (サイト II - 4)



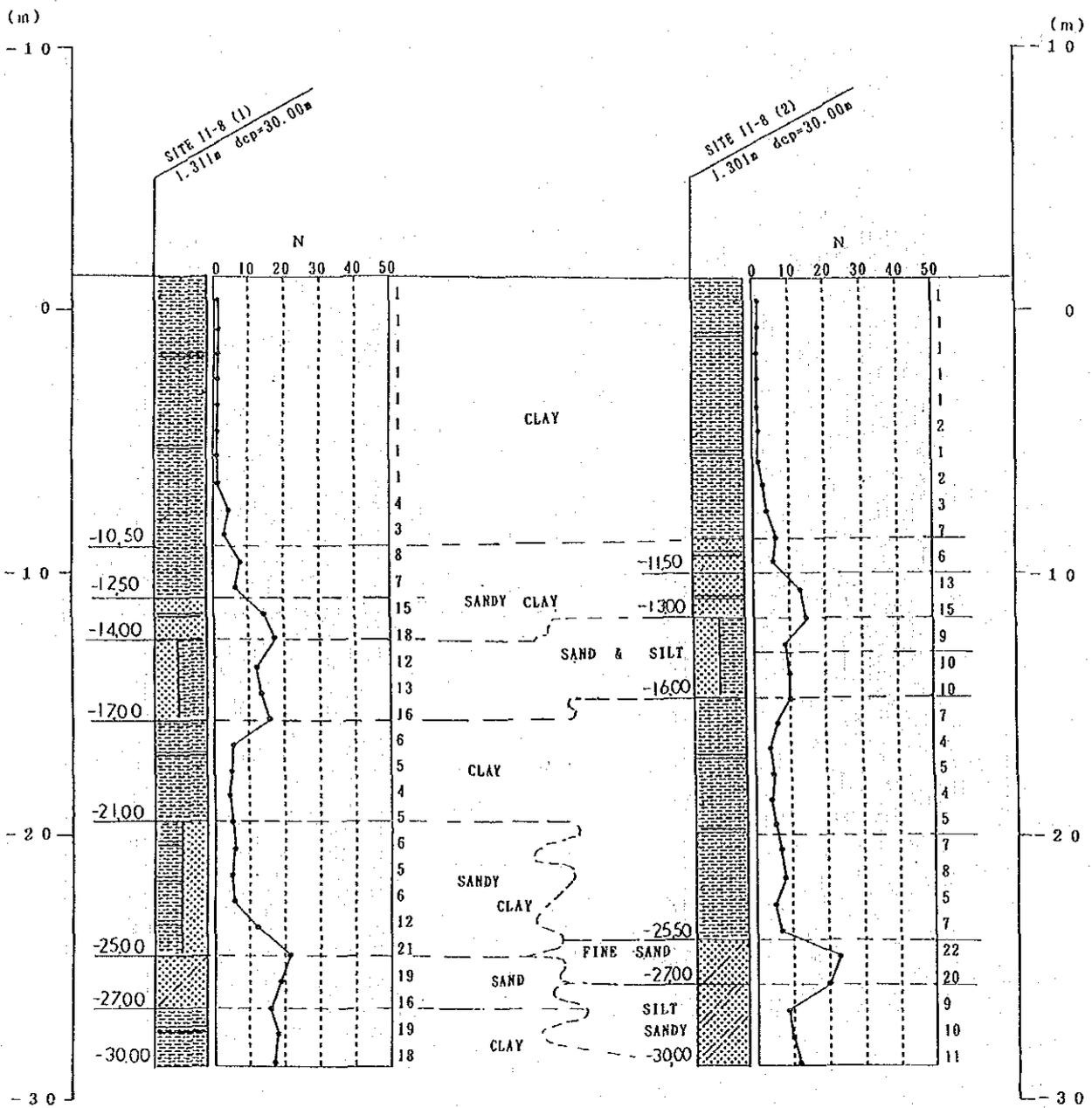
地質推定断面図 (サイトII-5)



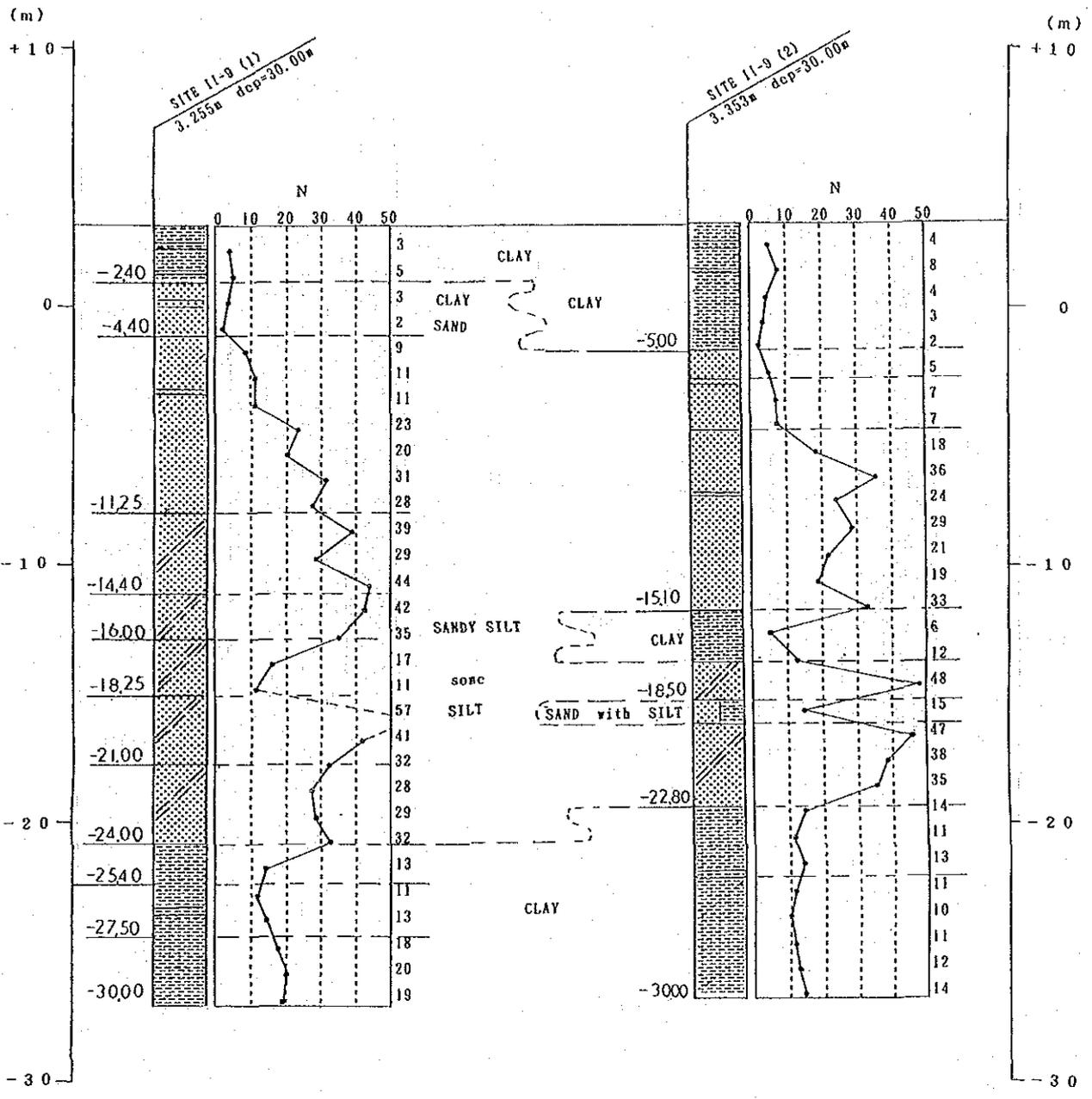
地質推定断面図 (サイト II-6)



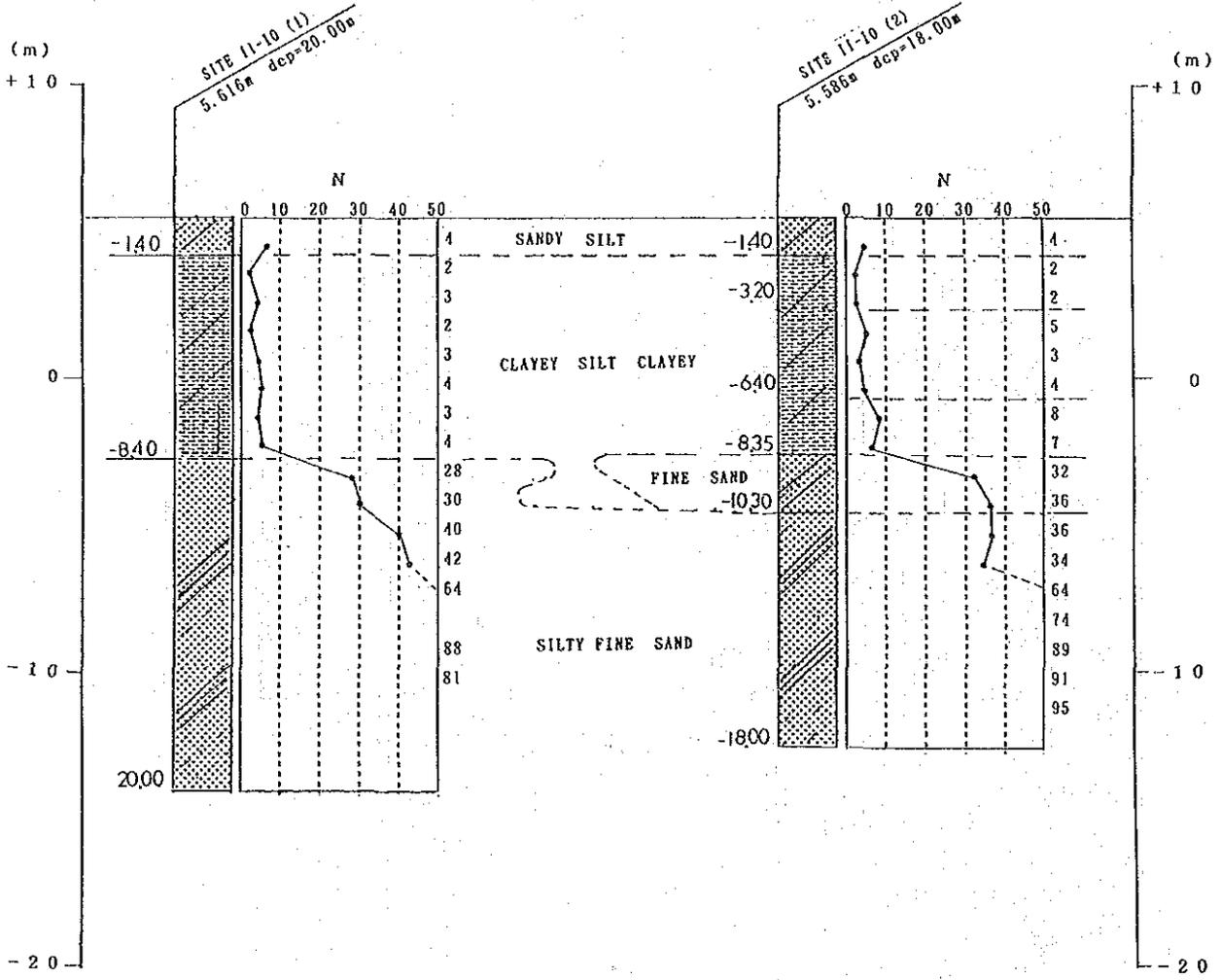
地質推定断面図 (サイト II-7)



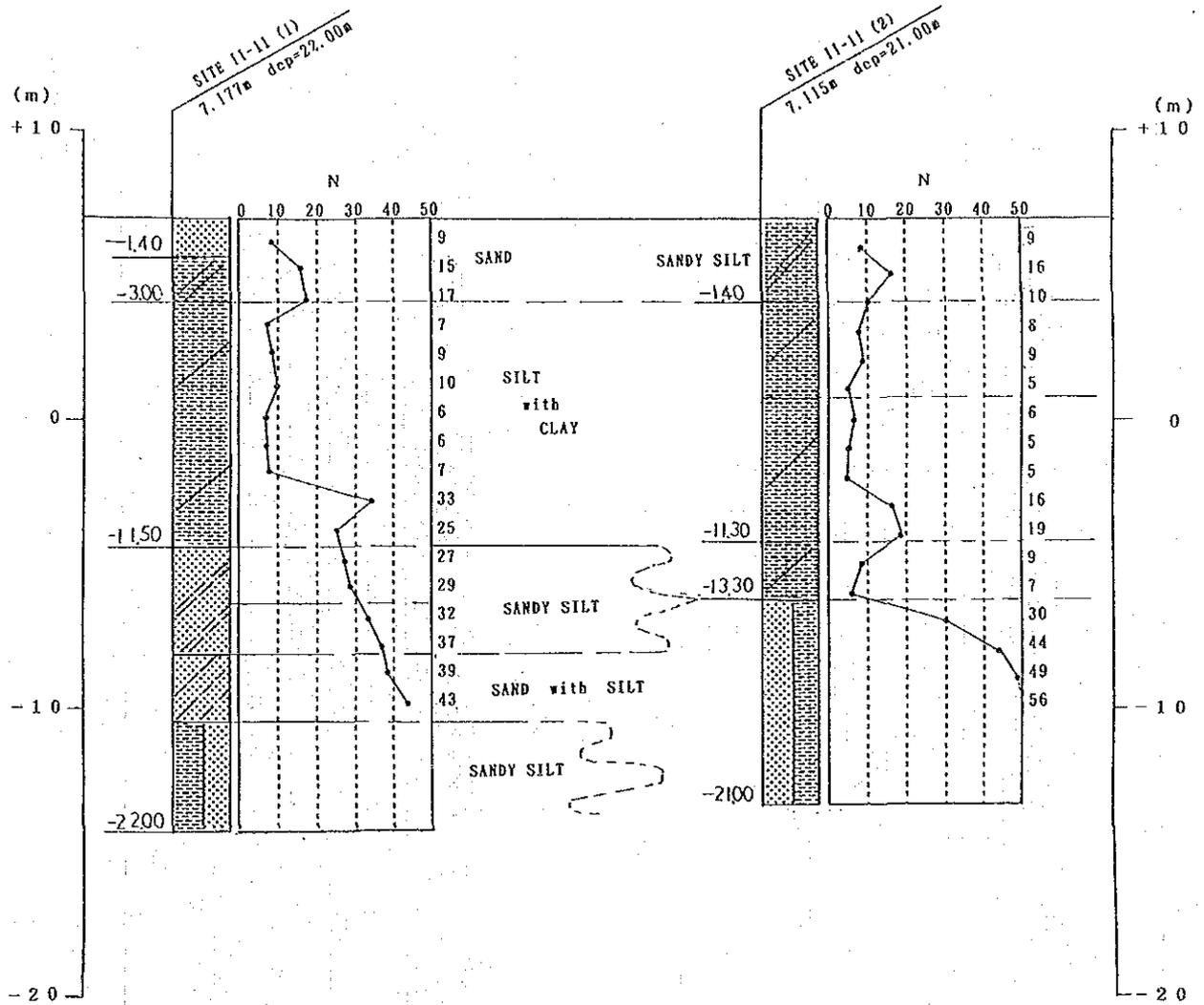
地質推定断面図 (サイト II-8)



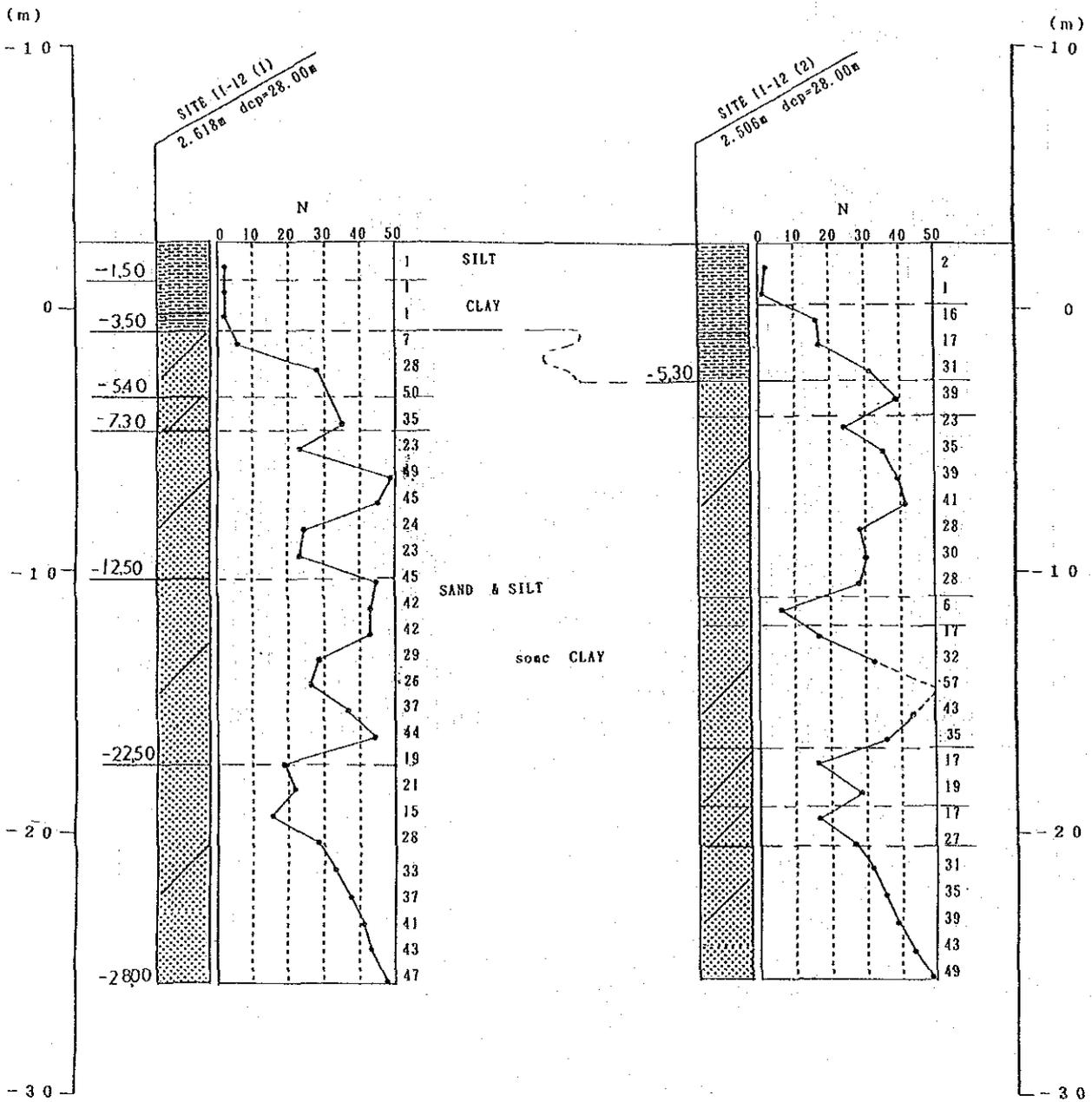
地質推定断面図 (サイト II-9)



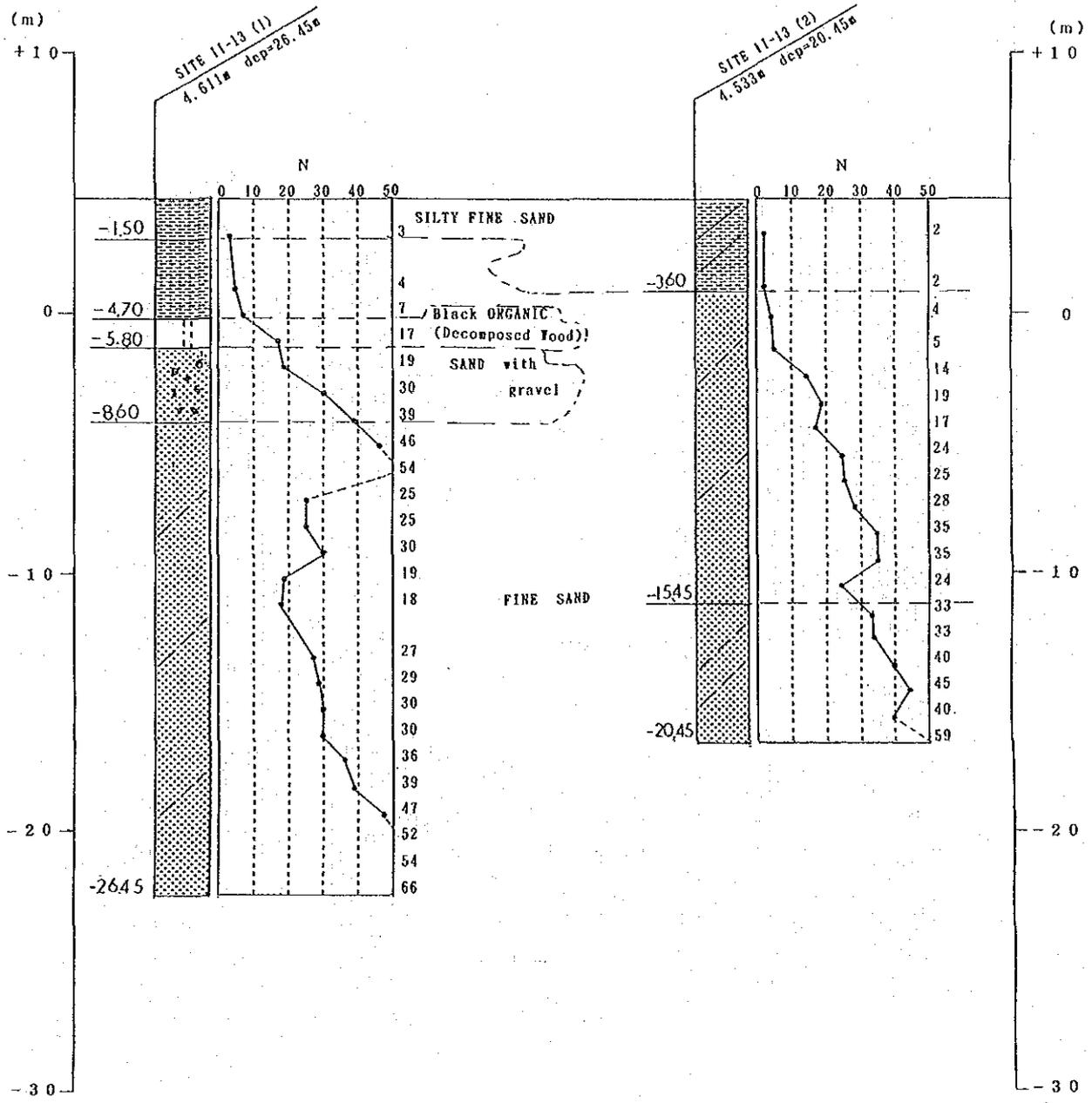
地質推定断面図 (サイト II-10)



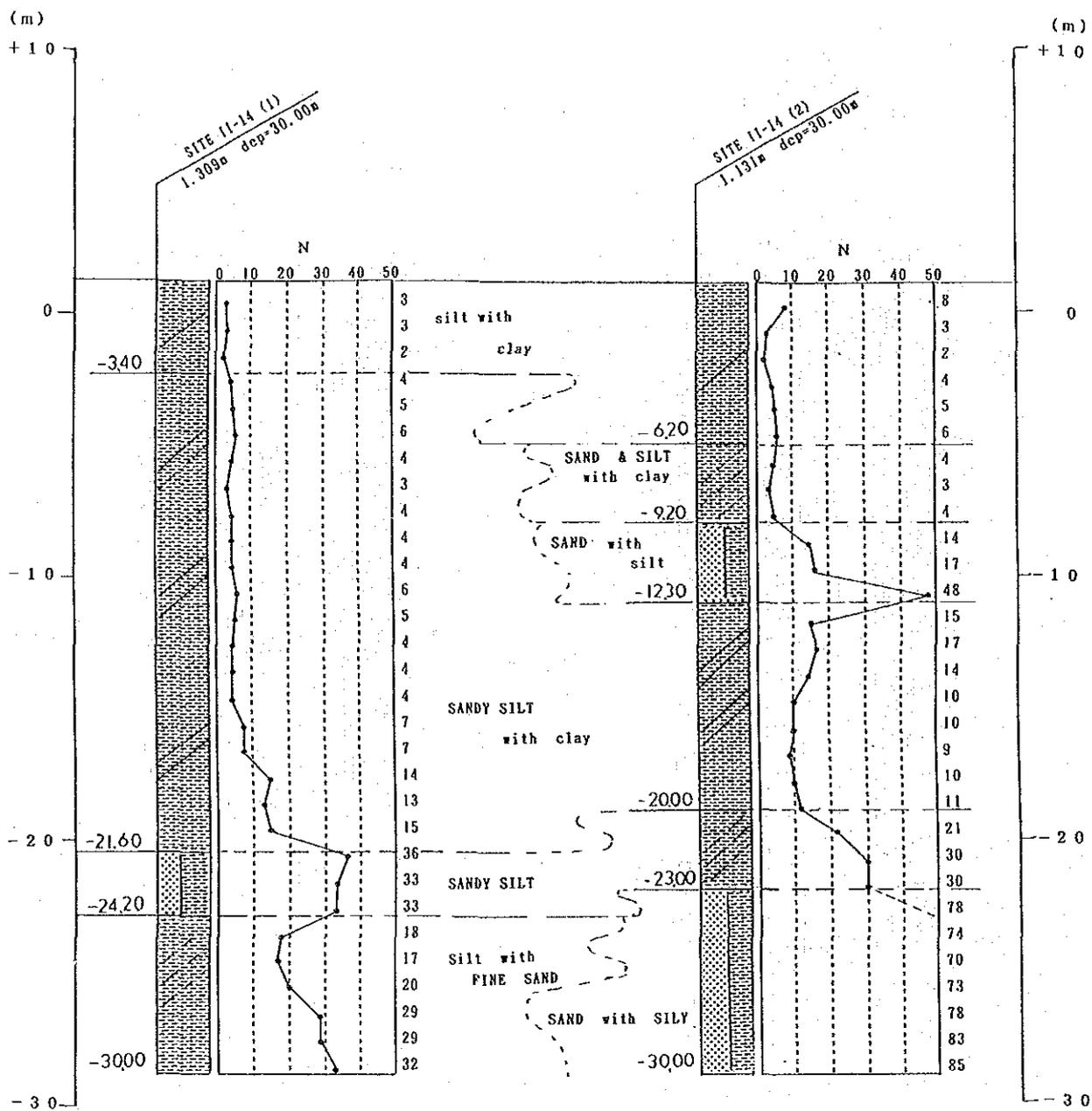
地質推定断面図 (サイト II-11)



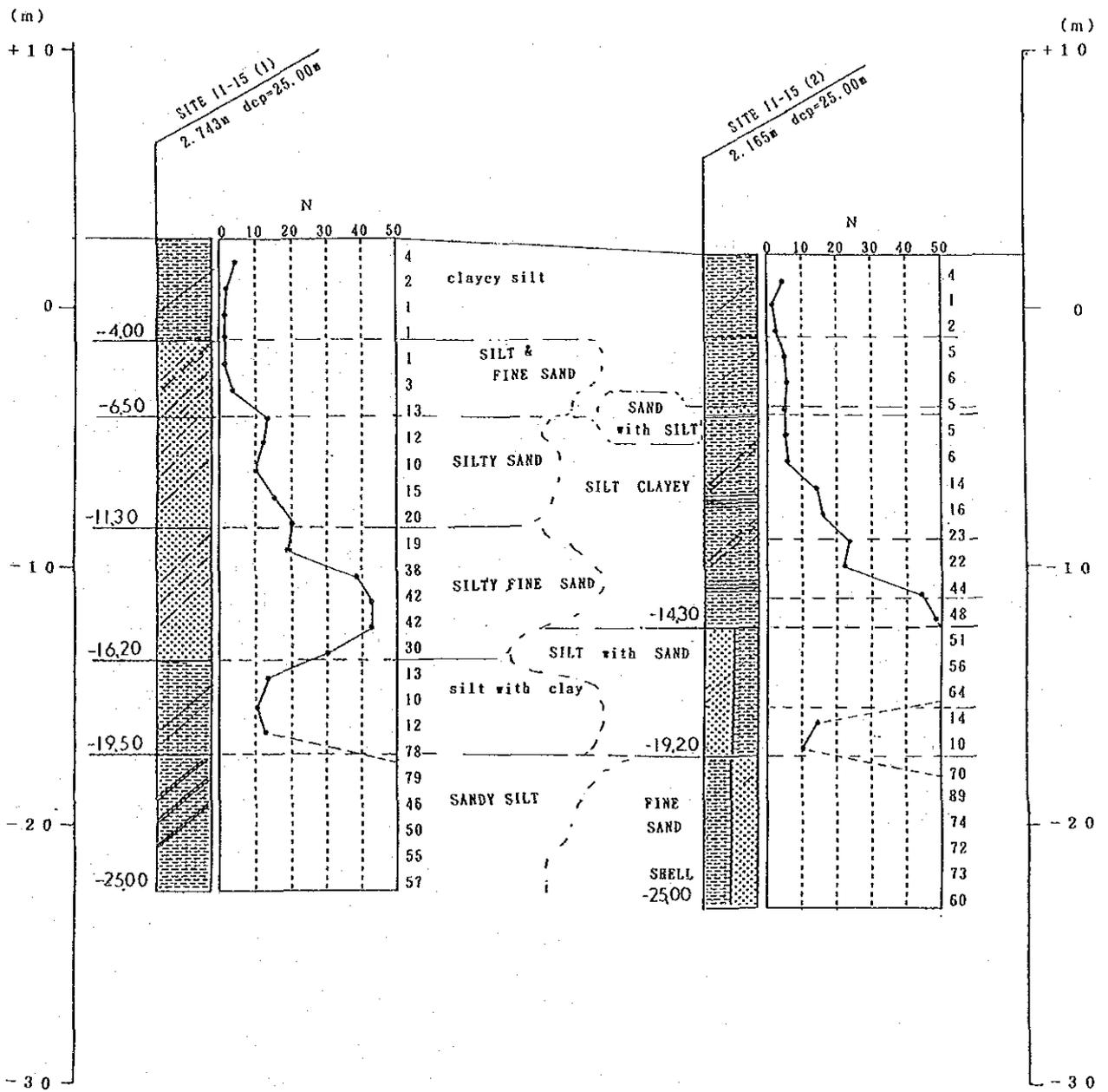
地質推定断面図 (サイトII-12)



地質推定断面図 (サイト II-13)



地質推定断面図 (サイトII-14)



地質推定断面図 (サイト II-15)



7-2-4 土質試驗結果一覽表



SUMMARY OF LABORATORY TEST (1)

SITE LOCATION (Site No.)		Banskhali, Saral (II-1)													
BORING HOLE No.		1 - 1							1 - 2						
SAMPLE No.		U-1	U-2	U-5	D-11	D-13	D-18	U-1	U-2	D-4	D-5	D-9	D-14		
DEPTH (m)		1.50 1.95	14.50 14.95	5.00 5.45	11.00 11.45	13.00 13.45	17.00 17.45	2.00 2.45	16.00 16.45	4.00 4.45	5.00 5.45	9.00 9.45	14.00 14.45		
DRY DENSITY $\rho_s$ g/cm <sup>3</sup>		1.125	1.20					1.30	1.343						
WET DENSITY $\rho_w$ g/cm <sup>3</sup>		1.60	1.749					1.78	1.81						
SPECIFIC GRAVITY $\rho_s$ g/cm <sup>3</sup>					2.655	2.65	2.651					2.645	2.622		
NATU. MOIST. CONT. $W_n$ %		42.13	45.29					36.63	34.73						
VOID RATIO $e$															
SATURATION $S_r$ %															
GRAVEL (2~75mm) %															
SAND (75 $\mu$ m ~2mm) %					1.6	1.5	2.8				1.0	6.8	30.2		
SILT (5 ~75 $\mu$ m) %					84.4	82.5	81.2				80.0	82.2	69.8		
CLAY (Under 5 $\mu$ m) %					14.0	16.0	16.0				19.0	11.0			
UNIFORMITY $U_c$															
CURVATURE $U_c'$															
MAX. GRAIN SIZE mm															
LIQUID LIMIT $W_L$ %				41.00	40.00	43.00		39.00		42.00		38.00			
PLASTIC LIMIT $W_P$ %				23.20	22.43	23.59		21.92		22.79		21.66			
PLASTICITY INDEX $I_P$				17.80	17.57	19.41		17.08		19.21		16.34			
CONSISTENCY INDEX															
CLASSIFICATION															
UNIFIED SOIL CLASS.					CL	CL								CL	
UNCONFINED COMPRESSION STRENGTH $q_u$ kgf/cm <sup>2</sup>		0.284	0.128					0.668	0.503						
FAILURE STRAIN %		6	7					7	6						

SUMMARY OF LABORATORY TEST (2)

SITE LOCATION (Site No.)		Banskhali, Sadhonpur (II-2)										
BORING HOLE No.		2 - 1					2 - 2					
SAMPLE No.		U-1	D-1	D-2	D-4	D-5	D-10	U-1	D-2	D-3	D-4	D-10
DEPTH (m)		1.50 1.95	1.00 1.45	2.00 2.45	4.00 4.45	5.00 5.45	10.00 10.45	1.50 1.95	2.00 2.45	3.00 3.45	4.00 4.45	10.00 10.45
GENERAL	DRY DENSITY $\rho_d$ g/cm <sup>3</sup>	1.357						1.414				
	WET DENSITY $\rho_w$ g/cm <sup>3</sup>	1.88						1.91				
	SPECIFIC GRAVITY $\rho_s$ g/cm <sup>3</sup>			2.653		2.632	2.634		2.644		2.634	2.622
GRAIN SIZE	NATU. MOIST. CONT. $W_n$ %	38.54						35.00				
	VOID RATIO $e$											
	SATURATION $S_r$ %											
	GRAVEL (2~75mm) %											
	SAND (75 $\mu$ m ~2mm) %			1.2		41.6	39.0		1.4		13.6	31.4
	SILT (5 ~75 $\mu$ m) %			81.8		57.4	61.0		82.2		79.4	66.6
	CLAY (Under 5 $\mu$ m) %			17.0		1.0			16.4		7.0	2.0
	UNIFORMITY $U_c$											
	CURVATURE $U_c'$											
	MAX. GRAIN SIZE mm											
ATTEMBERG LIMITS	LIQUID LIMIT $W_L$ %	42.00	40.00	38.00					40.00	39.00	38.00	
	PLASTIC LIMIT $W_P$ %	22.79	21.20	22.70					22.20	21.80	22.40	
	PLASTICITY INDEX $I_P$	19.21	18.80	15.30					17.80	17.20	15.60	
SOIL CLASS	CONSISTENCY INDEX											
	CLASSIFICATION											
	UNIFIED SOIL CLASS.		ML						ML		CL	
UNCONF. COMPRESS	UNCONF. QU $q_u$ kgf/cm <sup>2</sup>	0.295						0.394				
	FAILURE STRAIN %	8						8				

SUMMARY OF LABORATORY TEST (3)

SITE LOCATION (Site No.)		Banskhali, Jaldi (II-3)											
BORING HOLE No.		3 - 1						3 - 2					
SAMPLE No.		U-1	U-2	D-4	D-15	D-18	D-19	U-1	U-2	D-5	D-6	D-19	
DEPTH (m)		1.50	16.00	4.00	15.00	18.00	19.00	1.60	18.50	5.00	6.00	19.00	
		1.95	16.45	4.45	15.45	18.45	19.45	2.05	18.95	5.45	6.45	19.45	
GENERAL	DRY DENSITY $\rho_s$ g/cm <sup>3</sup>	1.139	1.20					1.27	1.26				
	WET DENSITY $\rho$ g/cm <sup>3</sup>	1.72	1.79					1.83	1.83				
	SPECIFIC GRAVITY $\rho_s$ g/cm <sup>3</sup>			2.655		2.641	2.639			2.655	2.647	2.652	
GRAIN SIZE	NATU. MOIST. CONT. $W_n$ %	50.93	48.58					43.88	44.37				
	VOID RATIO $e$												
	SATURATION $S_r$ %												
LIMITS	GRAVEL (2~75mm) %												
	SAND (75 $\mu$ m ~2mm) %			2.6		22.0	21.0			4.0	7.8	1.6	
	SILT (5 ~75 $\mu$ m) %			83.4		76.0	77.0			86.0	84.2	81.4	
	CLAY (Under 5 $\mu$ m) %			14.0		2.0	1.0			10.0	8.0	17.0	
SOIL CLASS	UNIFORMITY $U_c$												
	CURVATURE $U_c'$												
	MAX. GRAIN SIZE mm												
	LIQUID LIMIT $W_L$ %			41.00	39.00		36.00			39.00	38.00	41.00	
UNCONFINED COMPRESSIVE STRENGTH	PLASTIC LIMIT $W_p$ %			23.39	22.60		22.70			22.18	22.58	23.19	
	PLASTICITY INDEX $I_p$			17.61	16.40		13.30			16.82	15.42	17.81	
	CONSISTENCY INDEX												
UNCONFINED COMPRESSIVE STRENGTH	CLASSIFICATION												
	UNIFIED SOIL CLASS.			CL			ML			CL	CL	OL	
UNCONFINED COMPRESSIVE STRENGTH	UNCONFINED COMPRESSIVE STRENGTH $q_u$ kgf/cm <sup>2</sup>	0.247	0.425					0.323	0.704				
	FAILURE STRAIN %	10	4					8	6				

SUMMARY OF LABORATORY TEST (4)

SITE LOCATION (Site No.)	Cox's Bazar, Sadar, Jalalabad (II-4)												Cox's Bazar, Sadar, Jalalabad (II-5)											
	4 - 1						4 - 2						5 - 1						5 - 2					
	BORING HOLE No.	U-1	U-2	D-11	U-1	U-2	D-2	U-12	U-1	U-2	D-7	D-10	U-1	U-2	D-6									
SAMPLE No.	3.10	6.10	10.55	7.10	8.10	1.55	11.55	7.10	8.10	6.55	9.55	2.10	2.10	9.10	5.55									
DEPTH (m)	3.55	6.55	11.00	7.55	8.55	2.00	12.00	7.55	8.55	7.00	10.00	2.55	2.55	9.55	6.00									
DRY DENSITY $\rho_d$ g/cm <sup>3</sup>	1.327	1.390	1.498	1.174	1.301	1.497		1.174	1.301	1.475	1.575	1.390	1.390	1.747	1.476									
WET DENSITY $\rho_w$ g/cm <sup>3</sup>	1.860	1.909	1.881	1.740	1.839	1.853		1.740	1.839	1.916	1.916	1.867	1.867	2.136	1.888									
SPECIFIC GRAVITY $\rho_s$ g/cm <sup>3</sup>	2.595	2.606	2.67	2.587	2.595	2.651	2.59	2.587	2.595	2.609	2.673	2.623	2.623	2.668	2.623									
NATU. MOIST. CONT. $W_n$ %	40.19	37.33	25.60	48.19	41.30	23.74	42.16	48.19	41.30	29.94	21.69	34.28	34.28	22.26	27.90									
VOID RATIO $e$																								
SATURATION $S_r$ %																								
GRAVEL (2~75mm) %																								
SAND (75 $\mu$ m ~2mm) %	8	8	76	7	24	32	3	7	24	37	93	30	30	85	28									
SILT (5 ~75 $\mu$ m) %	76	81	24	73	59	64	78	73	59	50	7	58	58	15	64									
CLAY (Under 5 $\mu$ m) %	16	11	0	20	17	4	19	20	17	13	0	12	12	0	8									
UNIFORMITY $U_c$																								
CURVATURE $U_c'$																								
MAX. GRAIN SIZE mm																								
LIQUID LIMIT $W_L$ %	50.84	41.48	N.P.	51.85	45.33	N.P.		51.85	45.33	41.41	N.P.	49.78	49.78	N.P.	34.06									
PLASTIC LIMIT $W_P$ %	26.40	25.00		28.00	26.40			28.00	26.40	25.00		25.64	25.64		19.23									
PLASTICITY INDEX $I_P$	24.44	16.48		23.85	18.93			23.85	18.93	16.41		24.14	24.14		14.83									
CONSISTENCY INDEX																								
CLASSIFICATION																								
UNIFIED SOIL CLASS.	MH	OL	SM	MH	CL	ML		MH	CL	CL	SM	ML	ML	SM	CL									
UNCONF. COMPRESS. STRENGTH $q_u$ kgf/cm <sup>2</sup>	0.311	0.531		0.414	0.376			0.414	0.376			0.371	0.350											
FAILURE STRAIN %	10.71	10.71		10.71	10.71			10.71	10.71			8.92	10.71											

SUMMARY OF LABORATORY TEST (5)

SITE LOCATION (Site No.)	Cox's Bazar, Sadar, Jalalabad (II-6)						Ramu, Patakarkul (II-10)					
	6 - 1			6 - 2			10 - 1			10 - 2		
BORING HOLE No.	U-1	D-8	D-14	U-1	D-7	D-11	U-1	U-2	D-13	U-1	U-2	D-2
SAMPLE No.	3.10	7.55	13.55	3.10	6.55	10.55	4.10	6.10	12.55	4.10	7.10	1.55
DEPTH (m)	3.55	8.00	14.00	3.55	7.00	11.00	4.55	6.55	13.00	4.55	7.55	2.00
DRY DENSITY $\rho_d$ g/cm <sup>3</sup>	1.549	1.520	1.519	1.563	1.539	1.867	1.379	1.361	1.684	1.396	1.379	1.328
WET DENSITY $\rho_w$ g/cm <sup>3</sup>	1.909	1.836	1.888	1.909	1.881	1.570	1.867	1.895	2.037	1.902	1.895	1.864
SPECIFIC GRAVITY $\rho_s$ g/cm <sup>3</sup>	2.634	2.670	2.668	2.665	2.673	2.645	2.612	2.601	2.691	2.582	2.595	2.617
NATU. MOIST. CONT. $w_n$ %	23.28	20.75	24.33	22.17	22.26	18.89	35.38	39.29	20.91	36.27	37.43	40.37
VOID RATIO $e$												
SATURATION $S_r$ %												
GRAVEL (2~75mm) %												
SAND (75 $\mu$ m ~2mm) %	76	71	82	77	80	60	2	9	97	4	9	12
SILT (5 ~75 $\mu$ m) %	24	29	18	23	20	40	81	73	3	67	75	78
CLAY (Under 5 $\mu$ m) %							17	18	0	29	16	10
UNIFORMITY $U_c$												
CURVATURE $U_c'$												
MAX. GRAIN SIZE mm												
LIQUID LIMIT $w_L$ %	N.P.	N.P.	N.P.	N.P.	N.P.	N.P.	54.12	58.20	N.P.	57.95	47.20	36.30
PLASTIC LIMIT $w_p$ %							26.92	29.16		29.62	25.00	20.00
PLASTICITY INDEX $I_p$							27.20	29.04		28.33	22.20	16.30
CONSISTENCY INDEX												
CLASSIFICATION												
UNIFIED SOIL CLASS.	SM	SM	SM	SM	SM	SM	MH	MH	SW	MH	ML	CL
UNCONFINED COMPRESSIVE STRENGTH $q_u$ kgf/cm <sup>2</sup>	0.371			0.509			0.545	0.519		0.637	0.752	
FAILURE STRAIN %	5.35			5.35			8.92	10.71		8.92	10.71	

SUMMARY OF LABORATORY TEST (6)

SITE LOCATION (Site No.)		Chokoria, East Boro Rheola (II-7)													
BORING HOLE No.		7 - 1							7 - 2						
SAMPLE No.		U-1	U-2	U-3	D-1	D-12	D-13	U-1	U-2	U-3	D-11	D-12	D-14		
DEPTH (m)		9.50	19.50	29.00	0.50	11.50	12.50	9.50	19.50	29.00	10.50	11.50	13.50		
		10.00	20.00	29.50	1.00	12.00	13.00	10.00	20.00	29.50	11.00	12.00	14.00		
GENERAL	DRY DENSITY $\rho_d$ g/cm <sup>3</sup>	1.525	1.467	1.560				1.499	1.394	1.635					
	WET DENSITY $\rho_w$ g/cm <sup>3</sup>	1.961	1.905	1.920				1.950	1.898	1.999					
	SPECIFIC GRAVITY $\rho_s$ g/cm <sup>3</sup>	2.680				2.659	2.658	2.681	2.622			2.660			
GRAIN SIZE	NATU. MOIST. CONT. $W_n$ %	28.6	29.9	23.1				30.1	36.2	22.3					
	VOID RATIO $e$														
	SATURATION $S_r$ %														
	GRAVEL (2~75mm) %														
	SAND (75 $\mu$ m ~2mm) %				10	71	68				56	74			
	SILT (5 ~75 $\mu$ m) %				90	29	32				34	26			
	CLAY (Under 5 $\mu$ m) %														
	UNIFORMITY $U_c$														
	CURVATURE $U_c$														
	MAX. GRAIN SIZE mm														
LIMITS	LIQUID LIMIT $W_L$ %	42.0	44.0	59.0				42.0	57.0	48.0			45.0		
	PLASTIC LIMIT $W_P$ %	19.0	21.0	33.0				18.0	28.0	26.0			20.0		
	PLASTICITY INDEX $I_P$	23.0	23.0	26.0				24.0	29.0	22.0			25.0		
	CONSISTENCY INDEX														
SOIL CLASS	CLASSIFICATION														
	UNIFIED SOIL CLASS.														
UNCONF. COMPRESS	UNCONF. QU $q_u$ kgf/cm <sup>2</sup>	1.068	0.608	1.442				0.791	0.617	2.249					
	FAILURE STRAIN %	12	13	10				13	10	9					

SUMMARY OF LABORATORY TEST (7)

SITE LOCATION (Site No.)		Chokoria, Badarkhali (II-8)													
BORING HOLE No.		8 - 1							8 - 2						
SAMPLE No.		U-1	U-2	U-3	D-6	D-13	D-14	D-26	U-1	U-2	U-3	D-12	D-15	D-27	
DEPTH (m)		9.50	19.50	29.00	5.50	12.50	13.50	25.50	9.50	19.50	29.00	11.50	14.50	26.50	
		10.00	20.00	29.50	6.00	13.00	14.00	26.00	10.00	20.00	29.50	12.00	15.00	27.00	
GENERAL	DRY DENSITY $\rho_s$ g/cm <sup>3</sup>	1.275	1.413	1.634					1.421	1.425	1.606				
	WET DENSITY $\rho$ g/cm <sup>3</sup>	1.735	1.869	2.029					1.843	1.855	1.994				
	SPECIFIC GRAVITY $\rho_s$ g/cm <sup>3</sup>	2.680		2.684		2.685		2.657	2.601	2.682			2.660		
	NATU. MOIST. CONT. $W_n$ %	36.1	32.3	24.2					29.7	30.2	24.2				
	VOID RATIO $e$														
	SATURATION $S_r$ %														
GRAIN SIZE	GRAVEL (2~75mm) %														
	SAND (75 $\mu$ m ~2mm) %					75	73	82				69	57	81	
	SILT (5 ~75 $\mu$ m) %					25	27	18				31	43	19	
	CLAY (Under 5 $\mu$ m) %														
	UNIFORMITY $U_c$														
	CURVATURE $U_c'$														
ATTEBERG LIMITS	MAX. GRAIN SIZE mm														
	LIQUID LIMIT $W_L$ %	45.0	44.0	52.0	41.0				39.0	46.0	46.0				
	PLASTIC LIMIT $W_P$ %	22.0	20.0	24.0	17.0				17.0	22.0	21.0				
	PLASTICITY INDEX $I_P$	23.0	24.0	28.0	24.0				22.0	24.0	25.0				
	CONSISTENCY INDEX														
SOIL CLASS	CLASSIFICATION														
	UNIFIED SOIL CLASS.														
UNCONFINED COMPRESSIVE STRENGTH	UNCONFINED COMPRESSIVE STRENGTH $q_u$ kgf/cm <sup>2</sup>	0.300	0.458	1.967					0.643	0.491	1.193				
	FAILURE STRAIN %	16	14	10					14	15	12				

SUMMARY OF LABORATORY TEST (8)

SITE LOCATION (Site No.)		Chokoria, Chiringa (II-9)														
BORING HOLE No.		9 - 1							9 - 2							
SAMPLE No.		U-1	U-2	U-3	D-3	D-14	D-17	D-25	D-27	U-1	U-2	U-3	D-6	D-8	D-16	
DEPTH (m)		9.50	19.50	28.50	2.50	13.50	16.50	24.50	26.50	9.50	18.50	28.50	5.50	7.50	15.50	
		10.00	20.00	29.00	3.00	14.00	17.00	25.00	27.00	10.00	19.00	29.00	6.00	8.00	16.00	
GENERAL	DRY DENSITY $\rho_d$ g/cm <sup>3</sup>	1.562	1.626	1.643			1.541			1.610		1.585				
	WET DENSITY $\rho_w$ g/cm <sup>3</sup>	1.938	1.985	2.015			1.929			1.944		1.970				
	SPECIFIC GRAVITY $\rho_s$ g/cm <sup>3</sup>	2.657	2.656	2.684						2.659	2.657	2.685				
	NATU. MOIST. CONT. $W_n$ %	24.1	22.1	22.7			25.2			23.9	23.1	24.3				
GRAIN SIZE	VOID RATIO $e$															
	SATURATION $S_r$ %															
	GRAVEL (2~75mm) %															
	SAND (75 $\mu$ m ~2mm) %	84	93			89	72			71	61			54		
	SILT (5 ~75 $\mu$ m) %	16	7			11	28			29	39			46		
	CLAY (Under 5 $\mu$ m) %															
	UNIFORMITY $U_c$															
	CURVATURE $U_c'$															
	MAX. GRAIN SIZE mm															
	ATTERBERG LIMITS	LIQUID LIMIT $W_L$ %			59.0	41.0			57.0	47.0			48.0	45.0		47.0
PLASTIC LIMIT $W_P$ %				34.0	18.0			33.0	25.0			25.0	19.0		22.0	
PLASTICITY INDEX $I_P$				25.0	23.0			24.0	22.0			23.0	26.0		25.0	
CONSISTENCY INDEX																
SOIL CLASS	CLASSIFICATION															
	UNIFIED SOIL CLASS.															
UNCONF. COMPRESS	UNCONF. COMPRESS. STRENGTH $q_u$ kgf/cm <sup>2</sup>			2.222								1.213				
	FAILURE STRAIN %			10								13				

SUMMARY OF LABORATORY TEST (9)

SITE LOCATION (Site No.)		Ukhia, Jaliapara (II-11)										Chokoria, Magnama (II-14)									
BORING HOLE No.		11 - 1					11 - 2					14 - 1					14 - 2				
SAMPLE No.		U-1	U-2	D-8	D-7	D-10	U-1	U-2	D-8	D-7	D-10	U-1	U-2	D-5	D-11	D-11	U-1	U-2	D-5	D-11	D-11
DEPTH (m)		2.10	4.10	7.55	6.55	9.55	2.10	2.10	7.55	6.55	9.55	1.10	2.10	4.55	10.55	10.55	1.10	2.10	4.55	10.55	10.55
		2.55	4.55	8.00	7.00	10.00	2.55	2.55	8.00	7.00	10.00	1.55	2.55	5.00	11.00	11.00	1.55	2.55	5.00	11.00	11.00
GENERAL	DRY DENSITY $\rho_d$ g/cm <sup>3</sup>	1.604	1.648	1.414	1.334	1.563	1.520	1.520	1.414	1.334	1.563	1.351	1.375	1.469		1.382	1.351	1.375	1.469		1.382
	WET DENSITY $\rho_w$ g/cm <sup>3</sup>	2.037	2.051	1.902	1.846	1.959	1.909	1.909	1.902	1.846	1.959	1.848	1.860	1.768		1.839	1.848	1.860	1.768		1.839
GRAIN SIZE	SPECIFIC GRAVITY $\rho_s$ g/cm <sup>3</sup>	2.569	2.609	2.617	2.617	2.609	2.623	2.623	2.617	2.617	2.609	2.579	2.585	2.614		2.617	2.579	2.585	2.614		2.617
	NATU. MOIST. CONT. $W_n$ %	26.98	24.46	34.50	38.39	25.30	25.58	25.58	34.50	38.39	25.30	36.85	35.28	20.36	36.00	38.00	36.85	35.28	20.36	36.00	38.00
	VOID RATIO $e$																				
	SATURATION $S_r$ %																				
	GRAVEL (2~75mm) %																				
ATTREBUT	SAND (75 $\mu$ m ~ 2mm) %	3	4	4	3	10	25	25	4	3	10	2	4	26	30	2	2	4	26	30	2
	SILT (5 ~ 75 $\mu$ m) %	72	82	79	82	74	63	63	79	82	74	73	78	62	59	85	73	78	62	59	85
	CLAY (Under 5 $\mu$ m) %	25	14	17	15	16	12	12	17	15	16	25	18	12	11	13	25	18	12	11	13
	UNIFORMITY $U_c$																				
SOIL CLASS	CURVATURE $U_c'$																				
	MAX. GRAIN SIZE mm																				
	LIQUID LIMIT $W_L$ %	55.46	51.47	44.87	58.33	37.87	50.95	50.95	44.87	58.33	37.87	69.23	42.06	37.04		51.02	69.23	42.06	37.04		51.02
	PLASTIC LIMIT $W_P$ %	28.46	26.92	24.00	28.57	21.42	28.40	28.40	24.00	28.57	21.42	30.76	25.38	20.62		26.92	30.76	25.38	20.62		26.92
	PLASTICITY INDEX $I_P$	27.00	24.55	20.87	29.77	16.45	22.55	22.55	20.87	29.77	16.45	38.47	16.68	16.42		24.10	38.47	16.68	16.42		24.10
UNCONSOLIDATED COMPRESSION STRENGTH	CONSISTENCY INDEX																				
	CLASSIFICATION																				
	UNIFIED SOIL CLASS.	MH	MH	ML	MH	ML	MH	MH	ML	MH	ML	MH	ML	ML		MH	MH	ML	ML		MH
UNCONSOLIDATED COMPRESSION STRENGTH	$q_u$ kgf/cm <sup>2</sup>	2.365	2.410				4.451	4.451				1.222	0.597			0.687	1.222	0.597			0.687
	FAILURE STRAIN %	8.92	5.35				8.92	8.92				8.92	8.92			10.71	8.92	8.92			10.71

SUMMARY OF LABORATORY TEST (10)

SITE LOCATION (Site No.)		Chokoria, Khotakhari (II-12)											
BORING HOLE No.		12 - 1						12 - 2					
SAMPLE No.		U-1	U-2	D-2	D-6	D-16	D-27	U-1	U-2	D-3	D-14	D-26	
DEPTH (m)		9.50 10.00	19.50 20.00	1.50 2.00	5.50 6.00	15.50 16.00	26.50 27.00	9.50 10.00	19.50 20.00	1.50 2.00	13.50 14.00	25.50 26.00	
GENERAL	DRY DENSITY $\rho_s$ g/cm <sup>3</sup>	1.618	1.620			1.612		1.611	1.632			1.620	
	WET DENSITY $\rho$ g/cm <sup>3</sup>	1.962	1.982			1.971		1.996	2.025			1.981	
	SPECIFIC GRAVITY $\rho_s$ g/cm <sup>3</sup>	2.658	2.660			2.659		2.659	2.672			2.656	
	NATU. MOIST. CONT. $w_n$ %	21.3	22.4			22.3		23.9	24.1			22.3	
VOID RATIO $e$													
SATURATION $S_r$ %													
GRAIN SIZE	GRAVEL (2~75mm) %												
	SAND (75 $\mu$ m ~2mm) %	87	76		88		88	78	8			78	
	SILT (5 ~75 $\mu$ m) %	13	24		12		12	22	92			22	
	CLAY (Under 5 $\mu$ m) %												
	UNIFORMITY $U_c$												
CURVATURE $U_c'$													
ATTERBERG LIMITS	MAX. GRAIN SIZE mm												
	LIQUID LIMIT $w_L$ %			42.00						44.00	46.00		
	PLASTIC LIMIT $w_p$ %			18.00						19.00	21.00		
	PLASTICITY INDEX $I_p$			24.00						25.00	25.00		
SOIL CLASS	CONSISTENCY INDEX												
	CLASSIFICATION												
UNCONFINED COMPRESSIVE STRENGTH	UNIFIED SOIL CLASS.												
	UNCONFINED COMPRESSIVE STRENGTH $q_u$ kgf/cm <sup>2</sup>												
	FAILURE STRAIN %												

SUMMARY OF LABORATORY TEST (11)

SITE LOCATION (Site No.)	Chokoria, Chiringa (II-13)						Chokoria, Magnama (II-15)							
	13 - 1			13 - 2			15 - 1			15 - 2				
BORING HOLE No.	U-1	D-1	D-2I	U-1	D-1	D-1I	U-1	U-2	D-3	D-15	U-1	U-2	D-7	D-13
SAMPLE No.														
DEPTH (m)	1.50	1.00	20.00	1.50	1.00	11.00	6.10	7.10	2.55	14.55	2.10	3.10	6.55	12.55
	1.95	1.45	20.45	1.95	1.45	11.45	6.55	7.55	3.00	15.00	2.55	3.55	7.00	13.00
	1.52			1.43			1.313	1.297	1.393		1.216	1.304	1.377	
DRY DENSITY $\rho_s$ g/cm <sup>3</sup>	1.87			1.86			1.895	1.786	1.846		1.754	1.793	1.853	
WET DENSITY $\rho_w$ g/cm <sup>3</sup>	2.623	2.647	2.622	2.643	2.639	2.622	2.628	2.668	2.579		2.595	2.617	2.623	
SPECIFIC GRAVITY $\rho_s$ g/cm <sup>3</sup>	22.36			30.09			37.73	32.48	44.32	26.52	44.18	37.52	34.50	28.25
NATU. MOIST. CONT. $W_n$ %														
VOID RATIO $e$														
SATURATION $S_r$ %														
GRAVEL (2~75mm) %														
SAND (75 $\mu$ m ~2mm) %	45.0	13.5	66.8	17.5	11.0	62.5	40	69	5	74	3	23	32	29
SILT (5 ~75 $\mu$ m) %	55.0	83.5	33.2	81.5	84.0	37.5	52	31	67	26	78	67	56	65
CLAY (Under 5 $\mu$ m) %	0	3.0	0	1.0	5.0	0	8	0	28	0	19	10	12	6
UNIFORMITY $U_c$														
CURVATURE $U_c'$														
MAX. GRAIN SIZE mm														
LIQUID LIMIT $W_L$ %		36.50		35.50	37.00		36.72	N.P.	48.00		46.80	35.95	35.85	
PLASTIC LIMIT $W_P$ %		22.62		21.11	22.93		20.68		25.92		23.07	19.23	20.00	
PLASTICITY INDEX $I_p$		13.88		13.39	14.07		16.04		22.08		23.73	16.72	15.85	
CONSISTENCY INDEX														
CLASSIFICATION														
UNIFIED SOIL CLASS.		ML		ML	ML		OL	SM	OL		OL	ML	ML	
UNCONFINED COMPRESSION STRENGTH $q_u$ kgf/cm <sup>2</sup>				0.316			0.292	0.440			0.212	0.391		
FAILURE STRAIN %	4			6			8.92	5.35			8.92	7.14		

