

APPENDIX 1.4
Geological Survey Works

A1: Location of Borehole

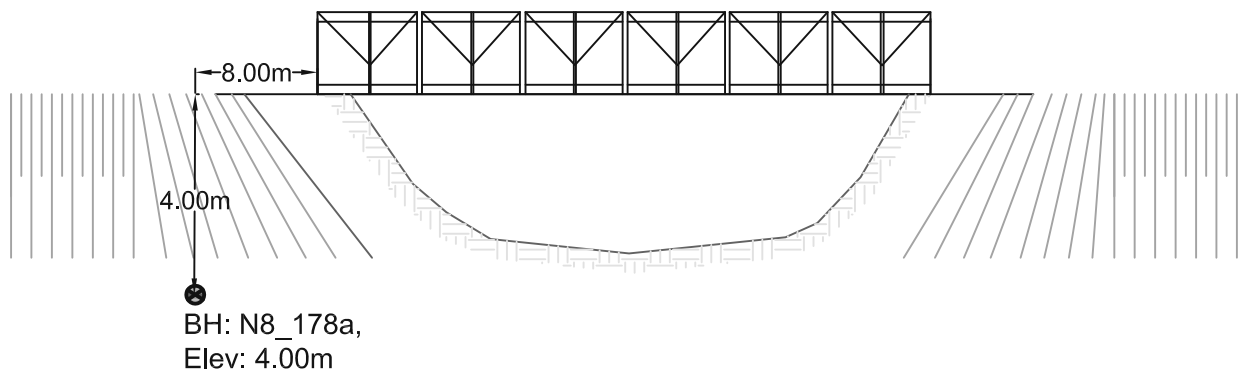
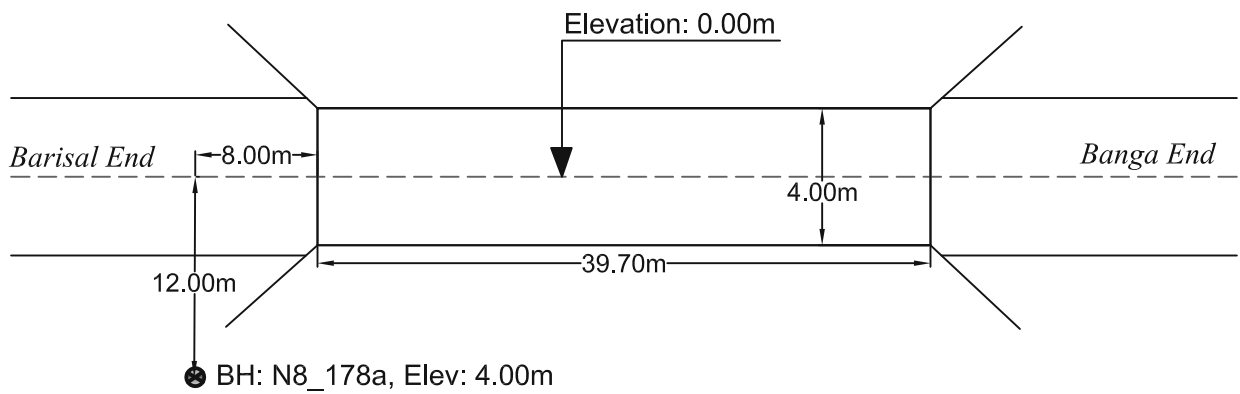
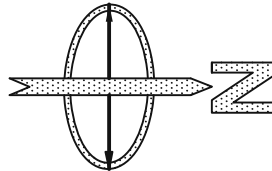
CLIENT: Oriental Consultants Company Limited.

RANK: 1

BRIDGE ID: N8_178a

LATITUDE: 22°34'30.833" LONGITUDE: 90°20'11.932"

CHAINAGE: 176.88



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 1	BOREHOLE NO: N8_178a	Longitude: N 90°13'20.172"	Latitude: E 22°34'30.833"
			Brigde ID: N8_178a	Road Name: Dhaka (Jatrabari)MawaBhangaBarisalPatuakhali.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 176.88, RL: -4.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 09-04-2014	Completed Date: 13-04-2014	G. W. T : -9.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								
0								0							
2.0m	Filling sand.		1.00	1.45				D-1							
2			2.00	2.45	1	0	1	1	D-2						
			3.00	3.45	1	0	1	1	D-3	7.3	92.7	41.5	18.6	2.749	34.07
4			4.00	4.45	1	1	2	3	D-4						
			5.00	5.45	1	1	2	3	D-5						
6	Gray 7.5YR (5/1), very soft, low plastic, Clay with sand, CL.		6.00	6.45	2	2	3	5	D-6						
			7.00	7.45	2	1	3	4	D-7						
8			8.00	8.45	2	3	4	7	D-8						
			9.00	9.45	3	3	3	6	D-9						
10			10.00	10.45	2	2	4	6	D-10						
			11.00	11.45	2	3	4	7	D-11						
12			12.00	12.45	3	4	7	11	D-12						
			13.00	13.45	2	3	5	8	D-13						
2.0m	Gray 7.5YR (5/1), very soft, high plastic, Clay with sand, CH.		14.00	14.45	2	4	5	9	D-14						
14			15.00	15.45	2	5	5	10	D-15						
			16.00	16.45	4	6	6	12	D-16						
16			17.00	17.45	3	5	7	12	D-17						
			18.00	18.45	3	4	7	11	D-18						
18	Gray 7.5YR (5/1), stiff, low plastic, Silt with sand, ML.		19.00	19.45	3	6	9	15	D-19						
			20.00	20.45	4	8	10	18	D-20						
20			21.00	21.45	4	9	12	21	D-21						
			22.00	22.45	3	7	13	20	D-22						
22			23.00	23.45	5	8	12	20	D-23						
			24.00	24.45	4	8	14	22	D-24						
3.00m	Gray 7.5YR (5/1), very stiff, low plastic Micaceous Silt with sand, ML.		25.00	25.45	3	8	10	18	D-25						
24			26.00	26.45	2	5	8	13	D-26						
26			27.00	27.45	3	6	9	15	D-27						
			28.00	28.45	4	6	11	17	D-28						
28	Gray 7.5YR (5/1), very stiff, low plastic, Silt with sand, ML.		29.00	29.45	4	8	10	18	D-29						
			30.00	30.45	6	9	11	20	D-30						
5.45m															
30															

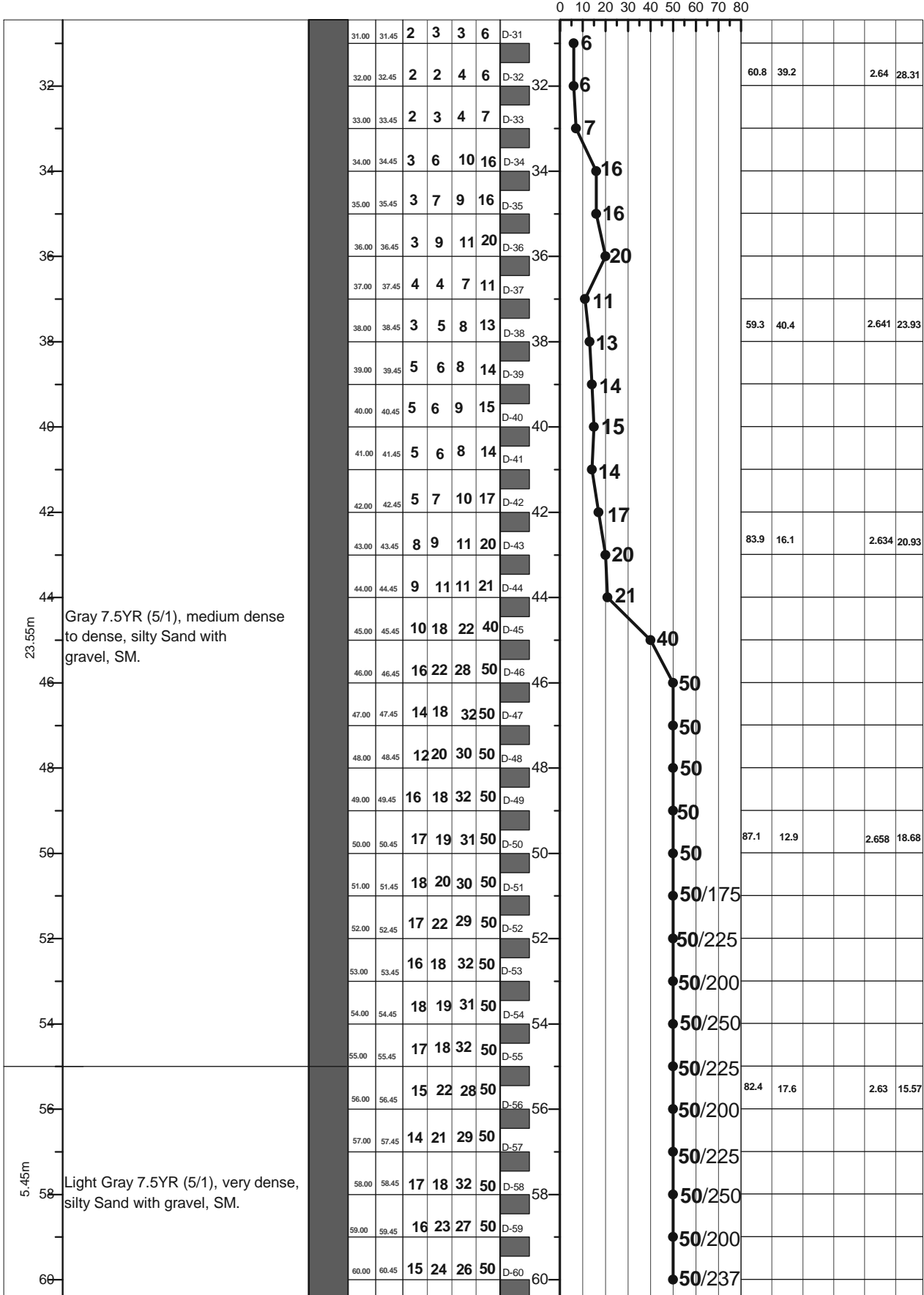
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 1	BOREHOLE NO: N8_178a	Longitude: N 90°13'20.172"	Latitude: E 22°34'30.833"
			Brigde ID: N8_178a	Road Name: Dhaka (Jatrabari)MawaBhangaBarisalPatuakhali.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 176.88, RL: -4.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 09-04-2014	Completed Date: 13-04-2014	G. W. T : -9.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

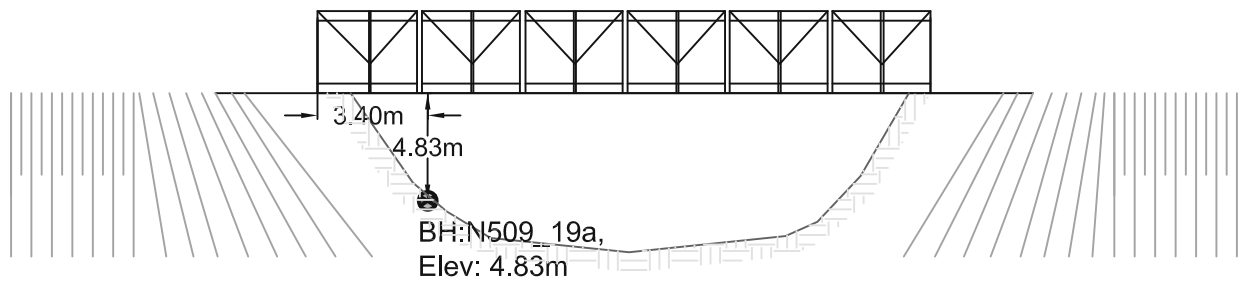
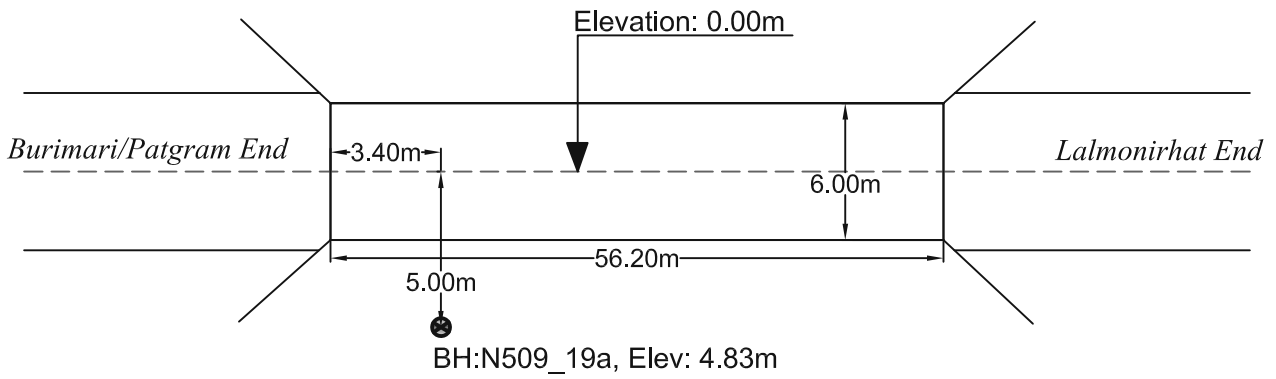
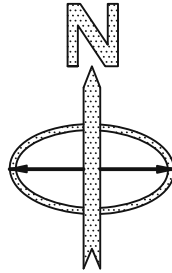


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

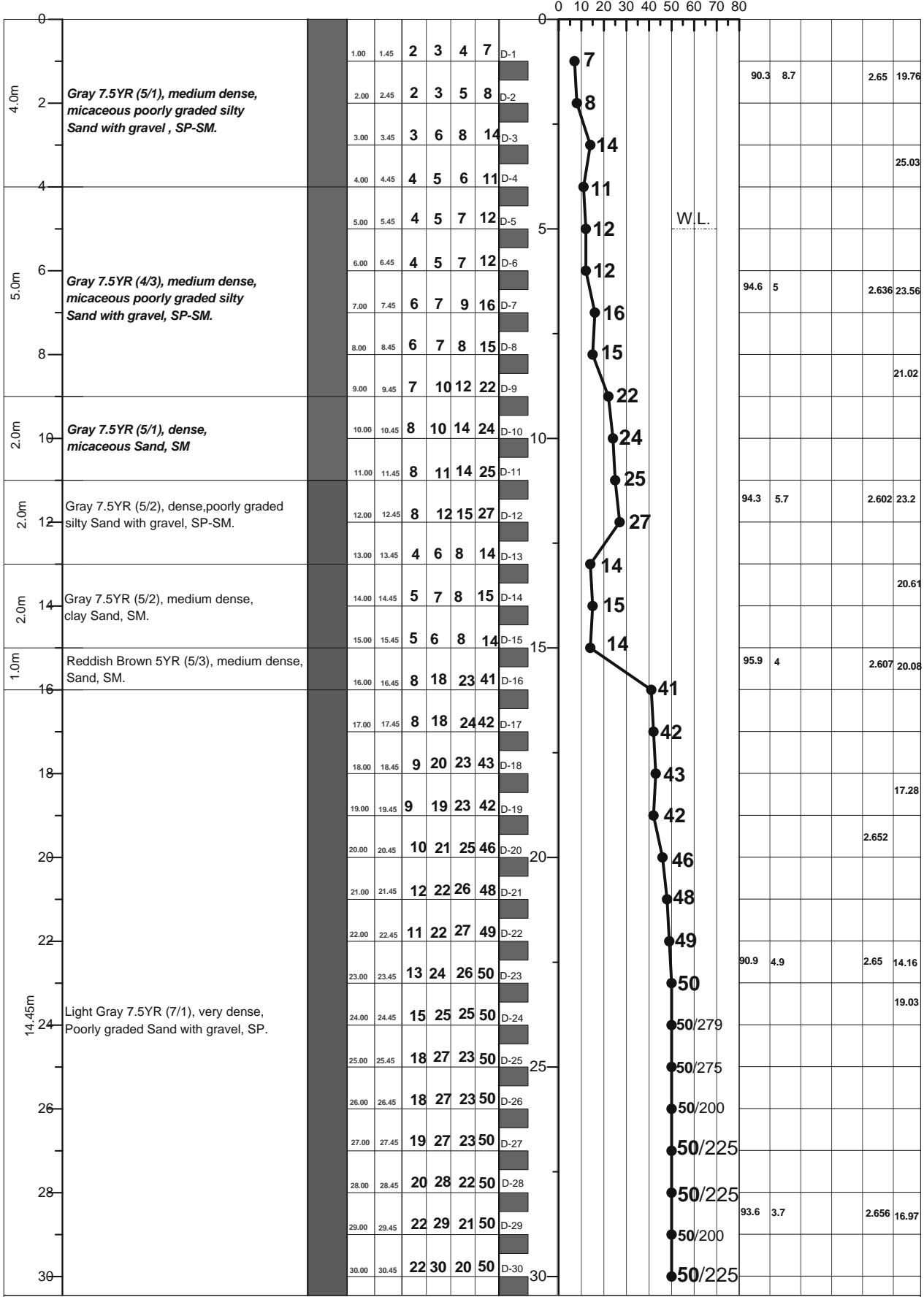
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 2
BRIDGE ID: N509_19a
LATITUDE: 25°54'33.978" LONGITUDE: 89°21'57.998"
CHAINAGE: 19.553



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 2	BOREHOLE NO: N509_19a	Longitude: N 88°33'12"	Latitude: E 25°54'33.978"
			Brigde ID: N509_19a	Road Name: Barabari-Lalmonirhat-Burimary Road.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 19.553, RL: -4.83m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 25-02-2014	Completed Date: 26-02-2014	G. W. T : -5.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

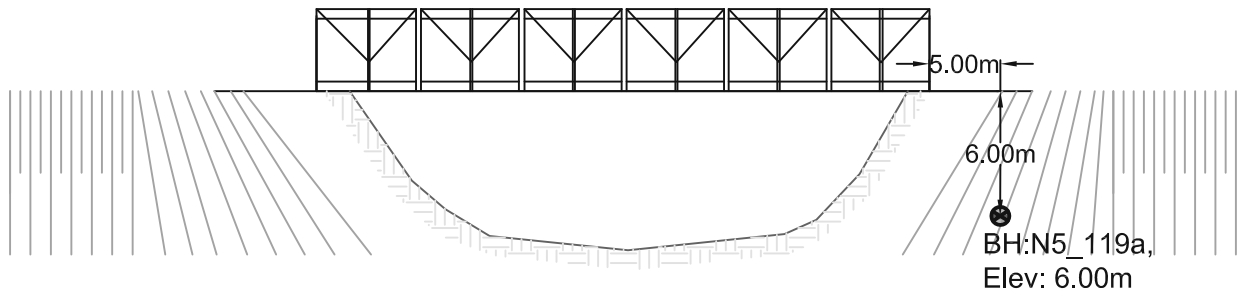
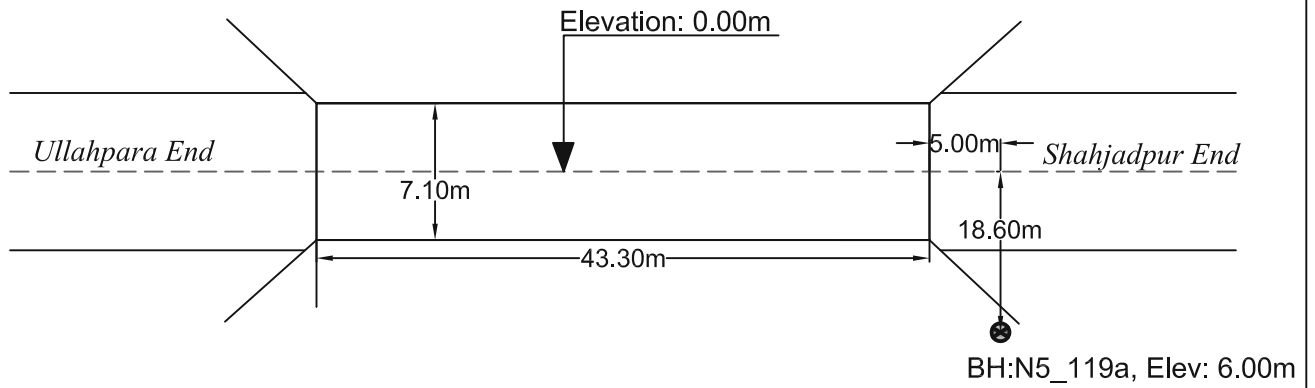
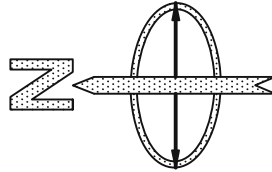
CLIENT: Oriental Consultants Company Limited.

RANK: 3

BRIDGE ID: N5_119a

LATITUDE: 24°02'45.462" LONGITUDE:89°36'15.575"

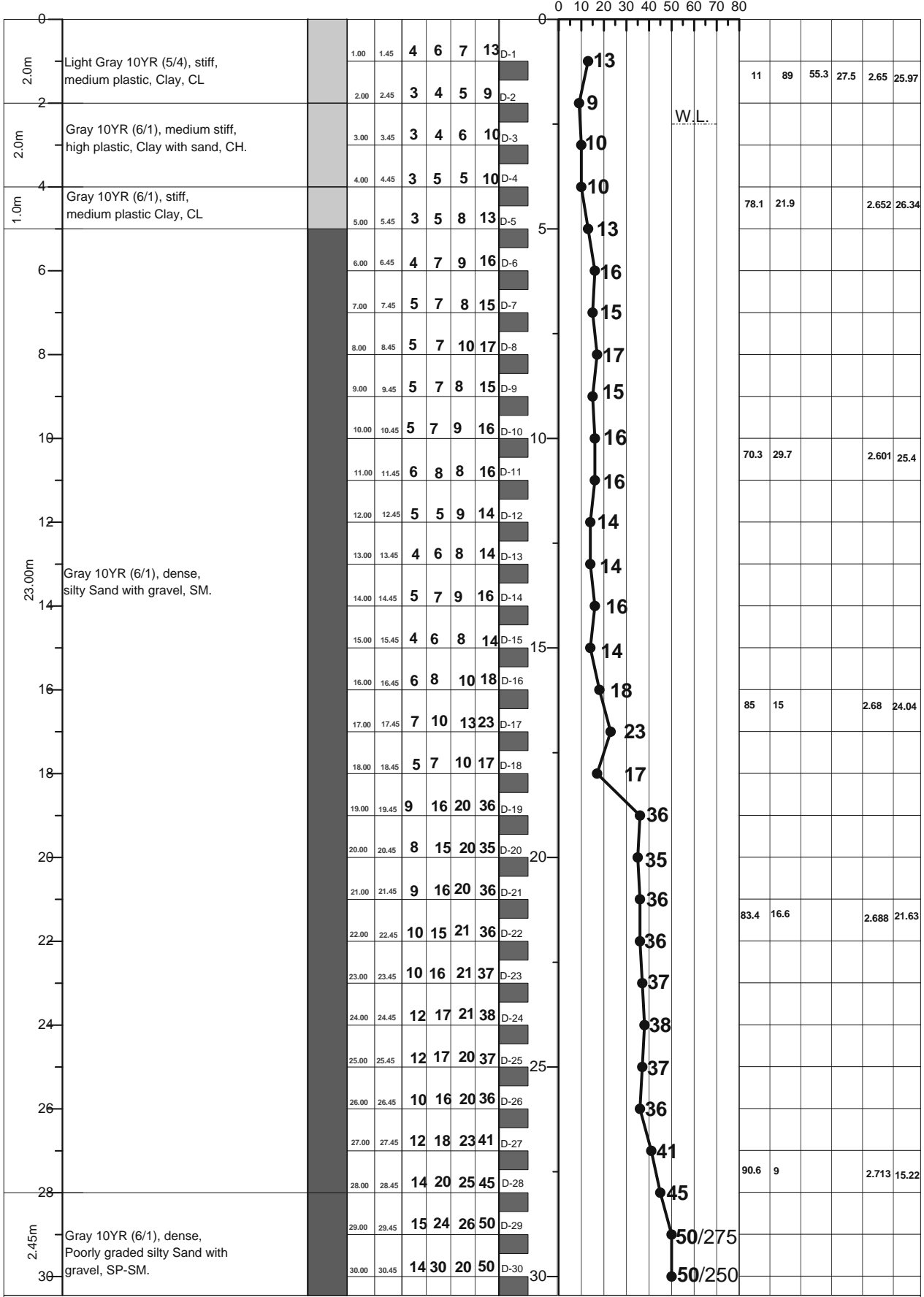
CHAINAGE: 118.748



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 3	BOREHOLE NO: N5_119a	Longitude: N 89°33'31"	Latitude: E 24°02'45.462"
			Brigde ID: N5_119a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 36.0m	Chainage: 118.748, RL: -6.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 24-02-2014	Completed Date: 25-02-2014	G. W. T : -2.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



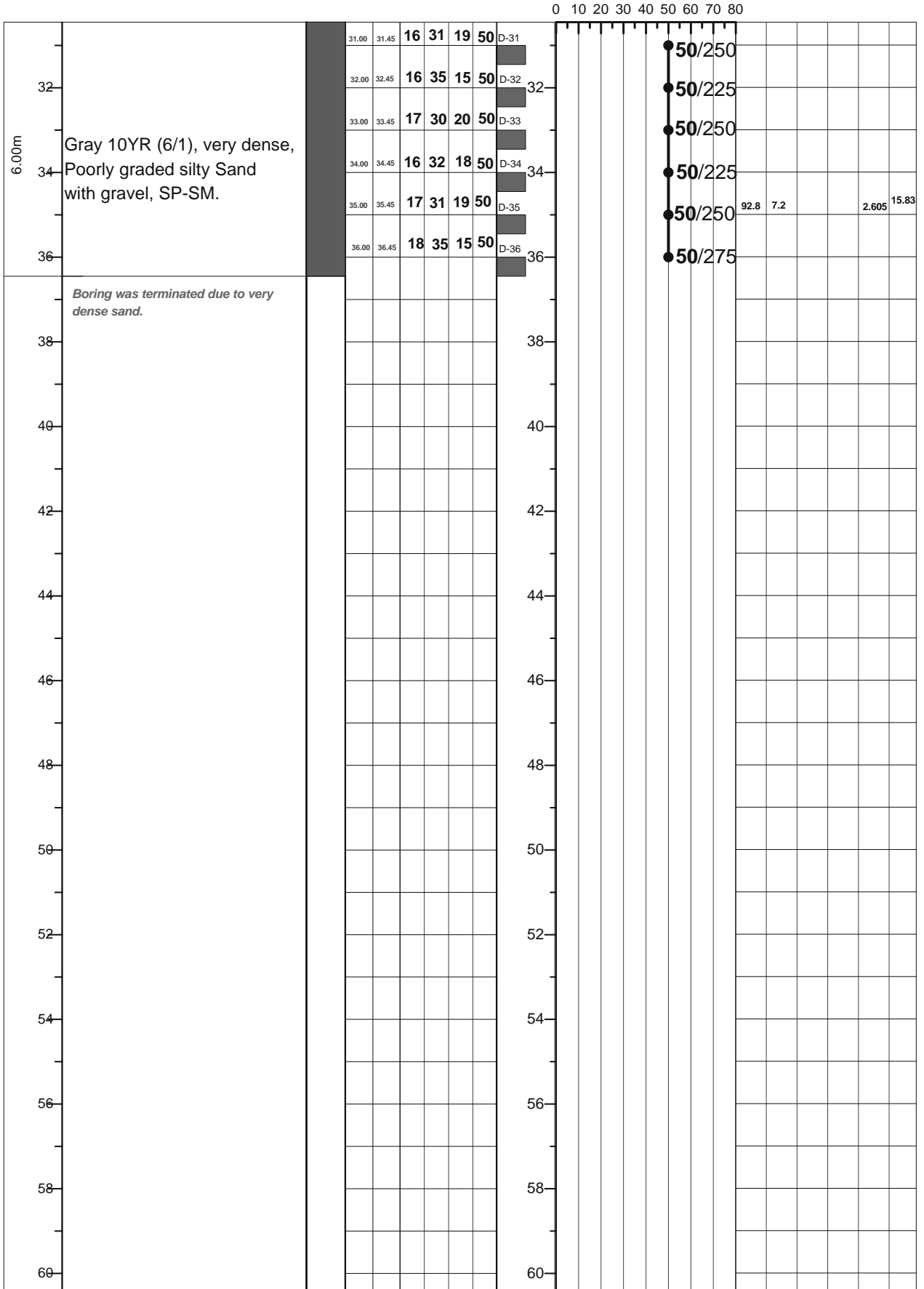
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 3	BOREHOLE NO: N5-119a	Longitude: N 89°33'31"	Latitude: E 24°02'45.462"
			Brigde ID: N5-119a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 36.0m	Chainage: 118.748, RL: -6.0
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 24-02-2014	Completed Date: 25-02-2014	G. W. T : -2.5m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



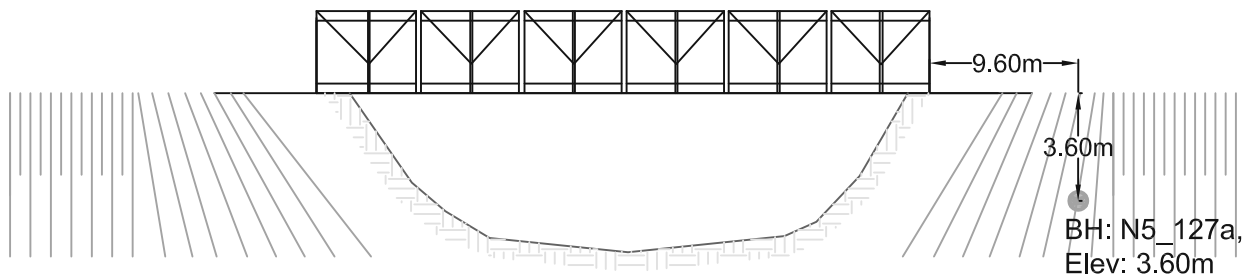
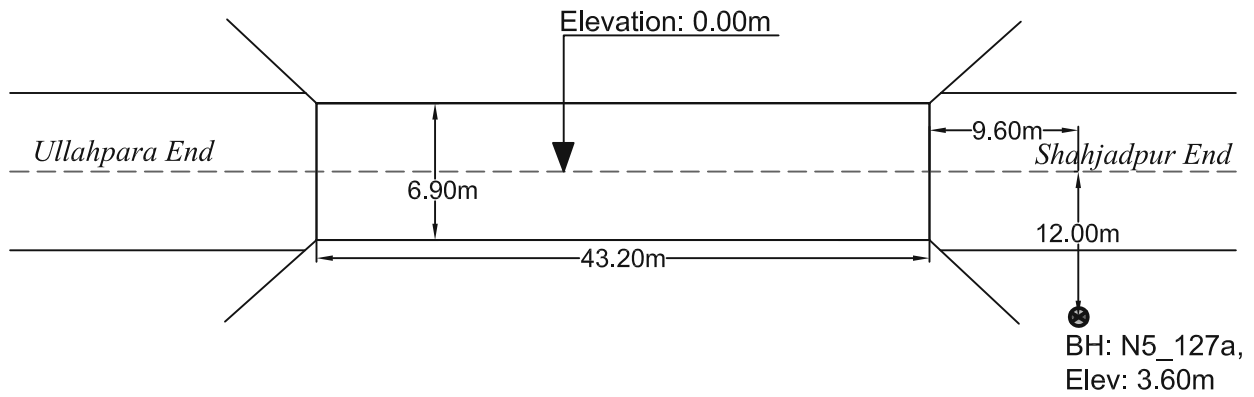
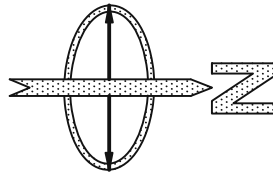
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

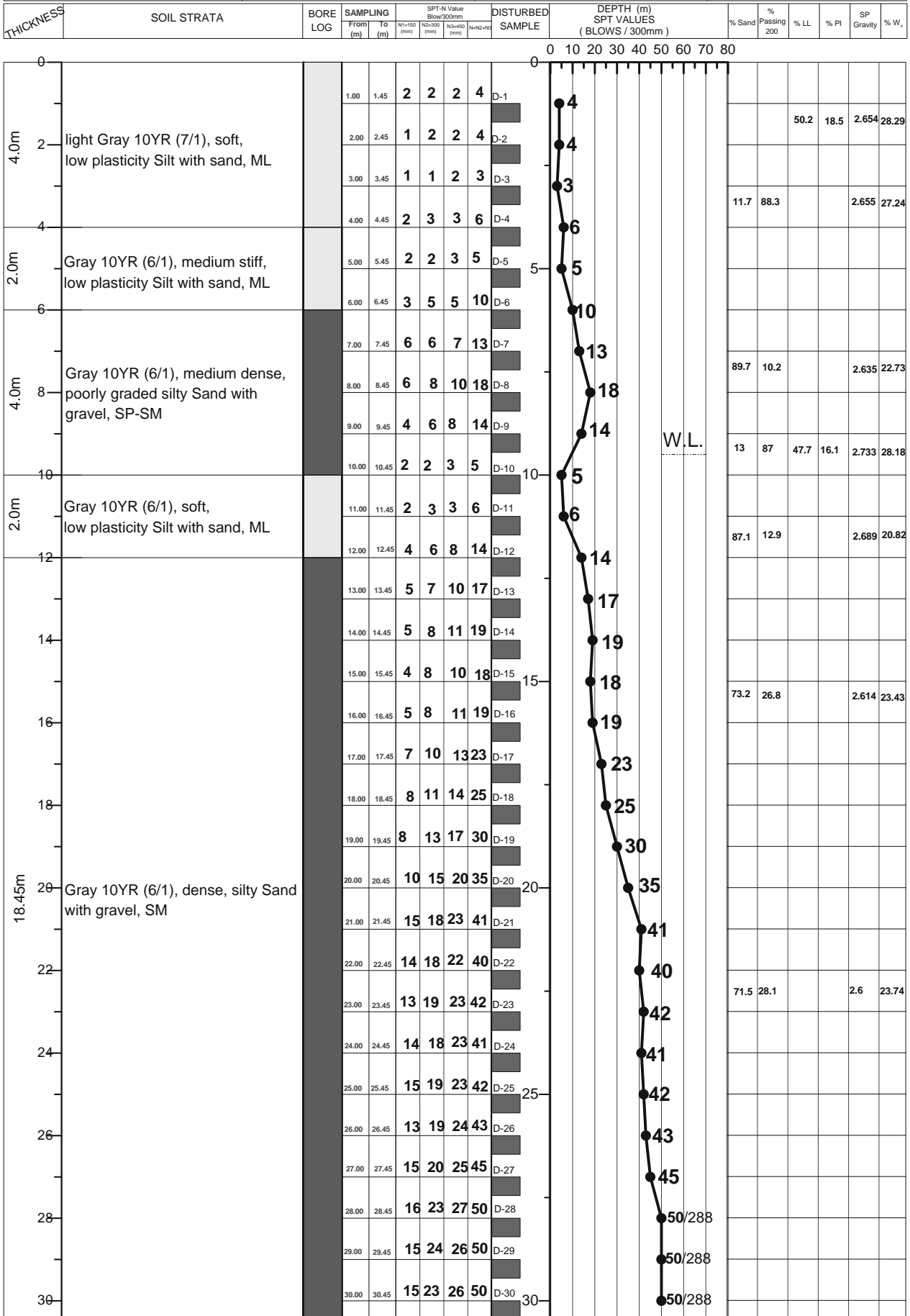
MAXTH PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 4
BRIDGE ID: N5_127a
LATITUDE: 24°06'24.672" LONGITUDE: 89°34'52.711"
CHAINAGE: 126.806



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 4	BOREHOLE NO: N5_127a Brigde ID: N5_127a	Longitude: N 89°35'19.67" Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh.	Latitude: E 24°06'24.672"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 40.0m	Chainage: 126.806, RL: -3.6m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 2-03-2014	Completed Date: 4-03-2014	G. W. T : -9.5m.



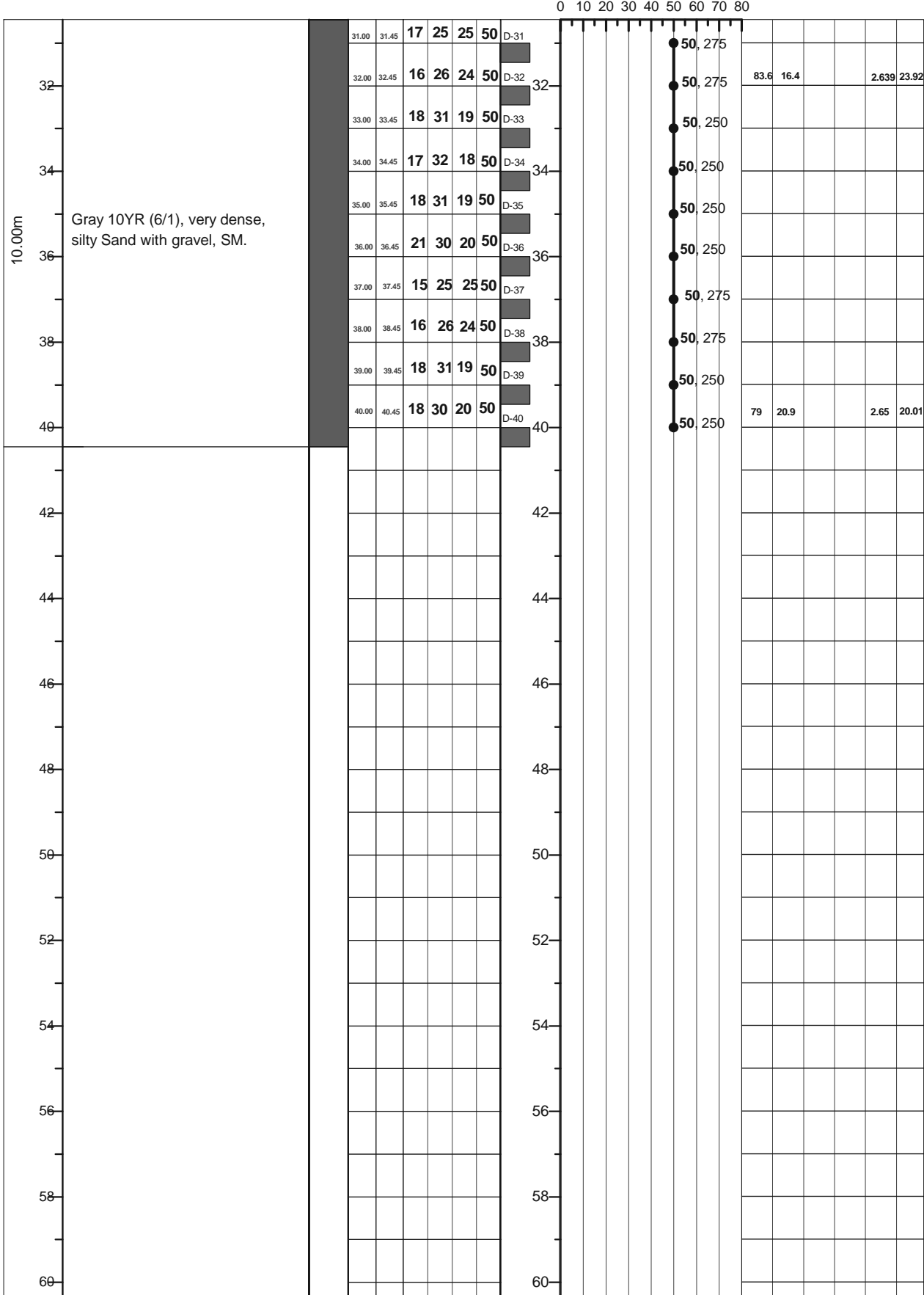
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^m PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 4	BOREHOLE NO: N5-127a	Longitude: N 89°35'19.67"	Latitude: E 24°06'24.672"
			Brigde ID: N5-127a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 40.0m	Chainage: 126.806, RL: -3.6m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 2-03-2014	Completed Date: 4-03-2014	G. W. T : -9.5m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)								

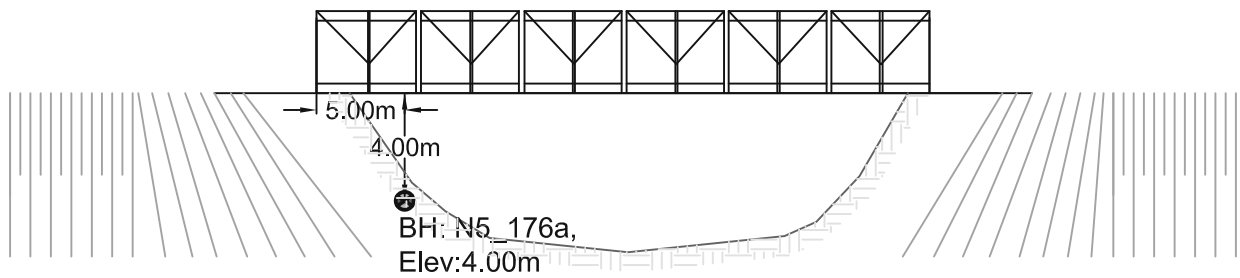
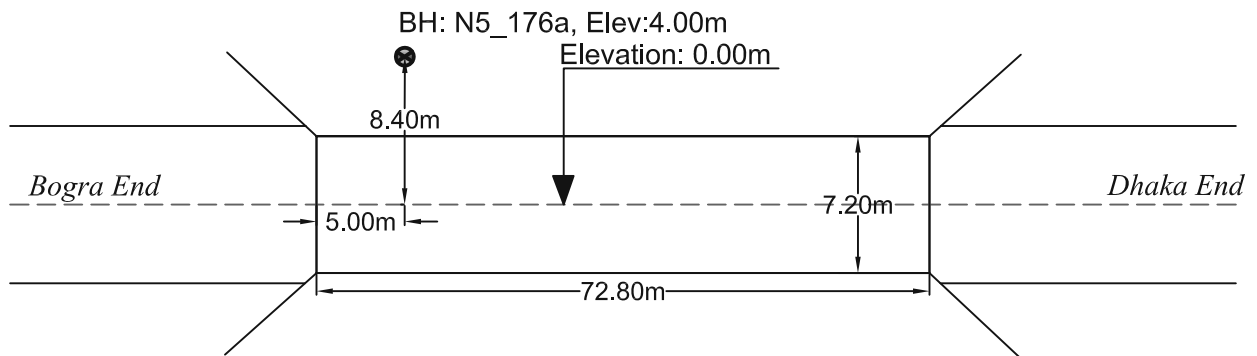
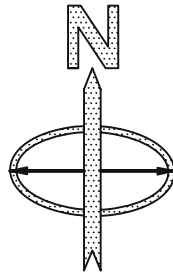


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

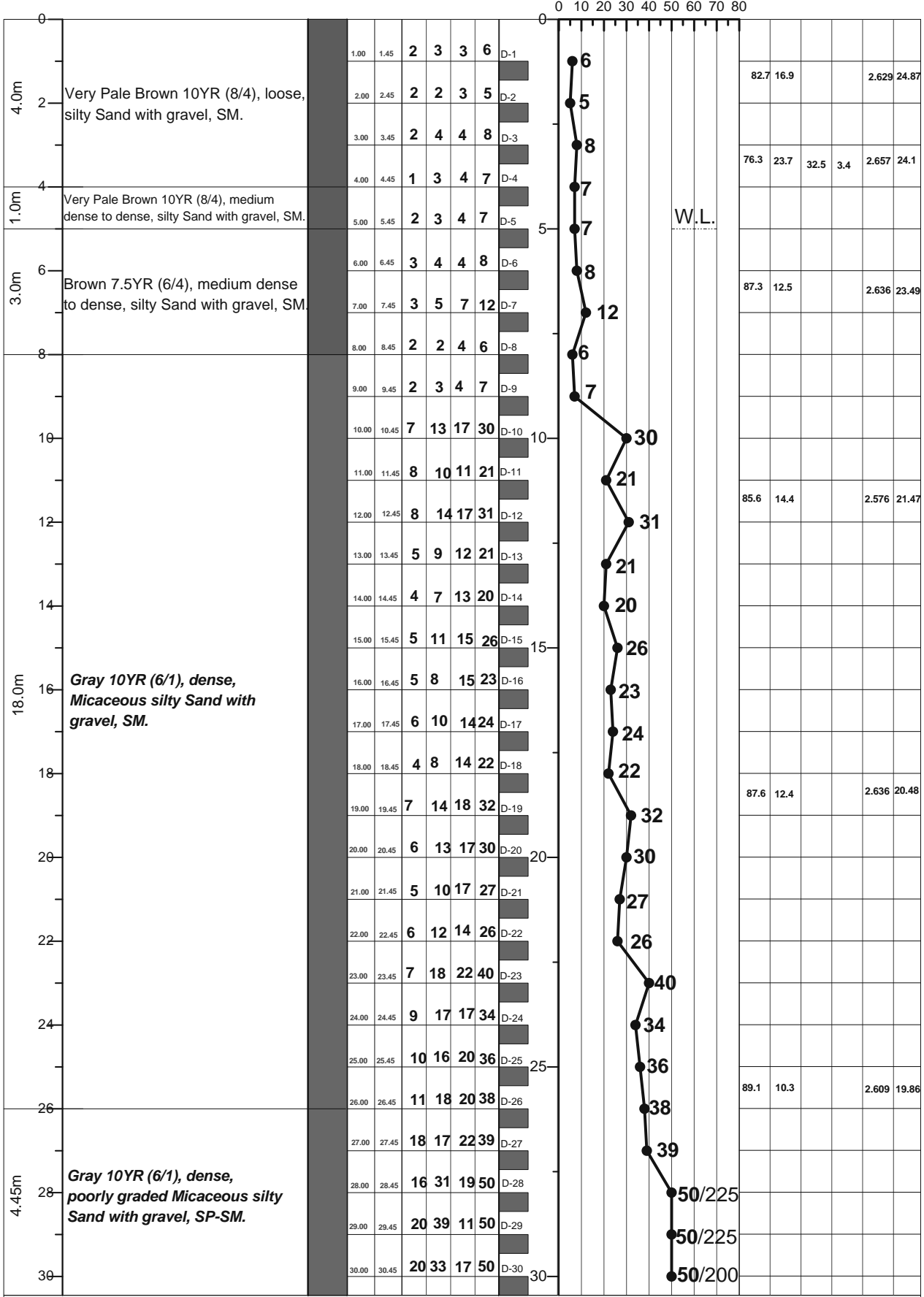
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 5
BRIDGE ID: N5_176a
LATITUDE: 24°29'27.535" LONGITUDE: 89°30'34.912"
CHAINAGE: 173.833



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 5	BOREHOLE NO: N5_176a	Longitude: N 89°32'8.998"	Latitude: E 24°29'27.535"
			Brigde ID: N5_176a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 32.0m	Chainage: 173.833, RL: -4.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -5.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



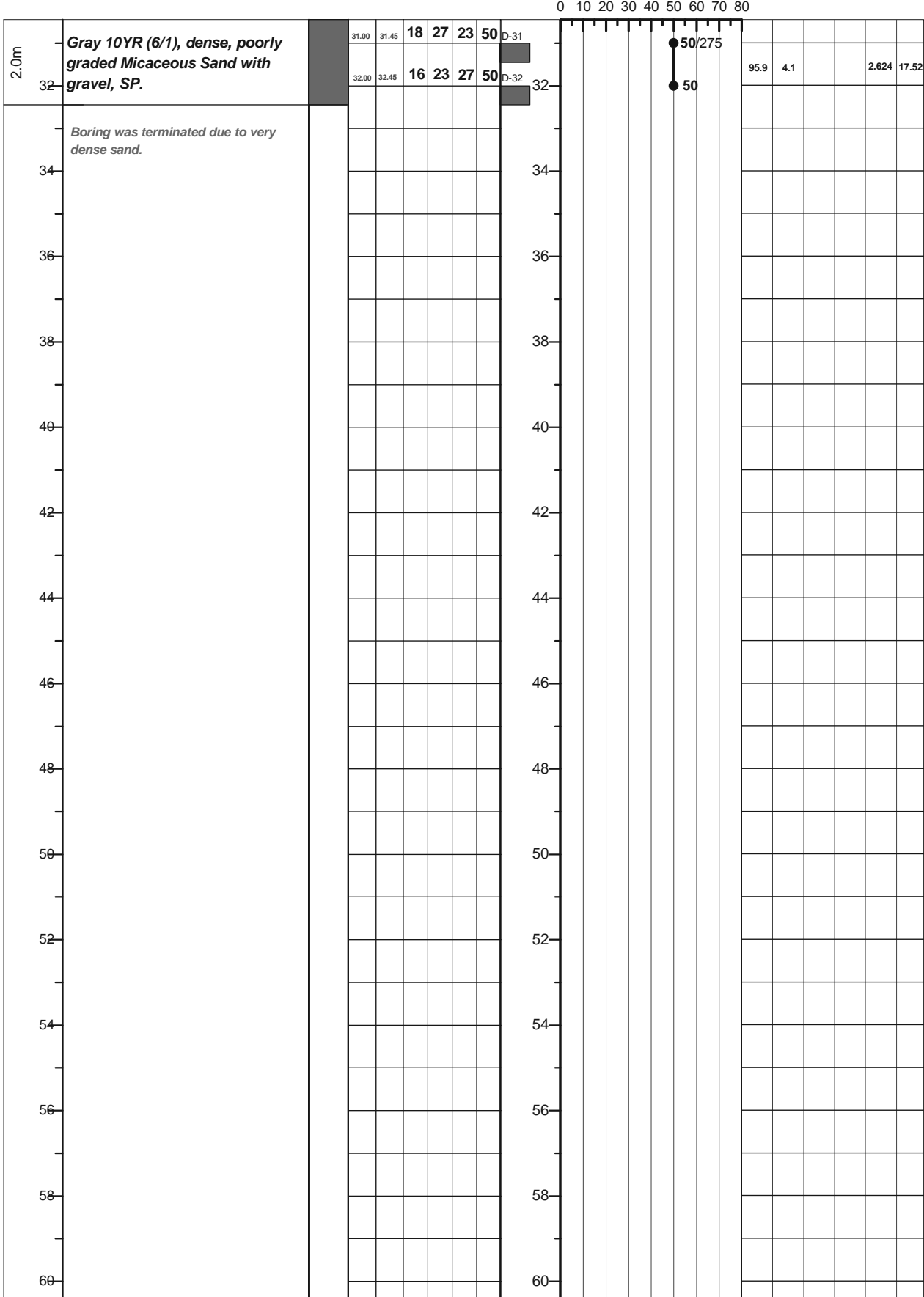
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 5	BOREHOLE NO: N5_176a	Longitude: N 89°32'8.998"	Latitude: E 24°29'27.535"
			Brigde ID: N5_176a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 32.0m	Chainage: 173.833, RL: -4.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -5.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

[Light Gray Box] PLASTIC CLAY	[Light Blue Box] SILT	[Dark Gray Box] PEAT/HIGHLY ORGANIC SOIL	[White Box] UNDISTURBED SAMPLE
[Dark Gray Box] MICACEOUS FINE SAND/SILT	[Dark Blue Box] SAND	[Black Box] SHALE	[Dark Gray Box] DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

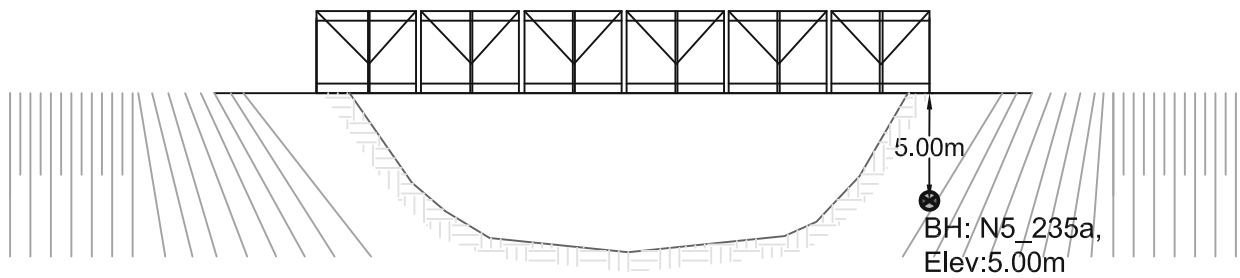
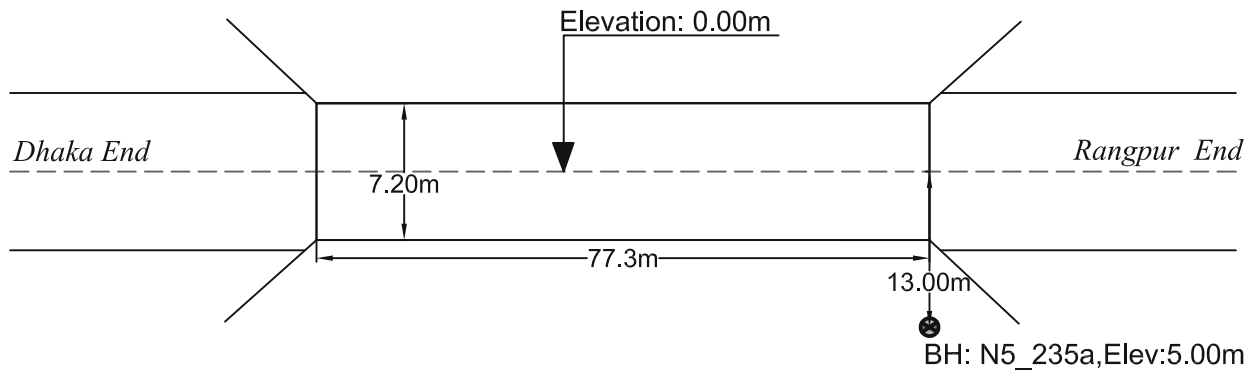
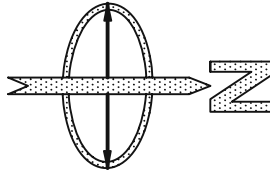
CLIENT: Oriental Consultants Company Limited.

RANK: 6

BRIDGE ID: N5_235a

LATITUDE: 24°57'15.45" LONGITUDE: 89°21'07.856"

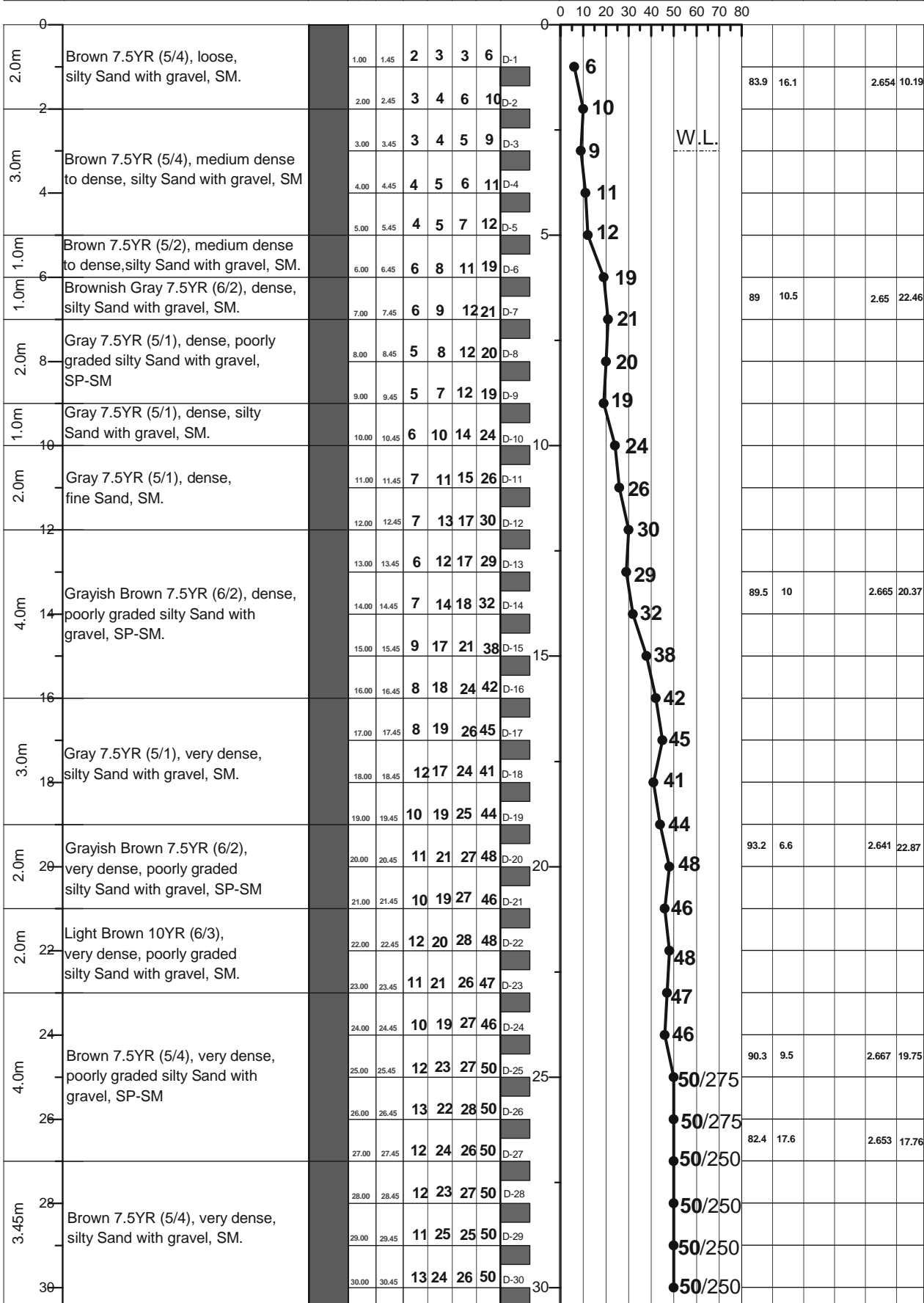
CHAINAGE: 232.973



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 6	BOREHOLE NO: N5_235a	Longitude: N 89°21'08.8"	Latitude: E 24°57'16.5"
			Brigde ID: N5_235a	Road Name: Dhaka-Utholi-Paturia-Bogra-Rangpur-Banglabandh Road.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 232.972, RL: -5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING						DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)	N4=600 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

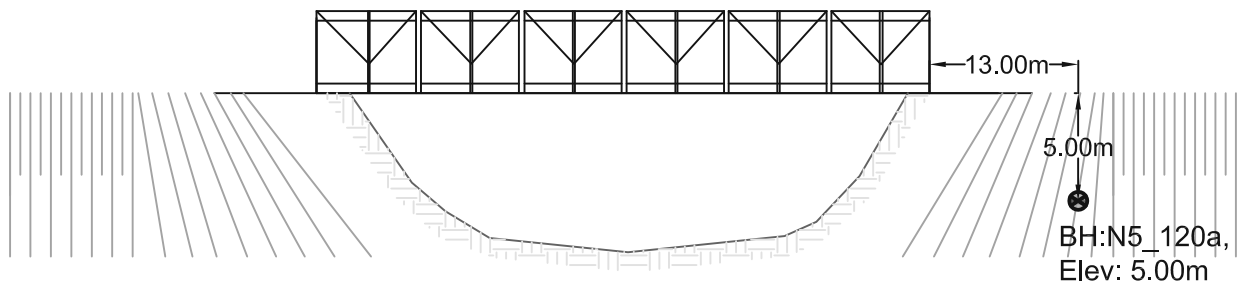
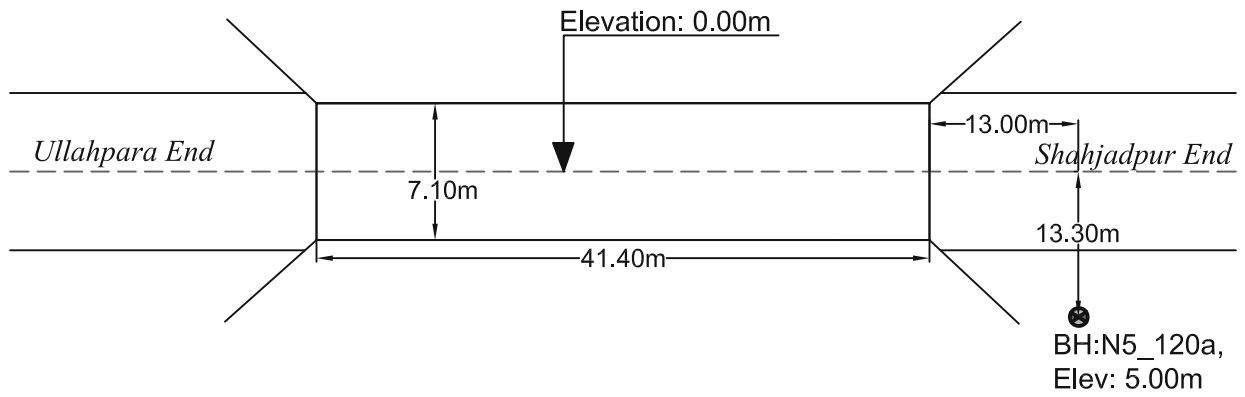
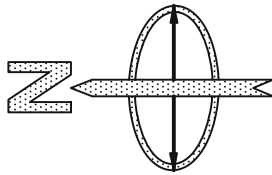
CLIENT: Oriental Consultants Company Limited.

RANK: 7

BRIDGE ID: N5_120a

LATITUDE: 24°03'0.213" LONGITUDE: 89°36'19.411"

CHAINAGE: 119.227



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 7	BOREHOLE NO: N5_120a	Longitude: N 89°33'31"	Latitude: E 24°03'02.13"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 36.0m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 26-02-2014		Completed Date: 27-02-2014	
				Chainage: 119.227, RL: -5.0m	
				G. W. T : -5.2m.	

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
4.0m	light Gray 10YR (7/1), very soft, low plasticity Clay with sand, CL		1.00	1.45	1	1	1	2	D-1	2	4.7	95.3			2.703	30.37
			2.00	2.45	1	1	2	3	D-2	3						
			3.00	3.45	1	1	1	2	D-3	2						
			4.00	4.45	1	2	3	5	D-4	5						
2.0m	light Gray 10YR (7/1), loose, high plasticity Clay with sand, CH		5.00	5.45	2	3	4	7	D-5	7						2.691
			6.00	6.45	2	4	5	9	D-6	9						
1.0m	Gray 10YR (6/1), medium dense, medium plastic, Clay with silt, CL		7.00	7.45	2	2	3	5	D-7	5	82.5	17.4			2.718	27.38
2.0m	Gray 10YR (6/1), medium dense, silty Sand with gravel, SM		8.00	8.45	2	2	3	5	D-8	5						
			9.00	9.45	2	4	7	11	D-9	11						
1.0m	Gray 10YR (6/1), medium dense, micaceous Sand, SM		10.00	10.45	7	9	12	21	D-10	21	92.8	7.2			2.567	23.39
7.0m	Gray 10YR (6/1), dense, poorly graded silty Sand with gravel, SM		11.00	11.45	7	10	14	24	D-11	24						
			12.00	12.45	7	12	15	27	D-12	27						
			13.00	13.45	7	12	14	26	D-13	26						
			14.00	14.45	7	11	13	24	D-14	24						
			15.00	15.45	8	10	13	23	D-15	23						
			16.00	16.45	7	10	15	25	D-16	25						
			17.00	17.45	7	11	14	25	D-17	25						
			18.00	18.45	8	10	16	26	D-18	26						
			19.00	19.45	7	10	14	24	D-19	24						
			20.00	20.45	7	10	13	23	D-20	23						
13.45m	Gray 10YR (6/1), dense, silty Sand with gravel, SM		21.00	21.45	7	11	14	25	D-21	25						
			22.00	22.45	10	13	17	30	D-22	30						
			23.00	23.45	10	14	17	31	D-23	31						
			24.00	24.45	13	15	20	35	D-24	35						
			25.00	25.45	13	16	21	37	D-25	37						
			26.00	26.45	12	19	24	43	D-26	43						
			27.00	27.45	14	23	27	50	D-27	50/288						
			28.00	28.45	13	24	26	50	D-28	50/288						
			29.00	29.45	15	23	27	50	D-29	50/288						
			30.00	30.45	14	23	26	50	D-30	50/288						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^m PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

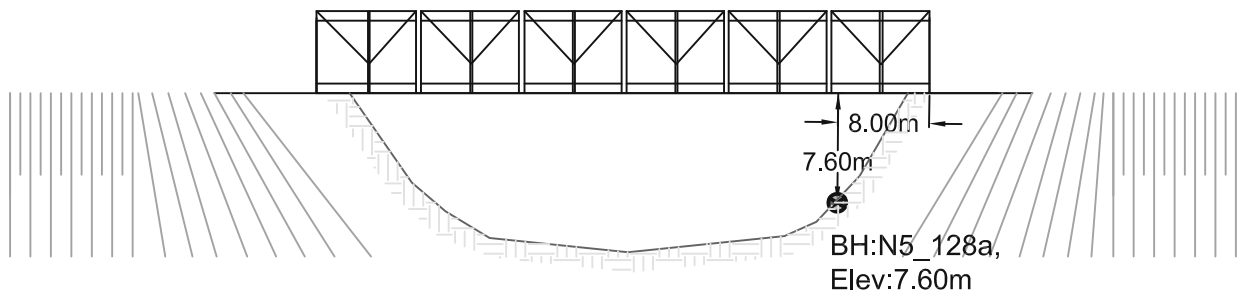
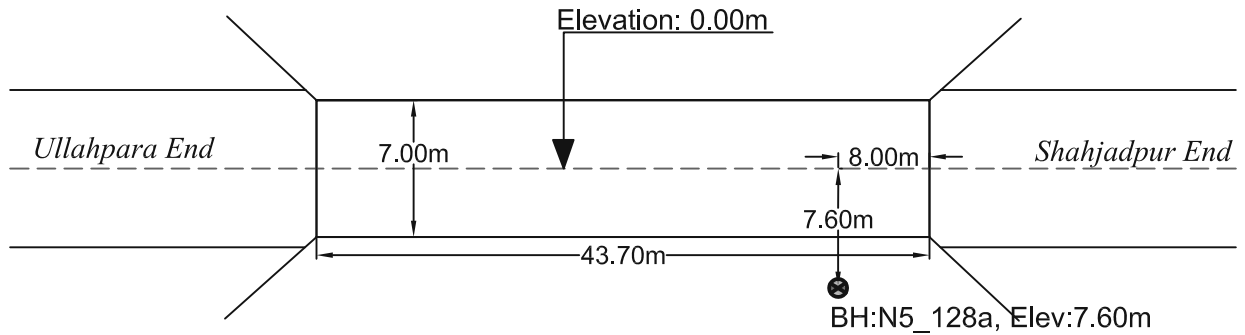
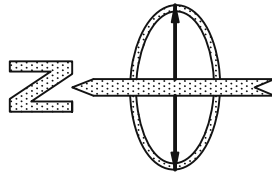
CLIENT: Oriental Consultants Company Limited.

RANK: 8

BRIDGE ID: N5_128a

LATITUDE: 24°06'31.83" LONGITUDE: 89°34'49.15"

CHAINAGE: 127.046



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 8	BOREHOLE NO: N5_128a	Longitude: N 89°34'49.15"	Latitude: E 24°06'31.83"
			Brigde ID: N5_128a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 40.0m	Chainage: 127.046, RL: -7.6m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 5-03-2014	Completed Date: 7-03-2014	G. W. T : -3.3m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									N4=600 (mm)
0-3.0m	Light Gray 10YR (7/1), soft, medium plastic Clay with sand, CL.		1.00	1.45	1	1	2	3	D-1	3	10.7	89.3	47.4	21.3	2.67	29.02
			2.00	2.45	1	2	2	4	D-2	4						
			3.00	3.45	1	2	2	4	D-3	4	94	6			2.616	30.01
2.0m	Gray 10YR (6/1), loose, Poorly graded silty Sand with gravel, SP-SM.		4.00	4.45	1	2	3	5	D-4	4					2.697	
			5.00	5.45	1	2	2	4	D-5	4						
1.0m	Gray 10YR (6/1), soft, Clay with Silt, ML.		6.00	6.45	1	2	3	5	D-6	5	6.6	93.4	44.6	19.6	2.683	27.69
2.0m	Gray 10YR (6/1), soft, low plastic, Clay with sand, CL.		7.00	7.45	1	2	2	4	D-7	4						
			8.00	8.45	3	4	5	9	D-8	9	95.1	4.9			2.662	24.19
1.0m	Gray 10YR (6/1), medium dense, Poorly graded Sand with gravel, SP.		9.00	9.45	6	8	10	18	D-9	18	91.2	8.8			2.644	23.87
10-11.00m	Gray 10YR (6/1), dense, poorly graded silty Sand with gravel, SP-SM.		10.00	10.45	4	6	6	12	D-10	12						
			11.00	11.45	5	5	7	12	D-11	12						
			12.00	12.45	5	7	8	15	D-12	15						
			13.00	13.45	6	7	10	17	D-13	17	88.7	11.3			2.603	21.34
			14.00	14.45	7	10	13	23	D-14	23						
			15.00	15.45	8	12	15	27	D-15	27						
			16.00	16.45	7	13	17	30	D-16	30						
			17.00	17.45	8	14	19	33	D-17	33						
			18.00	18.45	12	20	25	45	D-18	45						
			19.00	19.45	10	15	20	35	D-19	35						
7.00m	Gray 10YR (6/1), dense, silty Sand with gravel, SM.		20.00	20.45	11	12	16	28	D-20	28	86.5	13.5			2.645	24.88
			21.00	21.45	10	12	15	27	D-21	27						
			22.00	22.45	9	13	17	30	D-22	30						
			23.00	23.45	10	15	20	35	D-23	35						
			24.00	24.45	11	16	20	36	D-24	36						
			25.00	25.45	10	16	19	35	D-25	35						
			26.00	26.45	11	15	20	35	D-26	35						
			27.00	27.45	10	16	20	36	D-27	36	90.8	9.2			2.618	25.78
			28.00	28.45	10	14	17	31	D-28	31						
3.45m	Gray 10YR (6/1), dense, Poorly graded silty Sand with gravel, SP-SM.		29.00	29.45	11	15	18	33	D-29	33						
			30.00	30.45	15	18	24	42	D-30	42						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

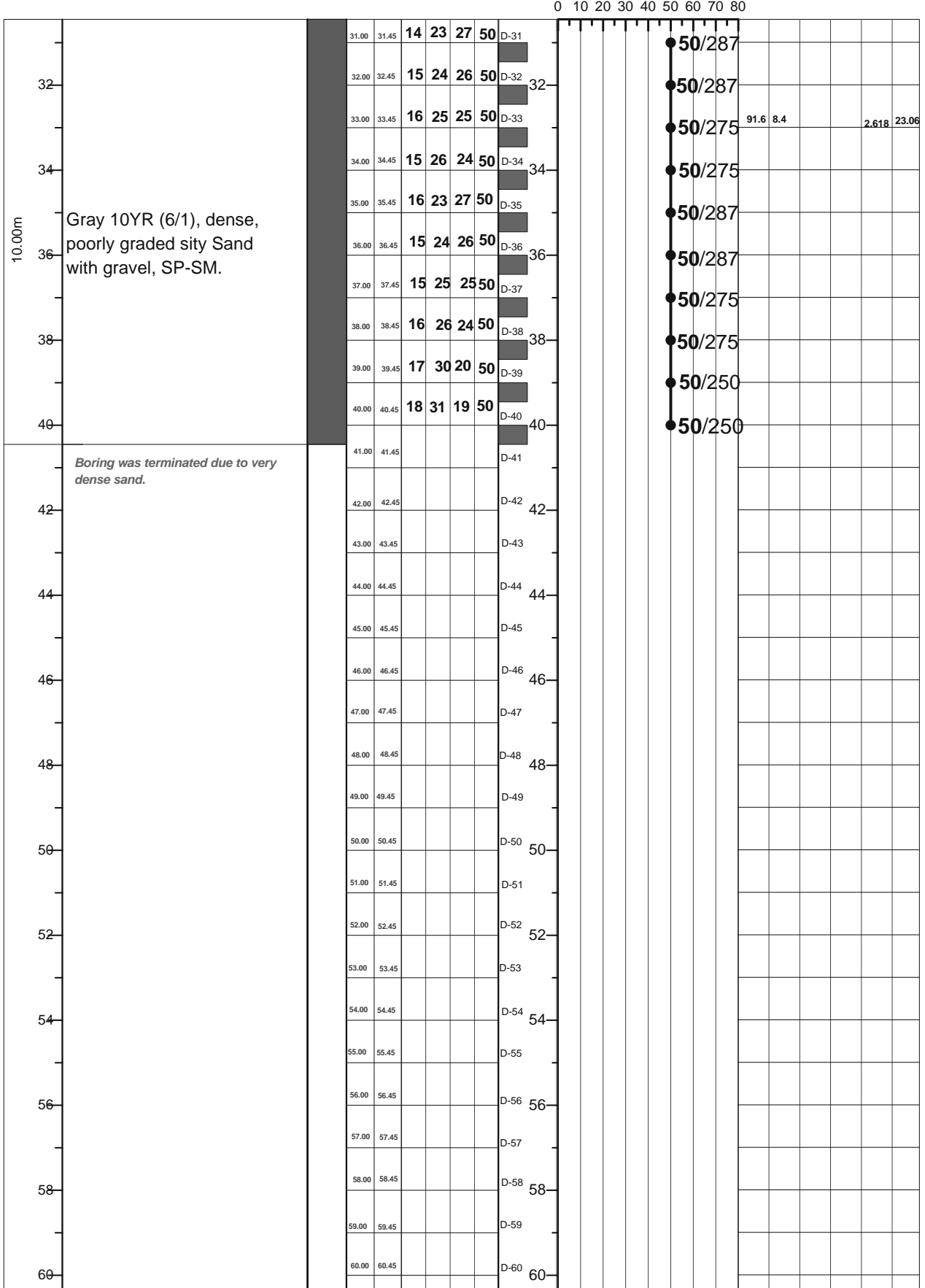
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 8	BOREHOLE NO: N5-128a	Longitude: N 89°35'19.67"	Latitude: E 24°06'31.83"
			Brigde ID: N5-128a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 40.0m	Chainage: 126.806, RL: -3.6m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 2-03-2014	Completed Date: 4-03-2014	G. W. T : -9.5m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									

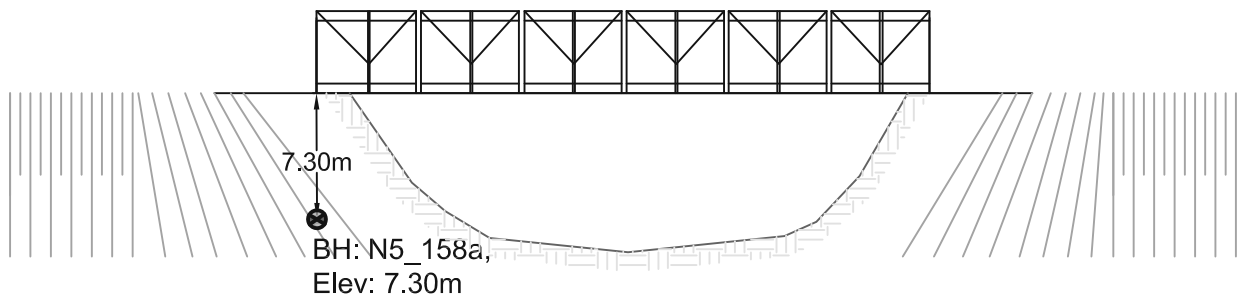
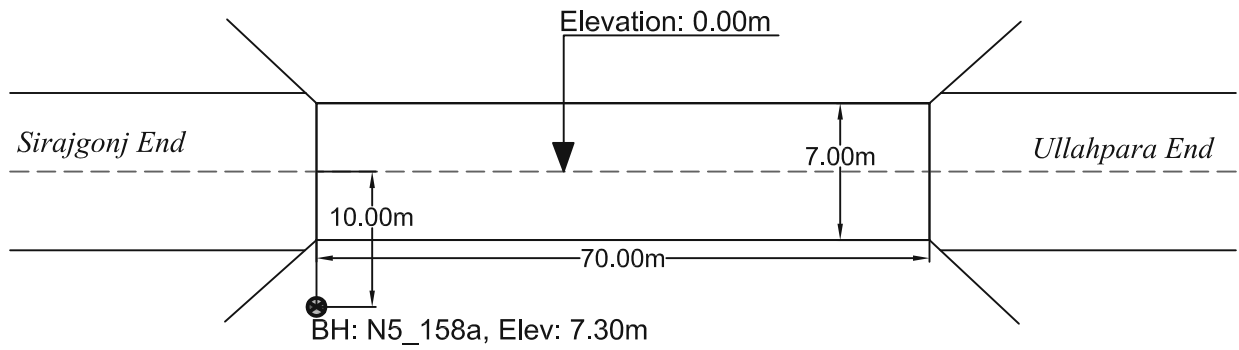
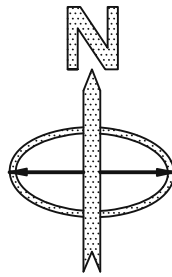


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

[Light Gray Box] PLASTIC CLAY	[Light Blue Box] SILT	[Dark Gray Box] PEAT/HIGHLY ORGANIC SOIL	[White Box] UNDISTURBED SAMPLE
[Dark Gray Box] MICACEOUS FINE SAND/SILT	[Dark Blue Box] SAND	[Black Box] SHALE	[Light Gray Box] DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

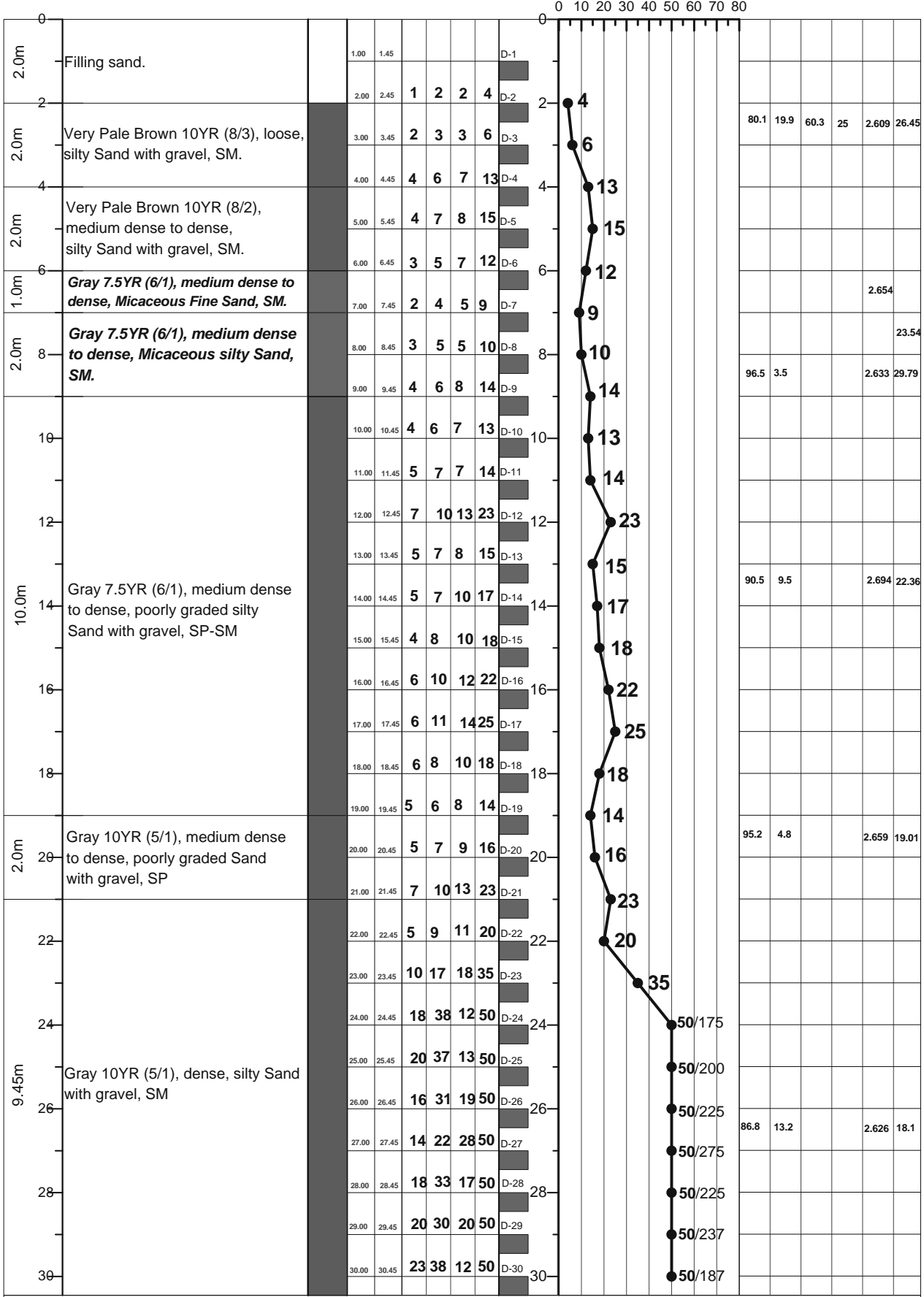
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 9
BRIDGE ID: N5_158a
LATITUDE: 24°20'49.045" LONGITUDE: 89°33'36.782"
CHAINAGE: 155.583



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 9	BOREHOLE NO: N5_158a	Longitude: N 89°33'36"	Latitude: E 24°20'49"
			Brigde ID: N5_158a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 155.583, RL: 7.3m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : 7.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

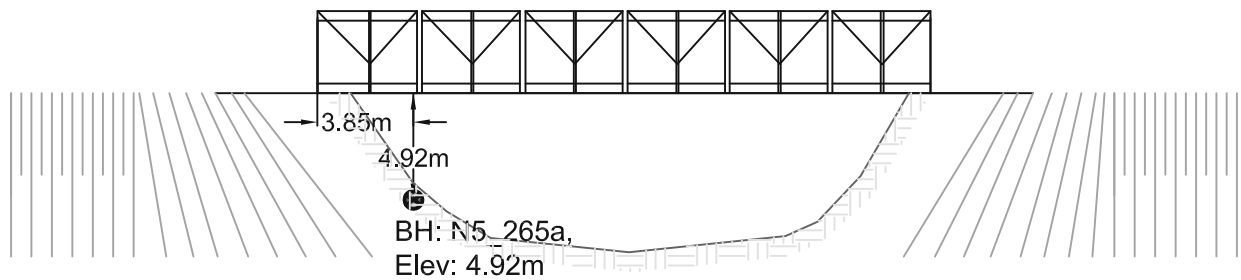
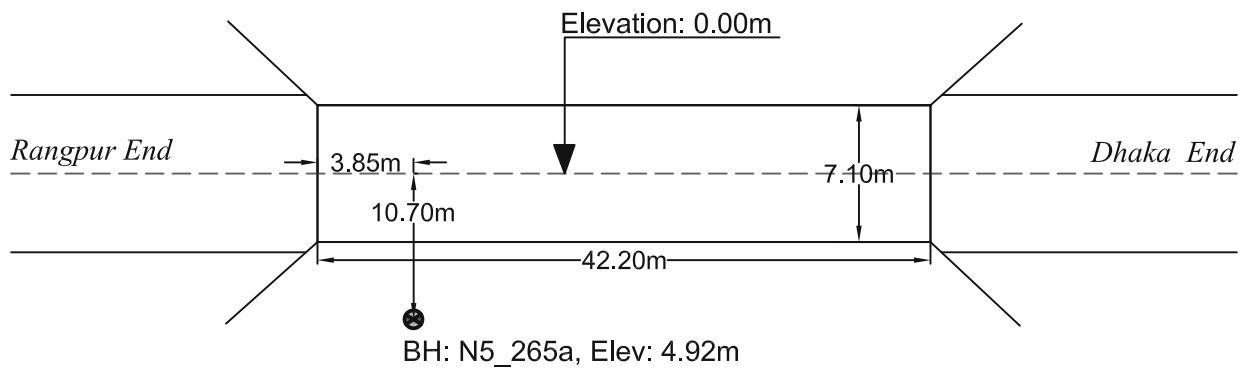
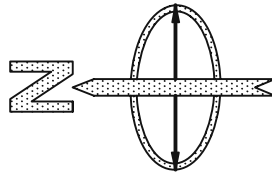


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 10
BRIDGE ID: N5_265a
LATITUDE: 25°12'35.933" LONGITUDE: 89°22'45.586"
CHAINAGE: 262.719



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 10	BOREHOLE NO: N5_265a	Longitude: N 089°22.750'	Latitude: E 25°12.612'
			Brigde ID: N5_265a	Road Name: Dhaka-Paturia-Kashinathpur-Bogra-Rangpur-Banglabondh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 262.719, RL: -4.92m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 21-02-2014	Completed Date: 22-02-2014	G. W. T : -3.50m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0-3.0m	Gray 10YR (5/1), loose, silty Sand with gravel, SM.		1.00	1.45	2	2	3	5	D-1							
			2.00	2.45	2	3	4	7	D-2		86.6	13.4		2.68	27.33	
			3.00	3.45	4	5	6	11	D-3		84	16		2.619	26.07	
1.0m	Gray 10YR (5/1), medium dense to dense, Micaceous silty Sand with gravel, SM.		4.00	4.45	4	5	6	11	D-4							
2.0m	Gray 10YR (5/2), medium dense to dense, fine Sand, SM.		5.00	5.45	5	9	11	20	D-5							
			6.00	6.45	4	8	11	19	D-6							
3.0m	Light Gray 10YR (6/1), dense, fine Sand, SM.		7.00	7.45	6	9	13	22	D-7							
			8.00	8.45	5	8	10	18	D-8							
			9.00	9.45	5	7	9	16	D-9		93.6	6.2		2.659	20.21	
2.0m	Light Gray 7YR (6/1), dense, Poorly Graded silty Sand with gravel, SP-SM.		10.00	10.45	5	7	10	17	D-10							
			11.00	11.45	5	8	11	19	D-11							
3.0m	Gray 7.5YR (5/1), dense, Micaceous silty Sand with gravel, SM.		12.00	12.45	6	11	14	25	D-12							
			13.00	13.45	8	18	21	39	D-13		86.9	13		2.621	17.63	
			14.00	14.45	9	14	19	33	D-14							
3.0m	Brown 10YR (5/2), very dense, fine Sand, SM.		15.00	15.45	9	14	20	34	D-15							
			16.00	16.45	9	15	19	34	D-16							
			17.00	17.45	13	20	25	45	D-17							
1.0m	Gray 10YR (5/1), very dense, very fine Sand, SM.		18.00	18.45	15	22	26	48	D-18		96.4	2		2.634	23.73	
			19.00	19.45	17	21	25	46	D-19							
			20.00	20.45	16	23	26	49	D-20							
			21.00	21.45	16	22	26	48	D-21							
8.0m	Light Gray 10YR (5/2), very dense, Poorly graded Sand with Gravel, SP.		22.00	22.45	16	24	26	50	D-22							
			23.00	23.45	17	25	25	50	D-23							
			24.00	24.45	18	25	25	50	D-24							
			25.00	25.45	19	27	23	50	D-25							
			26.00	26.45	18	26	24	50	D-26		72.5	27.5		2.626	23.29	
			27.00	27.45	18	27	23	50	D-27							
4.45m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		28.00	28.45	20	28	22	50	D-28							
			29.00	29.45	19	28	22	50	D-29							
			30.00	30.45	21	29	21	50	D-30							22.99

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

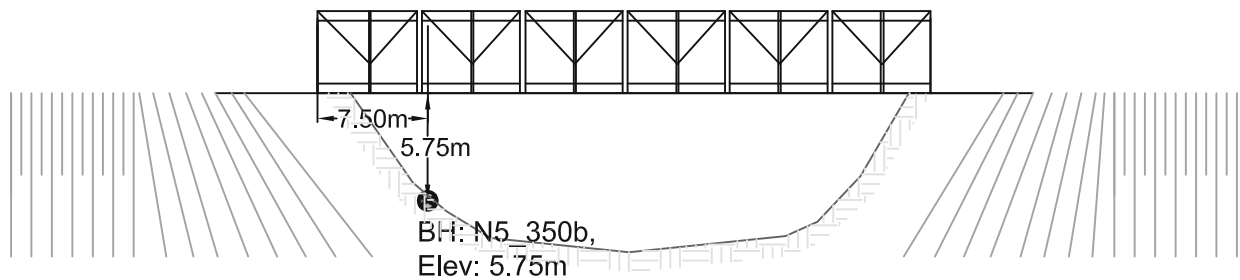
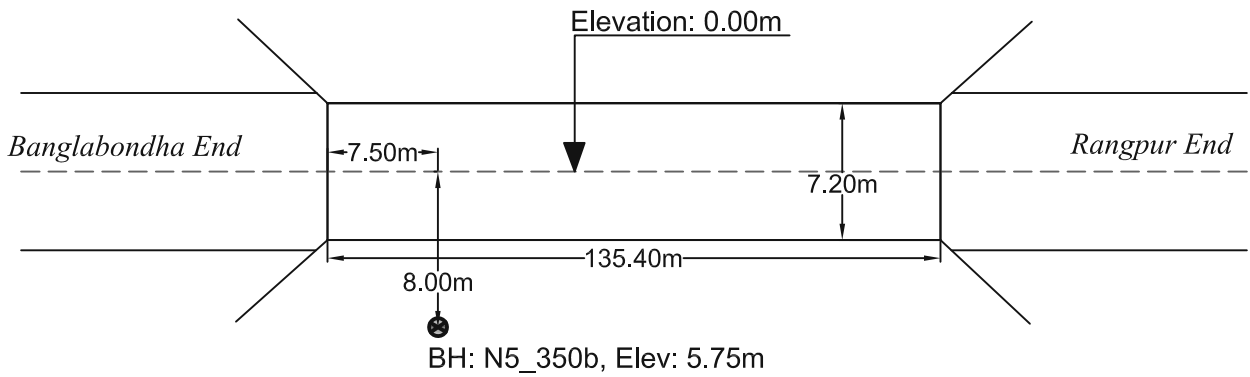
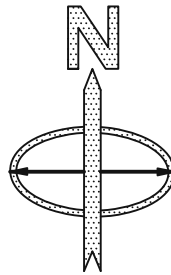
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

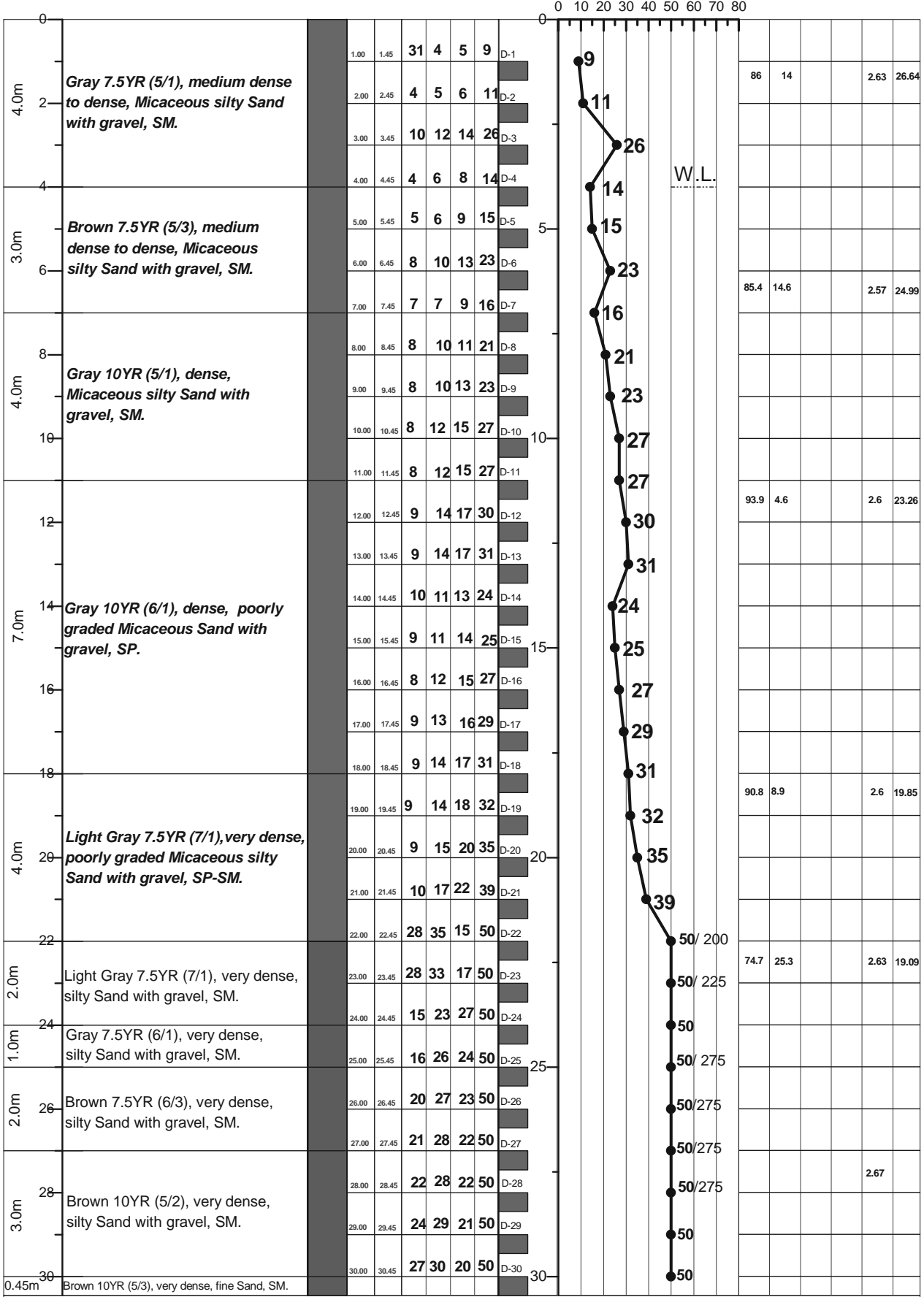
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 11
BRIDGE ID: N5_350b
LATITUDE: 25°48'40.794" LONGITUDE: 89°2'47.211"
CHAINAGE: 348.448



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 11	BOREHOLE NO: N5_350b	Longitude: N 89°02.736'	Latitude: E 25°48.680'
			Brigde ID: N5_350b	Road Name: Dhaka -Paturia-Kashinathpur- Bogra-Rangpur-Beldanga- Banglabandh Road.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 348.448, RL: -5.75m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -4.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

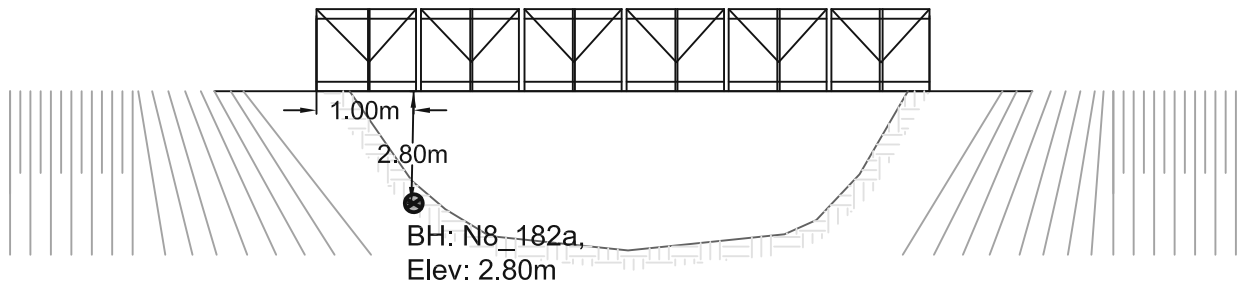
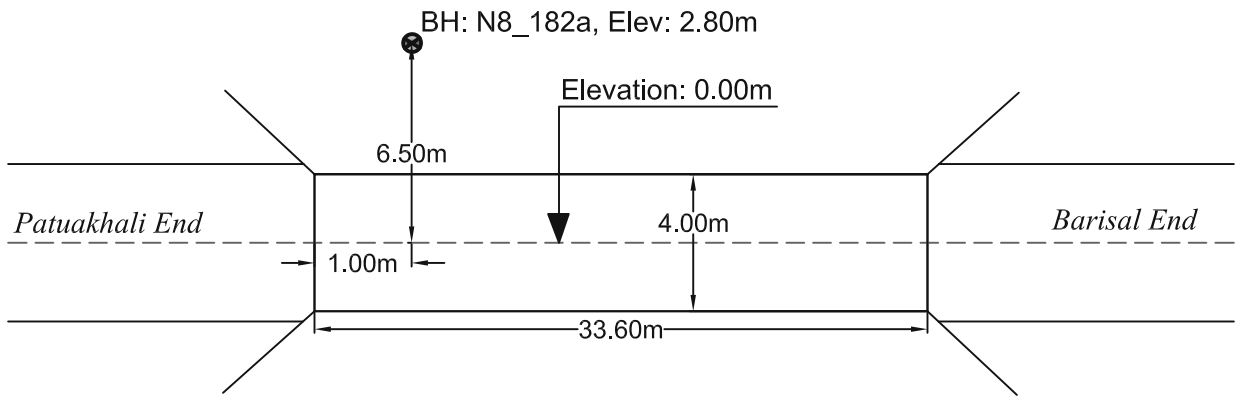
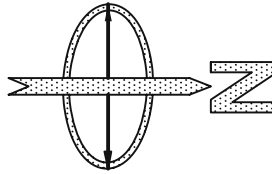
CLIENT: Oriental Consultants Company Limited.

RANK: 12

BRIDGE ID: N8_182a

LATITUDE: 22°32'26.884" LONGITUDE: 90°19'59.9"

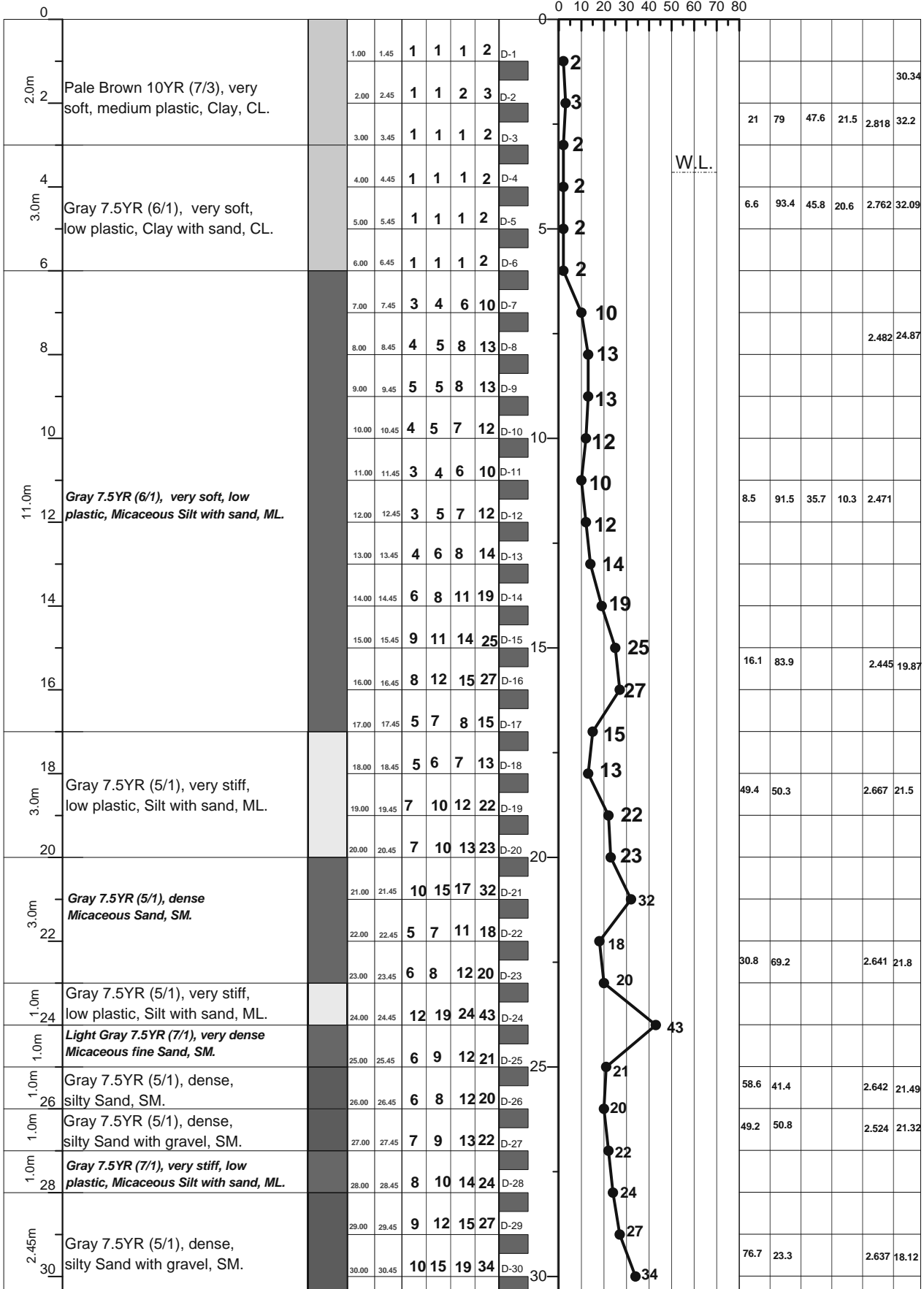
CHAINAGE: 180.819



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 12	BOREHOLE NO: N8_182a	Longitude: N 90°19'59.9"	Latitude: E 22°32'26.884"
			Brigde ID: N8_182a	Road Name: Dhaka (Jatrabari)Mawa-Bhanga-Barisal-Patuakhali.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 180.819, RL: -2.8m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 16-03-2014	Completed Date: 25-03-2014	G. W. T : -3.65m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _s
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



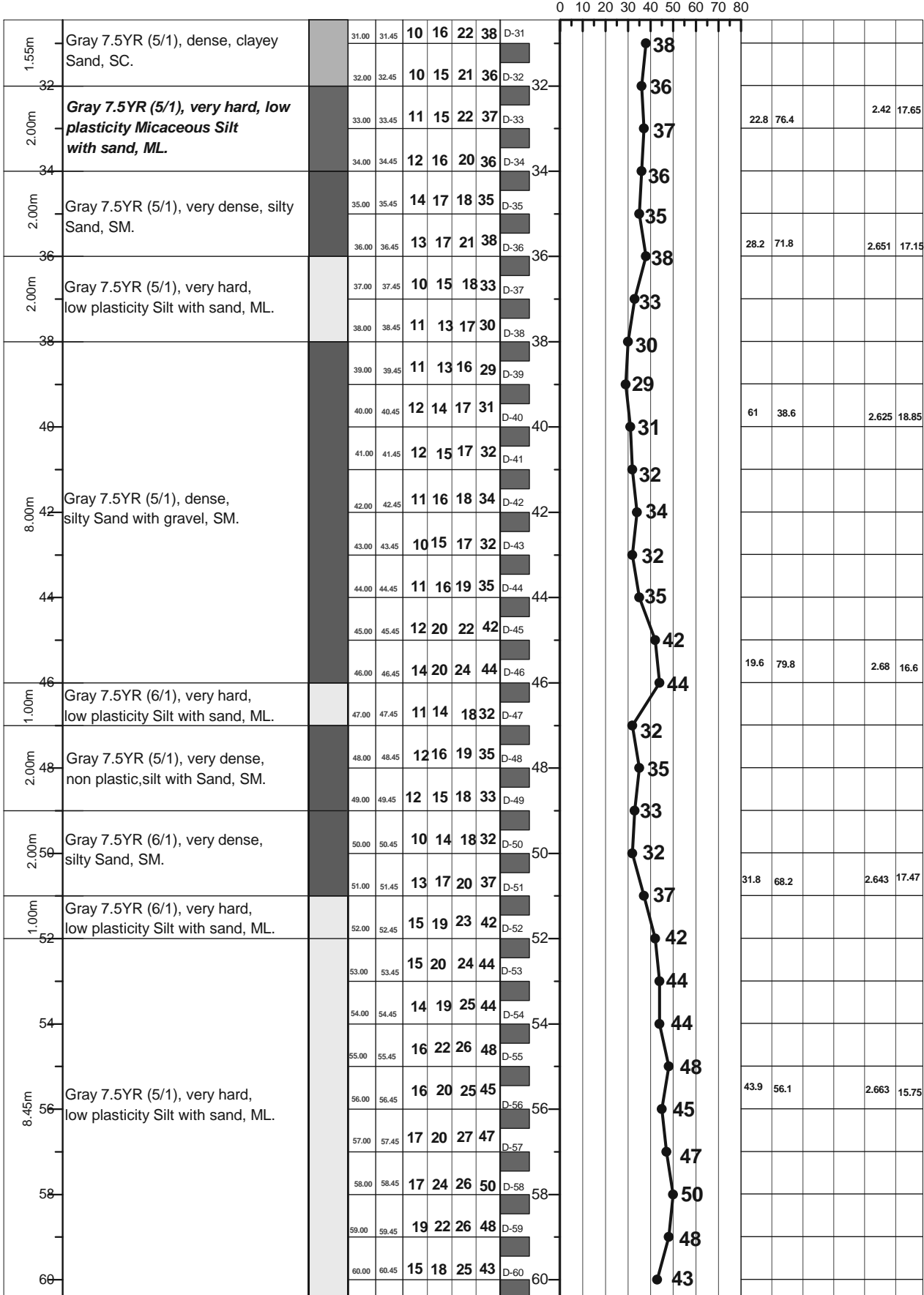
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 12	BOREHOLE NO: N8_182a	Longitude: N 90°19'59.9"	Latitude: E 22°32'26.884"
			Brigde ID: N8_182a	Road Name: Dhaka (Jatrabari)Mawa-Bhanga-Barisal-Patuakhali.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 180.819, RL: -2.8m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 16-03-2014	Completed Date: 25-03-2014	G. W. T : -3.65m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



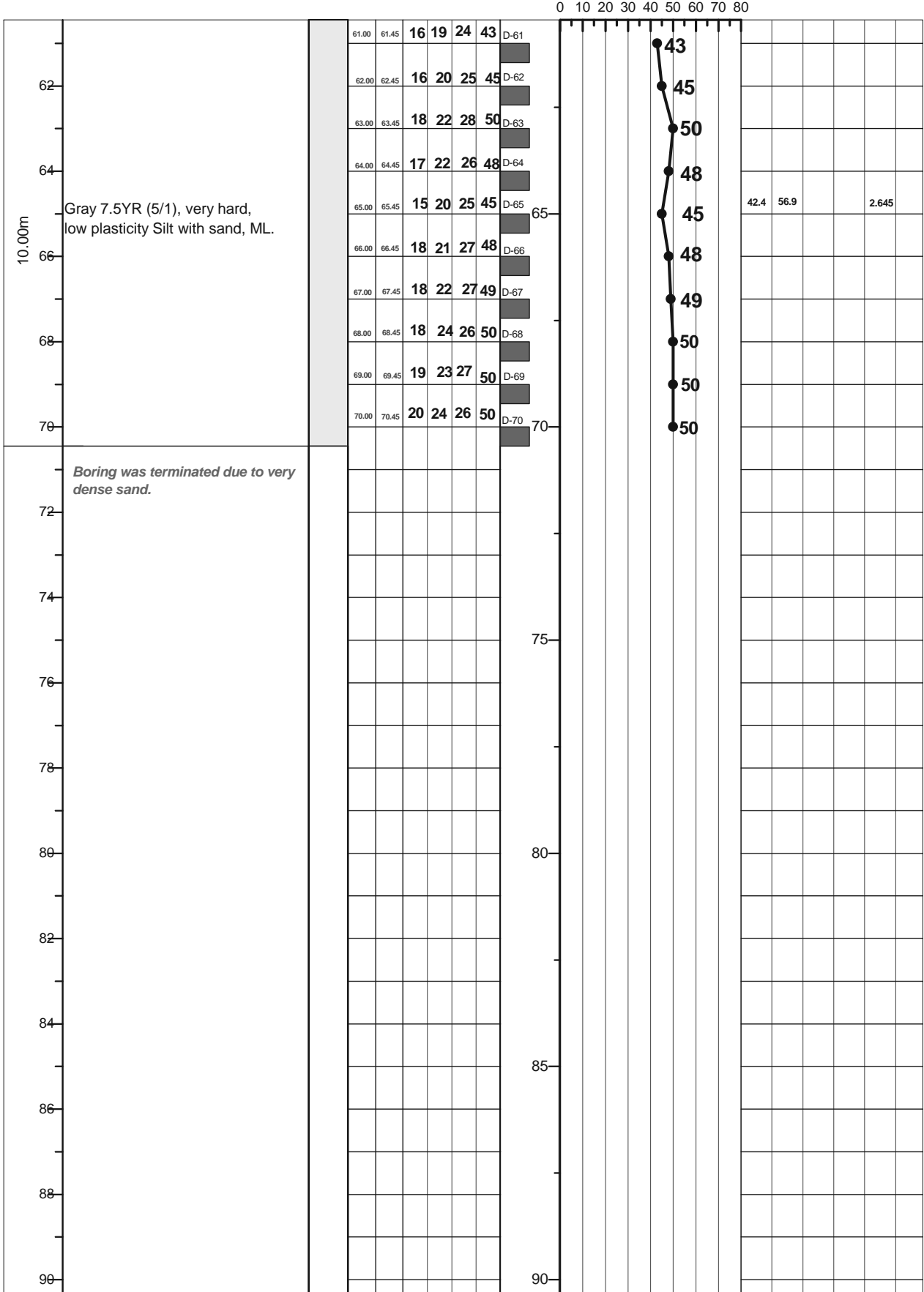
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 12	BOREHOLE NO: N8_182a	Longitude: N 90°19'59.9"	Latitude: E 22°32'26.884"
			Brigde ID: N8_182a	Road Name: Dhaka (Jatrabari)Mawa-Bhanga-Barisal-Patuakhali.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 180.819, RL: -2.8m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 16-03-2014	Completed Date: 25-03-2014	G. W. T : -3.65m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

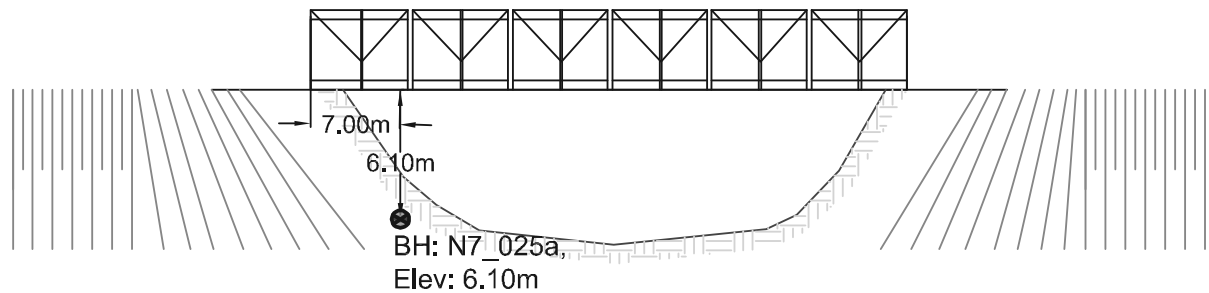
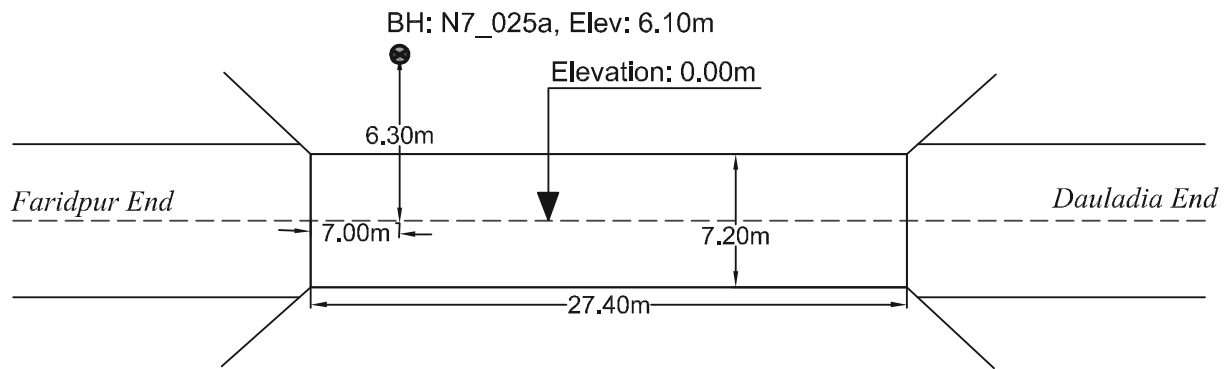
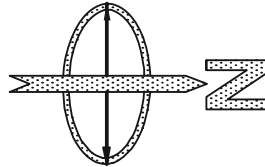
CLIENT: Oriental Consultants Company Limited.

RANK: 13

BRIDGE ID: N7_025a

LATITUDE: 23°36'28.708" LONGITUDE: 89°46'39.719"

CHAINAGE: 25.993



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 13	BOREHOLE NO: N7_025a	Longitude: N 90°16'38"	Latitude: E 23°36'28.708"
			Brigde ID: N7_025a	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 25.993, RL: -6.1m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 24-03-2014	Completed Date: 27-03-2014	G. W. T : -4.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0-2.0m	Rubbish Soil		1.00	1.45	1	1	2	3	D-1	3						
			2.00	2.45	1	2	2	4	D-2	4						
			3.00	3.45	1	0	1	1	D-3	1						
			4.00	4.45	1	0	1	1	D-4	1						
7.0m	Gray 7.5YR (5/1), soft, low plasticity Clay with sand, CL		5.00	5.45	1	0	1	1	D-5	1	9.4	90.6	46.2	19.9	2.667	33.93
			6.00	6.45	1	0	1	1	D-6	1						
			7.00	7.45	1	0	1	1	D-7	1						
			8.00	8.45	2	2	2	4	D-8	4						
			9.00	9.45	2	2	6	8	D-9	8	9.7	90.3	48.2	21.8	2.652	30.96
2.0m	Gray 7.5YR (5/1), medium stiff, low plasticity Clay with sand, CL		10.00	10.45	3	4	7	11	D-10	11						
			11.00	11.45	6	11	13	24	D-11	24						
			12.00	12.45	5	7	8	15	D-12	15						
4.0m	Gray 7.5YR (5/1), dense, poorly graded silty Sand with gravel, SP-SM		13.00	13.45	4	6	9	15	D-13	15	89.1	10.9			2.654	23.19
			14.00	14.45	5	7	9	16	D-14	16						
			15.00	15.45	5	8	13	21	D-15	21						
1.0m	Grayish Brown 10YR (5/2), dense, silty Sand with gravel, SM		16.00	16.45	2	3	4	7	D-16	7						
			17.00	17.45	3	4	6	10	D-17	10	65.7	34.3			2.659	24.92
			18.00	18.45	5	8	11	19	D-18	19						
7.0m	Gray 7.5YR (5/1), medium dense to dense, silty Sand with gravel, SM		19.00	19.45	11	12	12	24	D-19	24						
			20.00	20.45	10	10	12	22	D-20	22						
			21.00	21.45	7	11	12	23	D-21	23						
			22.00	22.45	9	9	10	19	D-22	19						
			23.00	23.45	9	11	26	37	D-23	37	91.6	8.4			2.648	17.9
1.0m	Gray 7.5YR (5/1), very dense, poorly graded silty Sand with gravel, SP-SM		24.00	24.45	10	14	20	34	D-24	34						
1.0m	light Gray 7.5YR (7/1), very dense, silty Sand with gravel, SM		25.00	25.45	8	11	17	28	D-25	28						
1.0m	Gray 7.5YR (5/1), dense, silty Sand with gravel, SM		26.00	26.45	7	12	18	30	D-26	30						
2.0m	Gray 7.5YR (6/1), very stiff, low plasticity Clay with sand, CL		27.00	27.45	11	17	24	41	D-27	41	7.9	92.1	44.6	19	2.684	20.49
			28.00	28.45	10	13	15	28	D-28	28						
2.45m	light Gray 7.5YR (7/1), dense, silty Sand with gravel, SM		29.00	29.45	8	15	16	31	D-29	31						
			30.00	30.45	9	16	22	38	D-30	38						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

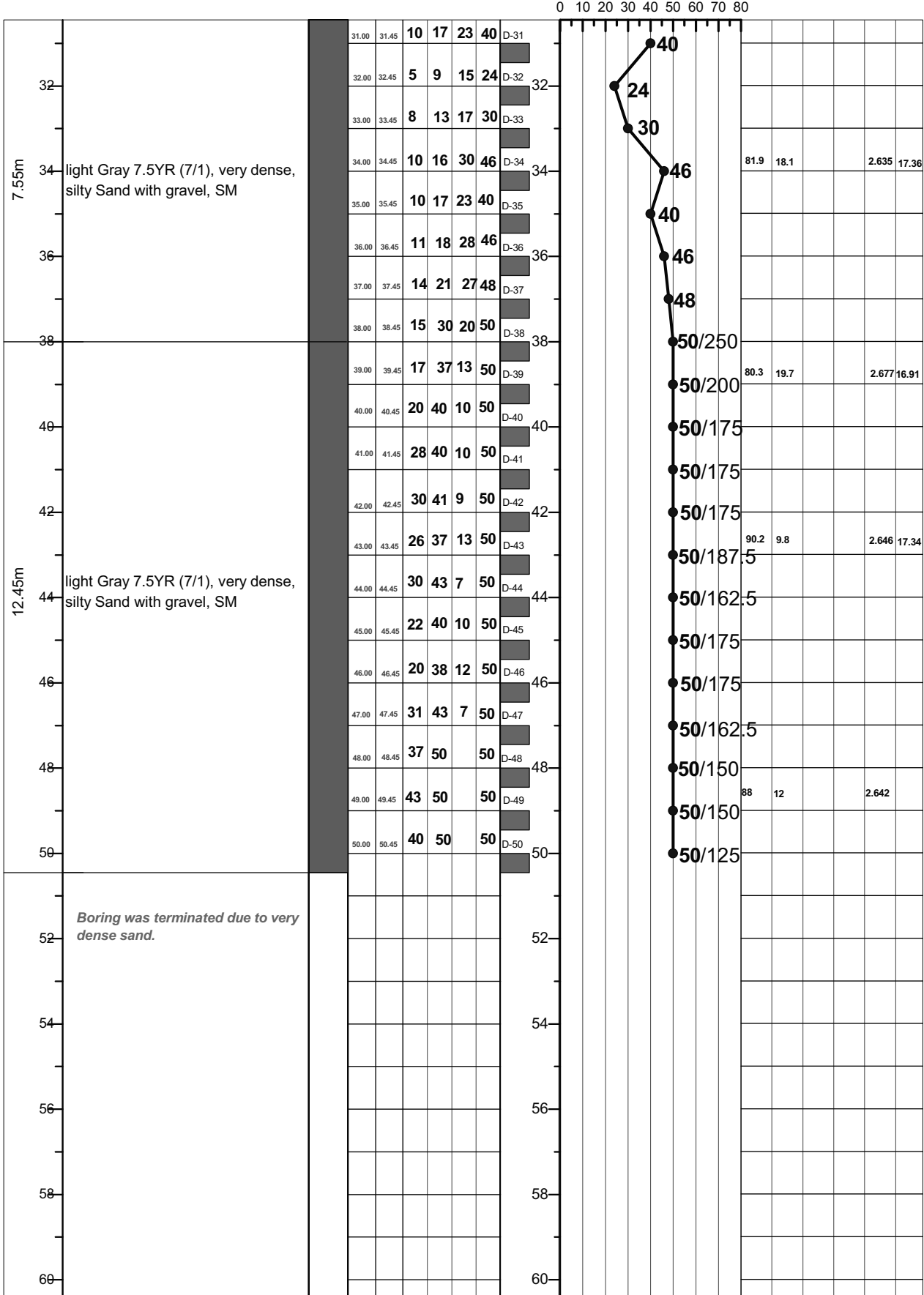
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 13	BOREHOLE NO: N7_025a	Longitude: N 90°16'38"	Latitude: E 23°36'28.708"
			Brigde ID: N7_025a	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 25.993, RL: -6.1m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 24-03-2014	Completed Date: 27-03-2014	G. W. T : -4.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

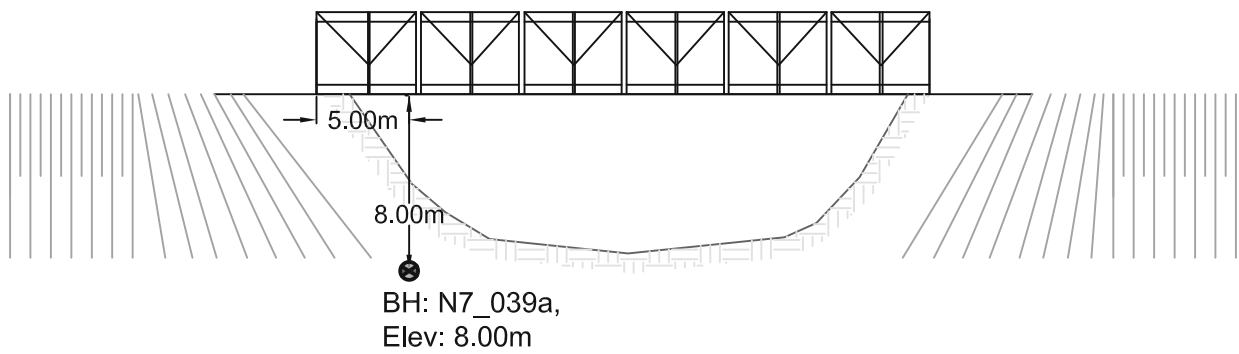
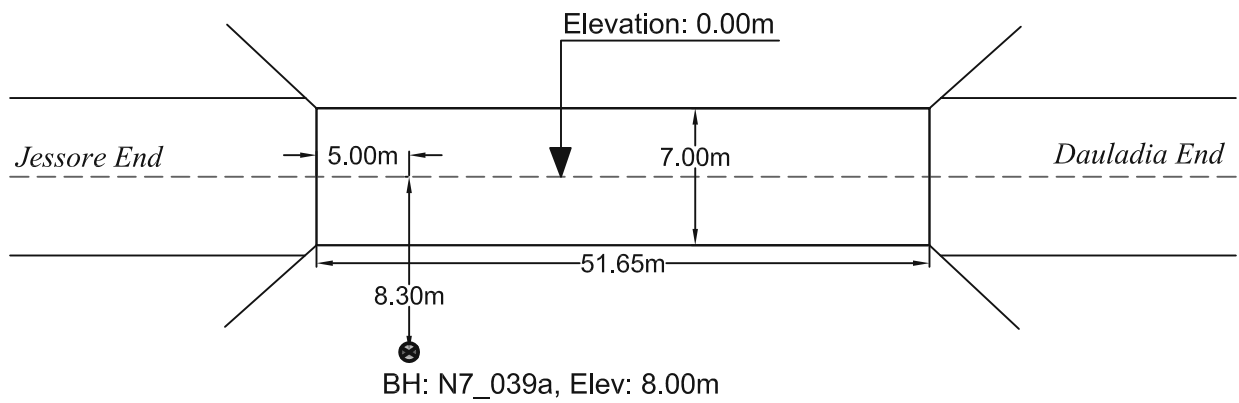
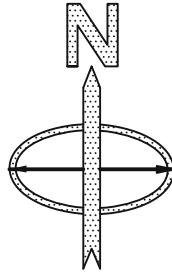
CLIENT: Oriental Consultants Company Limited.

RANK: 14

BRIDGE ID: N7_039a

LATITUDE: 23°32'13.858" LONGITUDE: 89°44'49.055"

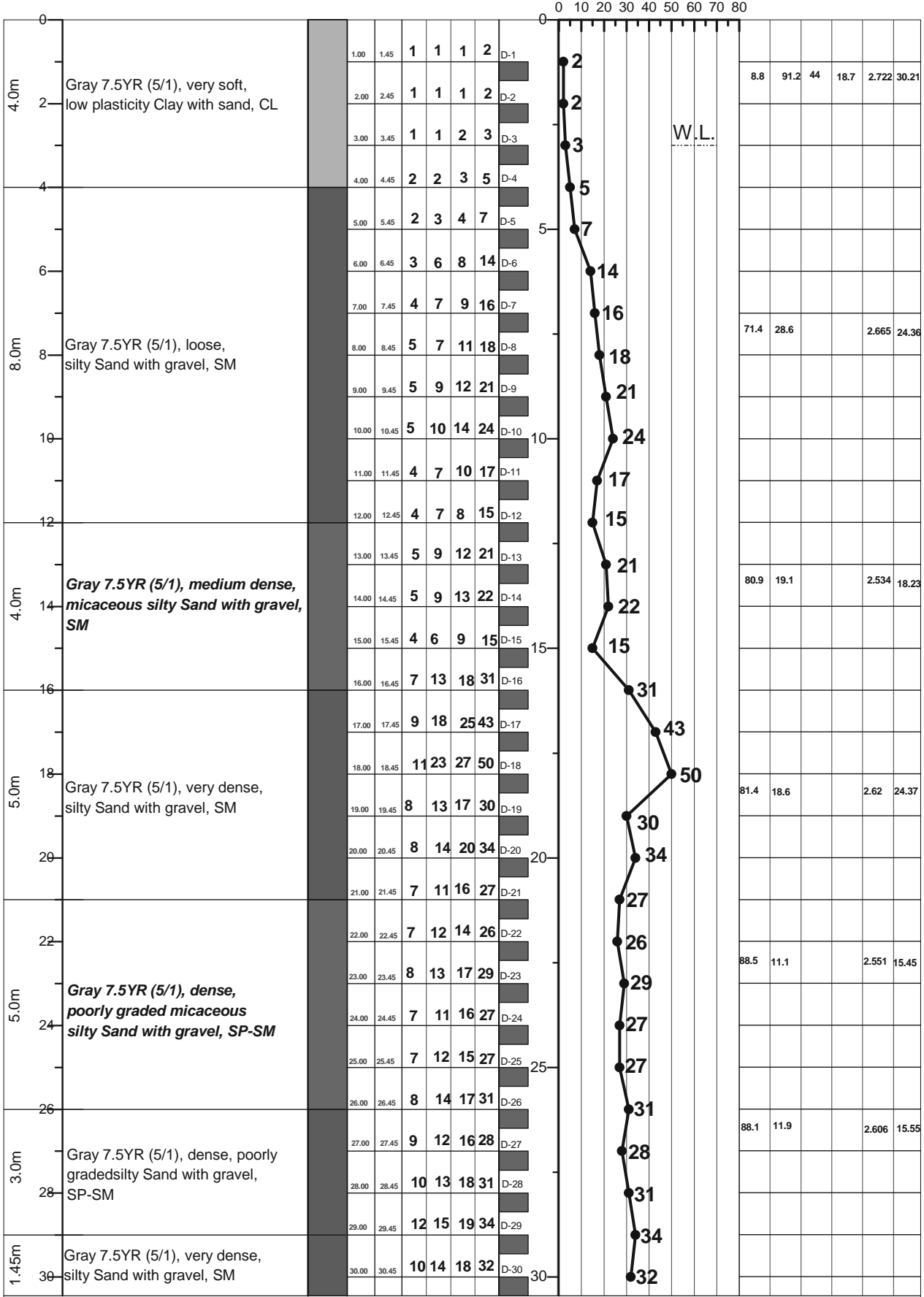
CHAINAGE: 39.64



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 14	BOREHOLE NO: N7_039a	Longitude: N 90°16'38"	Latitude: E 23°32'13.858"
			Brigde ID: N7_039a	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khuina-Mongla	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 39.64, RL: -8.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 18-03-2014	Completed Date: 22-03-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)								



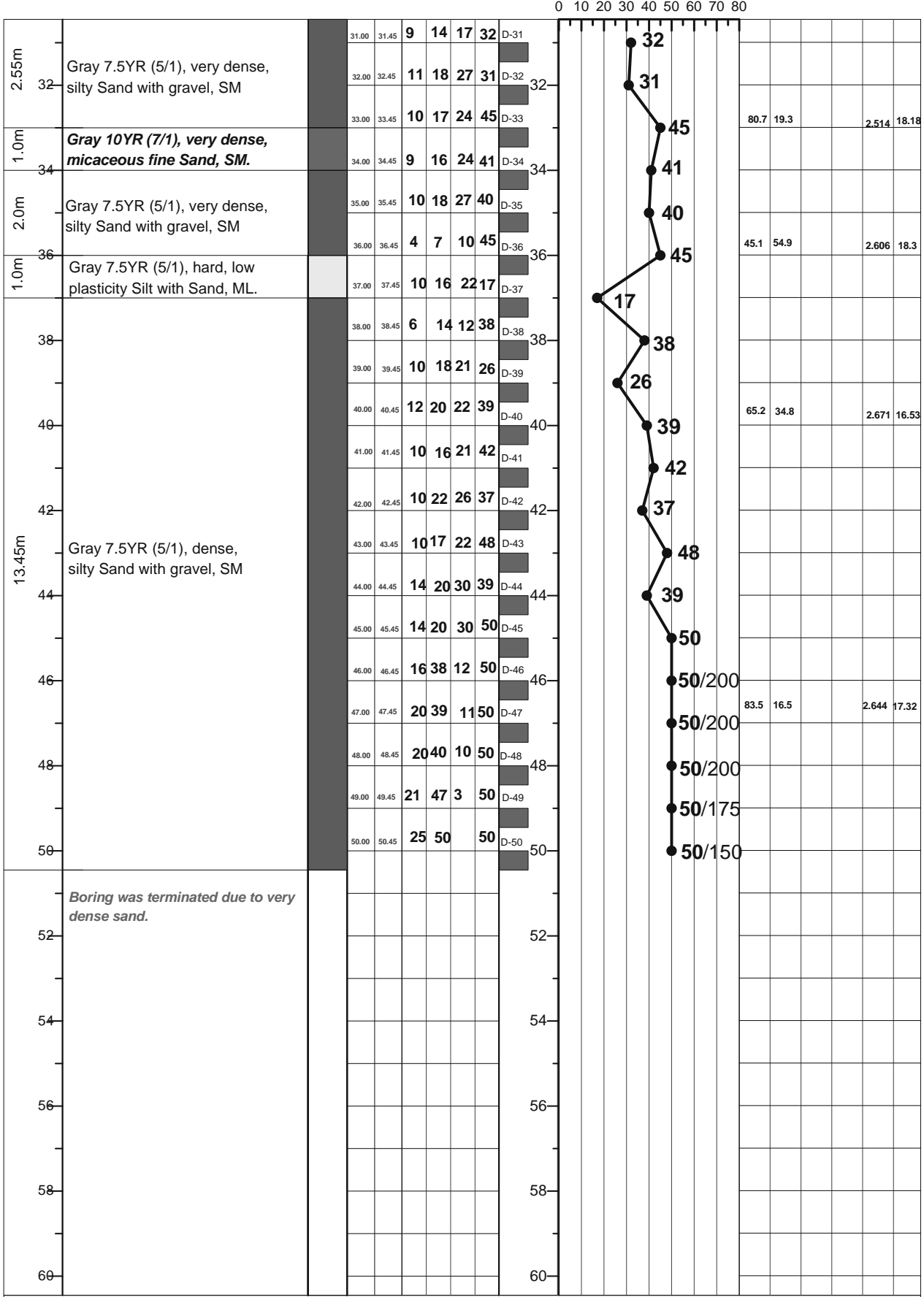
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 14	BOREHOLE NO: N7_039a	Longitude: N 90°16'38"	Latitude: E 23°32'13.858"
			Brigde ID: N7_039a	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 39.64, RL: -8.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 18-03-2014	Completed Date: 22-03-2014	G. W. T : -3.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)					% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)				N4=600 (mm)	% Sand	% Passing 200	% LL	% PI						

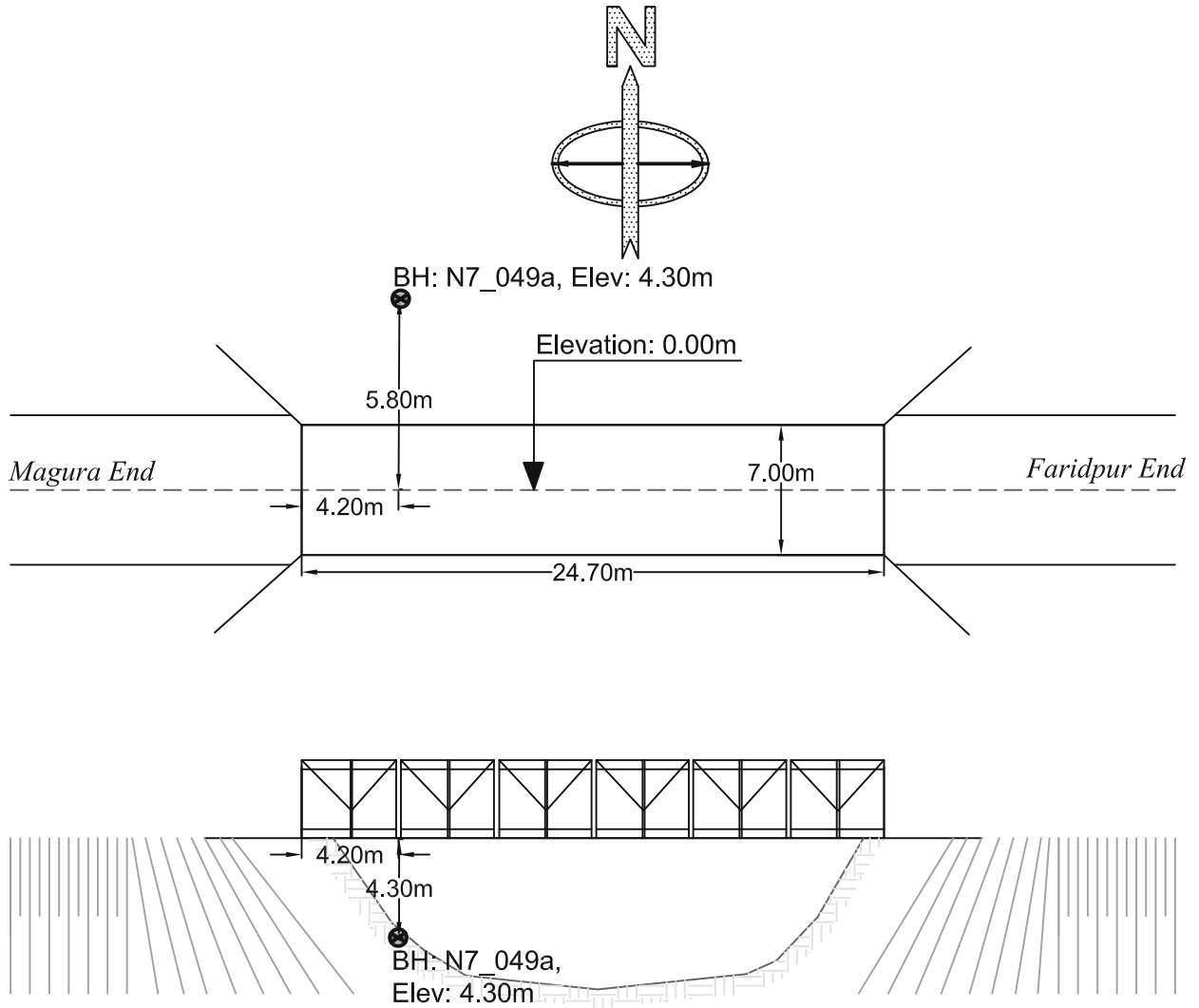


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

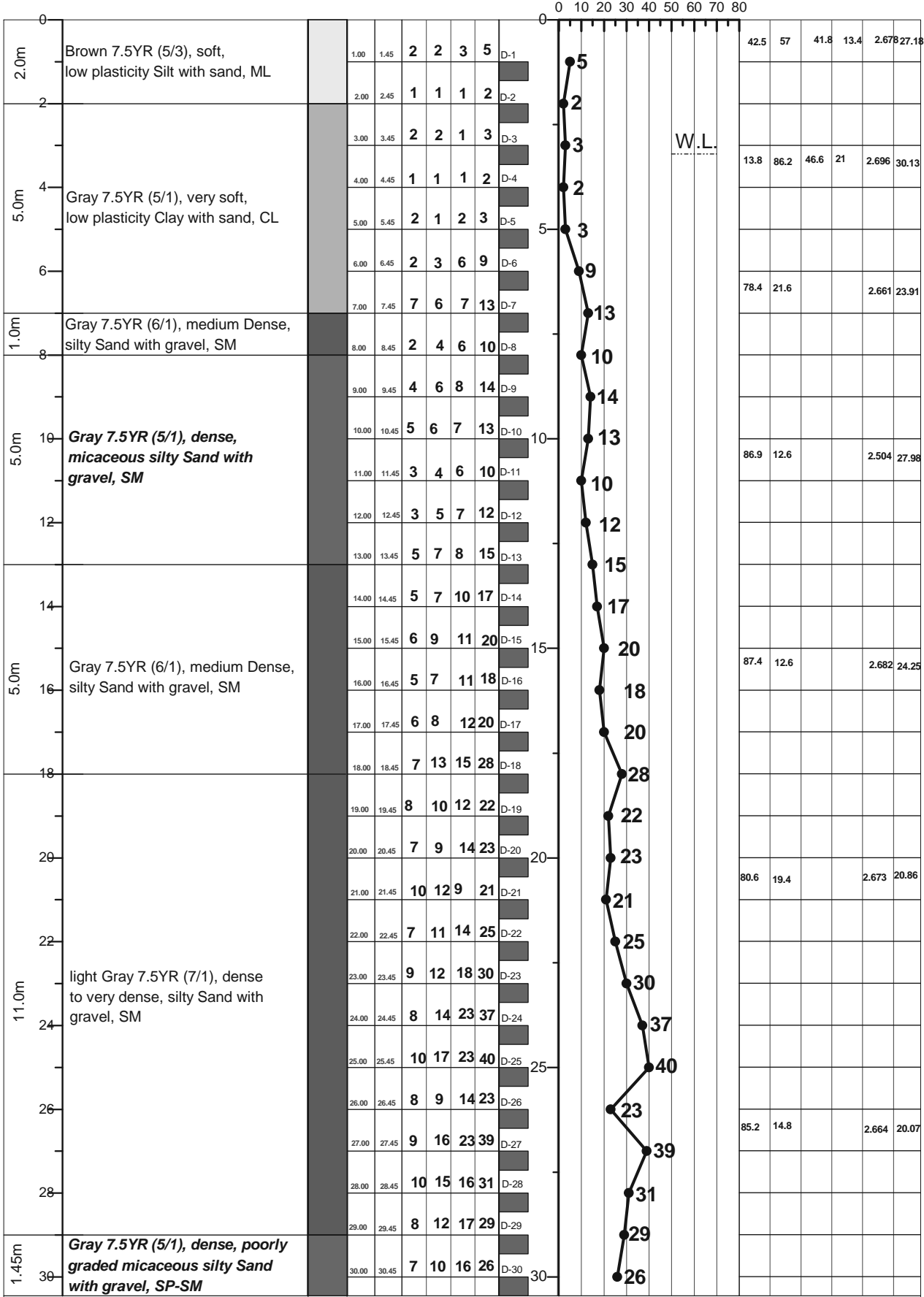
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 15
BRIDGE ID: N7_049a
LATITUDE: 23°32'14.741" LONGITUDE: 89°39'17.581"
CHAINAGE: 49.629



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 15	BOREHOLE NO: N7_049a	Longitude: N 89°11'6.079"	Latitude: E 23°40'0.948"
			Brigde ID: N7_049a	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 49.629, RL: -4.3m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 2-04-2014	Completed Date: 6-04-2014	G. W. T : -3.2m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)								



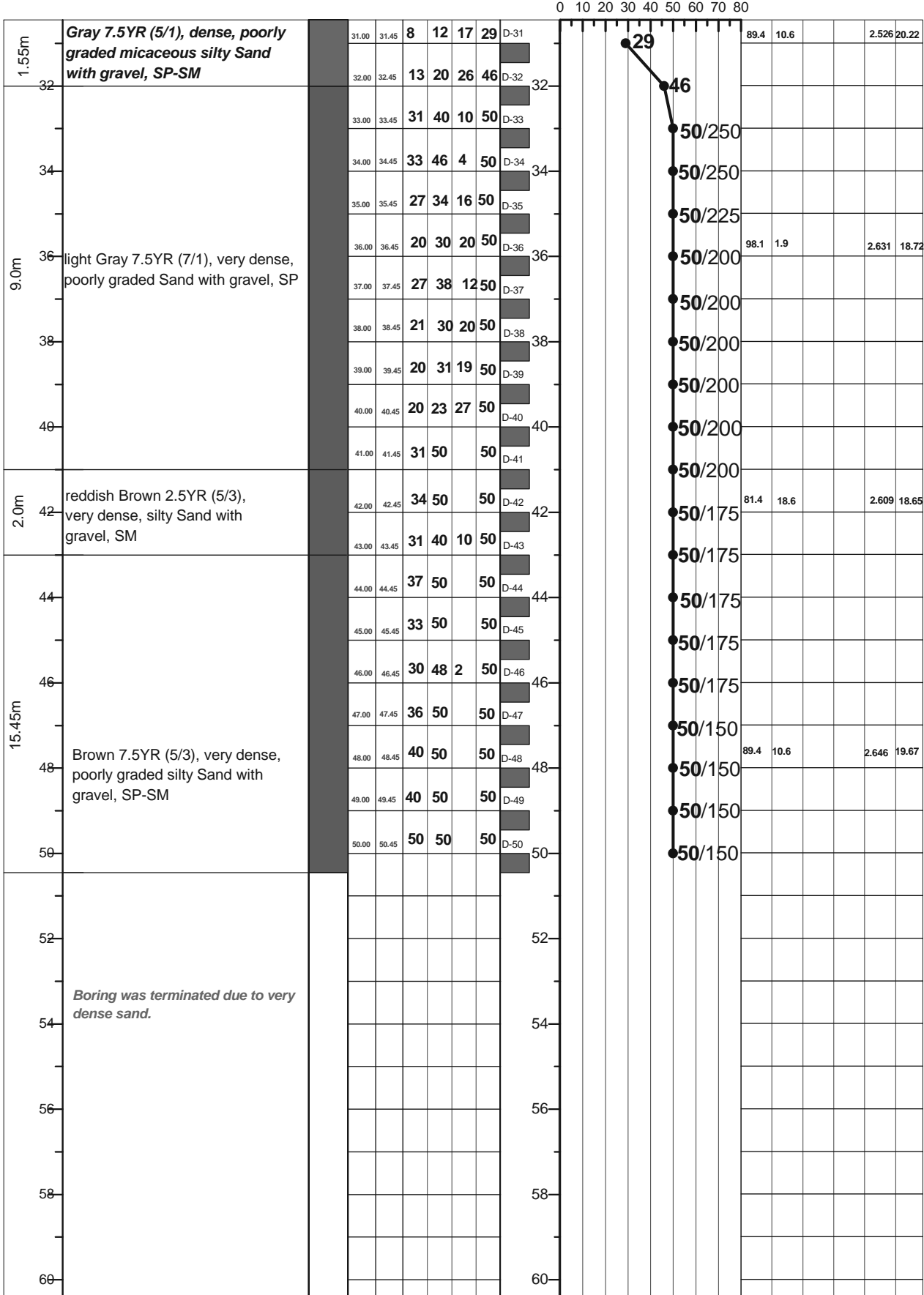
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 15	BOREHOLE NO: N7_049a	Longitude: N 89°16'38"	Latitude: E 23°32'14.741"
			Brigde ID: N7_049a	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 49.629, RL: -4.3m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 2-04-2014	Completed Date: 6-04-2014	G. W. T : -3.2m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

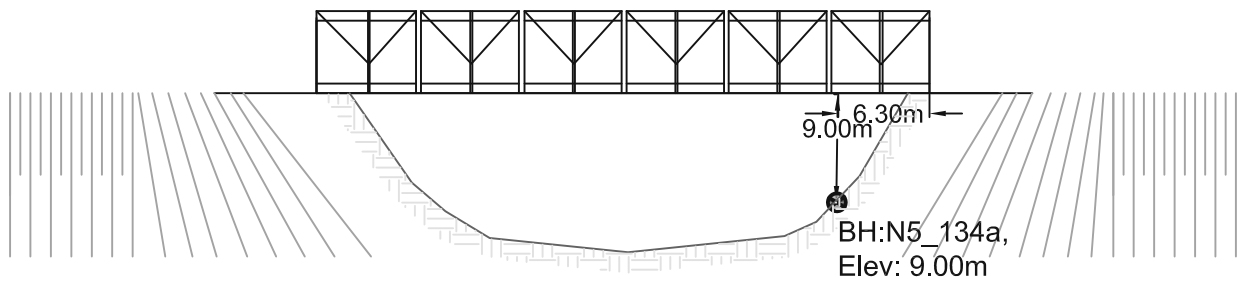
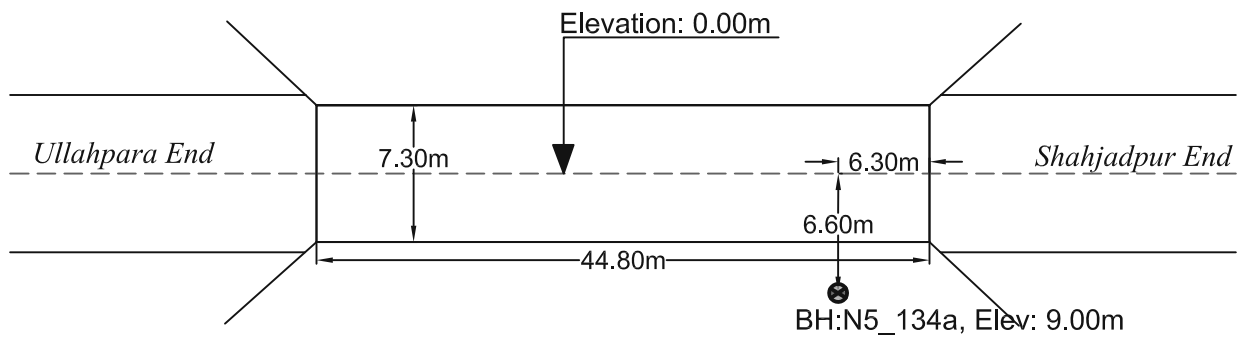
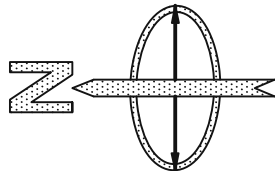
CLIENT: Oriental Consultants Company Limited.

RANK: 16

BRIDGE ID: N5_134a

LATITUDE: 24°09'04.062" LONGITUDE: 89°35'11.352"

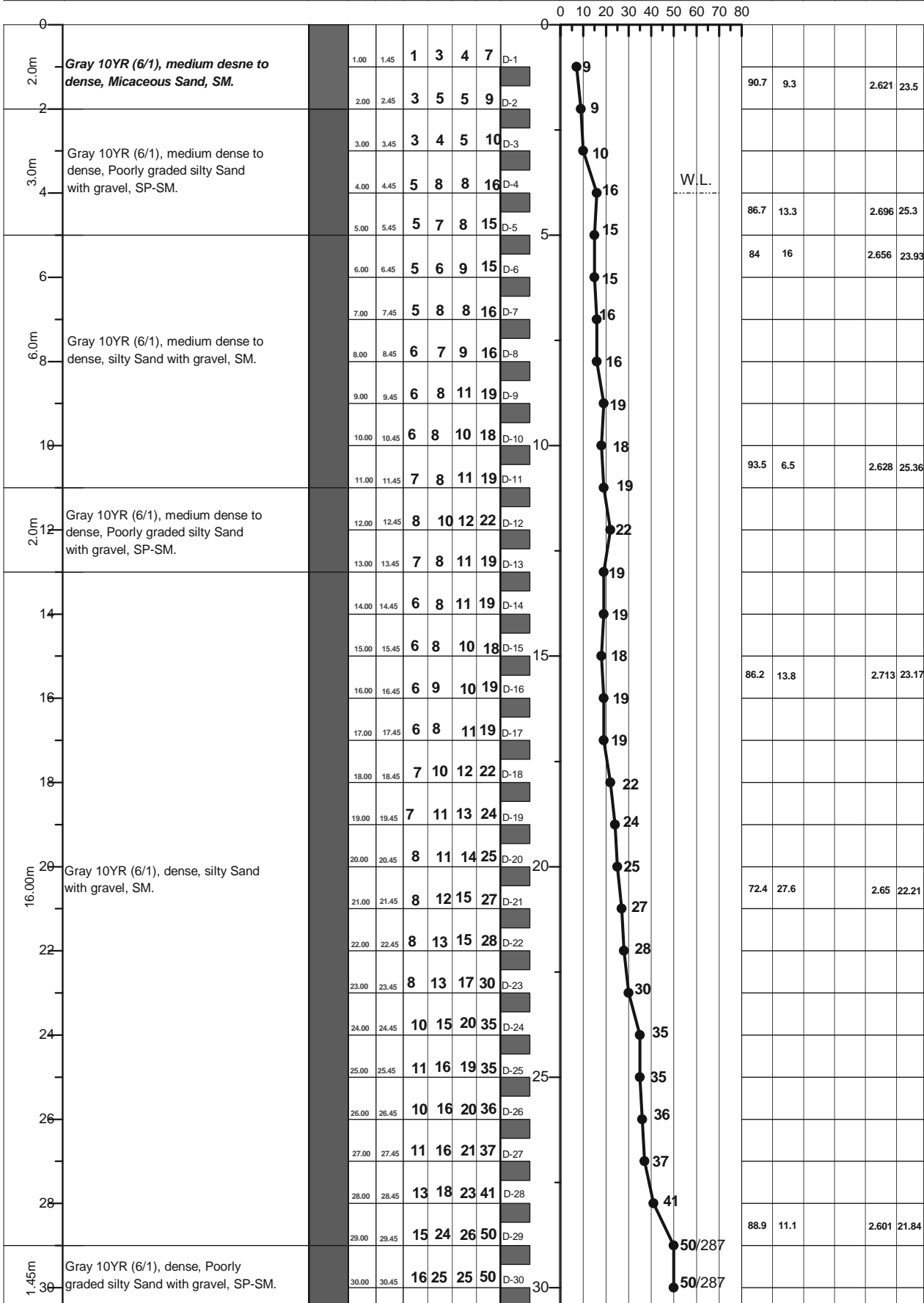
CHAINAGE: 132.062



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 16	BOREHOLE NO: N5_134a	Longitude: N 89°35'11"	Latitude: E 24°09'04"
			Brigde ID: N5_134a	Road Name: Dhaka (Mirpur)-Paturia- Natakhoia-Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 40.0m	Chainage: 132.062, RL: -9m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 08-03-2014	Completed Date: 10-03-2014	G. W. T : -4.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

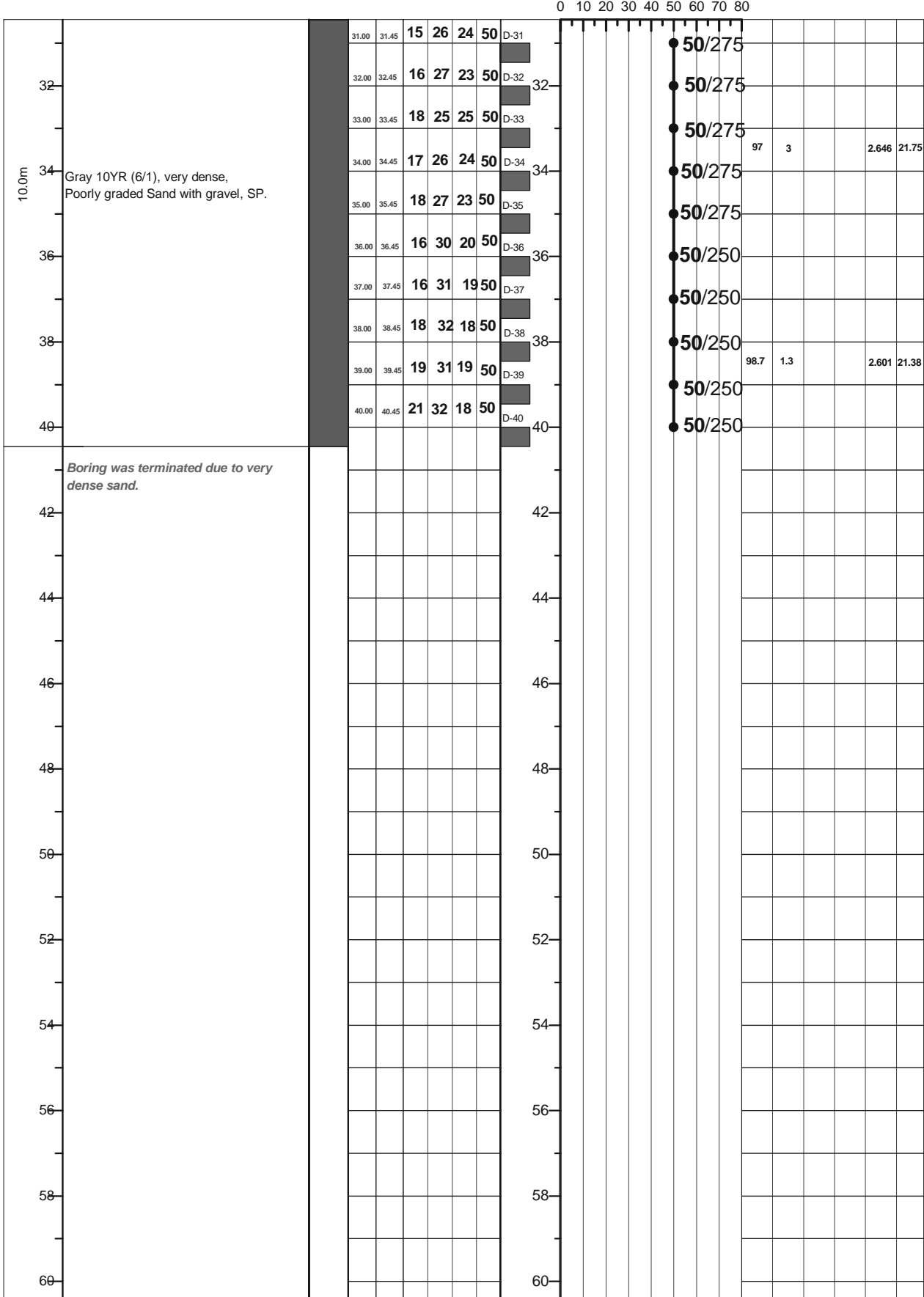
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 16	BOREHOLE NO: N5_134a	Longitude: N 89°35'11"	Latitude: E 24°09'04"
			Brigde ID: N5_134a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 40.0m	Chainage: 132.062, RL: -9m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 08-03-2014	Completed Date: 10-03-2014	G. W. T : -4.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

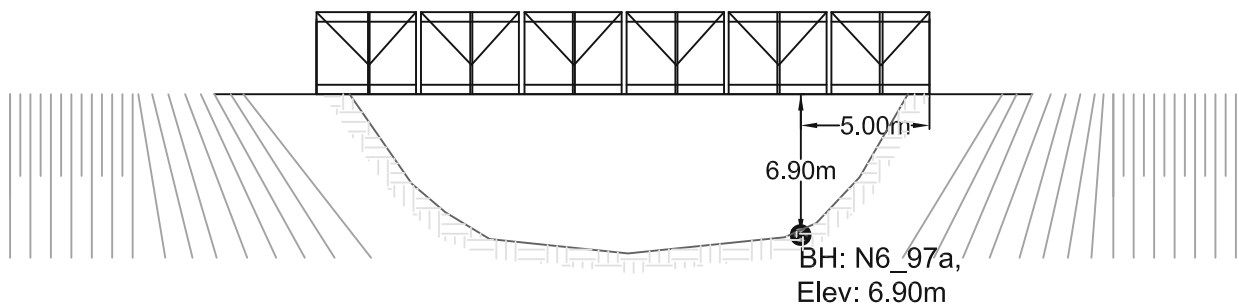
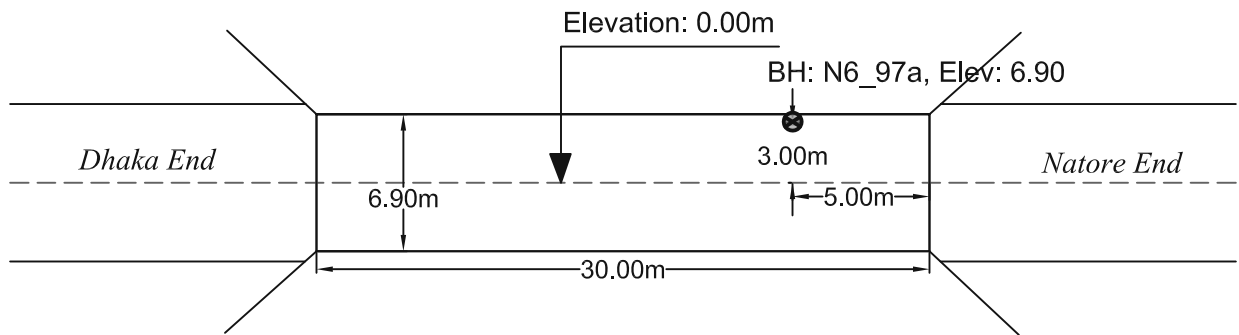
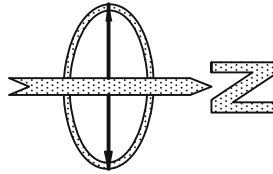
CLIENT: Oriental Consultants Company Limited.

RANK: 17

BRIDGE ID: N6_97a

LATITUDE: 24°23'56.815" LONGITUDE: 89°01'52.355"

CHAINAGE: 97.587



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 17	BOREHOLE NO: N6_97a	Longitude: N 89°01'52"	Latitude: E 24°23'58"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Brigde ID: N6_97a	Road Name: Kashinathpur-Dasuria-Natore-Rajshahi.	
Type of Drill Rig: Manual Rotary			Borehole Depth: 30.0m	Chainage: 97.587, RL: -6.9m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 24-02-2014	Completed Date: 25-02-2014	G. W. T : -1.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

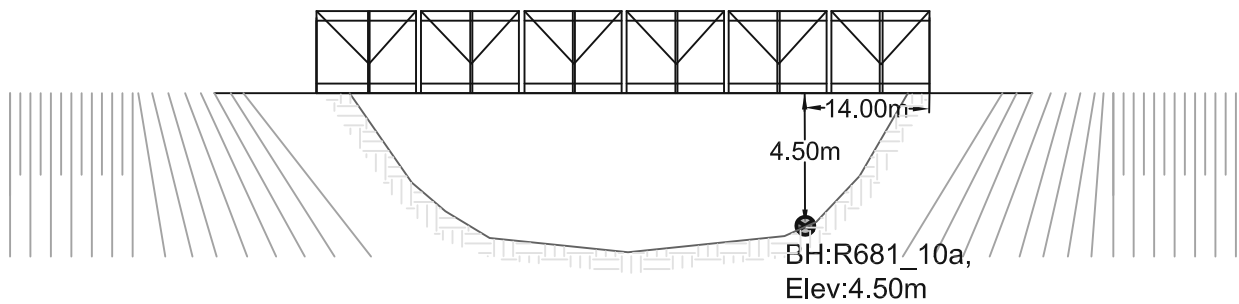
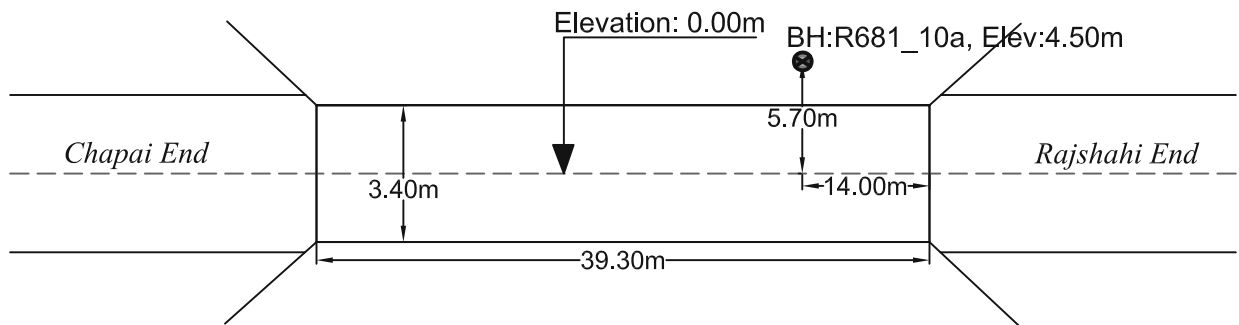
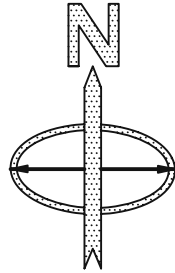
THICKNESS	SOIL STRATA	BORE LOG	From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)	N4-N62.5 (mm)	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
0										0							
4.0m	Gray 7.5YR (5/1), soft, high plastic, Clay with sand, CH.		1.00	1.45	1	2	2	4	D-1	4							
2.0m			2.00	2.45	2	3	3	6	D-2	6	11	89	54.3	26.7	2.687	28.64	
3.0m			3.00	3.45	2	1	3	4	D-3	4							
4.0m			4.00	4.45	1	1	1	2	D-4	2							
3.0m	Grayish Brown 10YR (5/2), very soft, low plastic, Clay with sand, CL.		5.00	5.45	1	1	2	3	D-5	3							
6.0m			6.00	6.45	3	4	5	9	D-6	9							
7.0m			7.00	7.45	3	4	4	8	D-7	8	7.8	92.2	46.7	20.9	2.675	23.97	
1.0m	Light Brown 7.5YR (6/3), medium stiff, low plastic, Clay with sand, CL.		8.00	8.45	2	4	5	9	D-8	9							
1.0m	Grayish Brown 10YR (5/2), medium stiff, medium plastic, Clay, CL.		9.00	9.45	5	6	7	13	D-9	13							
1.0m	Light Brown 7.5YR (6/3), stiff, medium plastic, Clay, CL.		10.00	10.45	4	6	10	16	D-10	16							
2.0m	Light Brown 7.5YR (6/3), dense, Sand, SM.		11.00	11.45	6	8	14	22	D-11	22							
12.0m			12.00	12.45	3	5	9	14	D-12	14						2.609	
1.0m	Grayish Brown 10YR (5/2), medium dense to dense, Sand, SM.		13.00	13.45	9	10	12	22	D-13	22	88.8	9.9			2.64	15.03	
2.0m	Gray 7.5YR (5/1), dense, Well graded silty Sand with gravel, SW-SM.		14.00	14.45	12	10	15	25	D-14	25							
15.0m			15.00	15.45	13	15	22	37	D-15	37							
4.0m	Grayish Brown 10YR (5/2), very dense, silty Sand with gravel, SM.		16.00	16.45	19	22	28	50	D-16	50	84.8	14.9			2.65	17.13	
17.0m			17.00	17.45	17	20	26	46	D-17	46							
18.0m			18.00	18.45	13	18	24	42	D-18	42							
19.0m			19.00	19.45	10	13	16	29	D-19	29							
2.0m	Grayish Brown 10YR (5/2), dense, Micaceous silty Sand with gravel, SM.		20.00	20.45	10	15	18	33	D-20	33	83.9	16.1			2.569	14.79	
21.0m			21.00	21.45	19	32	18	50	D-21	50							
1.0m	Grayish Brown 10YR (5/2), very dense, silty Sand with gravel, SM.		22.00	22.45	16	38	12	50	D-22	50/225							
2.0m	Grayish Brown 10YR (5/2), very dense, Micaceous Sand, SM.		23.00	23.45	16	33	17	50	D-23	50/187							
24.0m			24.00	24.45	13	30	20	50	D-24	50/175	86.6	13.4			2.558	16.36	
1.0m	Light Gray 7.5YR (7/1), very dense, Micaceous silty Sand with gravel, SM.		25.00	25.45	12	28	22	50	D-25	50/200							
1.0m	Grayish Brown 10YR (5/2), very dense, Sand, SM.		26.00	26.45	18	29	21	50	D-26	50/250							
1.0m	Gray 7.5YR (5/1), very dense, Micaceous Sand, SM.		27.00	27.45	18	26	24	50	D-27	50/225							
3.45m	Grayish Brown 10YR (5/2), very dense, Poorly graded Sand with gravel, SP.		28.00	28.45	22	36	14	50	D-28	50/250							
29.0m			29.00	29.45	25	42	8	50	D-29	50/200	95.2	4.8			2.714	14.77	
30.0m			30.00	30.45	26	46	4	50	D-30	50/150							

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

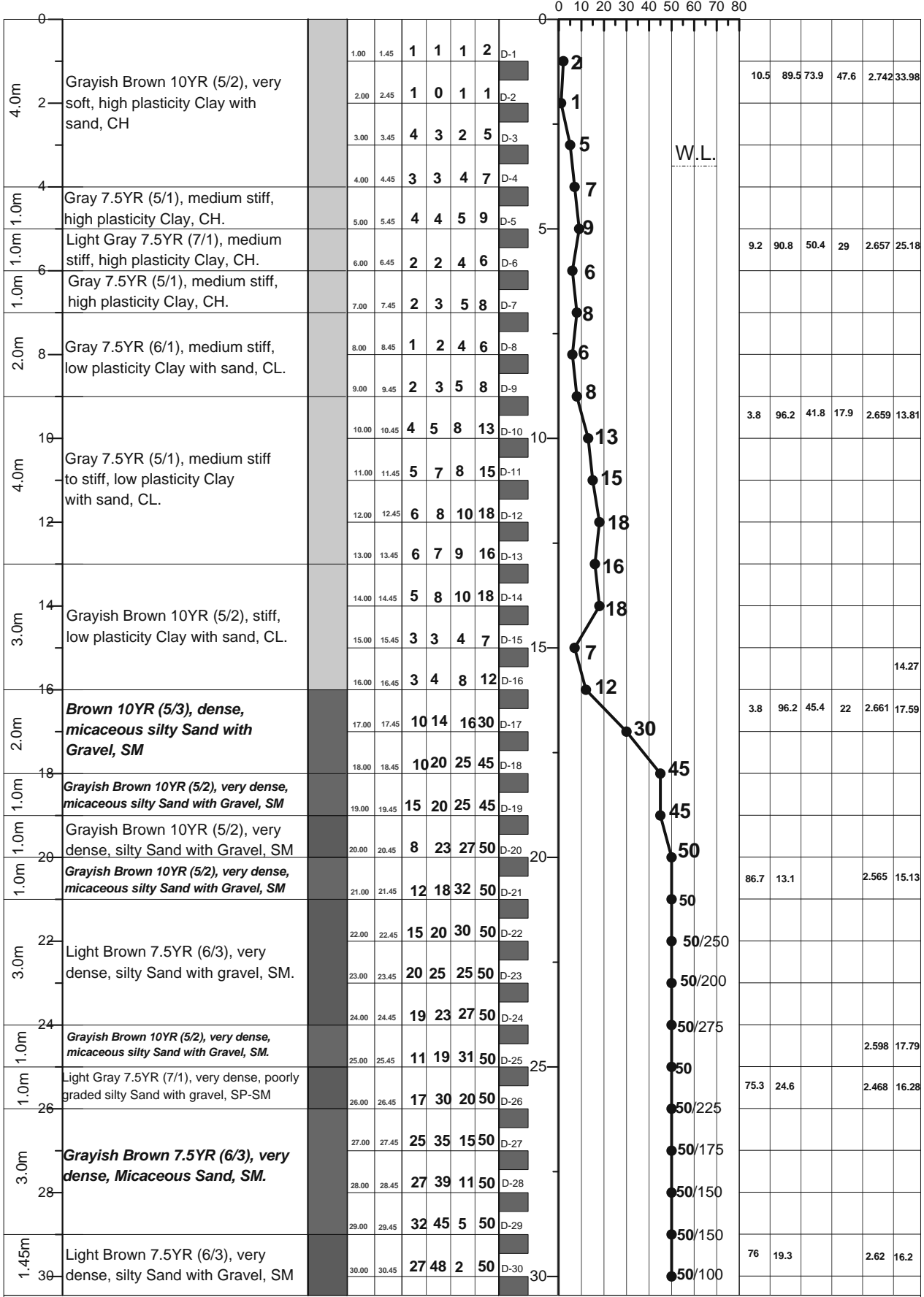
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 18
BRIDGE ID: R681_10a
LATITUDE: 24°25'25.554" LONGITUDE: 88°21'42.394"
CHAINAGE: 10.266



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 18	BOREHOLE NO: R681_10a	Longitude: N 88°21'42"	Latitude: E 24°25'26"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Brigde ID: R681_10a	Road Name: Ujanpara-Bijohnagar Road (Old Part).	
Type of Drill Rig: Manual Rotary			Borehole Depth: 30.0m	Chainage: 10.266, RL: -4.5m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -3.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

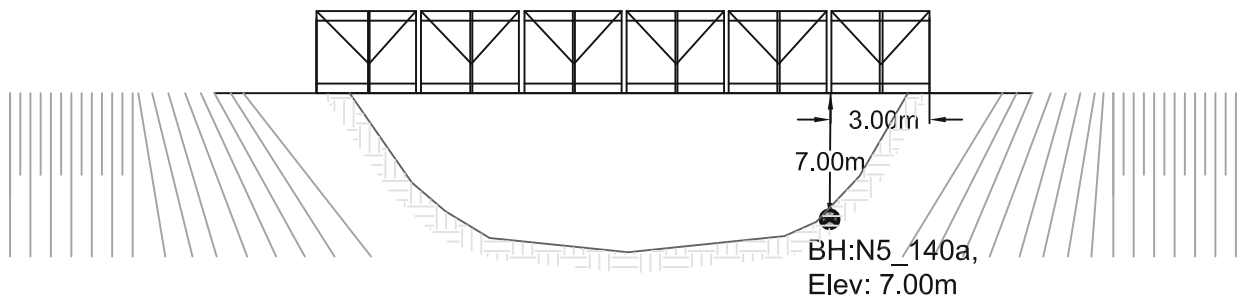
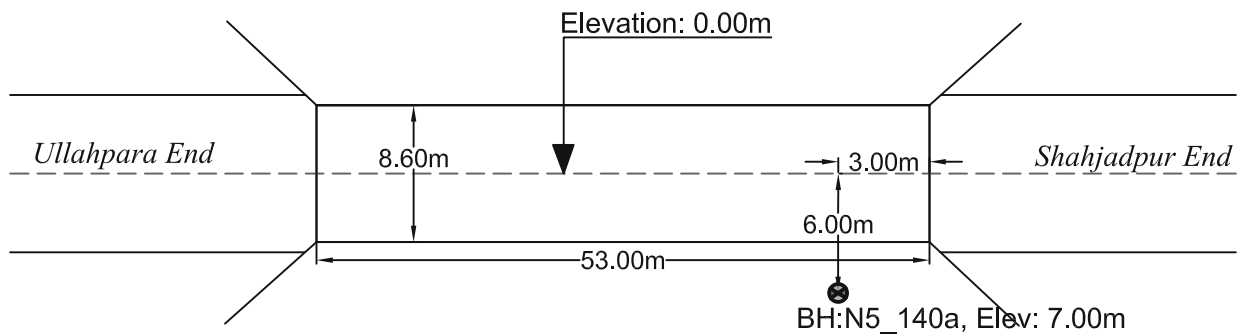
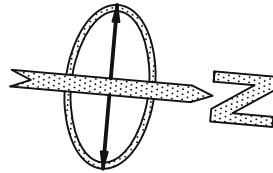


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

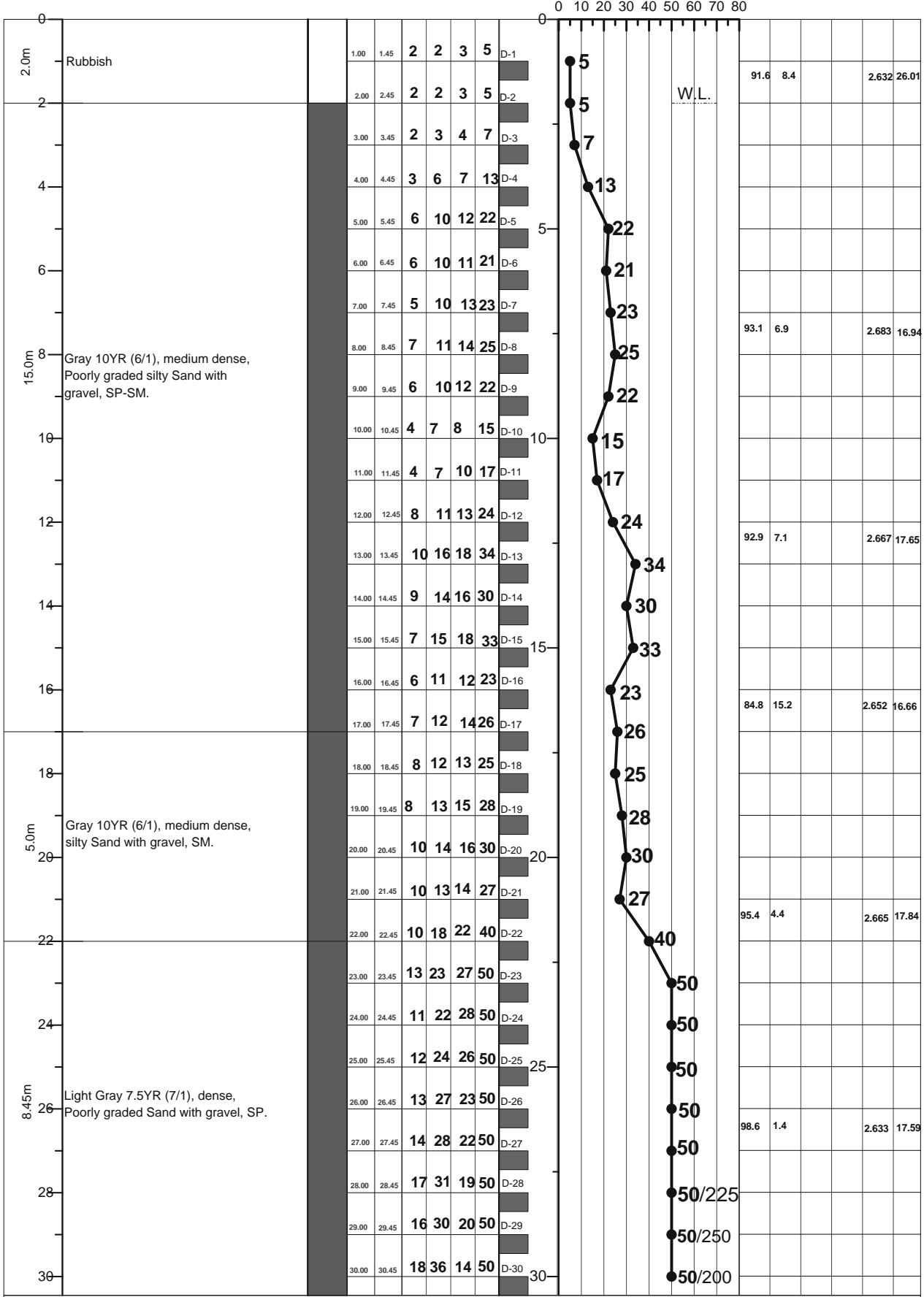
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 19
BRIDGE ID: N5_140a
LATITUDE: 24°12'08.099" LONGITUDE: 89°35'23.106"
CHAINAGE: 138.201



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 19	BOREHOLE NO: N5_140a	Longitude: N 89°34'49.15"	Latitude: E 24°12'08.99"
			Brigde ID: N5_140a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 138.201, RL: -7.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 9-03-2014	Completed Date: 10-03-2014	G. W. T : -2.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

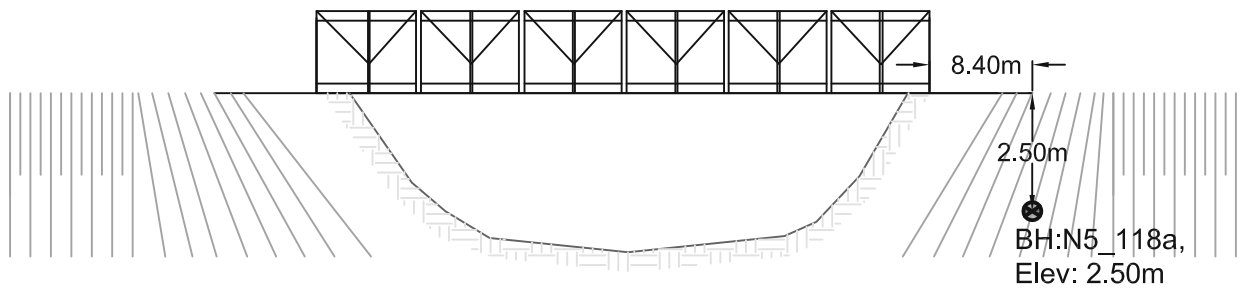
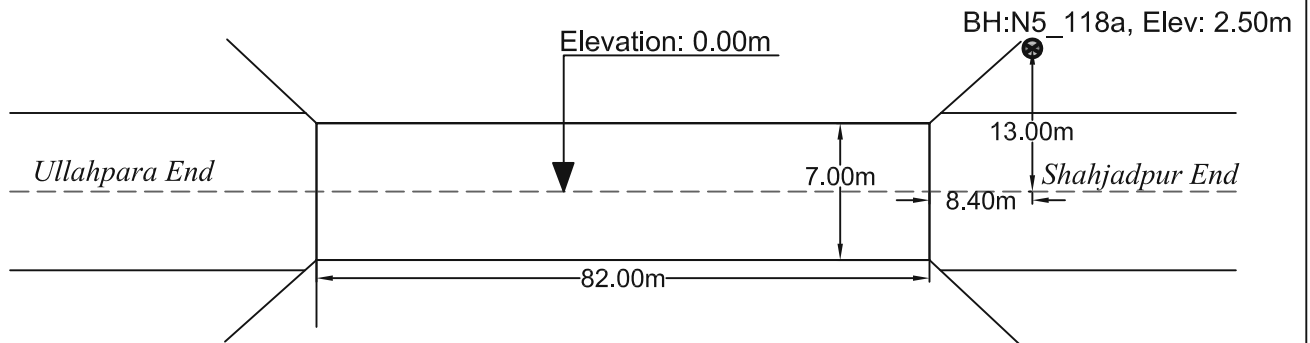
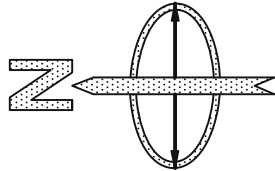


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

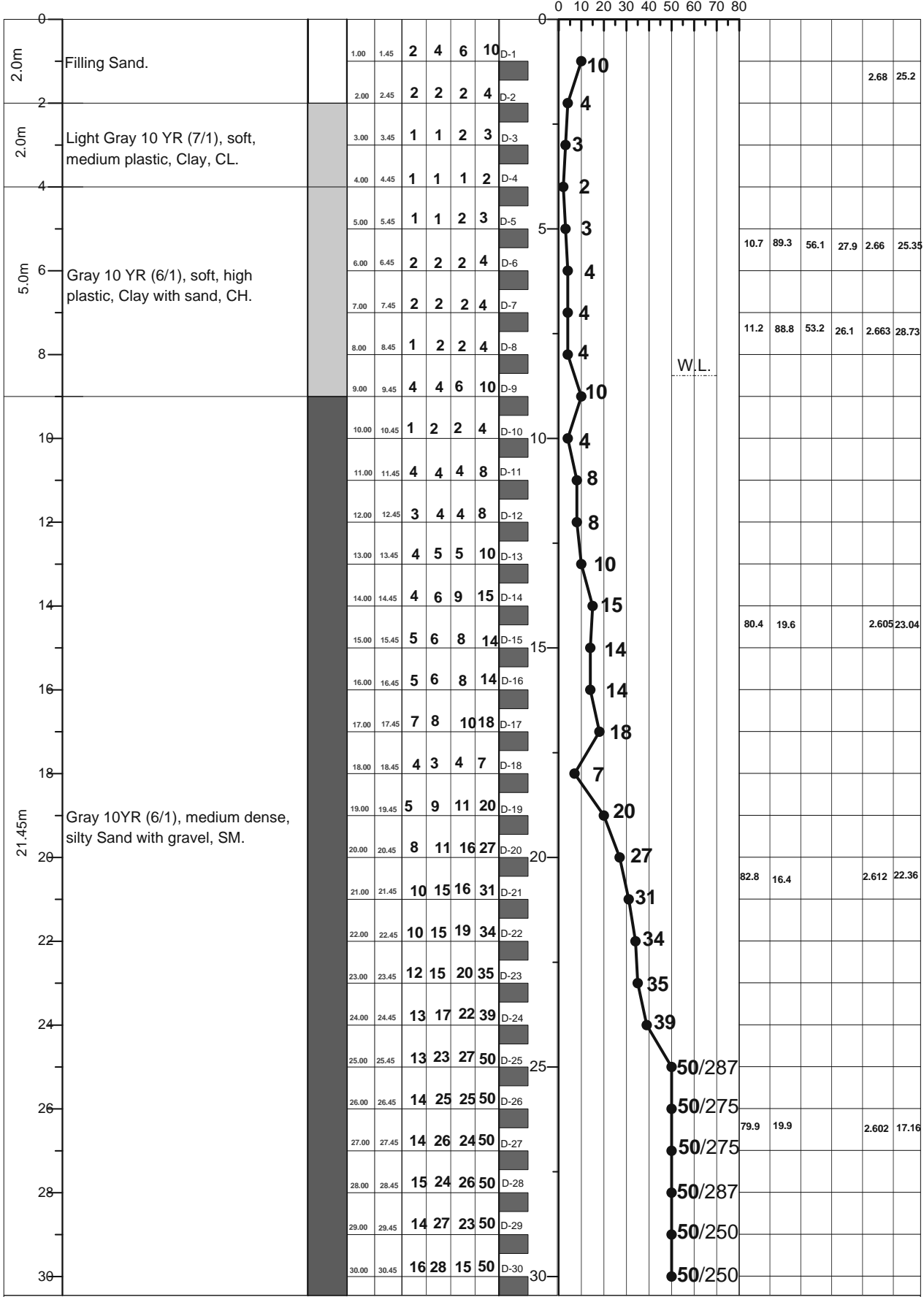
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 20
BRIDGE ID: N5_118a
LATITUDE: 24°01'57.443" LONGITUDE: 89°36'15.207"
CHAINAGE: 117.143



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 20	BOREHOLE NO: N5_118a	Longitude: N 89°33'31"	Latitude: E 024°01'57.443"
			Brigde ID: N5_118a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 117.143, RL: -2.50
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 18-02-2014	Completed Date: 19-02-2014	G. W. T : -8.50m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

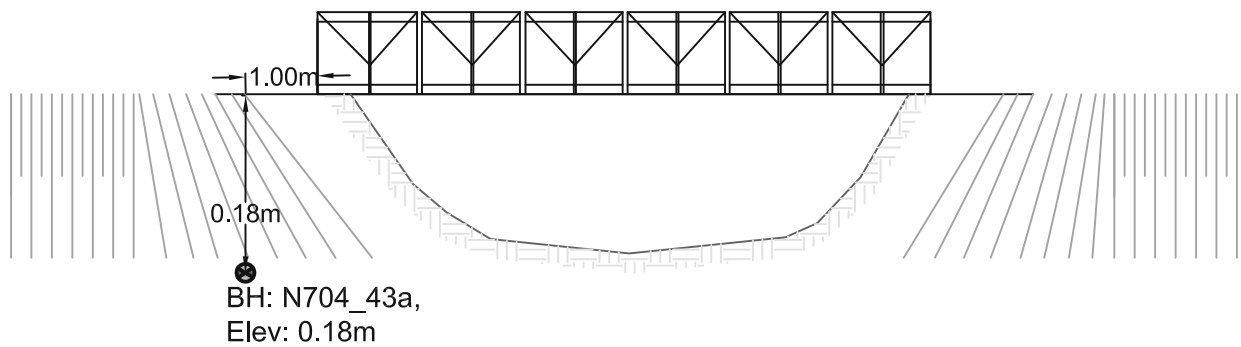
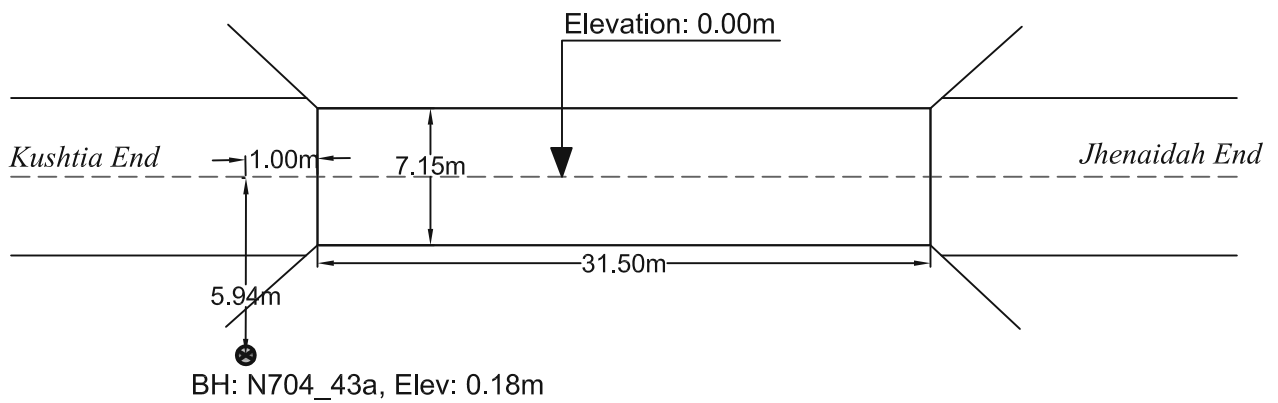
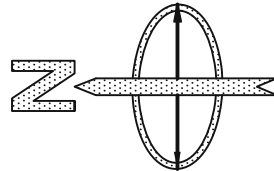


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 21
BRIDGE ID: N704_43a
LATITUDE: 23°53'17.313" LONGITUDE: 89°6'28.814"
CHAINAGE: 44.135



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 21	BOREHOLE NO: N704_43a	Longitude: N 089°6'28.814"	Latitude: E 23°53'17.313"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Brigde ID: N704_43a	Road Name: Jhenaidah-Kushtia-Paksey Ferry-Dasuria.	
Type of Drill Rig: Manual Rotary			Borehole Depth: 50.0m	Chainage: 44.135, RL: -0.18m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 09-03-2014	Completed Date: 14-03-2014	G. W. T : -3.35m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									N6-600 (mm)
0-3.0m	Brown 7.5YR (5/2), soft, low plastic, Clay with sand, CL.		1.00	1.45	1	2	2	4	D-1	4	11.3	88.7	41.7	16.1	2.675	29.22
			2.00	2.45	1	1	2	3	D-2	3						
			3.00	3.45	1	1	1	2	D-3	2						
3.0-2.0m	Very Pale Brown 10YR (7/3), very soft, low plastic, silty Clay, CL.		4.00	4.45	2	3	6	9	D-4	9						
			5.00	5.45	2	3	4	7	D-5	7						
2.0-2.6m	Gray 7.5YR (5/1), medium stiff, medium plastic, silty Clay, CL.		6.00	6.45	2	3	3	6	D-6	6						
			7.00	7.45	1	1	2	3	D-7	3	12.1	87.9	49.9	22.7	2.66	31.32
2.0-2.8m	Gray 7.5YR (5/2), soft, low plastic, Clay with sand, CL.		8.00	8.45	1	2	3	5	D-8	5						
			9.00	9.45	4	6	8	14	D-9	14	78.4	21.2			2.676	22.3
1.0-1.0m	Gray 10YR (7/1), medium dense to dense, silty Sand with gravel, SM.		10.00	10.45	2	2	3	5	D-10	5						
2.0-12.0m	Gray 7.5YR (5/1), soft, low plastic, silty Clay, CL.		11.00	11.45	1	1	2	3	D-11	3						
			12.00	12.45	2	2	3	5	D-12	5						
3.0-14.0m	Gray 7.5YR (5/2), soft, low plastic, Clay with sand, CL.		13.00	13.45	1	2	3	5	D-13	5						
			14.00	14.45	2	3	3	6	D-14	6	12.3	87.7	43	18.1	2.667	28.06
			15.00	15.45	2	3	6	9	D-15	9						
5.0-16.0m	Gray 7.5YR (5/1), medium stiff, low plastic, Clay with sand, CL.		16.00	16.45	3	6	6	12	D-16	12						
			17.00	17.45	4	5	10	15	D-17	15						
			18.00	18.45	4	6	8	14	D-18	14	12.2	87.8	49.9	22.2	2.705	22.55
			19.00	19.45	5	7	8	15	D-19	15						
			20.00	20.45	2	3	5	8	D-20	8						
6.0-20.0m	Gray 7.5YR (5/2), medium stiff, low plastic, Clay with sand, CL.		21.00	21.45	2	4	3	7	D-21	7						
			22.00	22.45	2	3	4	7	D-22	7						
			23.00	23.45	3	3	5	8	D-23	8						
			24.00	24.45	3	4	4	8	D-24	8						
			25.00	25.45	3	6	8	14	D-25	14	12.9	87.1	42.4	18.4	2.667	22.89
			26.00	26.45	3	7	10	17	D-26	17						
2.0-26.0m	Gray 7.5YR (5/2), very stiff, high plastic, silty Clay, CL.		27.00	27.45	2	6	12	18	D-27	18						
			28.00	28.45	9	11	17	28	D-28	28						
2.0-28.0m	Brown 7.5YR (5/3), dense, silty Sand, SM.		29.00	29.45	12	20	22	42	D-29	42						
			30.00	30.45	13	22	28	50	D-30	50	82.1	17.9			2.623	17.86
0.45-30.0m	Brown 7.5YR (5/3), very dense, silty Sand with gravel, SM.															

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

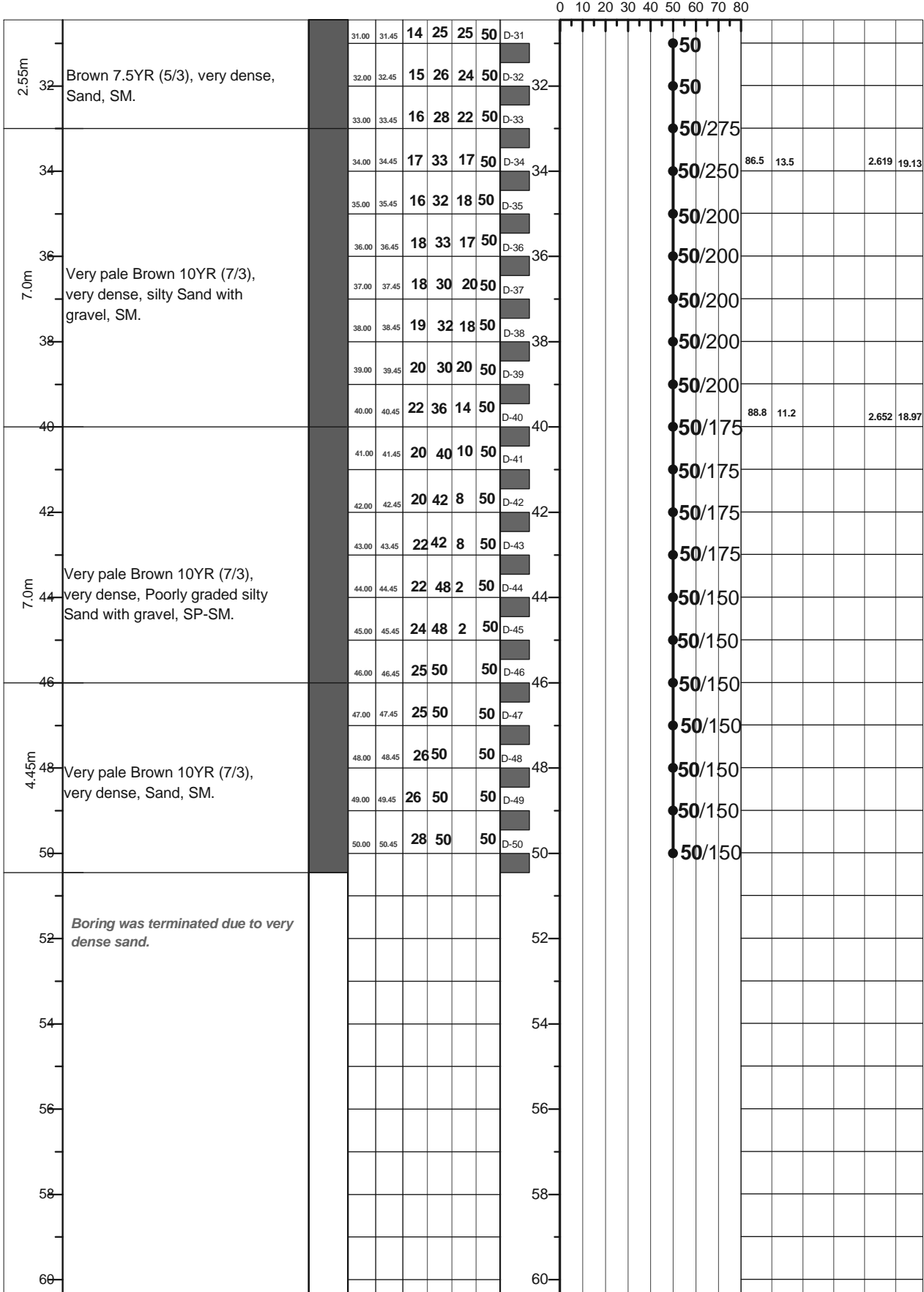
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 21	BOREHOLE NO: N704_43a	Longitude: N 089° 6' 28.814"	Latitude: E 23° 53' 17.313"
			Brigde ID: N704_43a	Road Name: Jhenaidah-Kushtia-Paksey Ferry-Dasuria.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 44.135, RL: -0.18m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 09-03-2014	Completed Date: 14-03-2014	G. W. T : -3.35m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N ₁₋₁₅₀ (blows)	N ₁₅₀₋₃₀₀ (blows)	N ₃₀₀₋₄₅₀ (blows)								

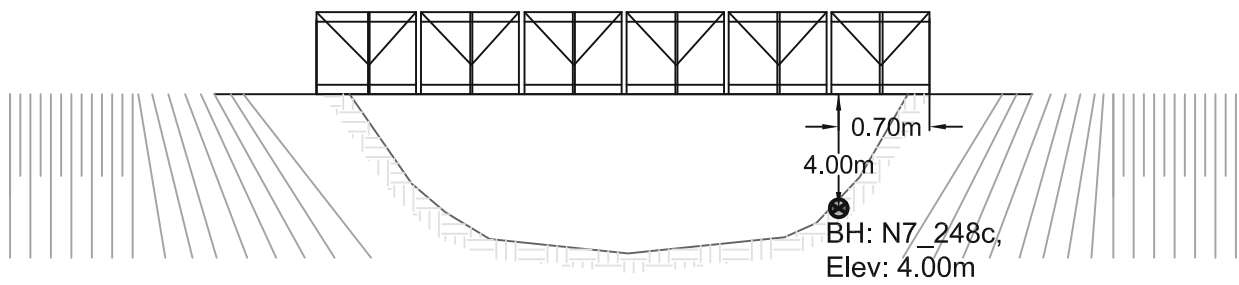
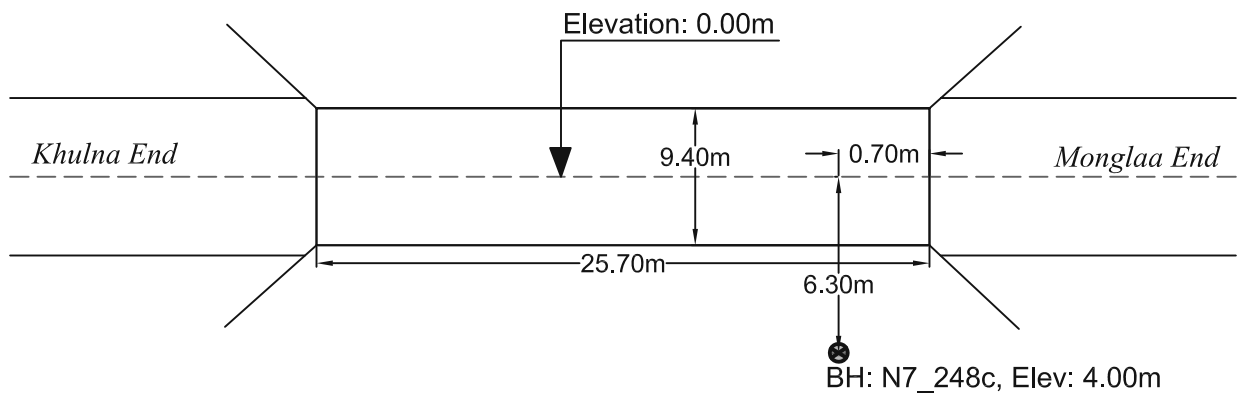
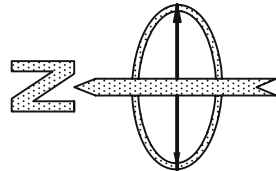


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

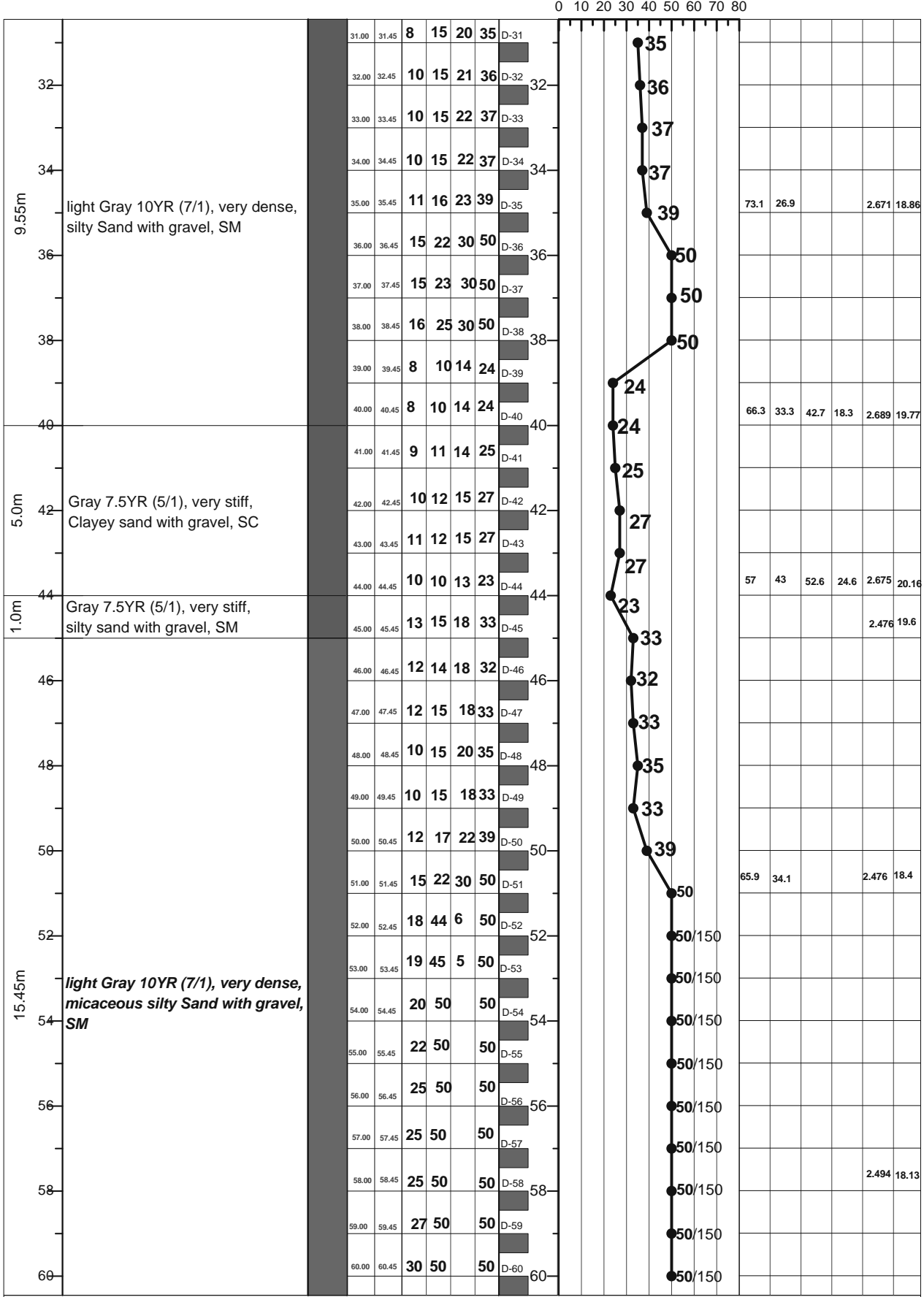
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 22
BRIDGE ID: N7_248c
LATITUDE: 22°33'21.514" LONGITUDE: 89°35'41.885"
CHAINAGE: 248.844



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 22	BOREHOLE NO: N7_248c	Longitude: N 89°36'51"	Latitude: E 22°33'21.514"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Brigde ID: N7_248c	Road Name: Daulatdia-Faridpur -Magura-Jhenaidah-Jessore -Khulna-Mongla	
Type of Drill Rig: Manual Rotary			Borehole Depth: 60.0m	Chainage: 248.844, RL: -4.0m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 6-04-2014	Completed Date: 10-04-2014	G. W. T : -2.2m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



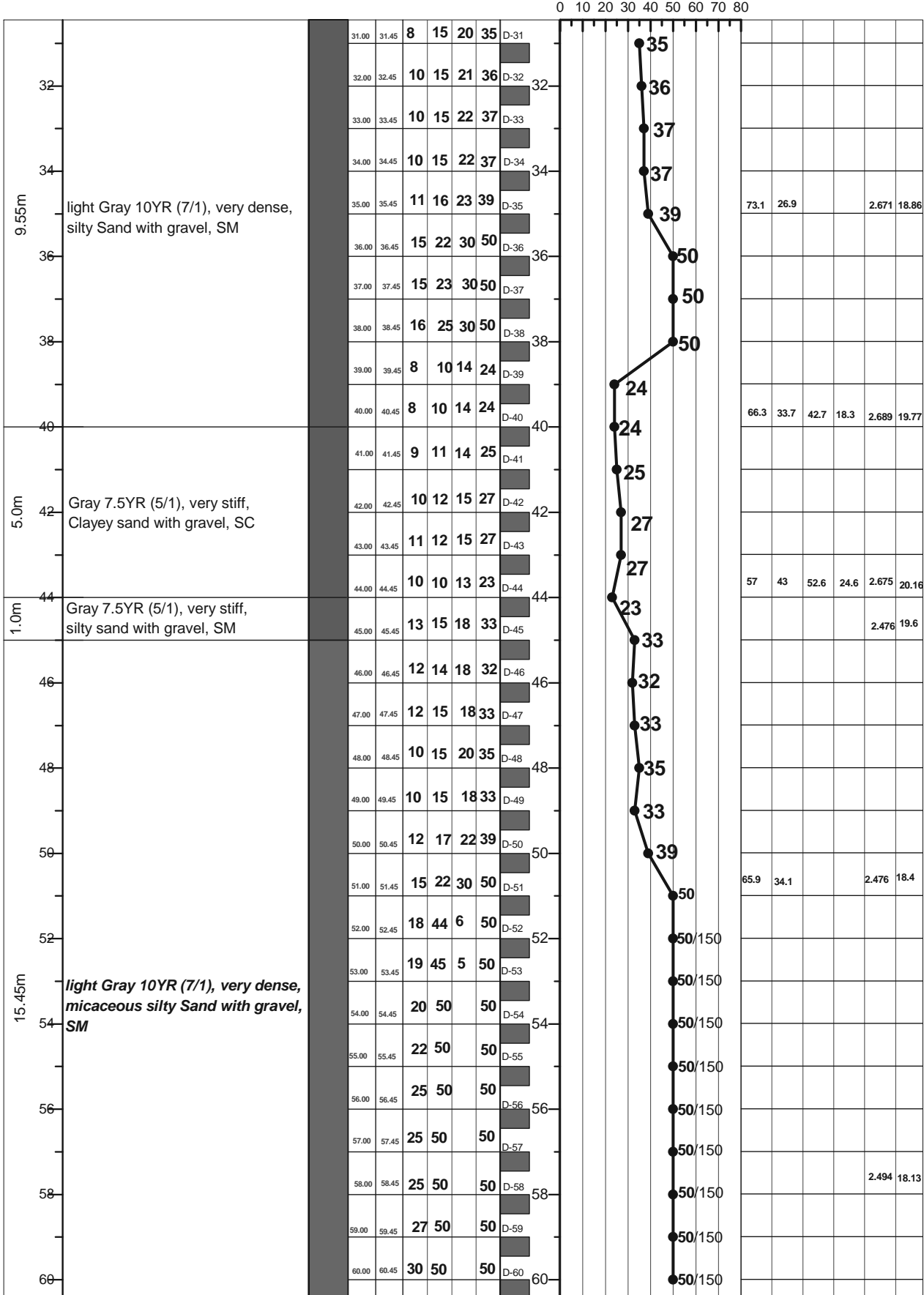
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 22	BOREHOLE NO: N7_248c	Longitude: N 89°36'51"	Latitude: E 22°33'21.514"
			Brigde ID: N7_248c	Road Name: Daulatdia-Faridpur -Magura-Jhenaidah-Jessore -Khulna-Mongla	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 248.844, RL: -4.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 6-04-2014	Completed Date: 10-04-2014	G. W. T : -2.2m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING				DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)								



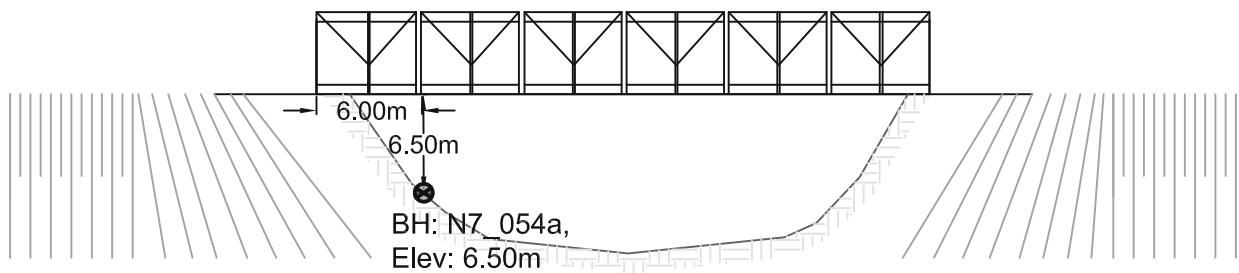
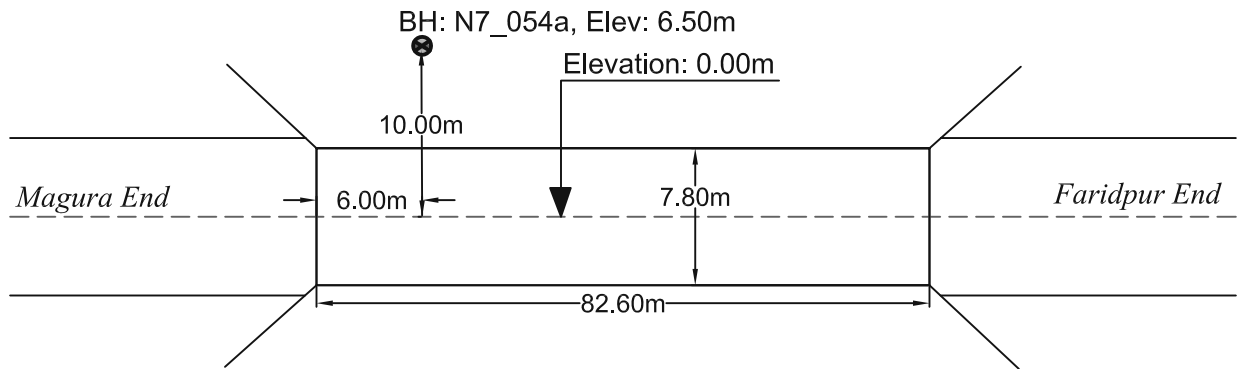
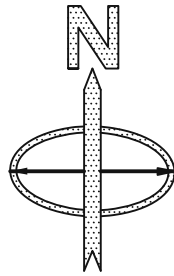
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

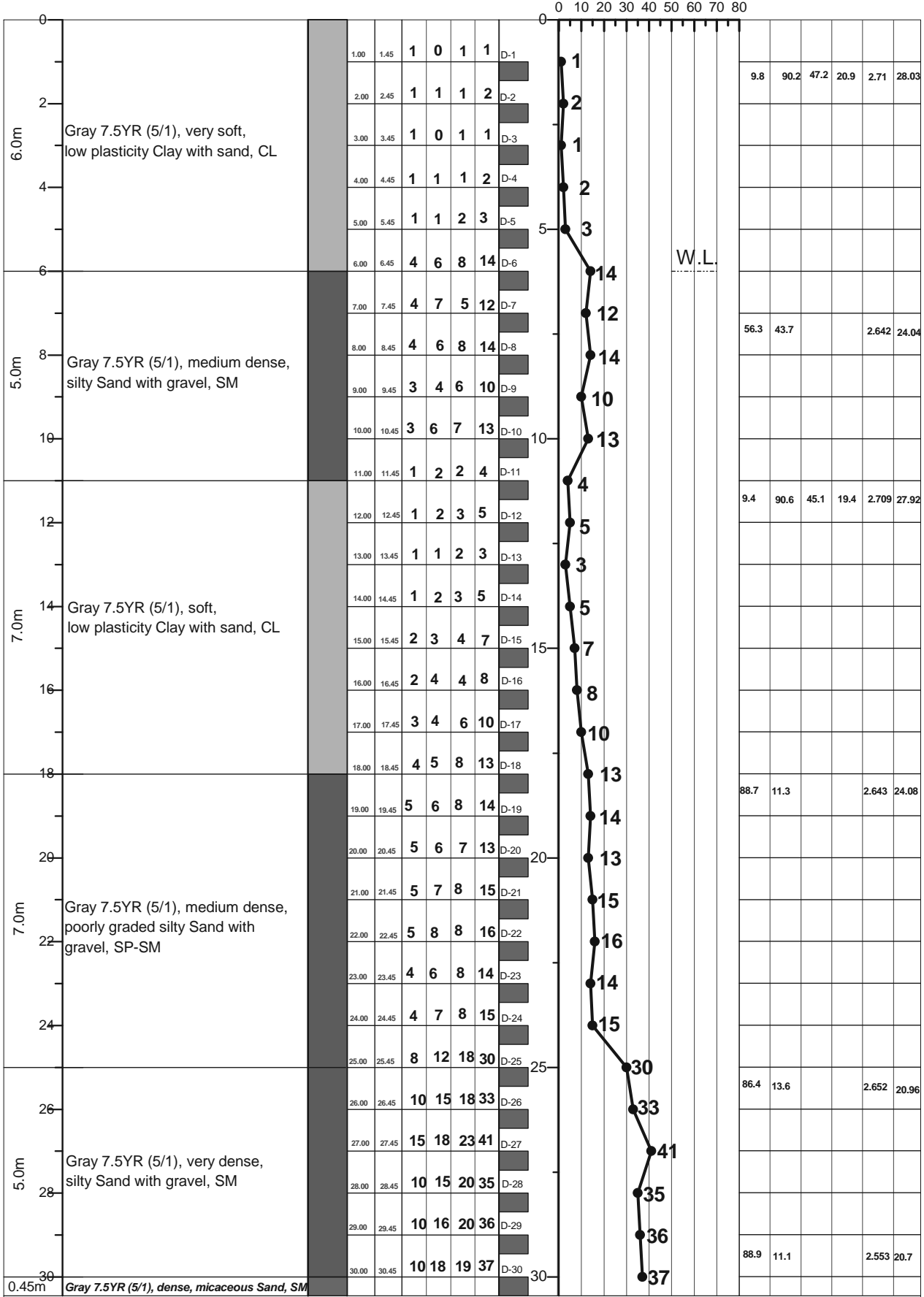
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 23
BRIDGE ID: N7_054a
LATITUDE: 23°31'45.434" LONGITUDE: 89°36'30.335"
CHAINAGE: 55.168



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 23	BOREHOLE NO: N7_054a	Longitude: N 90°16'38"	Latitude: E 23°32'03.719"
			Brigde ID: N7_054a	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 55.168, RL: -6.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 1-04-2014	Completed Date: 7-04-2014	G. W. T : -6.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)									



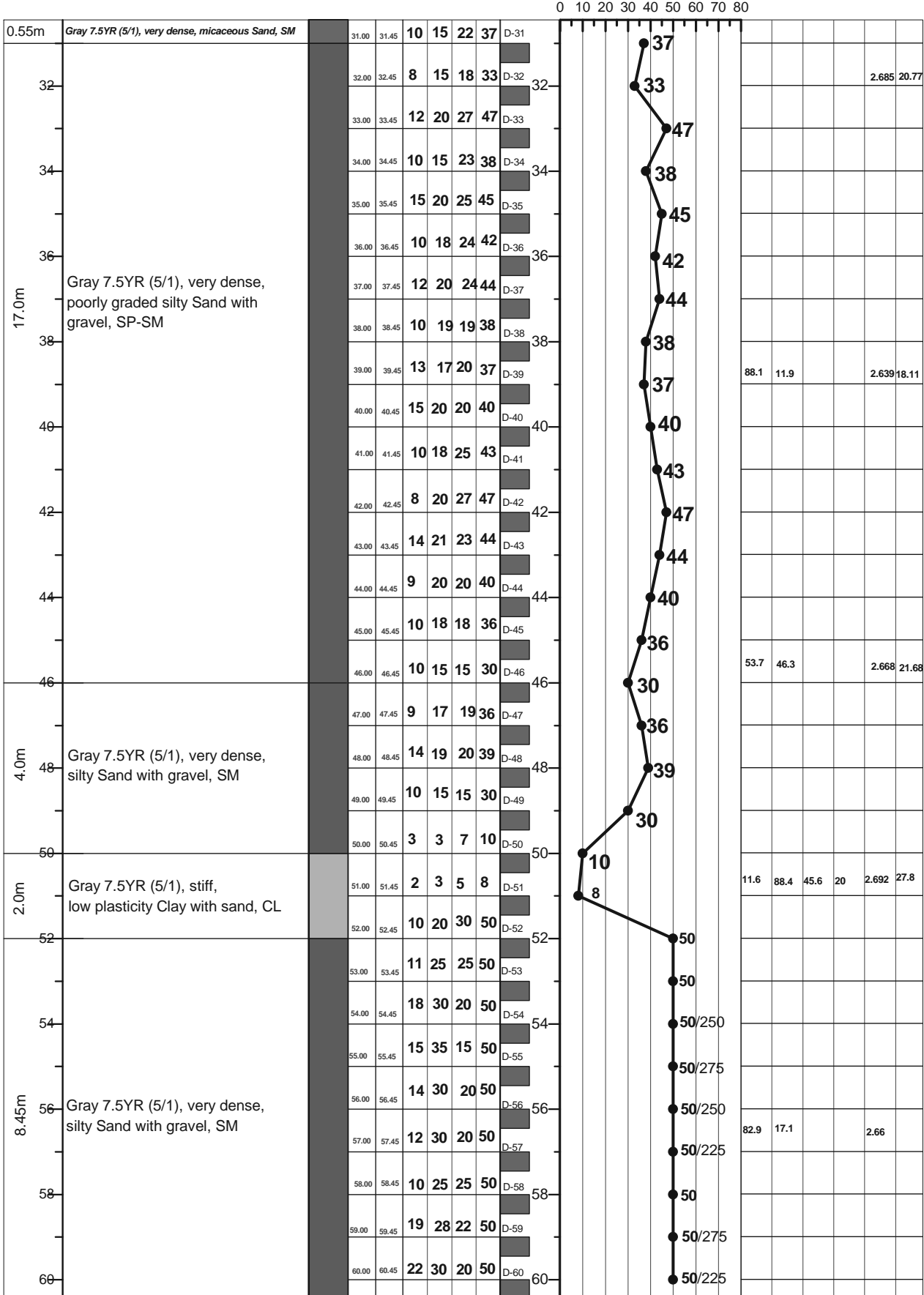
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 23	BOREHOLE NO: N7_054a	Longitude: N 90°16'38"	Latitude: E 23°31'45.434"
			Brigde ID: N7_054a	Road Name: Dauladia-Faridpur -Magura -Jhenaidah-Jessore-Khulna-Mongla	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 55.168, RL: -6.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 1-04-2014	Completed Date: 7-04-2014	G. W. T : -6.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

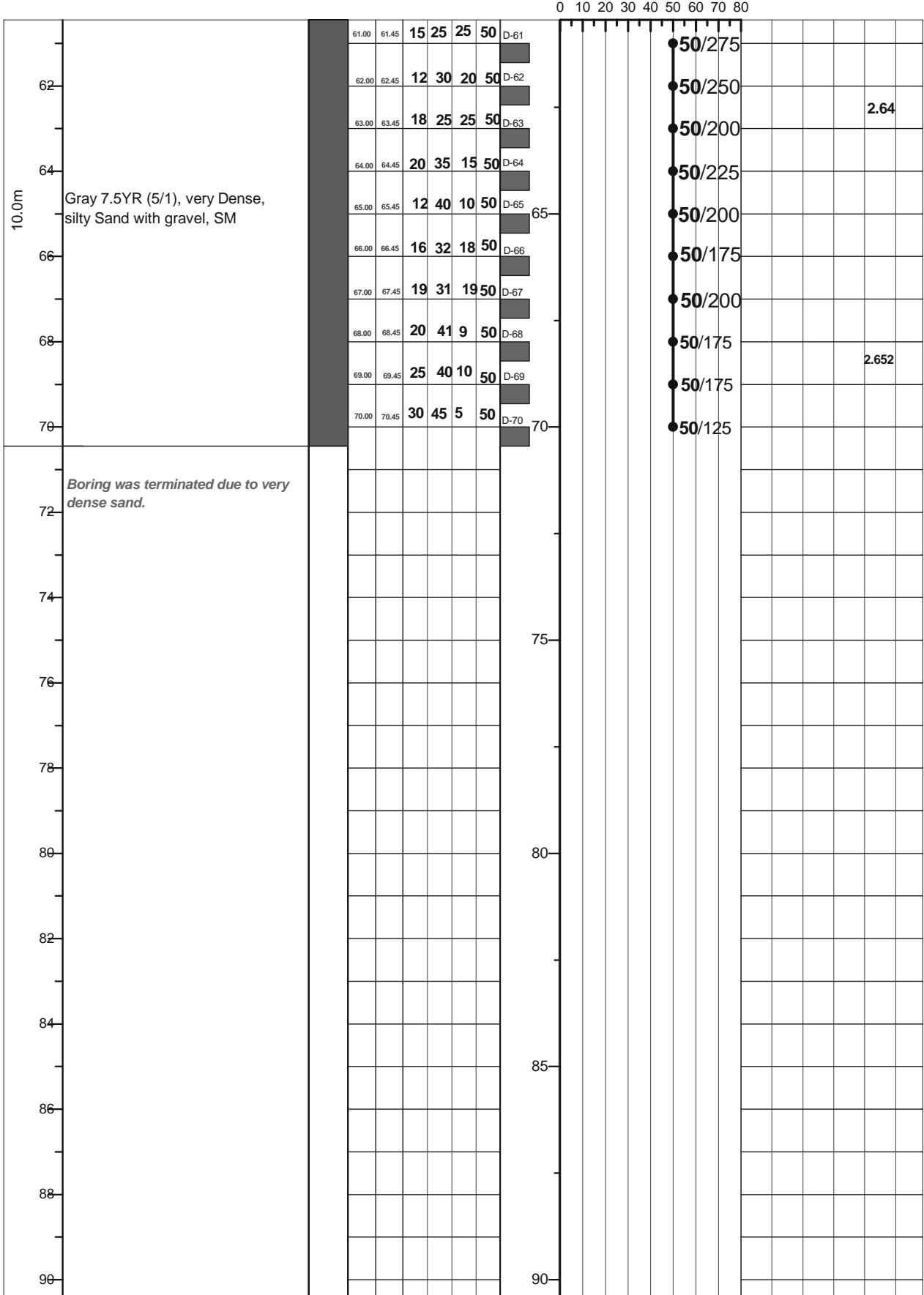
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 23	BOREHOLE NO: N7_054a	Longitude: N 90°16'38"	Latitude: E 23°31'45.434"
			Brigde ID: N7_054a	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 55.168, RL: -6.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 1-04-2014	Completed Date: 7-04-2014	G. W. T : -6.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

[Dark Gray Box] PLASTIC CLAY	[Light Gray Box] SILT	[Black Box] PEAT/HIGHLY ORGANIC SOIL	[Dark Gray Box] UNDISTURBED SAMPLE
[Medium Gray Box] MICACEOUS FINE SAND/SILT	[White Box] SAND	[Black Box] SHALE	[Dark Gray Box] DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

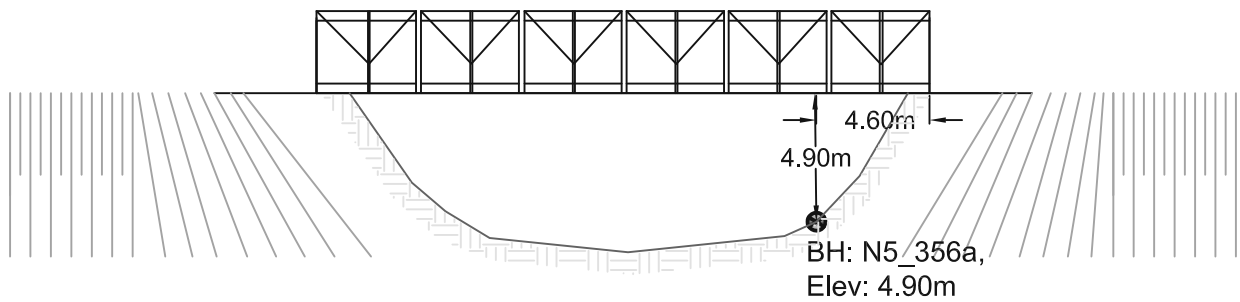
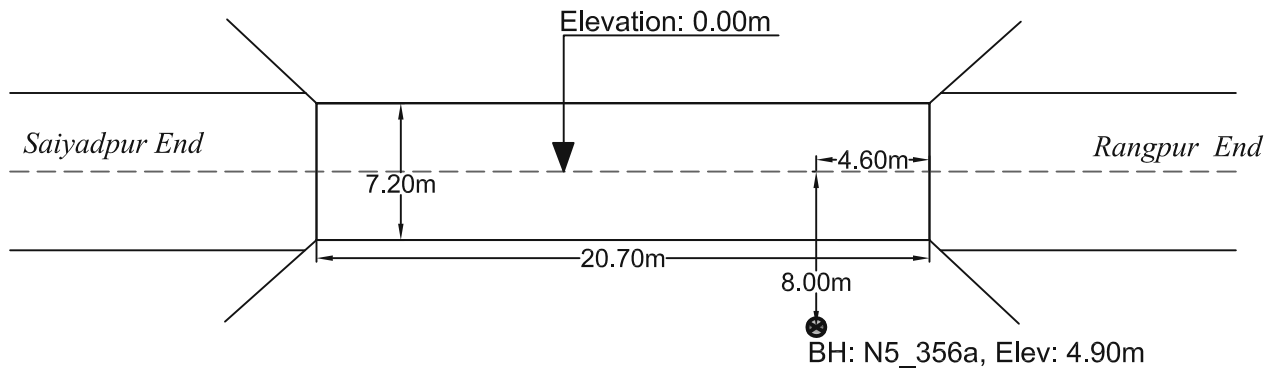
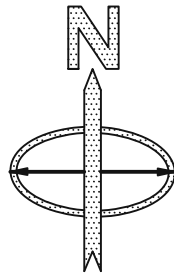
CLIENT: Oriental Consultants Company Limited.

RANK: 24

BRIDGE ID: N5_356a

LATITUDE: 25°48'39.877" LONGITUDE: 88°59'21.77"

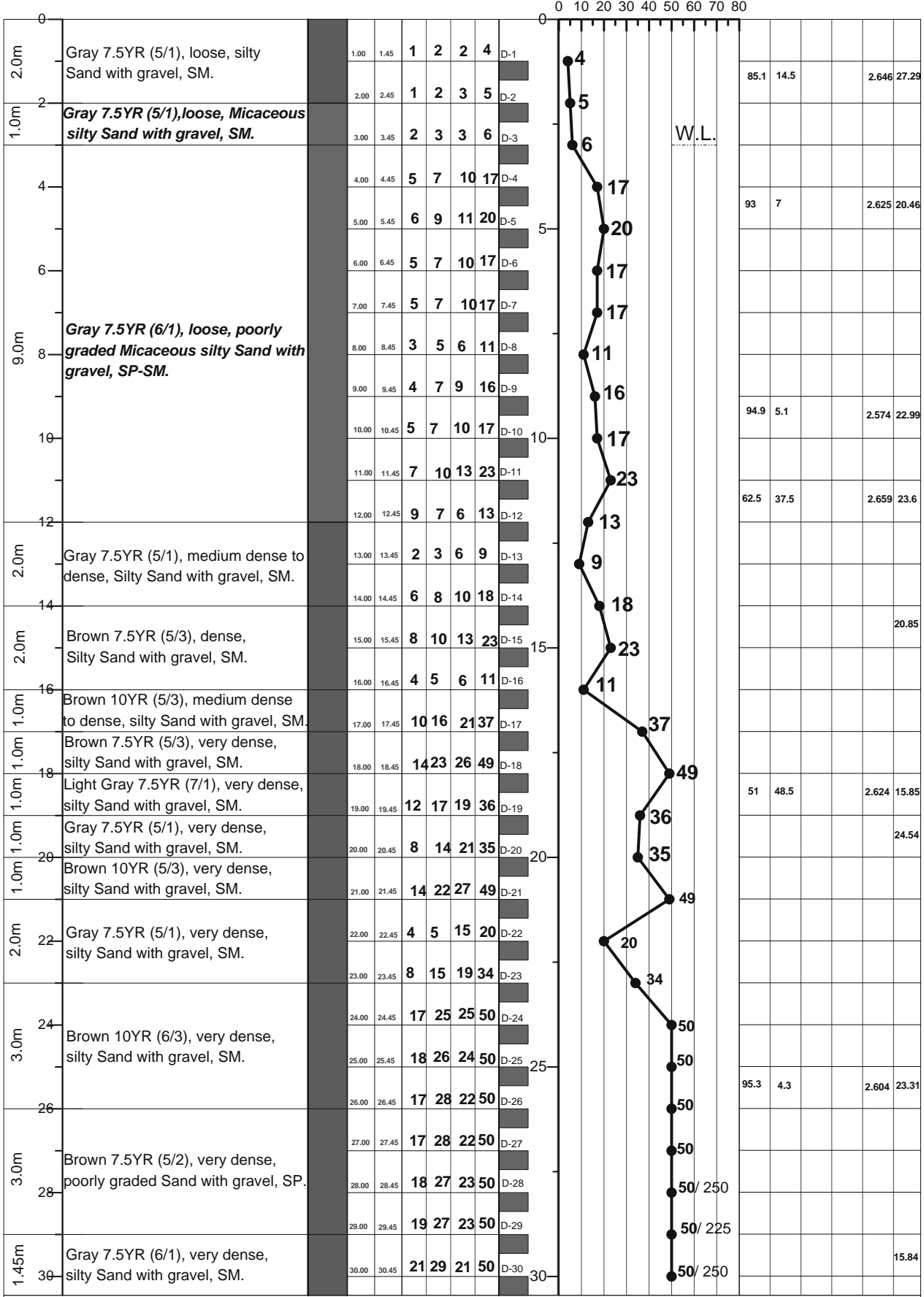
CHAINAGE: 354.204



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 24	BOREHOLE NO: N5_356a Brigde ID: N5_356a	Longitude: N 89°59.358' Road Name: Dhaka -Paturia-Kashinathpur- Bogra-Rangpur-Beldanga- Banglabandh Road.	Latitude: E 25°48.660'
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 354.204, RL: -4.90m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

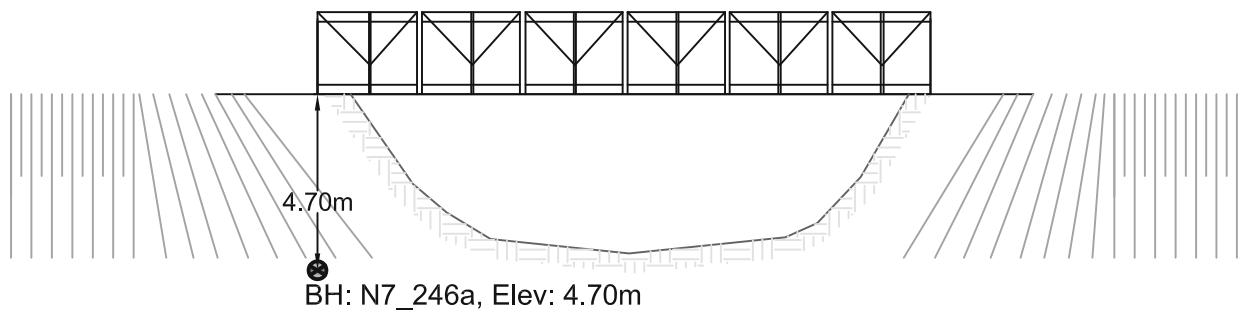
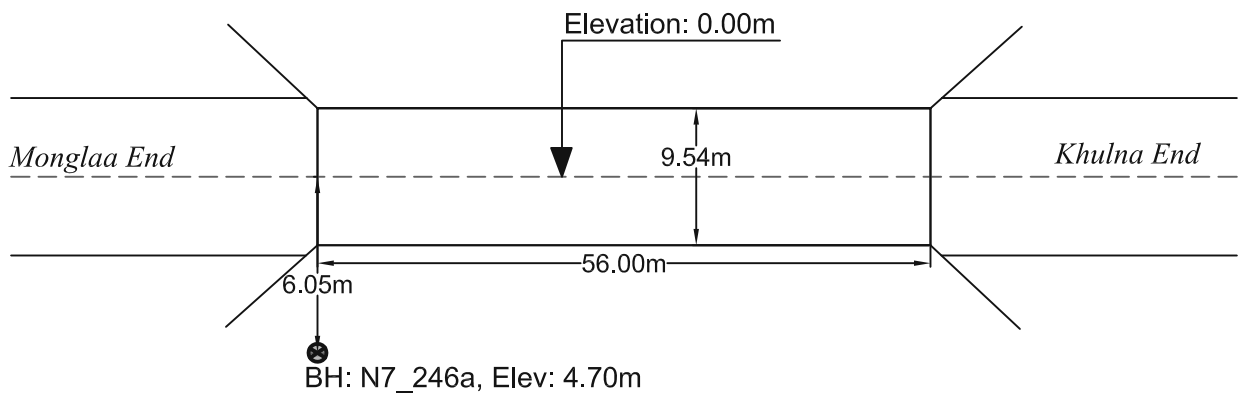
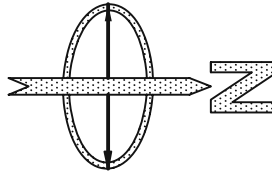


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

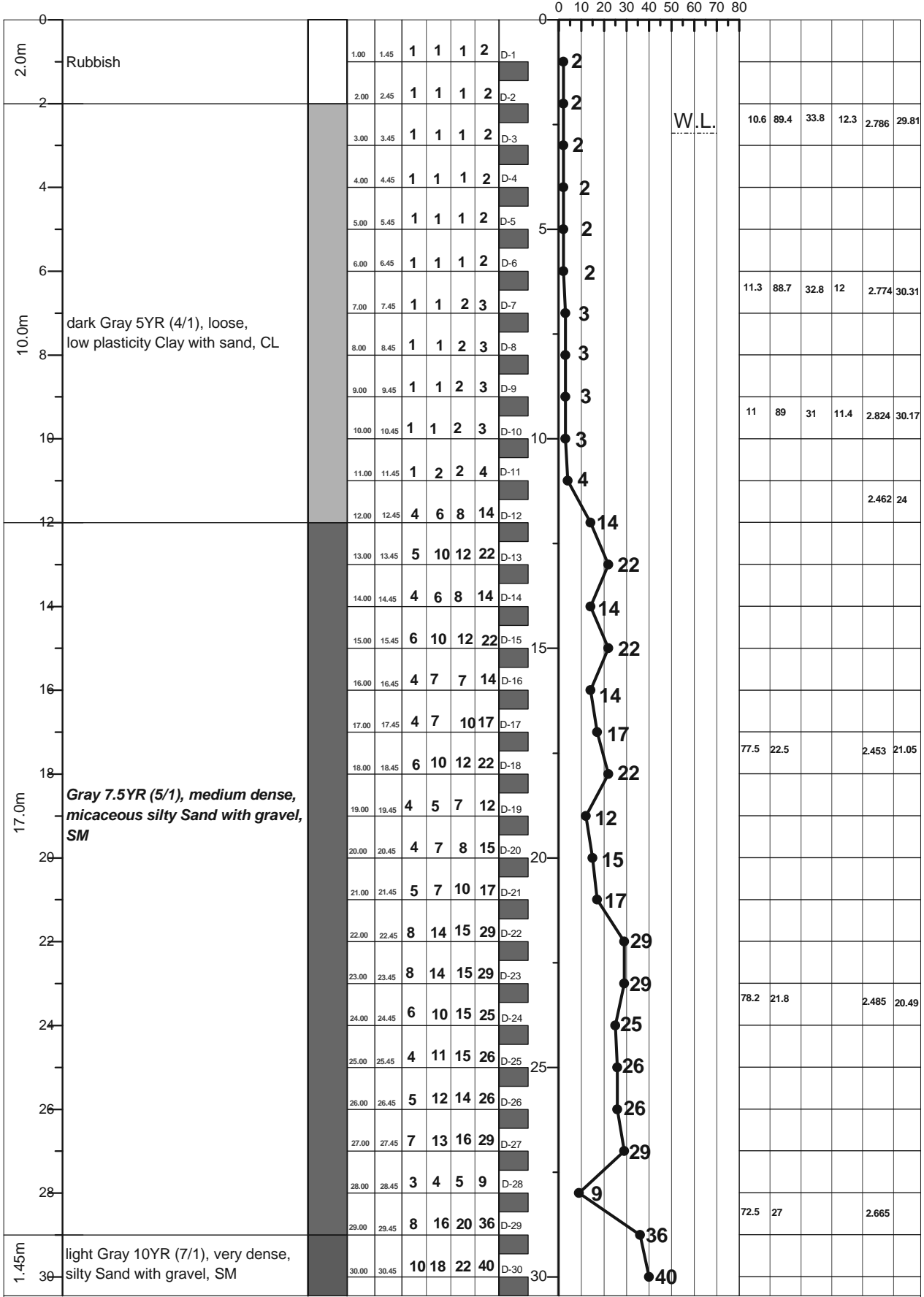
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 25
BRIDGE ID: N7_246a
LATITUDE: 22°34'23" LONGITUDE: 89°36'51"
CHAINAGE: 246.112



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 25	BOREHOLE NO: N7_246a	Longitude: N 89°36'51"	Latitude: E 22°34'23"
			Brigde ID: N7_246a	Road Name: Daulatdia-Faridpur -Magura-Jhenaidah-Jessore -Khulna-Mongla.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 246.112, RL: -4.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 30-03-2014	Completed Date: 5-04-2014	G. W. T : -2.703m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)								



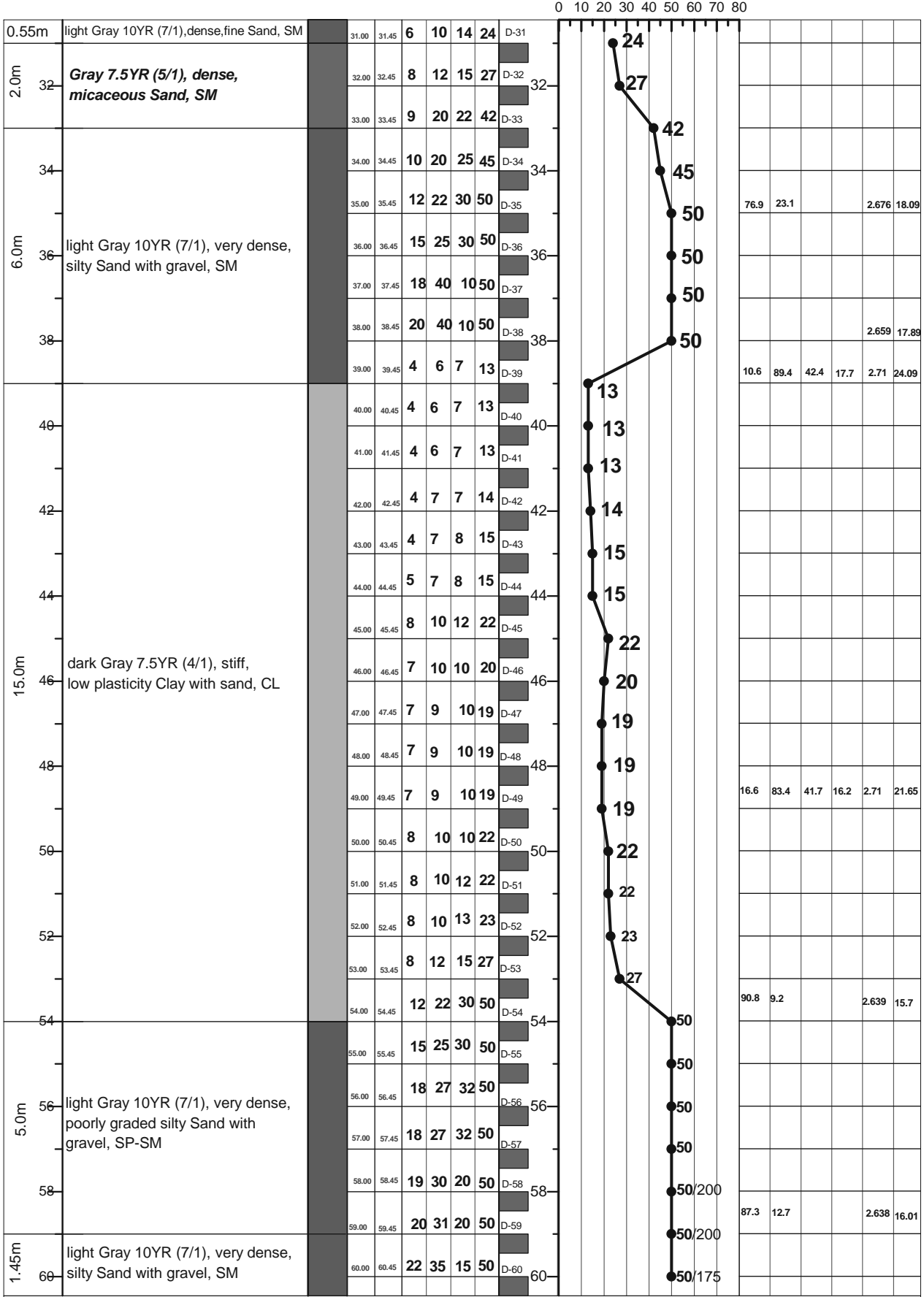
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 25	BOREHOLE NO: N7_246a	Longitude: N 89°36'51"	Latitude: E 22°34'23"
			Brigde ID: N7_246a	Road Name: Daulatdia-Faridpur -Magura-Jhenaidah-Jessore -Khulna-Mongla	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 246.112, RL: -4.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 30-03-2014	Completed Date: 5-04-2014	G. W. T : -2.703m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									



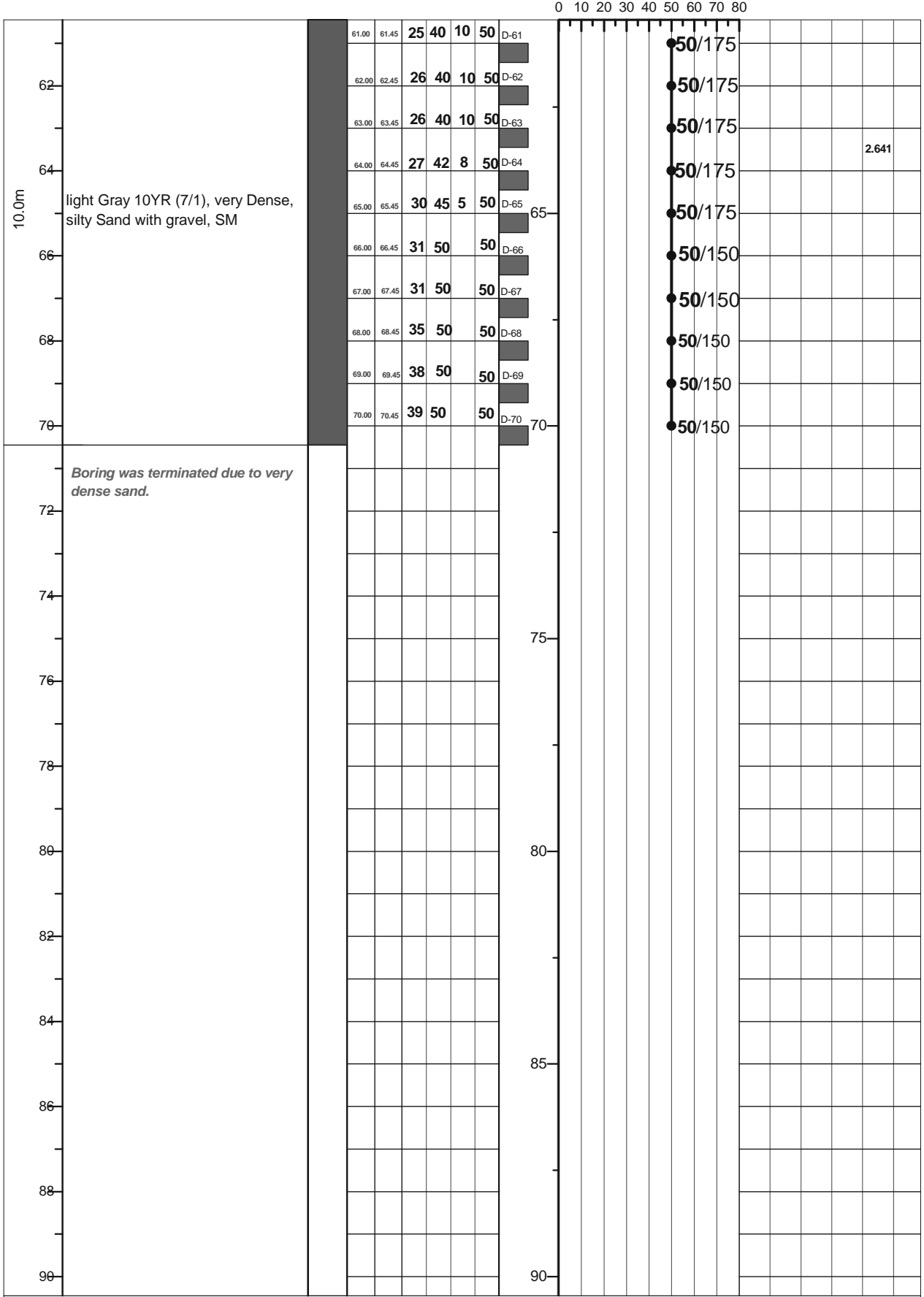
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 25	BOREHOLE NO: N7_246a	Longitude: N 89°36'51"	Latitude: E 22°34'23"
			Brigde ID: N7_246a	Road Name: Daulatdia-Faridpur -Magura-Jhenaidah-Jessore -Khulna-Mongla.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 246.112, RL: -4.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 30-03-2014	Completed Date: 5-04-2014	G. W. T : -2.703m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

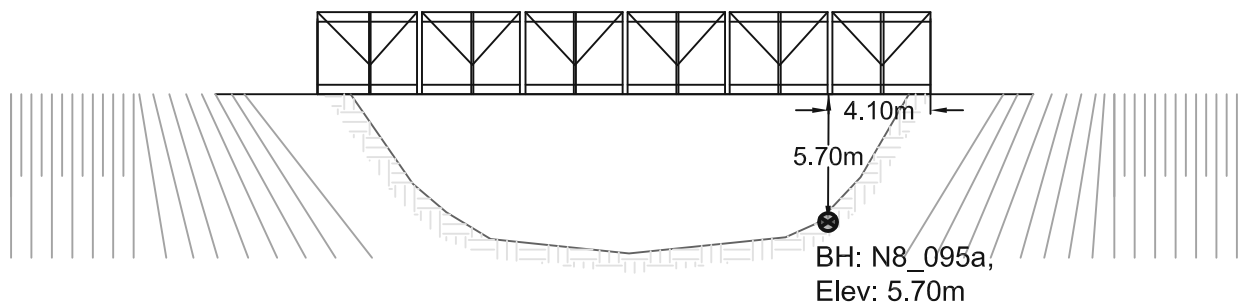
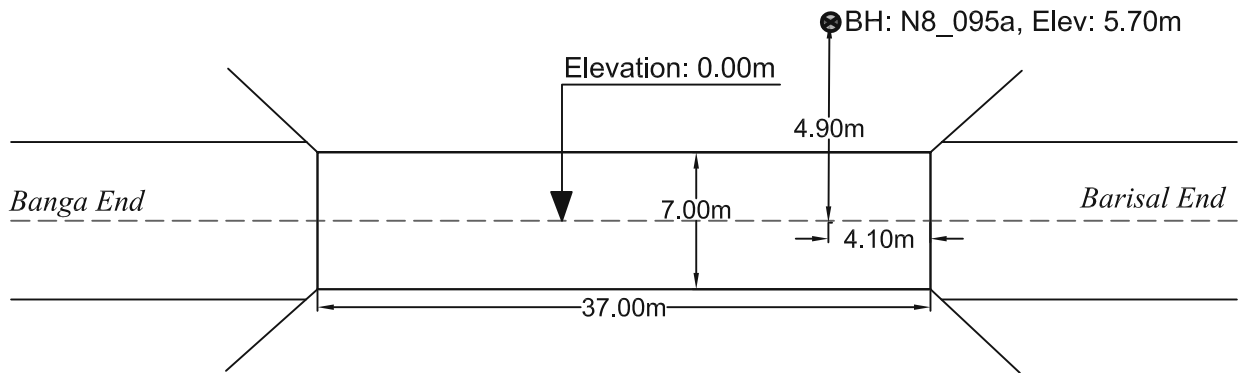
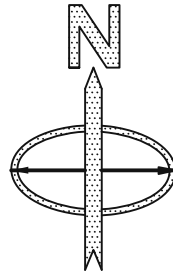
CLIENT: Oriental Consultants Company Limited.

RANK: 26

BRIDGE ID: N8_095a

LATITUDE: 23°11'56.62" LONGITUDE: 90°4'1.088"

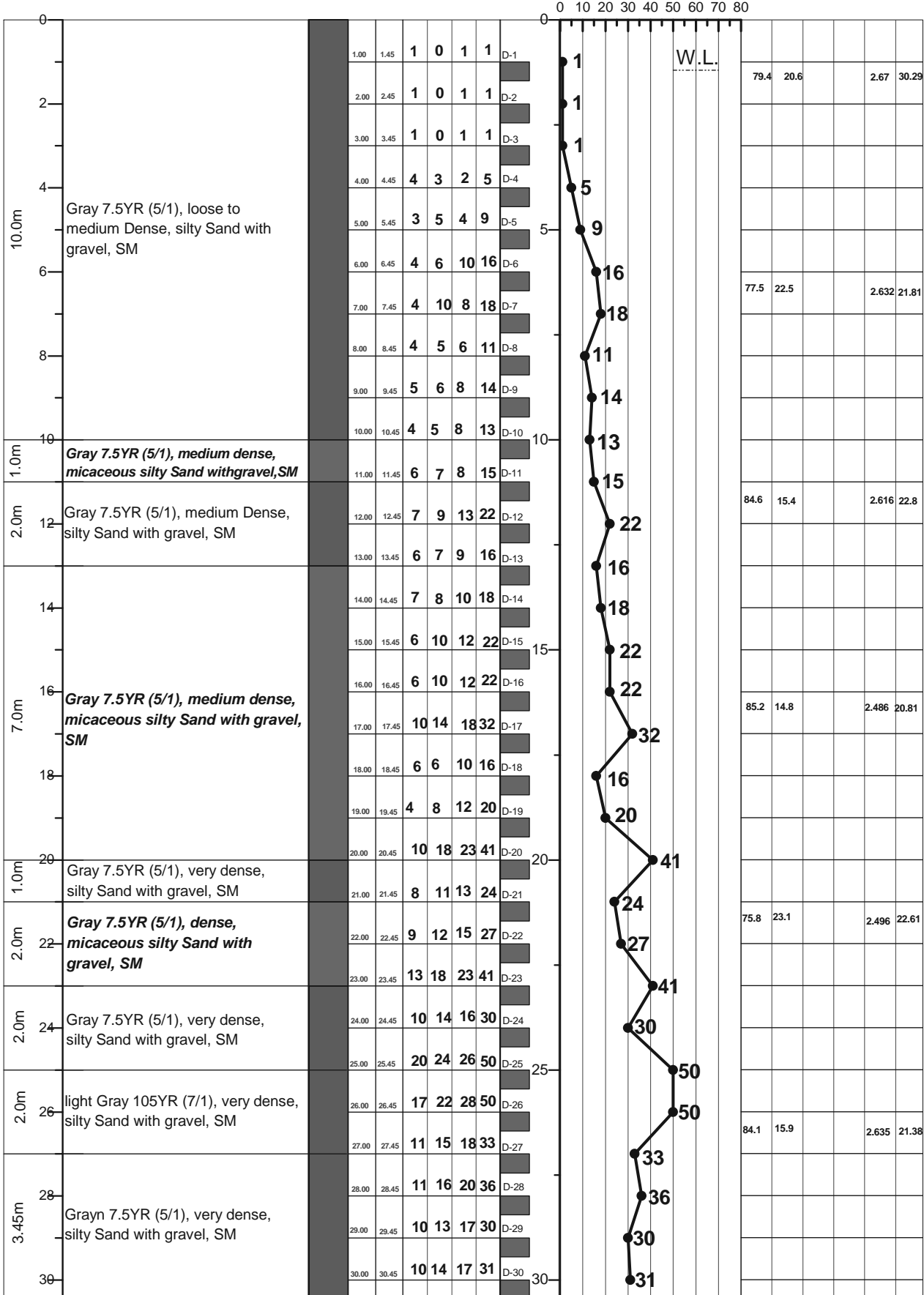
CHAINAGE: 94.098



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 26	BOREHOLE NO: N8_095a	Longitude: N 90°41'088"	Latitude: E 23°11'56.62"
			Brigde ID: N8_095a	Road Name: Dhaka(Jatrabari)-Mawa-Banga-Barisal- Patuakhali.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 94.098, RL: -5.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 18-03-2014	Completed Date: 24-03-2014	G. W. T : -1.2m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

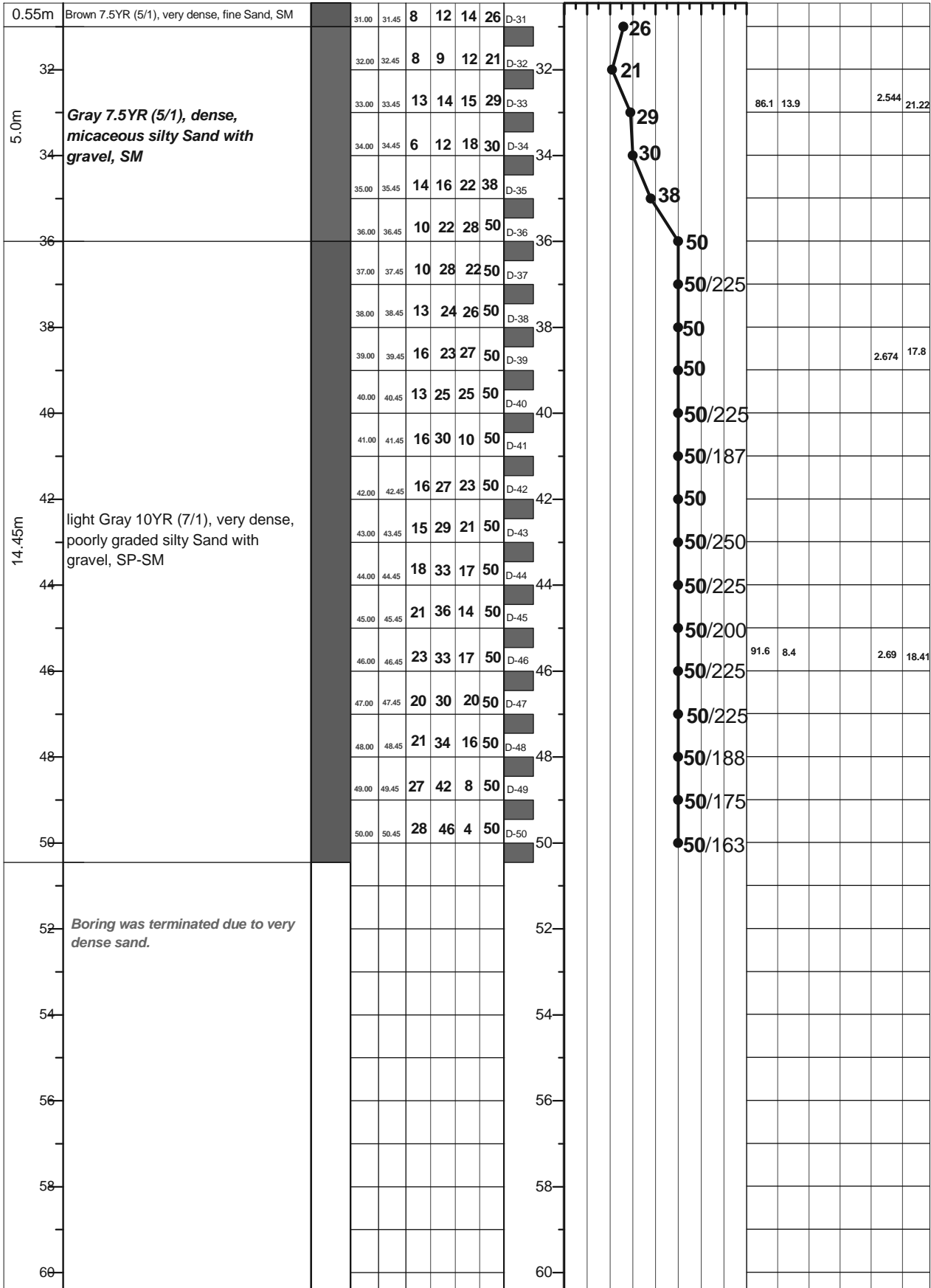
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 26	BOREHOLE NO: N8_095a	Longitude: N 89° 4' 1.088"	Latitude: E 23° 11' 56.62"
			Brigde ID: N8_095a	Road Name: Dhaka(Jatrabari)-Mawa-Banga-Barisal- Patuakhali	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 94.098, RL: -5.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 18-03-2014	Completed Date: 24-03-2014	G. W. T : -1.2m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

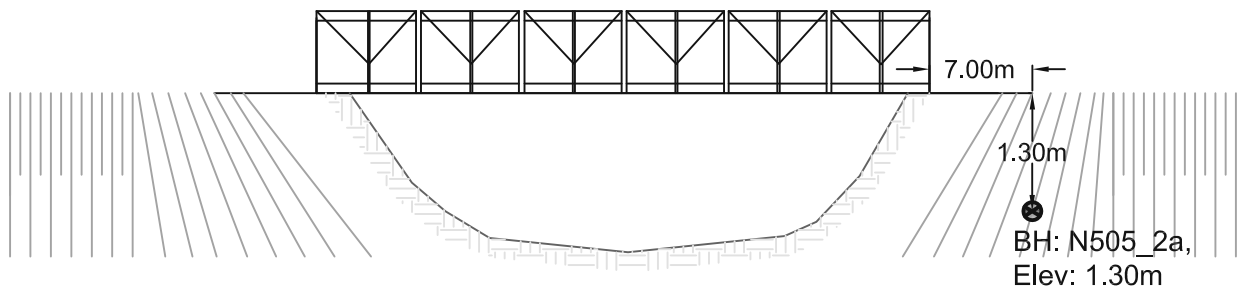
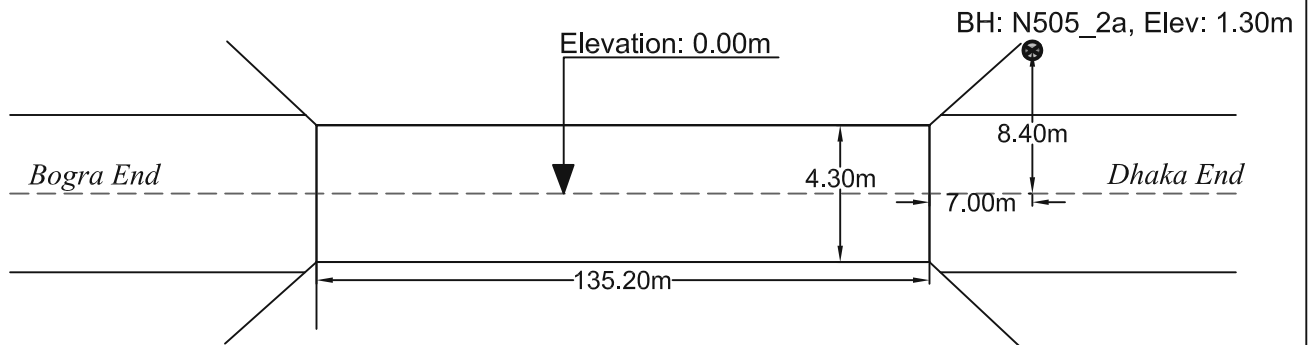
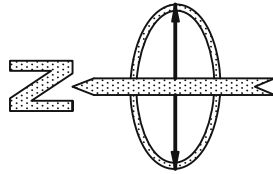


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

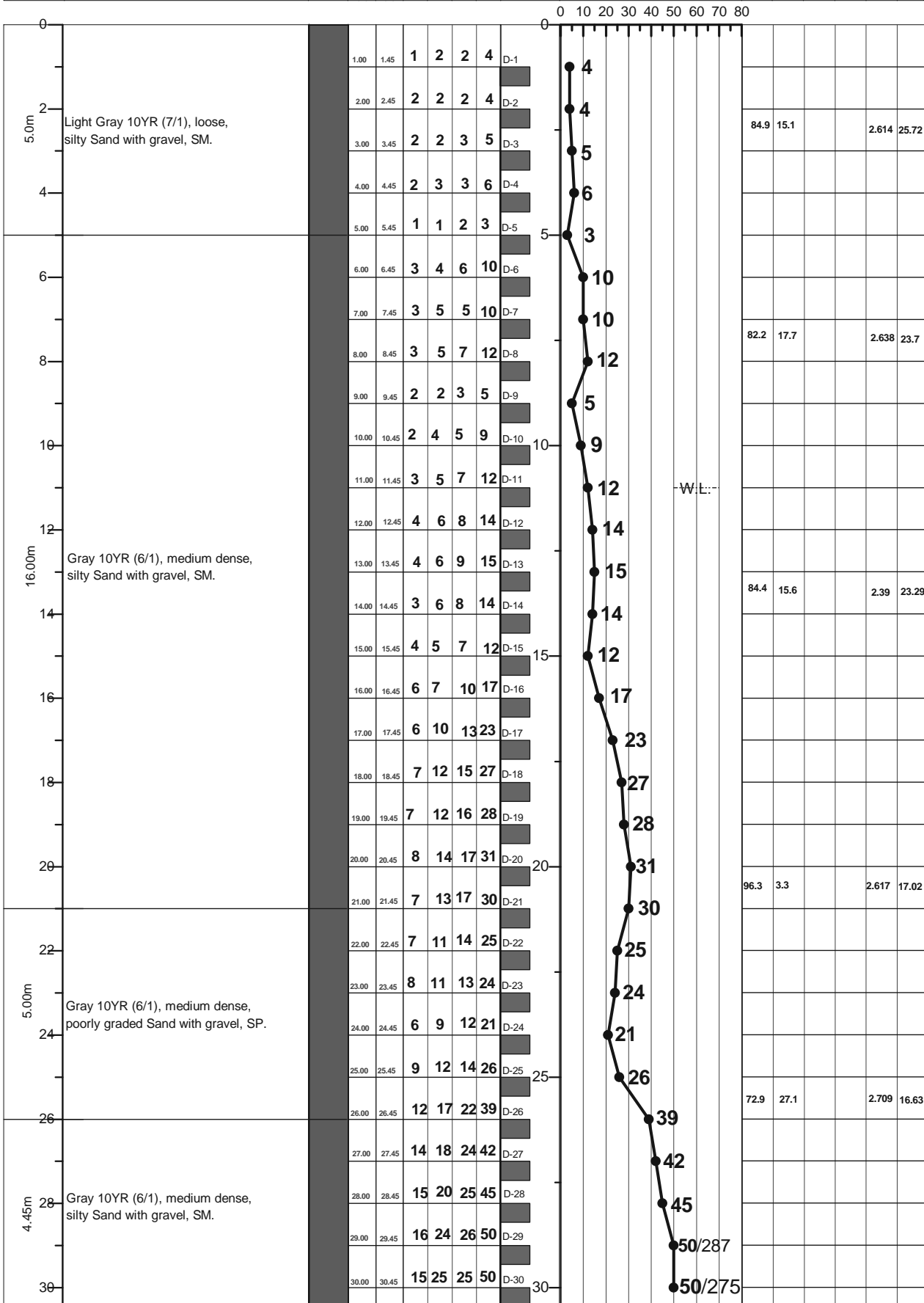
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 27
BRIDGE ID: N505_2a
LATITUDE: 23°52'49.845" LONGITUDE: 89°39'52.2"
CHAINAGE: 2.47



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 27	BOREHOLE NO: N505_2a	Longitude: N 89°39'52.2"	Latitude: E 23°52'49.845"
			Brigde ID: N505_2a	Road Name: Baderhat-Kazirhat (Latifpur).	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 36.0m	Chainage: 2.47, RL: -1.3m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 22-02-2014	G. W. T : -11.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

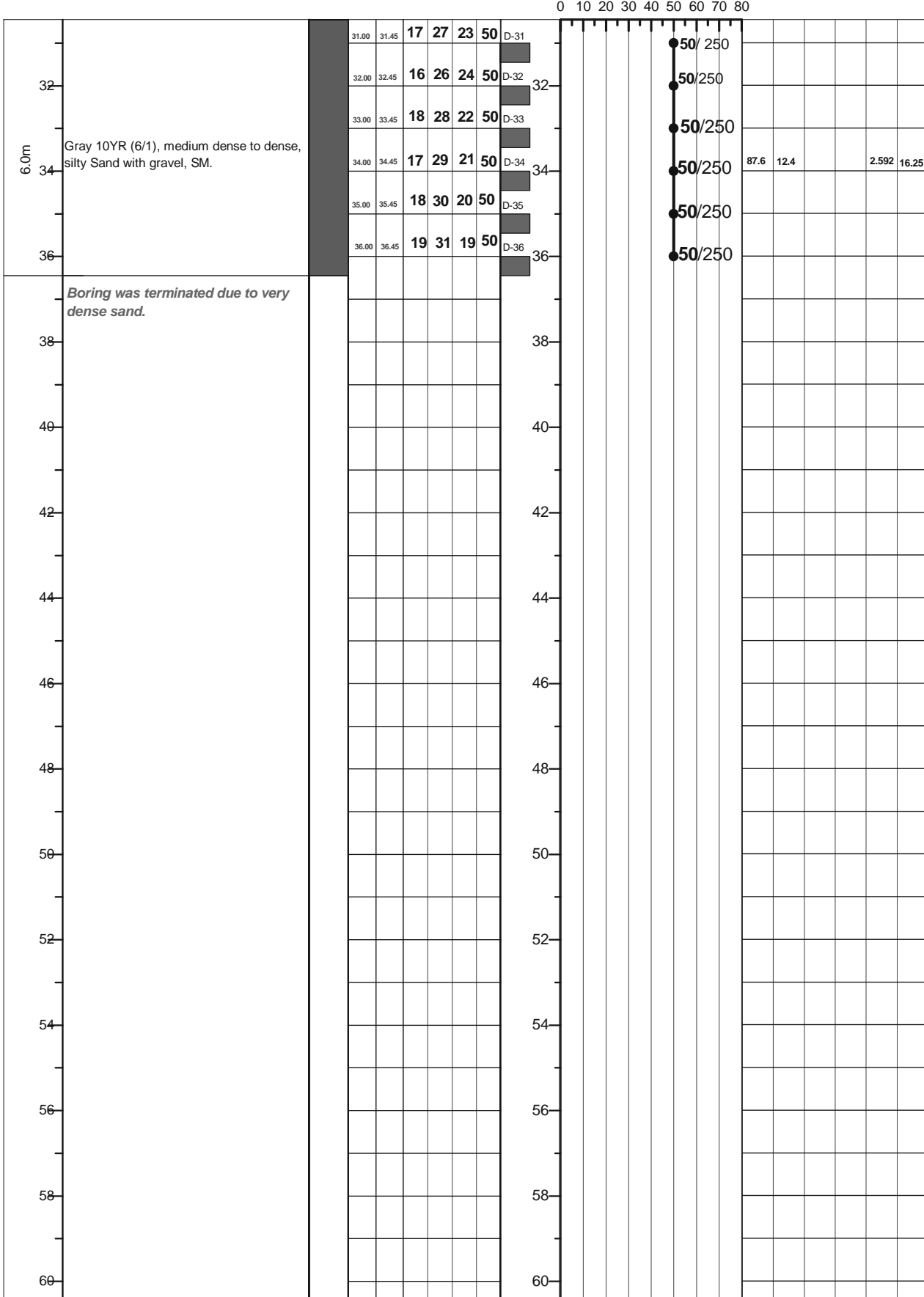
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	BOREHOLE NO: N505_2a	Longitude: N 89°39'52.2"	Latitude: E 23°52'49.845"
		Brigde ID: N505_2a	Road Name: Baderhat-Kazirhat (Latifpur)	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 36.0m	Chainage: 2.47, RL: -1.3
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 20-02-2014	Completed Date: 22-02-2014	G. W. T : -11.00m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING		SPT-N Value Blow/300mm				DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)	N4=600 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

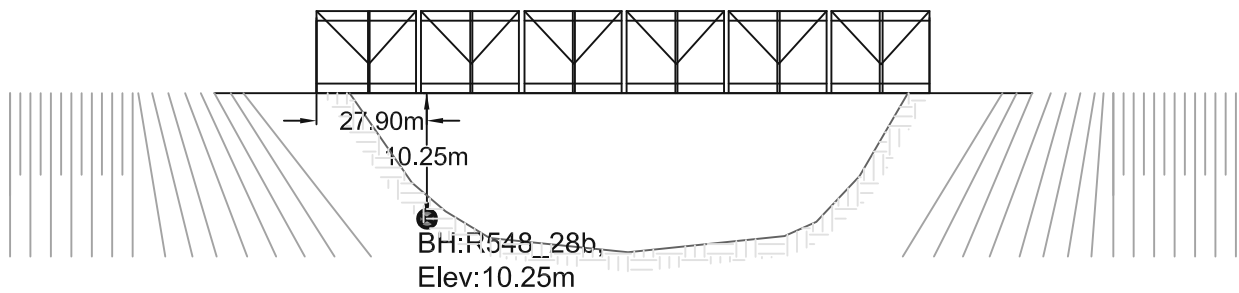
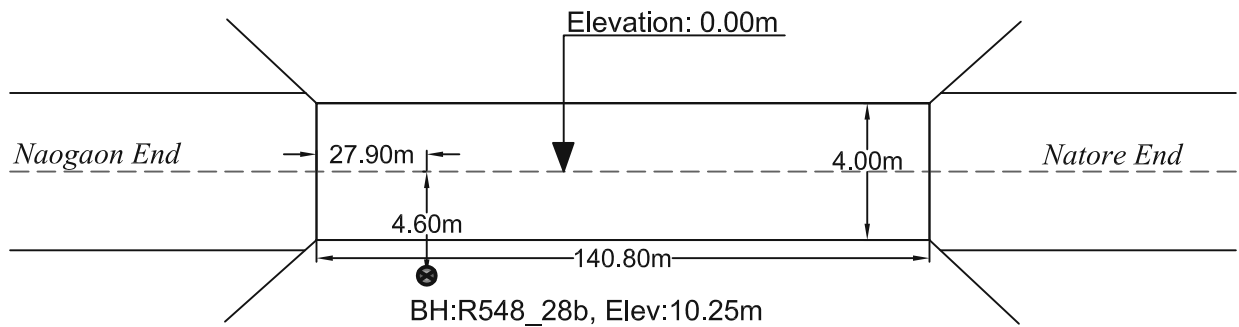
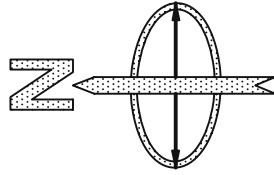
CLIENT: Oriental Consultants Company Limited.

RANK: 28

BRIDGE ID: R548_28b

LATITUDE: 24°36'45.203" LONGITUDE: 88°58'29.071"

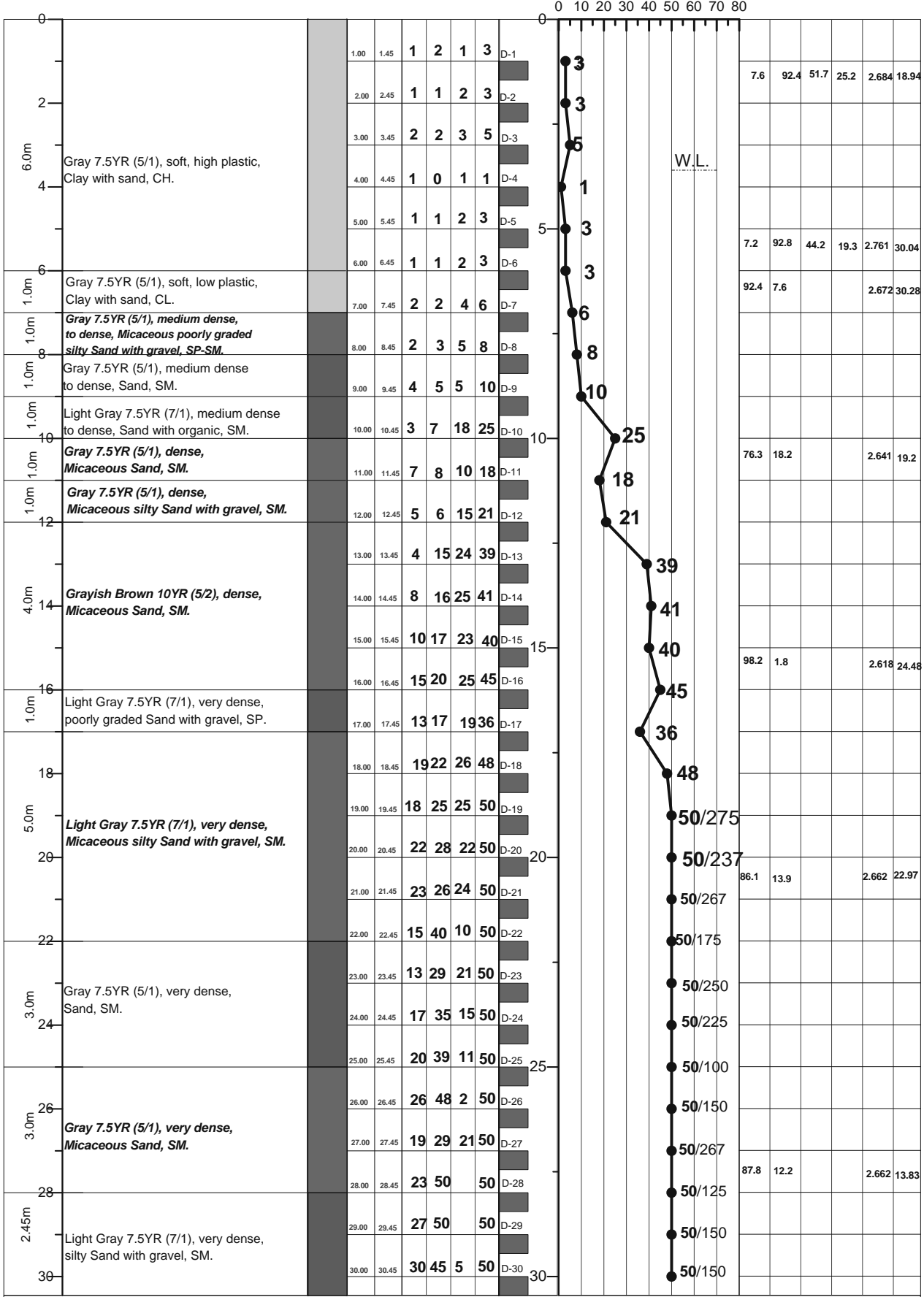
CHAINAGE: 27.8



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 28	BOREHOLE NO: R548_28b	Longitude: N 88°58'28"	Latitude: E 24°36'46"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 27.8, RL: -10.25m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 01-03-2014	Completed Date: 02-03-2014	G. W. T : -3.6m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

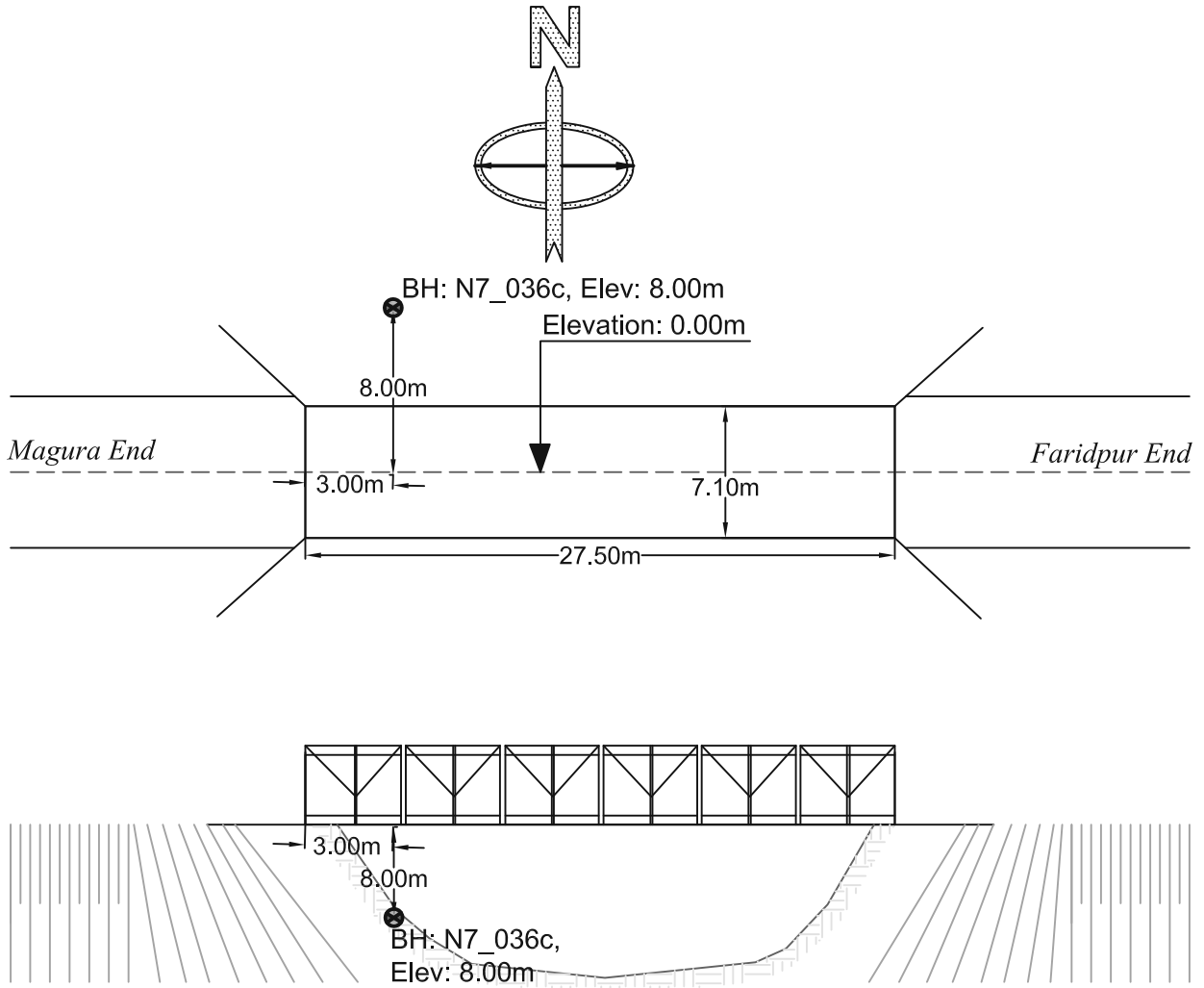


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 29
BRIDGE ID: N7_036c
LATITUDE: 23°32'20.808" LONGITUDE: 89°46'04.335"
CHAINAGE: 37.369



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 29	BOREHOLE NO: N7_036c	Longitude: N 90°16'38"	Latitude: E 23°32'20.808"
			Brigde ID: N7_036c	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 37.369, RL: -8.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 23-03-2014	Completed Date: 26-03-2014	G. W. T : -12.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _s	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									N6-600 (mm)
3.0m	Brown 7.5YR (5/2), soft, low plasticity Clay with sand, CL		1.00	1.45	1	2	3	5	D-1	5	16	84	43.9	18.4	2.743	30.62
			2.00	2.45	1	1	2	3	D-2	3						
			3.00	3.45	1	2	3	5	D-3	5						
2.0m	Gray 7.5YR (5/1), soft, low plasticity Clay with sand, CL		4.00	4.45	1	1	2	3	D-4	3	10.1	89.9	46.4	20.4	2.662	29.95
			5.00	5.45	1	2	3	5	D-5	5						
4.0m	Gray 7.5YR (5/1), loose, silty Sand with gravel, SM		6.00	6.45	2	2	3	5	D-6	5						
			7.00	7.45	3	6	8	14	D-7	14						
			8.00	8.45	2	4	6	10	D-8	10						
			9.00	9.45	5	8	12	20	D-9	20						
5.0m	Gray 7.5YR (5/1), dense, silty Sand with gravel, SM		10.00	10.45	6	9	15	24	D-10	24						
			11.00	11.45	6	18	21	39	D-11	39						
			12.00	12.45	7	25	25	50	D-12	50						
			13.00	13.45	7	11	13	24	D-13	24						
			14.00	14.45	1	1	2	3	D-14	3						
5.0m	Gray 7.5YR (5/1), soft, low plasticity Clay with sand, CL		15.00	15.45	1	2	3	5	D-15	5	13.3	86.7	45	19.8	2.675	29.22
			16.00	16.45	2	3	3	6	D-16	6						
			17.00	17.45	3	4	5	9	D-17	9						
			18.00	18.45	3	3	4	7	D-18	7						
			19.00	19.45	4	5	10	15	D-19	15						
9.0m	Gray 7.5YR (5/1), medium dense, poorly graded silty Sand with gravel, SP-SM		20.00	20.45	7	10	12	22	D-20	22						
			21.00	21.45	9	16	19	35	D-21	35						
			22.00	22.45	8	10	15	25	D-22	25						
			23.00	23.45	9	13	17	30	D-23	30						
			24.00	24.45	11	16	21	37	D-24	37						
			25.00	25.45	11	14	16	30	D-25	30						
			26.00	26.45	12	15	15	30	D-26	30						
2.45m	Gray 7.5YR (5/1), medium dense, silty Sand with gravel, SM		27.00	27.45	7	13	16	29	D-27	29						
			28.00	28.45	9	12	18	30	D-28	30						
			29.00	29.45	10	12	20	32	D-29	32						
			30.00	30.45	11	15	25	40	D-30	40						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

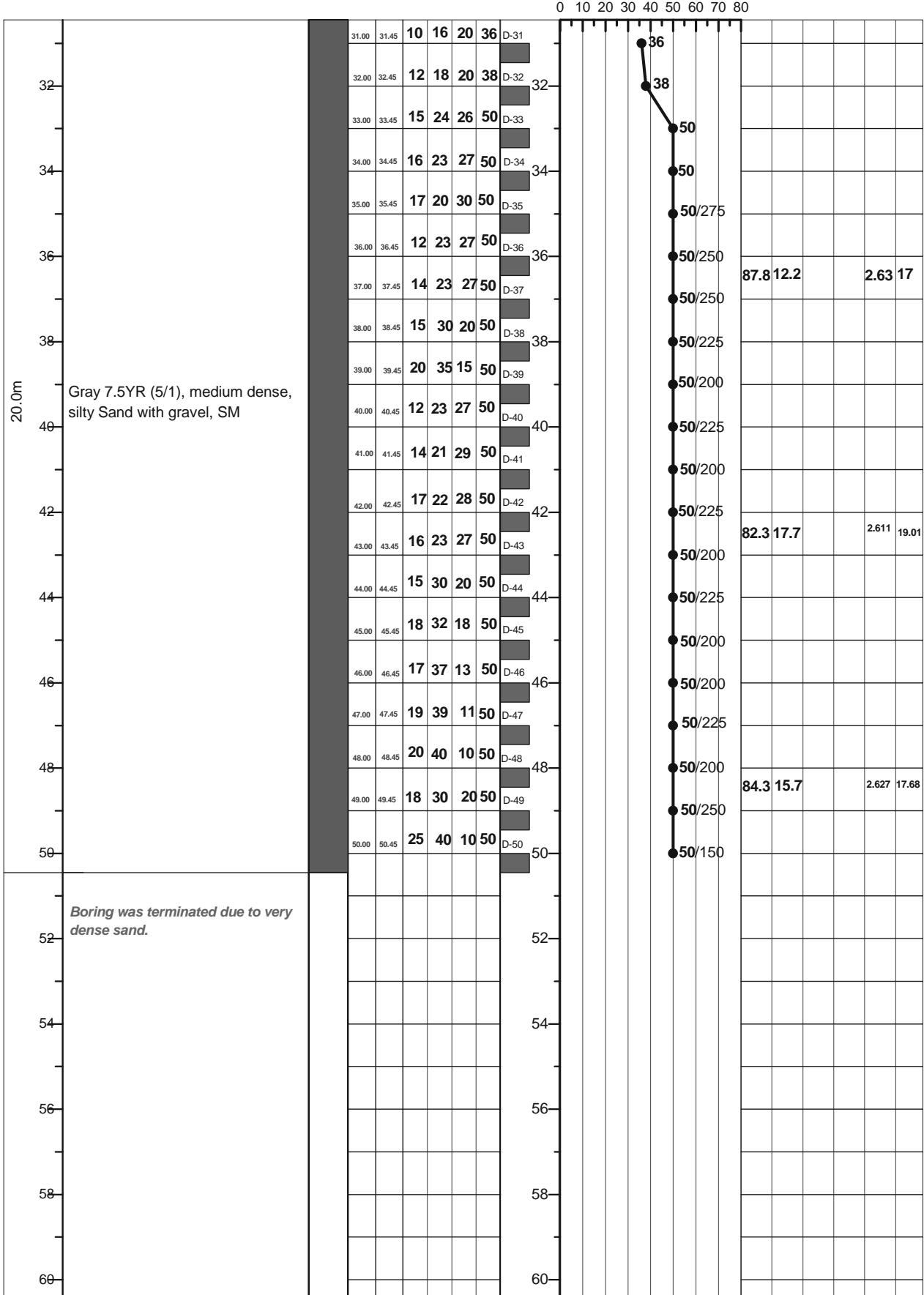
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 29	BOREHOLE NO: N7_036c	Longitude: N 90°16'38"	Latitude: E 23°32'20.808"
			Brigde ID: N7_036c	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 37.369, RL: -8.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 23-03-2014	Completed Date: 26-03-2014	G. W. T : -12.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

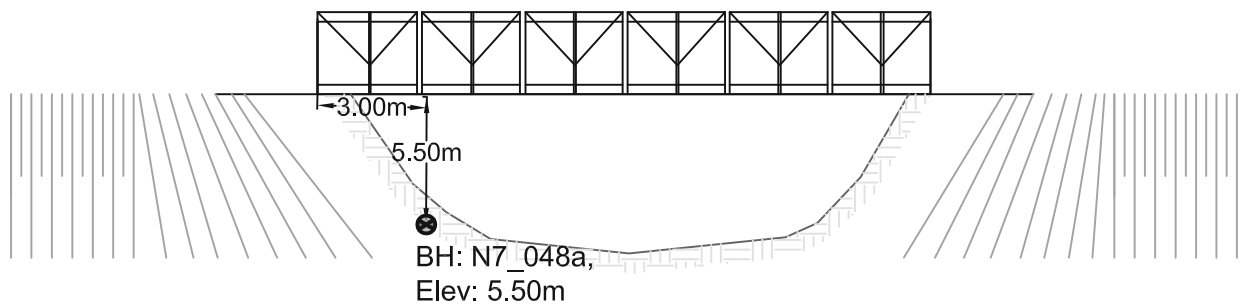
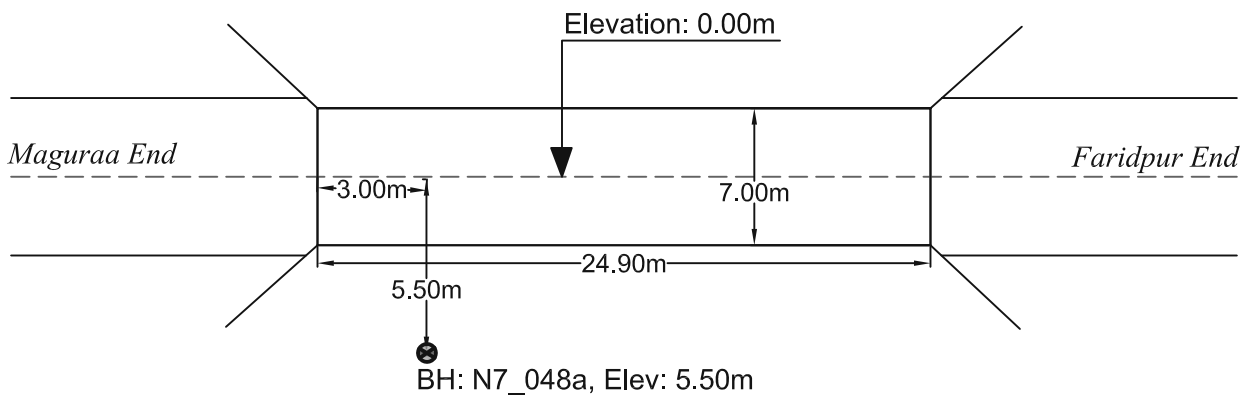
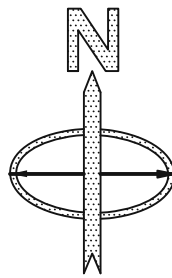


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

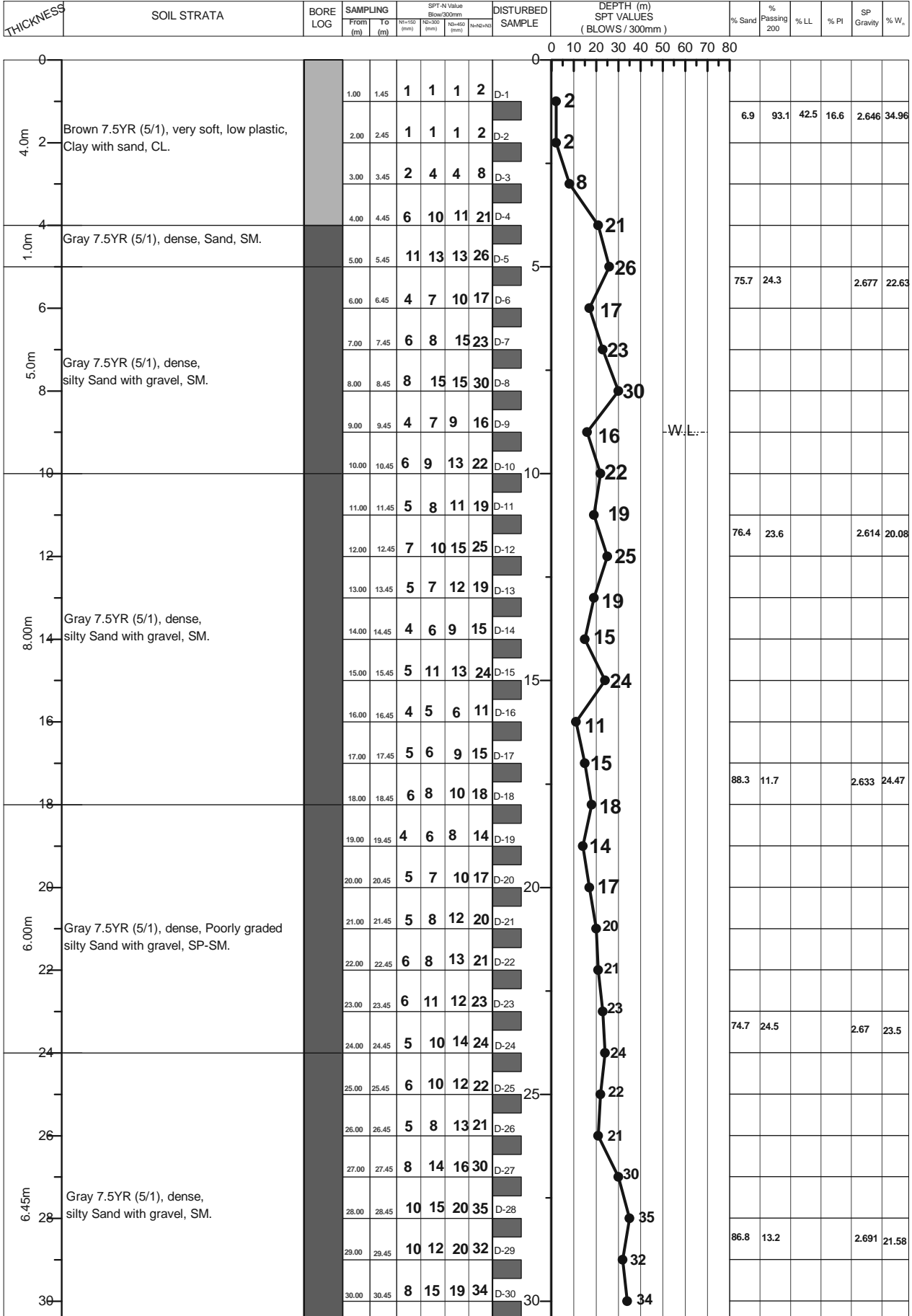
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 30
BRIDGE ID: N7_048a
LATITUDE: 23°32'06.95" LONGITUDE: 89°39'57.073"
CHAINAGE: 48.48



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 30	BOREHOLE NO: N7_048a	Longitude: N 089°39'57"	Latitude: E 23°32'07"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 50.0m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 27-03-2014		Completed Date: 31-03-2014	
			Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla.		Chainage: 48.48, RL: -5.5m
			G. W. T : -9.0m.		



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

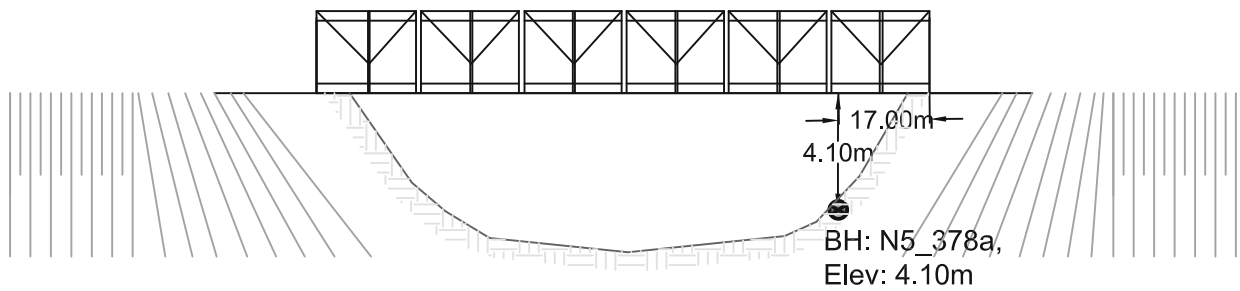
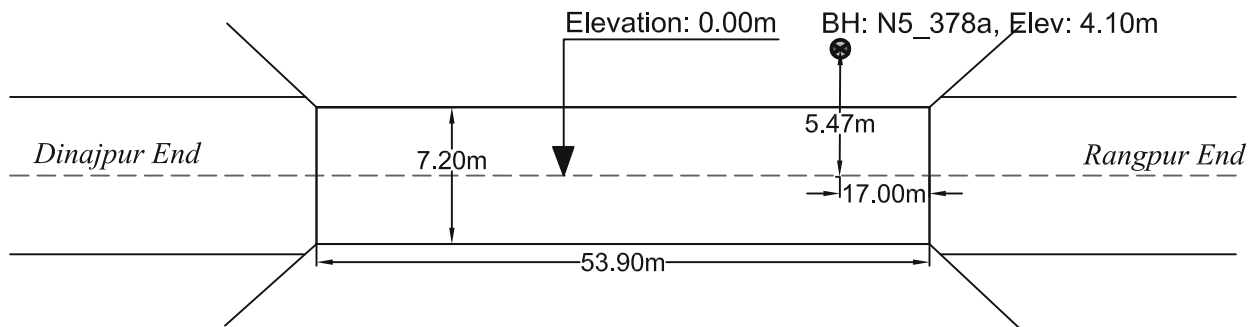
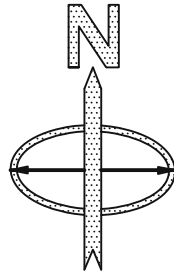
A2	PROSOIL	RANK: 30	BOREHOLE NO: N7_048a				Longitude: N 089°39'57"		Latitude: E 23°32'07"							
			Brigde ID: N7_048a				Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla.									
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary			Borehole Depth: 50.0m			Chainage: 48.48, RL: -5.5m							
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 27-03-2014			Completed Date: 31-03-2014			G. W. T : -9.0m.							
THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0 10 20 30 40 50 60 70 80																
2.55m	Gray 7.5YR (5/1), dense, Sand, SM.		31.00	31.45	8	12	18	30	D-31	30						
32			32.00	32.45	10	15	20	35	D-32	35						
			33.00	33.45	10	15	24	39	D-33	39						
1.00m		Gray 7.5YR (5/1), very dense, Sand, SM.		34.00	34.45	12	20	30	50	D-34	50					
34				35.00	35.45	10	25	25	50	D-35	50	95.6	4.4		2.651	20.03
2.00m	Gray 7.5YR (5/1), very dense, Poorly graded Sand with gravel, SP.		36.00	36.45	15	21	29	50	D-36	50						
36			37.00	37.45	13	20	30	50	D-37	50/275						
1.00m	Brown 7.5YR (5/1), very dense, fine Sand, SM.		38.00	38.45	15	21	29	50	D-38	50/275						
38			39.00	39.45	12	30	20	50	D-39	50/250						
6.0m	Gray 7.5YR (5/1), very dense, Poorly graded Sand with gravel, SP.		40.00	40.45	18	20	30	50	D-40	50						
		40		41.00	41.45	16	21	30	50	D-41	50	95.9	4.1		2.658	20.53
				42.00	42.45	18	28	22	50	D-42	50/250					
		42		43.00	43.45	10	19	31	50	D-43	50/250					
				44.00	44.45	13	25	25	50	D-44	50/275					
2.00m	Brown 7.5YR (5/3), very dense, fine Sand, SM.		45.00	45.45	18	30	20	50	D-45	50/225						
44			46.00	46.45	15	20	30	50	D-46	50						
5.45m	Gray 7.5YR (5/1), very dense, Poorly graded silty Sand with gravel, SP-SM.		47.00	47.45	14	23	27	50	D-47	50						
		46		48.00	48.45	15	20	30	50	D-48	50	92.2	7.8		2.64	19.56
				49.00	49.45	20	25	25	50	D-49	50/250					
		48		50.00	50.45	6	28	22	50	D-50	50/275					
		50														
	<i>Boring was terminated due to very dense sand.</i>															
52																
54																
56																
58																
60																

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

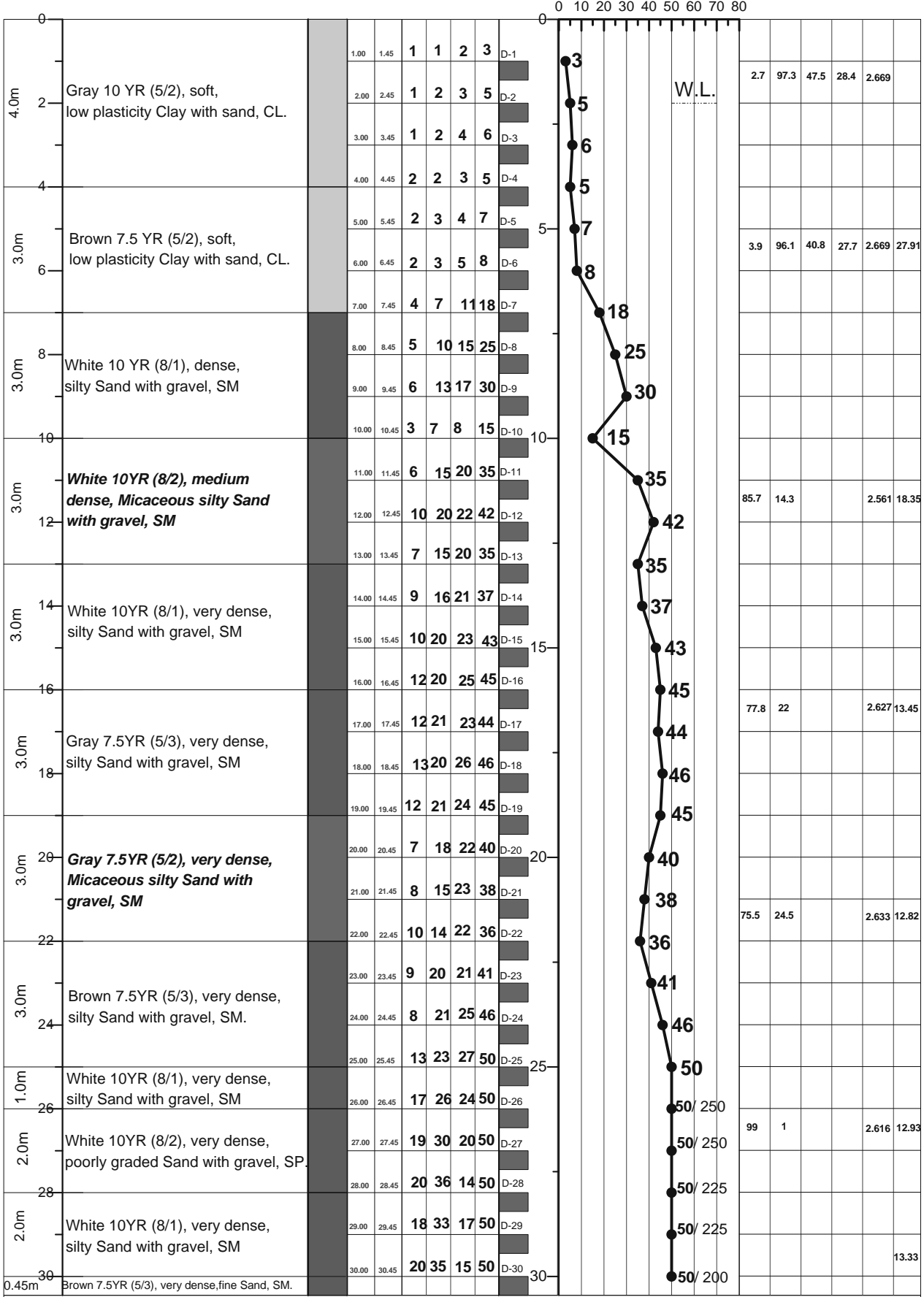
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 31
BRIDGE ID: N5_378a
LATITUDE: 25°45'59.723" LONGITUDE: 88°49'58.692"
CHAINAGE: 375.421



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 31	BOREHOLE NO: N5-378a	Longitude: N 88°59'21.77"	Latitude: E 25°45'59.723"
			Brigde ID: N5-378a	Road Name: Dhaka-Paturia-Kashinathpur- Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 375.210, RL: -4.10
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 2-03-2014	Completed Date: 4-03-2014	G. W. T : -2.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

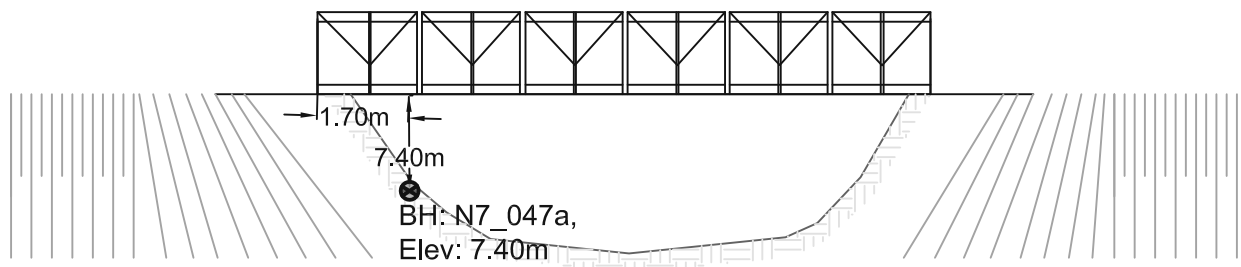
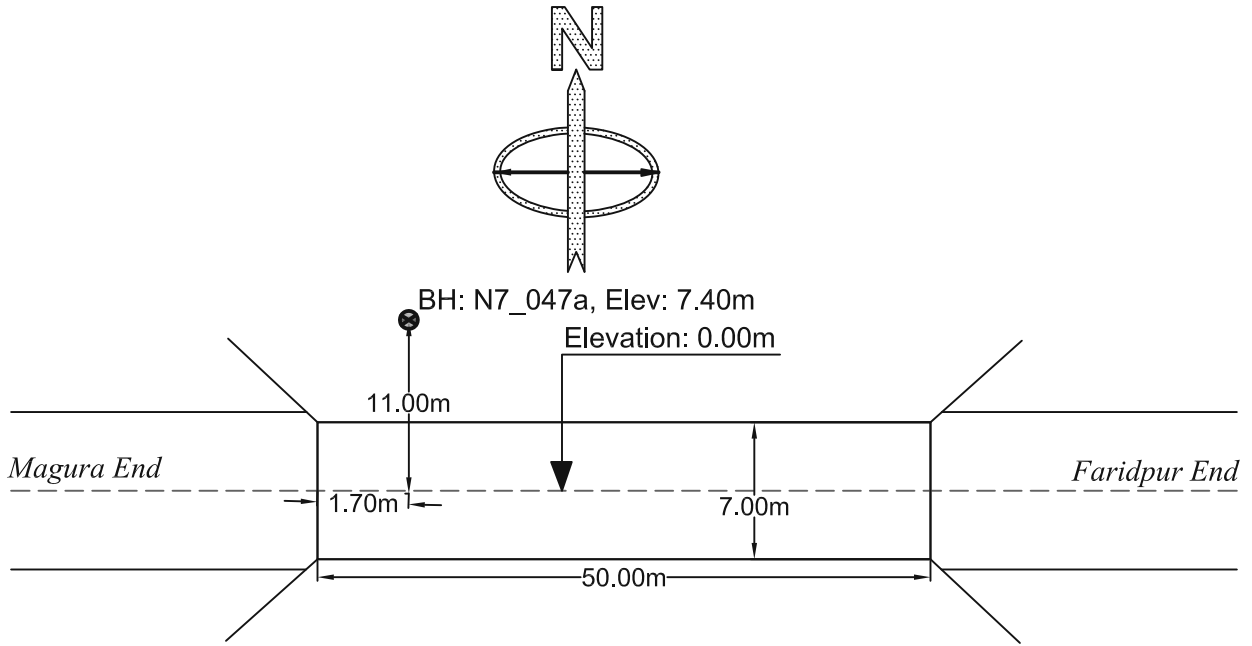


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

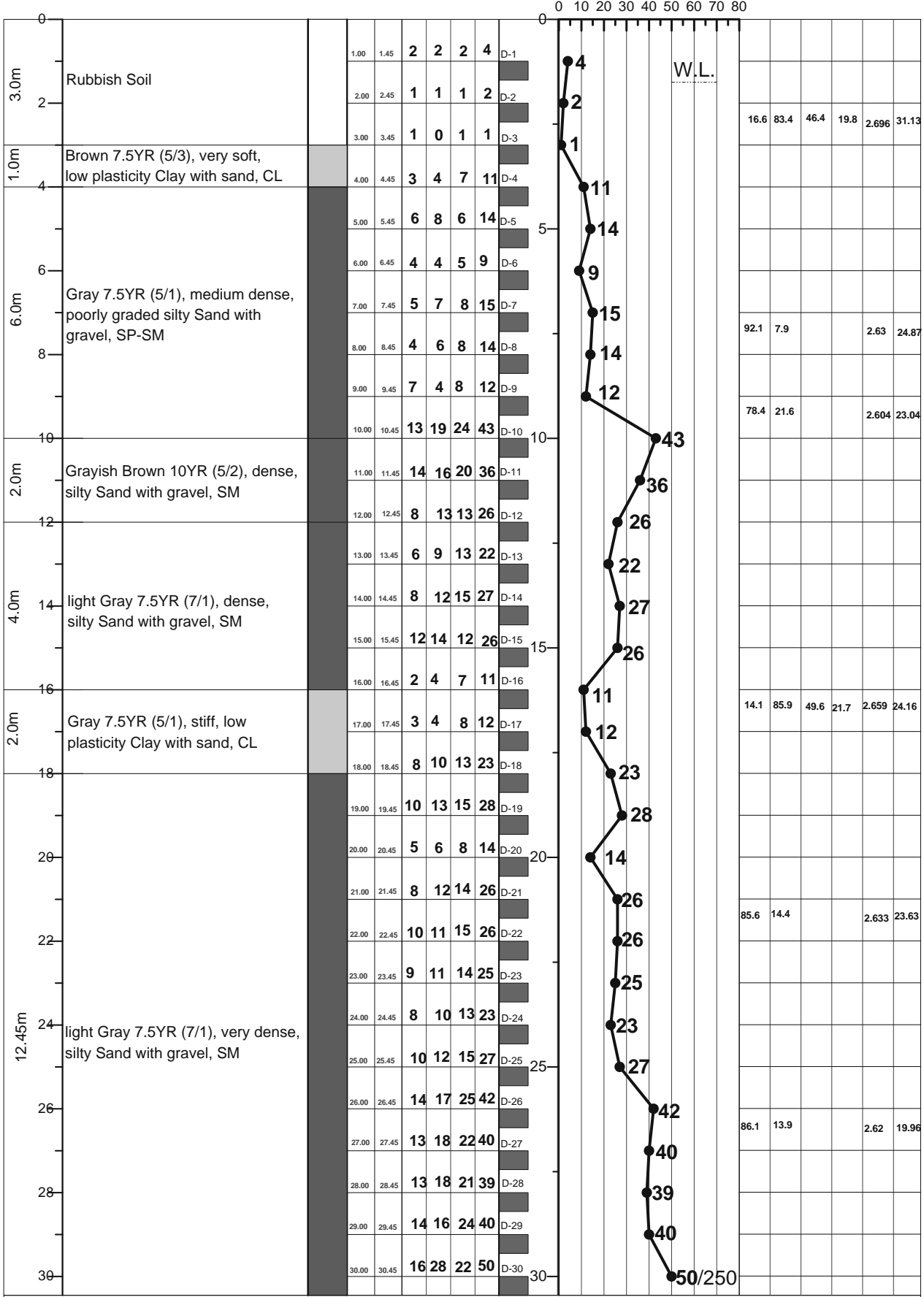
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 32
BRIDGE ID: N7_047a
LATITUDE: 23°32'03.719" LONGITUDE: 89°40'18.717"
CHAINAGE: 47.833



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 32	BOREHOLE NO: N7_047a	Longitude: N 90°16'38"	Latitude: E 23°32'3.719"
			Brigde ID: N7_047a	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 47.833, RL: -7.4m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 28-03-2014	Completed Date: 1-04-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



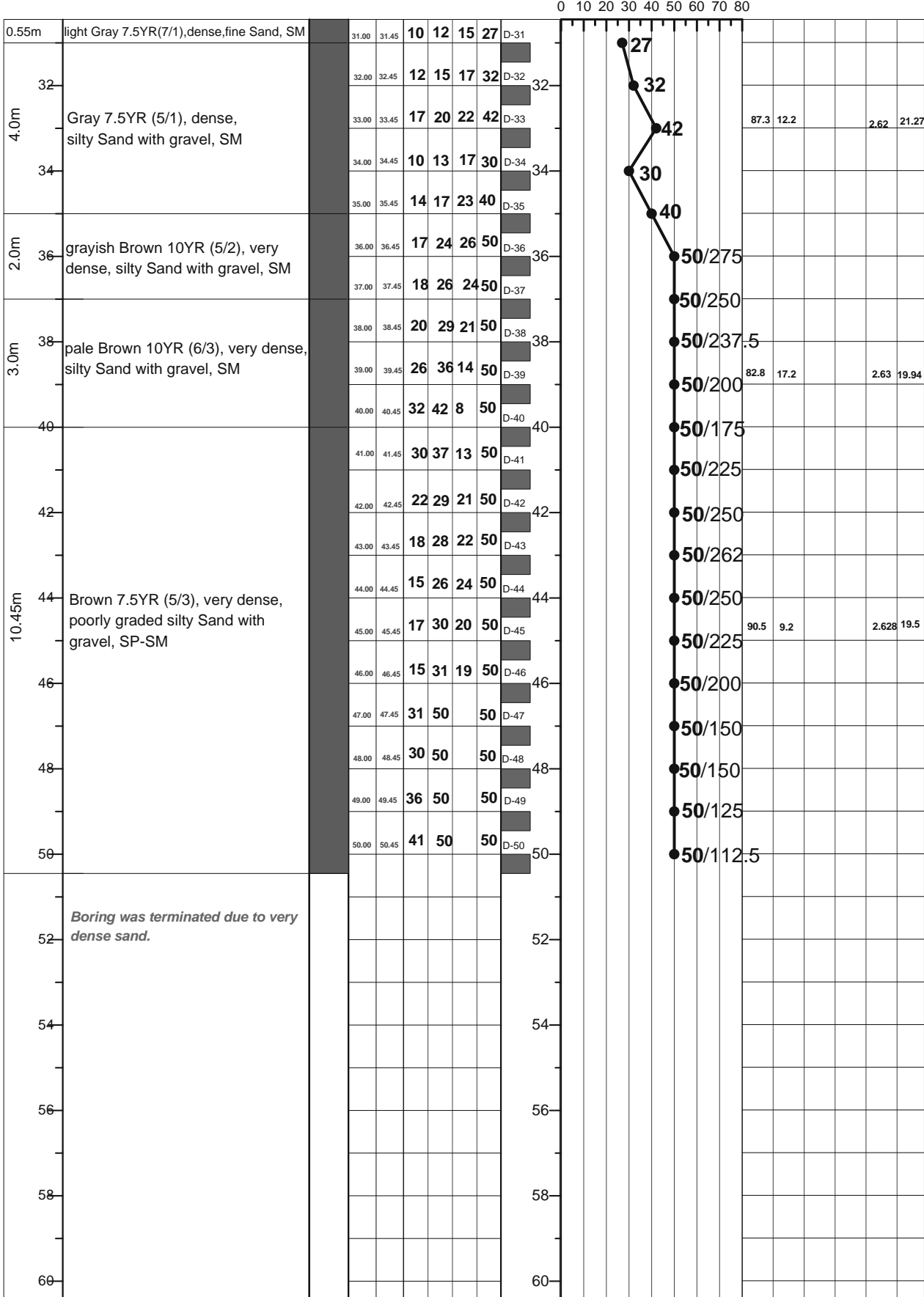
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 32	BOREHOLE NO: N7_047a	Longitude: N 90°16'38"	Latitude: E 23°32'03.719"
			Brigde ID: N7_047a	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 47.833, RL: -7.4m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 28-03-2014	Completed Date: 1-04-2014	G. W. T : -1.5m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING		SPT-N Value Blow/300mm					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)	N4-600 (mm)	N5-750 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

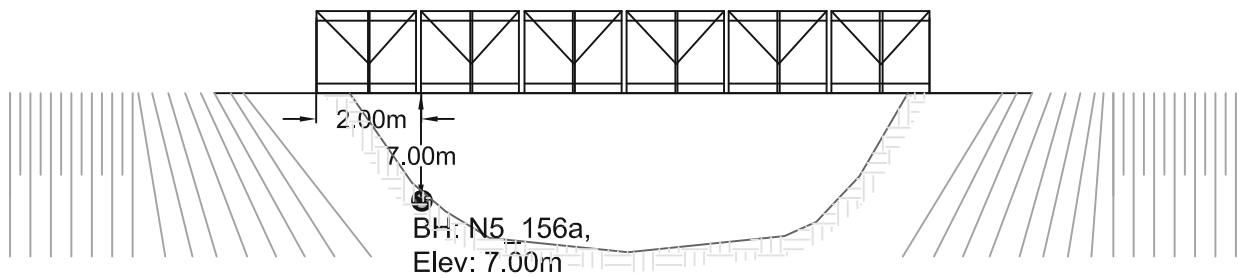
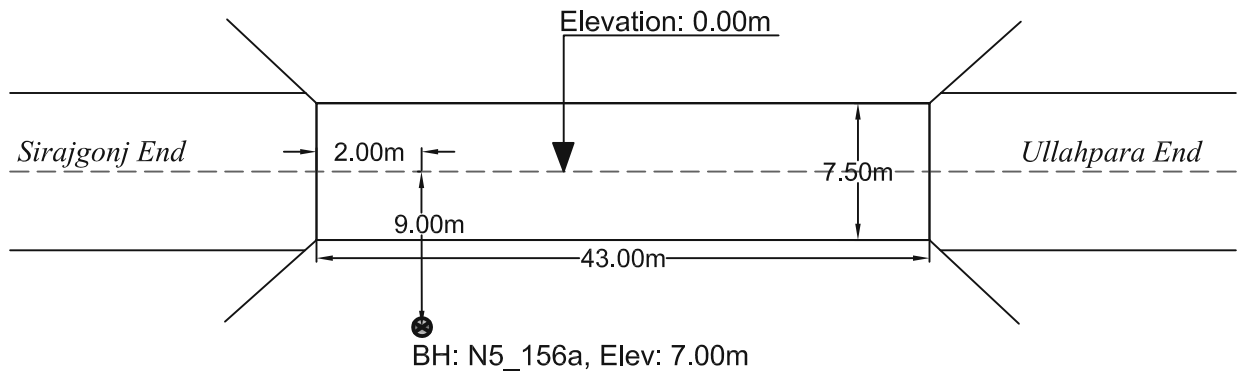
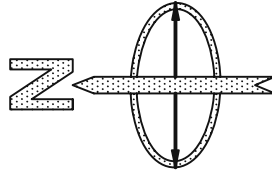
CLIENT: Oriental Consultants Company Limited.

RANK: 33

BRIDGE ID: N5_156a

LATITUDE: 24°19'59.876" LONGITUDE: 89°33'42.921"

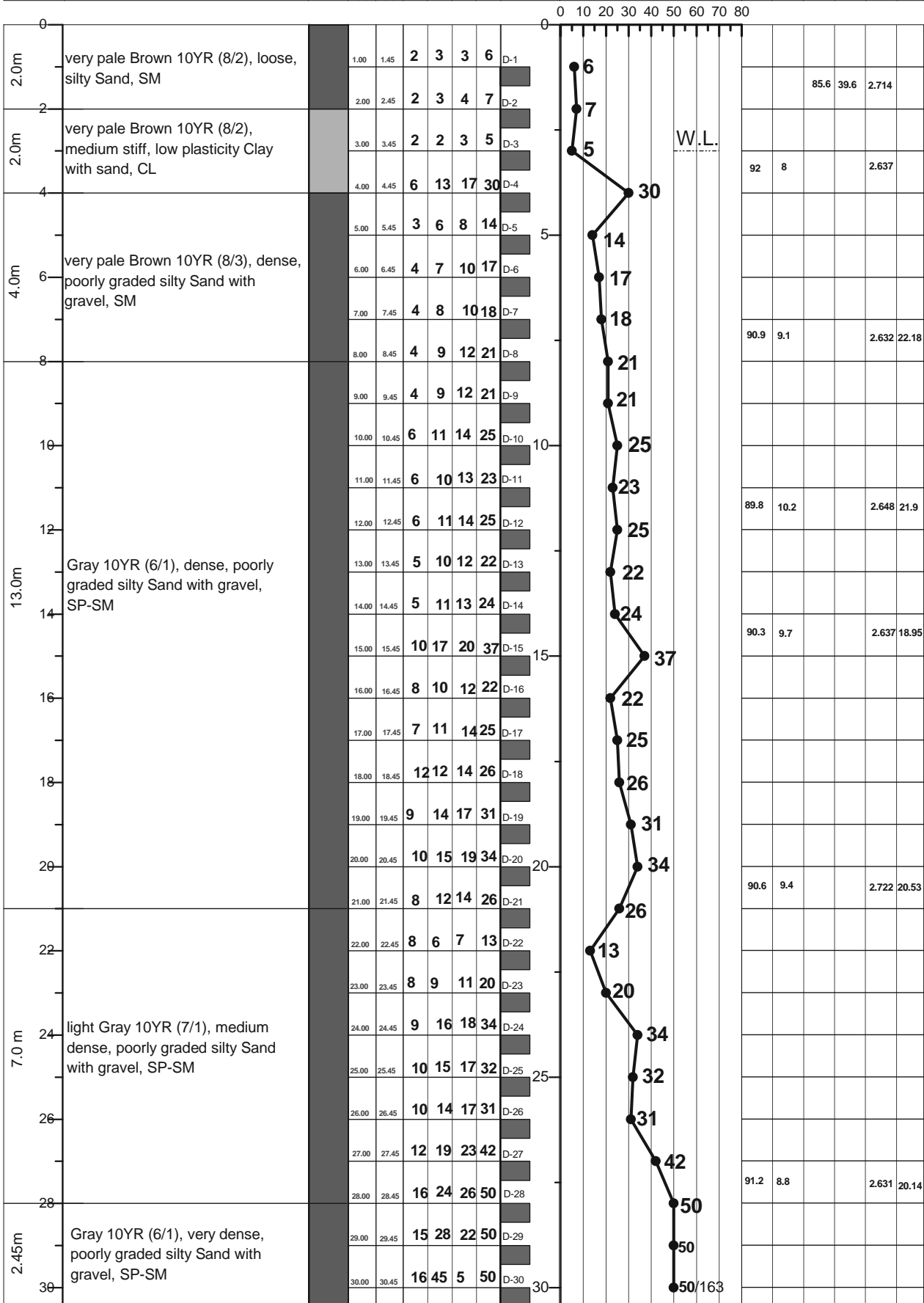
CHAINAGE: 153.977



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 33	BOREHOLE NO: N5_156a	Longitude: N 24°19'59"	Latitude: E 89°33'42"
			Brigde ID: N5_156a	Road Name: Dhaka-Utholi-Paturia-Bogra-Rangpur-Banglabandh Road.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 40.0m	Chainage: 153.977, RL: -7.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 2-03-2014	Completed Date: 4-03-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



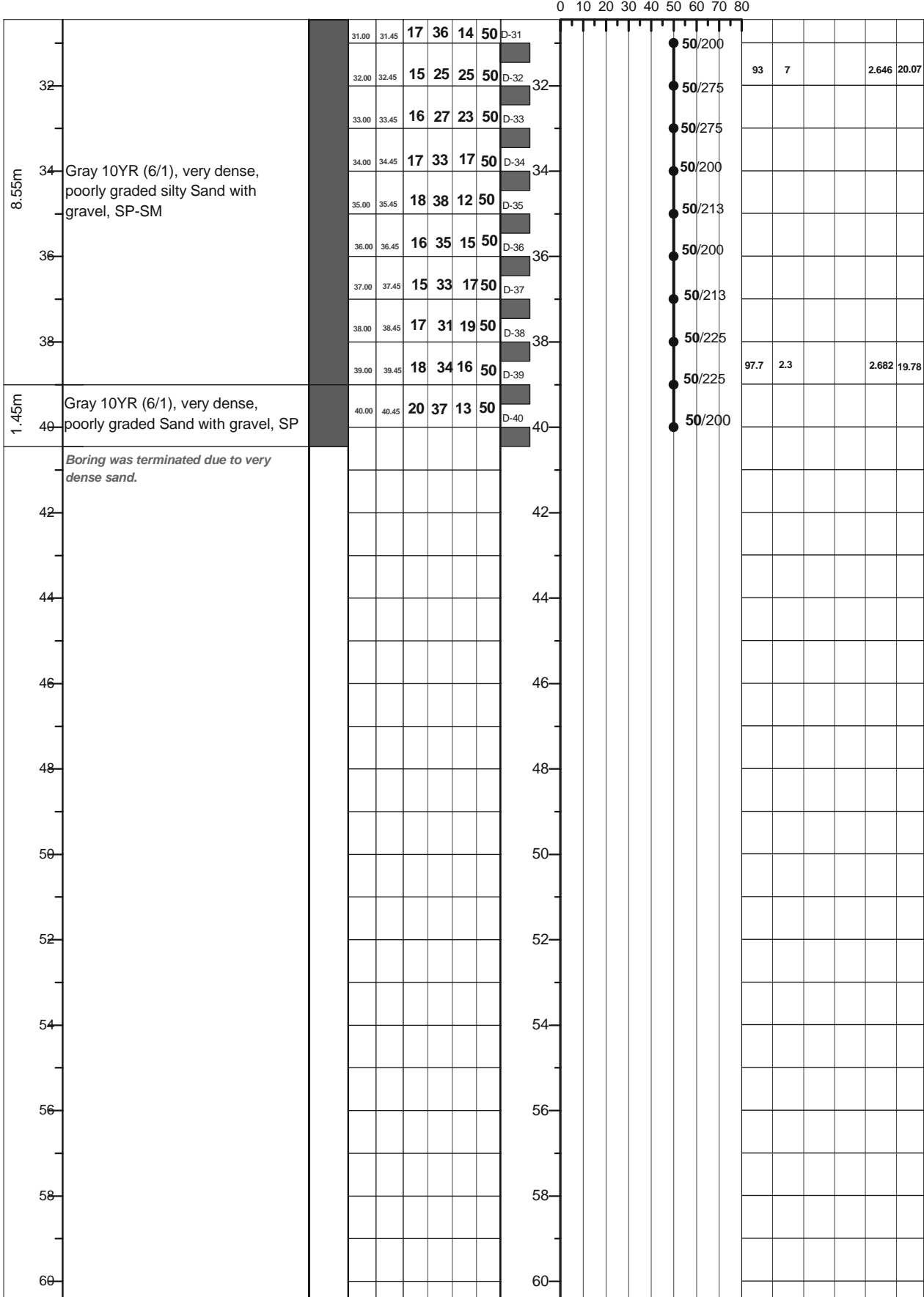
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 33	BOREHOLE NO: N5-156a	Longitude: N 89°34'49.15"	Latitude: E 24°19'59.876"
			Brigde ID: N5-156a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 40.0m	Chainage: 153.977, RL: -7.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 2-03-2014	Completed Date: 4-03-2014	G. W. T : -3.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)								

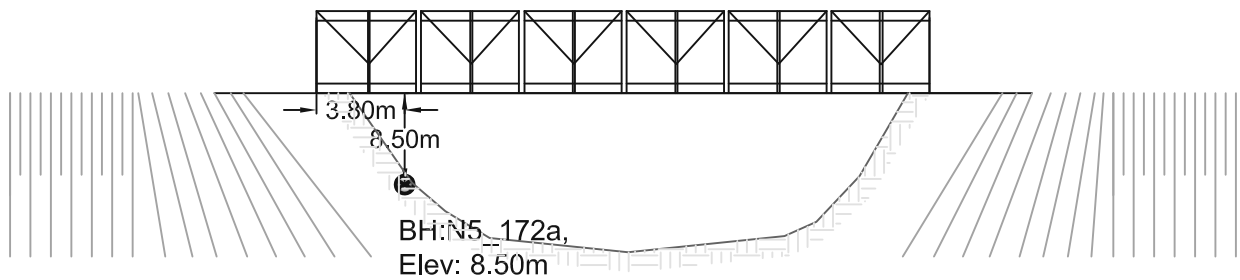
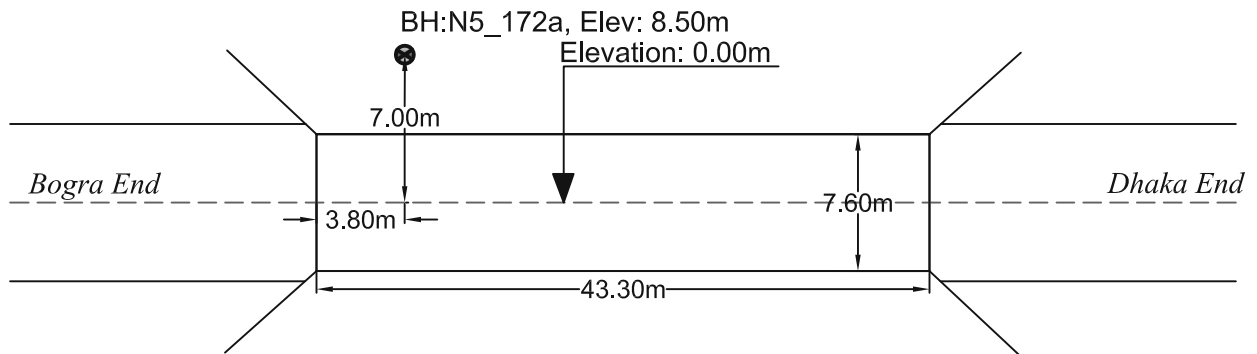
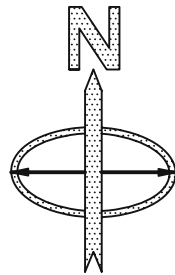


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

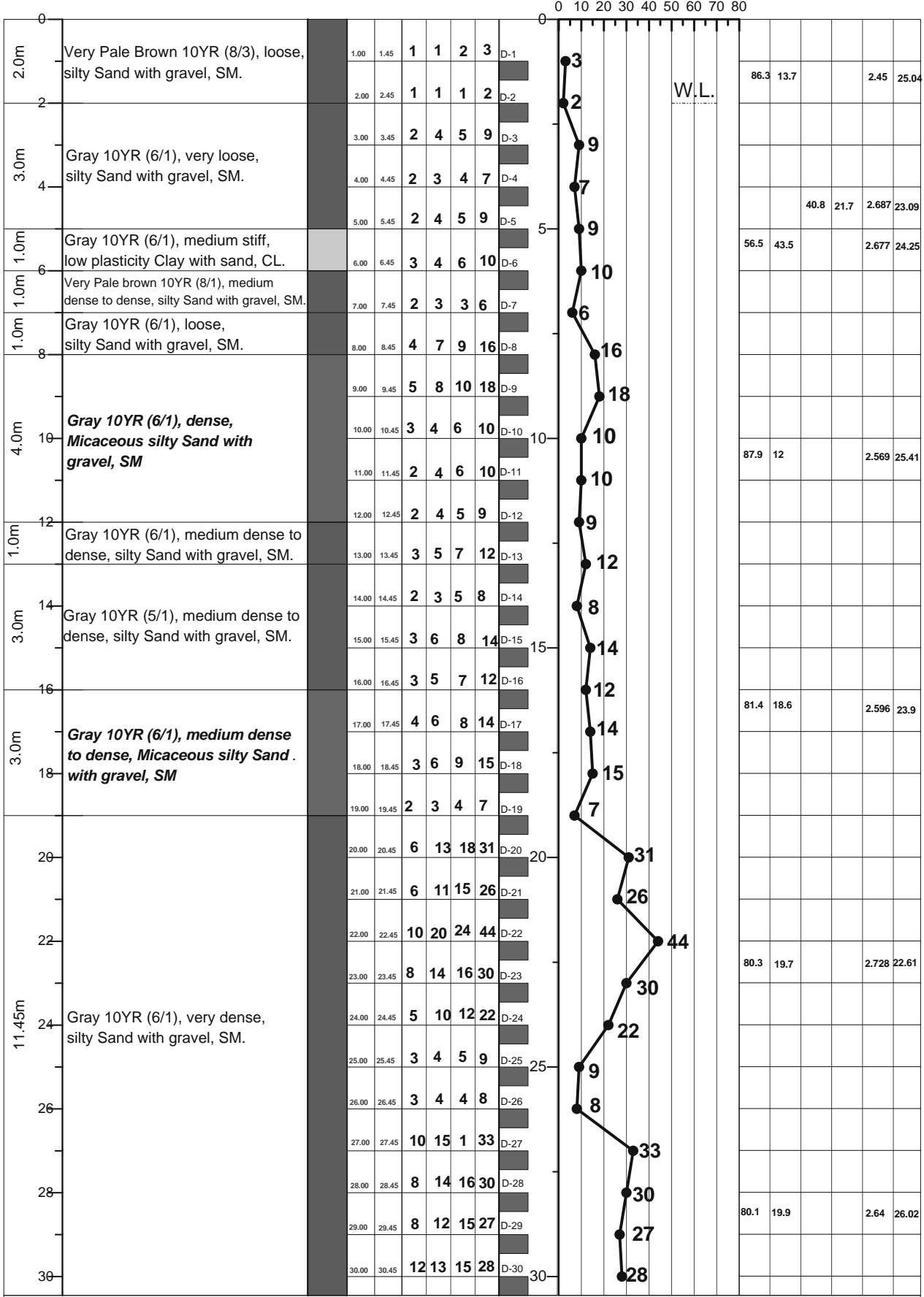
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 34
BRIDGE ID: N5_172a
LATITUDE: 24°27'46.143" LONGITUDE: 89°32'8.998"
CHAINAGE: 169.626



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 34	BOREHOLE NO: N5_172a	Longitude: N 89°32'8.998"	Latitude: E 24°27'46.143"
			Brigde ID: N5_172a	Road Name: Dhaka (Mirpur)-Paturia- Natakholia-Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 35.0m	Chainage: 169.626, RL: -8.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -2.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



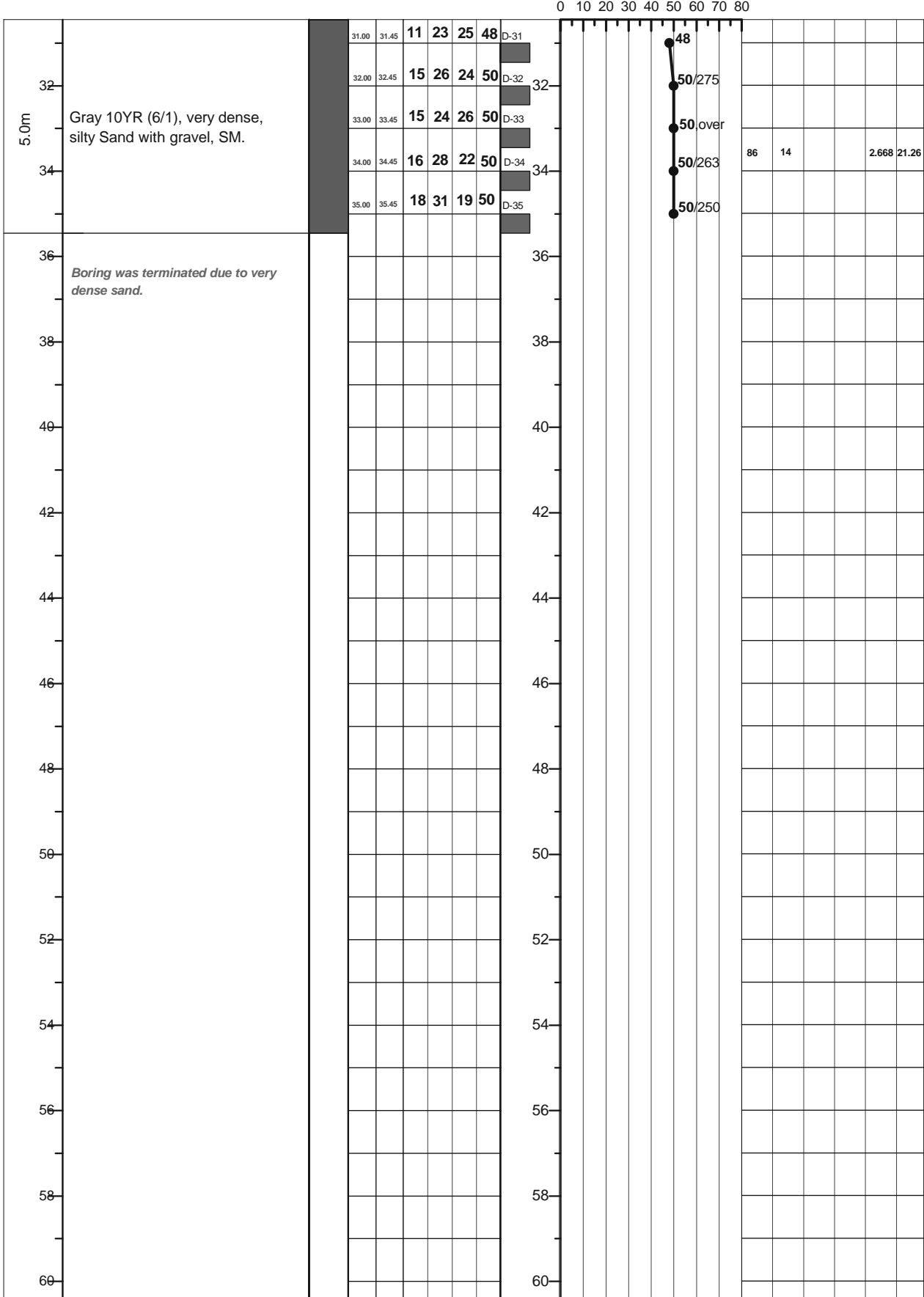
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 34	BOREHOLE NO: N5_172a	Longitude: N 89°32'8.998"	Latitude: E 24°27'46.143"
			Brigde ID: N5_172a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 35.0m	Chainage: 169.626, RL: -8.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -2.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									

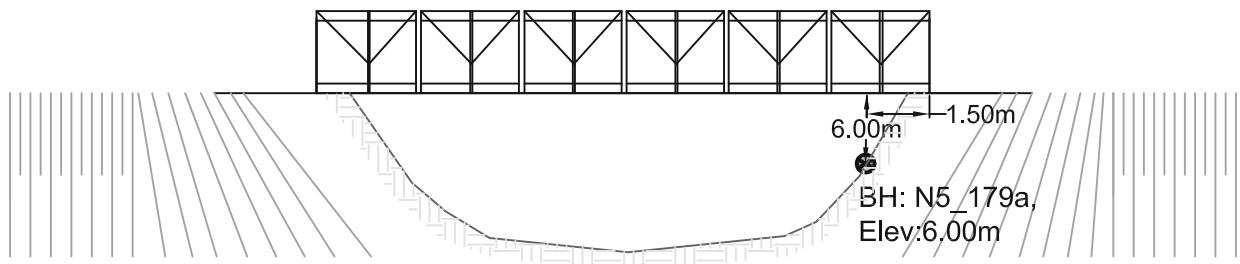
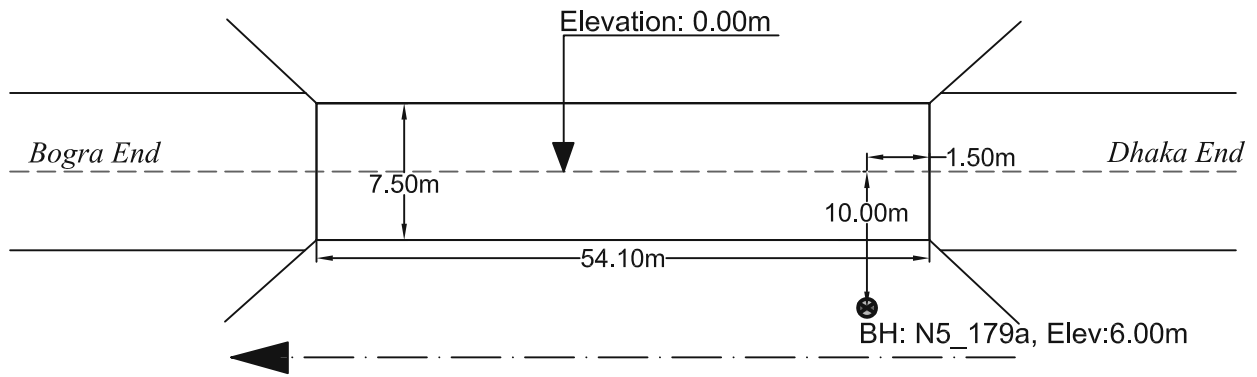
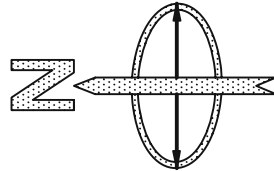


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 35
BRIDGE ID: N5_179a
LATITUDE: 24°30'54.885" LONGITUDE:89°30'42.258"
CHAINAGE: 176.746



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 35	BOREHOLE NO: N5_179a	Longitude: N 89°30'42.8"	Latitude: E 24°30'54.6"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 30.0m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 20-02-2014		Completed Date: 23-02-2014	
				Chainage: 176.746, RL: -6.0m	
				G. W. T : -4.0m.	

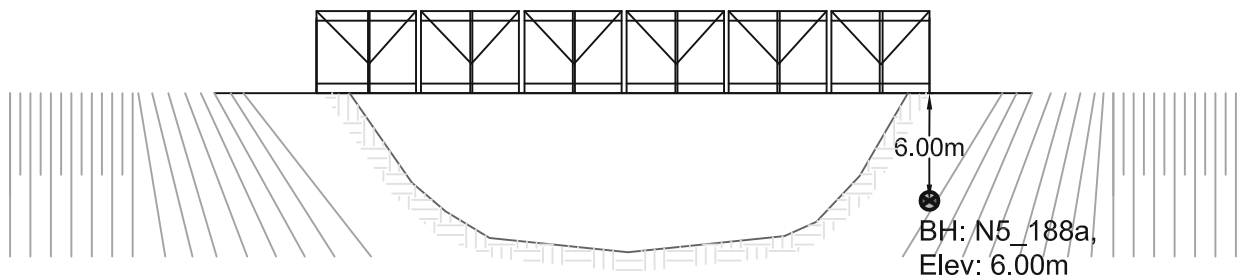
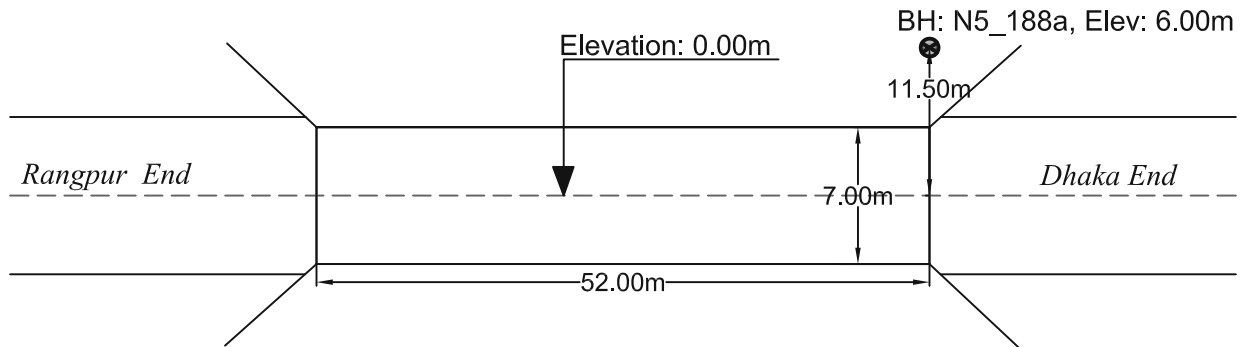
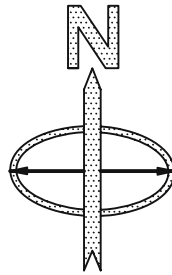
THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0-3.0m	Pale Brown 10YR (6/3), soft, low plasticity Clay with sand, CL		1.00	1.45	1	1	2	3	D-1	3	9.3	90.7	41.8	17.9	2.655	30.31
			2.00	2.45	1	1	2	3	D-2	3						
			3.00	3.45	1	2	2	4	D-3	4						
3.0m-4.0m	Brown 7.5YR (5/4), soft, low plasticity Clay with sand, CL		4.00	4.45	2	2	3	5	D-4	5			44.4	15.9	2.67	26.51
			5.00	5.45	4	6	9	15	D-5	15						
4.0m-6.0m	Grayish Brown 7.5YR (5/1), medium dense to dense, fine Sand, SM.		6.00	6.45	4	7	11	18	D-6	18						
			7.00	7.45	5	10	14	24	D-7	24						
			8.00	8.45	6	11	16	27	D-8	27						
6.0m-8.0m	Gray 7.5YR (5/1), dense, poorly graded silty Sand with gravel, SP-SM		9.00	9.45	6	11	15	26	D-9	26						
			10.00	10.45	6	12	17	29	D-10	29						
			11.00	11.45	8	13	18	31	D-11	31						
			12.00	12.45	6	10	13	23	D-12	23	91.7	7.8			2.607	20.08
			13.00	13.45	6	9	12	21	D-13	21						
			14.00	14.45	6	11	14	25	D-14	25						
			15.00	15.45	6	9	13	22	D-15	22						
			16.00	16.45	5	8	10	18	D-16	18						
8.0m-13.0m	Gray 7.5YR (5/1), dense, Micaceous silty Sand with gravel, SM.		17.00	17.45	4	6	7	13	D-17	13						
			18.00	18.45	4	6	8	14	D-18	14	86.6	13.4			2.597	23.28
			19.00	19.45	3	5	7	12	D-19	12						
			20.00	20.45	4	6	13	14	D-20	14						
			21.00	21.45	6	10	10	23	D-21	23						
13.0m-14.0m	Gray 7.5YR (5/1), dense, fine Sand, SM.		22.00	22.45	5	7	11	17	D-22	17						
14.0m-16.0m	Grayish Brown 7.5YR (5/2), very stiff, low plasticity Clay with sand, CL.		23.00	23.45	6	8	11	19	D-23	19	11.2	88.8	45.4	22.5	2.699	20.21
			24.00	24.45	6	8	20	19	D-24	19						
16.0m-17.0m	Grayish Brown 7.5YR (5/2), dense, silty Sand, SM.		25.00	25.45	20	30	13	50	D-25	50/225						
			26.00	26.45	30	50	50	50	D-26	50/100						
			27.00	27.45	34	50	50	50	D-27	50/100						
17.0m-22.0m	Gray 7.5YR (4/1), very dense, silty Sand with gravel, SM.		28.00	28.45	36	50	50	50	D-28	50/75	63.6	18.8			2.597	20.03
			29.00	29.45	39	50	50	50	D-29	50/75						
			30.00	30.45	36	50	50	50	D-30	50/75						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

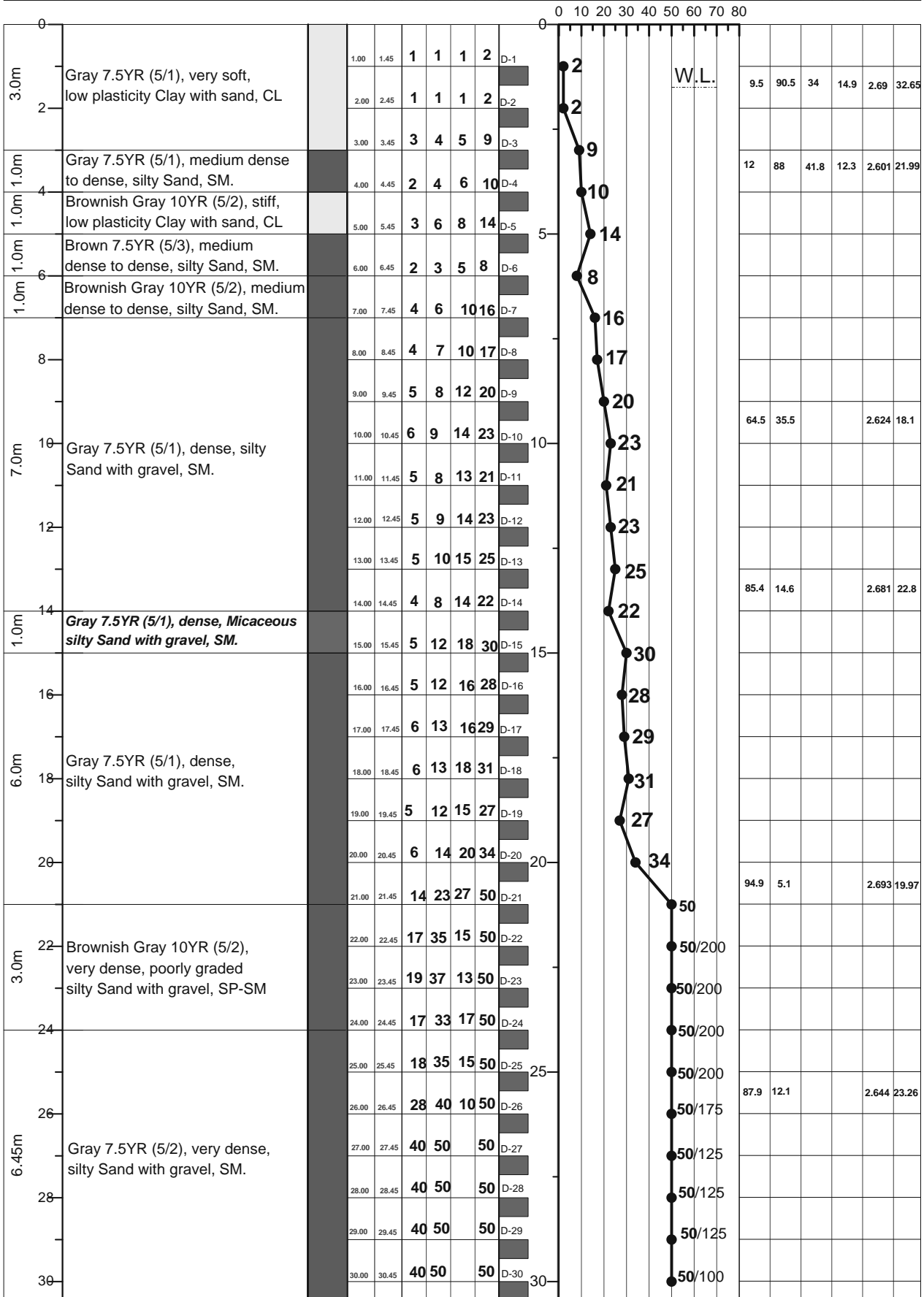
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 36
BRIDGE ID: N5_188a
LATITUDE: 24°34'23.731" LONGITUDE: 89°27'58.427"
CHAINAGE: 185.73



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 36	BOREHOLE NO: N5_188a	Longitude: N 89°27'59.5"	Latitude: E 24°34'24.3"
			Brigde ID: N5_188a	Road Name: Dhaka (Mirpur)-Utholi-Paturia- Bogra-Rangpur- Banglabandh Road.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 185.73, RL: -6.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _s
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

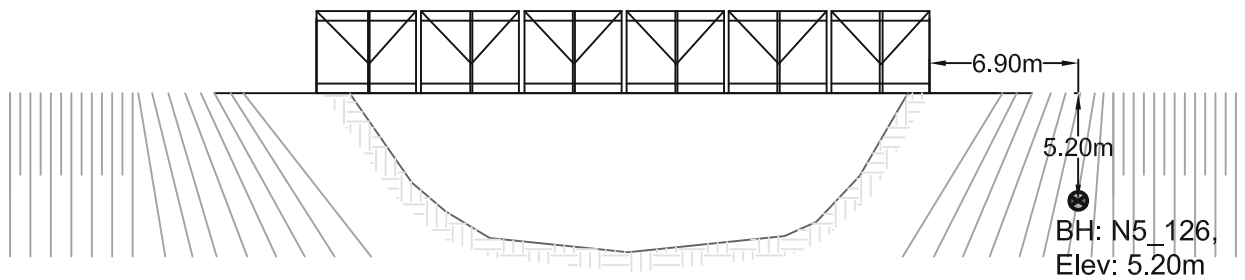
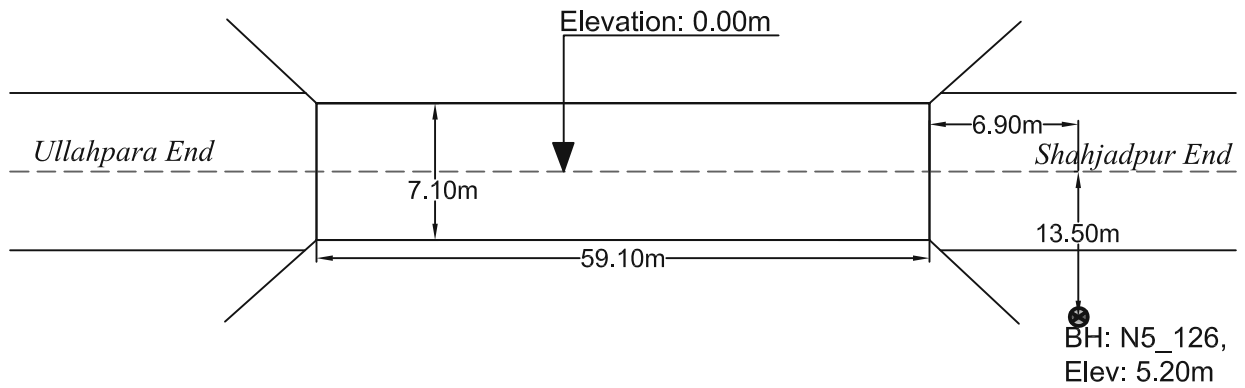
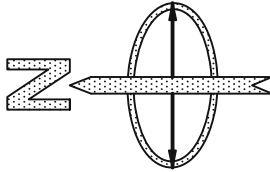
CLIENT: Oriental Consultants Company Limited.

RANK: 37

BRIDGE ID: N5_126a

LATITUDE: 24°05'34.63" LONGITUDE: 89°35'19.67"

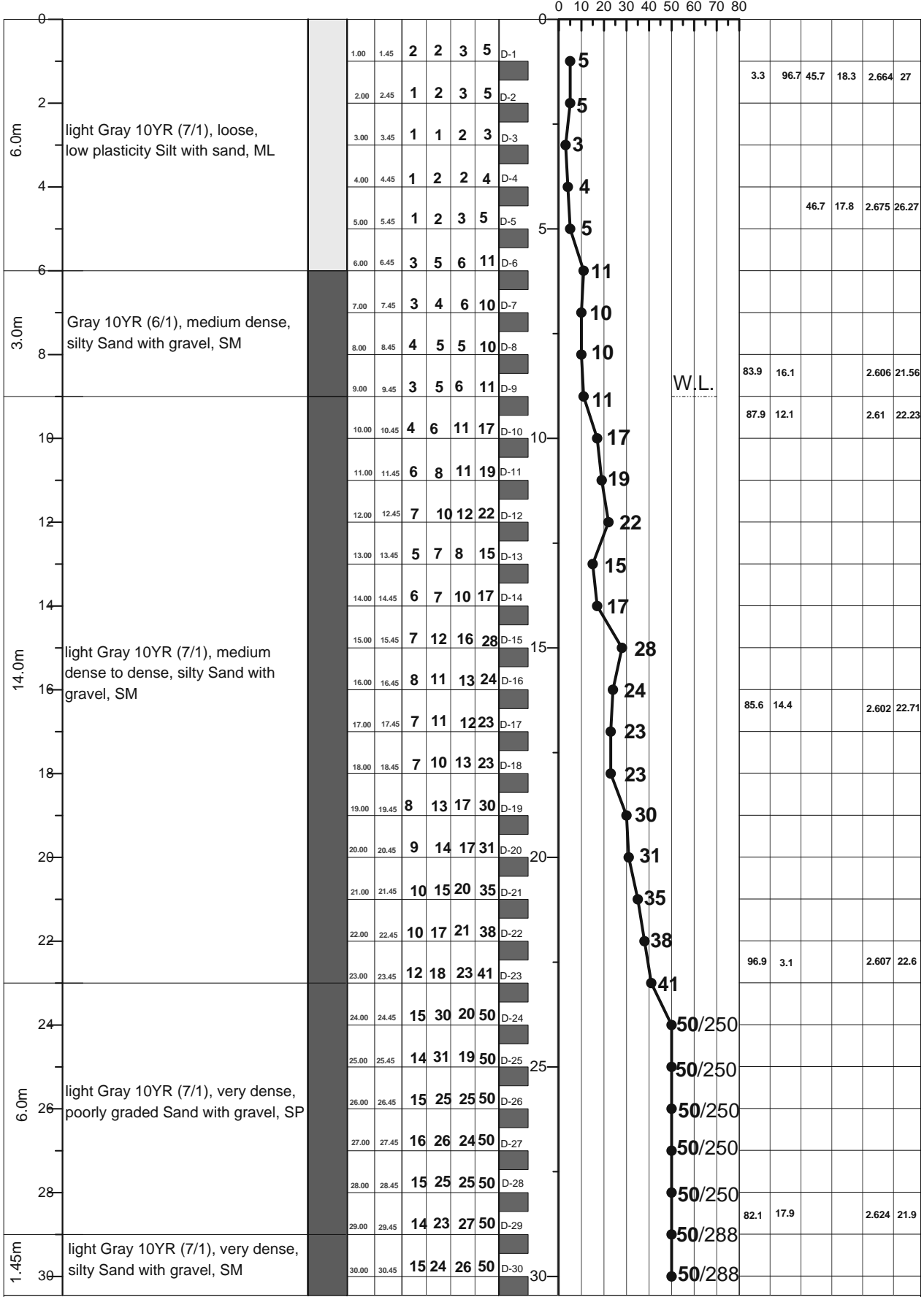
CHAINAGE: 125.093



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 37	BOREHOLE NO: N5_126a	Longitude: N 24°05'35"	Latitude: E 89°35'19"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 30.0m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 28-02-2014		Completed Date: 01-03-2014	
				Chainage: 125.093, RL: -5.2m	
				G. W. T : -9.0m.	

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _s
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

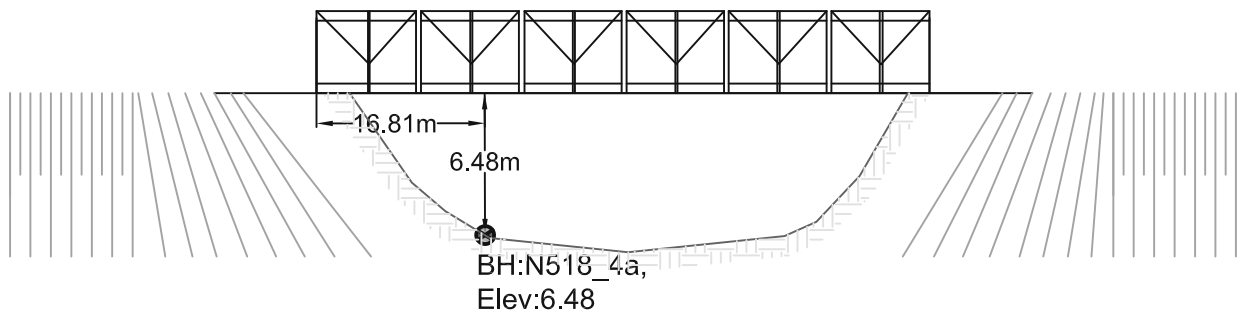
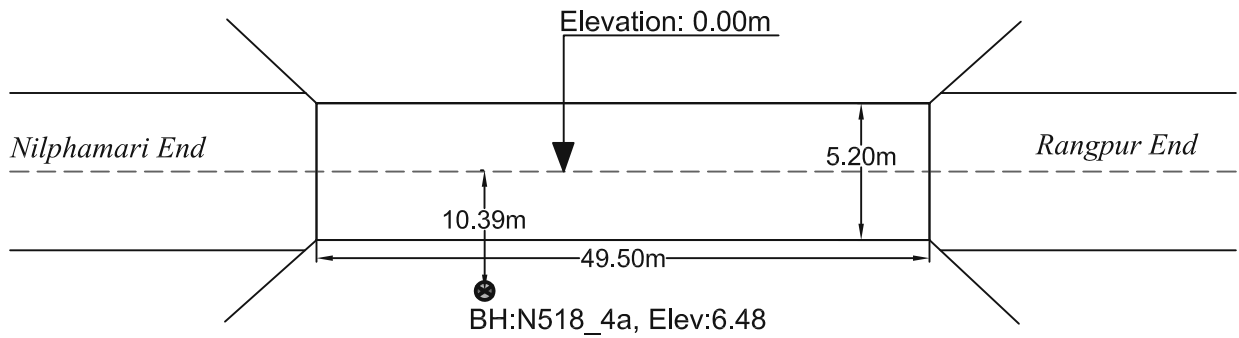
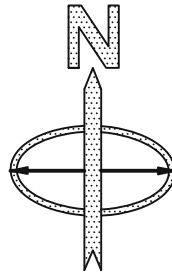


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^m PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED
 50/X = BLOWS 50, "X" MM PENETRATION

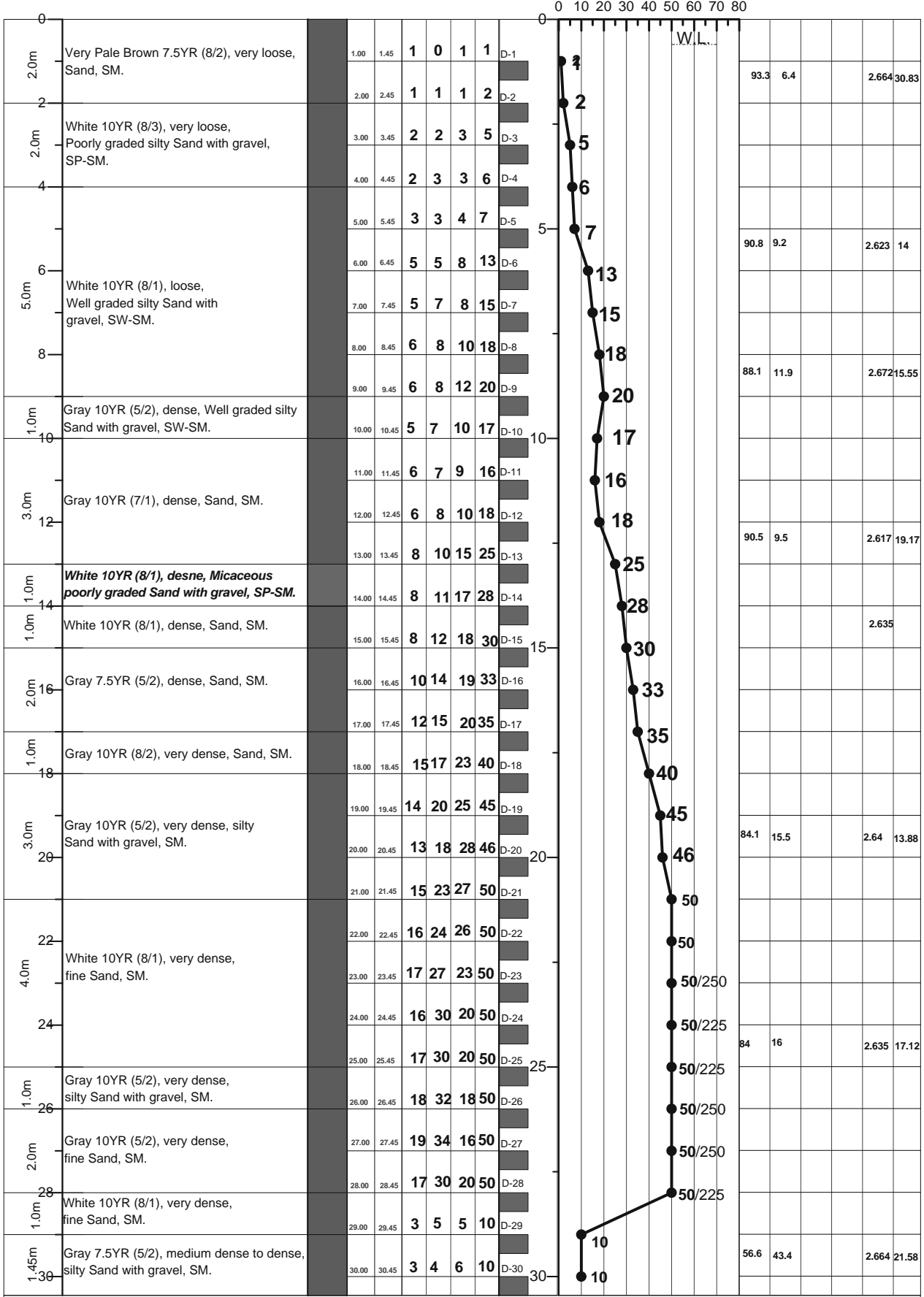
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 38
BRIDGE ID: N518_4a
LATITUDE: 25°46'24.845" LONGITUDE: 88°52'39.156"
CHAINAGE: 3.959



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 38	BOREHOLE NO: N518_4a	Longitude: N 088°52.391'	Latitude: E 25°46.248'
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Brigde ID: N518_4a	Road Name: Sayedpur Town Old Section (Sutkir More-Sonapukur).	
Type of Drill Rig: Manual Rotary			Borehole Depth: 37.0m	Chainage: 3.959, RL: -6.48m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 05-03-2014	Completed Date: 08-03-2014	G. W. T : -0.60m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



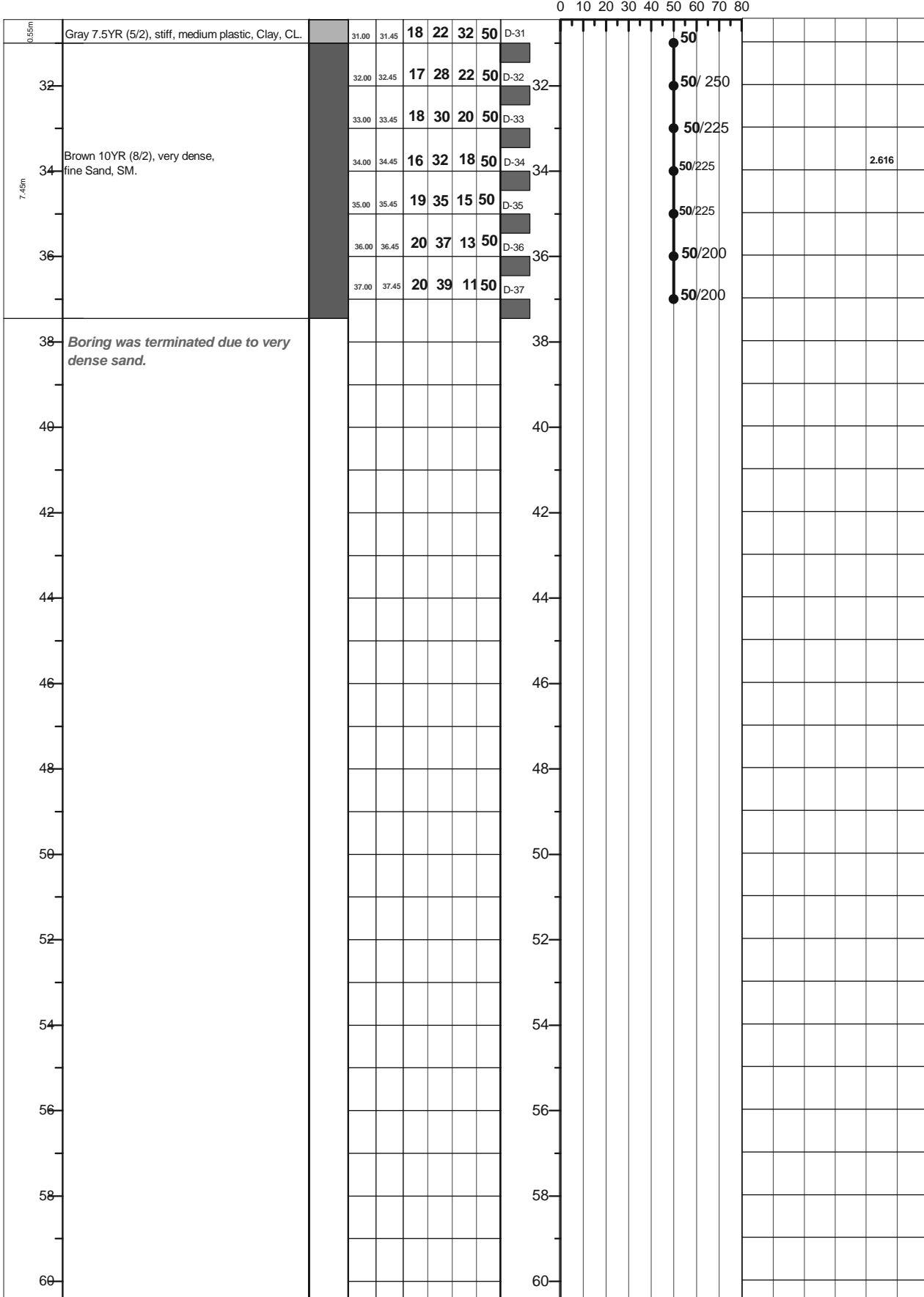
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 38	BOREHOLE NO: N518_4a	Longitude: N 088°52.391'	Latitude: E 25°46.248'
			Brigde ID: N518_4a	Road Name: Sayedpur Town Old Section (Sutkir More-Sonapukur).	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 37.0m	Chainage: 3.959, RL: -6.48m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 05-03-2014	Completed Date: 08-03-2014	G. W. T : -0.60m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING		SPT-N Value Blow/300mm				DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)	N4=600 (mm)								

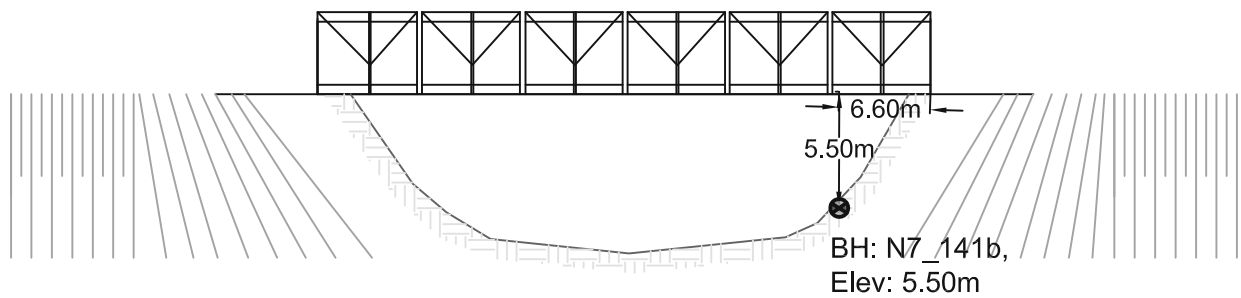
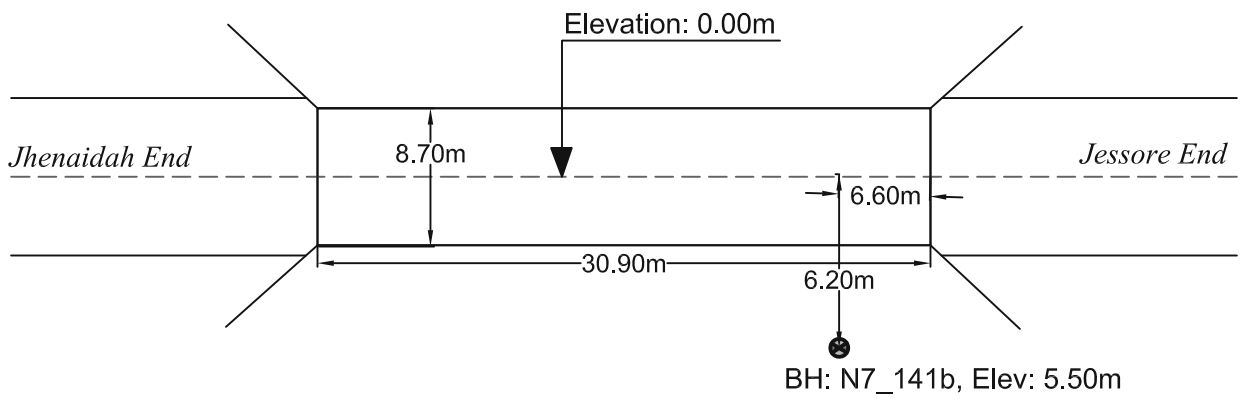
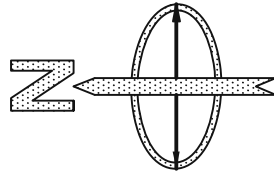


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 39
BRIDGE ID: N7_141b
LATITUDE: 23°14'30.489" LONGITUDE: 89°9'59.562"
CHAINAGE: 142.096



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 39	BOREHOLE NO: N7_141b	Longitude: N 89°09'59.562"	Latitude: E 23°14'30.489"
			Brigde ID: N7_141b	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 142.096, RL: -5.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 11-03-2014	Completed Date: 15-03-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									N6-600 (mm)
0-2.0m	dark Gray 7.5YR (4/1), soft, low plasticity Clay with sand, CL		1.00	1.45	2	2	2	4	D-1	4						
2-3.0m	Gray 7.5YR (5/1), loose, silty Sand with gravel, SM		2.00	2.45	2	2	2	4	D-2	4						
3.0-4.0m	Gray 7.5YR (5/1), loose, silty Sand with gravel, SM		3.00	3.45	1	1	2	3	D-3	3	86.5	13.5			2.642	29.81
4.0-5.0m			4.00	4.45	1	1	2	3	D-4	3						
5.0-6.0m			5.00	5.45	1	1	1	2	D-5	2						
6.0-7.0m		Gray 7.5YR (5/1), very loose, micaceous silty Sand with gravel, SM		6.00	6.45	1	1	1	2	D-6	2	69.2	30.8			2.468
7.0-8.0m	Brown 7.5YR (5/2), loose, poorly graded silty Sand with gravel, SP-SM		7.00	7.45	2	2	3	5	D-7	5	86.5	13.5				
8.0-9.0m			8.00	8.45	3	4	4	8	D-8	8						
9.0-10.0m			9.00	9.45	4	6	8	14	D-9	14						
10.0-11.0m			10.00	10.45	5	8	10	18	D-10	18	89.6	10.4			2.644	24.42
11.0-12.0m	light Gray 10YR (7/1), dense, silty Sand with gravel, SM		11.00	11.45	5	9	12	21	D-11	21						
12.0-13.0m			12.00	12.45	6	10	13	23	D-12	23						
13.0-14.0m			13.00	13.45	7	13	15	28	D-13	28						
14.0-15.0m			14.00	14.45	8	15	17	32	D-14	32						
15.0-16.0m			15.00	15.45	8	16	20	36	D-15	36	74.3	25.7			2.649	21.19
16.0-17.0m			16.00	16.45	10	17	20	37	D-16	37						
17.0-18.0m			17.00	17.45	11	19	20	40	D-17	40						
18.0-19.0m			18.00	18.45	12	22	30	50	D-18	50						
19.0-20.0m			19.00	19.45	13	22	30	50	D-19	50						
20.0-21.0m			20.00	20.45	13	22	30	50	D-20	50						
21.0-22.0m		21.00	21.45	13	22	30	50	D-21	50							
22.0-23.0m		22.00	22.45	15	25	30	50	D-22	50							
23.0-24.0m	dark Gray 7.5YR (4/1), medium stiff, low plasticity Clay with sand, CL		23.00	23.45	2	2	4	6	D-23	6						
24.0-25.0m			24.00	24.45	2	3	4	7	D-24	7	0.9	99.1	45.2	19.7	2.744	25.35
25.0-26.0m			25.00	25.45	2	3	3	6	D-25	6						
26.0-27.0m			26.00	26.45	2	2	4	6	D-26	6	16	84	41.8	17.7	2.693	
27.0-28.0m			27.00	27.45	2	3	4	7	D-27	7						
28.0-29.0m	Brown 7.5YR (5/2), stiff, low plasticity Clay with sand, CL		28.00	28.45	3	5	6	11	D-28	11						
29.0-30.0m			29.00	29.45	3	4	5	9	D-29	9	11.6	88.4	47.6	20.4	2.669	25.41
30.0-30.45m			30.00	30.45	3	4	5	9	D-30	9						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

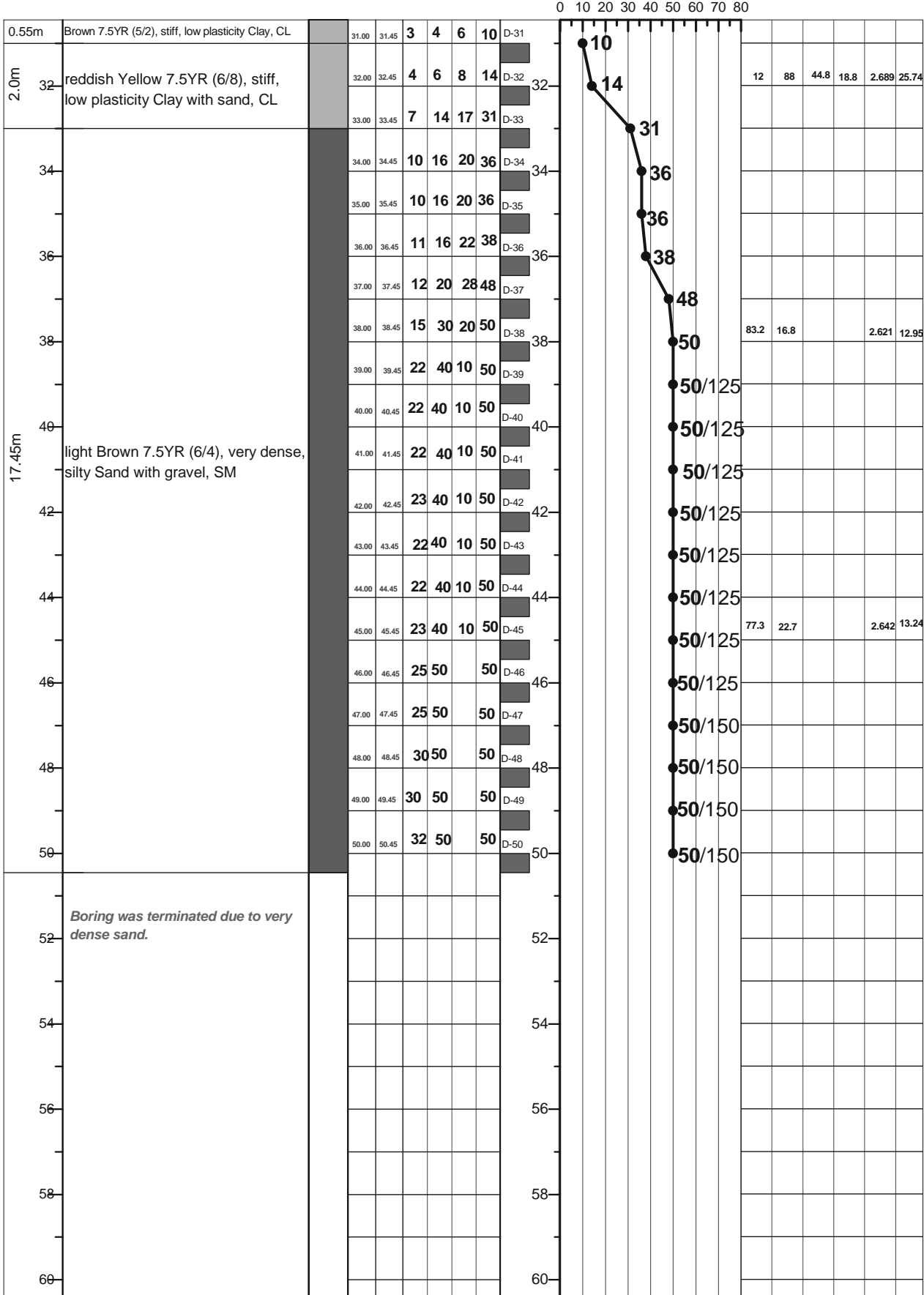
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 39	BOREHOLE NO: N7_141b	Longitude: N 89°05'54.804"	Latitude: E 23°14'30.489"
			Brigde ID: N7_141b	Road Name: Dauladia-Faridpur -Magura-Jhenaidah-Jessore-Khulna-Mongla	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 142.096, RL: -5.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 11-03-2014	Completed Date: 15-03-2014	G. W. T : -1.5m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

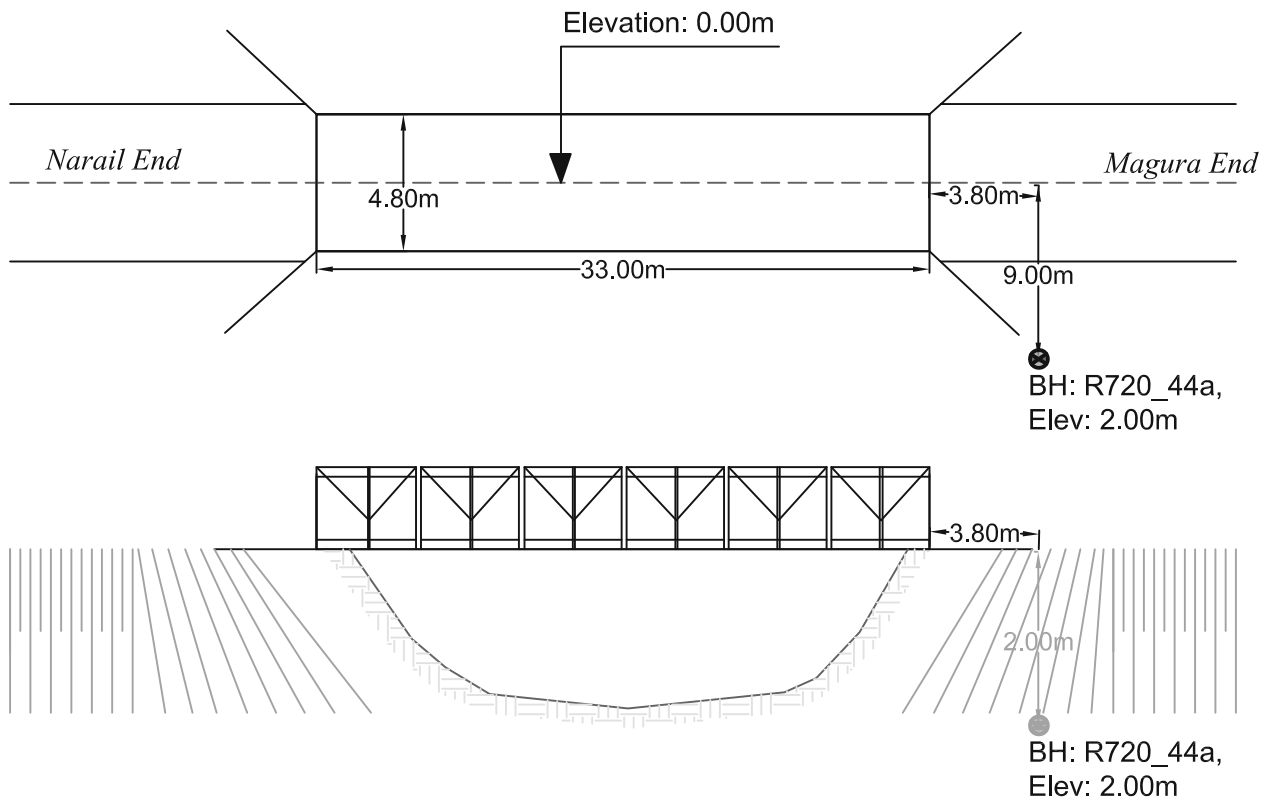
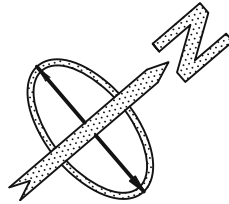


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 40
BRIDGE ID: R720_44a
LATITUDE: 23°11'51.212" LONGITUDE: 89°30'47.502"
CHAINAGE: 43.568



PROSOIL FOUNDATION CONSULTANT

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								
0								0							
2.0m	Light Gray 10YR (7/1), stiff, low plastic, Clay with sand, CL.		1.00	1.45	3	5	7	12	D-1	11.9	88.1	33.9	12.8	2.686	27.34
2			2.00	2.45	3	4	7	11	D-2						
2.0m	filling Sand		3.00	3.45	3	5	7	12	D-3						
4			4.00	4.45	2	2	3	5	D-4						
3.0m	Gray 10YR (6/1), soft, low plastic, clayey Silt, ML.		5.00	5.45	2	2	2	4	D-5						
6			6.00	6.45	2	2	3	5	D-6						
1.0m	Gray 10YR (6/1), loose, low plastic, Clay with sand, CL.		7.00	7.45	2	2	2	4	D-7	13.1	86.9	35.7	14.2	2.669	31.04
8			8.00	8.45	2	3	5	8	D-8	45.1	54.3				24.39
2.0m	Gray 10YR (6/1), loose, low plastic, Silt with sand, ML.		9.00	9.45	2	2	3	5	D-9						
10			10.00	10.45	2	2	4	6	D-10						
8.0m	Gray 10YR (6/1), medium stiff, low plastic, Clay with sand, CL.		11.00	11.45	2	2	3	5	D-11	11.5	88.5	41.1	17.7	2.762	30.12
12			12.00	12.45	2	2	4	6	D-12						
14			13.00	13.45	2	3	3	6	D-13						
16			14.00	14.45	2	2	4	6	D-14						
18			15.00	15.45	2	3	3	6	D-15						
2.00m	Gray 10YR (6/1), stiff, non plastic, clayey Silt, ML.		16.00	16.45	2	3	4	7	D-16	13.4	86.6	47.4	21.1	2.675	25.92
20			17.00	17.45	4	4	6	10	D-17						
3.00m	Gray 10YR (6/1), medium dense to dense, clayey Sand, SC.		18.00	18.45	4	5	5	10	D-18						
22			19.00	19.45	5	5	6	11	D-19						
24			20.00	20.45	4	6	8	14	D-20						
2.00m	Gray 10YR (6/1), dense, silty Sand with gravel, SM.		21.00	21.45	6	8	10	18	D-21						
26			22.00	22.45	6	9	12	21	D-22						
5.00m	Gray 10YR (6/1), very dense, fine Sand, SM.		23.00	23.45	7	13	17	30	D-23	72.3	27.7			2.61	19.31
28			24.00	24.45	8	15	20	35	D-24						
30			25.00	25.45	13	23	27	50	D-25						
3.6m	Dark Gray 10YR (6/1), very stiff, organic silty clays of low plasticity, CL.		26.00	26.45	14	24	26	50	D-26						
			27.00	27.45	16	24	26	50	D-27						
			28.00	28.45	25	36	14	50	D-28						
			29.00	29.45	18	25	25	50	D-29						
			30.00	30.45	7	7	10	17	D-30						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

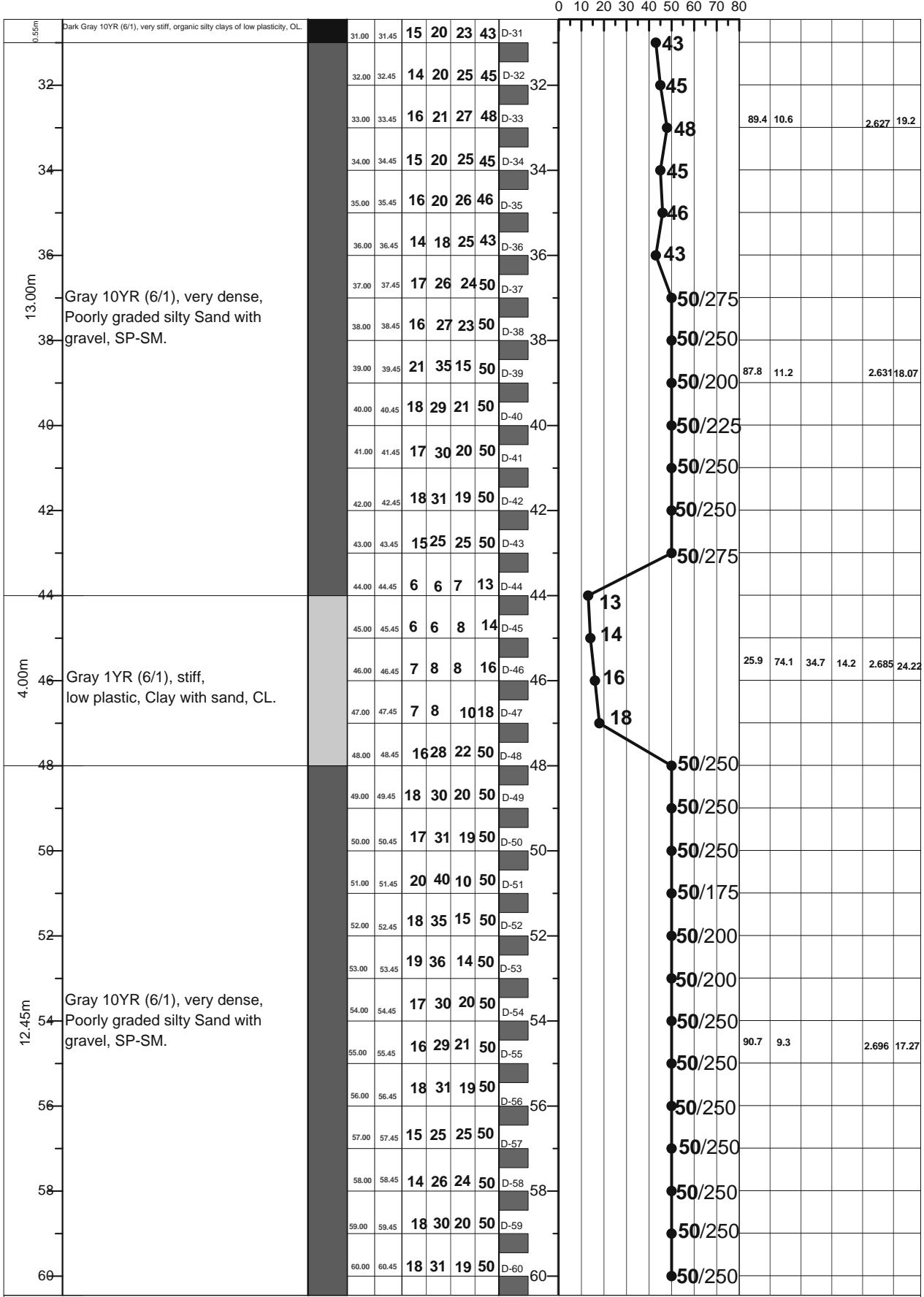
- PLASTIC CLAY
- SILT
- PEAT/HIGHLY ORGANIC SOIL
- UNDISTURBED SAMPLE
- MICACEOUS FINE SAND/SILT
- SAND
- SHALE
- DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 40	BOREHOLE NO: R720_44a	Longitude: N 089°34'7.505"	Latitude: E 23°11'52.215"
			Brigde ID: R720_44a	Road Name: Magura-Narail.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 48.48, RL: -5.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 22-03-2014	Completed Date: 27-03-2014	G. W. T : -8.0m.



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

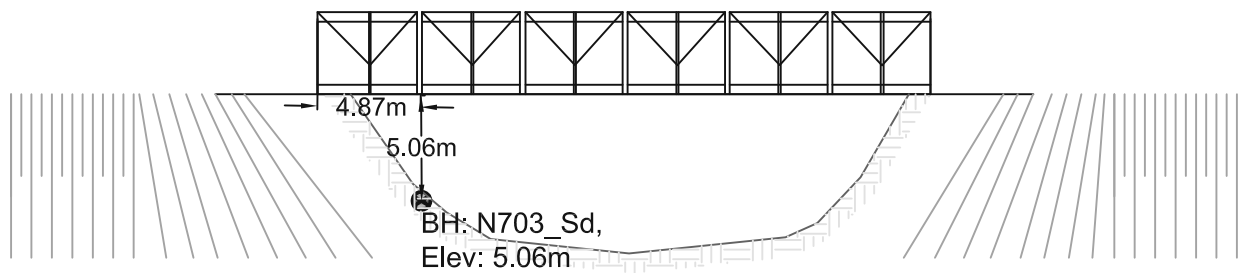
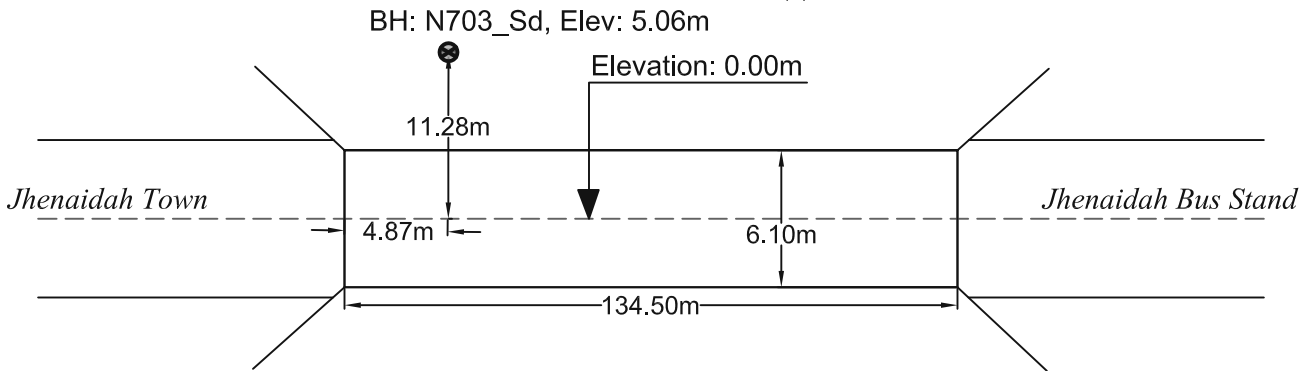
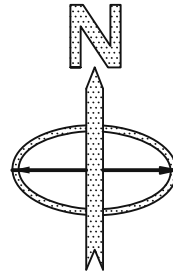
CLIENT: Oriental Consultants Company Limited.

RANK: 41

BRIDGE ID: N703_Sd

LATITUDE: 23°32'39.635" LONGITUDE: 89°11'6.079"

CHAINAGE: 0.508



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 41	BOREHOLE NO: N703_Sd	Longitude: N 089°11'6.079"	Latitude: E 23°32'39.635"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 0.508, RL: -5.06m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 27-03-2014	Completed Date: 30-03-2014	G. W. T : -1.82m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _s
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								
0								0							
2	Gray 7.5YR (5/2), soft, low plastic, Clay with sand, CL.		1.00	1.45	1	0	1	1	D-1	1					
			2.00	2.45	1	1	1	2	D-2	2	10.2	89.8	41.7	18	2.776
			3.00	3.45	1	1	2	3	D-3	3					
			4.00	4.45	1	2	2	4	D-4	4					
			5.00	5.45	2	3	4	7	D-5	7					
			6.00	6.45	1	0	1	1	D-6	1					
1.0m	Gray 7.5YR (5/1), very soft, low plastic, Clay with sand, CL.		7.00	7.45	1	2	3	5	D-7	5					2.663 26.41
1.0m	Gray 7.5YR (5/1), loose, Poorly graded silty Sand with gravel, SP-SM.		8.00	8.45	2	3	4	7	D-8	7					
1.0m	Gray 7.5YR (5/1), medium stiff, low plastic, silty Clay, CL.		9.00	9.45	9	10	11	21	D-9	21					2.647 22.54
1.0m	Gray 10YR (7/1), medium dense to dense, Poorly graded silty Sand with gravel, SP-SM.		10.00	10.45	7	7	12	19	D-10	19					
2.0m	Gray 7.5YR (5/1), dense, Poorly graded Micaceous silty Sand with gravel, SP-SM.		11.00	11.45	6	7	9	16	D-11	16					2.478 23.76
			12.00	12.45	7	11	19	30	D-12	30					
			13.00	13.45	8	13	18	31	D-13	31					
			14.00	14.45	9	13	17	30	D-14	30					
			15.00	15.45	10	12	18	30	D-15	30					
			16.00	16.45	7	12	16	28	D-16	28					
			17.00	17.45	8	12	18	30	D-17	30					
			18.00	18.45	8	9	12	21	D-18	21					
			19.00	19.45	5	8	9	17	D-19	17					
			20.00	20.45	8	12	16	28	D-20	28					
			21.00	21.45	9	13	17	30	D-21	30					2.504 20.2
			22.00	22.45	8	16	16	32	D-22	32					
			23.00	23.45	8	16	20	36	D-23	36					
			24.00	24.45	7	18	24	42	D-24	42					
			25.00	25.45	14	21	23	44	D-25	44					
			26.00	26.45	12	16	18	34	D-26	34					
			27.00	27.45	11	14	16	30	D-27	30					
			28.00	28.45	12	18	20	38	D-28	38					
			29.00	29.45	14	20	22	42	D-29	42					
1.45m	Gray 10YR (7/1), very dense, fine Sand, SM.		30.00	30.45	19	28	22	50	D-30	50					

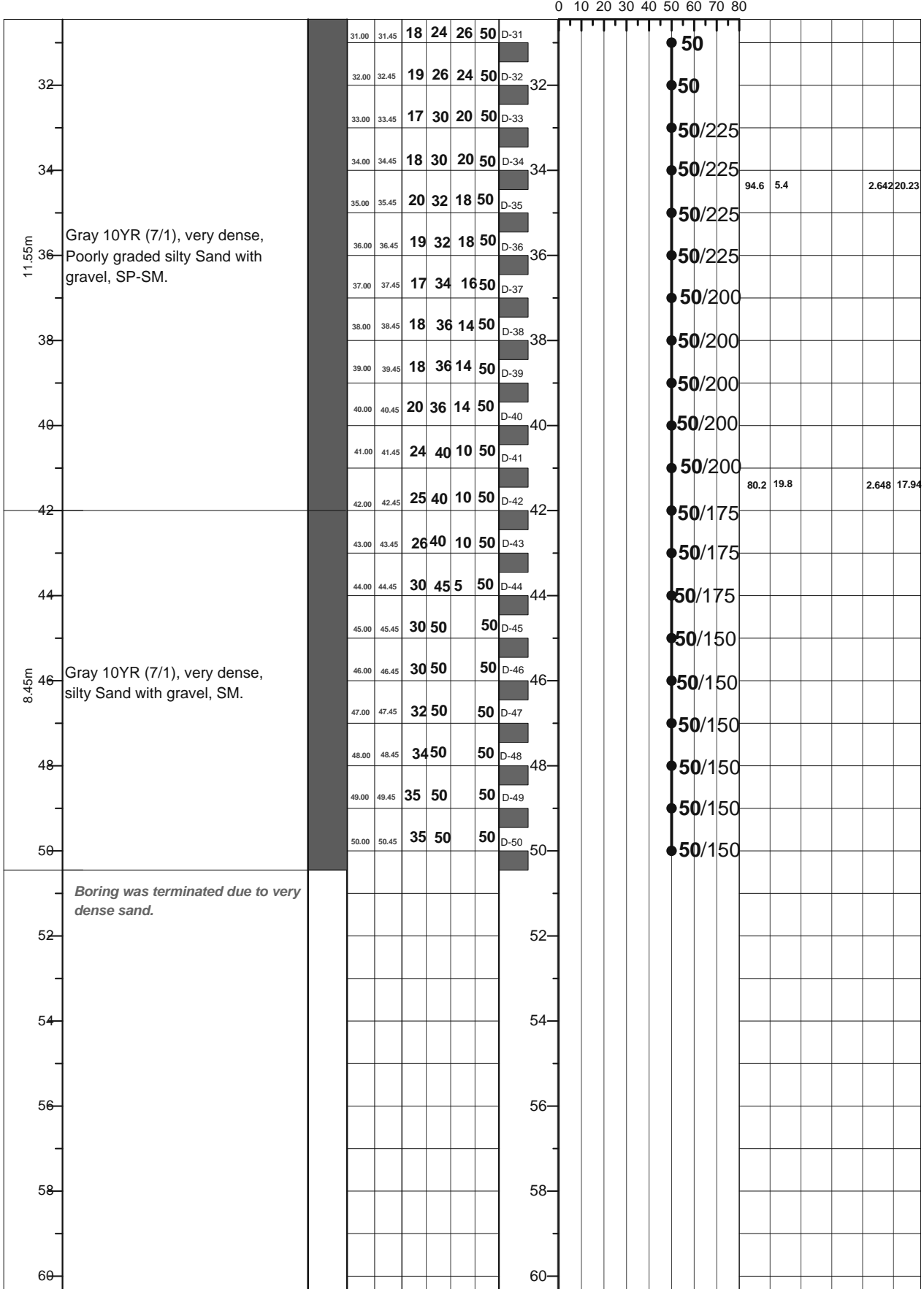
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 41	BOREHOLE NO: N703_Sd	Longitude: N 089°11'6.079"	Latitude: E 23°32'39.635"
			Brigde ID: N703_Sd	Road Name: Jhenaidah Town Old Section.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 0.508, RL: -5.06m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 27-03-2014	Completed Date: 30-03-2014	G. W. T : -1.82m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)										



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

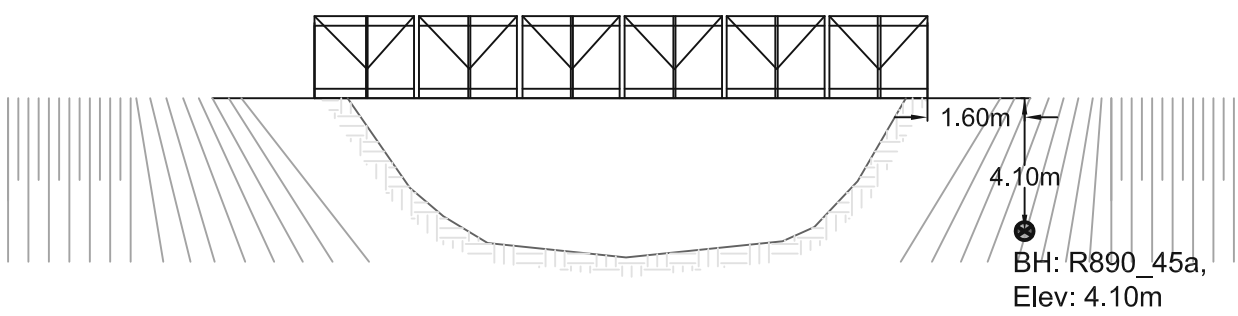
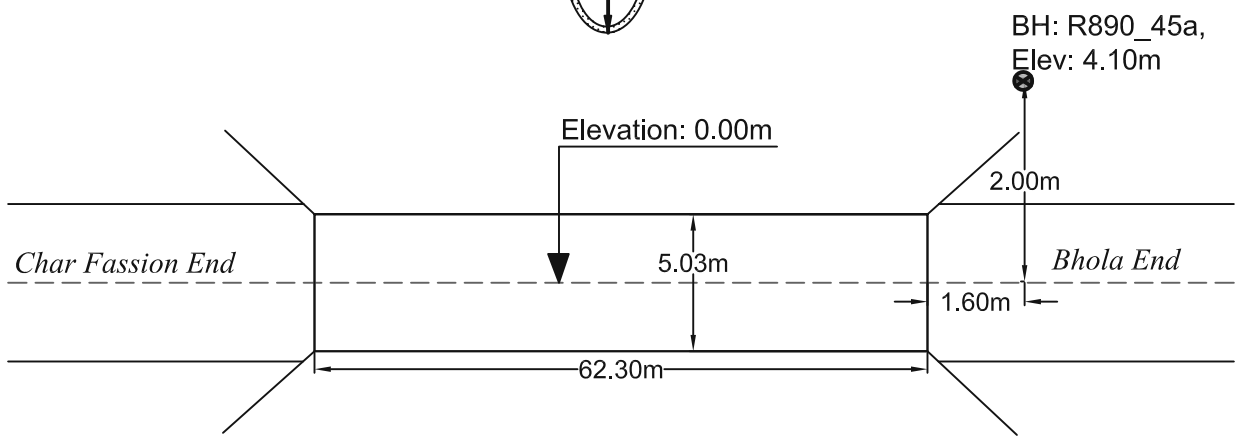
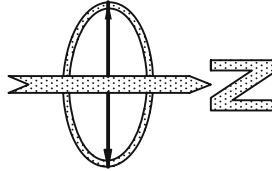
CLIENT: Oriental Consultants Company Limited.

RANK: 42

BRIDGE ID: R890_45a

LATITUDE: 22°22'9.334" LONGITUDE: 89°56'3.13"

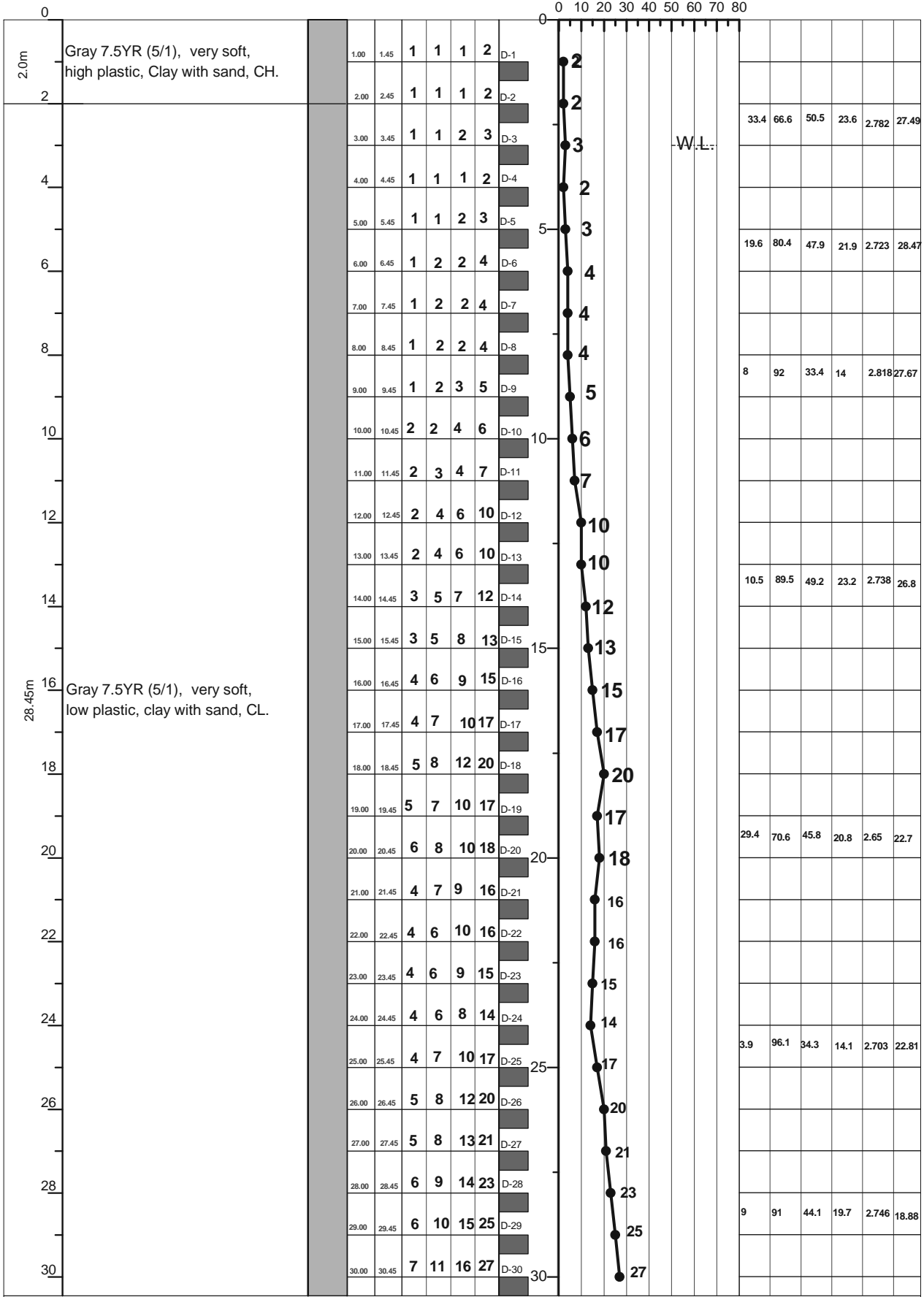
CHAINAGE: 45.766



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 42	BOREHOLE NO: R890_45a	Longitude: N 89°56'3.13"	Latitude: E 22°22'9.334"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 60.0m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 11-04-2014		Completed Date: 16-04-2014	
			Brigde ID: R890_45a		Road Name: Bholra(Paran Talukderhat)-Burhanuddin-Lalmohon-Char Fassion-Char Manika.
			Chainage: 45.766, RL: -4.1m		G. W. T : -3.00m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								



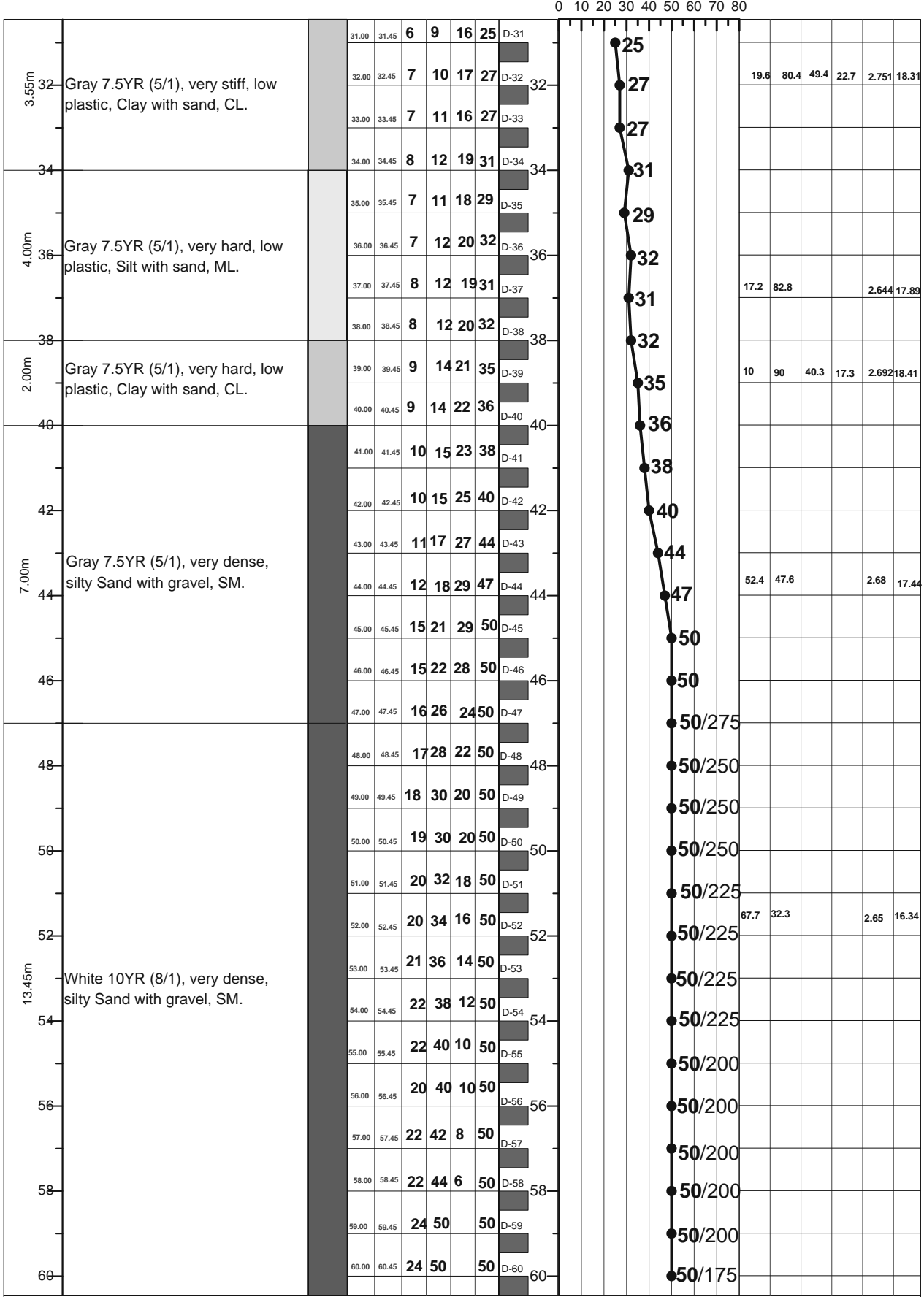
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 42	BOREHOLE NO: R890_45a	Longitude: N 89°56'3.13"	Latitude: E 22°22'9.334"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 60.0m	Chainage: 45.766, RL: -4.1m
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 11-04-2014		Completed Date: 16-04-2014	G. W. T : -3.00m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

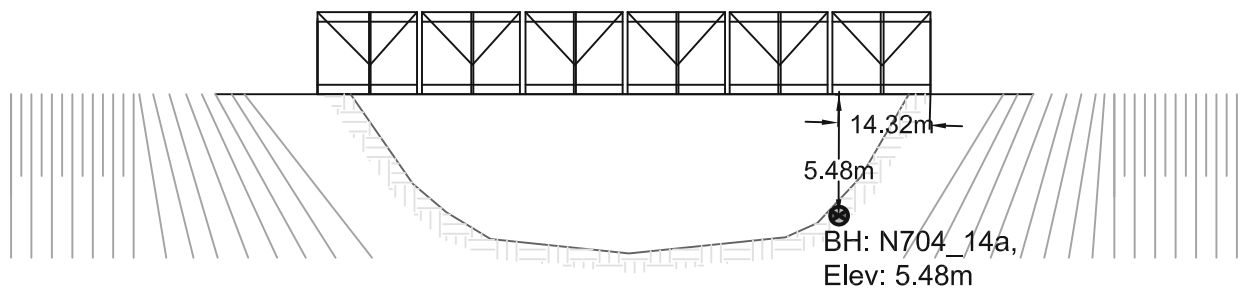
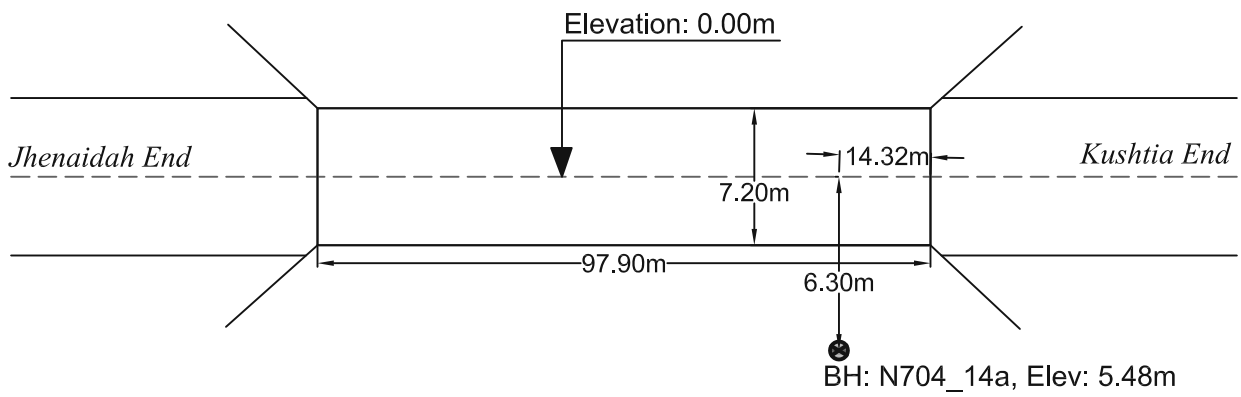
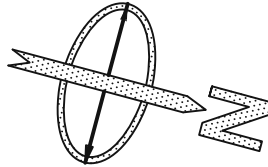
CLIENT: Oriental Consultants Company Limited.

RANK: 43

BRIDGE ID: N704_14a

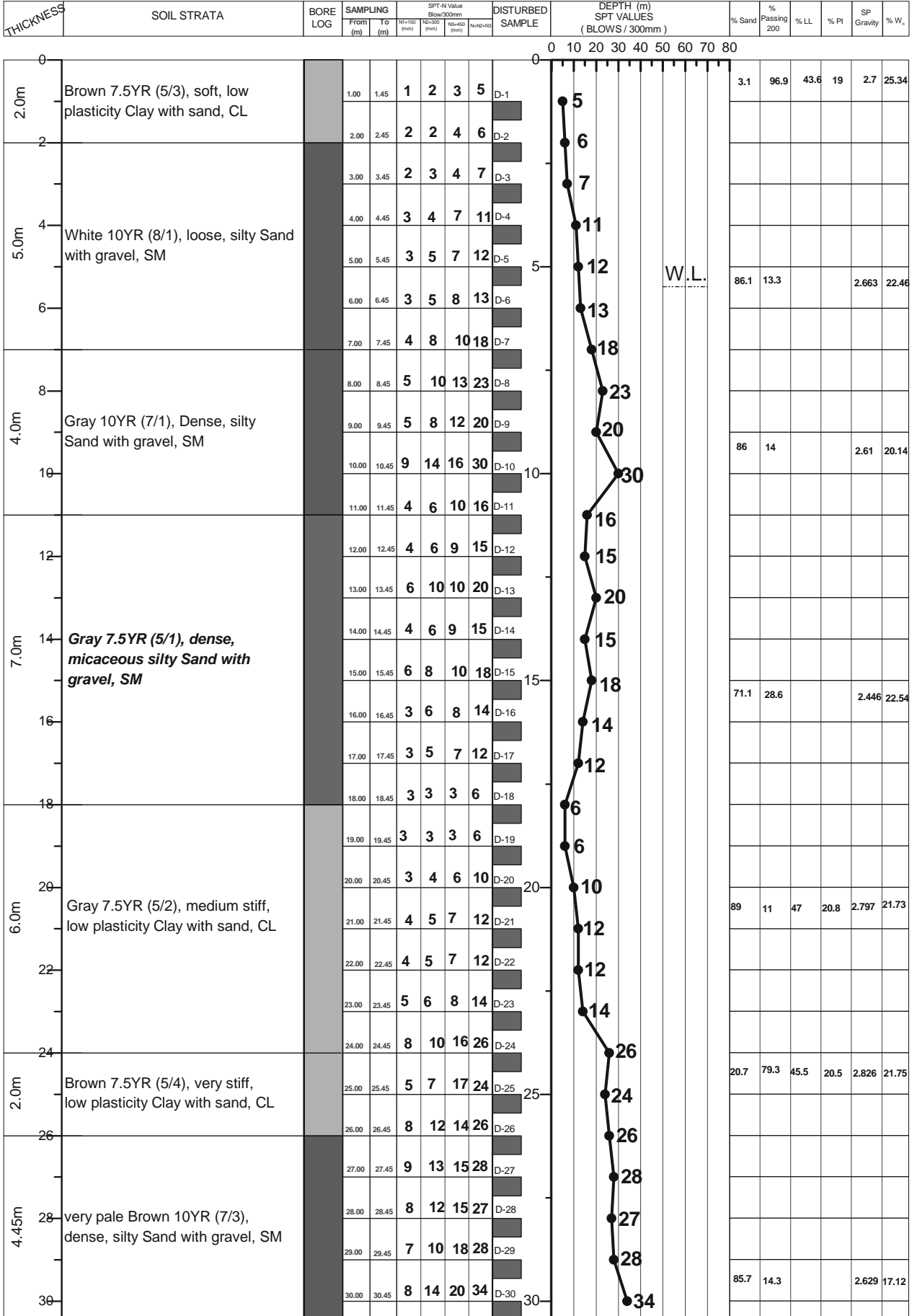
LATITUDE: 23°40'0.948" LONGITUDE: 89°11'26.474"

CHAINAGE: 15.342



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 43	BOREHOLE NO: N704_14a	Longitude: N 89°11'6.079"	Latitude: E 23°40'0.948"
			Brigde ID: N704_14a	Road Name: Jhenaidah-Kushtia-Paksey Ferry-Dasuria.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 15.342, RL: -5.48m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 15-03-2014	Completed Date: 19-03-2014	G. W. T : -5.48m.



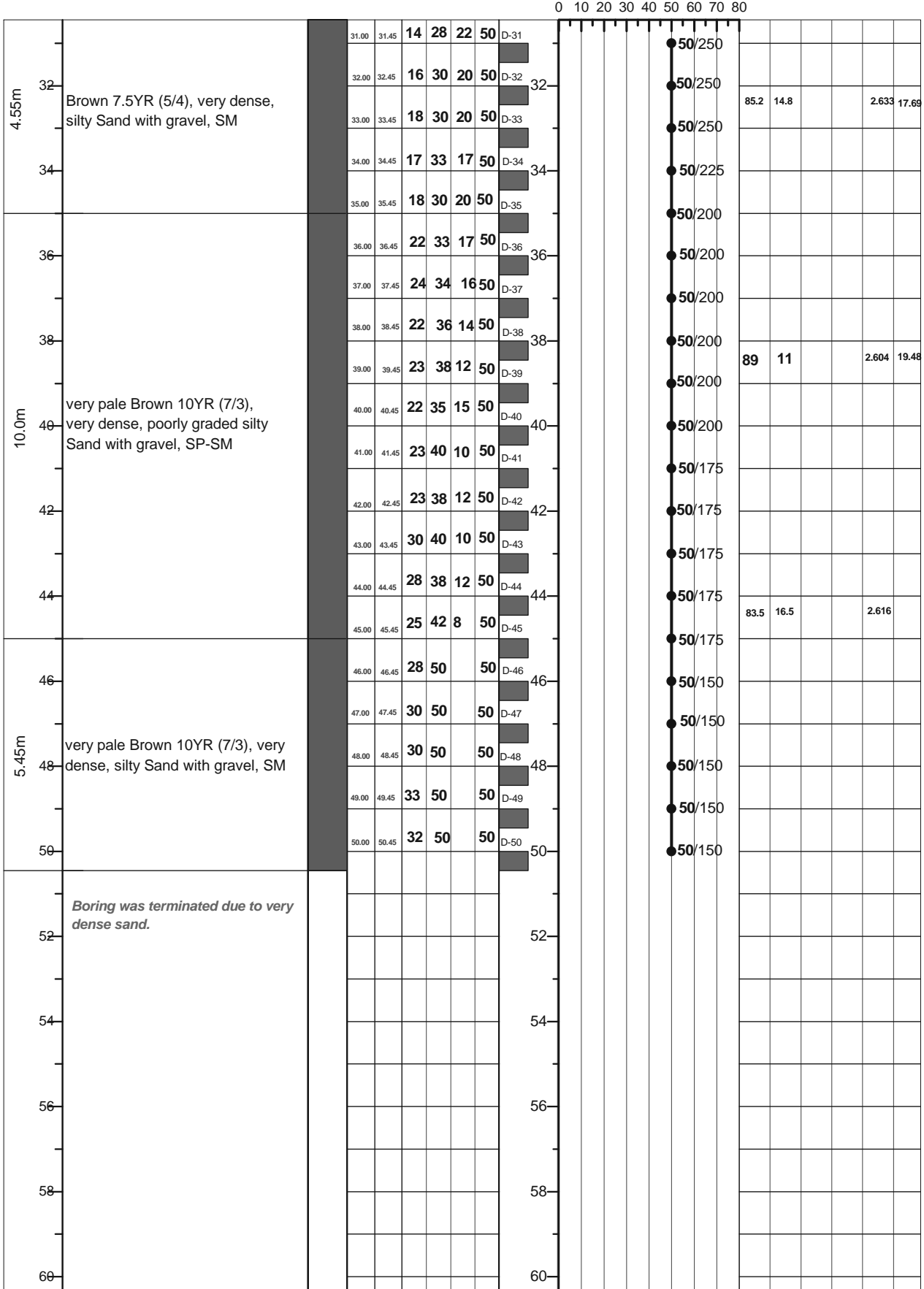
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 43	BOREHOLE NO: N704_14a	Longitude: N 89°11'6.079"	Latitude: E 23°40'0.948"
			Brigde ID: N704_14a	Road Name: Jhenaidah-Kushtia-Paksey Ferry-Dasuria	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 15.342, RL: -5.48m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 15-03-2014	Completed Date: 19-03-2014	G. W. T : -5.48m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

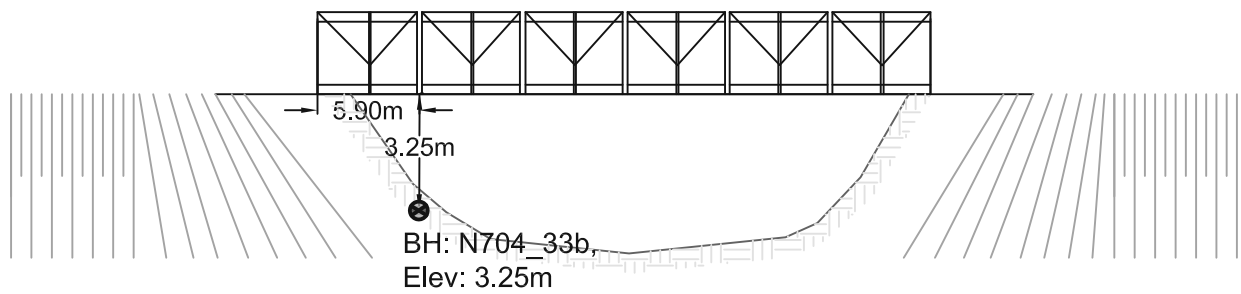
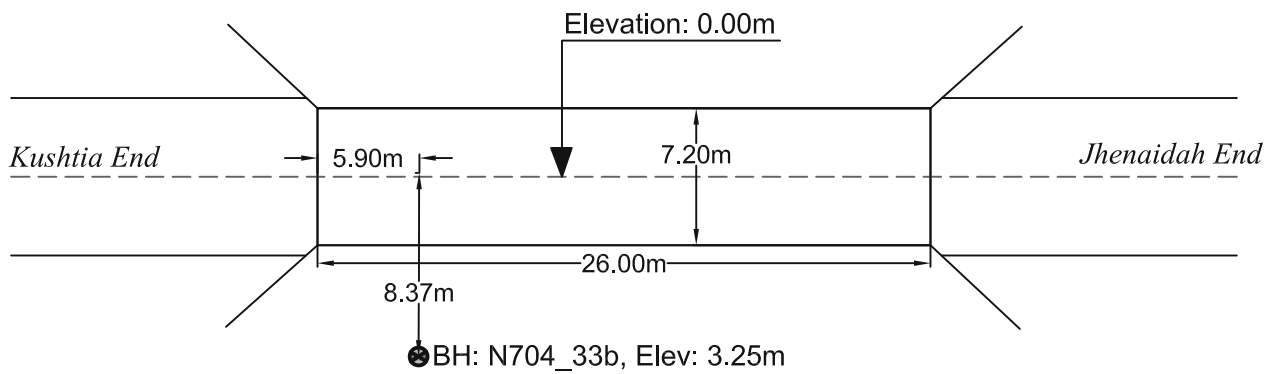
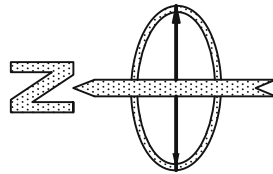
CLIENT: Oriental Consultants Company Limited.

RANK: 44

BRIDGE ID: N704_33b

LATITUDE: 23°51'4.165" LONGITUDE: 89°6'26.092"

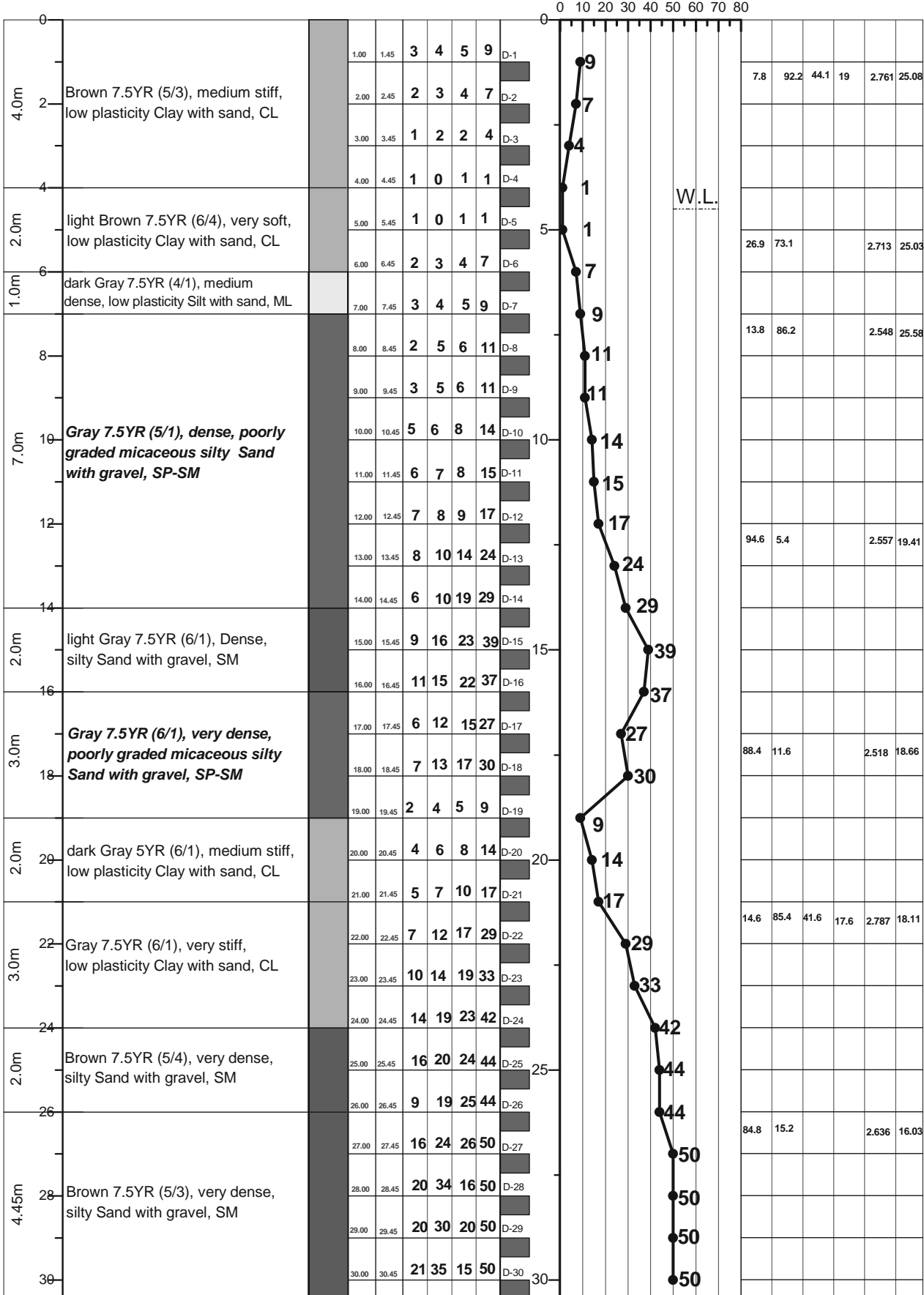
CHAINAGE: 34.625



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 44	BOREHOLE NO: N704_33b	Longitude: N 89°6'26.092"	Latitude: E 23°51'4.165"
			Brigde ID: N704_33b	Road Name: Jhenaidah-Kushtia-Paksey-Ferry-Dasuria.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 34.625, RL: -3.25m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 9-03-2014	Completed Date: 14-03-2014	G. W. T : -4.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

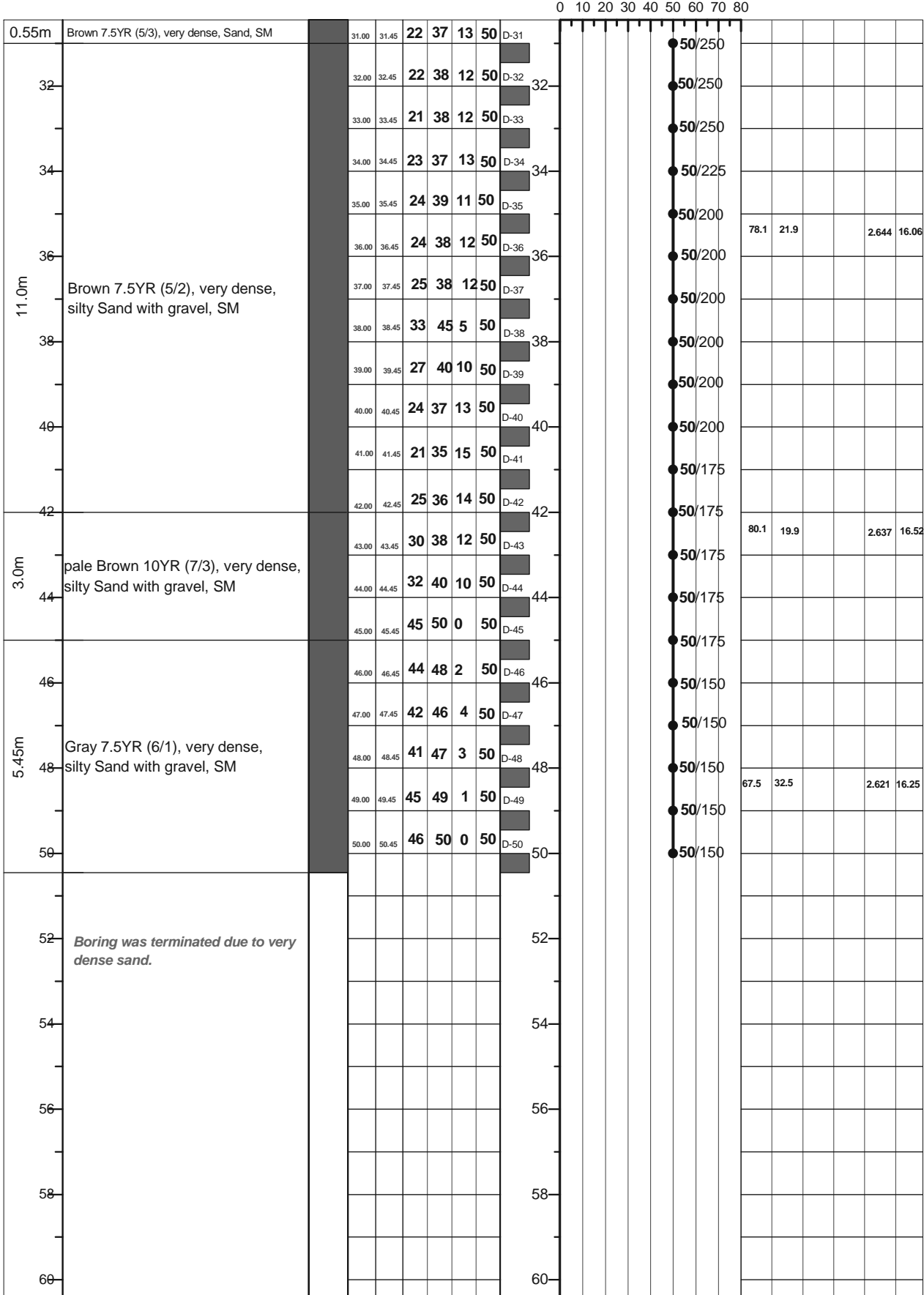
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 44	BOREHOLE NO: N704_33b	Longitude: N 89° 6' 26.092"	Latitude: E 23° 51' 4.165"
			Brigde ID: N704_33b	Road Name: Jhenaidah-Kushtia-Paksey Ferry-Dasuria	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 34.625, RL: -3.25m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 9-03-2014	Completed Date: 4-03-2014	G. W. T : -4.5m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

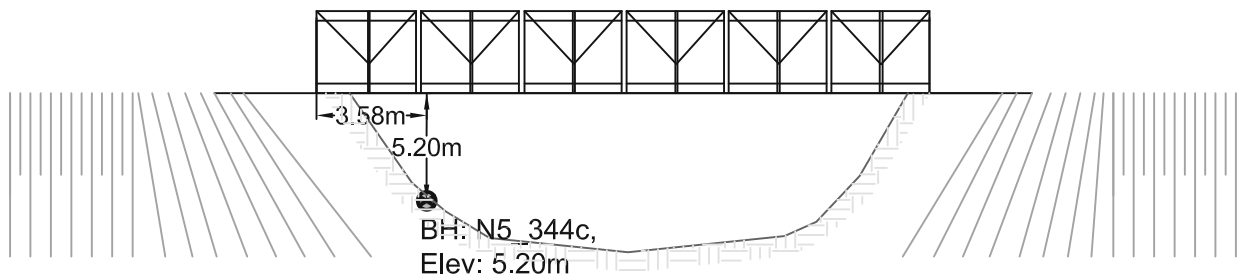
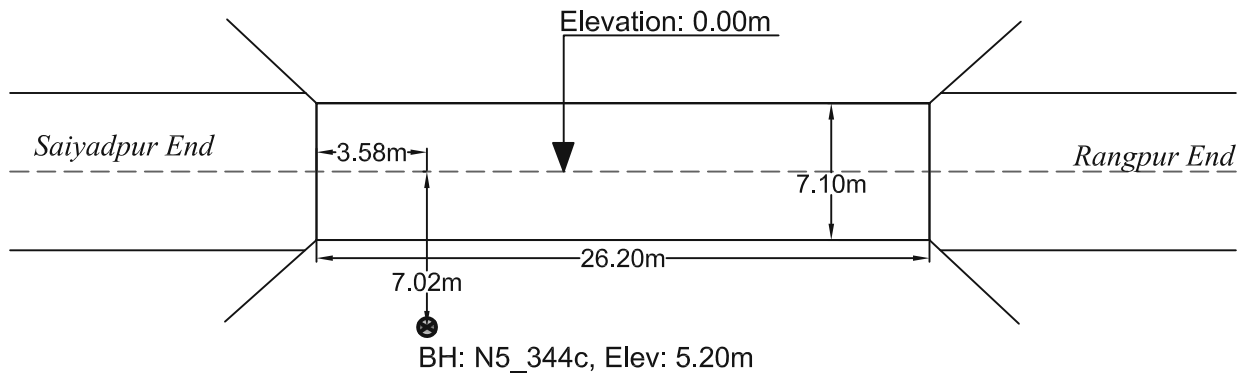
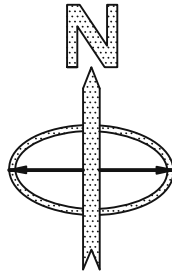


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

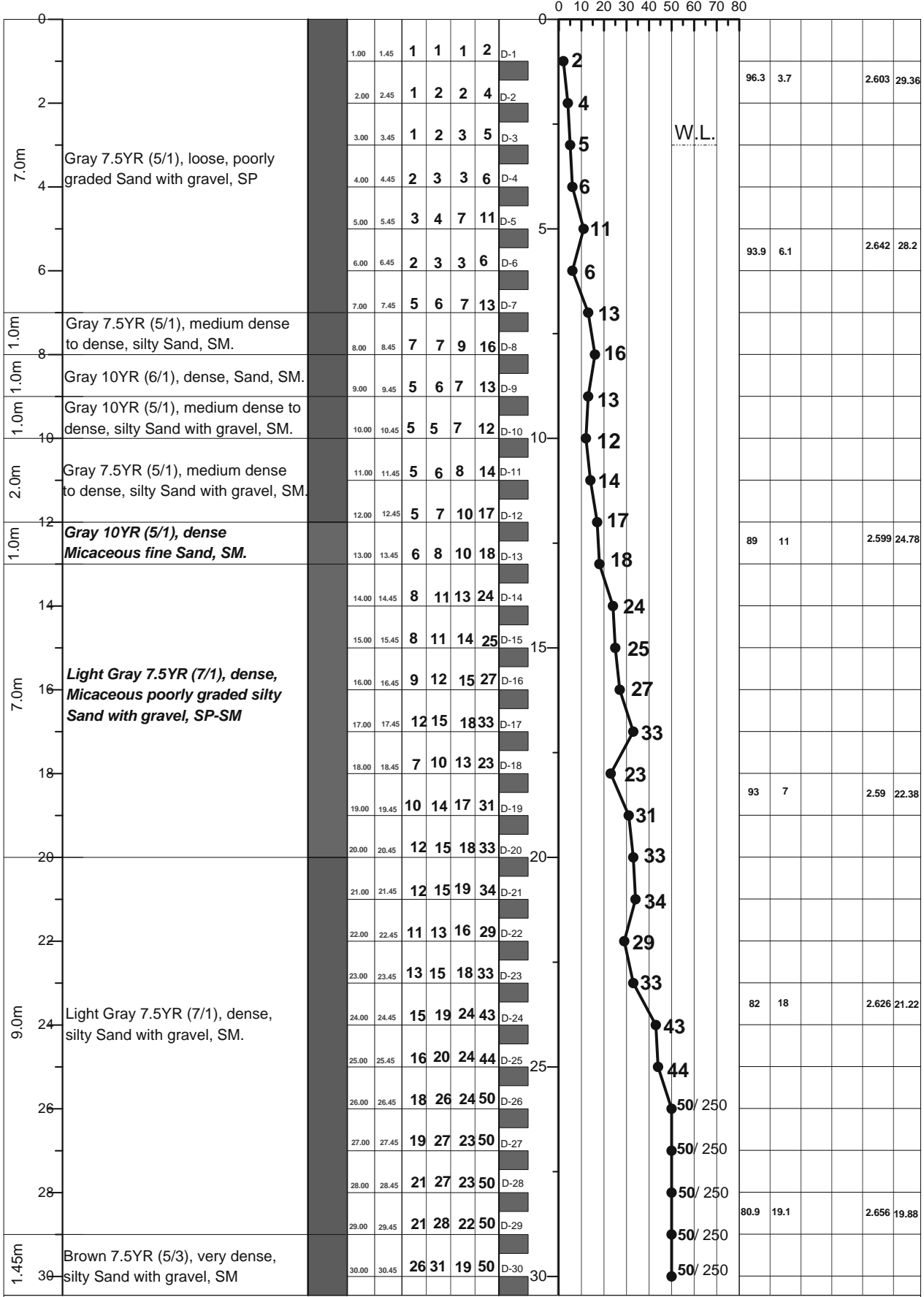
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 45
BRIDGE ID: N5_344c
LATITUDE: 25°48'41.813" LONGITUDE: 89°6'026.938"
CHAINAGE: 342.366



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 45	BOREHOLE NO: N5_344c	Longitude: N 89°06.443'	Latitude: E 25°48.699'
			Brigde ID: N5_344c	Road Name: Dhaka -Paturia-Kashinathpur- Bogra-Rangpur-Beidanga- Banglabandh Road.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 342.625, RL: -5.2m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

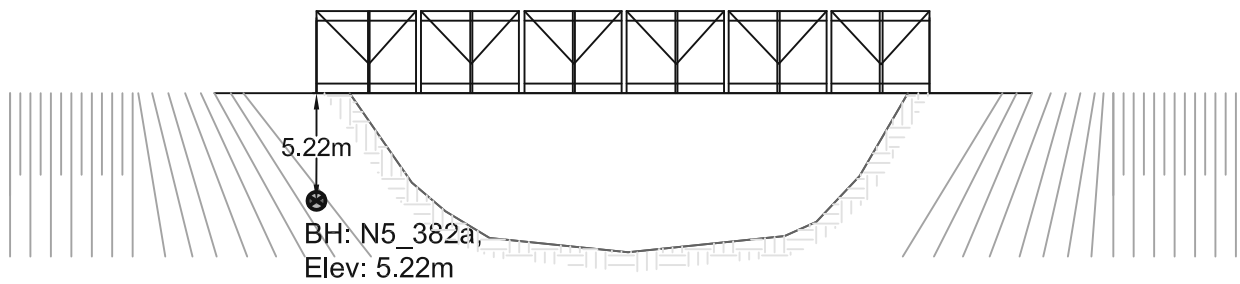
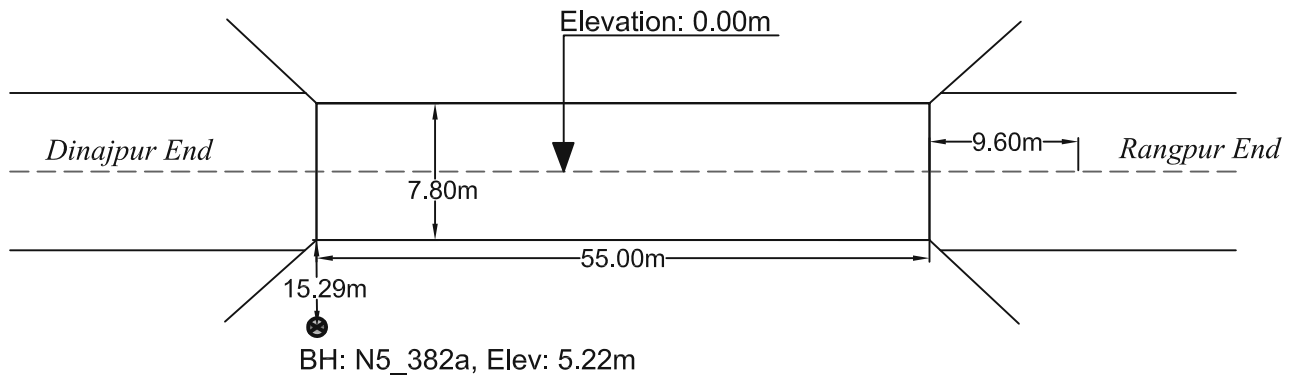
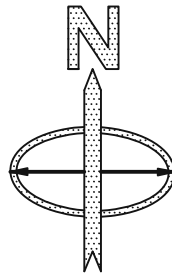
CLIENT: Oriental Consultants Company Limited.

RANK: 46

BRIDGE ID: N5_382a

LATITUDE: 25°46'25.014" LONGITUDE: 88°47'37.307"

CHAINAGE: 379.45



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 46	BOREHOLE NO: N5_382a	Longitude: N 088° 47.592'	Latitude: E 25° 46.413'
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Brigde ID: N5_382a	Road Name: Dhaka-Paturia-Kashinathpur- Bogra-Rangpur- Banglabandh.	
Type of Drill Rig: Manual Rotary			Borehole Depth: 42.0m	Chainage: 379.45, RL: -5.22m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 26-02-2014	Completed Date: 01-03-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0-3.0m	White 10R (8/1), loose, silty Sand with gravel, SM.		1.00	1.45	2	2	3	5	D-1	5	75.5	24.5			2.646	21.98
3.0-4.0m	Gray 7.5YR (5/2), medium stiff, high plastic Clay with sand, CH.		2.00	2.45	3	4	5	9	D-2	9						
4.0-5.0m			3.00	3.45	2	3	4	7	D-3	7						
5.0-6.0m			4.00	4.45	1	1	2	3	D-4	3						
6.0-8.0m	Gray 7.5YR (5/2), dense, Micaceous fine Sand, SM.		5.00	5.45	1	3	4	7	D-5	7	9	91	56	28.1	2.695	23.49
8.0-7.0m			6.00	6.45	5	8	10	18	D-6	18						
7.0-8.0m			7.00	7.45	5	7	9	16	D-7	16						
8.0-9.0m	White 10YR (8/2), dense, Sand, SM.		8.00	8.45	6	9	11	20	D-8	20						
9.0-10.0m	White 10YR (8/1), very dense, Micaceous silty Sand with gravel, SM.		9.00	9.45	10	18	20	38	D-9	38						
10.0-11.0m			10.00	10.45	8	10	12	22	D-10	22	84.9	15.1			2.62	16.47
11.0-12.0m			11.00	11.45	5	7	7	14	D-11	14						
12.0-13.0m			12.00	12.45	6	7	9	16	D-12	16						
13.0-14.0m			13.00	13.45	7	9	15	24	D-13	24						
14.0-15.0m	Gray 7.5YR (5/2), dense, Sand, SM.		14.00	14.45	6	10	17	27	D-14	27						
15.0-16.0m	Gray 7.5YR (5/2), dense, Micaceous Fine Sand, SM.		15.00	15.45	5	8	15	23	D-15	23						
16.0-17.0m			16.00	16.45	6	10	11	21	D-16	21						
17.0-18.0m	White 10YR (8/1), dense, Micaceous silty Sand with gravel, SM.		17.00	17.45	10	15	32	47	D-17	37	85.5	14.5			2.615	15.01
18.0-19.0m			18.00	18.45	8	12	34	45	D-18	45						
19.0-20.0m	Gray 7.5YR (5/2), very dense, Sand with pebble, SM.		19.00	19.45	7	19	21	40	D-19	40						
20.0-21.0m	White 10YR (8/1), very dense, Micaceous Fine Sand, SM.		20.00	20.45	8	18	23	41	D-20	41						14.34
21.0-22.0m			21.00	21.45	10	15	18	33	D-21	33						
22.0-23.0m	Brown 10YR (8/3), very dense, Micaceous fine Sand, SM.		22.00	22.45	10	18	23	41	D-22	41						
23.0-24.0m			23.00	23.45	12	20	25	45	D-23	45						
24.0-25.0m	White 10YR (8/1), very dense, Sand, SM.		24.00	24.45	10	22	26	48	D-24	48						
25.0-26.0m	Brown 7.5YR (8/3), medium plastic, medium stiff, high plastic Clay with sand, CH.		25.00	25.45	3	4	5	9	D-25	9						
26.0-27.0m			26.00	26.45	2	3	3	6	D-26	6	12.8	87.2	52.5	25.7	2.661	23.2
27.0-28.0m			27.00	27.45	4	5	5	10	D-27	10						
28.0-29.0m			28.00	28.45	2	4	4	8	D-28	8	3.9	96.1	37.3	11.2	2.665	27.69
29.0-30.0m	Brown 7.5YR (8/3), medium stiff, low plastic Silt with sand, ML.		29.00	29.45	3	4	4	8	D-29	8						
30.0-31.0m	Brown 7.5YR (8/3), medium dense to dense, clay with Sand, SM.		30.00	30.45	10	15	18	50	D-30	33						
31.0-32.0m	Light Brown 10YR (5/2), very dense, silty Sand, SM.															

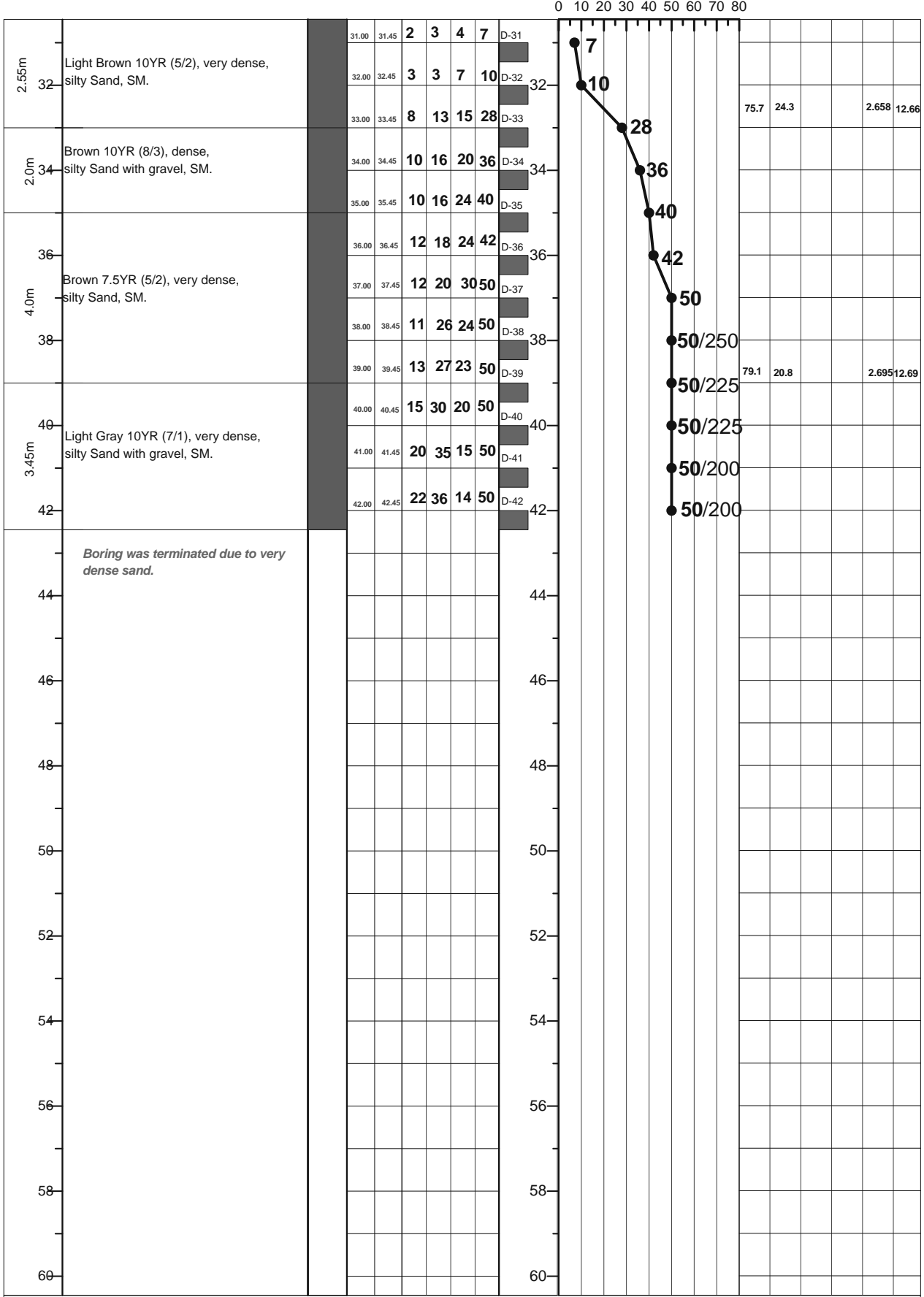
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 46	BOREHOLE NO: N5_382a	Longitude: N 088° 47.592'	Latitude: E 25° 46.413'
			Brigde ID: N5_382a	Road Name: Dhaka-Paturia-Kashinathpur- Bogra-Rangpur- Banglabandh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 42.0m	Chainage: 379.45, RL: -5.22m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 26-02-2014	Completed Date: 01-03-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									

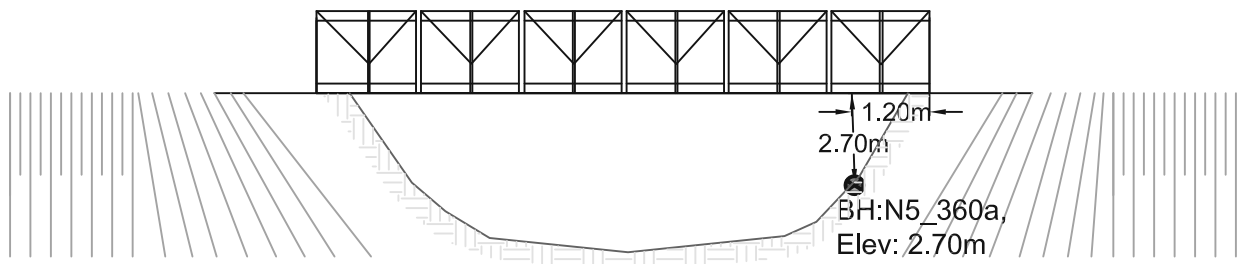
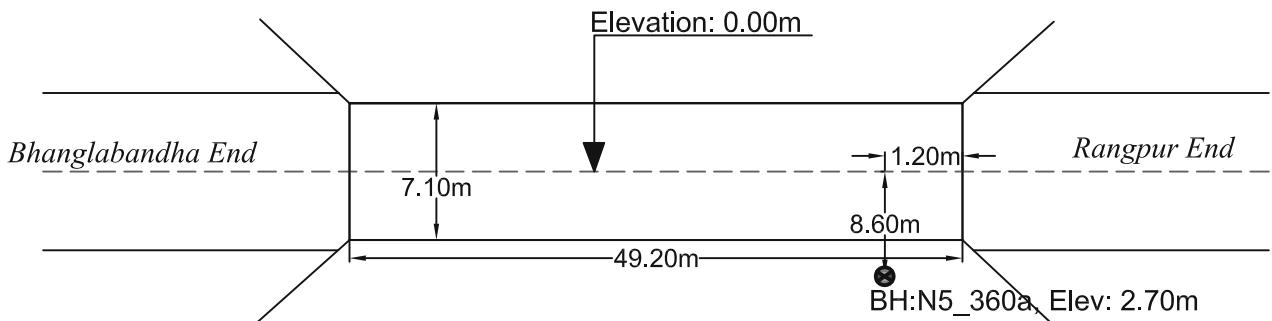
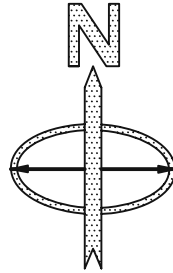


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

[Light Gray Box] PLASTIC CLAY	[Light Blue Box] SILT	[Dark Gray Box] PEAT/HIGHLY ORGANIC SOIL	[Dark Gray Box] UNDISTURBED SAMPLE
[Dark Gray Box] MICACEOUS FINE SAND/SILT	[Dark Blue Box] SAND	[Dark Gray Box] SHALE	[Dark Gray Box] DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 47
BRIDGE ID: N5_360a
LATITUDE: 25°47'46.925" LONGITUDE: 88°57'20.810"
CHAINAGE: 358.013



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 47	BOREHOLE NO: N5_360a Brigde ID: N5_360a	Longitude: N 088°57.349'	Latitude: E 25°47.788'
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 33.0m	Chainage: 358.013, RL: -2.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 06-03-2014	Completed Date: 08-03-2014	G. W. T : -3.9m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0								0								
3.0m	Very Pale Brown 10YR (8/3), loose, Sand, SM.		1.00	1.45	1	2	2	4	D-1	4						
2.0m			2.00	2.45	2	2	3	5	D-2	5						
3.0m			3.00	3.45	2	3	4	7	D-3	7						
1.0m	White 10YR (8/1), medium dense to dense, Sand, SM.		4.00	4.45	6	7	8	15	D-4	15						
1.0m	Gray 10YR (7/1), medium dense to dense, Sand, SM.		5.00	5.45	2	2	2	4	D-5	4						
6.0m	Black Gray 7.5YR (5/2), soft, low plastic, Silt with sand, ML.		6.00	6.45	1	1	2	3	D-6	3	9.4	90.6	56.3	28	2.71	32.39
7.0m			7.00	7.45	1	2	2	4	D-7	4						
8.0m			8.00	8.45	1	1	1	2	D-8	2	66	34			2.707	27.54
1.0m	Gray 7.5YR (5/2), very loose, silty Sand with gravel, SM.		9.00	9.45	8	8	10	18	D-9	18	85.1	14.8			2.604	20.49
2.0m	Gray 10YR (7/1), dense, silty Sand with gravel, SM.		10.00	10.45	8	9	10	19	D-10	19						
11.00			11.00	11.45	2	3	4	7	D-11	7						
12.00			12.00	12.45	2	2	3	5	D-12	5						
5.0m	Gray 7.5YR (5/2), medium stiff, low plastic, Silt with sand, ML.		13.00	13.45	2	2	3	5	D-13	5						
14.00			14.00	14.45	2	3	4	7	D-14	7	11.2	88.8	51.9	25.4	2.689	21.95
15.00			15.00	15.45	3	6	8	14	D-15	14						
16.00			16.00	16.45	3	6	7	13	D-16	13						
3.0m	Light Gray 10YR (5/2), stiff, medium plastic, Clay, CL.		17.00	17.45	6	7	8	15	D-17	15						
18.00			18.00	18.45	4	5	6	11	D-18	11						
19.00			19.00	19.45	5	5	8	13	D-19	13	6.9	93.1	45.8	20.4	2.65	20.39
3.0m	Very Pale Brown 10YR (8/2), stiff, medium plastic, silt with Clay, CL.		20.00	20.45	5	6	8	14	D-20	14						
21.00			21.00	21.45	4	7	8	15	D-21	15						
22.00			22.00	22.45	6	12	20	32	D-22	32						
2.0m	Gray 10YR (7/1), very dense, Micaceous Sand, SM.		23.00	23.45	10	16	24	40	D-23	40	87.8	12.2			2.587	22.65
1.0m	Light Gray 10YR (8/1), very dense, Micaceous silty Sand with gravel, SM.		24.00	24.45	12	17	27	44	D-24	44						
2.0m	Gray 7.5YR (5/2), very stiff, silt with Clay, CL.		25.00	25.45	17	13	12	25	D-25	25						
26.00			26.00	26.45	1	2	3	5	D-26	5						
27.00			27.00	27.45	9	14	21	35	D-27	35	75.5	24.5			2.603	17.64
3.45m	Gray 10YR (7/1), very dense, silty Sand with gravel, SM.		28.00	28.45	12	22	28	50	D-28	50						
29.00			29.00	29.45	14	24	26	50	D-29	50/250					2.558	
30.00			30.00	30.45	22	28	22	50	D-30	50/225						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

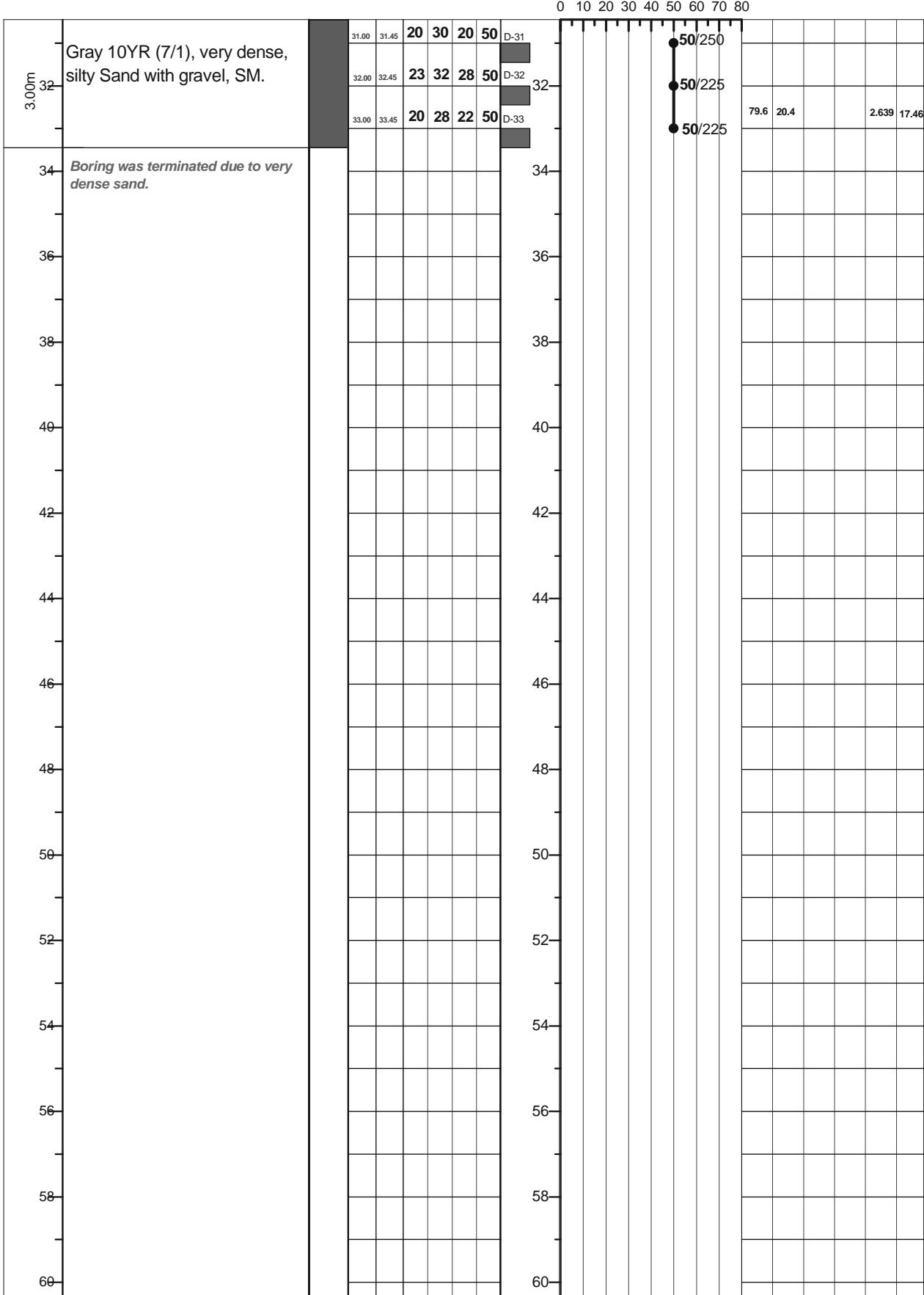
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 47	BOREHOLE NO: N5_360a	Longitude: N 088°57.349'	Latitude: E 25°47.788'
			Brigde ID: N5_360a	Road Name: Dhaka -Paturia-Kashinathpur- Bogra-Rangpur-Beldanga- Banglabandh Road.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 33.0m	Chainage: 358.013, RL: -2.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 06-03-2014	Completed Date: 08-03-2014	G. W. T : -3.9m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)								

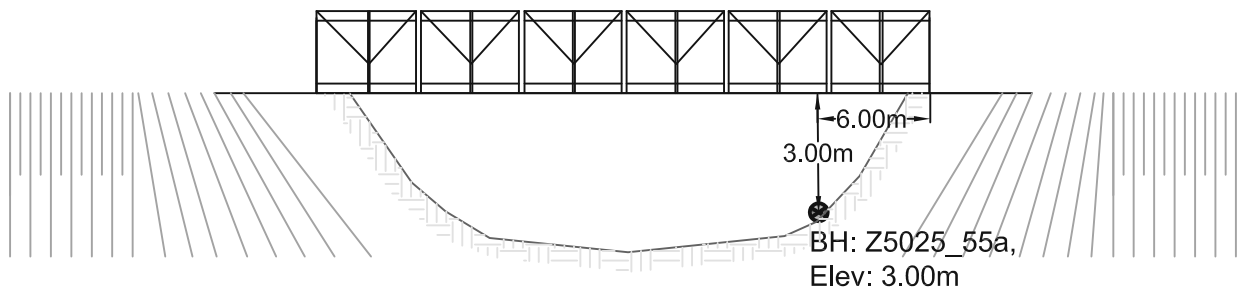
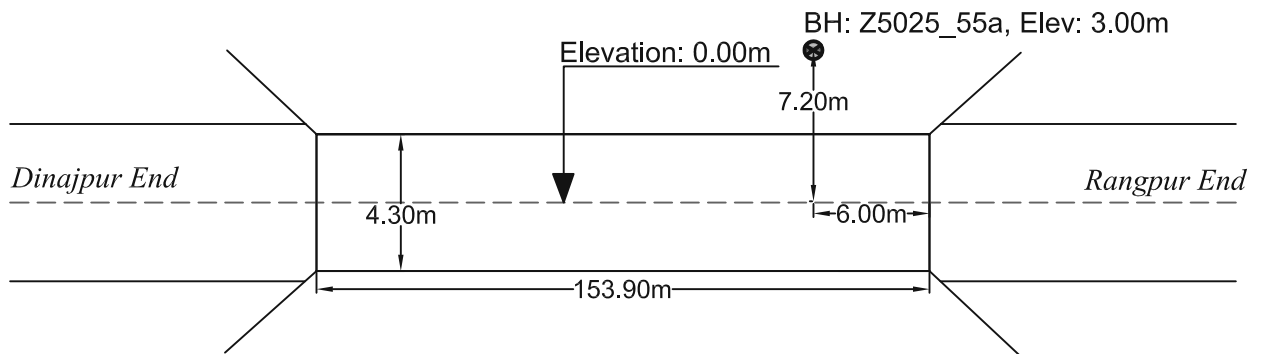
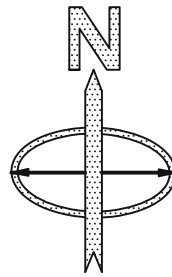


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

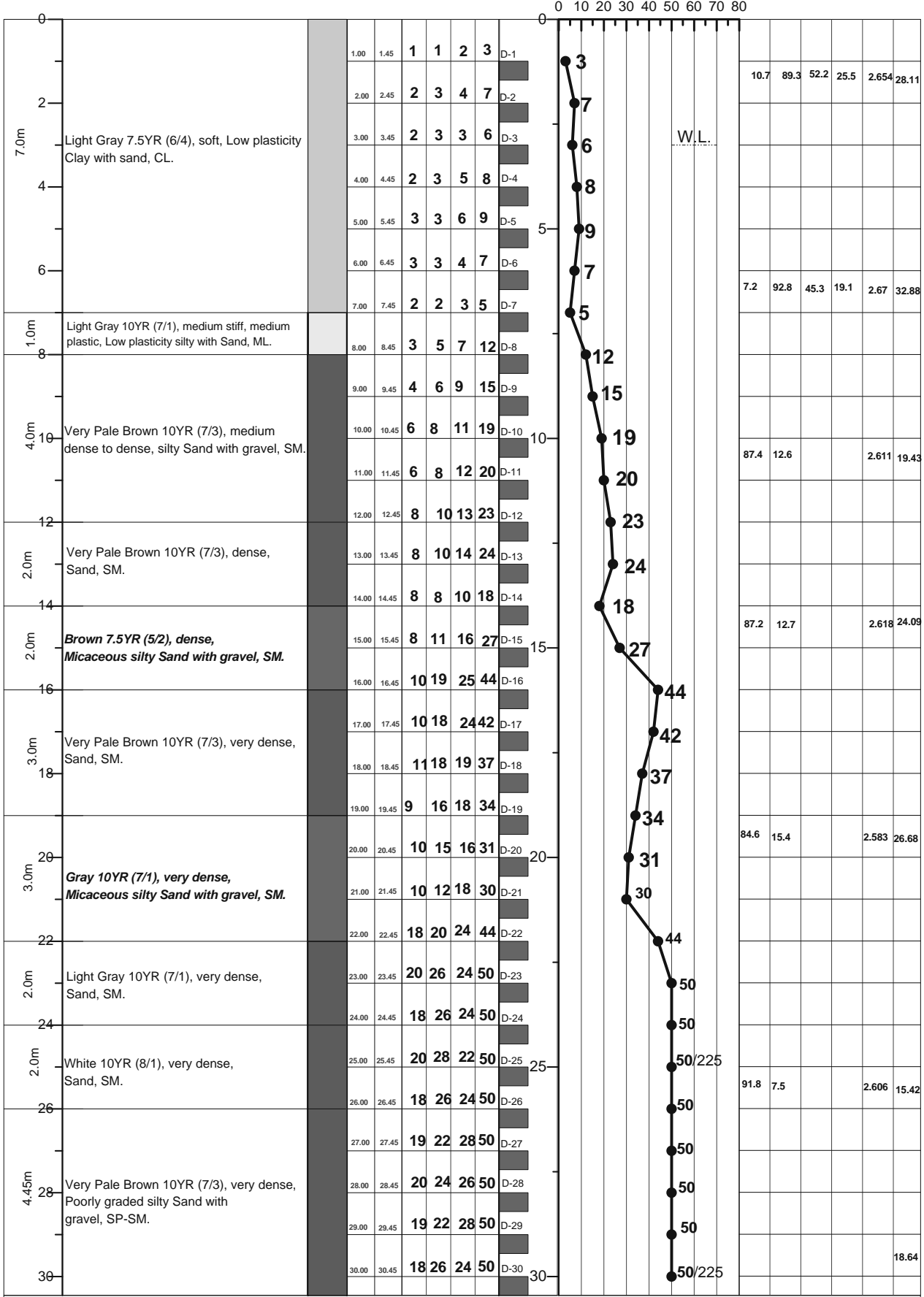
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 48
BRIDGE ID: Z5025_55a
LATITUDE: 25°39'08.493" LONGITUDE: 88°45'39.608"
CHAINAGE: 54.359



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 48	BOREHOLE NO: Z5025_55a	Longitude: N 088° 45.611'	Latitude: E 25° 39.145'
			Brigde ID: Z5025_55a	Road Name: Rangpur-Badarganj-Parbatipur-Dinajpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 54.359, RL: -3.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 22-02-2014	Completed Date: 23-02-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

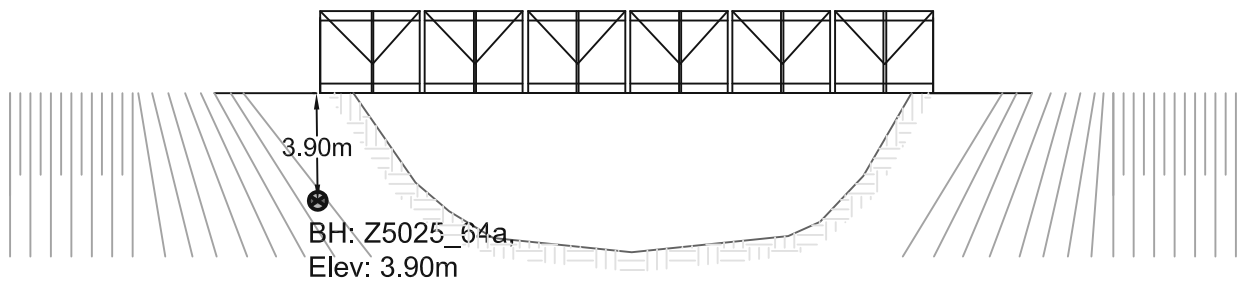
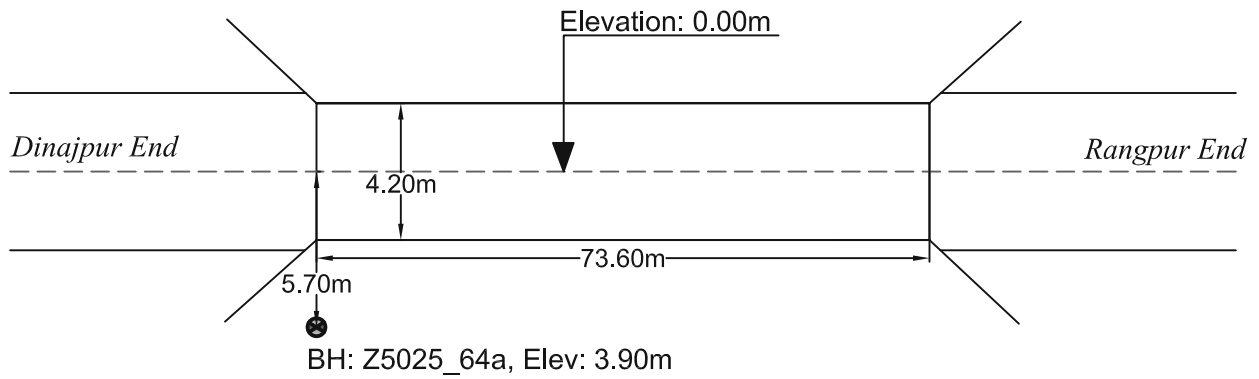
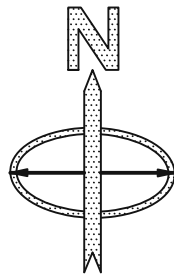
CLIENT: Oriental Consultants Company Limited.

RANK: 49

BRIDGE ID: Z5025_64a

LATITUDE: 25°38'20.874" **LONGITUDE:** 88°40'13.865"

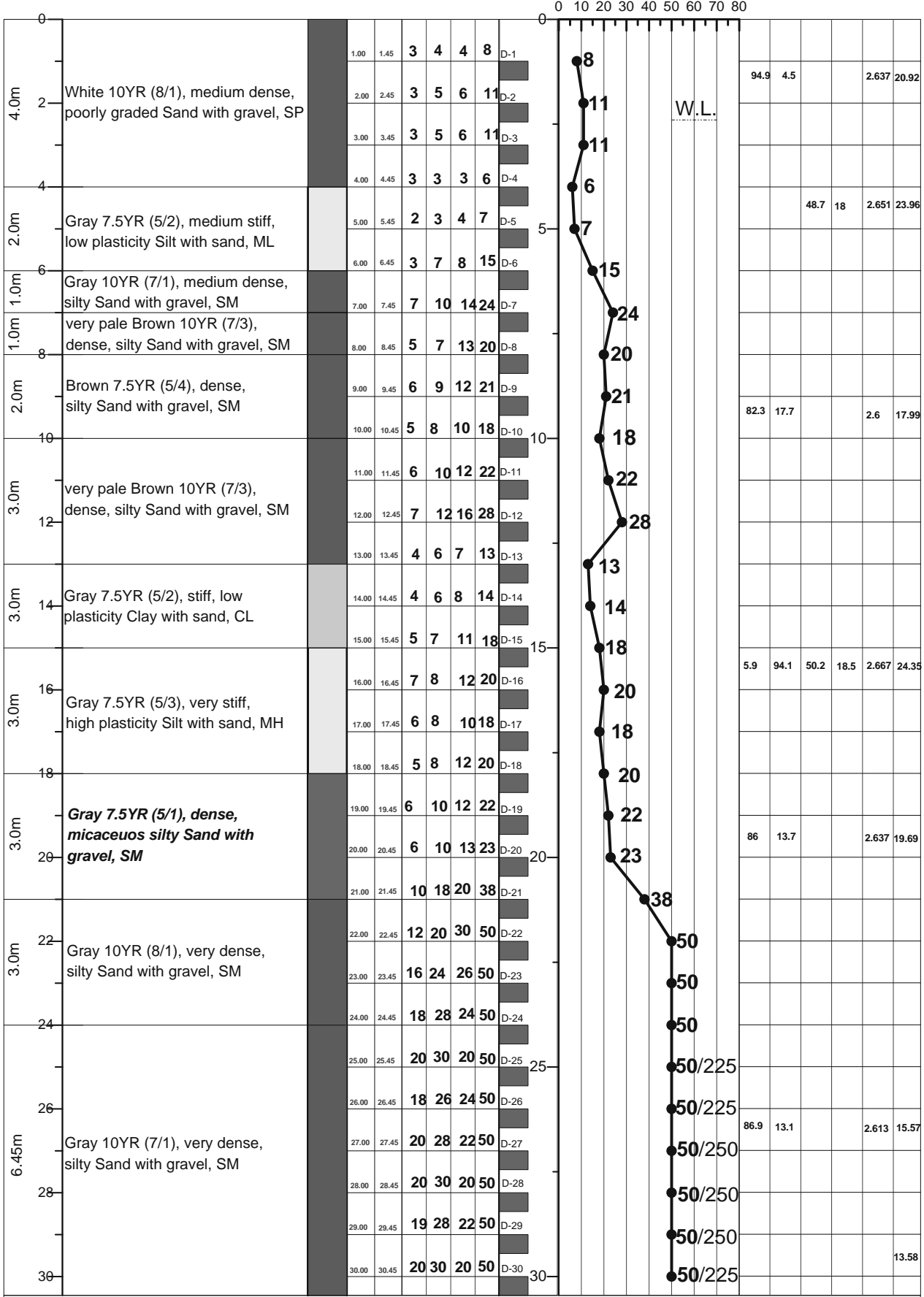
CHAINAGE: 63.739



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 49	BOREHOLE NO: Z5025-64a	Longitude: N 88°40'13.865"	Latitude: E 25°38'20.874"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Road Name: Rangpur-Badarganj-Parbatipur-Dinajpur.	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 3-03-2014		Completed Date: 4-03-2014	
				Chainage: 63.739, RL: -3.9m	
				G. W. T : -2.4m.	

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

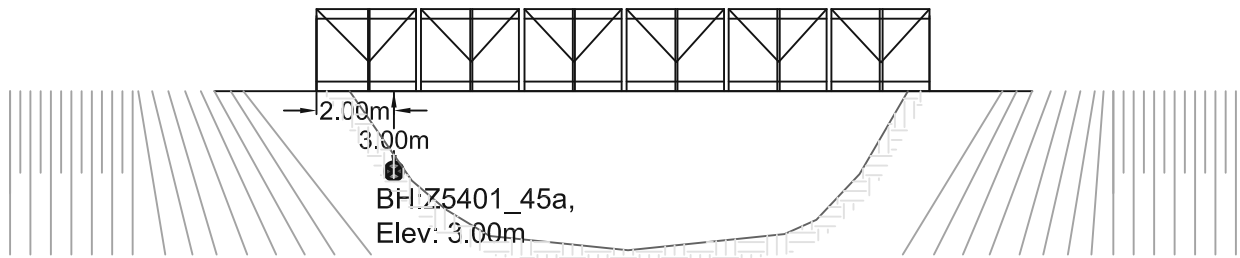
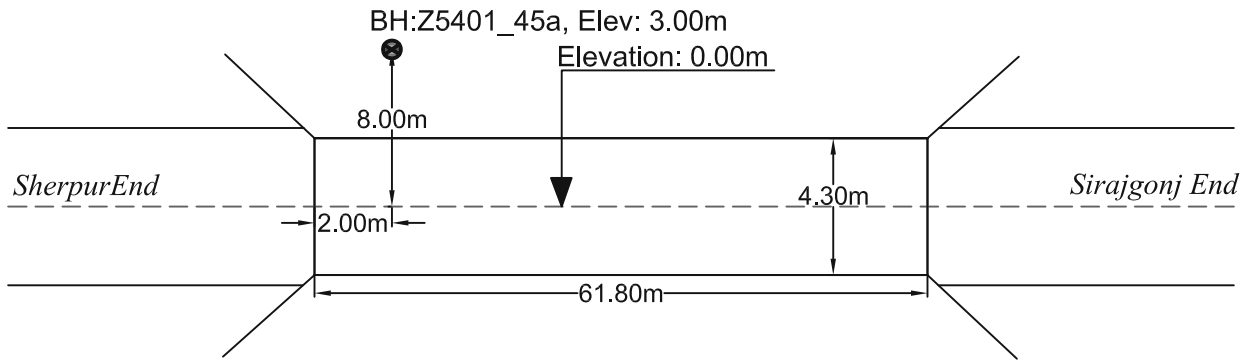
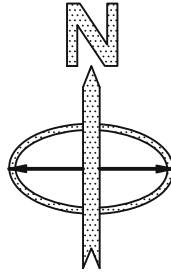


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

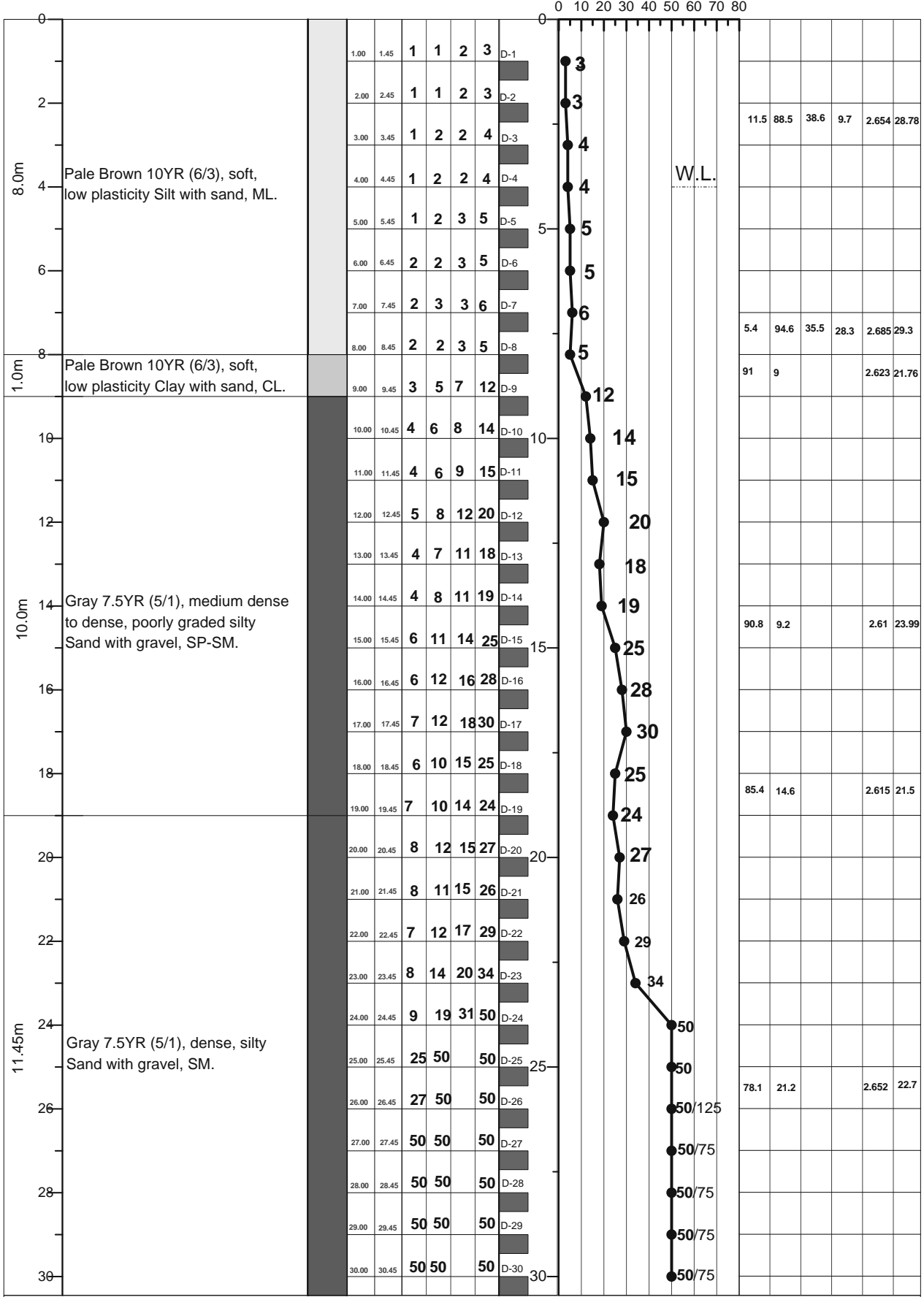
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 50
BRIDGE ID: Z5401_45a
LATITUDE: 24°40'23.002" LONGITUDE: 89°30'58.126"
CHAINAGE: 44.585



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 50	BOREHOLE NO: Z5401_45a	Longitude: N 89°30'55.9"	Latitude: E 24°40'22.4"
			Brigde ID: Z5401_45a	Road Name: Sirajganj-Kazipur-Dhunat-Sherpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 44.585, RL: -3m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -4.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

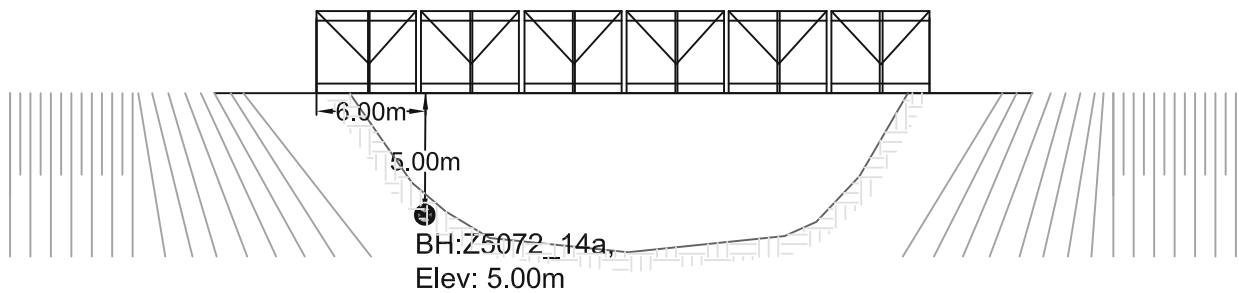
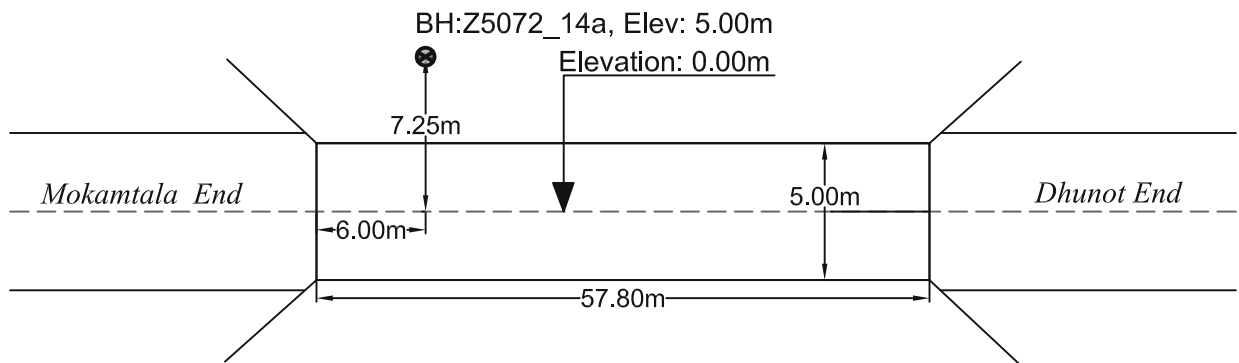
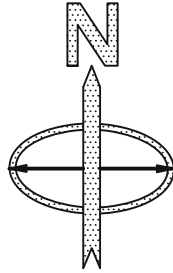


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

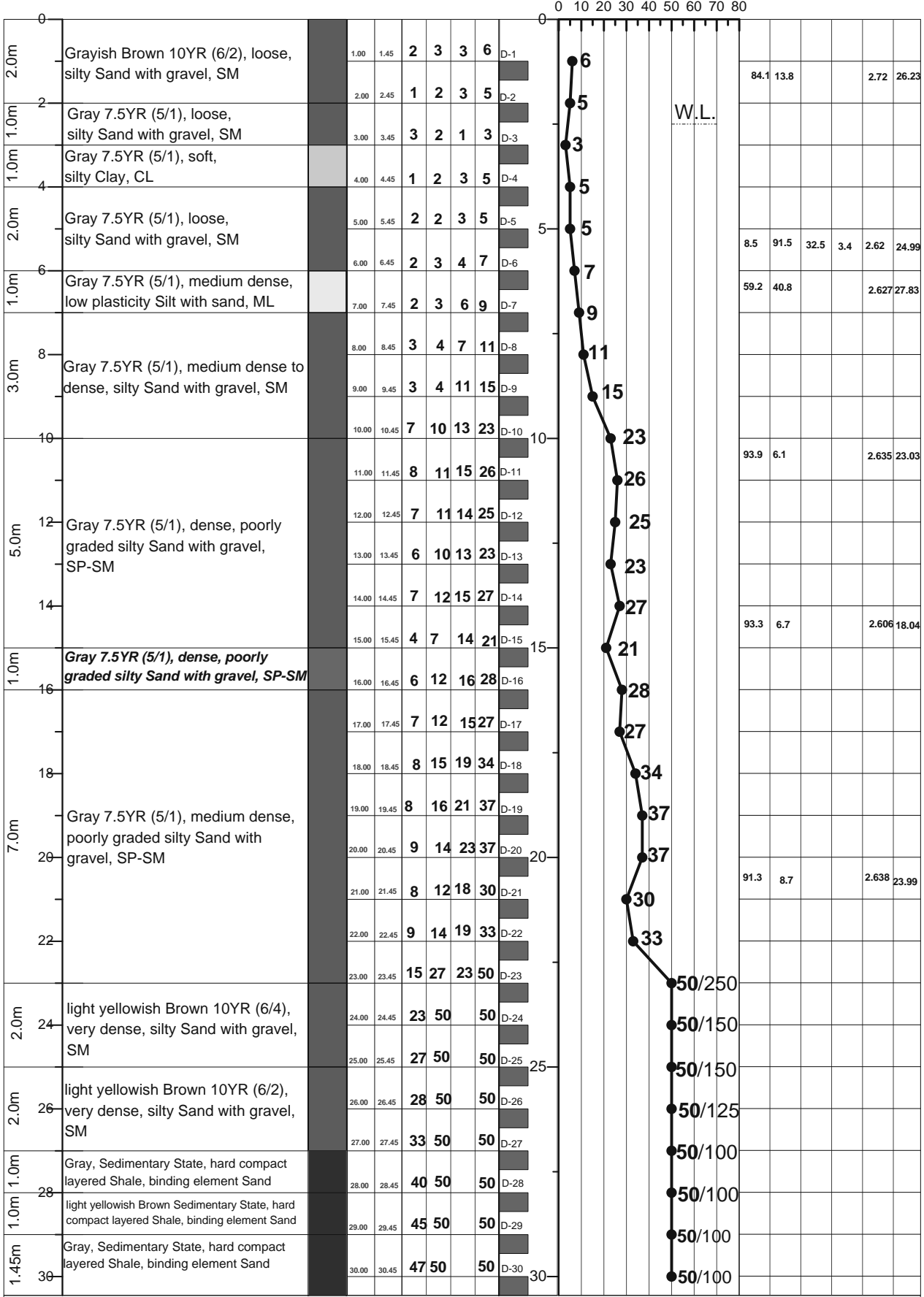
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 51
BRIDGE ID: Z5072_14a
LATITUDE: 24°46'25.487" LONGITUDE: 89°30'40.119"
CHAINAGE: 13.52



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 51	BOREHOLE NO: Z5072-14a	Longitude: N 89°25'37.83"	Latitude: E 24°46'25.487"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Brigde ID: Z5072-14a	Road Name: Dhunot-Nanglu-Baliadighi-Gabtali-Pirgachha-Mokamtala.	
Type of Drill Rig: Manual Rotary			Borehole Depth: 30.0m	Chainage: 13.52, RL: -5.0m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 25-02-2014	Completed Date: 27-02-2014	G. W. T : -2.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

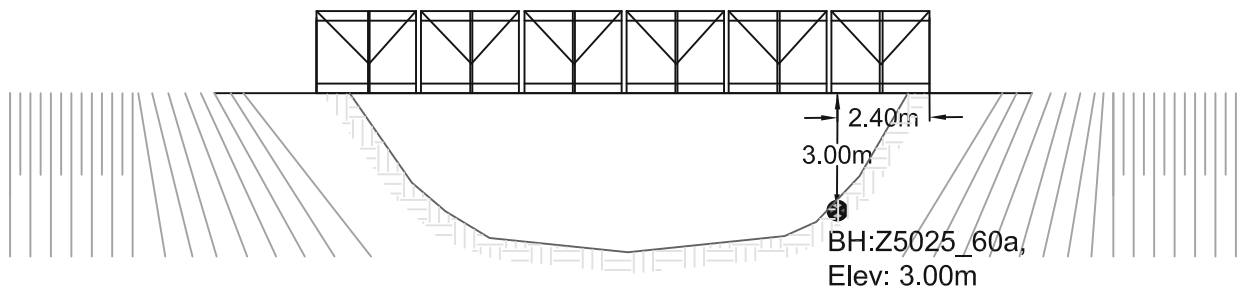
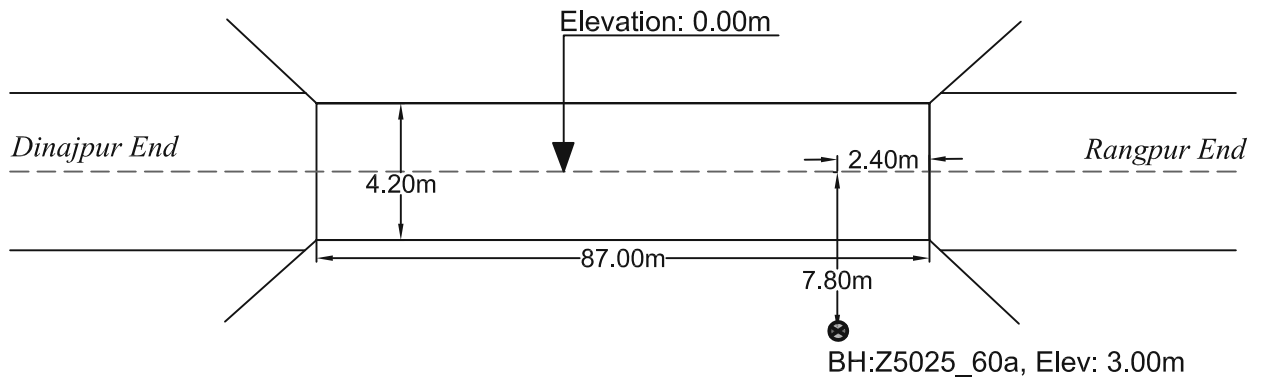
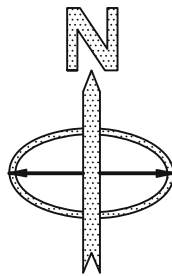


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

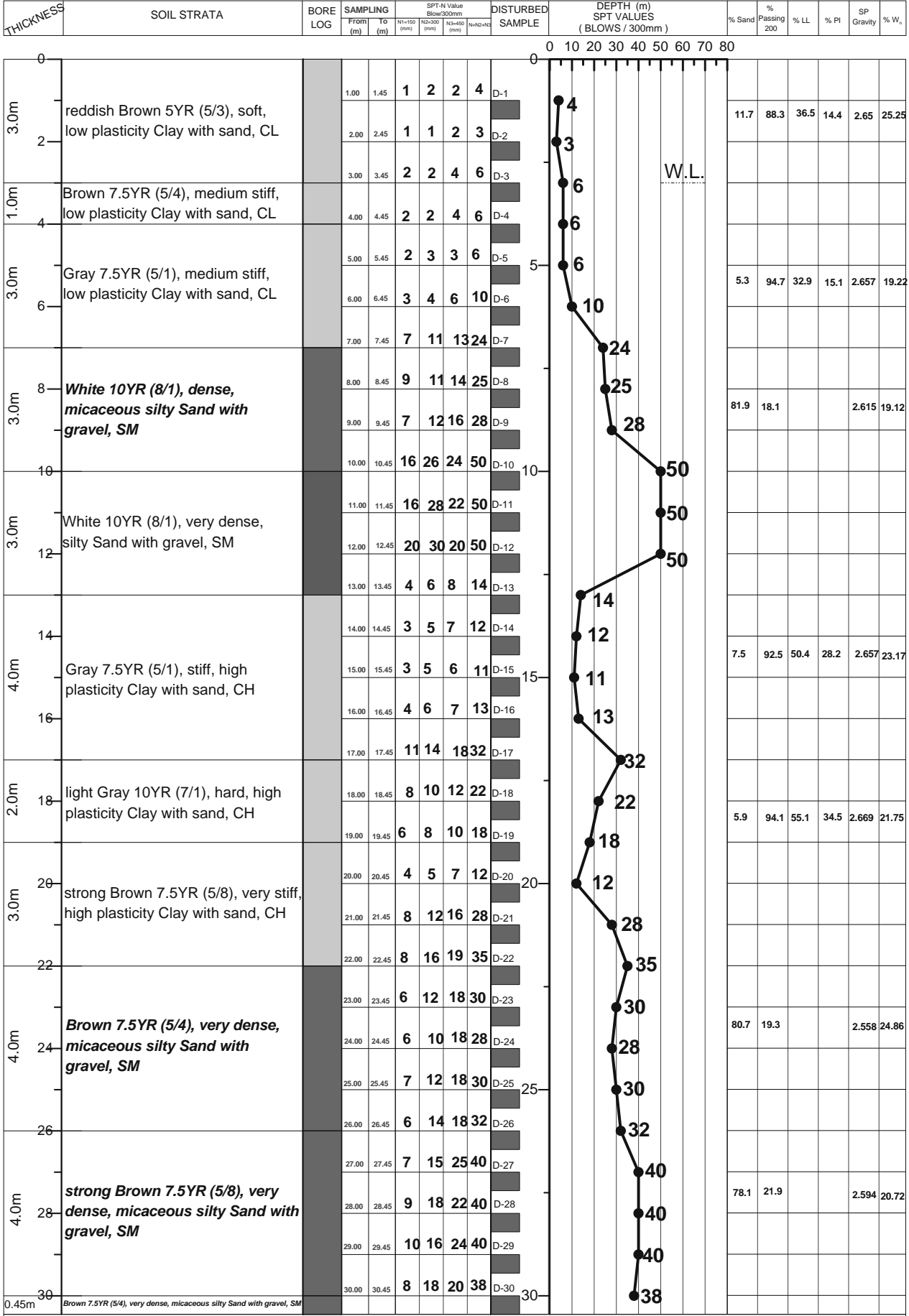
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 52
BRIDGE ID: Z5025_60a
LATITUDE: 25°38'35.58" LONGITUDE: 88°42'46.39"
CHAINAGE: 59.364



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 52	BOREHOLE NO: Z5025-60a	Longitude: N 88°42'46.39"	Latitude: E 25°38'35.58"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 50.0m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 24-02-2014		Completed Date: 27-02-2014	
				Chainage: 59.364, RL: -3.0m	
				G. W. T : -3.0m.	



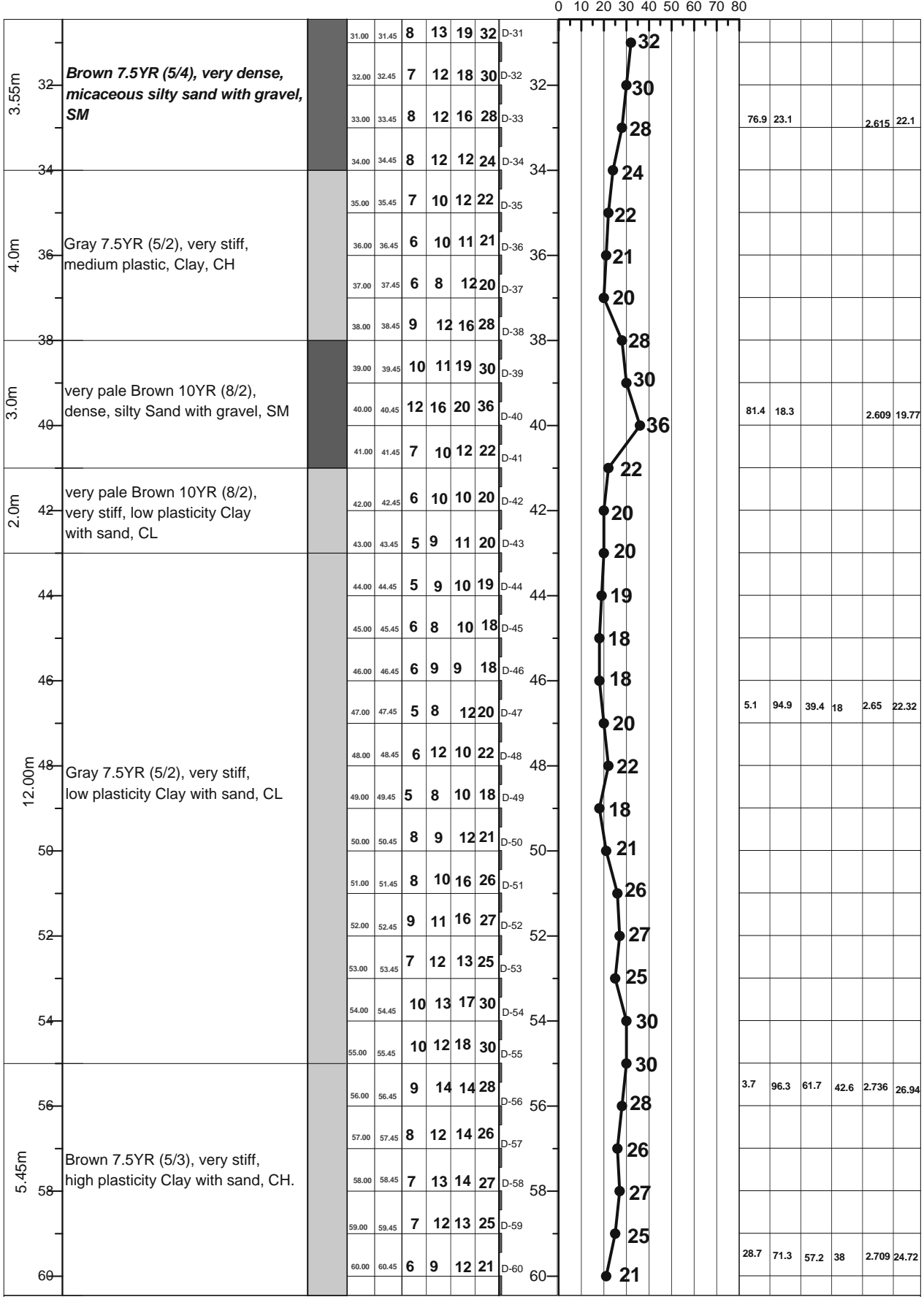
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 52	BOREHOLE NO: Z5025_60a	Longitude: N 88°42'46.39"	Latitude: E 25°38'35.58"
			Brigde ID: Z5025_60a	Road Name: Rangpur-Badarganj-Parbatipur-Dinajpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 59.364, RL: -3.0
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 24-02-2014	Completed Date: 27-02-2014	G. W. T : -3.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

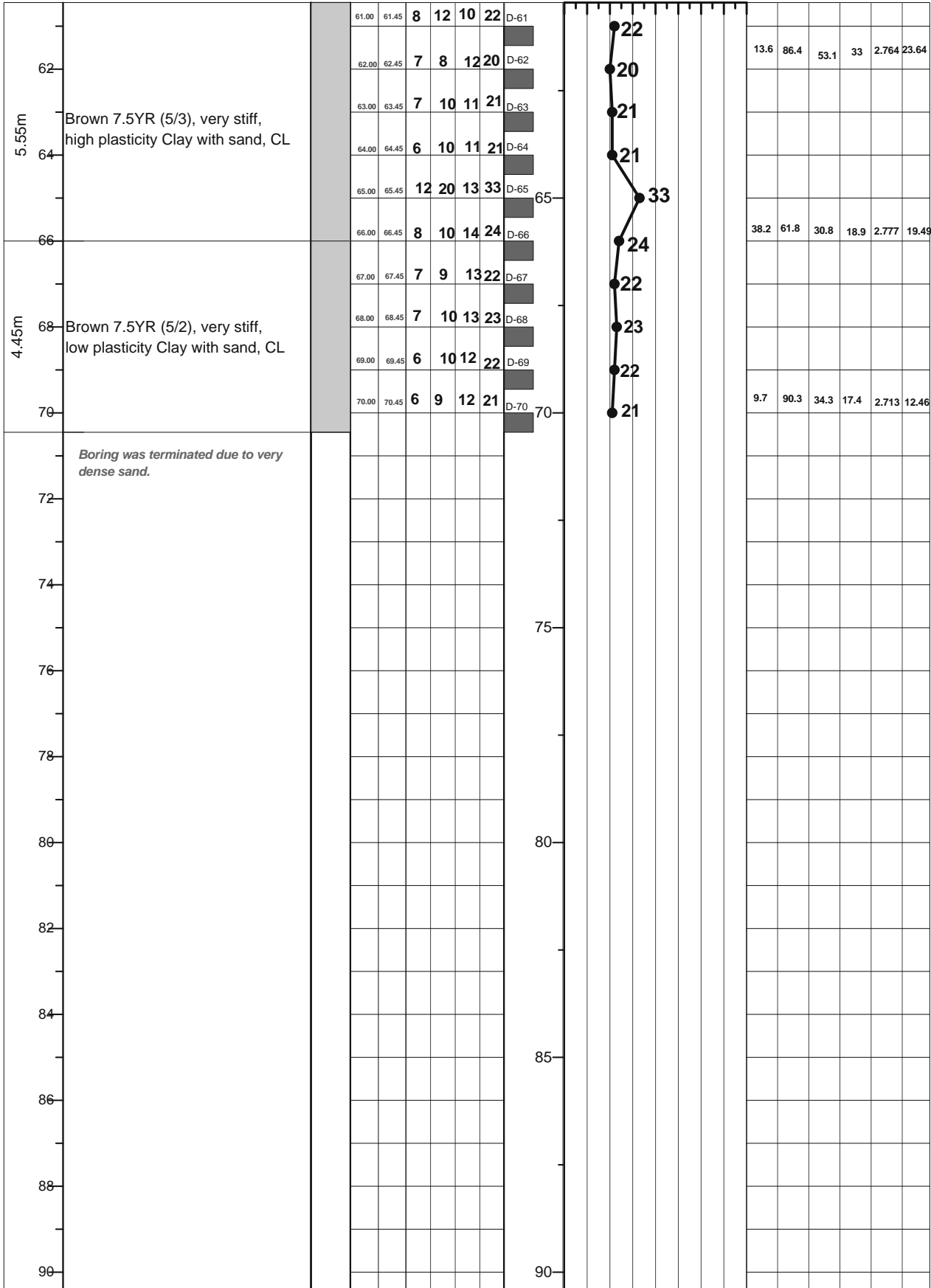
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 52	BOREHOLE NO: Z5025_60a	Longitude: N 88°42'46.39"	Latitude: E 25°38'35.58"
			Brigde ID: Z5025_60a	Road Name: Rangpur-Badarganj-Parbatipur-Dinajpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 59.364, RL: -3.0
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 24-02-2014	Completed Date: 27-02-2014	G. W. T : -3.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									

0 10 20 30 40 50 60 70 80

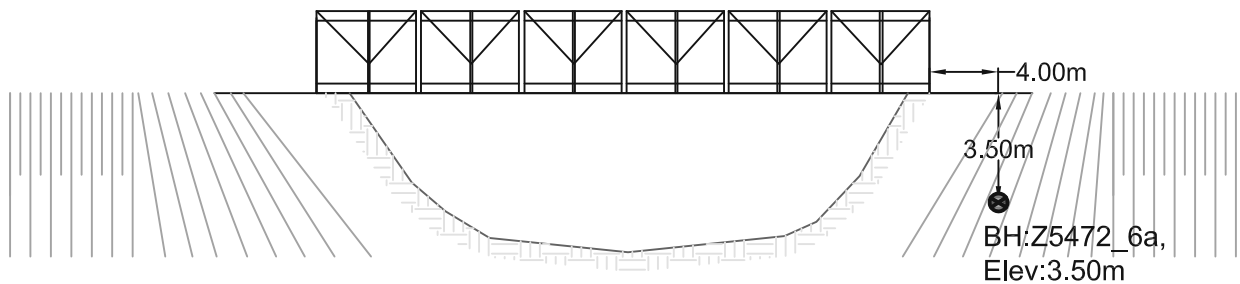
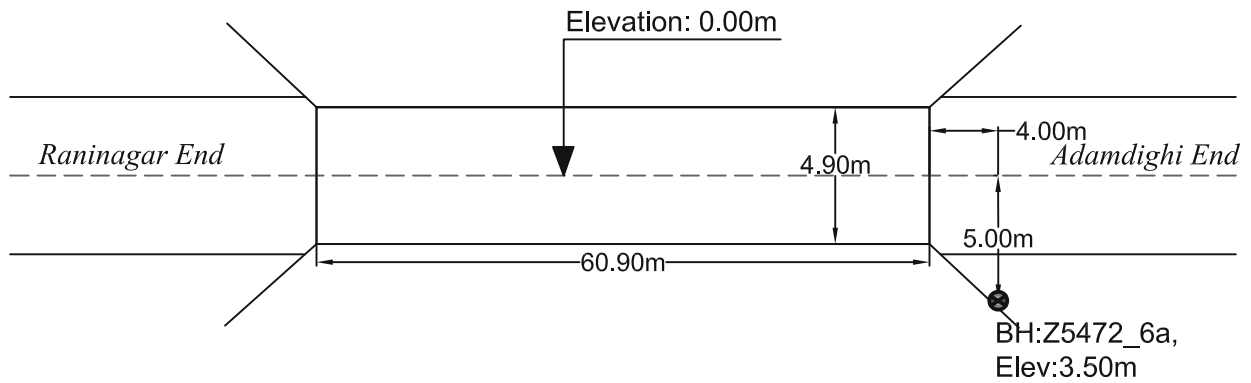
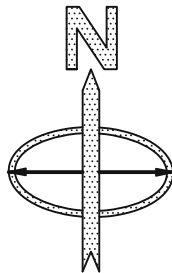


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

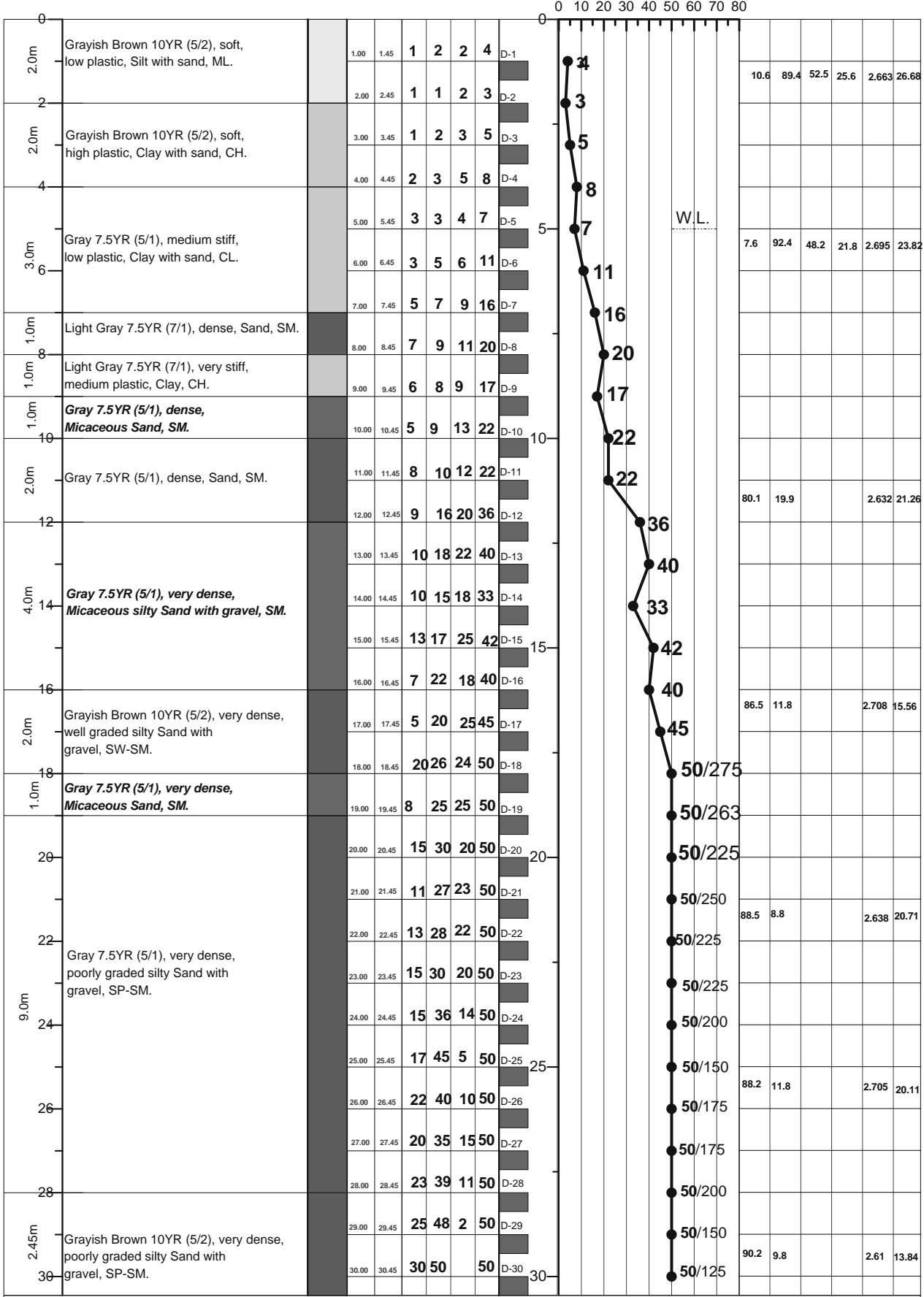
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 53
BRIDGE ID: Z5472_6a
LATITUDE: 24°47'9.847" LONGITUDE: 89°0'30.036"
CHAINAGE: 6.28



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 53	BOREHOLE NO: Z5472_6a	Longitude: N 89°00'31.0"	Latitude: E 24°47'09"
			Brigde ID: Z5472_6a	Road Name: Adamdighi-Santahar Sailo-Raninagar.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 6.28, RL: -3.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 03-03-2014	Completed Date: 04-03-2014	G. W. T : -5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING						DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)	N4-N630 (mm)								

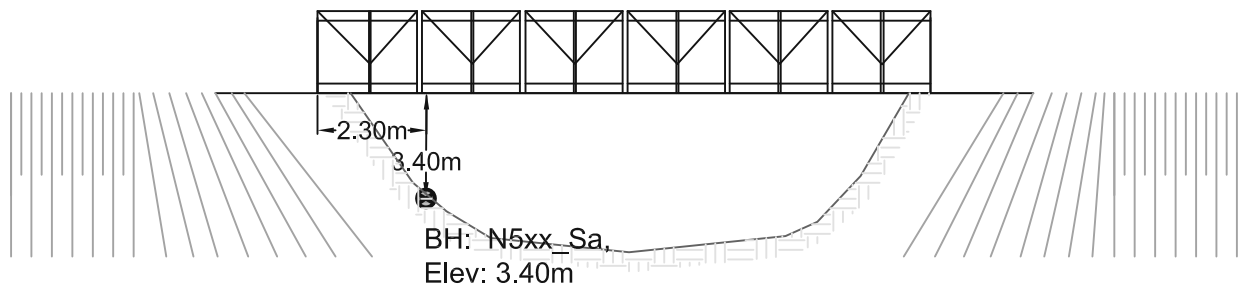
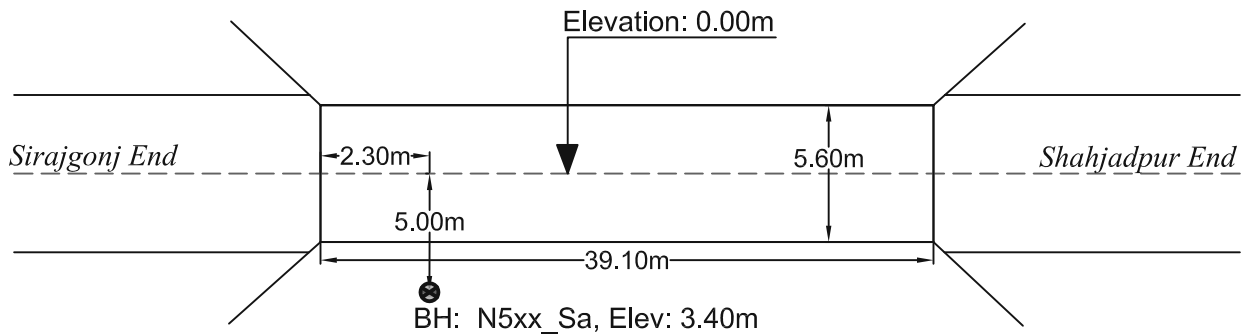
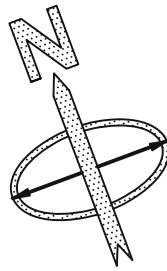


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 54
BRIDGE ID: N5xx_Sa
LATITUDE: 24°18'37.838" LONGITUDE:89°34'07.474"
CHAINAGE: 0.92



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 54	BOREHOLE NO: N5xx-Sa Brigde ID: N5xx-Sa	Longitude: N 89°39'52.2" Road Name: Ullahpara town portion of Dhaka - Banglabandh road.	Latitude: E 24°18'37.838"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 0.92, RL: -3.4m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 7-03-2014	Completed Date: 8-03-2014	G. W. T : -9.0m.

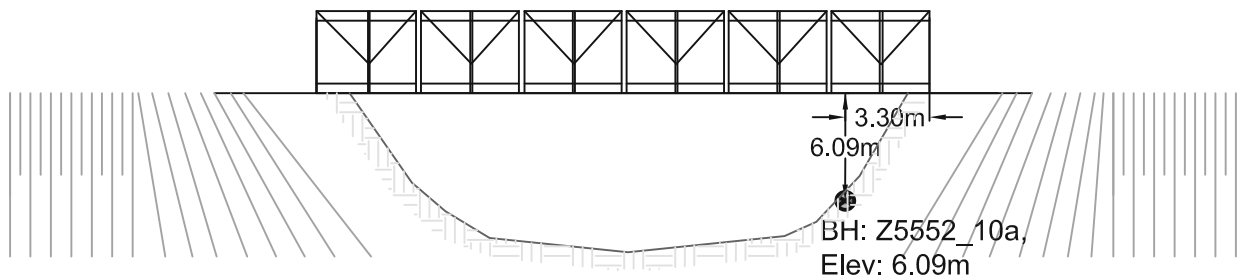
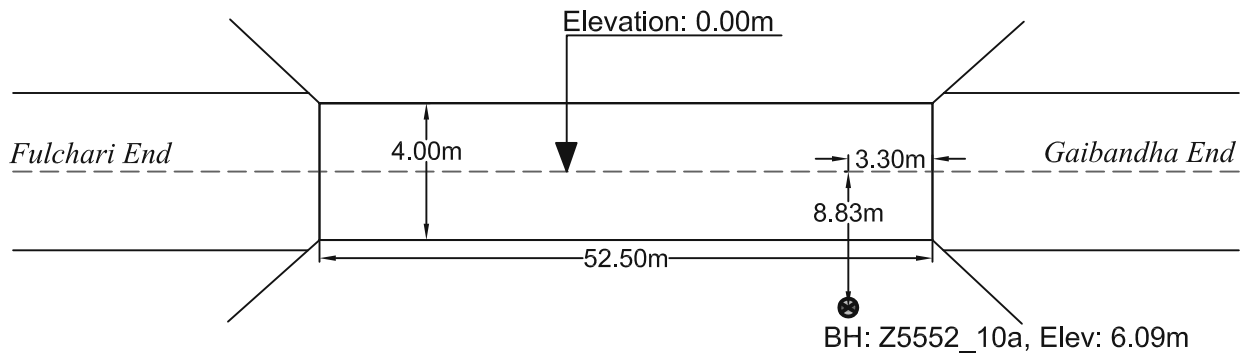
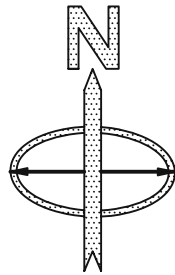
THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								
0-2.0m	filled sand with rubbish		1.00	1.45	1	1	1	2	D-1						
2-2.0m	very pale Brown 10YR (8/2), medium dense, poorly graded silty Sand with gravel, SP-SM		2.00	2.45	2	3	4	7	D-2						
			3.00	3.45	2	3	4	7	D-3		94.9	5.1		2.616	24.29
4-2.0m	Gray 10YR (8/2), very loose, high plasticity Clay with sand, CH		4.00	4.45	1	1	1	2	D-4						
			5.00	5.45	1	2	2	4	D-5		4.5	95.5	75	49.4	2.653
6-1.0m	White 10YR (8/1), medium dense, silty Sand with gravel, SM		6.00	6.45	3	5	6	11	D-6						
8-8.0m	very pale Brown 10YR (8/2), medium dense, poorly graded silty Sand with gravel, SP-SM		7.00	7.45	3	4	5	9	D-7						
			8.00	8.45	4	5	7	12	D-8						
			9.00	9.45	3	6	8	14	D-9						
			10.00	10.45	3	7	9	16	D-10						
			11.00	11.45	4	8	10	18	D-11						
			12.00	12.45	4	9	11	20	D-12						
10-1.0m	Gray 10YR (6/1), medium dense, silty Sand with gravel, SM		13.00	13.45	4	8	10	18	D-13						
			14.00	14.45	4	8	11	19	D-14						
			15.00	15.45	3	4	7	11	D-15						
16-2.0m	Gray 7.5YR (6/1), dense, silty Sand with gravel, SM		16.00	16.45	5	7	10	17	D-16						
		17.00	17.45	5	8	10	18	D-17		76.2	23.6		2.627	18.76	
18-4.45m	Gray 7.5YR (6/1), very dense, poorly graded silty Sand with gravel, SP-SM		18.00	18.45	16	27	23	50	D-18						
			19.00	19.45	15	24	26	50	D-19						
			20.00	20.45	10	22	28	50	D-20						
			21.00	21.45	13	25	25	50	D-21						
			22.00	22.45	15	28	22	50	D-22		90.3	9.7		2.606	15.24
			23.00	23.45	16	24	26	50	D-23						
			24.00	24.45	12	23	27	50	D-24						
			25.00	25.45	13	30	20	50	D-25						
			26.00	26.45	14	29	21	50	D-26						
			27.00	27.45	16	32	18	50	D-27		88.9	11		2.609	15.13
28-4.45m	Gray 10YR (6/1), very dense, poorly graded silty Sand with gravel, SP-SM		28.00	28.45	20	38	12	50	D-28						
			29.00	29.45	13	33	17	50	D-29						
			30.00	30.45	20	35	15	50	D-30						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

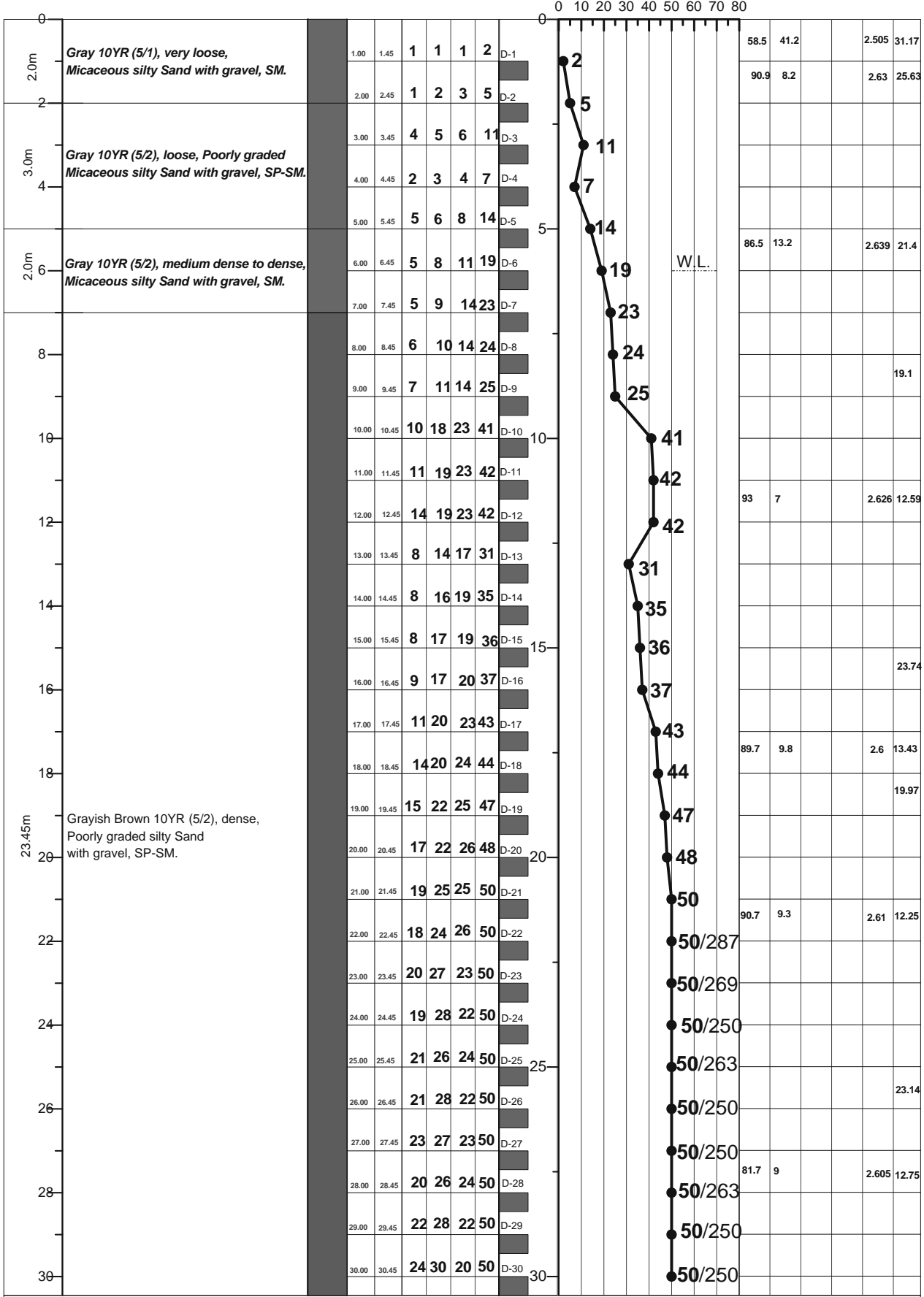
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 55
BRIDGE ID: Z5552_10a
LATITUDE: 25°14'34.830" LONGITUDE: 89°33'30.305"
CHAINAGE: 10.295



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 55	BOREHOLE NO: Z5552_10a	Longitude: N 089°33.505'	Latitude: E 25°14.581'
			Brigde ID: Z5552_10a	Road Name: Gaibanda-Phulchari-Vratkhali-Saghata.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 10.295, RL: -6.09m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 23-02-2014	Completed Date: 24-02-2014	G. W. T : -6.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

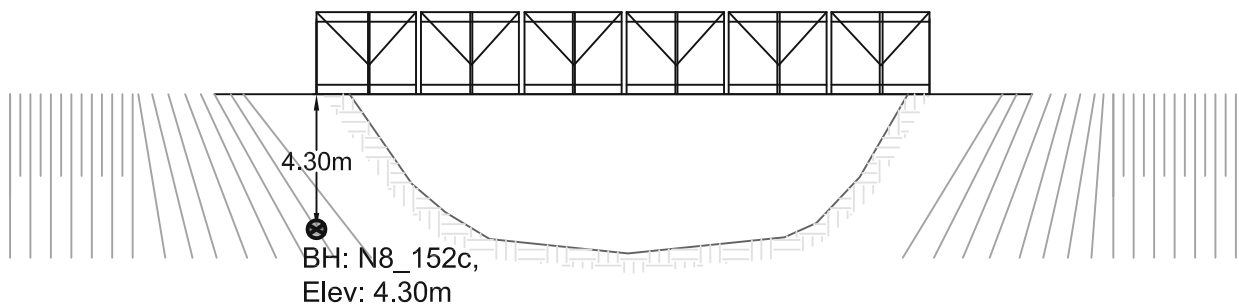
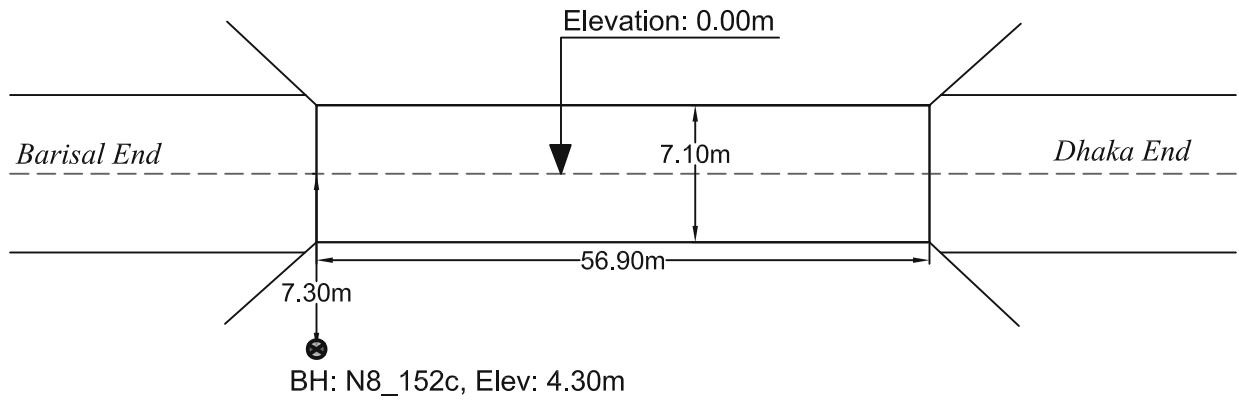
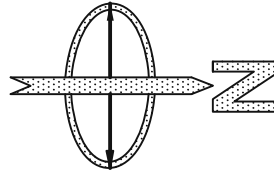
CLIENT: Oriental Consultants Company Limited.

RANK: 56

BRIDGE ID: N8_152c

LATITUDE: 22°47'23.188" LONGITUDE: 90°17'58.776"

CHAINAGE: 150.977



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 56	BOREHOLE NO: N8_152c	Longitude: N 90°13'20.172"	Latitude: E 22°7'23.188"
			Brigde ID: N8_152c	Road Name: Dhaka-(Jatrabari)-Mawa-Bhanga-Barisal-Patuakhali	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 150.977, RL: -4.3m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 18-03-2014	Completed Date: 22-03-2014	G. W. T : -1.5m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								

		SPT-N Value Blow/300mm					DEPTH (m) SPT VALUES (BLOWS / 300mm)									
THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									N6-600 (mm)
0-2.0m	very pale Brown 10YR (8/2), soft, low plasticity Silt with sand, ML		1.00	1.45	2	2	2	4	D-1	4						
			2.00	2.45	2	2	2	4	D-2	4						28.7 70.5 2.617
2-3.0m	Gray 10YR (6/1), loose, clay silty Sand with gravel, SM		3.00	3.45	2	2	3	5	D-3	5						
			4.00	4.45	3	2	2	4	D-4	4						81.4 18.6 2.663 31.21
3.0-4.0m	very pale Brown 10YR (8/1), loose, silty Sand with gravel, SM		5.00	5.45	4	3	5	8	D-5	8						
			6.00	6.45	6	4	3	7	D-6	7						
4.0-6.0m	Gray 7.5YR (6/1), loose, silty Sand with gravel, SM		7.00	7.45	2	1	1	2	D-7	2						
			8.00	8.45	1	1	2	3	D-8	3						
6.0-8.0m	Gray 10YR (6/1), very loose, poorly graded silty Sand with gravel, SP-SM		9.00	9.45	2	3	8	11	D-9	11						90.8 9.2 2.656 26.48
			10.00	10.45	1	2	3	5	D-10	5						
			11.00	11.45	2	2	3	5	D-11	5						
			12.00	12.45	2	2	4	6	D-12	6						
			13.00	13.45	3	4	6	10	D-13	10						
			14.00	14.45	3	5	7	12	D-14	12						
			15.00	15.45	3	3	5	8	D-15	8						77.8 22.2 2.659 27.67
			16.00	16.45	2	4	6	10	D-16	10						
			17.00	17.45	3	6	6	12	D-17	12						
			18.00	18.45	8	10	16	26	D-18	26						
			19.00	19.45	8	11	13	24	D-19	24						
			20.00	20.45	8	10	12	22	D-20	22						
			21.00	21.45	9	7	10	17	D-21	17						69.1 30.9 2.639 24.21
			22.00	22.45	7	8	11	19	D-22	19						
			23.00	23.45	6	7	10	17	D-23	17						
			24.00	24.45	5	7	9	16	D-24	16						
			25.00	25.45	5	6	8	14	D-25	14						
			26.00	26.45	5	7	10	17	D-26	17						
			27.00	27.45	5	6	11	17	D-27	17						57.5 42.5 2.663 24.54
			28.00	28.45	6	7	8	15	D-28	15						
			29.00	29.45	6	8	10	18	D-29	18						
			30.00	30.45	10	14	17	31	D-30	31						
0.45m	Gray 10YR (6/1), very dense, fine Sand, SM															

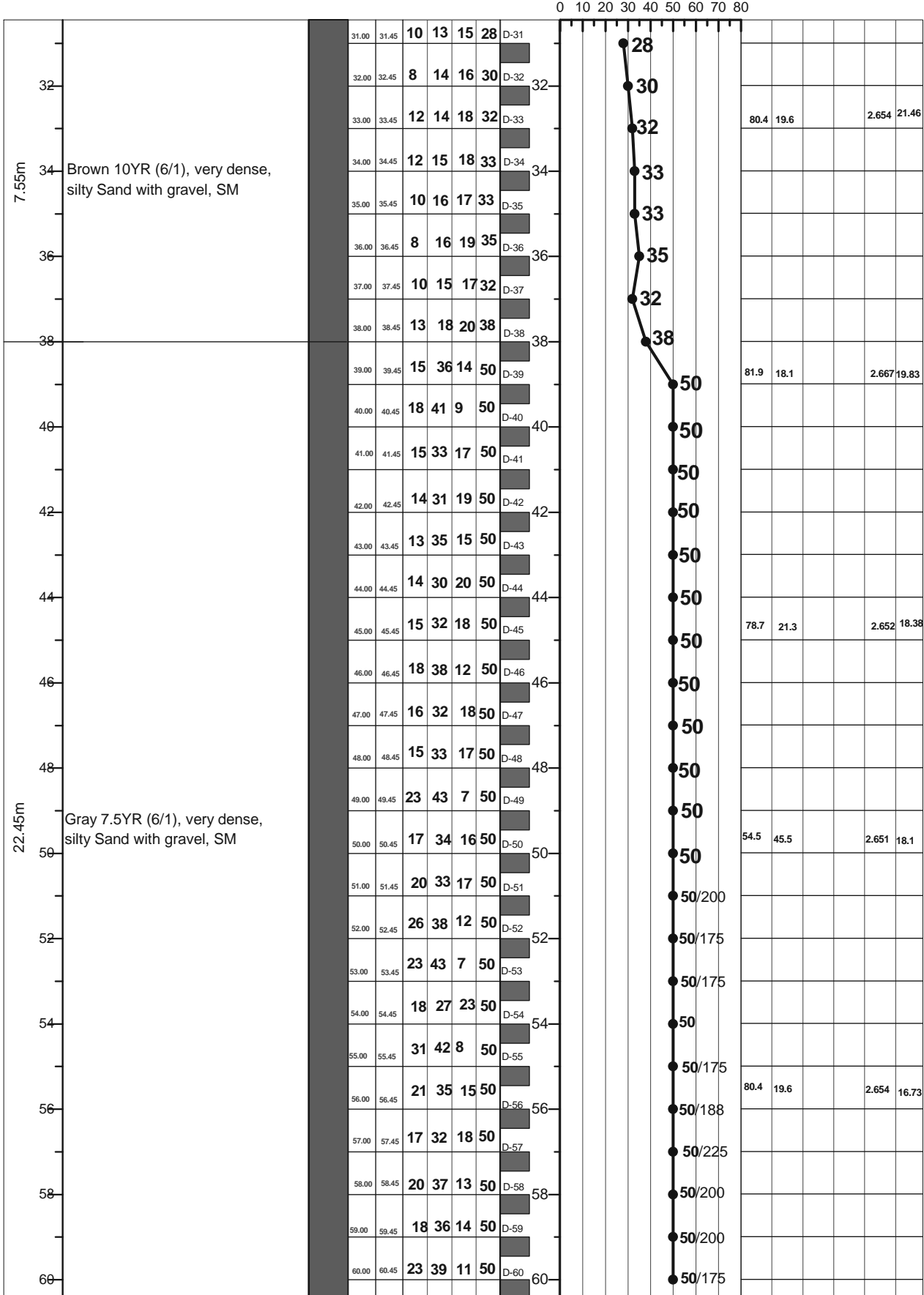
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 56	BOREHOLE NO: N8_152c	Longitude: N 90°13'20.172"	Latitude: E 22°47'23.188"
			Brigde ID: N8_152c	Road Name: Dhaka-(Jatrabari)-Mawa-Bhanga-Barisal-Patuakhali	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 150.977, RL: -4.3m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 15-03-2014	Completed Date: 19-03-2014	G. W. T : -1.5m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									

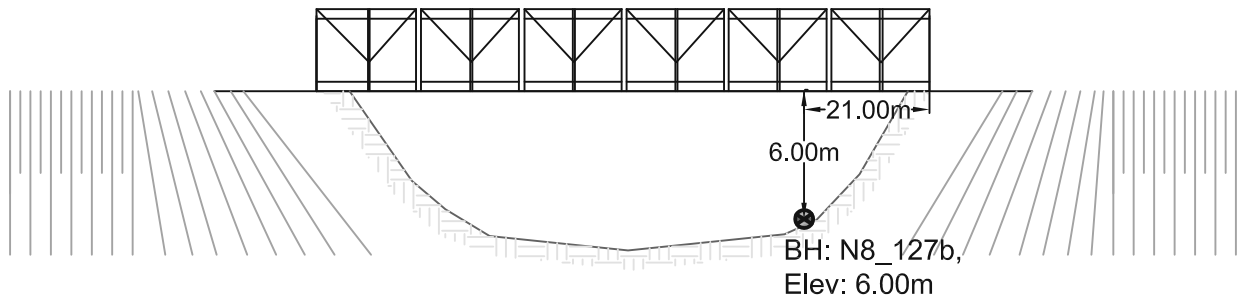
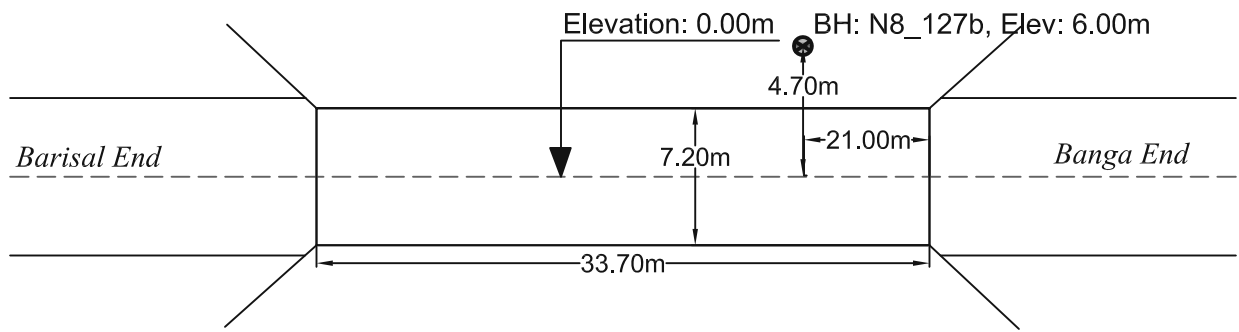
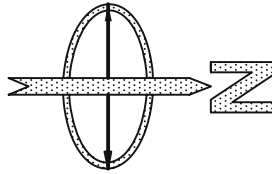


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

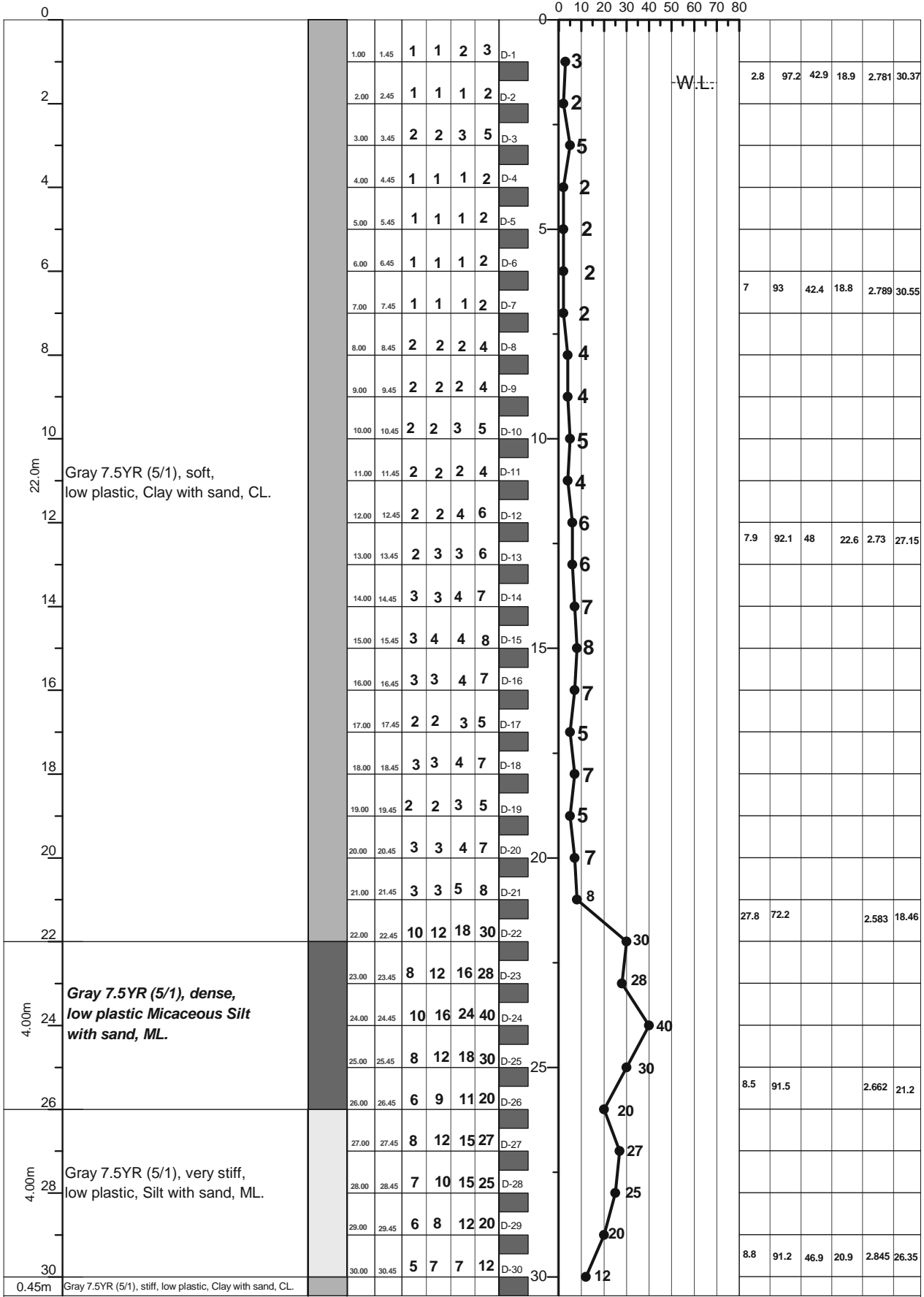
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 57
BRIDGE ID: N8_127b
LATITUDE: 22°58'29.143" LONGITUDE: 90°13'20.172"
CHAINAGE: 126.358



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 57	BOREHOLE NO: N8_127b	Longitude: N 90°13'20.172"	Latitude: E 22°58'29.143"
			Brigde ID: N8_127b	Road Name: Dhaka(Jatrabari)MawaBangaBarisal Patuakhail.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 126.358, RL: -6.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 02-04-2014	Completed Date: 06-04-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								



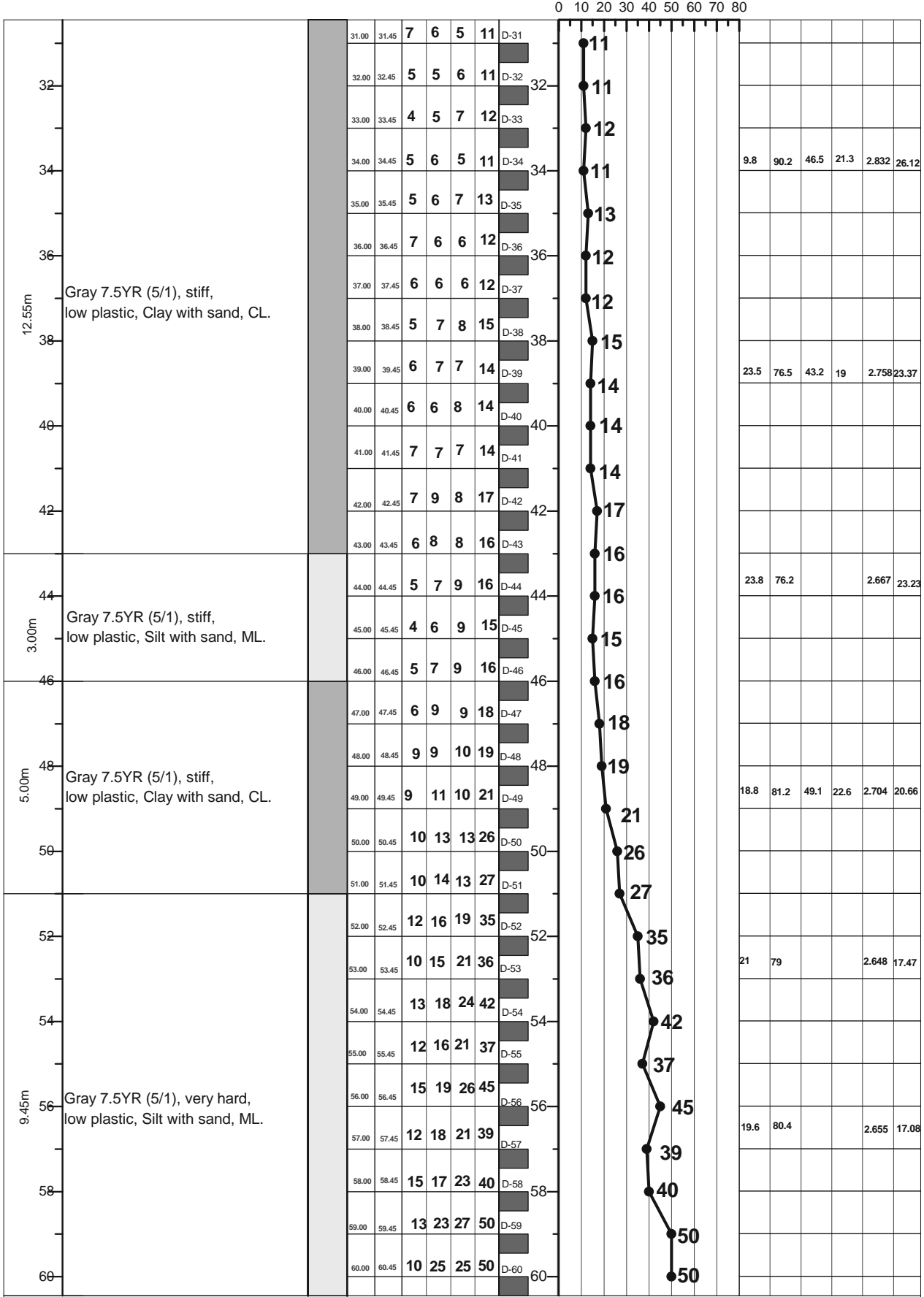
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 57	BOREHOLE NO: N8_127b Brigde ID: N8_127b	Longitude: N 90°13'20.172" Road Name: Dhaka(Jatrabari)MawaBangaBarisal Patuakhali.	Latitude: E 22°58'29.143"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 126.358, RL: -6.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 02-04-2014	Completed Date: 06-04-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



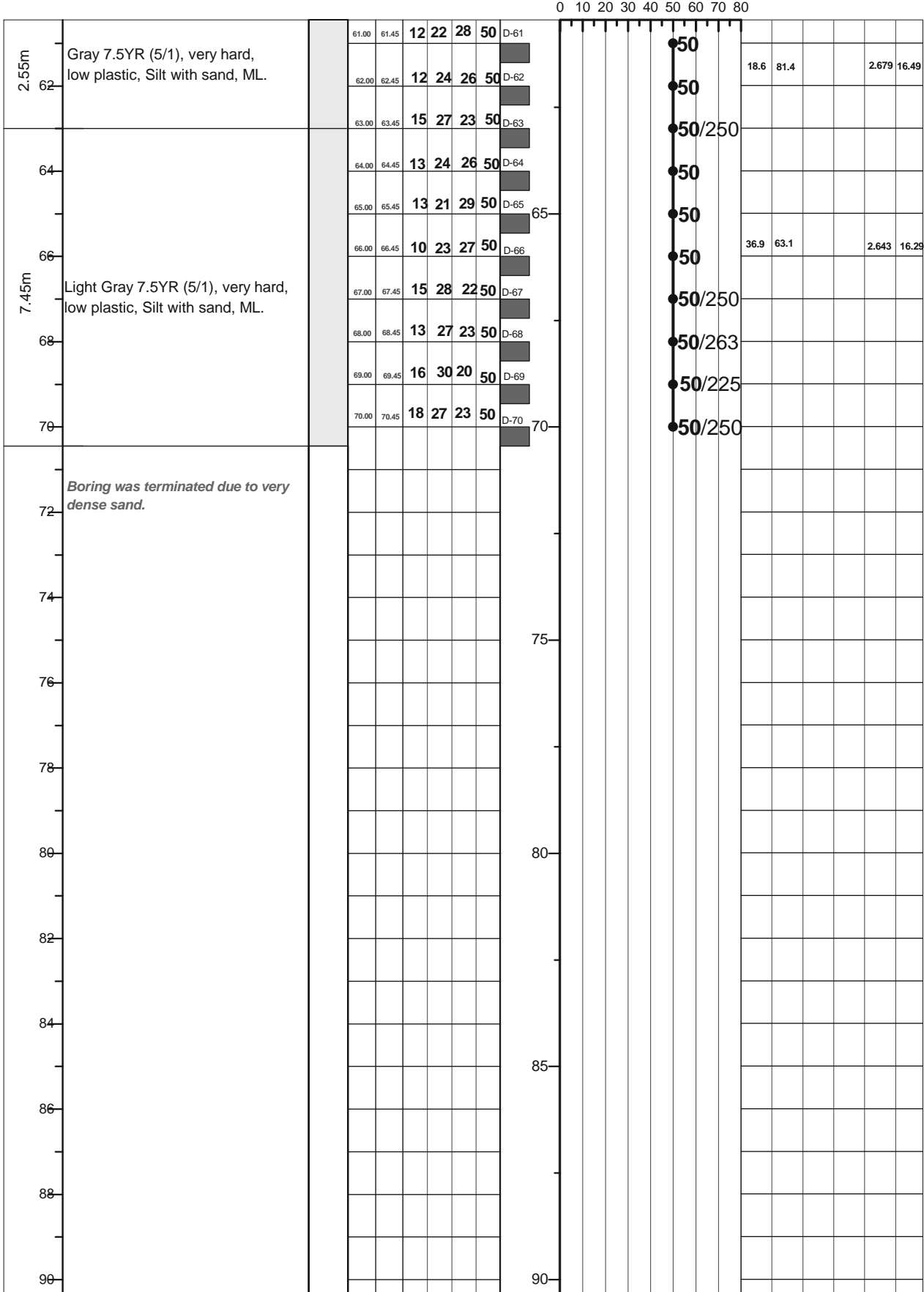
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 57	BOREHOLE NO: N8_127b	Longitude: N 90°13'20.172"	Latitude: E 22°58'29.143"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 70.0m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 2-04-2014		Completed Date: 06-04-2014	
				Chainage: 126.358, RL: -6.0m	
				G. W. T : -1.5m.	

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)				
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)				N4-600 (mm)	% Sand	% Passing 200	% LL	% PI

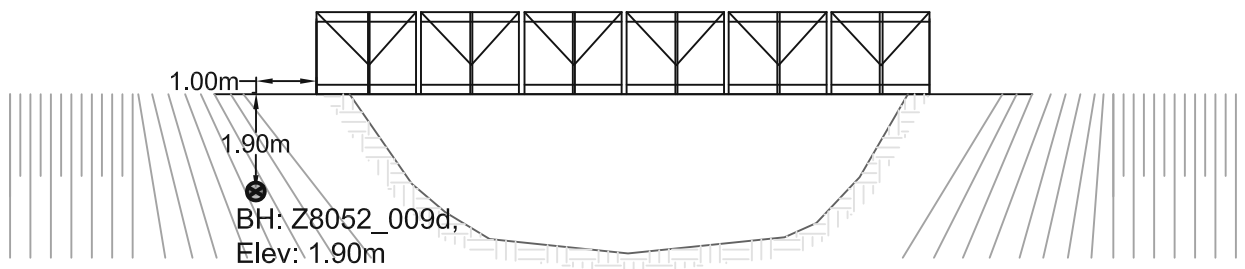
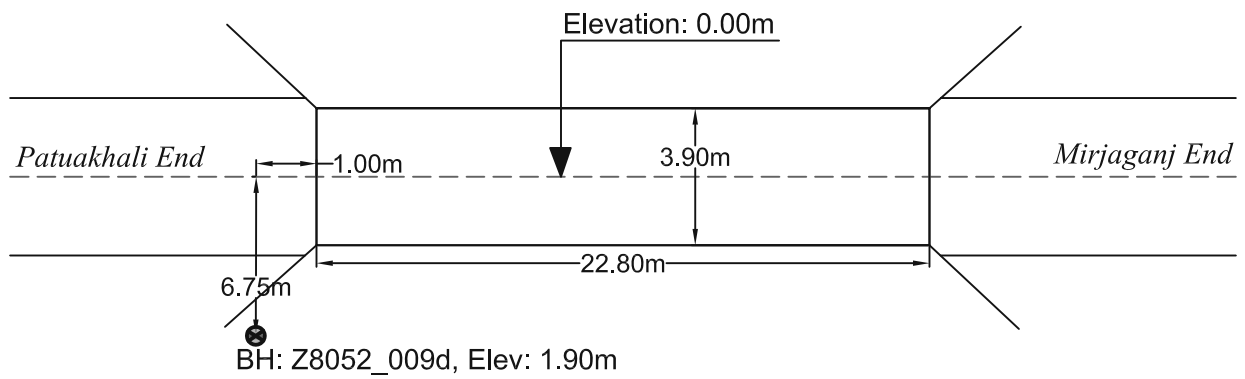
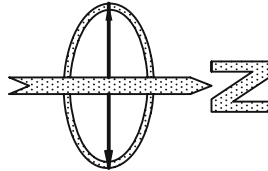


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

[Light Gray Box] PLASTIC CLAY	[White Box] SILT	[Dark Gray Box] PEAT/HIGHLY ORGANIC SOIL	[Black Box] UNDISTURBED SAMPLE
[Dark Gray Box] MICACEOUS FINE SAND/SILT	[White Box] SAND	[Black Box] SHALE	[Black Box] DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

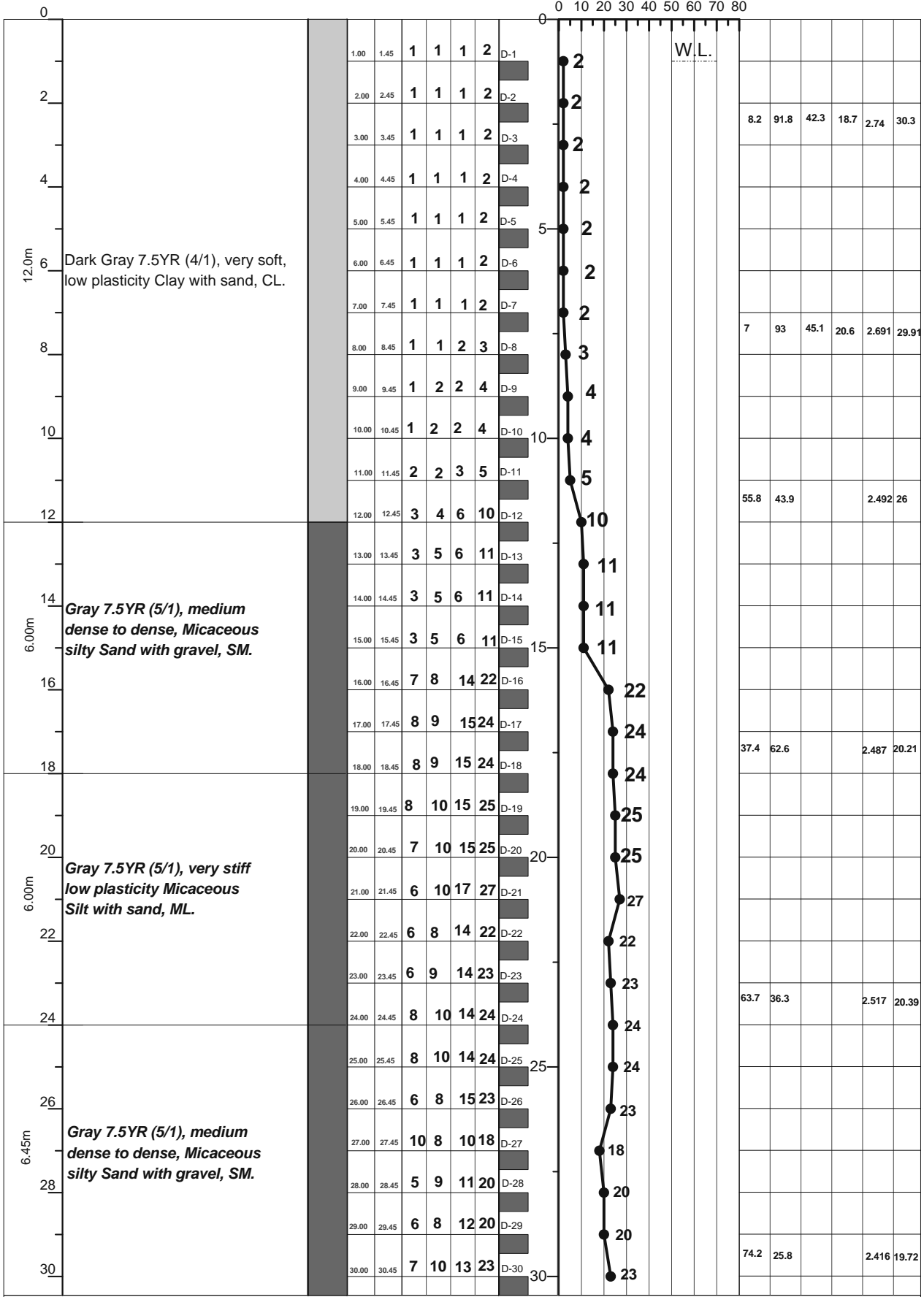
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 58
BRIDGE ID: Z8052_009d
LATITUDE: 22°21'41.377" LONGITUDE: 90°14'8.925"
CHAINAGE: 9.88



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 58	BOREHOLE NO: Z8052_009d		Longitude: N 90°14'8.925"		Latitude: E 22°0'21'41.377"	
			Brigde ID: Z8052_009d		Road Name: Barisal (Dinerpool)LaxmipashaDumki.			
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary		Borehole Depth: 60.0m		Chainage: 9.88, RL: -1.9m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 11-04-2014		Completed Date: 16-04-2014		G. W. T : -1.0m.	

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

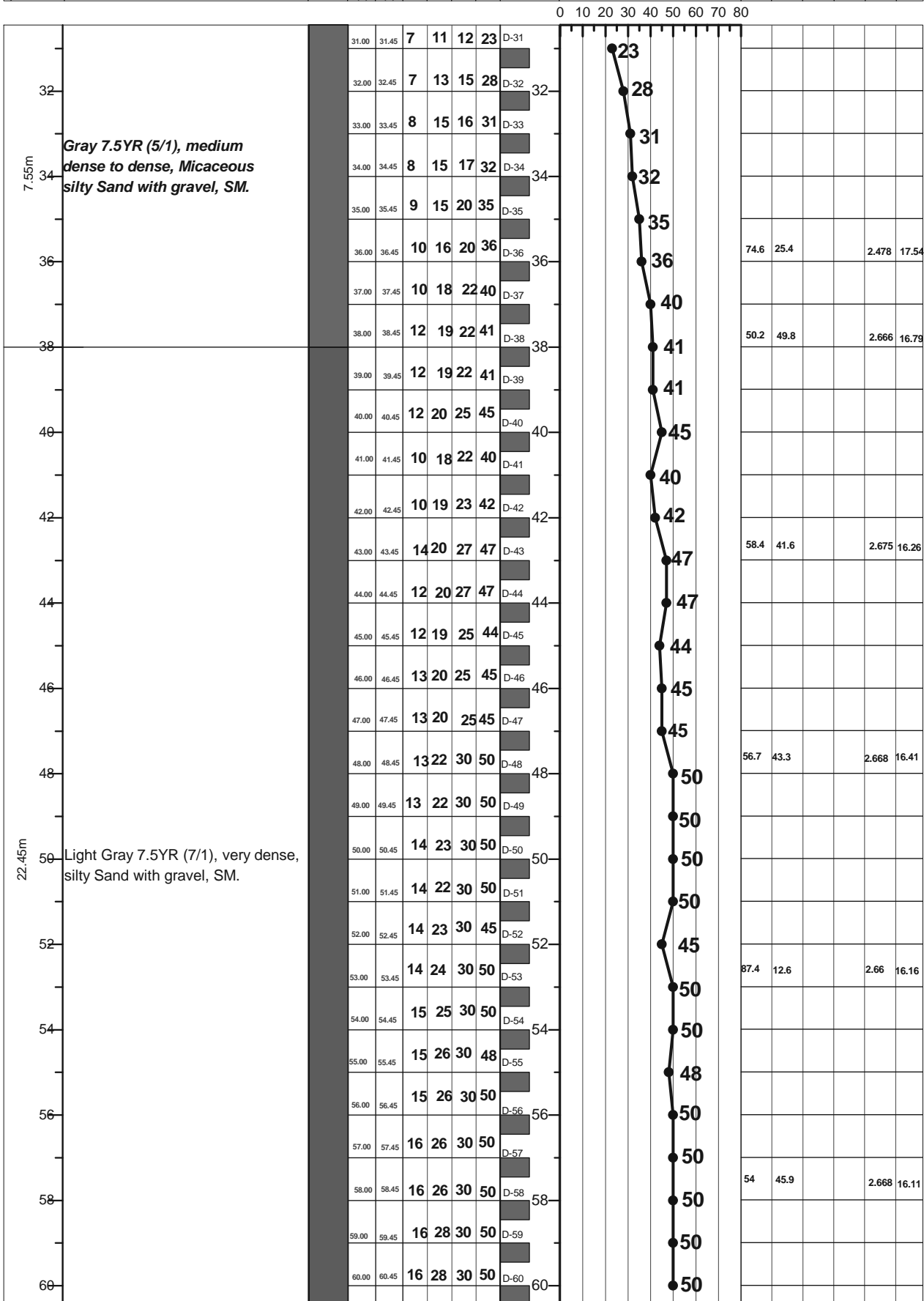


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED
 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 58	BOREHOLE NO: Z8052_009d	Longitude: N 90°14'8.925"	Latitude: E 22°21'41.377"
			Brigde ID: Z8052_009d	Road Name: Barisal (Dinerpool)LaxmipashaDumki.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 9.88, RL: -1.9m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 11-04-2014	Completed Date: 16-04-2014	G. W. T : -1.0m.

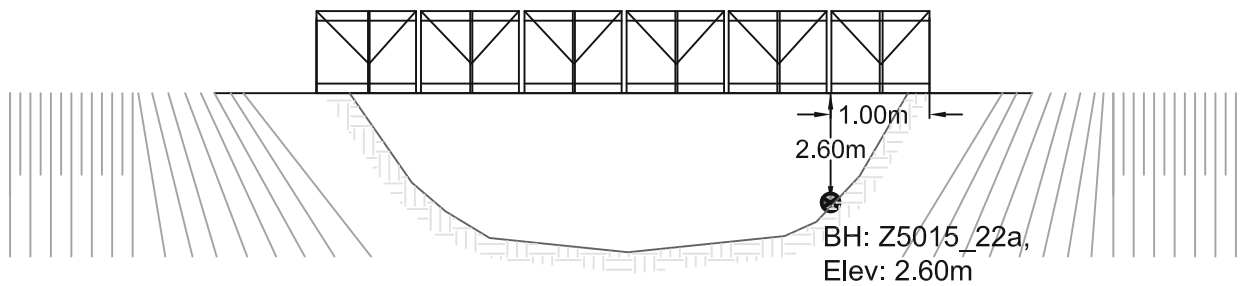
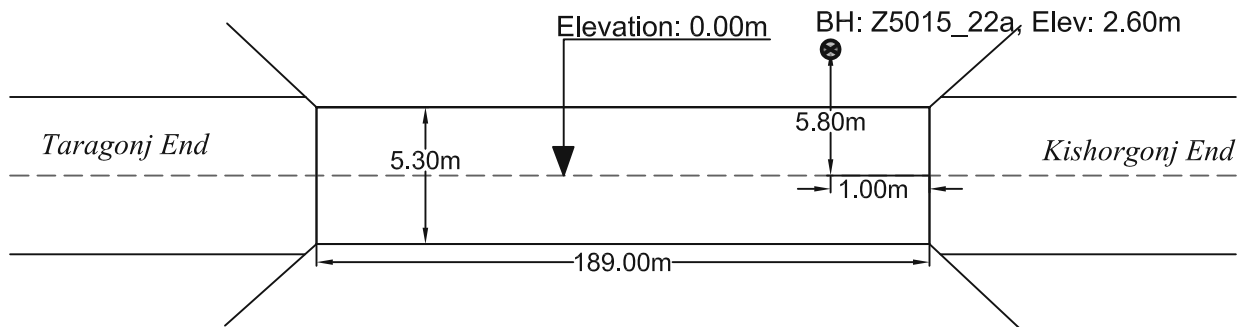
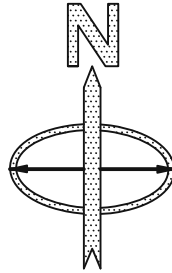


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 59
BRIDGE ID: Z5015_22a
LATITUDE: 25°50'53.503" LONGITUDE: 89°1'9.875"
CHAINAGE: 22.244



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 59	BOREHOLE NO: Z5015_22a	Longitude: N 89°01'11.0"	Latitude: E 25°50'54.6"
			Brigde ID: Z5015_22a	Road Name: Taxerhat-Laldighi-Taraganj-Kishoreganj.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 22.244, RL: -2.6m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 06-03-2014	Completed Date: 07-03-2014	G. W. T : -3.40m.

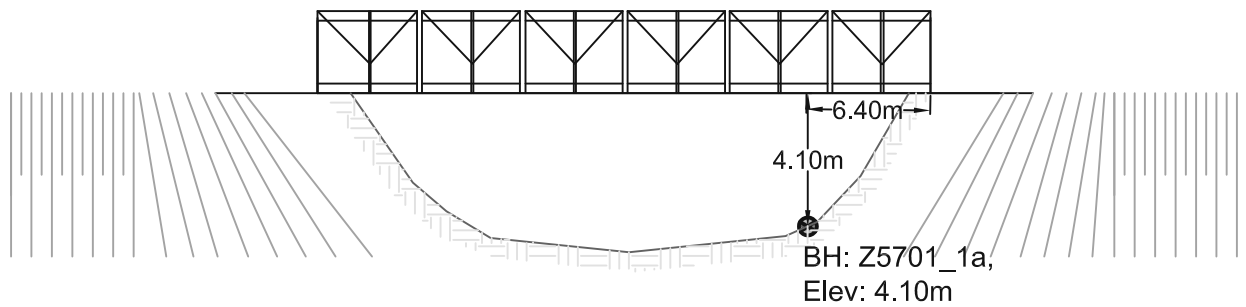
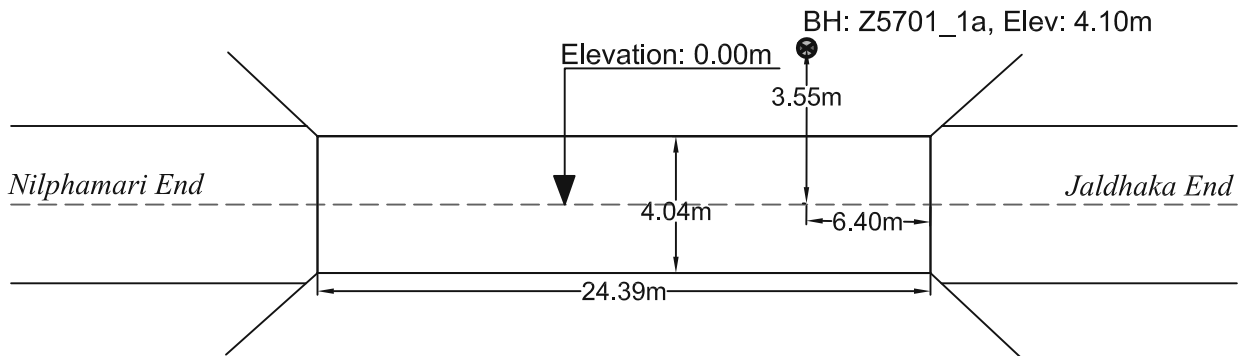
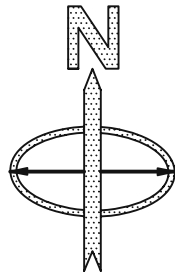
THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1+150 (mm)	N2+300 (mm)	N3+450 (mm)									N4+600 (mm)
0-3.0m	Gray 7.5YR (5/1), loose, Poorly graded Micaceous silty Sand with gravel, SP-SM.		1.00	1.45	1	2	2	4	D-1	4	91.8	8.2			2.555	24.8
			2.00	2.45	1	2	2	4	D-2	4						
			3.00	3.45	2	3	3	6	D-3	6						
2-4.0m	Very Dark Gray 2.5YR (2.5/1), medium stiff, low plastic, Silt with sand, ML.		4.00	4.45	1	2	2	4	D-4	4						
			5.00	5.45	1	1	2	3	D-5	3	7.6	92.4	53	25.8	2.699	25.17
4-6.0m	Very Dark Gray 2.5YR (2.5/1), medium stiff, high plastic, clay with sand, CH.		6.00	6.45	3	4	6	10	D-6	10						
			7.00	7.45	3	4	6	10	D-7	10						
6-8.0m	Gray 7.5YR (5/1), medium dense to dense, silty Sand with gravel, SM.		8.00	8.45	4	5	6	11	D-8	11						
			9.00	9.45	5	6	8	14	D-9	14						
8-10.0m			10.00	10.45	4	5	5	10	D-10	10	84.6	15.4			2.562	23.87
			11.00	11.45	2	3	3	6	D-11	6						
10-12.0m	Dark Gray 5YR (4/1), loose, Micaceous poorly graded Sand with gravel, SP.		12.00	12.45	2	2	2	4	D-12	4						
			13.00	13.45	2	2	3	5	D-13	5	99	1			2.568	28.84
12-14.0m			14.00	14.45	4	8	12	20	D-14	20						
			15.00	15.45	8	15	19	34	D-15	34						
14-16.0m	Gray 7.5YR (5/1), dense, Poorly Sand with gravel, SP.		16.00	16.45	8	12	17	29	D-16	29						
			17.00	17.45	8	11	15	26	D-17	26	95.4	4.6			2.641	21.25
16-18.0m			18.00	18.45	8	10	14	24	D-18	24						
			19.00	19.45	8	11	13	24	D-19	24						
18-20.0m			20.00	20.45	10	14	16	30	D-20	30						
			21.00	21.45	14	18	23	41	D-21	41						
20-22.0m			22.00	22.45	14	20	27	47	D-22	47						
			23.00	23.45	16	22	30	50	D-23	50						
22-24.0m			24.00	24.45	20	30	20	50	D-24	50/100						
			25.00	25.45	22	30	20	50	D-25	50/100	97.8	2.1			2.613	17.37
24-26.0m	Light Gray 10YR (7/1), dense, Poorly graded Sand with gravel, SP.		26.00	26.45	25	35	15	50	D-26	50/125						
			27.00	27.45	30	40	10	50	D-27	50/125						
26-28.0m			28.00	28.45	30	40	10	50	D-28	50/125						
			29.00	29.45	32	50		50	D-29	50/150						
28-30.0m			30.00	30.45	35	50		50	D-30	50/150						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

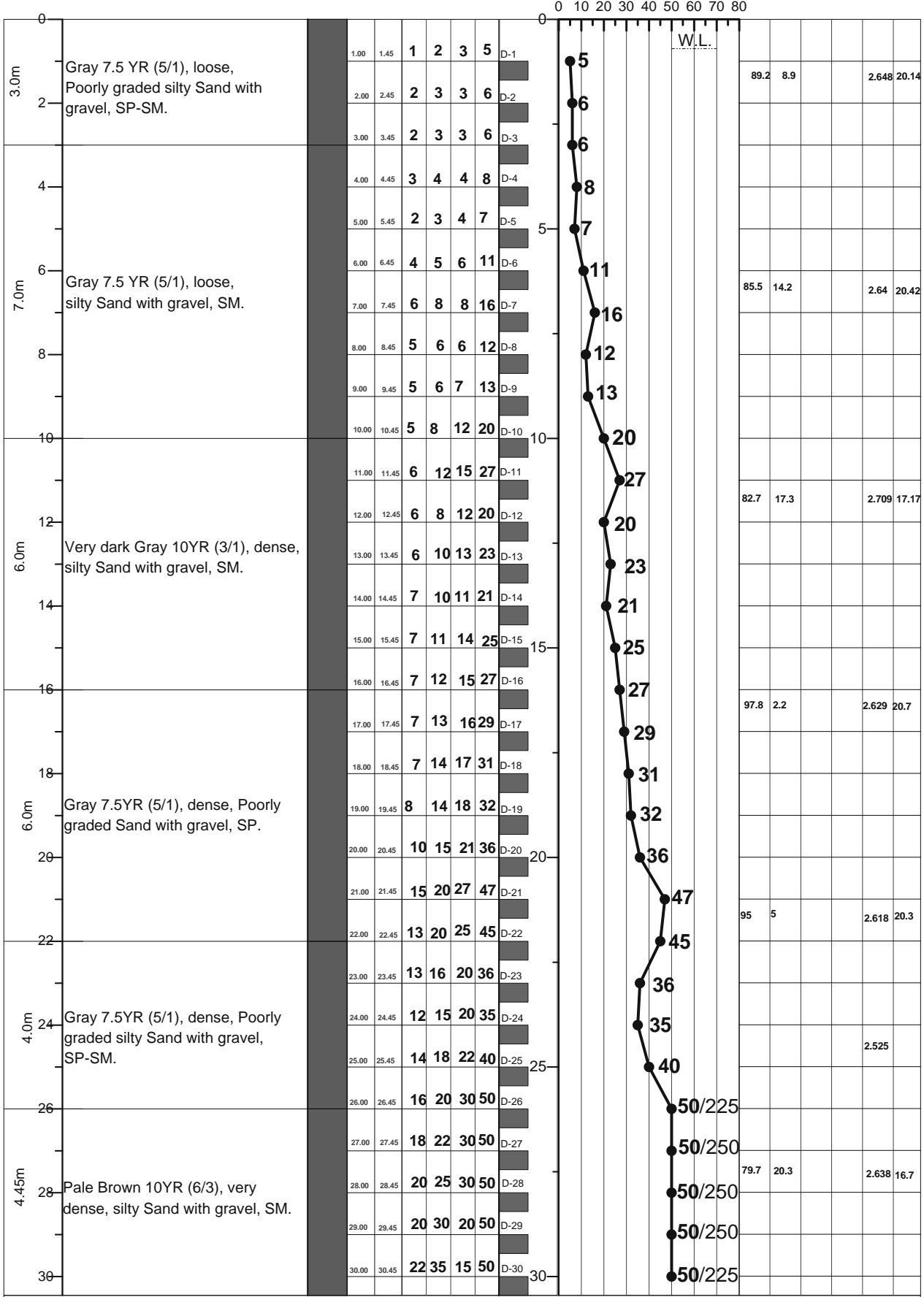
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 60
BRIDGE ID: Z5701_1a
LATITUDE: 25°56'17.52" LONGITUDE: 88°51'16.69"
CHAINAGE: 0.518



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 60	BOREHOLE NO: Z5701_1a	Longitude: N 88°51'16.69"	Latitude: E 25°56'17.52"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 0.518, RL: -4.10
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 1-03-2014	Completed Date: 3-03-2014	G. W. T : -0.70m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

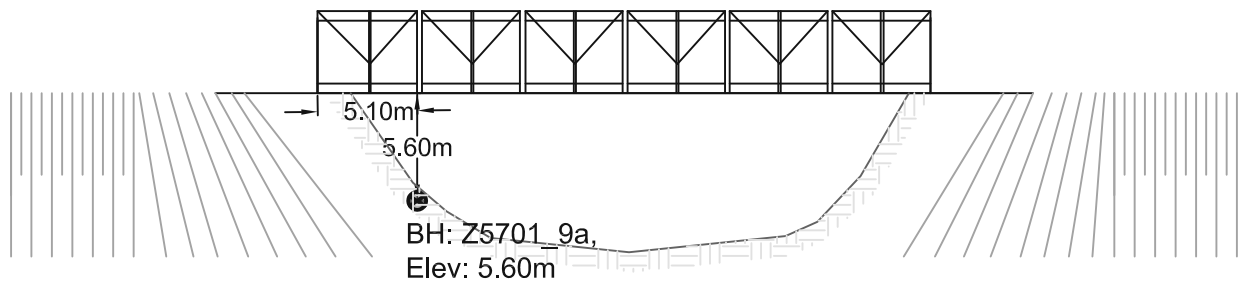
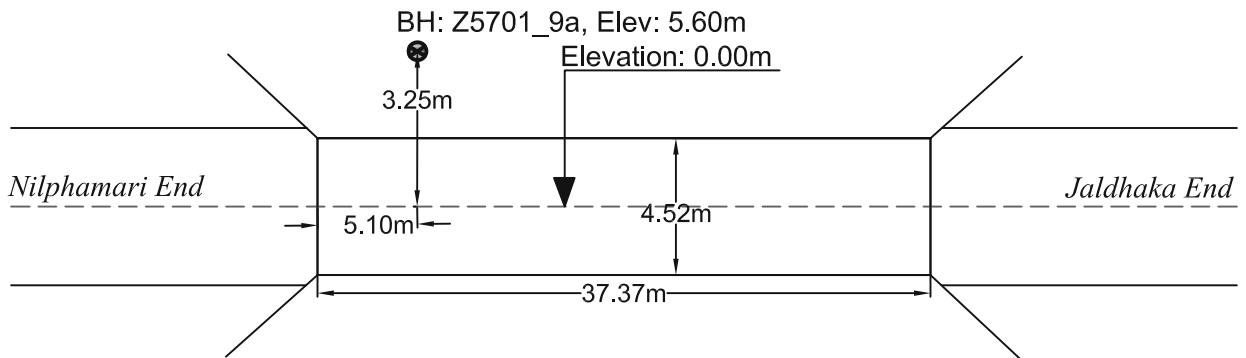
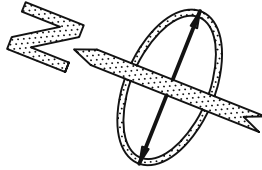
CLIENT: Oriental Consultants Company Limited.

RANK: 61

BRIDGE ID: Z5701_9a

LATITUDE: 25°57'32.378" LONGITUDE: 88°55'40.464"

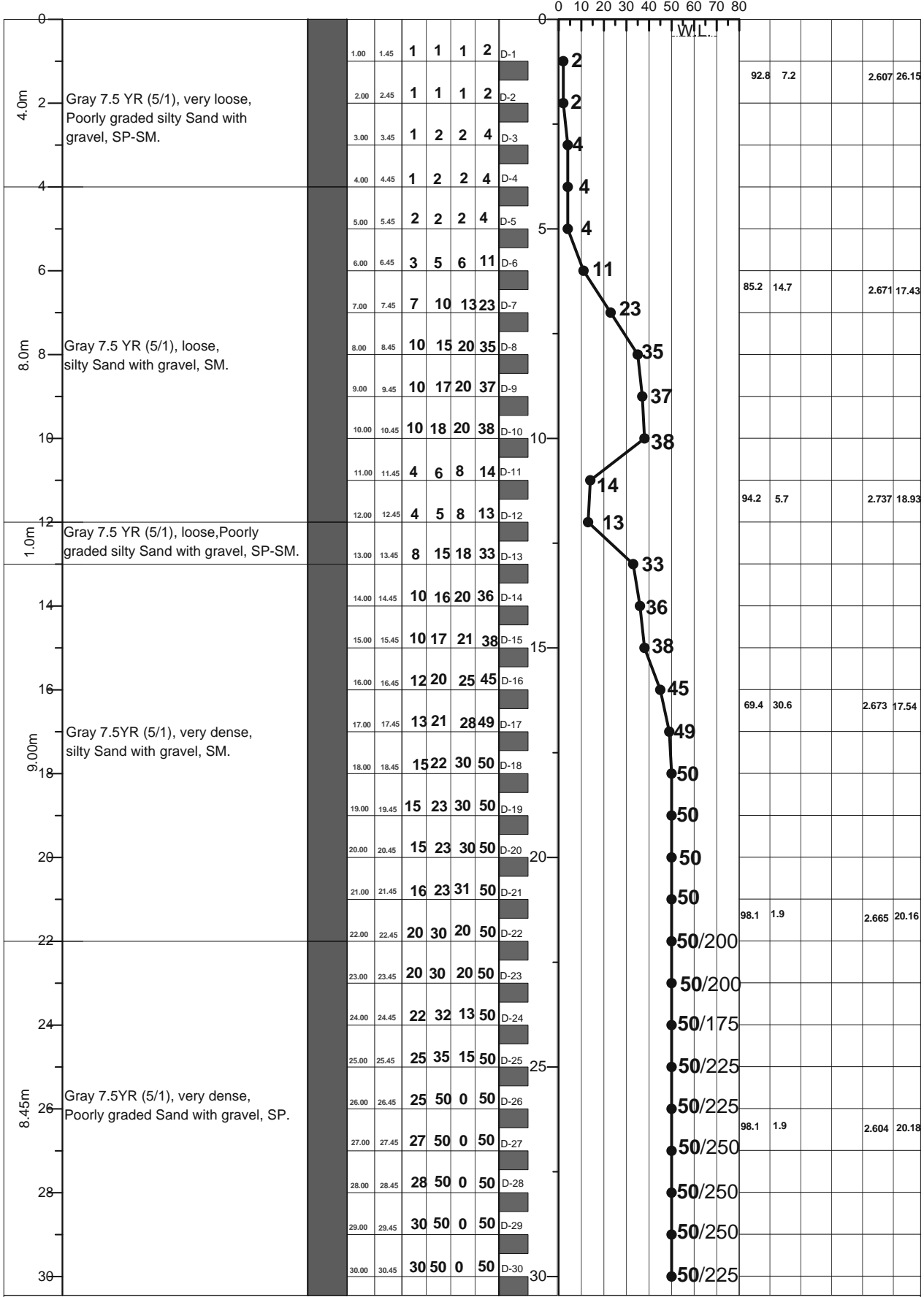
CHAINAGE: 7.362



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 61	BOREHOLE NO: Z5701_9a	Longitude: N 88°55'40.464"	Latitude: E 25°57'32.378"
			Brigde ID: Z5701_9a	Road Name: Nilphamari-Jaldhaka.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 7.362, RL: -5.60
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 4-03-2014	Completed Date: 5-03-2014	G. W. T : -0.40m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

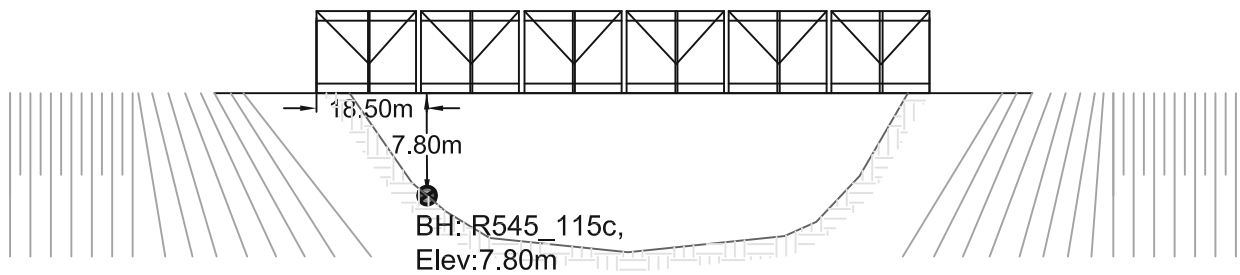
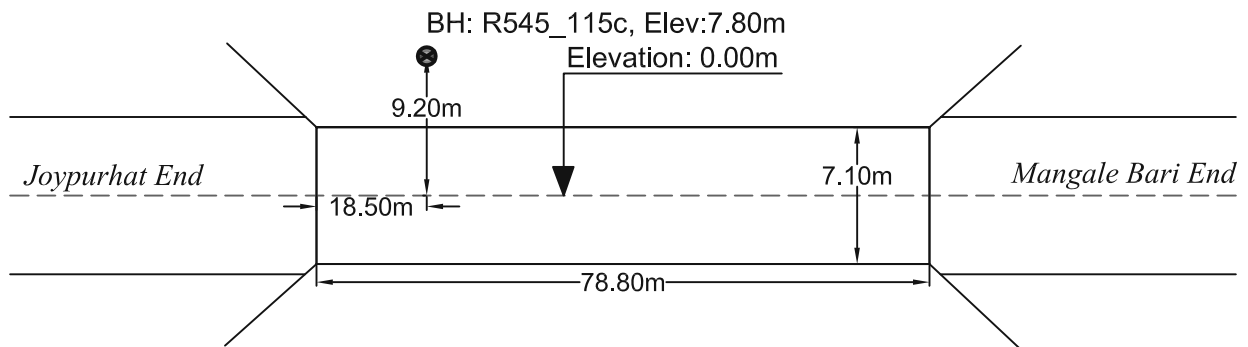
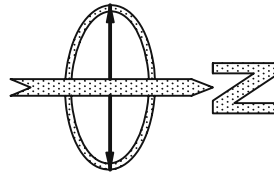


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS, "X" MM PENETRATION

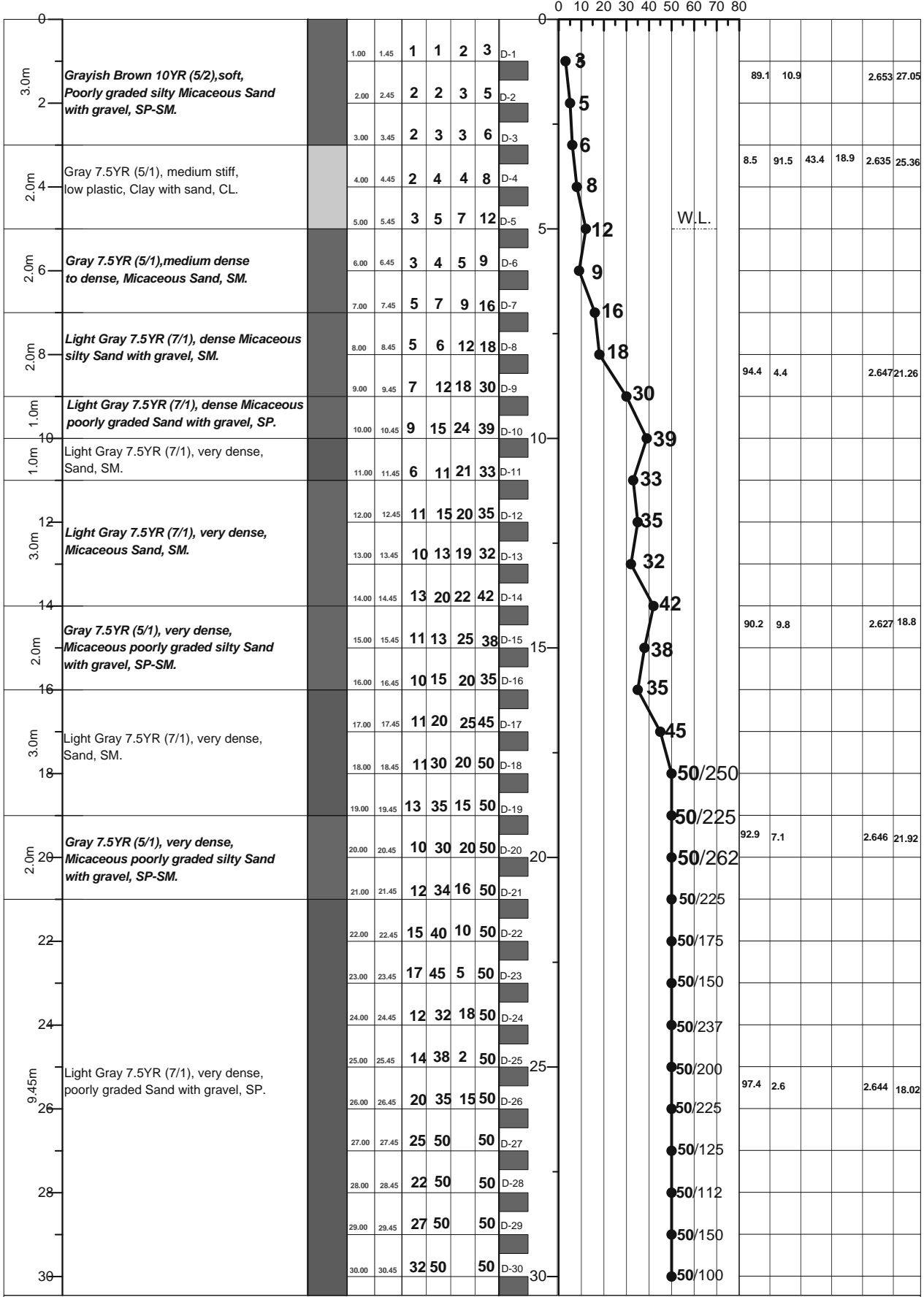
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 62
BRIDGE ID: R545_115c
LATITUDE: 25°6'41" LONGITUDE: 88°52'17"
CHAINAGE: 116.535



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 62	BOREHOLE NO: R545_115c	Longitude: N 88°52'17"	Latitude: E 25°06'41"
			Brigde ID: R545_115c	Road Name: Bogra-Naogaon-Mohadebpur-Patnitala-Dhamoirhat-Joypurhat.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 116.635, RL: -7.8m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 05-03-2014	Completed Date: 06-03-2014	G. W. T : -5.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

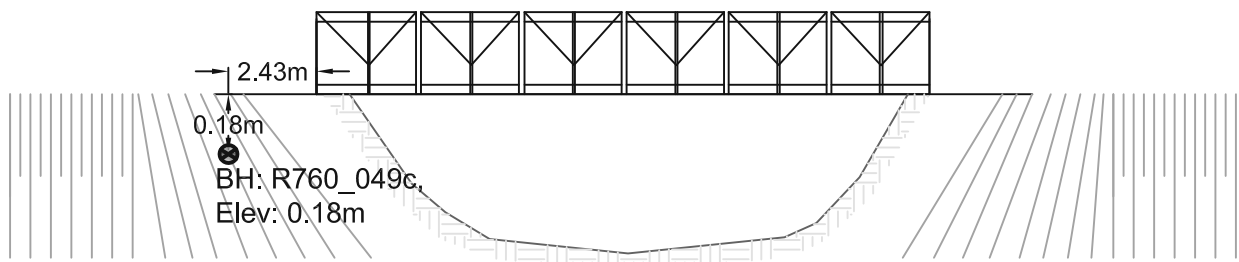
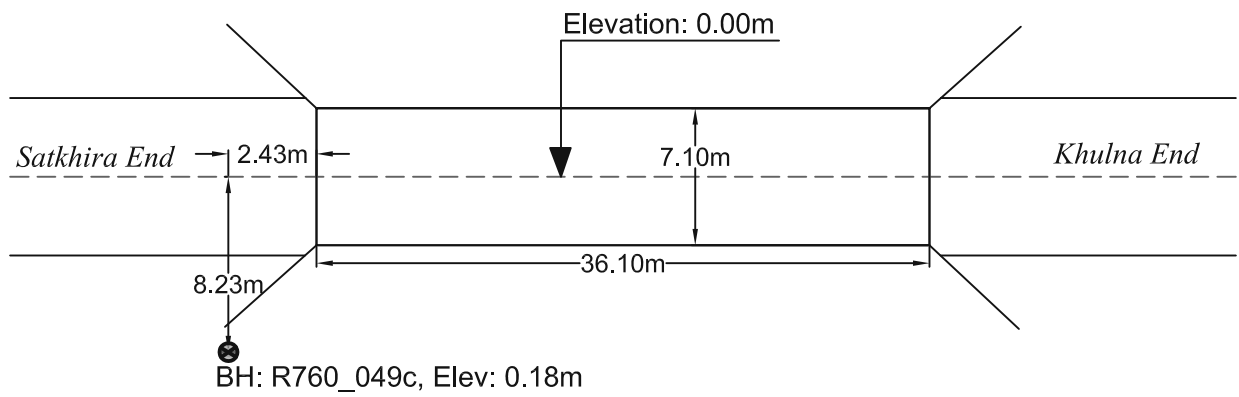
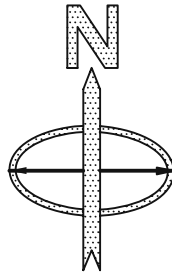


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 63
BRIDGE ID: R760_049c
LATITUDE: 22°45'57.647" LONGITUDE: 89°08'16.195"
CHAINAGE: 49.478



PROSOIL FOUNDATION CONSULTANT

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									N6-600 (mm)
0								0								
2.0m	Light Gray 7.5YR (5/2), very soft, low plastic, Clay with sand, CL.		1.00	1.45	1	0	1	1	D-1	1	11.8	88.2	48.7	21.8	2.671	30.71
2			2.00	2.45	3	4	3	7	D-2	7						
1.0m	Filling Sand.		3.00	3.45	1	1	3	4	D-3	4	9	91	47.5	20.1	2.723	27.84
4			4.00	4.45	1	1	2	3	D-4	3						
3.0m	Gray 7.5YR (5/2), soft, low plastic, Clay with sand, CL.		5.00	5.45	1	1	2	3	D-5	3						
6			6.00	6.45	1	1	1	2	D-6	2						
3.0m	Gray 7.5YR (5/2), very soft, low plastic, Clay with sand, CL.		7.00	7.45	1	1	1	2	D-7	2						
8			8.00	8.45	1	1	1	2	D-8	2	20	80	44.8	19.4	2.765	30.65
10			9.00	9.45	2	3	4	7	D-9	7						
1.0m	Gray 7.5YR (5/2), medium stiff, low plastic, silty Clay, CL.		10.00	10.45	5	8	11	19	D-10	19	91.8	8.2			2.669	22.9
1.0m	Gray 10YR (7/1), dense, Poorly graded silty Sand with gravel, SP-SM.		11.00	11.45	5	7	8	15	D-11	15	74.2	25.8			2.516	23.78
2.0m	Gray 10YR (7/1), medium dense to dense, Micaceous silty Sand with gravel, SM.		12.00	12.45	6	8	11	19	D-12	19						
12			13.00	13.45	5	10	12	22	D-13	22						
1.0m	Gray 10YR (7/1), dense, fine Sand, SM.		14.00	14.45	5	9	12	21	D-14	21	83	17			2.501	21.31
2.0m	Gray 10YR (7/1), dense, Micaceous silty Sand with gravel, SM.		15.00	15.45	4	7	13	20	D-15	20						
16			16.00	16.45	7	14	20	34	D-16	34						
2.0m	Gray 10YR (7/1), very dense, silty Sand with gravel, SM.		17.00	17.45	7	12	16	28	D-17	28	80.5	19.5			2.45	22.22
18			18.00	18.45	5	7	9	16	D-18	16						
4.0m	Gray 10YR (7/1), dense, Poorly graded Micaceous silty Sand with gravel, SP-SM.		19.00	19.45	6	7	5	12	D-19	12						
20			20.00	20.45	5	6	10	16	D-20	16	88.6	11.4			2.487	21.65
22			21.00	21.45	5	8	10	18	D-21	18						
2.0m	Gray 10YR (7/1), dense, fine Sand, SM.		22.00	22.45	8	12	15	27	D-22	27						
24			23.00	23.45	6	10	14	24	D-23	24						
2.0m			24.00	24.45	4	7	12	19	D-24	19						
26			25.00	25.45	6	12	16	28	D-25	28						
6.0m	Gray 10YR (7/1), dense, Poorly graded Micaceous silty Sand with gravel, SP-SM.		26.00	26.45	6	12	16	28	D-26	28						
28			27.00	27.45	7	10	16	26	D-27	26	90.7	9.3			2.518	19.42
30			28.00	28.45	8	12	15	27	D-28	27						
3.0m			29.00	29.45	10	14	18	32	D-29	32						
3.0m			30.00	30.45	14	28	22	50	D-30	50/250						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

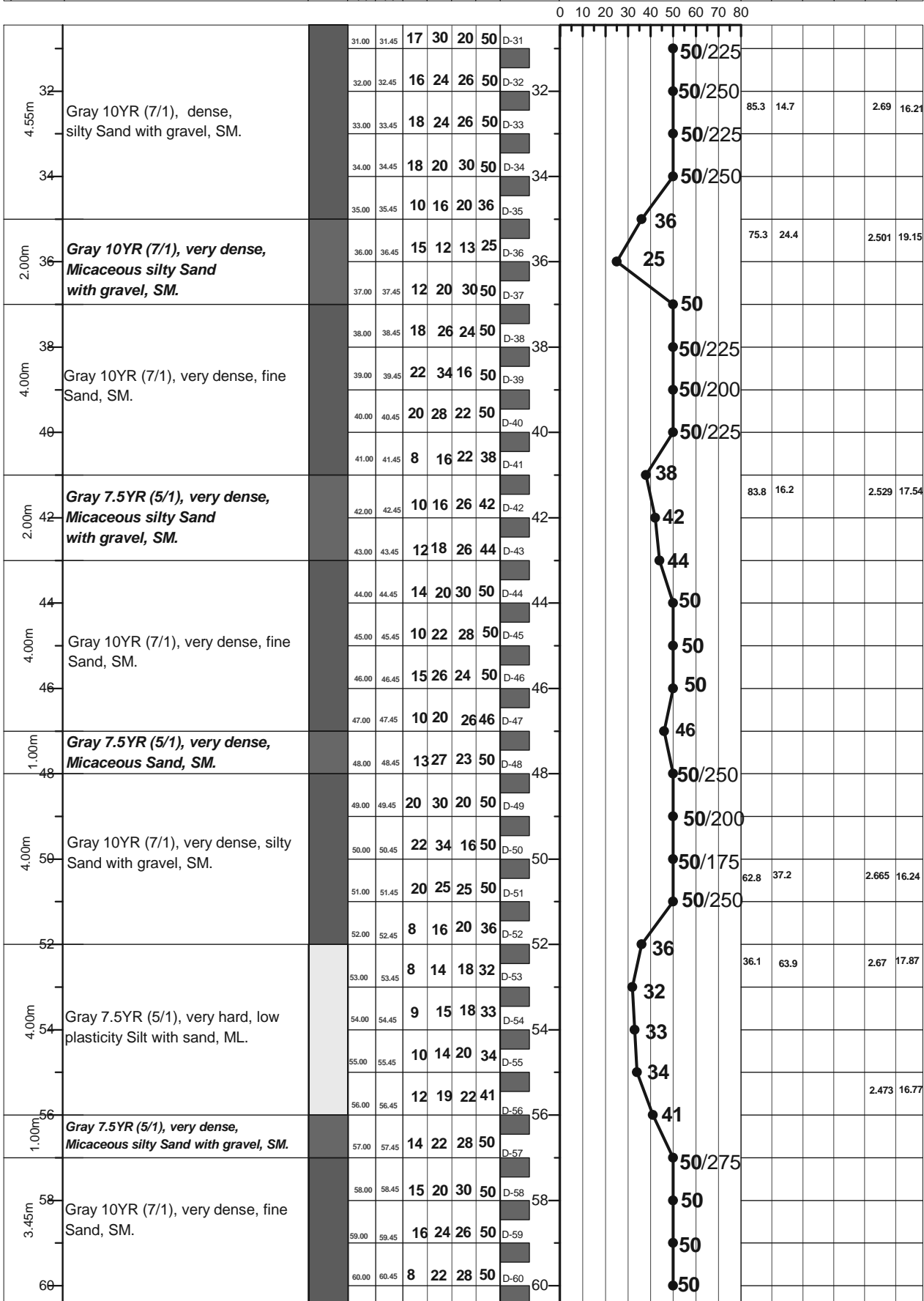
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 63	BOREHOLE NO: R760_049c	Longitude: N 89°26'30"	Latitude: E 22°45'57.647"
			Brigde ID: R760_049c	Road Name: Khuina - Chuknagar - Satkhira road.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 49.478, RL: -0.18m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 31-03-2014	Completed Date: 09-04-2014	G. W. T : -3.65m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)								



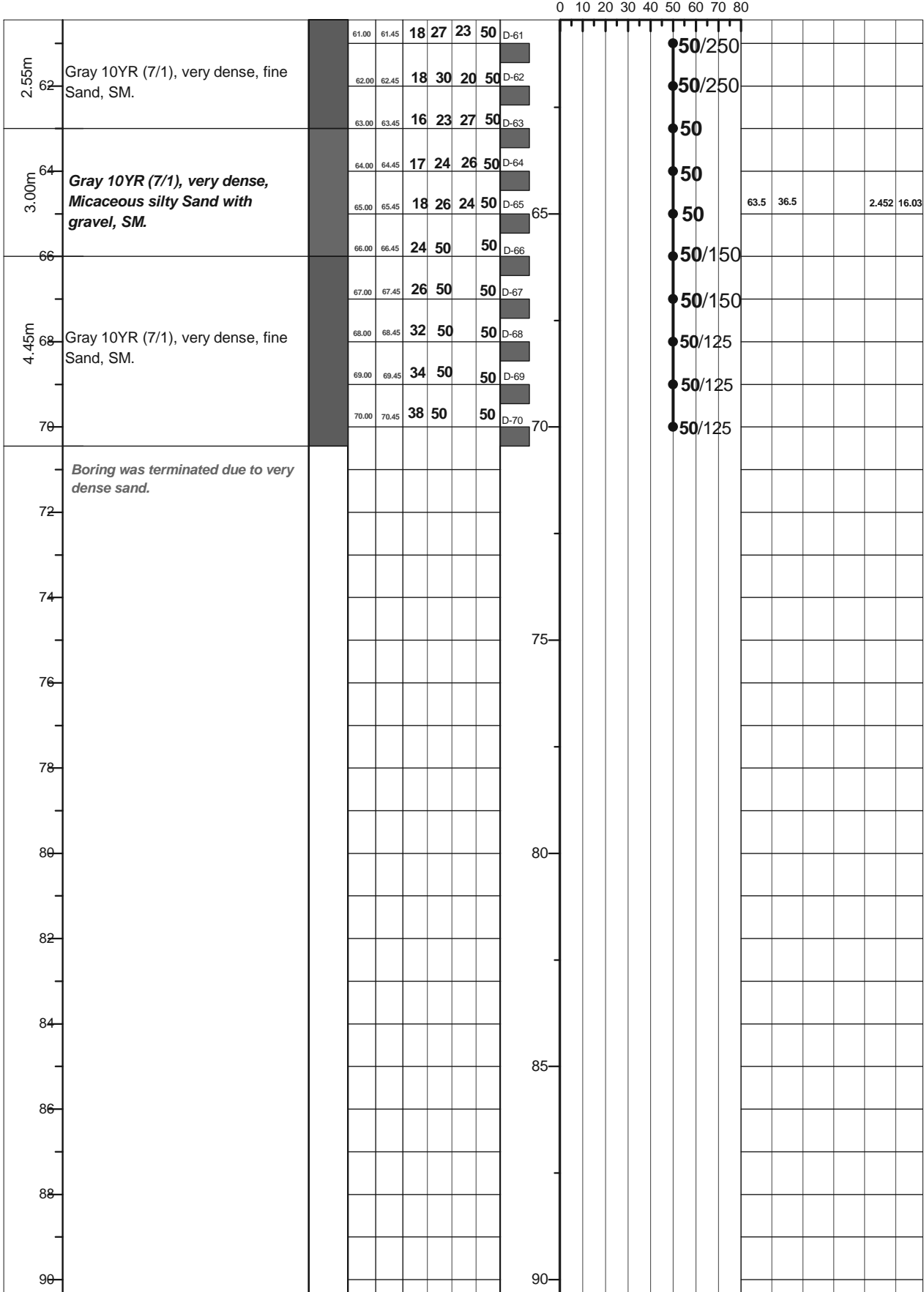
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 63	BOREHOLE NO: R760_049c	Longitude: N 89°26'30"	Latitude: E 22°45'57.647"
			Brigde ID: R760_049c	Road Name: Khulna - Chuknagar - Satkhira road.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 49.478, RL: -0.18m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 31-03-2014	Completed Date: 09-04-2014	G. W. T : -3.65m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

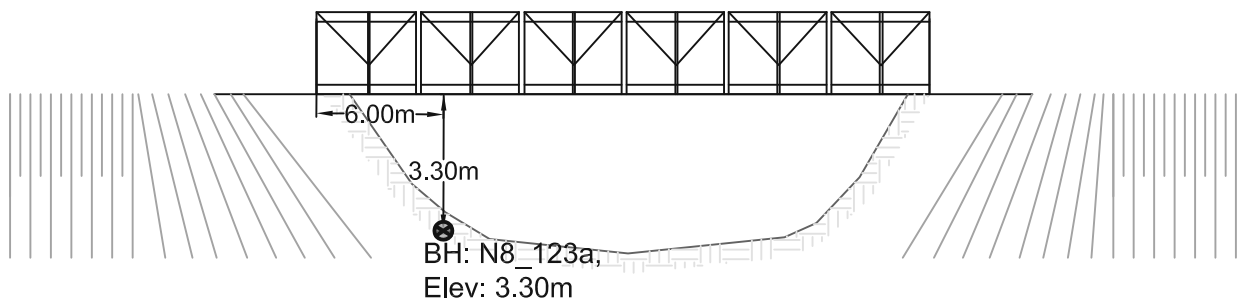
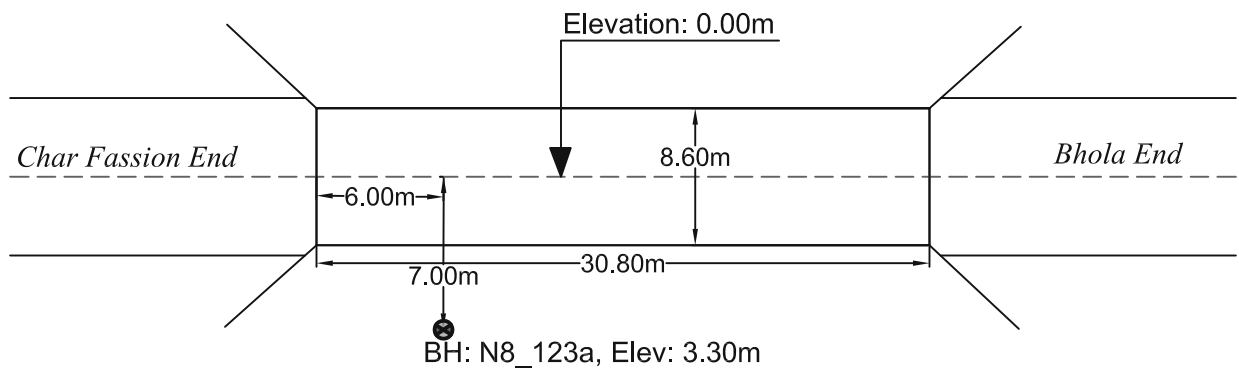
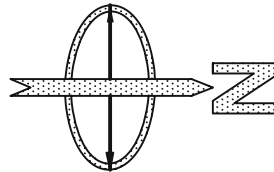
CLIENT: Oriental Consultants Company Limited.

RANK: 64

BRIDGE ID: N8_123a

LATITUDE: 23°0'53.976" LONGITUDE: 90°12'56.636"

CHAINAGE: 121.734



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 64	BOREHOLE NO: N8_123a	Longitude: N 90°12'56.636"	Latitude: E 23°0'53.976"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 60.0m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 25-03-2014		Completed Date: 31-03-2014	
			Brigde ID: N8_123a		Road Name: Dhaka(Jatrabari)MawaBangaBarisal Patuakhali.
					Chainage: 121.734, RL: -3.3m
					G. W. T : -2.3m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								
0								0							
4.0m	Grayish Brown 7.5YR (5/2), very soft, low plastic, Clay with sand, CL.		1.00	1.45	1	1	1	2	D-1	2	6.3	93.7	46.6	19.6	2.74
			2.00	2.45	1	1	2	3	D-2	3					
			3.00	3.45	1	2	2	4	D-3	4					
			4.00	4.45	1	2	2	4	D-4	4					
1.0m	Gray 7.5YR (5/1), soft, low plastic, Clay with sand, CL.		5.00	5.45	1	1	2	3	D-5	3					
1.0m	Dark Gray 7.5YR (4/1), soft, low plastic, Clay with sand, CL.		6.00	6.45	2	2	2	4	D-6	4					
1.0m	Gray 7.5YR (5/1), soft, low plastic, silty Clay, CL.		7.00	7.45	1	1	2	3	D-7	3					
2.0m	Dark Gray 7.5YR (4/1), soft, low plastic, Clay with sand, CL.		8.00	8.45	2	2	2	4	D-8	4	9.4	90.6	48.6	21.2	2.76
			9.00	9.45	2	2	3	5	D-9	5					
4.0m	Gray 7.5YR (5/1), soft, low plastic, Clay with sand, CL.		10.00	10.45	2	2	3	5	D-10	5					
			11.00	11.45	3	5	5	10	D-11	10					
			12.00	12.45	6	7	9	16	D-12	16	10.3	89.7	48.2	22.2	2.734 19.32
			13.00	13.45	1	1	2	3	D-13	3					
2.0m	Dark Gray 7.5YR (4/1), soft, low plastic, Clay with sand, CL.		14.00	14.45	2	2	2	4	D-14	4					
			15.00	15.45	2	3	3	6	D-15	6	2.7	97.3	42.2	18.7	2.676 27.7
1.0m	Gray 7.5YR (5/1), medium stiff, low plastic, Clay with sand, CL.		16.00	16.45	2	2	2	4	D-16	4					
1.0m	Dark Gray 7.5YR (4/1), soft, medium plastic, Clay, CL.		17.00	17.45	1	2	2	4	D-17	4					
2.0m	Gray 7.5YR (5/1), soft, low plastic, Clay with sand, CL.		18.00	18.45	2	2	3	5	D-18	5	3.3	96.7	48.5	22	2.725 27.93
			19.00	19.45	1	2	2	4	D-19	4					
2.0m	Dark Gray 7.5YR (4/1), soft, low plastic, Clay with sand, CL.		20.00	20.45	2	2	3	5	D-20	5	4.8	95.2	49.6	23.4	2.73 28.25
			21.00	21.45	3	5	7	12	D-21	12					
			22.00	22.45	3	3	5	8	D-22	8					
9.45m	Gray 7.5YR (5/1), stiff, low plastic, Clay with sand, CL.		23.00	23.45	3	4	5	9	D-23	9					
			24.00	24.45	5	5	6	11	D-24	11					
			25.00	25.45	4	5	7	12	D-25	12	8.1	91.9	42.3	18.7	2.757 20.26
			26.00	26.45	4	5	7	12	D-26	12					
			27.00	27.45	5	5	8	13	D-27	13					
			28.00	28.45	3	5	6	11	D-28	11					
			29.00	29.45	4	5	5	10	D-29	10					
			30.00	30.45	5	5	5	10	D-30	10					

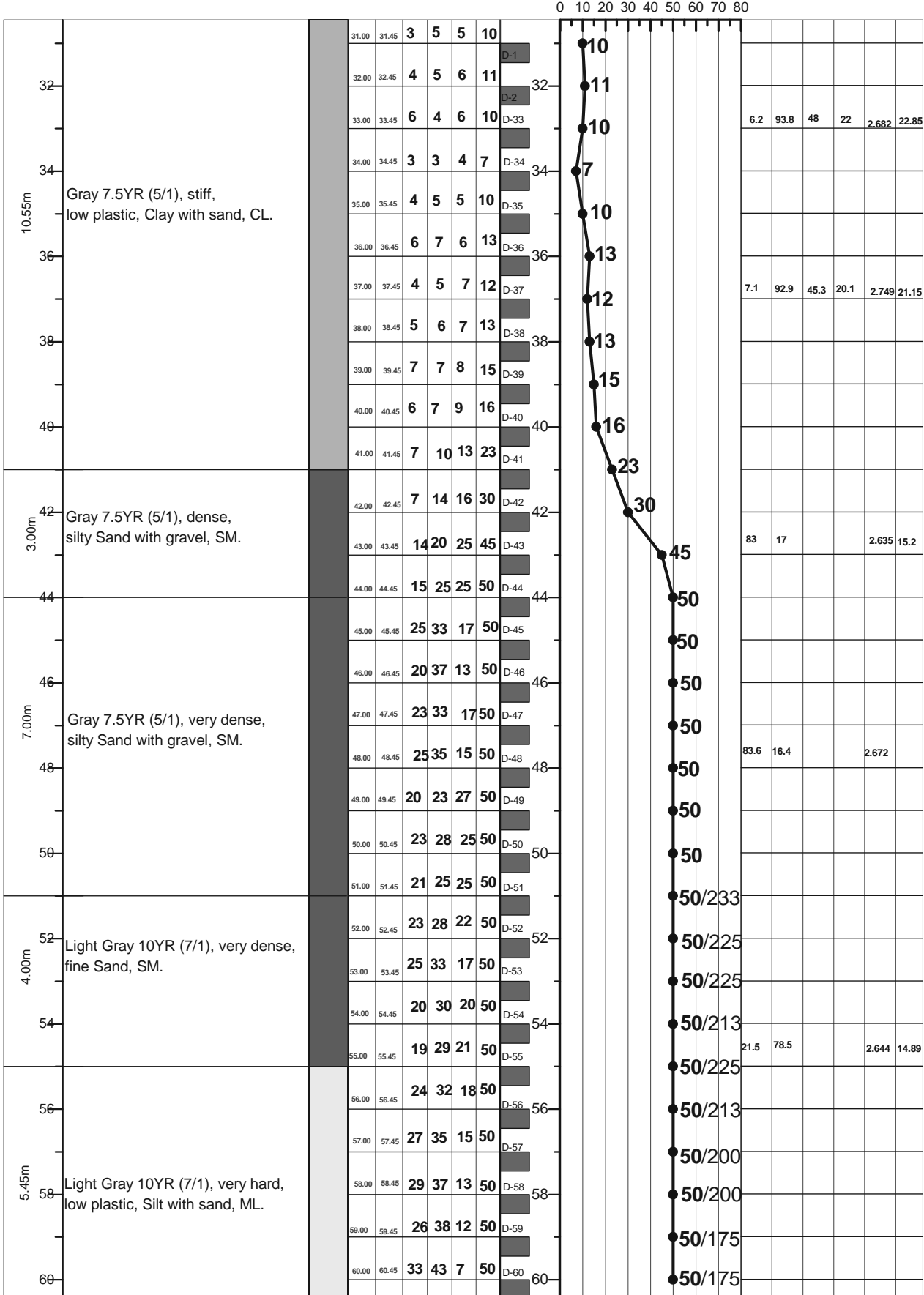
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^m PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 64	BOREHOLE NO: N8_123a	Longitude: N 90°13'20.172"	Latitude: E 22°58'29.143"
			Brigde ID: N8_123a	Road Name: Dhaka(Jatrabari)MawaBangaBarisal Patuakhali.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 121.734, RL: -3.3m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 25-03-2014	Completed Date: 31-03-2014	G. W. T : -2.3m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

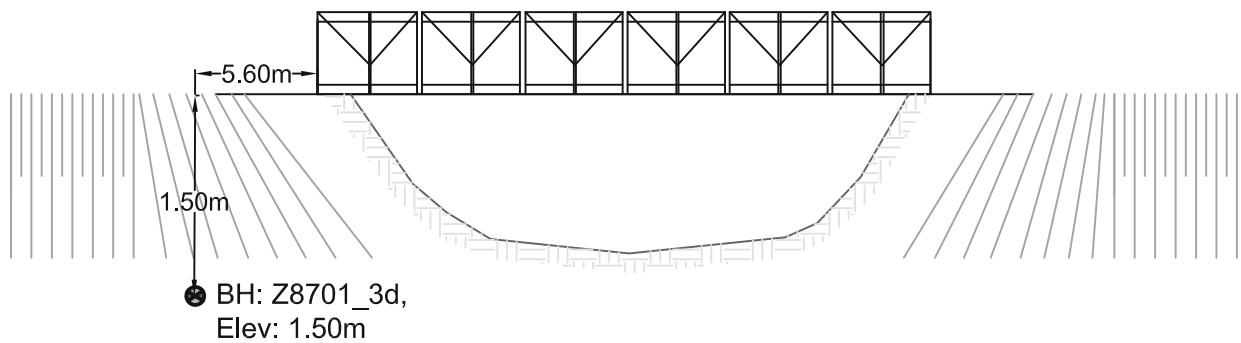
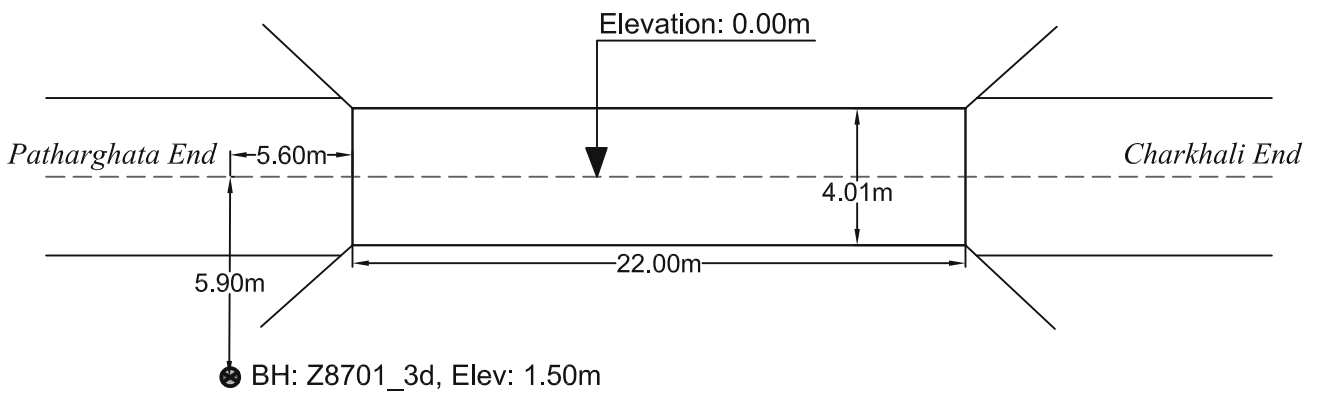
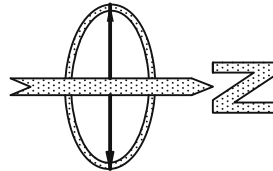
CLIENT: Oriental Consultants Company Limited.

RANK: 65

BRIDGE ID: Z8701_3d

LATITUDE: 22°27'20.052" LONGITUDE: 89°59'31.814"

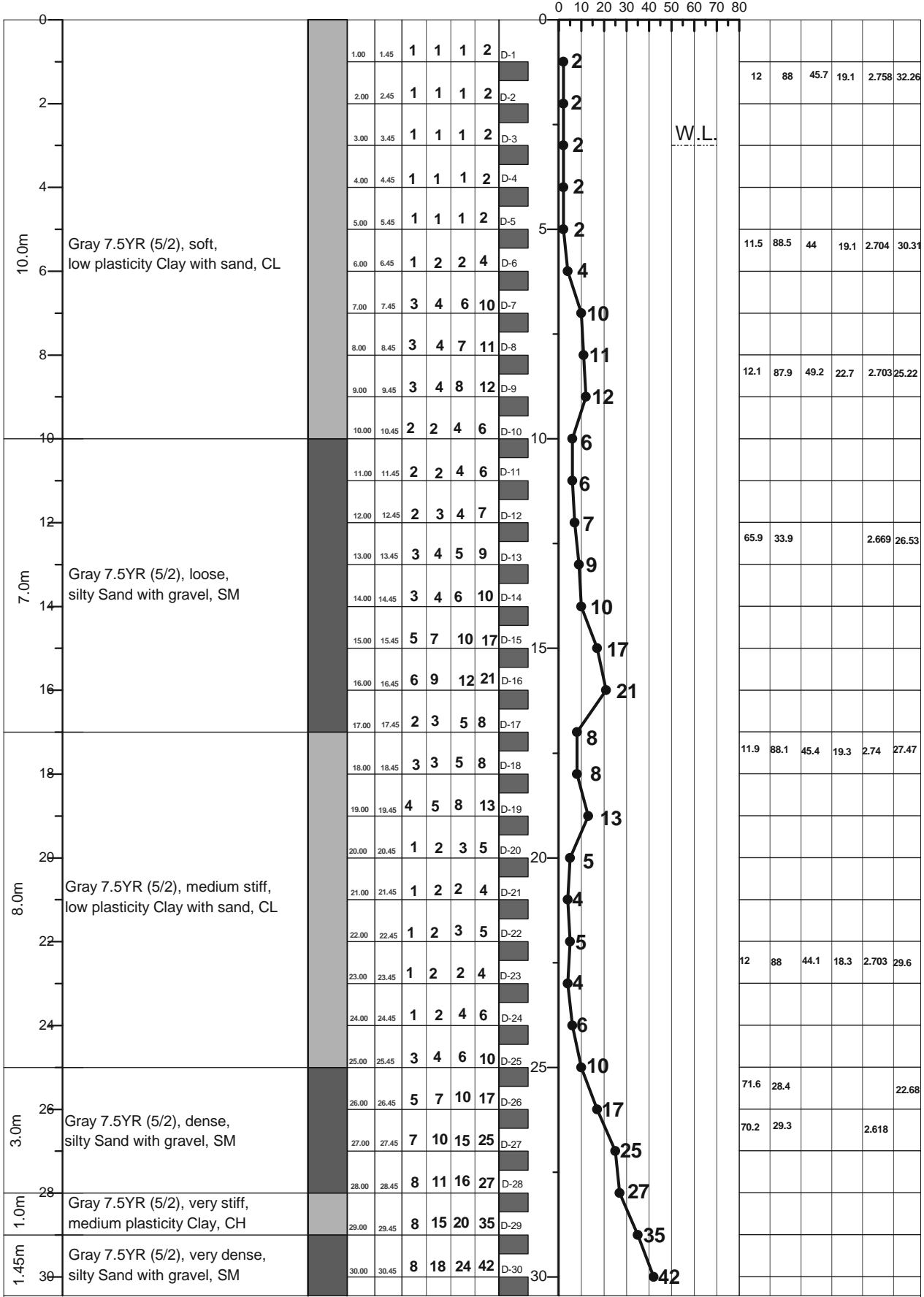
CHAINAGE: 3.806



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 65	BOREHOLE NO: Z8701_3d	Longitude: N 90°14'8.925"	Latitude: E 22°27'20.052"
			Brigde ID: Z8701_3d	Road Name: Charkhali-Tushkhali-Mathbaria-Patharghata.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 3.806, RL: -1.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 27-03-2014	Completed Date: 1-04-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								



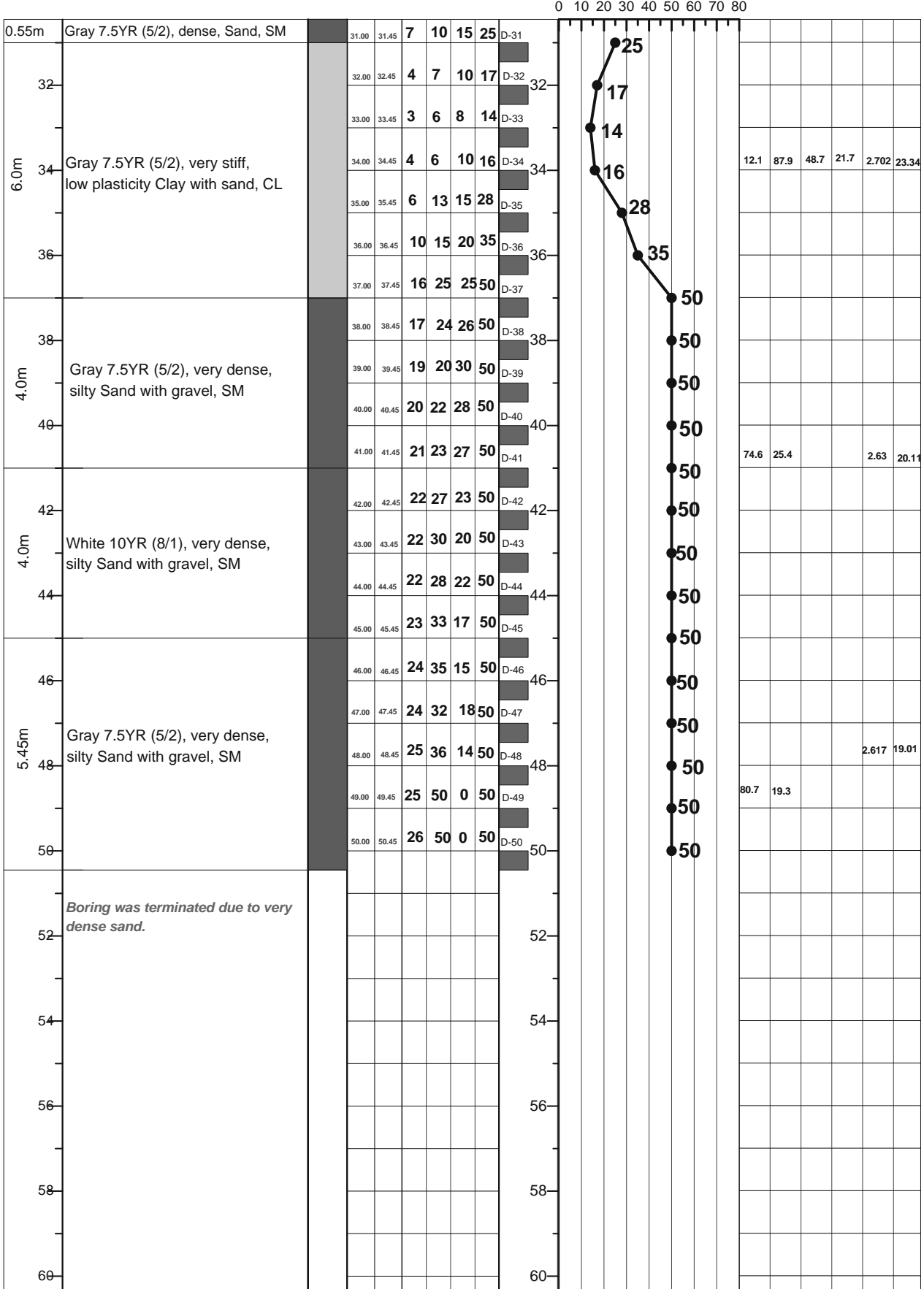
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 65	BOREHOLE NO: Z8701_3d	Longitude: N 90°14'8.925"	Latitude: E 22°27'20.052"
			Brigde ID: Z8701_3d	Road Name: Charkhali-Tushkhali-Mathbaria-Patharghata	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 3.806, RL: -1.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 27-03-2014	Completed Date: 1-04-2014	G. W. T : -3.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

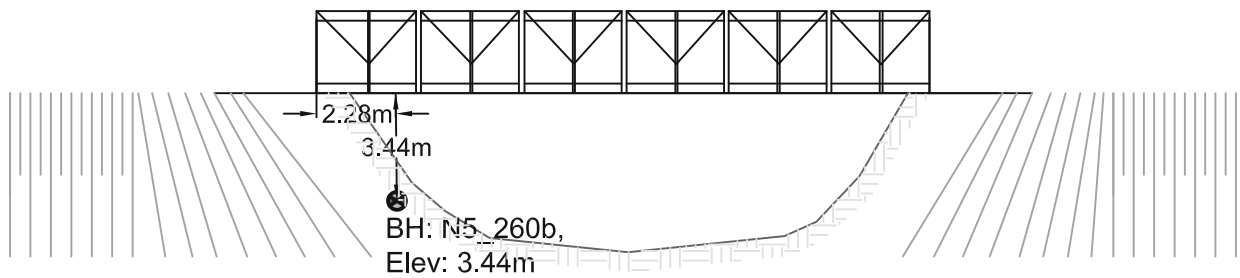
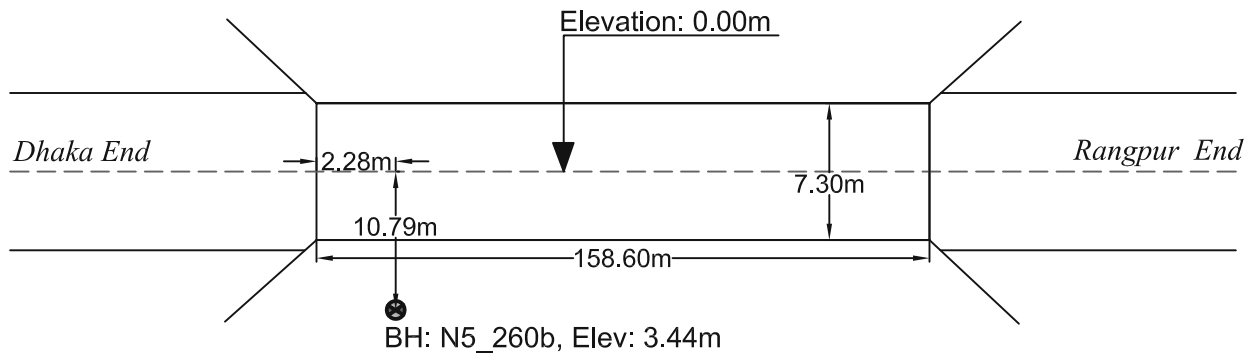
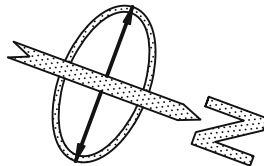
CLIENT: Oriental Consultants Company Limited.

RANK: 66

BRIDGE ID: N5_260b

LATITUDE: 25°10'22.855" LONGITUDE: 89°23'21.027"

CHAINAGE: 258.224



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 66	BOREHOLE NO: N5_260b	Longitude: N 089°23.370'	Latitude: E 25°10.341'
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Brigde ID: N5_260b	Road Name: Dhaka-Paturia-Kashinathpur-Bogra-Rangpur-Banglabondh.	
Type of Drill Rig: Manual Rotary			Borehole Depth: 32.0m	Chainage: 258.224, RL: -3.44m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : 0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING		SPT-N Value Blow/300mm					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)	N4-600 (mm)	N5-750 (mm)								
0-2.0m	filling sand.		1.00	1.45						D-1							
2-2.0m	10YR (5/4), loose, silty Sand with gravel, SM.		2.00	2.45	2	3	3	6		D-2							
2-4.0m	7.5YR (4/2), medium dense to dense, poorly graded silty Sand with gravel, SP-SM		3.00	3.45	3	3	4	7		D-3		89.9	10.1			2.611	26.14
4-5.0m	7.5YR (5/6), medium dense to dense, silty Sand with gravel, SM.		4.00	4.45	2	3	4	7		D-4							
5.0-6.0m	5YR (5/4), medium dense to dense, silty Sand with gravel, SM.		5.00	5.45	2	3	5	8		D-5							
6.0-7.0m	5YR (5/3), medium dense to dense, silty Sand with gravel, SM.		6.00	6.45	3	4	5	9		D-6							
7.0-8.0m	5YR (4/3), medium dense to dense, silty Sand with gravel, SM.		7.00	7.45	3	4	6	10		D-7							
8.0-9.0m	2.5YR (4/3), medium dense to dense, silty Sand with gravel, SM		8.00	8.45	3	4	6	10		D-8							
9.0-10.0m	7.5YR (5/1), dense, fine Sand, SM.		9.00	9.45	5	6	7	13		D-9		81.5	18.5			2.605	20.69
10.0-11.0m	7.5YR (5/4), very dense, very fine Sand, SM.		10.00	10.45	4	6	10	16		D-10							
11.0-12.0m	7.5YR (5/2), very dense, poorly graded silty Sand with gravel, SP-SM		11.00	11.45	5	8	12	20		D-11							
12.0-13.0m	10YR (6/2), very dense, silty Sand with gravel, SM.		12.00	12.45	6	10	16	26		D-12							
13.0-14.0m	5YR (5/2), very dense, silty Sand with gravel, SM.		13.00	13.45	14	19	24	43		D-13							
14.0-15.0m	7.5YR (5/2), very dense, silty Sand with gravel, SM.		14.00	14.45	12	19	23	42		D-14		91.3	8.7			2.682	21.82
15.0-16.0m	7.5YR (5/2), very dense, silty Sand with gravel, SM.		15.00	15.45	12	20	25	45		D-15							
16.0-17.0m	10YR (6/1), dense, poorly graded silty Sand with gravel, SP-SM		16.00	16.45	10	18	23	41		D-16							
17.0-18.0m	7.5YR (5/2), very dense, silty Sand with gravel, SM.		17.00	17.45	10	15	18	33		D-17							
18.0-19.0m	7.5YR (6/1), very dense, silty Sand with gravel, SM.		18.00	18.45	7	12	16	28		D-18							
19.0-20.0m	Gray 10YR (5/2), very dense, silty Sand with gravel, SM.		19.00	19.45	7	10	15	25		D-19							
20.0-21.0m	Gray 2.5YR (4/2), very stiff, low plasticity Clay with sand, CL		20.00	20.45	8	12	18	30		D-20		89	11			2.6	19.32
21.0-22.0m	Gray 2.5YR (4/2), dense, silty Sand with gravel, SM		21.00	21.45	8	17	21	38		D-21							
22.0-23.0m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		22.00	22.45	9	18	24	42		D-22							
23.0-24.0m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		23.00	23.45	9	20	25	45		D-23							
24.0-25.0m	Gray 2.5YR (4/2), dense, silty Sand with gravel, SM		24.00	24.45	10	20	26	46		D-24							
25.0-26.0m	Gray 2.5YR (4/2), dense, silty Sand with gravel, SM		25.00	25.45	11	21	27	48		D-25							
26.0-27.0m	Gray 2.5YR (4/2), dense, silty Sand with gravel, SM		26.00	26.45	7	12	14	26		D-26		36.2	63.8	43.9	23.1	2.642	20.09
27.0-28.0m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		27.00	27.45	8	13	14	27		D-27		83.5	16.5			2.613	24.33
28.0-29.0m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		28.00	28.45	14	25	25	50		D-28							
29.0-30.0m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		29.00	29.45	20	26	24	50		D-29							
30.0-31.45m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		30.00	30.45	23	28	22	50		D-30							

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

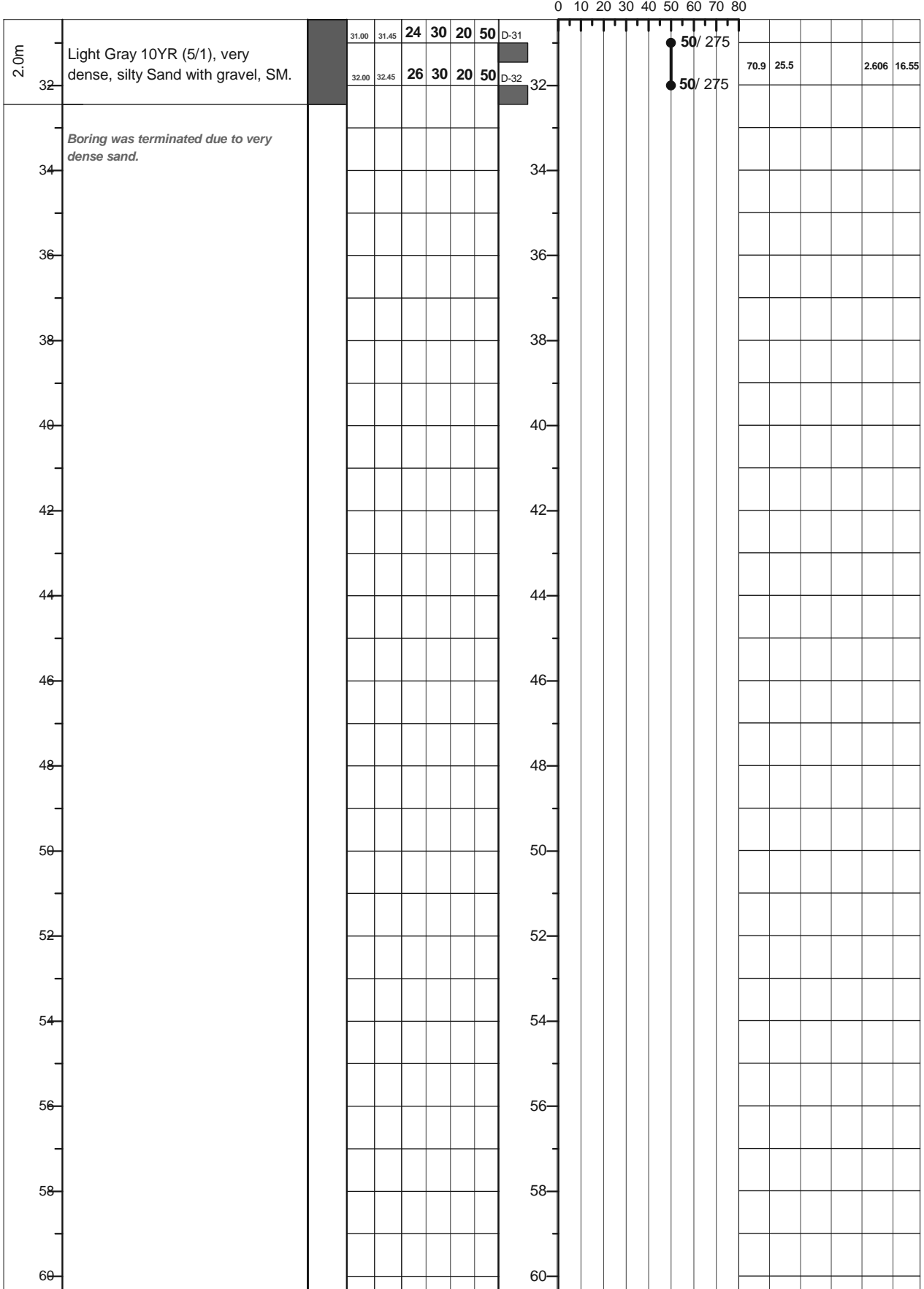
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 66	BOREHOLE NO: N5_260b	Longitude: N 089°23.370'	Latitude: E 25°10.341'
			Brigde ID: N5_260b	Road Name: Dhaka-Paturia-Kashinathpur-Bogra-Rangpur-Banglabondh.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 32.0m	Chainage: 258.224, RL: -3.44m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : 0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									

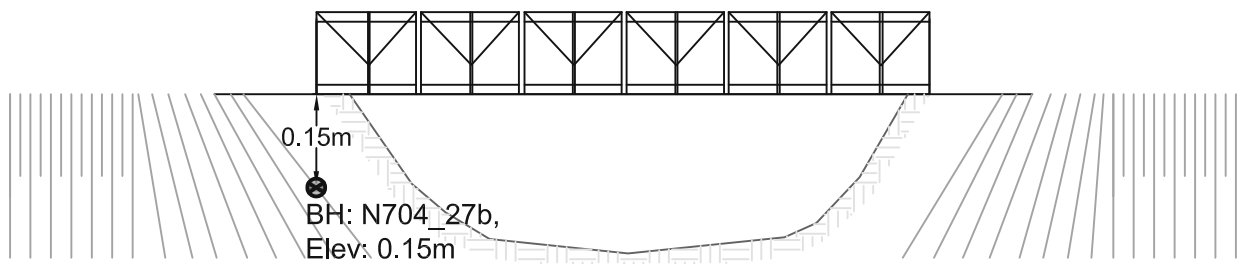
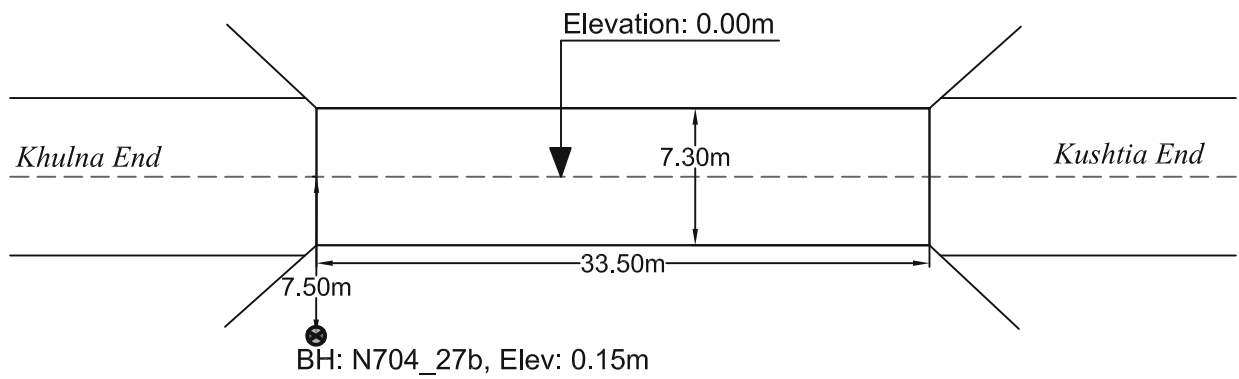
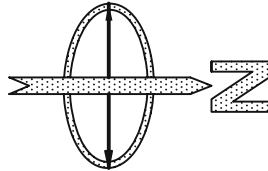


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

[Light Gray Box] PLASTIC CLAY	[Light Gray Box] SILT	[Dark Gray Box] PEAT/HIGHLY ORGANIC SOIL	[Dark Gray Box] UNDISTURBED SAMPLE
[Dark Gray Box] MICACEOUS FINE SAND/SILT	[Dark Gray Box] SAND	[Dark Gray Box] SHALE	[Dark Gray Box] DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

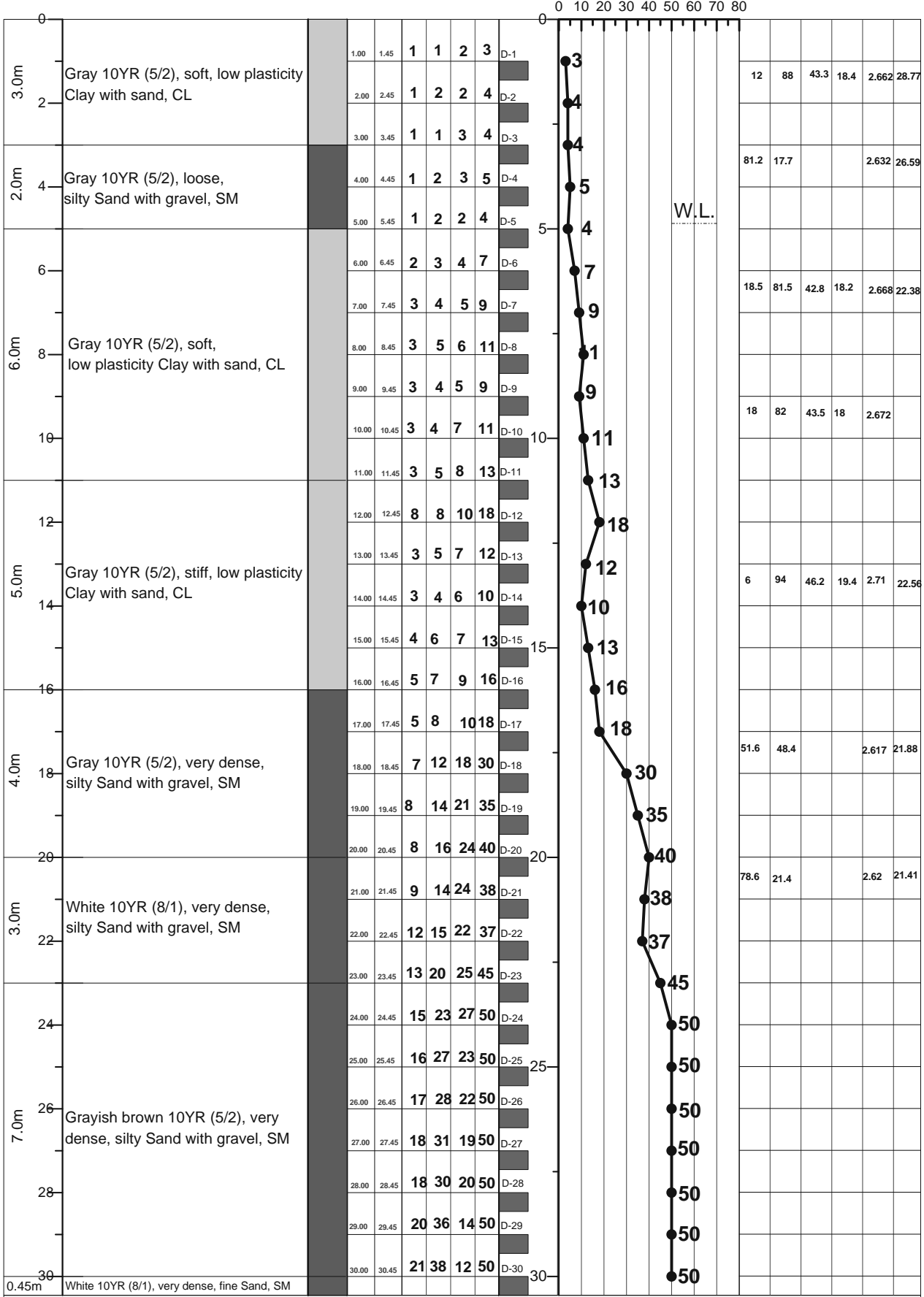
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 67
BRIDGE ID: N704_27b
LATITUDE: 23°45'47.388" LONGITUDE: 89°7'9.677"
CHAINAGE: 28.708



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 67	BOREHOLE NO: N704_27b	Longitude: N 89°07'9.677"	Latitude: E 23°45'47.388"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 50.0m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 9-03-2014		Completed Date: 14-03-2014	
				Chainage: 28.708, RL: 0.15m	
				G. W. T : -4.87m.	

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (blows)	N2-300 (blows)	N3-450 (blows)								



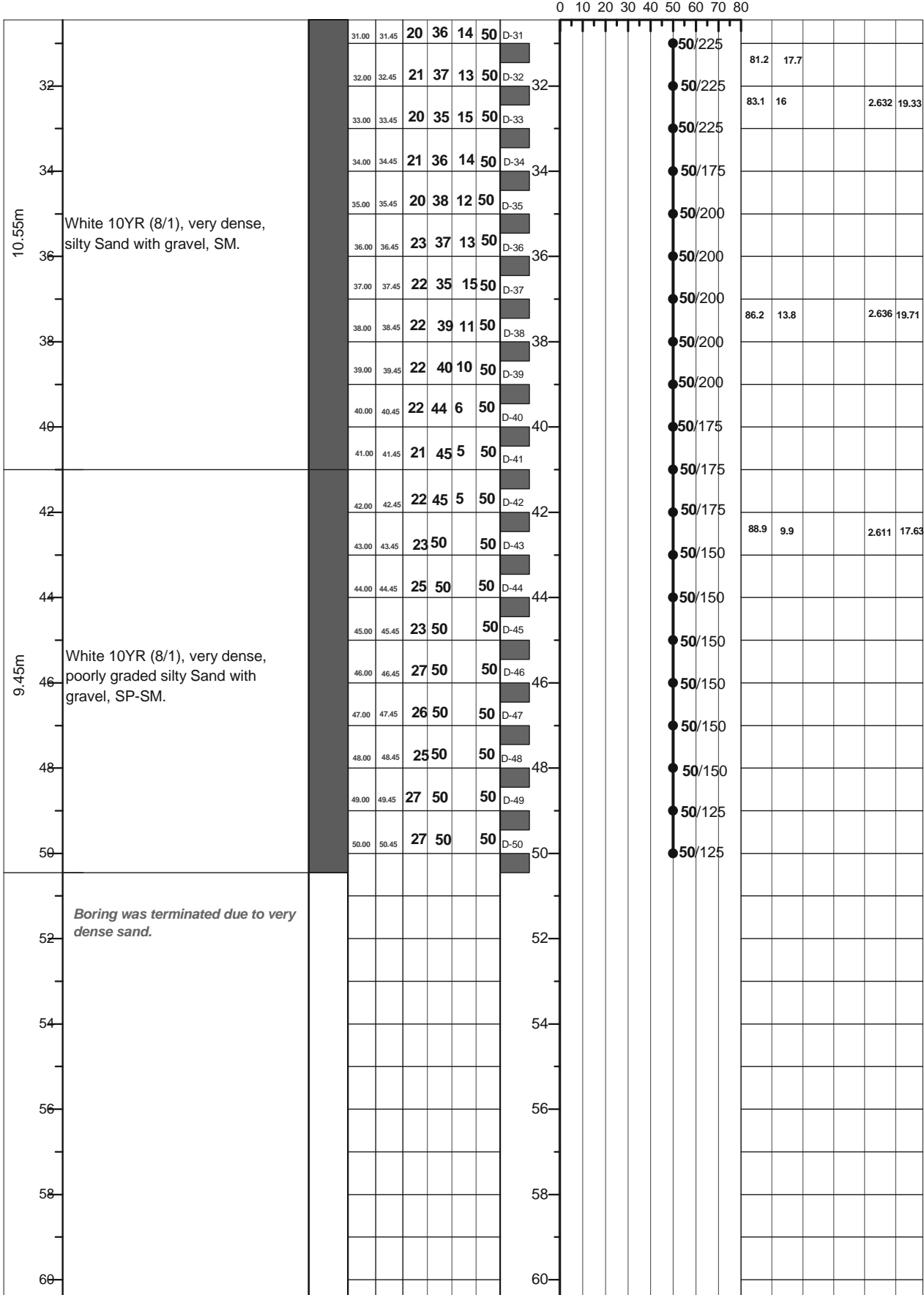
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 67	BOREHOLE NO: N704_27b	Longitude: N 89°07'9.677"	Latitude: E 23°45'47.388"
			Brigde ID: N704_27b	Road Name: Jhenaidah-Kushtia-Paksey Ferry-Dasuria	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 28.708, RL: 0.15m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 11-03-2014	Completed Date: 15-03-2014	G. W. T : -4.87m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

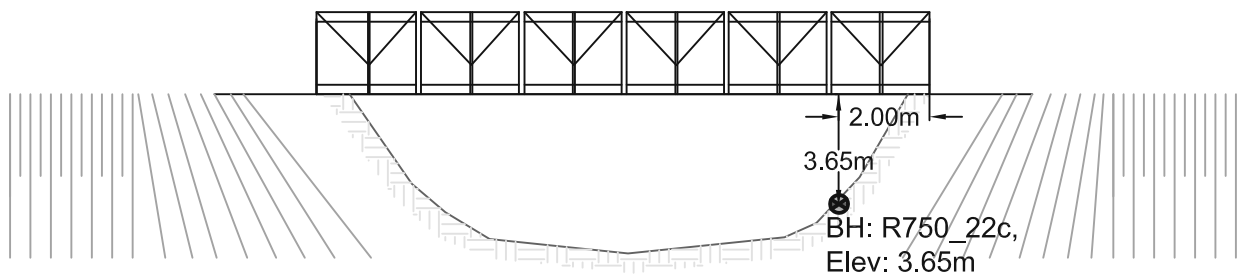
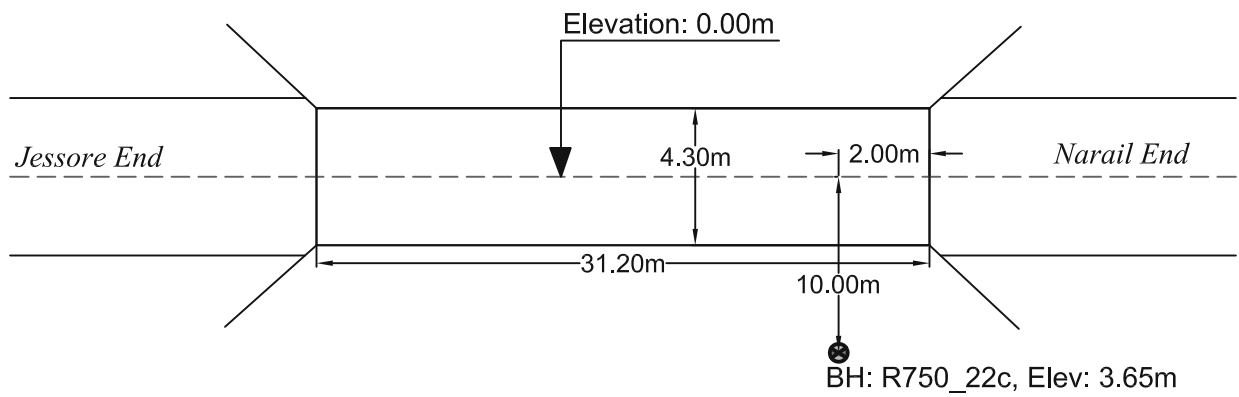
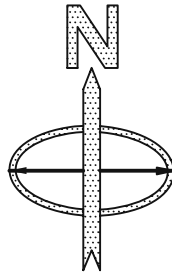


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^m PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 68
BRIDGE ID: R750_22c
LATITUDE: 23°10'34.001" LONGITUDE: 89°25'2.91"
CHAINAGE: 21.434



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 68	BOREHOLE NO: R750_22c	Longitude: N 89°25'2.93"	Latitude: E 23°10'34.002"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Brigde ID: R750_22c	Road Name: Jessore-Narail.	
Type of Drill Rig: Manual Rotary			Borehole Depth: 50.0m	Chainage: 21.434, RL: -3.65m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 01-04-2014	Completed Date: 05-04-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									N6-600 (mm)
0								0								
2.0m	Light Gray 10YR (7/1), very soft, low plastic, Clay with sand, CL.		1.00	1.45	1	1	1	2	D-1	2	11.4	88.6	47	20.1	2.73	29.22
2			2.00	2.45	1	1	1	2	D-2	2						
1.0m	Gray 10YR (6/1), very soft, low plastic, Clay, CL.		3.00	3.45	1	0	1	1	D-3	1						
1.0m	Dark Gray 10YR (4/1), low plastic, clay with partial decomposed Plant, CL.		4.00	4.45	1	1	1	2	D-4	1	10.4	89.6	49.4	22	2.668	36.23
1.0m	Gray 10YR (6/1), very soft, low plastic, Clay with sand, CL.		5.00	5.45	4	4	5	9	D-5	9	42.9	57.1			2.643	24.52
1.0m	Gray 10YR (6/1), medium stiff, low plastic, Silt with sand, ML.		6.00	6.45	1	1	1	2	D-6	2	10.9	89.1	47.9	21.4	2.679	35.08
1.0m	Gray 10YR (6/1), very soft, low plastic, Clay with sand, CL.		7.00	7.45	3	3	4	7	D-7	7	73	26.5			2.666	
3.0m	Gray 10YR (6/1), medium dense to dense, silty Sand with gravel, SM.		8.00	8.45	1	1	1	2	D-8	2						
			9.00	9.45	5	6	6	12	D-9	12						
10			10.00	10.45	5	8	9	17	D-10	17	88	12			2.619	20.77
			11.00	11.45	5	7	9	16	D-11	16						
			12.00	12.45	7	9	10	19	D-12	19						
			13.00	13.45	7	7	10	17	D-13	17						
9.00m	Gray 10YR (6/1), dense, Poorly graded silty Sand with gravel, SP-SM.		14.00	14.45	8	8	10	18	D-14	18						
			15.00	15.45	7	8	12	20	D-15	20						
			16.00	16.45	8	11	14	25	D-16	25						
			17.00	17.45	10	12	15	27	D-17	27						
			18.00	18.45	17	35	15	50	D-18	50/200						
			19.00	19.45	11	19	22	41	D-19	41	72.2	27.8			2.674	21.29
10.00m	Gray 10YR (6/1), dense, silty Sand with gravel, SM.		20.00	20.45	9	16	19	35	D-20	35						
			21.00	21.45	10	13	20	36	D-21	36						
			22.00	22.45	9	16	18	34	D-22	34						
			23.00	23.45	10	15	20	35	D-23	35						
			24.00	24.45	8	17	18	35	D-24	35						
			25.00	25.45	9	12	14	26	D-25	26						
			26.00	26.45	8	11	14	25	D-26	25						
			27.00	27.45	8	11	13	24	D-27	24						
			28.00	28.45	9	12	14	26	D-28	26						
			29.00	29.45	10	13	16	29	D-29	29	95.1	4.9			2.636	21.28
1.45m	Gray 10YR (6/1), dense, Poorly graded Sand with gravel, SP.		30.00	30.45	13	14	19	33	D-30	33						

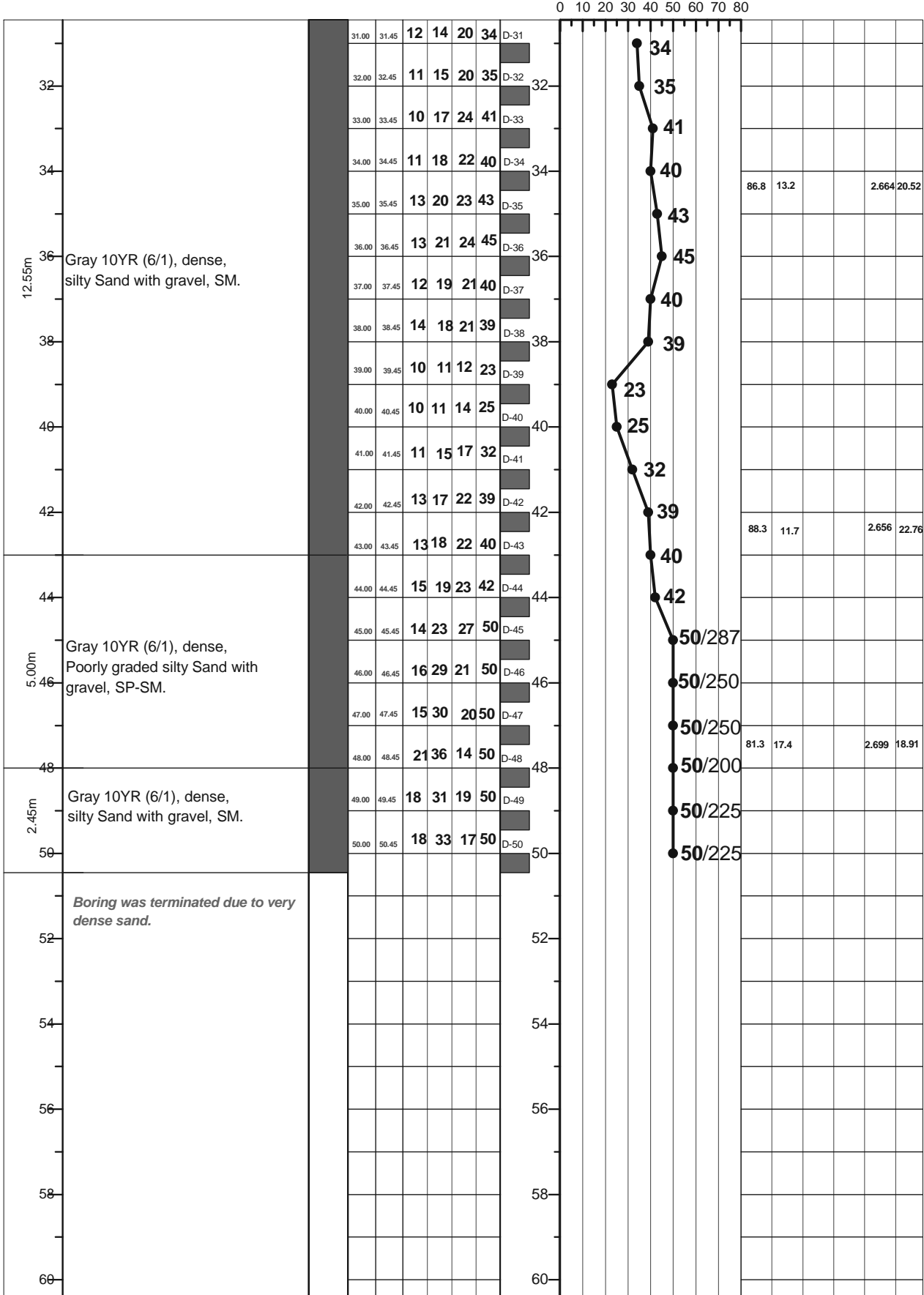
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 68	BOREHOLE NO: R750_22c	Longitude: N 89°25'2.93"	Latitude: E 23°10'34.002"
			Brigde ID: R750_22c	Road Name: Jessore-Narail.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 21.434, RL: -3.65m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 01-04-2014	Completed Date: 05-04-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

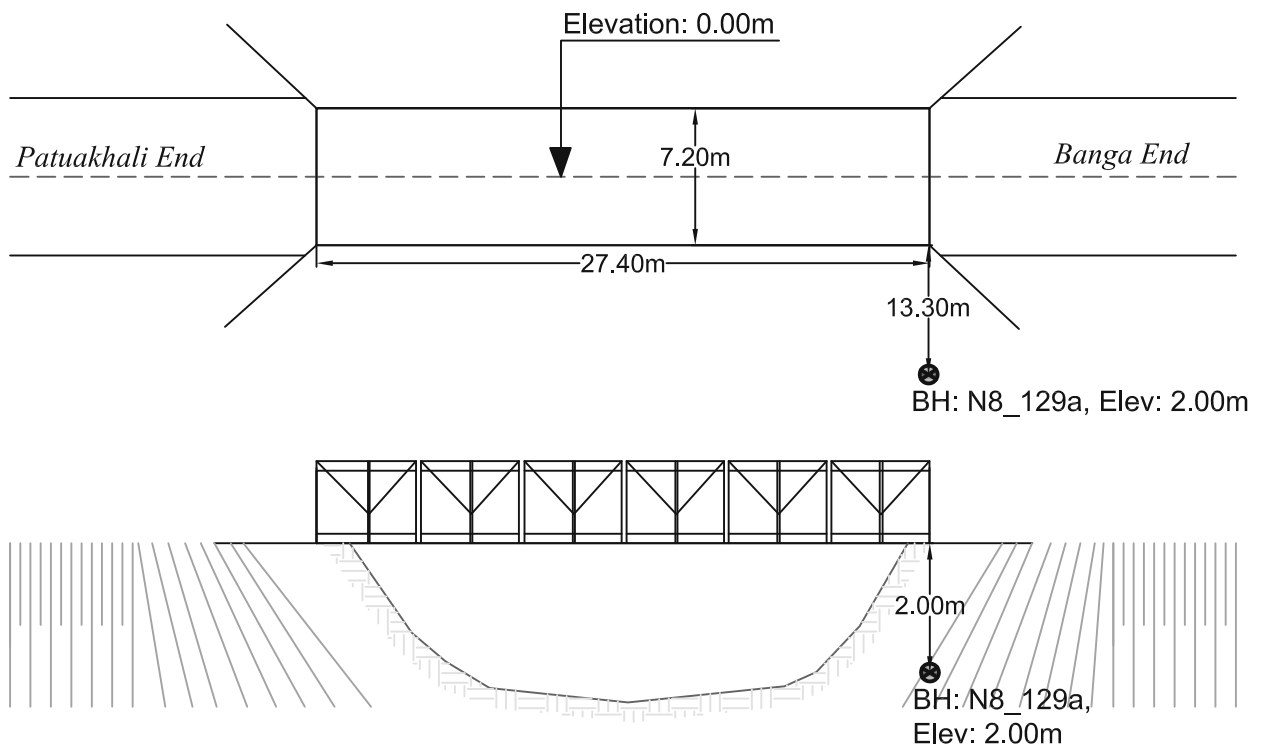
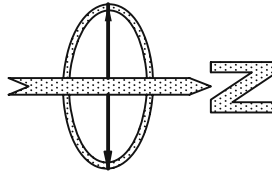
CLIENT: Oriental Consultants Company Limited.

RANK: 69

BRIDGE ID: N8_129a

LATITUDE: 22°57'46.023" LONGITUDE: 90°13'29.405"

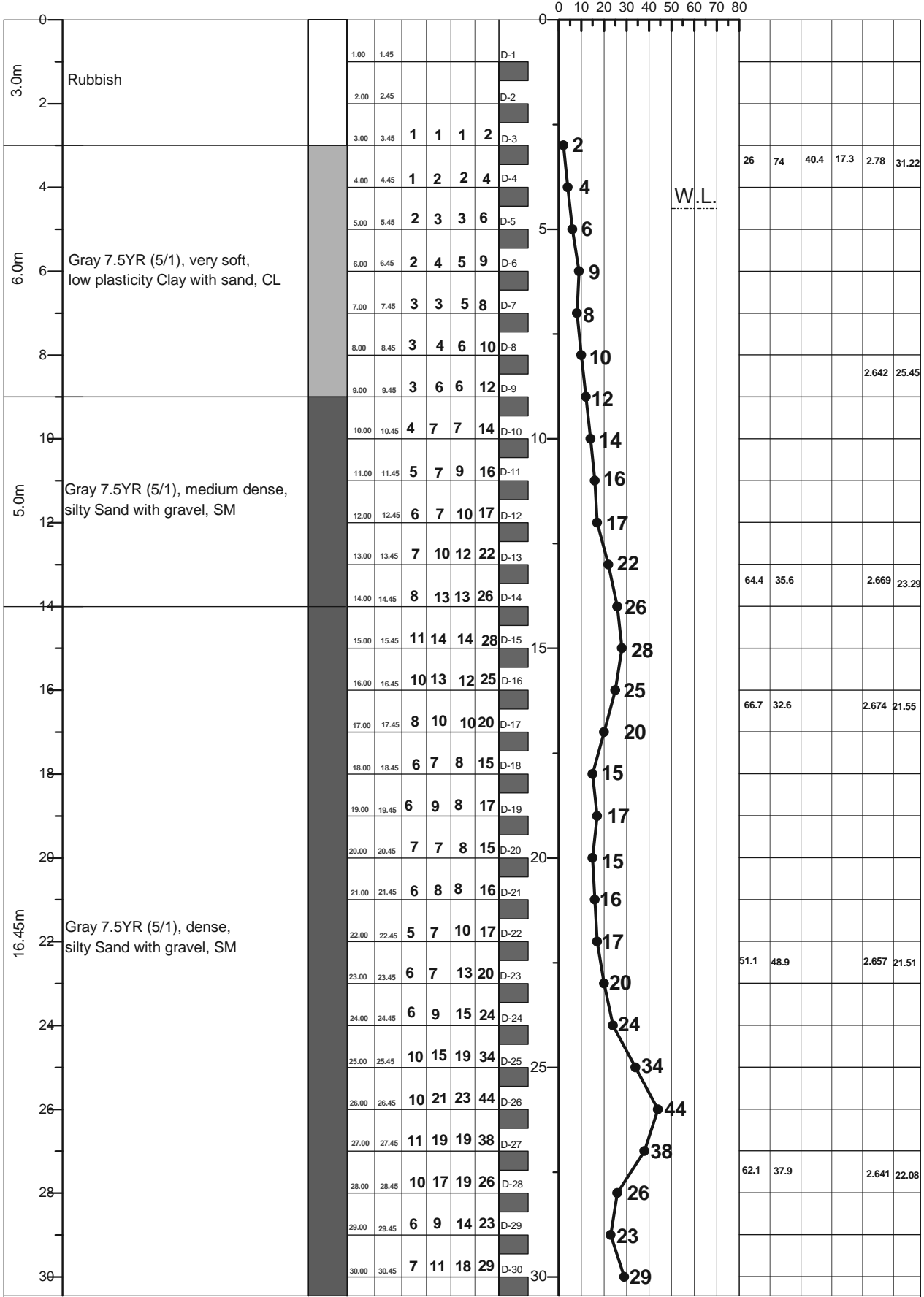
CHAINAGE: 127.737



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 69	BOREHOLE NO: N8_129a	Longitude: N 90°13'20.172"	Latitude: E 22°57'46.023"
			Brigde ID: N8_129a	Road Name: Dhaka(Jatrabari)-Mawa-BangaBarisal -Patuakhali.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 127.737, RL: -2.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 7-04-2014	Completed Date: 12-04-2014	G. W. T : -4.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



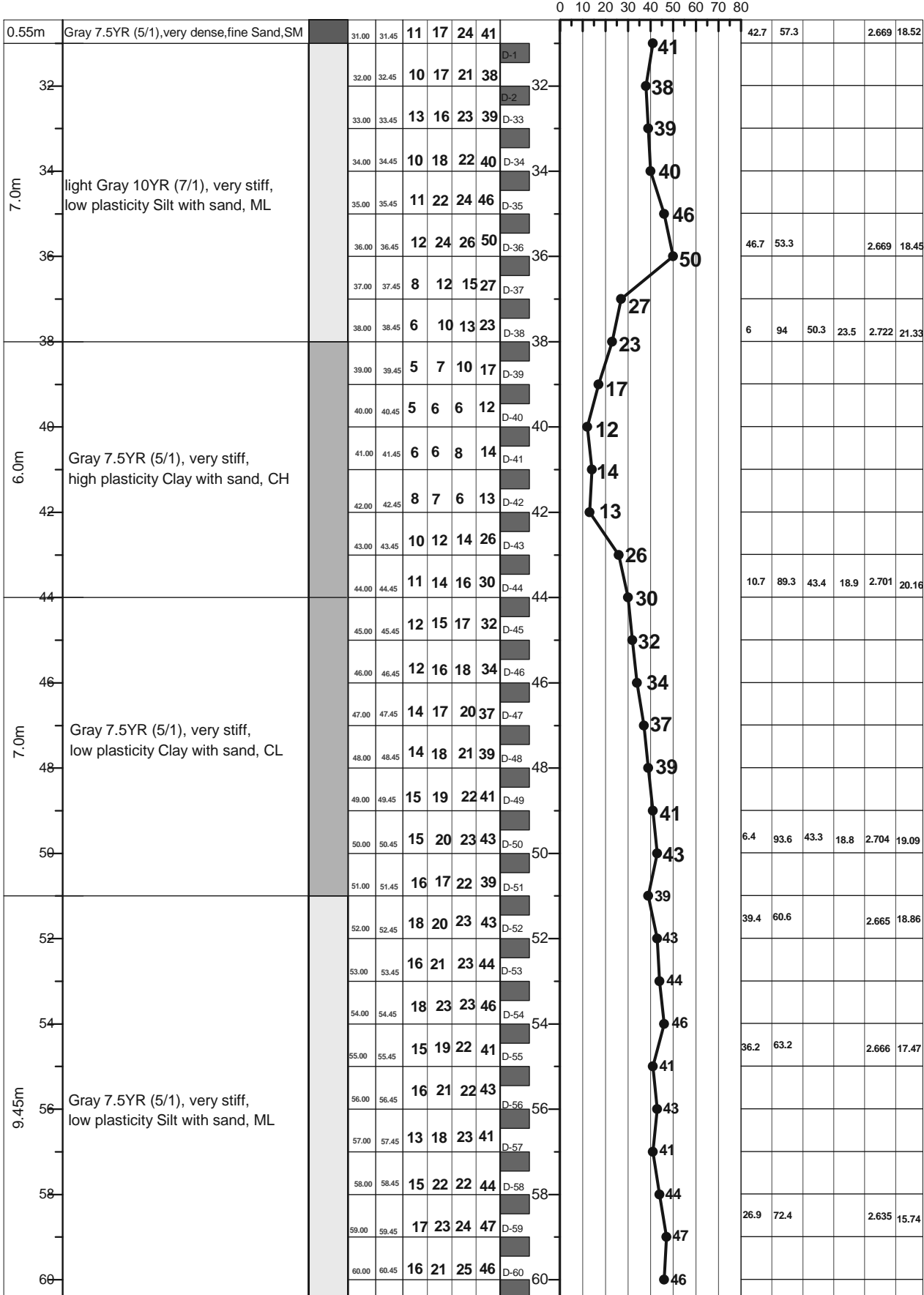
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 69	BOREHOLE NO: N8_129a	Longitude: N 90°13'20.172"	Latitude: E 22°57'46.023"
			Brigde ID: N8_129a	Road Name: Dhaka(Jatrabari)-Mawa-BangaBarisal -Patuakhali	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 127.737, RL: -2.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 7-04-2014	Completed Date: 12-04-2014	G. W. T : -4.5m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING		SPT-N Value Blow/300mm				DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)	N4-600 (mm)								



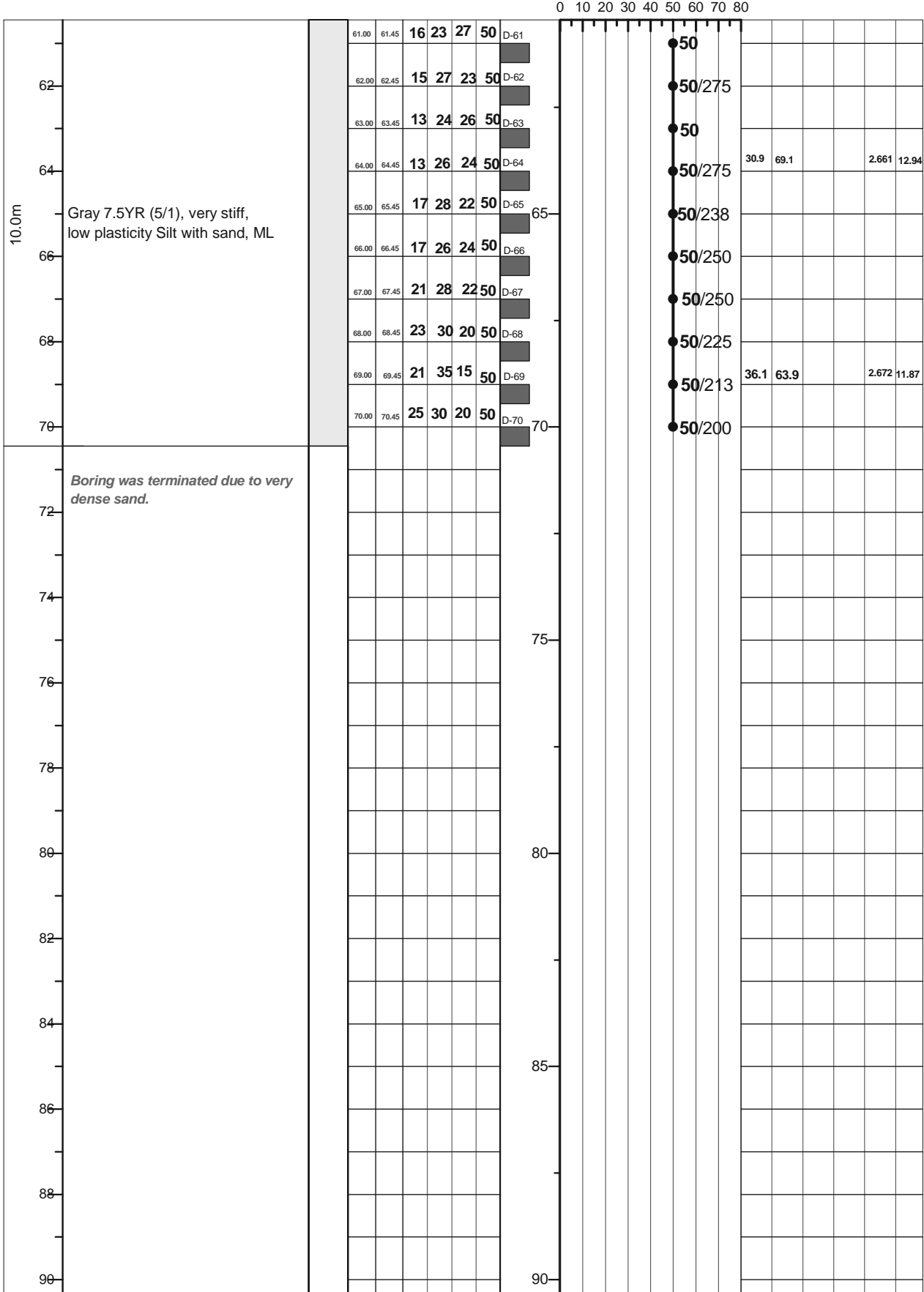
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 69	BOREHOLE NO: N8_129a	Longitude: N 90°13'20.172"	Latitude: E 22°57'46.023"
			Brigde ID: N8_129a	Road Name: Dhaka(Jatrabari)-Mawa-BangaBarisal -Patuakhali.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 127.737, RL: -2.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 7-04-2014	Completed Date: 12-04-2014	G. W. T : -4.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)					% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)			N4-600 (mm)	% Sand	% Passing 200	% LL	% PI						



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

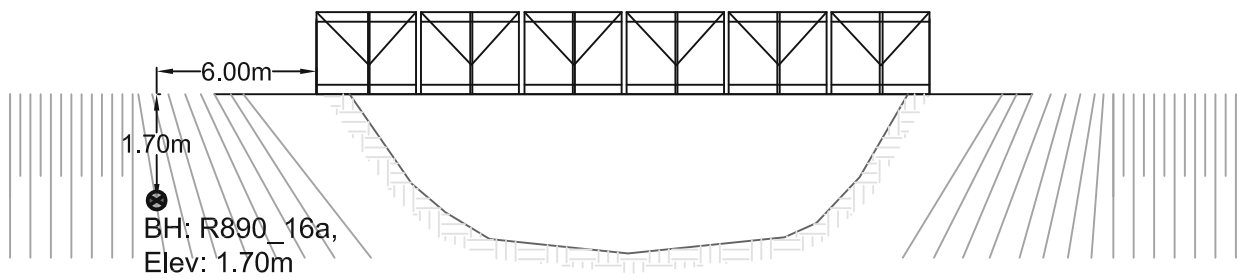
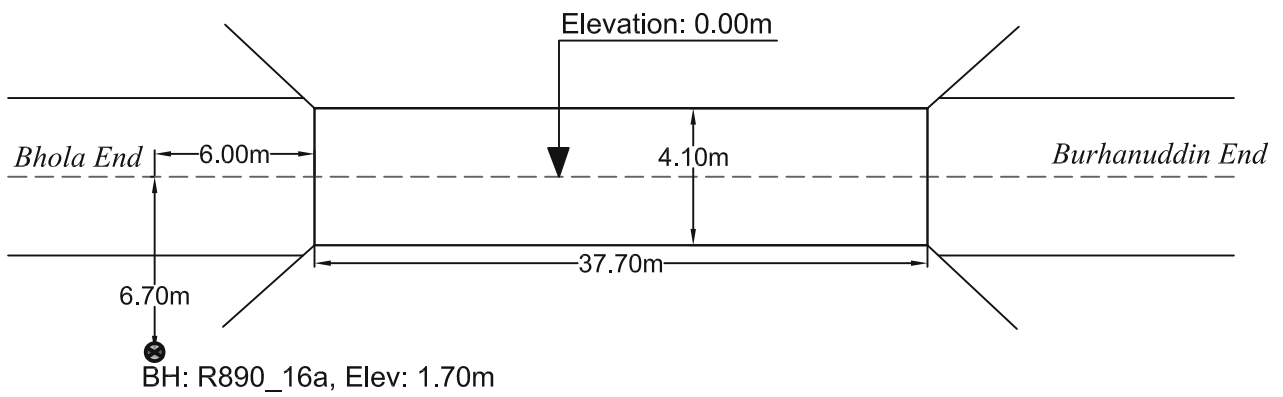
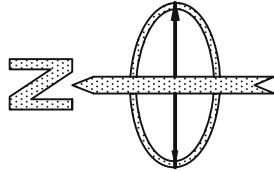
CLIENT: Oriental Consultants Company Limited.

RANK: 70

BRIDGE ID: R890_16a

LATITUDE: 22°35'36.75" LONGITUDE: 90°39'29.637"

CHAINAGE: 16.347



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 70	BOREHOLE NO: R890_16a	Longitude: N 90°19'59.9"	Latitude: E 22°35'36.75"
			Brigde ID: R890_16a	Road Name: Bholra(Paran Talukderhat)-Burhanuddin-Lalmohon-Char Fassion-Char Manika.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 16.347, RL: -1.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 29-03-2014	Completed Date: 04-04-2014	G. W. T : -5.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

THICKNESS	SOIL STRATA	BORE LOG	From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)	N4-600 (mm)	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
0-2.0m	Gray 7.5YR (6/1), dense, silty Sand, SM.		1.00	1.45	5	7	10	17	D-1	17						
2-2.0m			2.00	2.45	3	4	6	10	D-2	10						
2-3.0m	Gray 7.5YR (6/1), medium dense to dense, fine Sand, SM.		3.00	3.45	2	2	2	4	D-3	4	11.4	88.6			2.69	30.73
3-4.0m	Very Pale Brown 10YR (8/2), soft, low plasticity Silt with sand, ML.		4.00	4.45	2	4	5	9	D-4	9						
4-6.0m	Gray 7.5YR (6/1), medium dense to dense, Micaceous silty Sand with gravel, SM.		5.00	5.45	2	3	2	5	D-5	5	50.5	49.5			2.462	27.09
6-7.0m			6.00	6.45	1	1	2	3	D-6	3						
7-8.0m			7.00	7.45	3	5	5	10	D-7	10						
8-8.0m	Gray 7.5YR (6/1), stiff, low plasticity Silt with sand, ML.		8.00	8.45	3	4	7	11	D-8	11	20.6	79.4			2.663	25.12
8-9.0m			9.00	9.45	2	1	1	2	D-9	2						
9-10.0m			10.00	10.45	3	4	6	10	D-10	10						
10-11.0m			11.00	11.45	3	5	5	10	D-11	10						
11-12.0m			12.00	12.45	3	4	7	11	D-12	11						
12-13.0m	Gray 10YR (6/1), very stiff, low plasticity Silt with sand, ML.		13.00	13.45	6	10	12	22	D-13	22	22.9	77.1			2.677	20.85
13-14.0m			14.00	14.45	5	9	11	20	D-14	20						
14-15.0m			15.00	15.45	5	4	7	11	D-15	11	20.9	78.7			2.679	26.37
15-16.0m	Gray 7.5YR (6/1), stiff, low plasticity Silt with sand, ML.		16.00	16.45	7	10	14	24	D-16	24						
16-17.0m			17.00	17.45	7	10	13	23	D-17	23						
17-18.0m	Gray 10YR (6/1), very stiff, low plasticity Silt with sand, ML.		18.00	18.45	10	18	20	38	D-18	38						
18-19.0m			19.00	19.45	5	8	14	22	D-19	22						
19-20.0m			20.00	20.45	5	10	10	20	D-20	20						
20-21.0m			21.00	21.45	14	21	23	44	D-21	44	8.1	91.9			2.688	17.94
21-22.0m	Gray 7.5YR (6/1), very hard, low plasticity Silt with sand, ML.		22.00	22.45	10	16	20	36	D-22	36						
22-23.0m			23.00	23.45	10	16	22	38	D-23	38						
23-24.0m			24.00	24.45	8	14	22	36	D-24	36						
24-25.0m			25.00	25.45	11	17	23	40	D-25	40						
25-26.0m			26.00	26.45	14	24	26	50	D-26	50						
26-27.0m	Gray 10YR (6/1), very hard, low plasticity Silt with sand, ML.		27.00	27.45	18	38	12	50	D-27	50	16	84			2.686	16.92
27-28.0m			28.00	28.45	17	36	14	50	D-28	50						
28-29.0m			29.00	29.45	8	15	18	33	D-29	33						
29-30.0m	Gray 7.5YR (6/1), very hard, low plasticity Silt with sand, ML.		30.00	30.45	7	14	16	30	D-30	30						

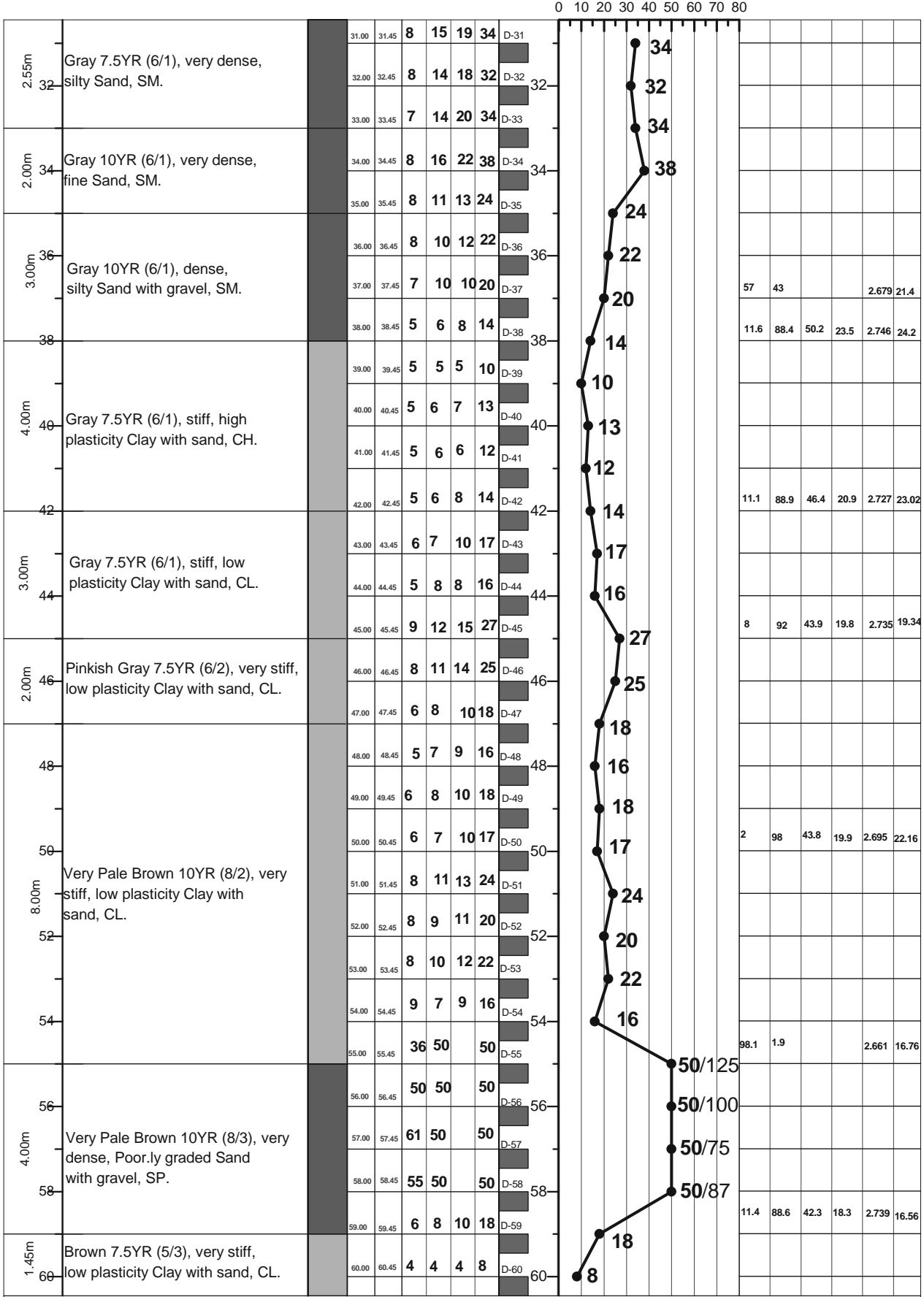
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 70	BOREHOLE NO: R890_16a	Longitude: N 90°19'59.9"	Latitude: E 22°35'36.75"
			Brigde ID: R890_16a	Road Name: Bholo(Paran Talukderhat)-Burhanuddin-Lalmohon-Char Fassion-Char Manika.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 16.347, RL: -1.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 29-03-2014	Completed Date: 04-04-2014	G. W. T : -5.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)								



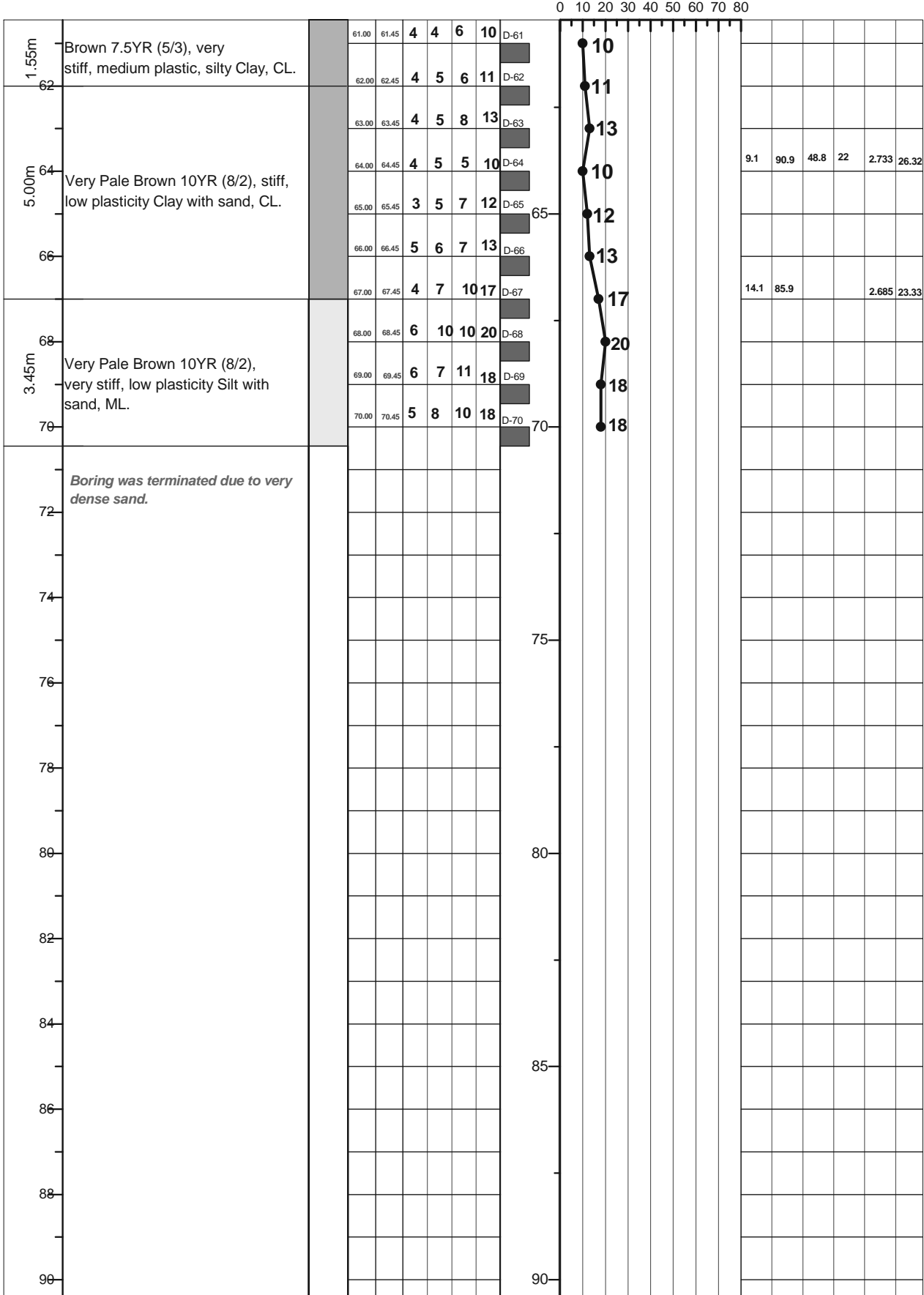
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 70	BOREHOLE NO: R890_16a	Longitude: N 90°19'59.9"	Latitude: E 22°35'36.75"
			Brigde ID: R890_16a	Road Name: Bholo(Paran Talukderhat)-Burhanuddin-Lalmohon-Char Fassion-Char Manika.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 16.347, RL: -1.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 29-03-2014	Completed Date: 04-04-2014	G. W. T : -5.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING				SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)									

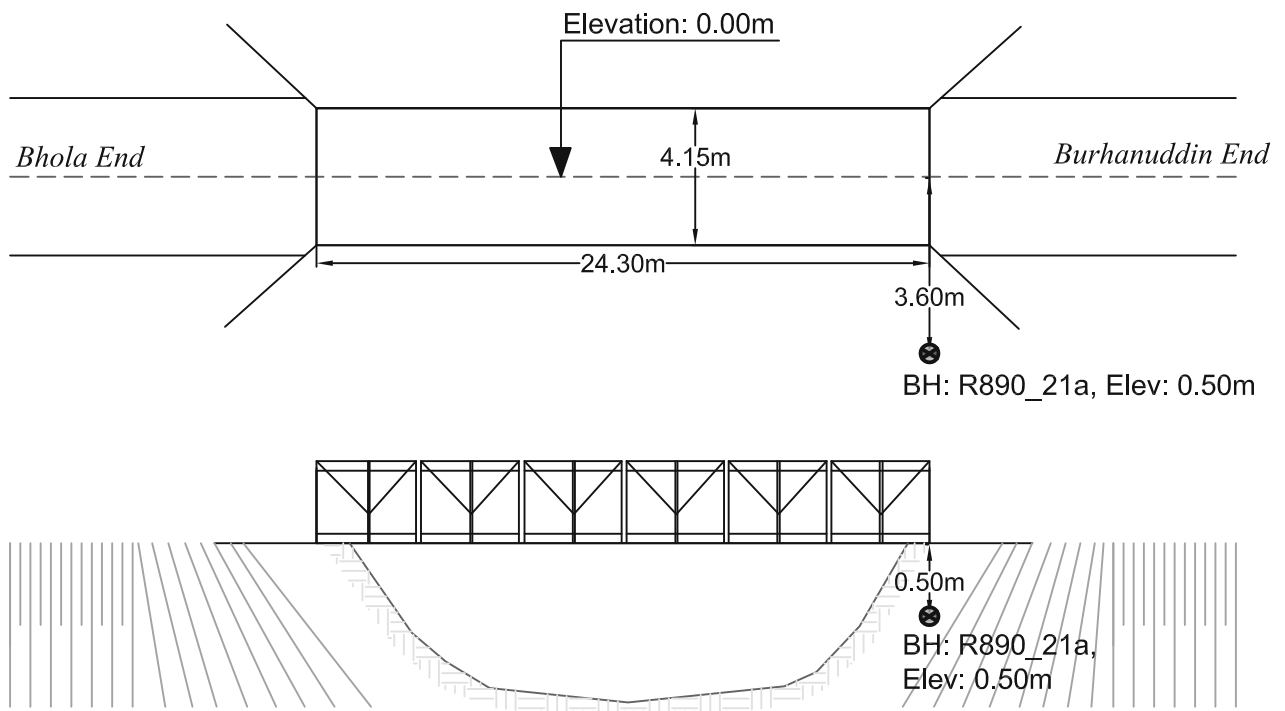
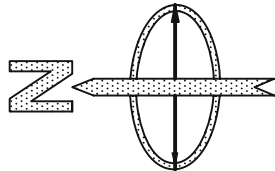


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 71
BRIDGE ID: R890_21a
LATITUDE: 22°33'23.299" LONGITUDE: 90°41'6.483"
CHAINAGE: 21.584



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 71	BOREHOLE NO: R890_21a	Longitude: N 90°41'6.483"	Latitude: E 22°33'23.299"
			Brigde ID: R890_21a	Road Name: Bholra(Paran Talukderhat)-Burhanuddin-Lalmohon-Char Fassion-Char Manika.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 21.584, RL: -0.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 7-04-2014	Completed Date: 11-04-2014	G. W. T : -7.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								
0								0							
4.0m	Very Pale Brown 10YR (8/2), loose, silty Sand with gravel, SM.		1.00	1.45	2	2	4	6	D-1	6					
			2.00	2.45	2	3	4	7	D-2	7	79.4	20.6			2.671 30.65
			3.00	3.45	3	3	4	7	D-3	7					
			4.00	4.45	1	1	2	3	D-4	3					
2.0m	Gray 7.5YR (6/1), loose, silty Sand, SM.		5.00	5.45	1	2	2	4	D-5	4					
			6.00	6.45	2	3	5	8	D-6	8					
3.0m	Gray 10YR (6/1), stiff, low plastic, Silt with sand, ML.		7.00	7.45	5	5	6	11	D-7	11					
			8.00	8.45	5	6	6	12	D-8	12					
			9.00	9.45	5	8	10	18	D-9	18					
			10.00	10.45	5	7	8	15	D-10	15	82.4	17.6			2.475 23.42
5.0m	Gray 10YR (6/1), medium dense to dense, Micaceous silty Sand with gravel, SM.		11.00	11.45	5	9	11	20	D-11	20					
			12.00	12.45	4	6	7	13	D-12	13					
			13.00	13.45	4	5	5	10	D-13	10					
			14.00	14.45	5	5	7	12	D-14	12					
			15.00	15.45	8	11	14	25	D-15	25	71.1	28.9			2.682 19.71
3.0m	Gray 10YR (6/1), dense, silty Sand with gravel, SM.		16.00	16.45	8	12	16	28	D-16	28					
			17.00	17.45	8	11	15	26	D-17	26					
1.0m	Gray 7.5YR (6/1), medium dense to dense, Micaceous silty Sand, SM.		18.00	18.45	4	6	7	13	D-18	13					
			19.00	19.45	7	10	12	22	D-19	22					
4.0m	Gray 10YR (6/1), dense, fine Sand, SM.		20.00	20.45	7	11	14	25	D-20	25					
			21.00	21.45	7	10	15	25	D-21	25					
			22.00	22.45	8	10	13	23	D-22	23					
			23.00	23.45	8	11	13	24	D-23	24	56.9	42.5			2.495 18.94
3.0m	Gray 7.5YR (6/1), dense, Micaceous silty Sand, SM.		24.00	24.45	8	10	12	22	D-24	22					
			25.00	25.45	7	9	11	20	D-25	20					
			26.00	26.45	7	10	10	20	D-26	20	81.6	18.4			2.701 21.18
4.45m	Gray 10YR (6/1), dense, silty Sand with gravel, SM.		27.00	27.45	6	11	10	21	D-27	21					
			28.00	28.45	6	10	12	22	D-28	22					
			29.00	29.45	7	11	14	25	D-29	25					
			30.00	30.45	10	15	17	32	D-30	32					

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

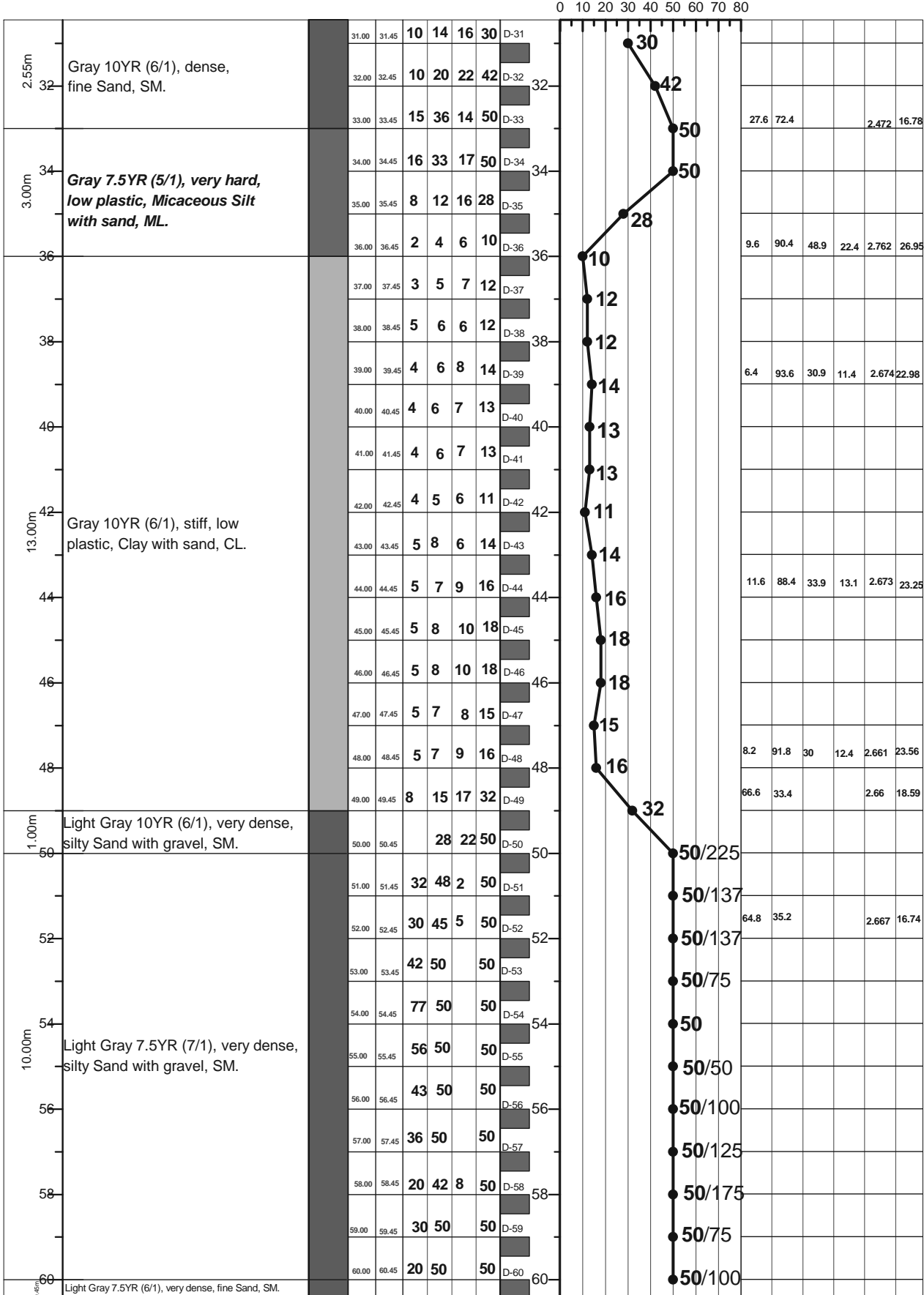
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 71	BOREHOLE NO: R890_21a	Longitude: N 90°41'6.483"	Latitude: E 22°33'23.299"
			Brigde ID: R890_21a	Road Name: Bholo(Paran Talukderhat)-Burhanuddin-Lalmohon-Char Fasson-Char Manika.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 21.584, RL: -0.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 7-04-2014	Completed Date: 11-04-2014	G. W. T : -7.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

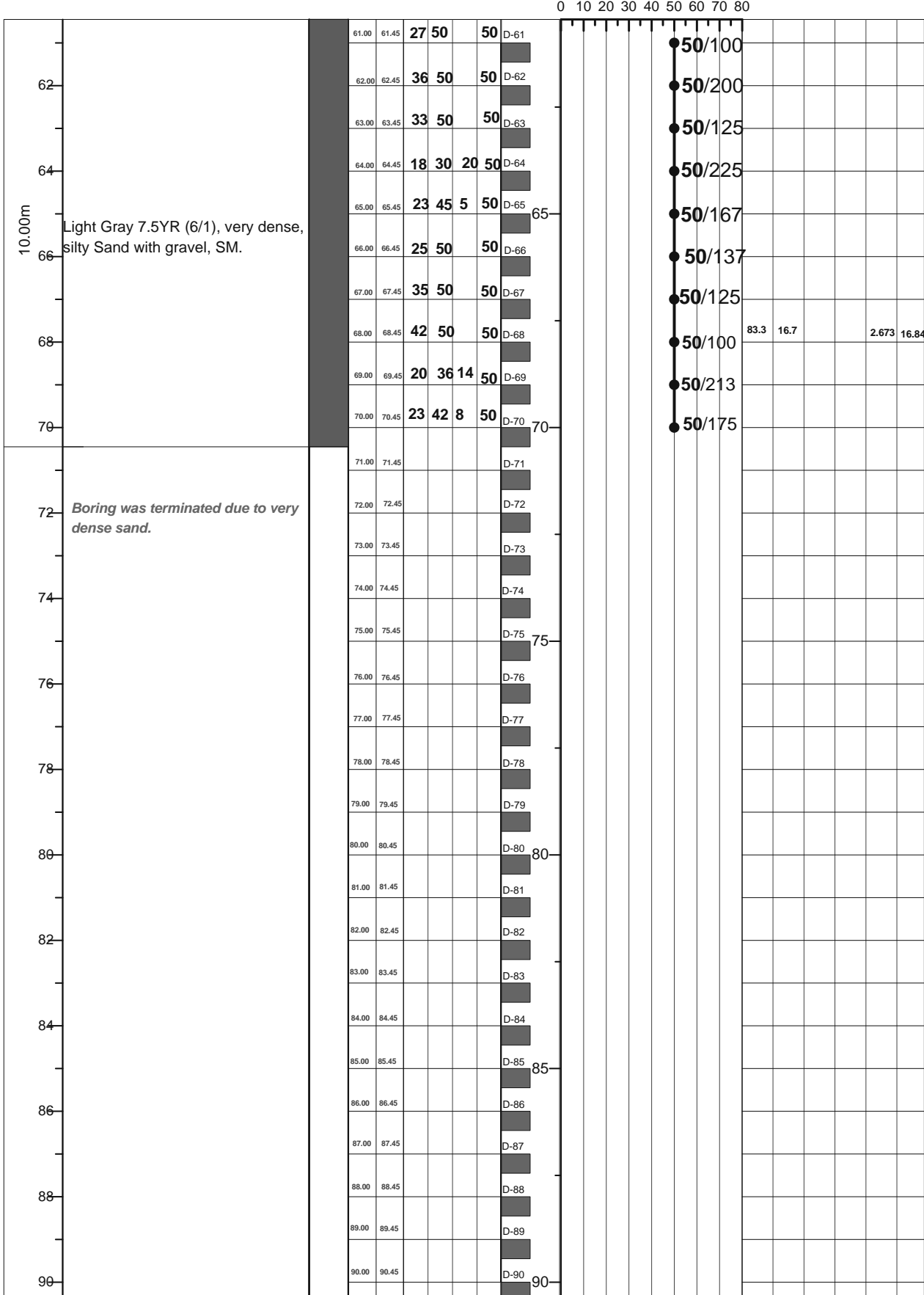
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 71	BOREHOLE NO: R890_21a	Longitude: N 90°41'6.483"	Latitude: E 22°33'23.299"
			Brigde ID: R890_21a	Road Name: Bhola(Paran Talukderhat)-Burhanuddin-Lalmohon-Char Fassion-Char Manika.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 21.584, RL: -0.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 7-04-2014	Completed Date: 11-04-2014	G. W. T : -7.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

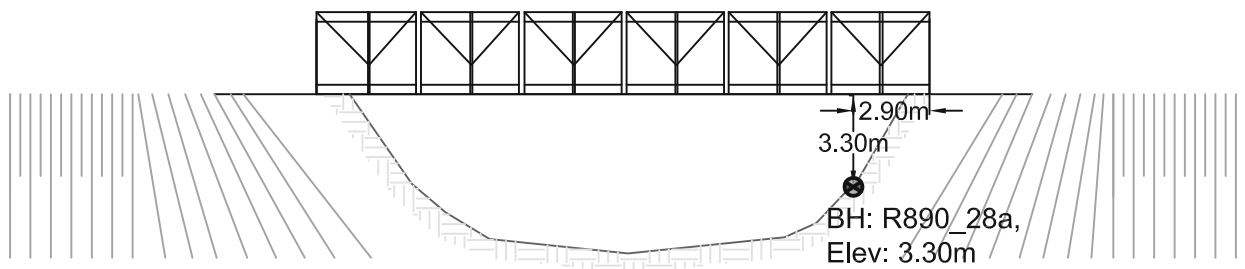
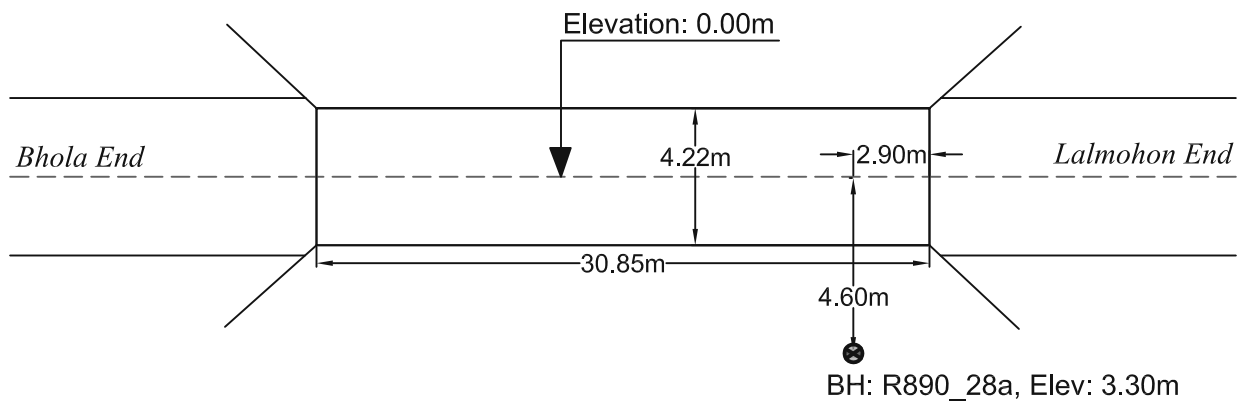
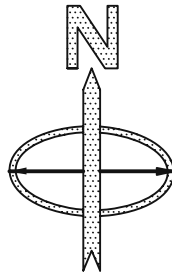
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 72
BRIDGE ID: R890_28a
LATITUDE: 22°30'9.483" LONGITUDE: 90°43'5.012"
CHAINAGE: 28.699



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 72	BOREHOLE NO: R890_28a	Longitude: N 90°43.5'012"	Latitude: E 22°30'9.483"
			Brigde ID: R890_28a	Road Name: Bhola(Paran Talukderhat)-Burhanuddin-Lalmohon-Char Fassion-Char Manika .	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 28.699, RL: -3.3m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 12-04-2014	Completed Date: 16-04-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								
0								0							
2.0m	Very Pale Brown 10YR (8/3), loose, silty Sand, SM.		1.00	1.45	1	1	2	3	D-1	3					
2			2.00	2.45	1	2	2	4	D-2	4	79.6	20.4			2.663 28.38
1.0m	Gray 7.5YR (6/1), loose, silty Sand with gravel, SM.		3.00	3.45	1	1	1	2	D-3	2	16.1	83.9	31.6	12.9	2.656 31.28
4	Gray 7.5YR (6/1), very soft, low plastic, Clay with sand, CL.		4.00	4.45	1	1	2	3	D-4	3					
4.0m			5.00	5.45	1	1	2	3	D-5	3					
6			6.00	6.45	1	1	2	3	D-6	3					
6			7.00	7.45	1	2	2	4	D-7	4					
8	Gray 7.5YR (6/1), loose, silty Sand with gravel, SM.		8.00	8.45	2	2	2	4	D-8	4					
3.0m			9.00	9.45	2	3	3	6	D-9	6					
10			10.00	10.45	2	4	4	8	D-10	8	6.8	93.2	30.3	11.8	2.649 26.13
2.0m	Gray 7.5YR (6/1), medium stiff, low plastic, Clay with sand, CL.		11.00	11.45	3	4	4	8	D-11	8					
12			12.00	12.45	2	4	7	11	D-12	11	14	86			2.468 26.2
2.0m	Gray 7.5YR (6/1), stiff, low plastic, Micaceous Silt with sand and, ML.		13.00	13.45	3	5	6	11	D-13	11					
14			14.00	14.45	3	4	5	9	D-14	9					
16	Gray 7.5YR (6/1), medium stiff, low plastic, Clay with sand, CL.		15.00	15.45	2	3	4	7	D-15	7					
4.0m			16.00	16.45	3	5	5	10	D-16	10	13.8	86.2	31.7	12.7	2.644 26.88
18			17.00	17.45	4	6	7	13	D-17	13					
18			18.00	18.45	8	10	12	22	D-18	22					
20	Gray 10YR (6/1), very hard, low plastic, Silt with sand, ML.		19.00	19.45	9	12	16	28	D-19	28					
4.0m			20.00	20.45	10	16	18	34	D-20	34	13	87			2.669 18.07
22			21.00	21.45	20	29	21	50	D-21	50/237					
22			22.00	22.45	6	7	9	16	D-22	16					
24	Gray 10YR (6/1), stiff, high plastic, Clay with sand, CH.		23.00	23.45	4	6	8	14	D-23	14					
4.0m			24.00	24.45	5	6	8	14	D-24	14	16.2	83.8	50	23.2	2.697 23.73
26			25.00	25.45	5	7	8	15	D-25	15					
26			26.00	26.45	4	6	9	15	D-26	15					
28	Gray 10YR (6/1), medium dense to dense, silty Sand with gravel, SM.		27.00	27.45	4	6	11	17	D-27	17					
4.45m			28.00	28.45	5	9	11	20	D-28	20					
30			29.00	29.45	5	10	13	23	D-29	23	79.4	20.6			2.647 22.19
30			30.00	30.45	10	12	15	27	D-30	27					

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

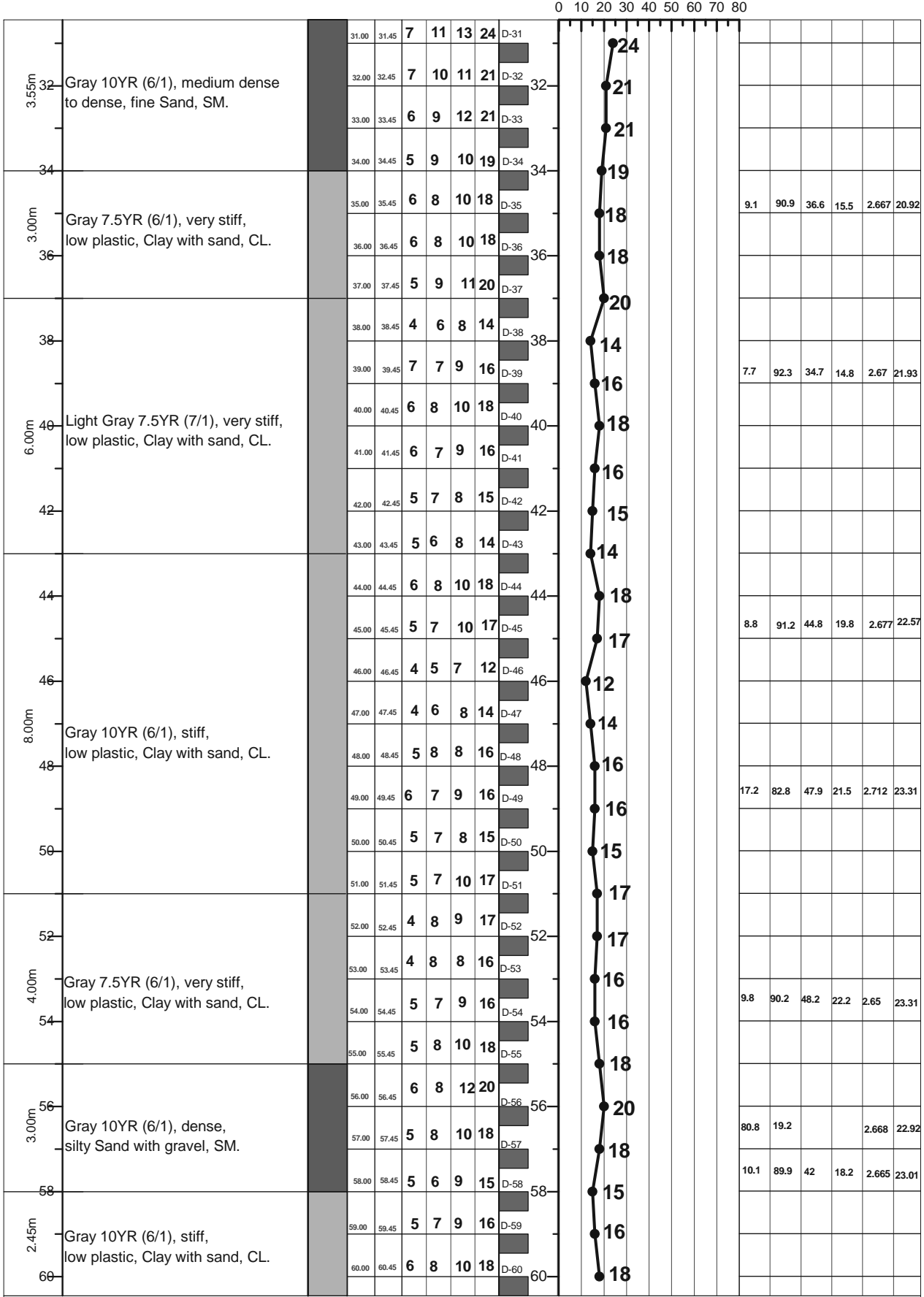
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 72	BOREHOLE NO: R890_28a	Longitude: N 90°43.5'012"	Latitude: E 22°30'9.483"
			Brigde ID: R890_28a	Road Name: Bholo(Paran Talukderhat)-Burhanuddin-Laimohon-Char Fassion-Char Manika.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 28.699, RL: -3.3m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 12-04-2014	Completed Date: 16-04-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



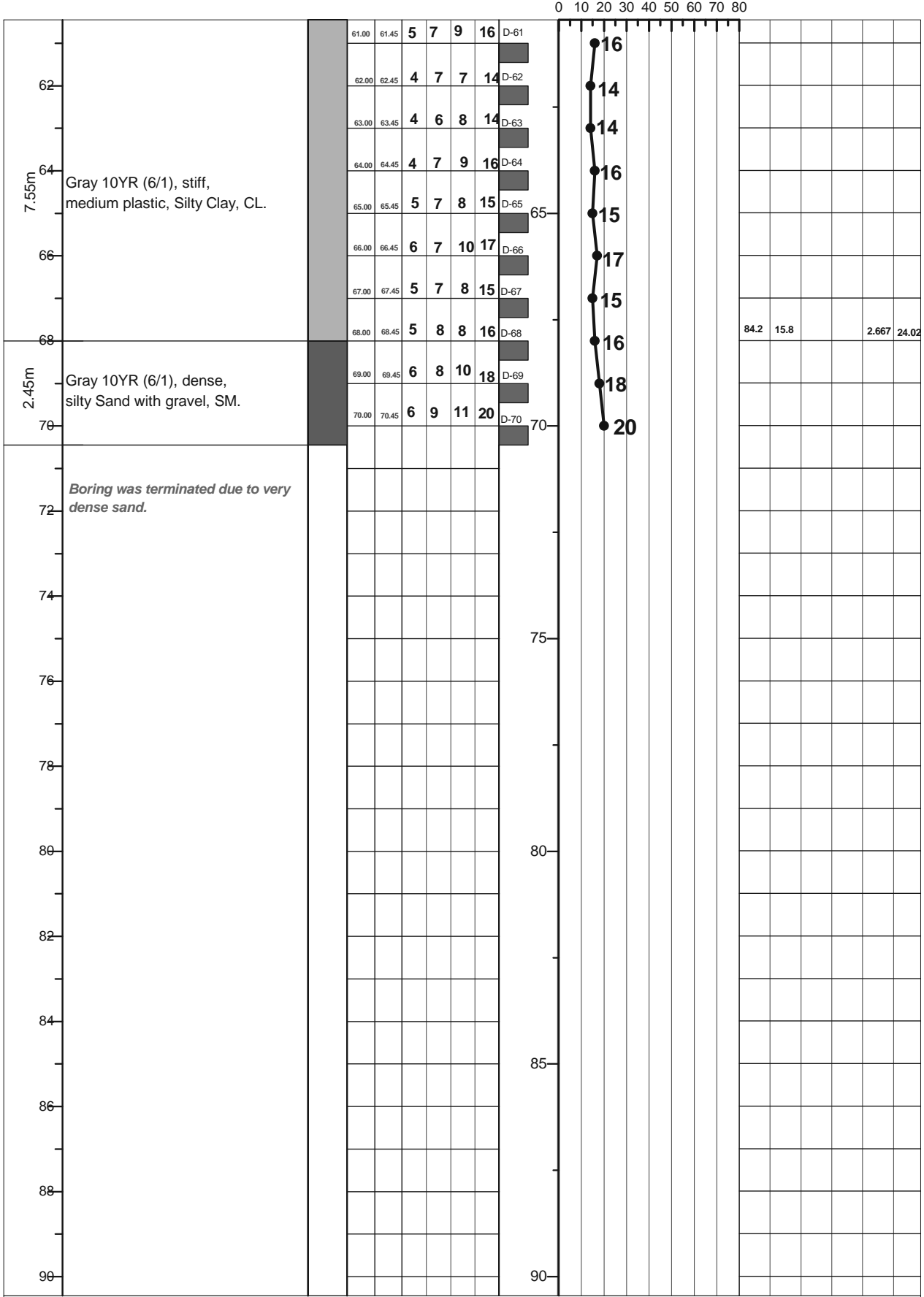
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 72	BOREHOLE NO: R890_28a	Longitude: N 90°43.5'012"	Latitude: E 22°30'9.483"
			Brigde ID: R890_28a	Road Name: Bholo(Paran Talukderhat)-Burhanuddin-Lalmohon-Char Fassion-Char Manika.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 28.699, RL: -3.3m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 12-04-2014	Completed Date: 16-04-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING				SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

[Light Gray Box] PLASTIC CLAY	[Light Gray Box] SILT	[Dark Gray Box] PEAT/HIGHLY ORGANIC SOIL	[Dark Gray Box] UNDISTURBED SAMPLE
[Dark Gray Box] MICACEOUS FINE SAND/SILT	[Dark Gray Box] SAND	[Dark Gray Box] SHALE	[Dark Gray Box] DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

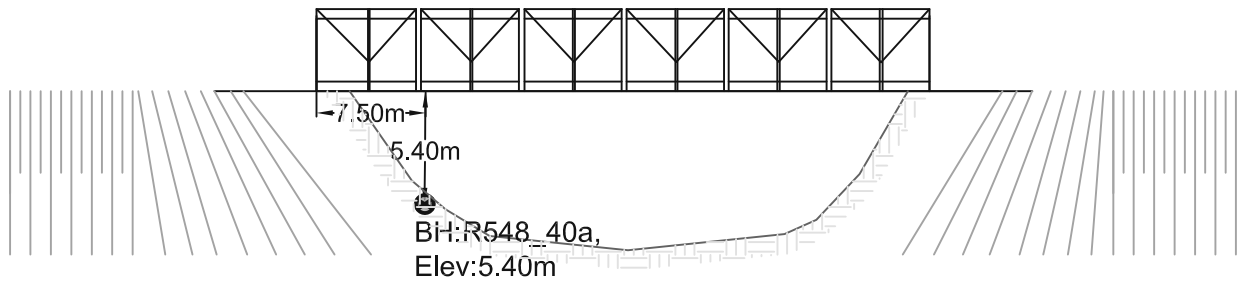
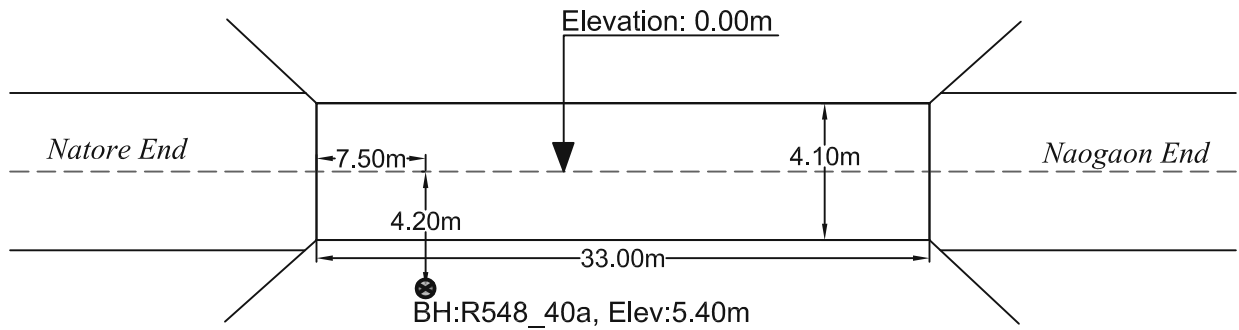
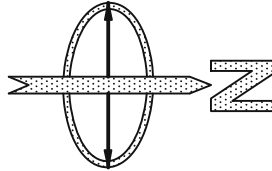
CLIENT: Oriental Consultants Company Limited.

RANK: 73

BRIDGE ID: R548_40a

LATITUDE: 24°30'50.13" LONGITUDE: 88°57'35.657"

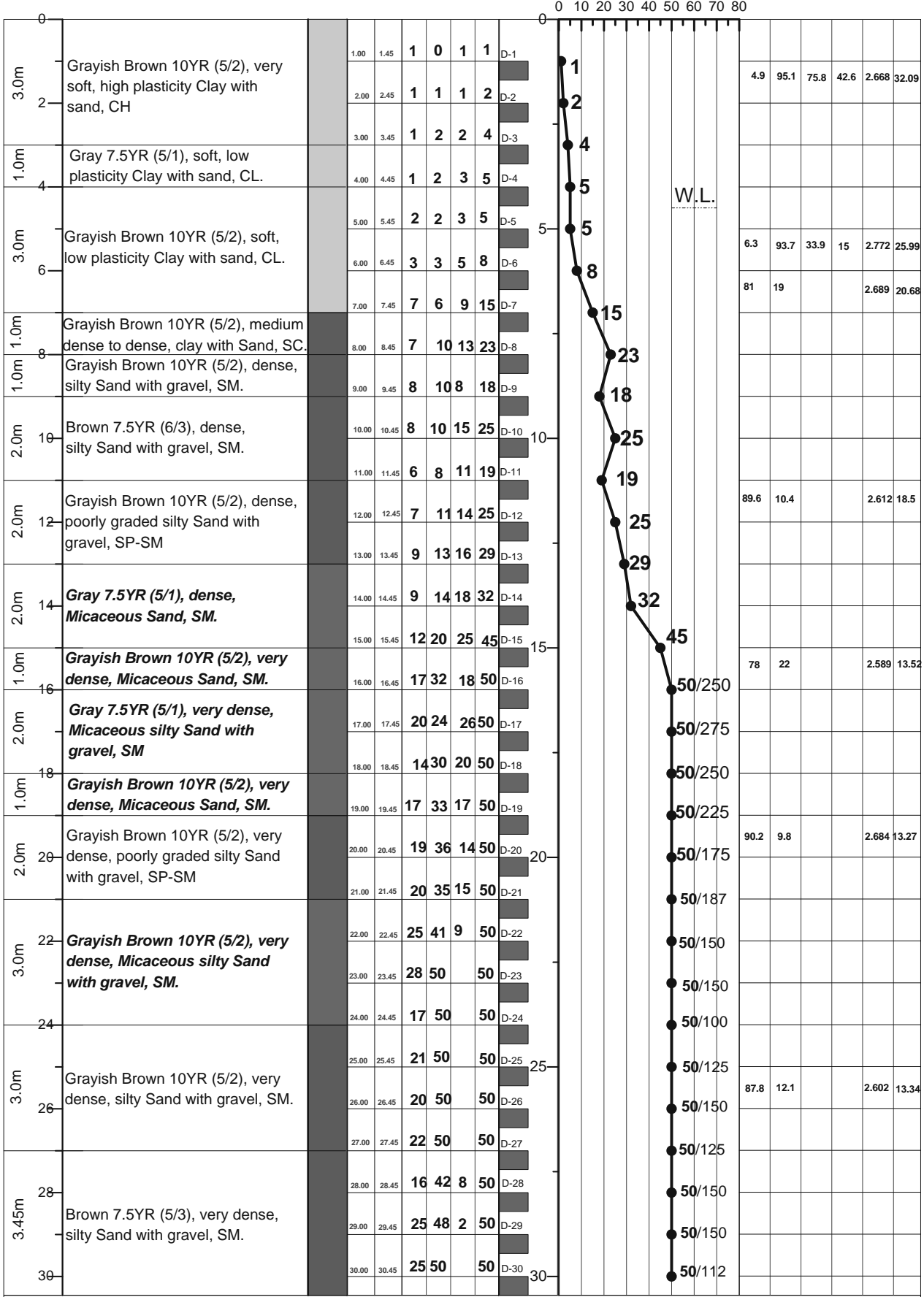
CHAINAGE: 0



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 73	BOREHOLE NO: R548_40a	Longitude: N 88°57'35"	Latitude: E 24°30'50"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 0, RL: -5.4m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -4.5m.	

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING		SPT-N Value Blow/300mm					DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)	N4-600 (mm)	N5-750 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

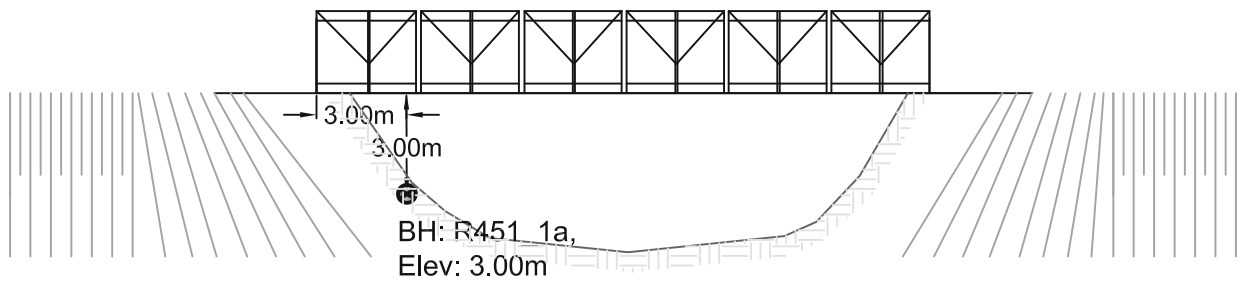
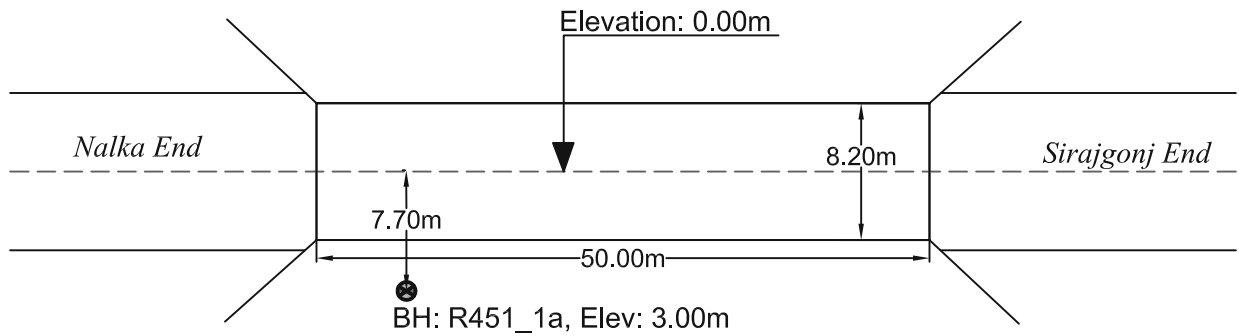
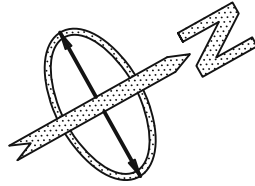
CLIENT: Oriental Consultants Company Limited.

RANK: 74

BRIDGE ID: R451_1a

LATITUDE: 24d25'47.69" LONGITUDE: 89d36'05.153"

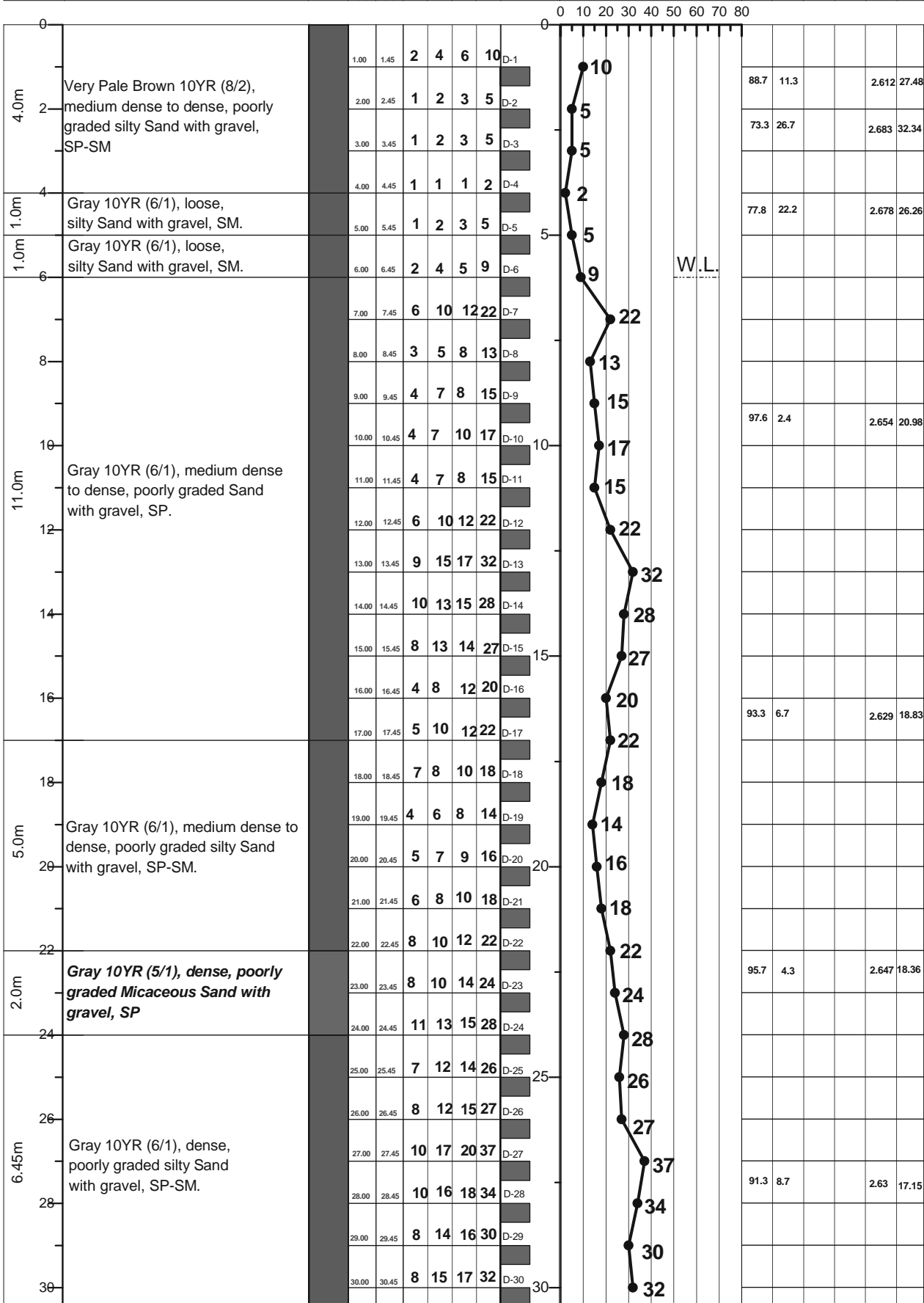
CHAINAGE: 0.907



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 74	BOREHOLE NO: R451_1a	Longitude: N 89°36'05"	Latitude: E 24°25'47"
			Brigde ID: R451_1a	Road Name: Nalka-Sirajganj.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 40.0m	Chainage: 0.907, RL: -3.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -6.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

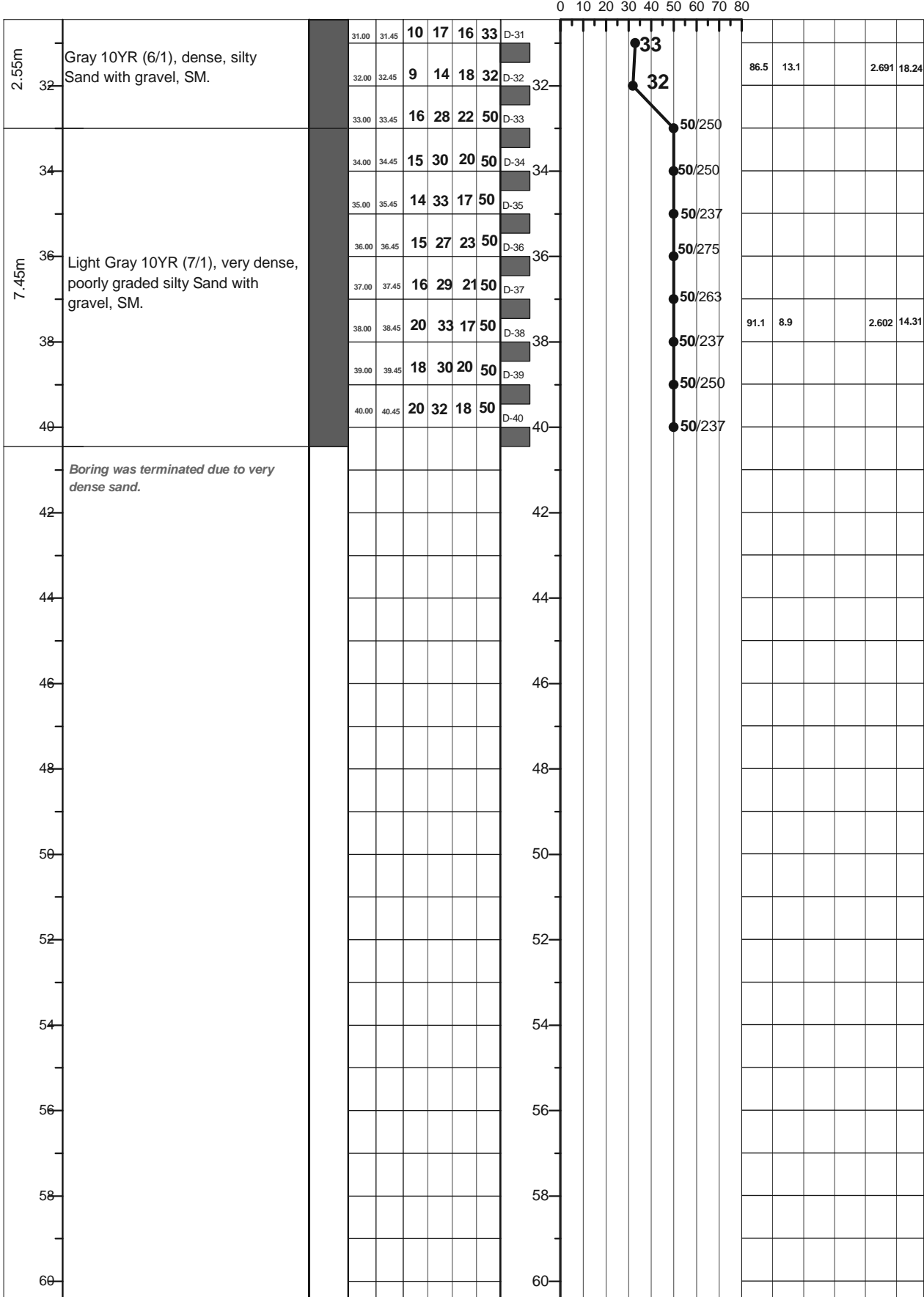
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 74	BOREHOLE NO: R451_1a	Longitude: N 89°36'05"	Latitude: E 24°25'47"
			Brigde ID: R451_1a	Road Name: Nalka-Sirajganj.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 40.0m	Chainage: 0.907, RL: -3.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -6.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

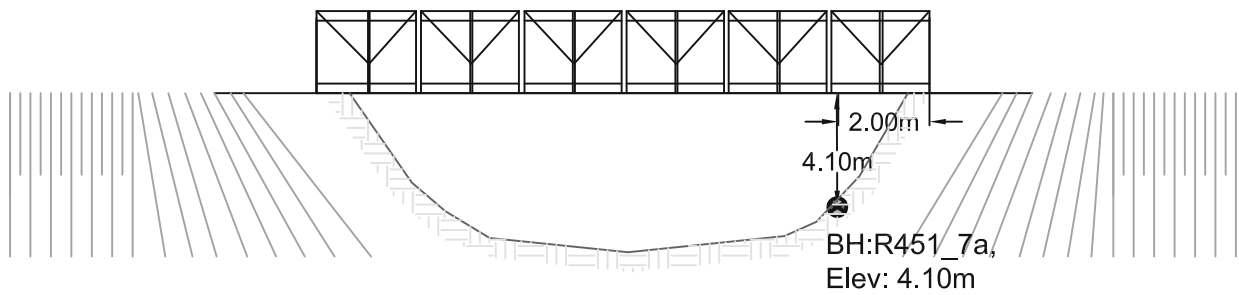
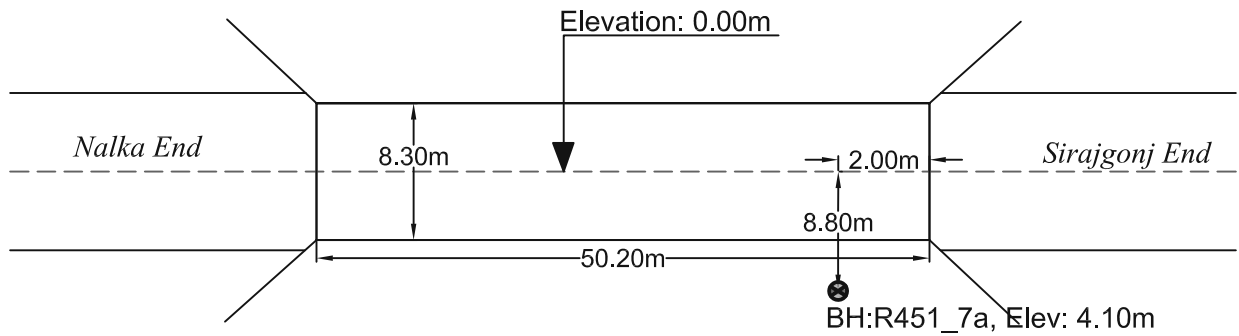
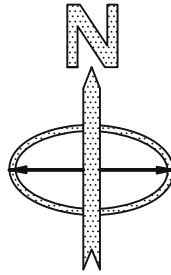
CLIENT: Oriental Consultants Company Limited.

RANK: 75

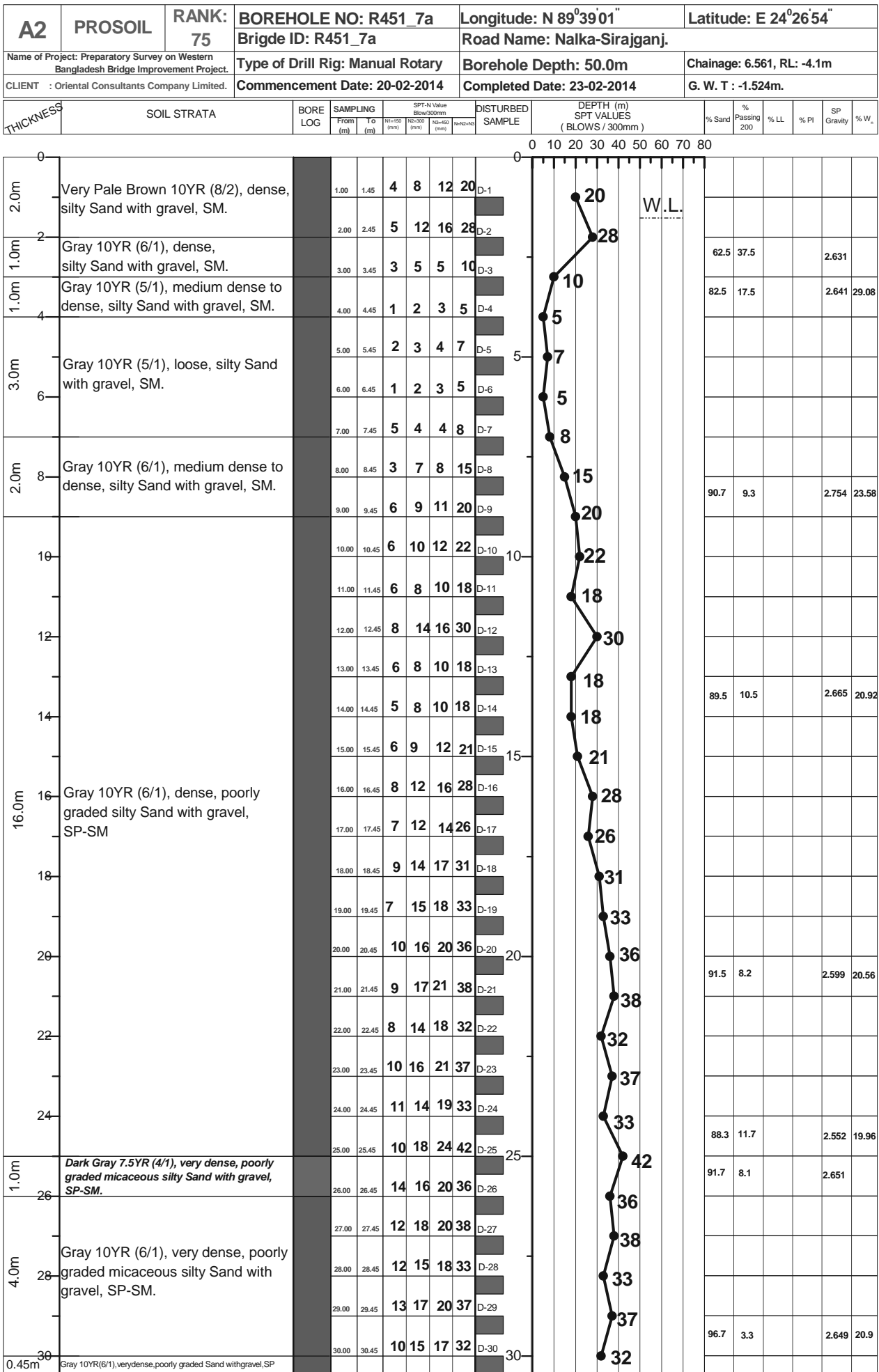
BRIDGE ID: R451_7a

LATITUDE: 24°26'54.482" LONGITUDE: 89°39'1.616"

CHAINAGE: 6.561



PROSOIL FOUNDATION CONSULTANT



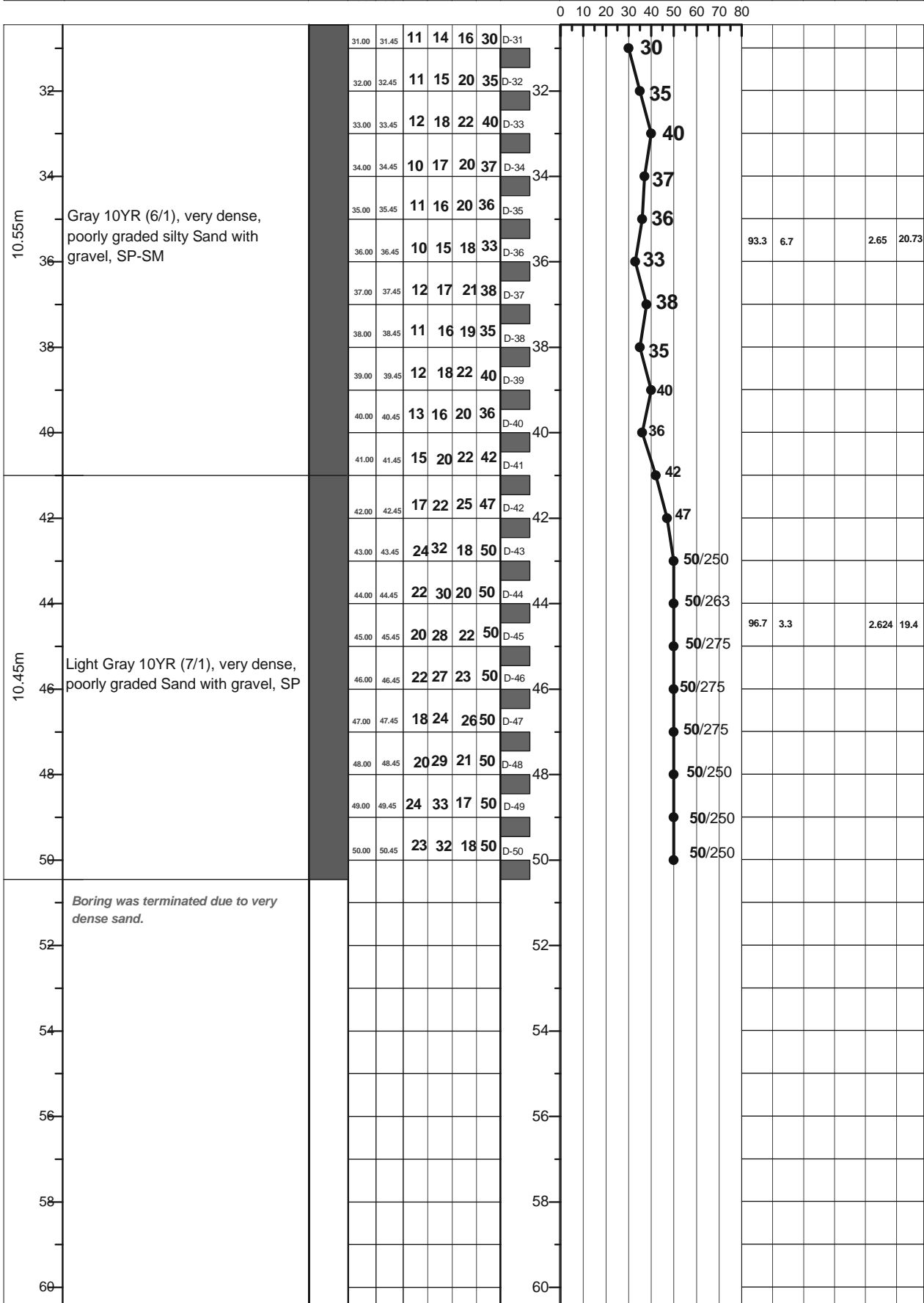
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

- PLASTIC CLAY
- SILT
- PEAT/HIGHLY ORGANIC SOIL
- UNDISTURBED SAMPLE
- MICACEOUS FINE SAND/SILT
- SAND
- SHALE
- DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 75	BOREHOLE NO: R451_7a	Longitude: N 89°39'01"	Latitude: E 24°26'54"
			Brigde ID: R451_7a	Road Name: Nalka-Sirajganj.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 6.561, RL: -4.1m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -1.524m.



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

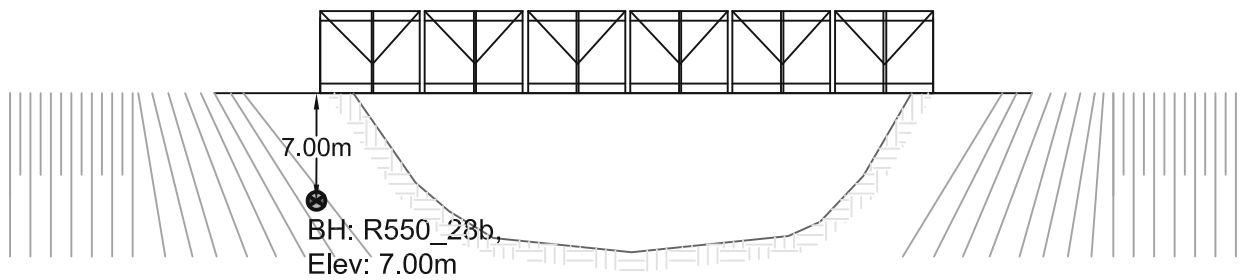
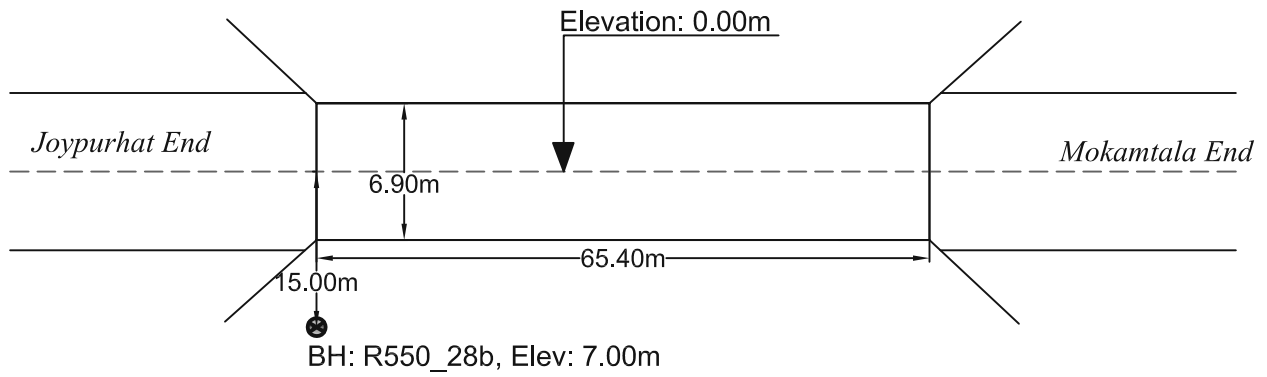
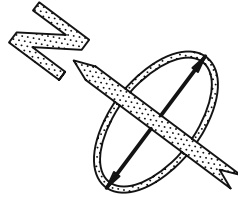
CLIENT: Oriental Consultants Company Limited.

RANK: 76

BRIDGE ID: R550_28b

LATITUDE: 25°04'08.918" LONGITUDE: 89°05'38.690"

CHAINAGE: 28.826



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 76	BOREHOLE NO: R550_28b	Longitude: E88°52'17"	Latitude: N25°04'10.5"
			Brigde ID: R550_28b	Road Name: Mokamtala-Kalai-Joypurhat.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 28.826, RL: -7.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 21-02-2014	Completed Date: 22-02-2014	G. W. T : -2.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0-2.0m	Brown 7.5YR (5/3), medium dense, silty Sand with gravel, SM		1.00	1.45	4	5	6	11	D-1	11	80.2	19.8			2.634	24.93
2-3.0m	light yellowish Brown 10YR (6/4), loose, silty Sand with gravel, SM		2.00	2.45	1	2	3	5	D-2	5						
3.0-4.0m	Gray 7.5YR (5/1), medium dense, silty Sand with gravel, SM		3.00	3.45	3	4	6	10	D-3	10	82.1	15.9			2.684	25.08
4.0-5.0m	Grayish Brown 7.5YR (6/2), very dense, silty Sand with gravel, SM		4.00	4.45	5	11	14	25	D-4	25						
5.0-6.0m			5.00	5.45	8	15	24	39	D-5	39						
6.0-7.0m			6.00	6.45	7	15	21	36	D-6	36						
7.0-8.0m			7.00	7.45	8	17	22	39	D-7	39						
8.0-9.0m			8.00	8.45	9	18	24	42	D-8	42	87.3	12.6			2.663	21.93
9.0-10.0m	Gray 7.5YR (5/1), very dense, well graded silty Sand with gravel, SW-SM		9.00	9.45	10	19	26	45	D-9	45						
10.0-11.0m			10.00	10.45	11	21	28	49	D-10	49						
11.0-12.0m			11.00	11.45	10	20	27	47	D-11	47						
12.0-13.0m			12.00	12.45	12	23	27	50	D-12	50						
13.0-14.0m			13.00	13.45	11	22	28	50	D-13	50						
14.0-15.0m			14.00	14.45	10	24	26	50	D-14	50	88.3	10.8			2.638	20.79
15.0-16.0m			15.00	15.45	11	23	27	50	D-15	50						
16.0-17.0m			16.00	16.45	12	22	28	50	D-16	50						
17.0-18.0m	Gray 7.5YR (5/1), very dense, poorly graded silty Sand with gravel, SP-SM		17.00	17.45	10	23	27	50	D-17	50	89.3	9			2.651	16.63
18.0-19.0m			18.00	18.45	11	22	28	50	D-18	50						
19.0-20.0m			19.00	19.45	16	35	15	50	D-19	50/200						
20.0-21.0m			20.00	20.45	17	38	12	50	D-20	50/200						
21.0-22.0m			21.00	21.45	16	34	16	50	D-21	50/200						
22.0-23.0m			22.00	22.45	18	35	15	50	D-22	50/200						
23.0-24.0m			23.00	23.45	17	37	13	50	D-23	50/187						
24.0-25.0m			24.00	24.45	16	36	14	50	D-24	50/200						
25.0-26.0m			25.00	25.45	18	34	16	50	D-25	50/200						
26.0-27.0m			26.00	26.45	16	34	16	50	D-26	50/200						
27.0-28.0m		27.00	27.45	18	37	13	50	D-27	50/200	90.7	9.3			2.698	15.9	
28.0-29.0m		28.00	28.45	17	35	15	50	D-28	50/200							
29.0-30.0m		29.00	29.45	15	36	14	50	D-29	50/200							
30.0-30.45m		30.00	30.45	17	38	12	50	D-30	50/200							

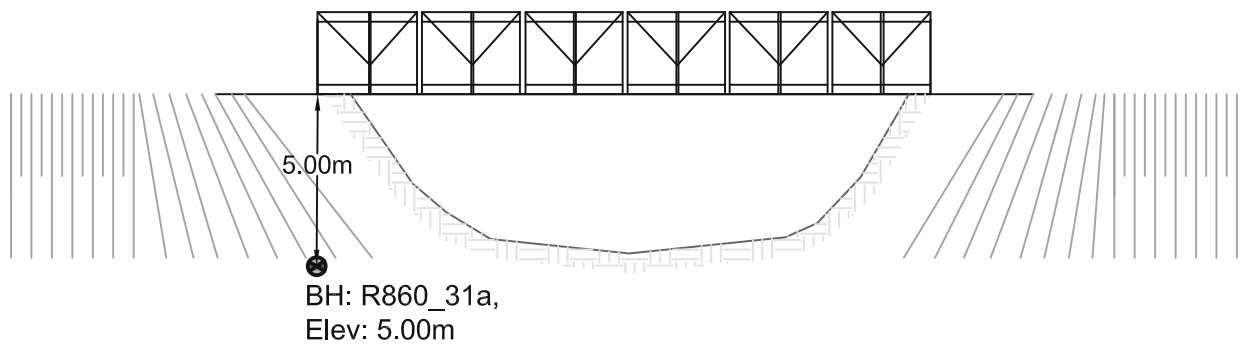
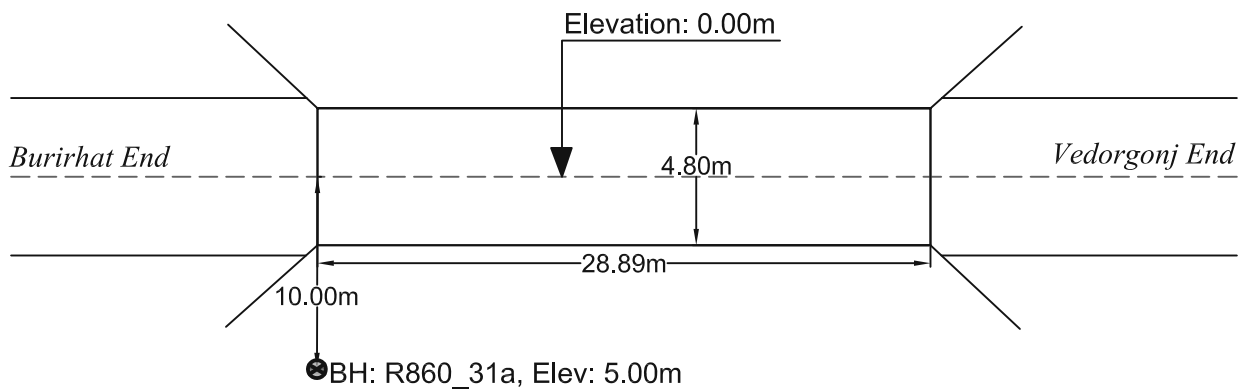
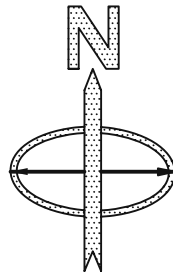
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 77
BRIDGE ID: R860_31a
LATITUDE: 23°11'15" LONGITUDE: 90°23'34"
CHAINAGE: 29.6



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 77	BOREHOLE NO: R860_31a	Longitude: N 90°23'34"	Latitude: E 23°11'15"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 60.0m	Chainage: 29.6, RL: -5.0m
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 16-03-2014		Completed Date: 22-03-2014	G. W. T : -1.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								
0								0							
0-6.0m	Dark Brown 7.5YR (3/2), very loose, clayey Sand, SC.		1.00	1.45	1	1	1	2	D-1	2					
			2.00	2.45	2	2	3	5	D-2	5					
			3.00	3.45	3	3	4	7	D-3	7					2.689 28.68
			4.00	4.45	2	2	3	5	D-4	5					
			5.00	5.45	2	3	4	7	D-5	7					
			6.00	6.45	2	2	4	6	D-6	6					
6-12.0m	Dark Gray 7.5YR (4/1), loose, silty Sand with gravel, SM.		7.00	7.45	2	3	3	6	D-7	6	63.1	36.9		2.633	24.81
			8.00	8.45	3	3	4	7	D-8	7					
			9.00	9.45	3	6	11	17	D-9	17					
			10.00	10.45	5	7	8	15	D-10	15					
			11.00	11.45	2	3	3	6	D-11	6	66.4	33.6		2.649	24.48
			12.00	12.45	3	4	3	7	D-12	7					
12-13.0m	Dark Brown 7.5YR (3/2), medium dense to dense, clayey Sand, SC.		13.00	13.45	6	7	8	15	D-13	15	83.2	15.7		2.659	23.49
13-16.0m	Dark Gray 7.5YR (4/1), medium dense to dense, silty Sand with gravel, SM.		14.00	14.45	5	7	7	14	D-14	14					
			15.00	15.45	3	4	5	9	D-15	9					
			16.00	16.45	4	5	6	11	D-16	11					
			17.00	17.45	5	7	10	17	D-17	17					
			18.00	18.45	6	8	10	18	D-18	18					
			19.00	19.45	8	10	14	24	D-19	24					
16-20.0m	Dark Gray 7.5YR (4/1), medium dense to dense, silty Sand with gravel, SM.		20.00	20.45	10	14	20	34	D-20	34	62	38		2.625	19.7
			21.00	21.45	14	18	21	39	D-21	39					
			22.00	22.45	14	20	25	45	D-22	45					
			23.00	23.45	15	22	27	49	D-23	49					
			24.00	24.45	14	20	30	50	D-24	50/275					
			25.00	25.45	12	16	20	36	D-25	36					
			26.00	26.45	13	18	24	42	D-26	42	46.3	53.7		2.654	19.18
20-22.0m	Gray 10YR (6/1), very hard, low plasticity Silt with sand, ML.		27.00	27.45	17	23	27	50	D-27	50/287					
			28.00	28.45	20	32	18	50	D-28	50/275					
22-24.0m	Light Gray 10YR (7/1), very dense, fine Sand, SM.		29.00	29.45	24	36	14	50	D-29	50/275					
			30.00	30.45	26	38	12	50	D-30	50/250					

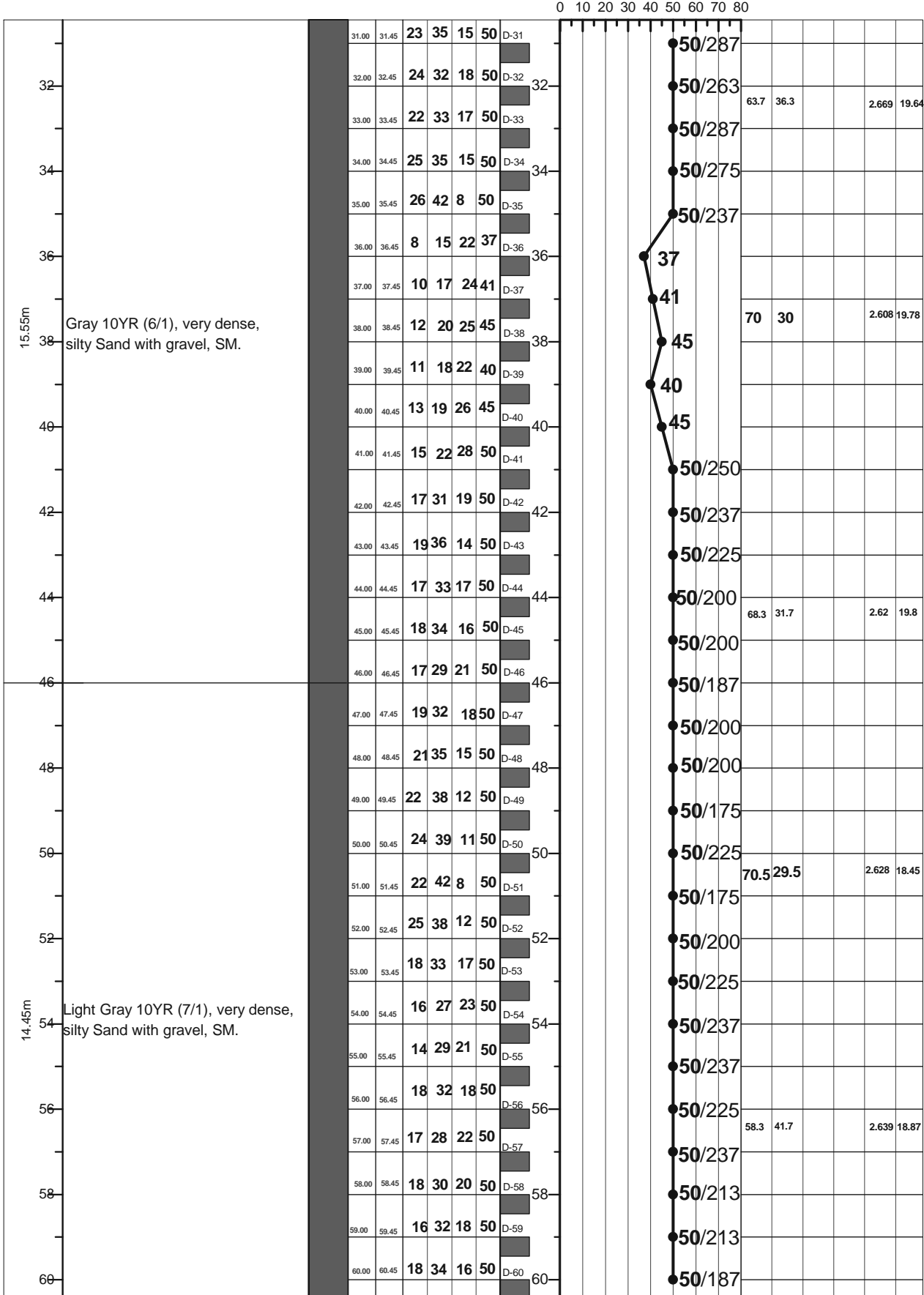
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 77	BOREHOLE NO: R860_31a	Longitude: N 90°23'34"	Latitude: E 23°11'15"
			Brigde ID: R860_31a	Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 24.18, RL: -7.8m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 16-03-2014	Completed Date: 22-03-2014	G. W. T : -1.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

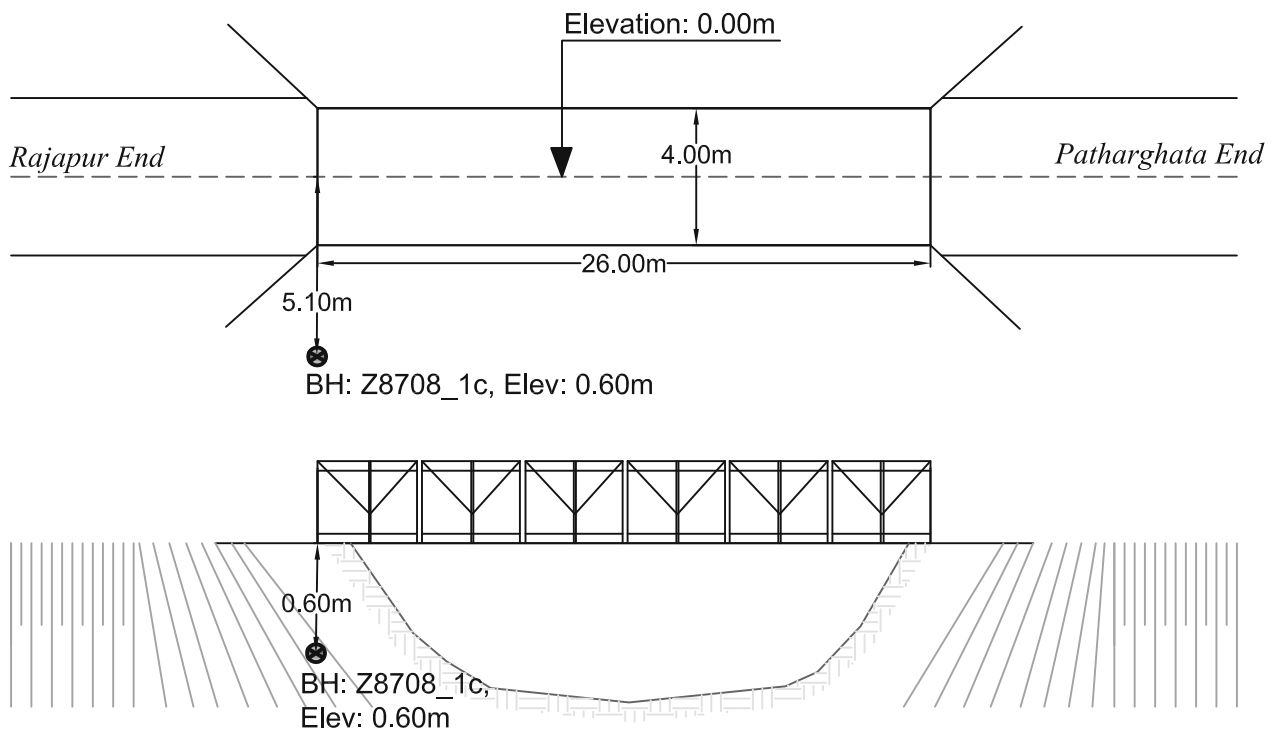
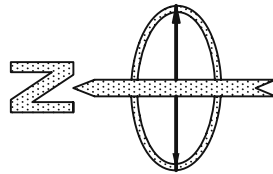
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

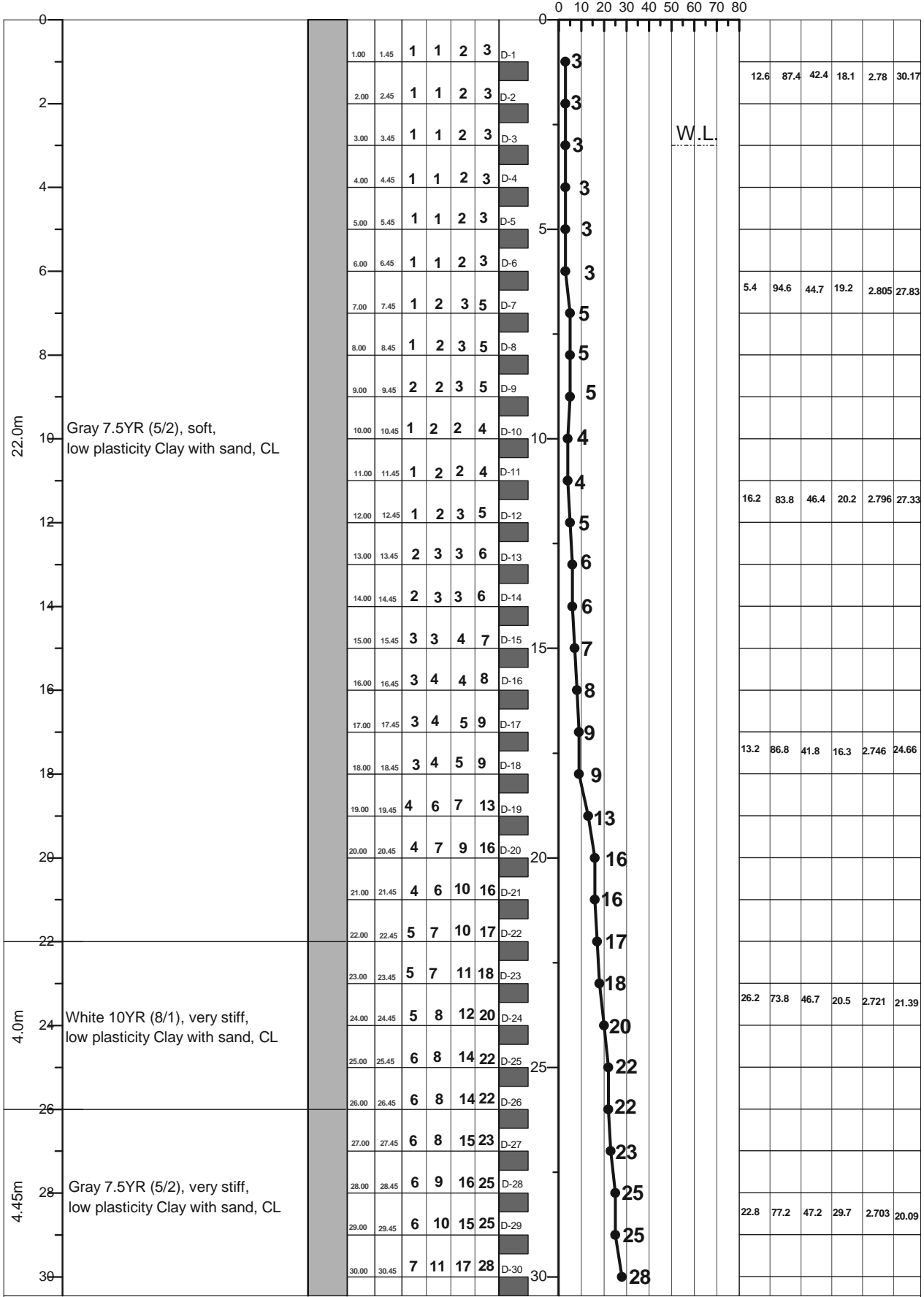
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 78
BRIDGE ID: Z8708_1c
LATITUDE: 22°33'06.212" LONGITUDE: 90°08'41.207"
CHAINAGE: 1.807



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 78	BOREHOLE NO: Z8708_1c	Longitude: N 90°0'21.9"	Latitude: E 22°33'6.212"
			Brigde ID: Z8708_1c	Road Name: Rajapur-Kathalia-Amua-Bamna-Patharghata.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 1.807, RL: -0.6m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 16-03-2014	Completed Date: 20-03-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



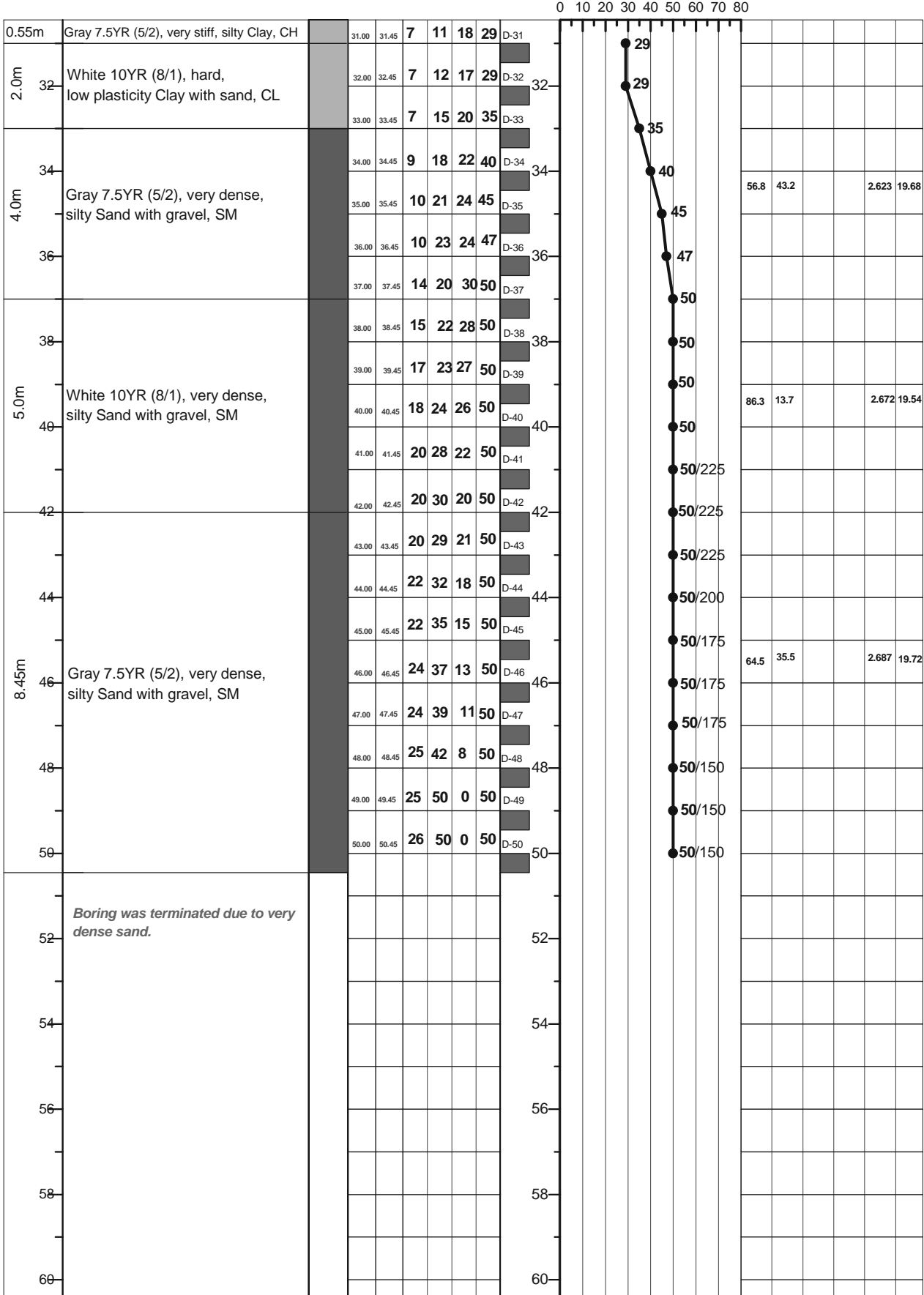
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 78	BOREHOLE NO: Z8708_1c	Longitude: N 90°9'21.9"	Latitude: E 22°33'6.212"
			Brigde ID: Z8708_1c	Road Name: Jhenaidah-Kushtia-Paksey Ferry-Dasuria	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 1.807, RL: -5.48m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 16-03-2014	Completed Date: 20-03-2014	G. W. T : -3.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (blows)	N2-300 (blows)	N3-450 (blows)								

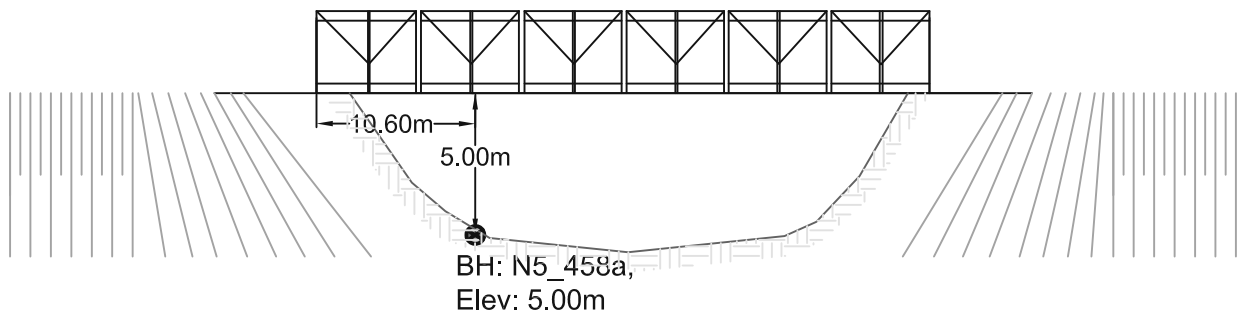
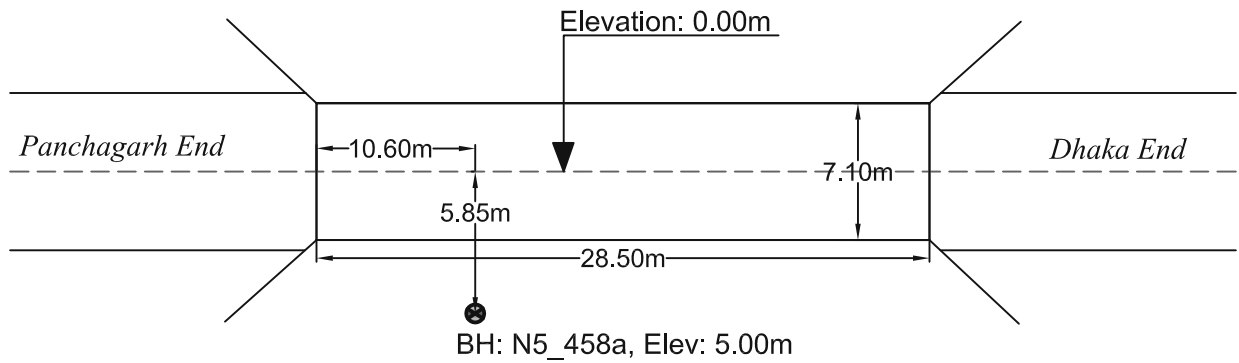
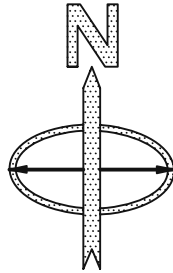


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

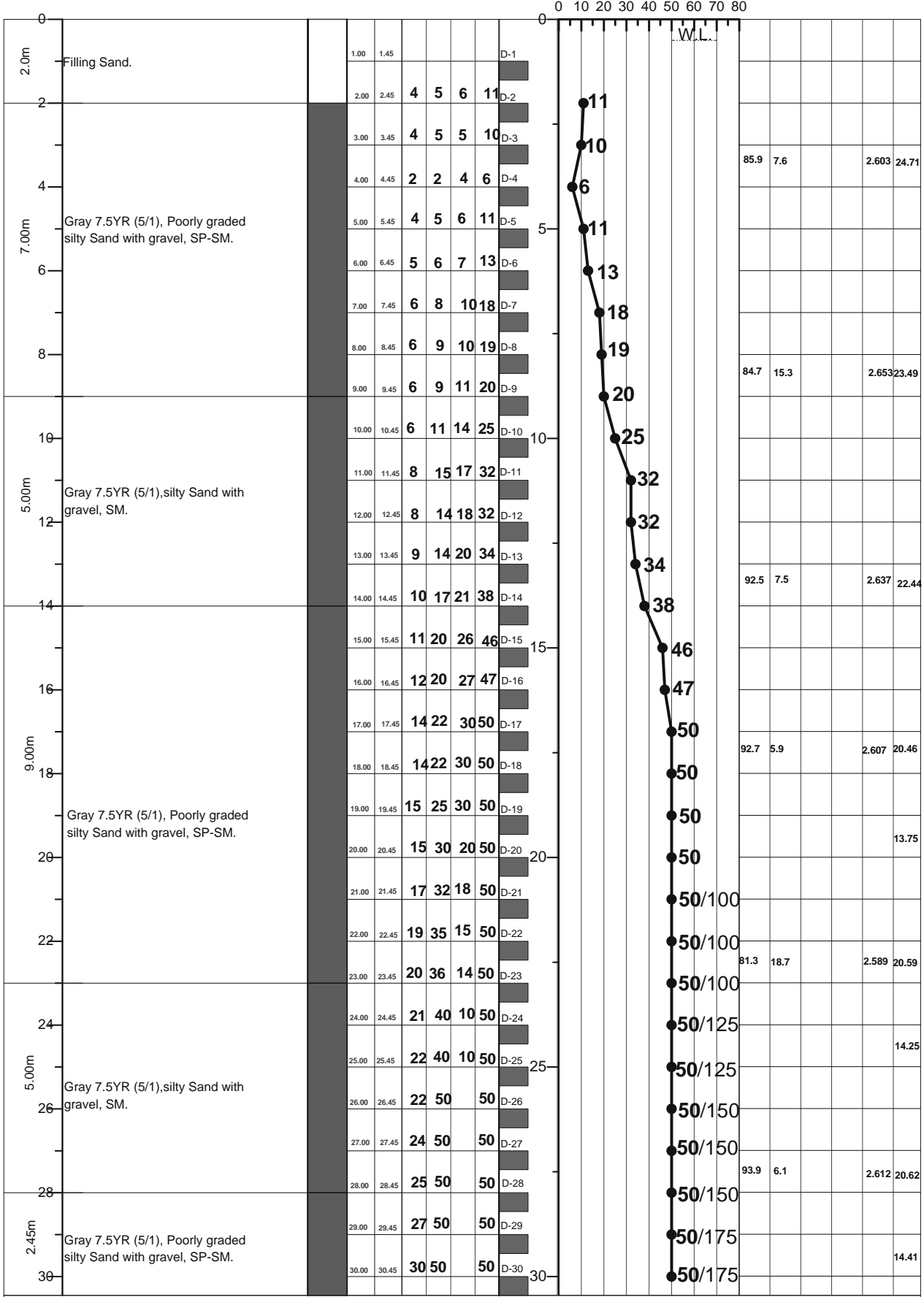
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 79
BRIDGE ID: N5_458a
LATITUDE: 26°11'51" LONGITUDE: 88°33'12"
CHAINAGE: 454.302



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 79	BOREHOLE NO: N5_458a	Longitude: N 88°33'12"	Latitude: E 26°11'51"
			Brigde ID: N5_458a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 454.302, RL: -5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 22-02-2014	Completed Date: 23-02-2014	G. W. T : -0.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

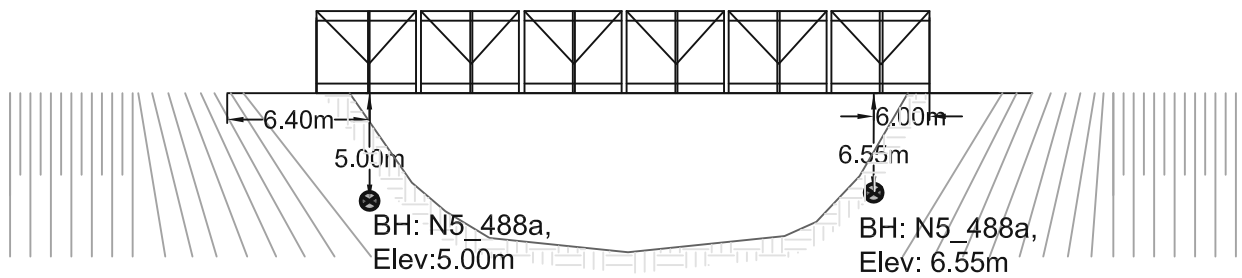
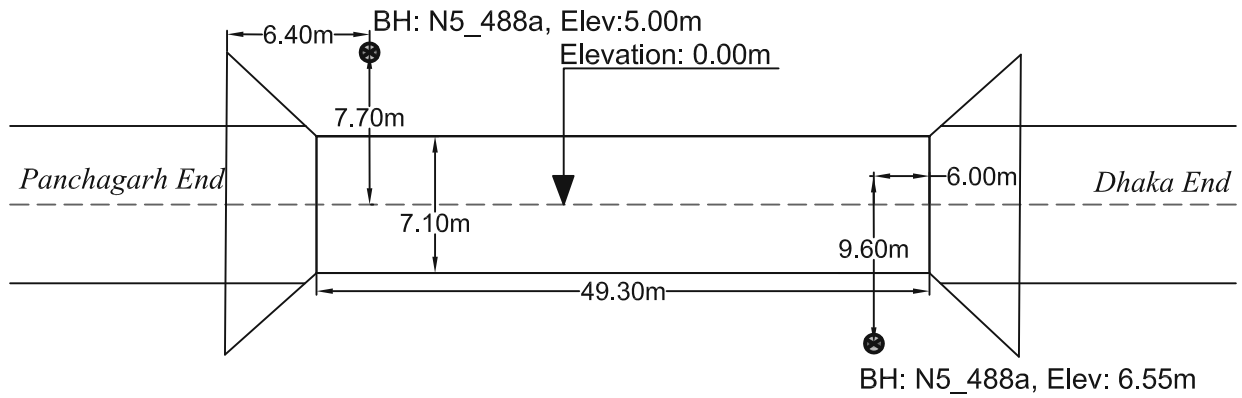
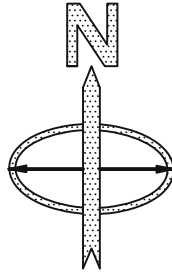
CLIENT: Oriental Consultants Company Limited.

RANK: 80

BRIDGE ID: N5_488a

LATITUDE: 26°27'9.306" LONGITUDE: 88°33'36.967"

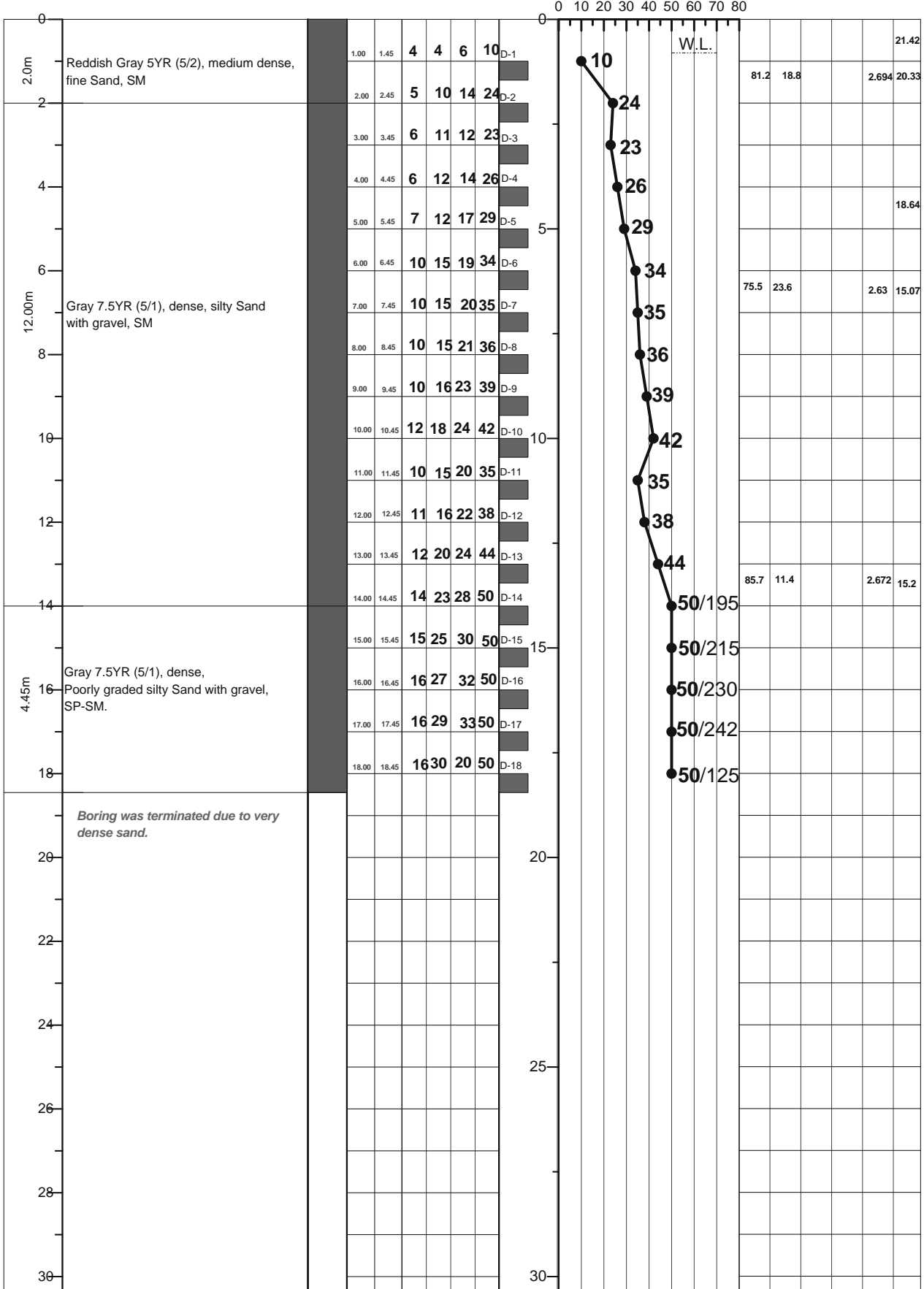
CHAINAGE: 483.864



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 88	BOREHOLE NO: N5_488a	Longitude: N 88°33'12"	Latitude: E 26°27'30.6"
			Brigde ID: N5_488a	Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 18.0m	Chainage: 483.864, RL: -5.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 18-02-2014	Completed Date: 21-02-2014	G. W. T : -0.8m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)								



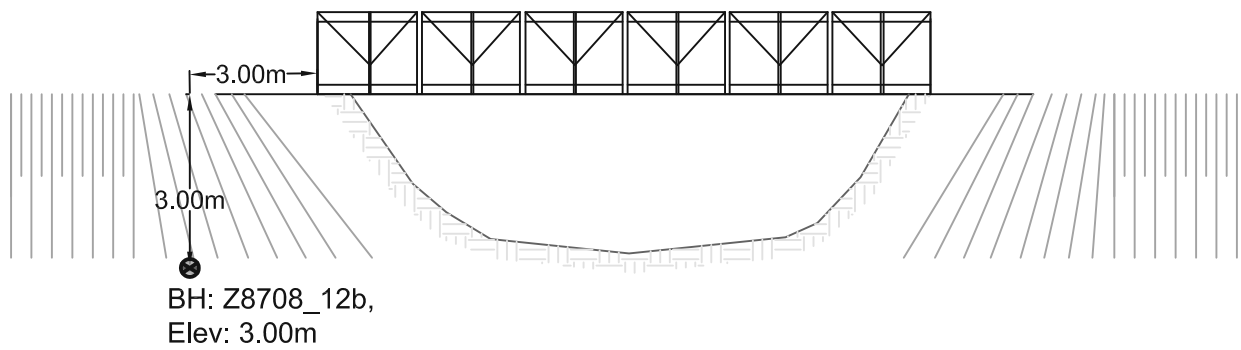
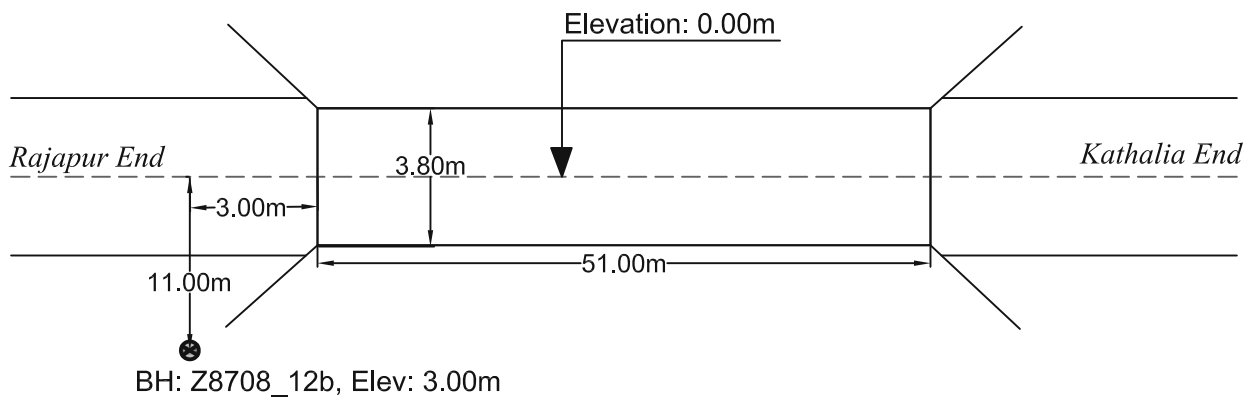
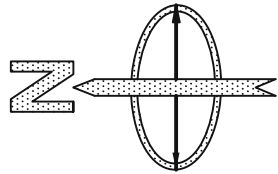
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

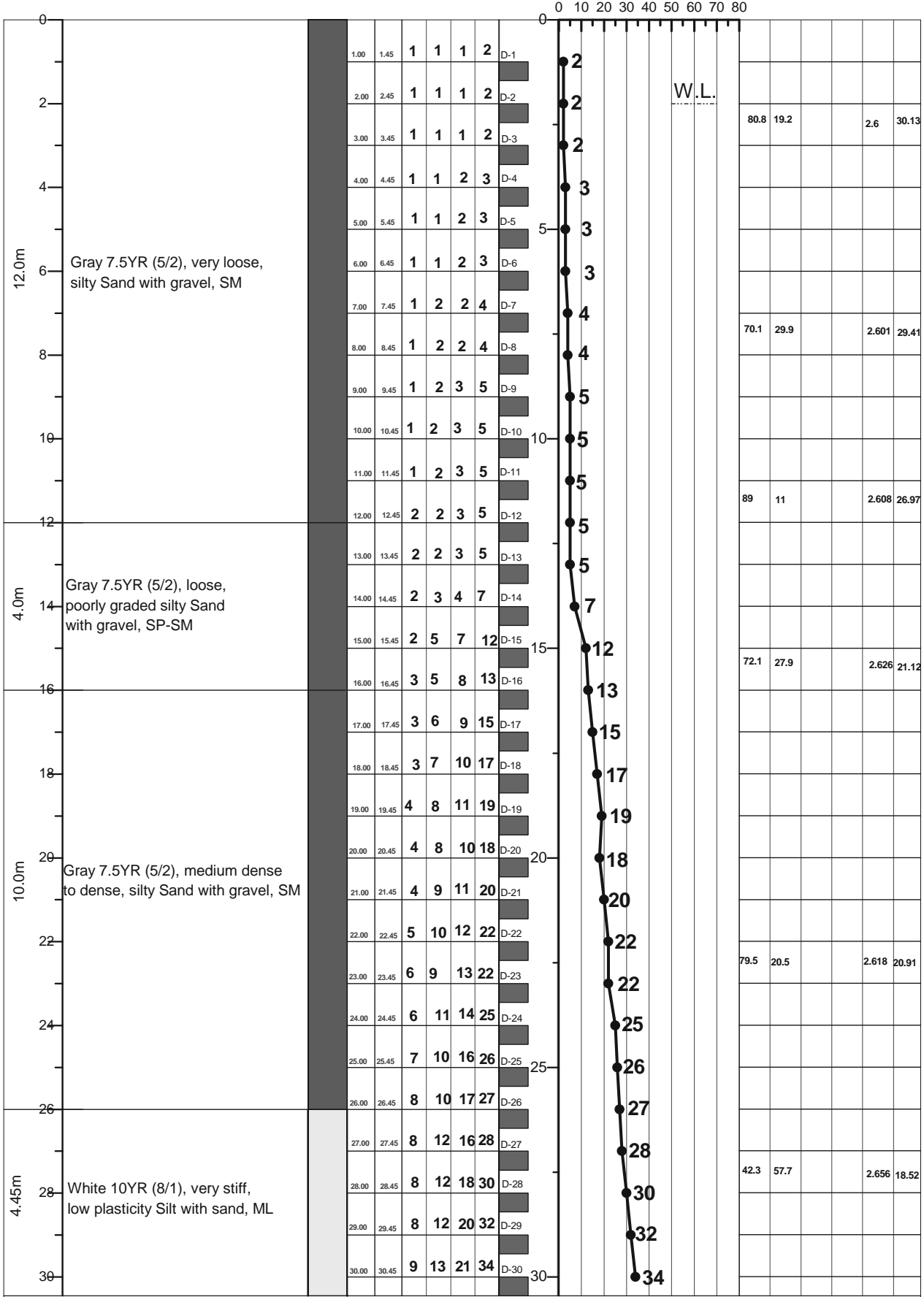
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 81
BRIDGE ID: Z8708_12b
LATITUDE: 22°28'51.337" LONGITUDE: 90°9'21.9"
CHAINAGE: 12.174



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 81	BOREHOLE NO: Z8708_12b	Longitude: N 90°09'21.9"	Latitude: E 22°28'51.337"
			Brigde ID: Z8708_12b	Road Name: Rajapur-Kathalia-Amua-Bamna-Patharghata.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 12.174, RL: 3.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 21-03-2014	Completed Date: 26-03-2014	G. W. T : -2.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



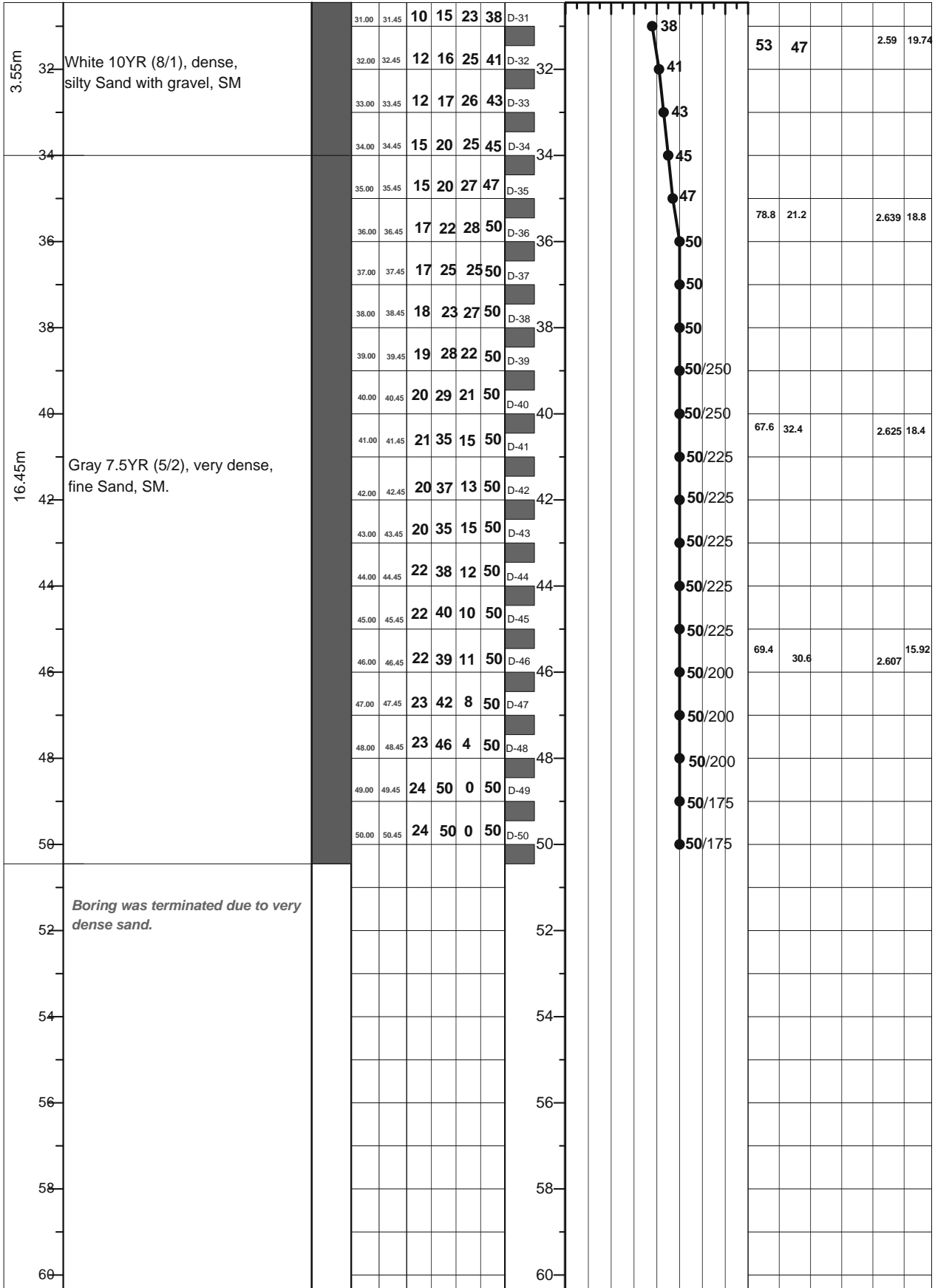
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 81	BOREHOLE NO: Z8708_12b	Longitude: N 90°09'21.9"	Latitude: E 22°28'51.337"
			Brigde ID: Z8708_12b	Road Name: Rajapur-Kathalia-Amua-Bamna-Patharghata	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 12.174, RL: 3.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 21-03-2014	Completed Date: 26-03-2014	G. W. T : -2.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _s
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									

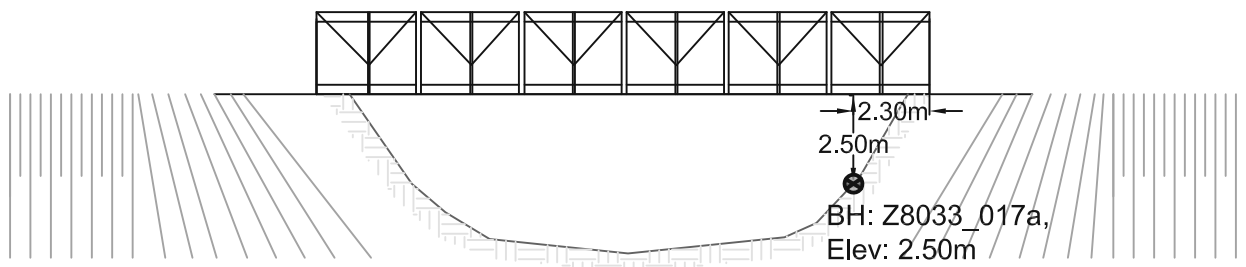
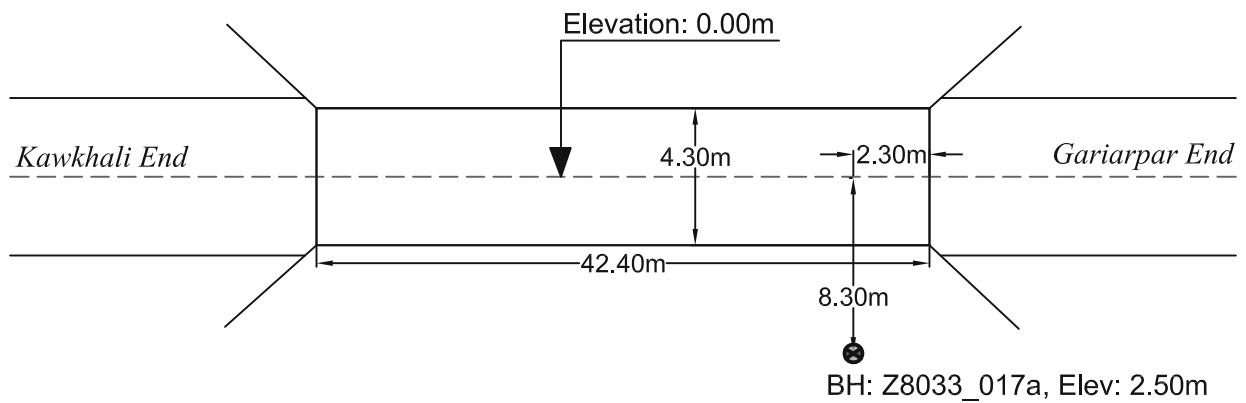
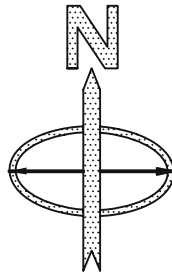


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTH PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

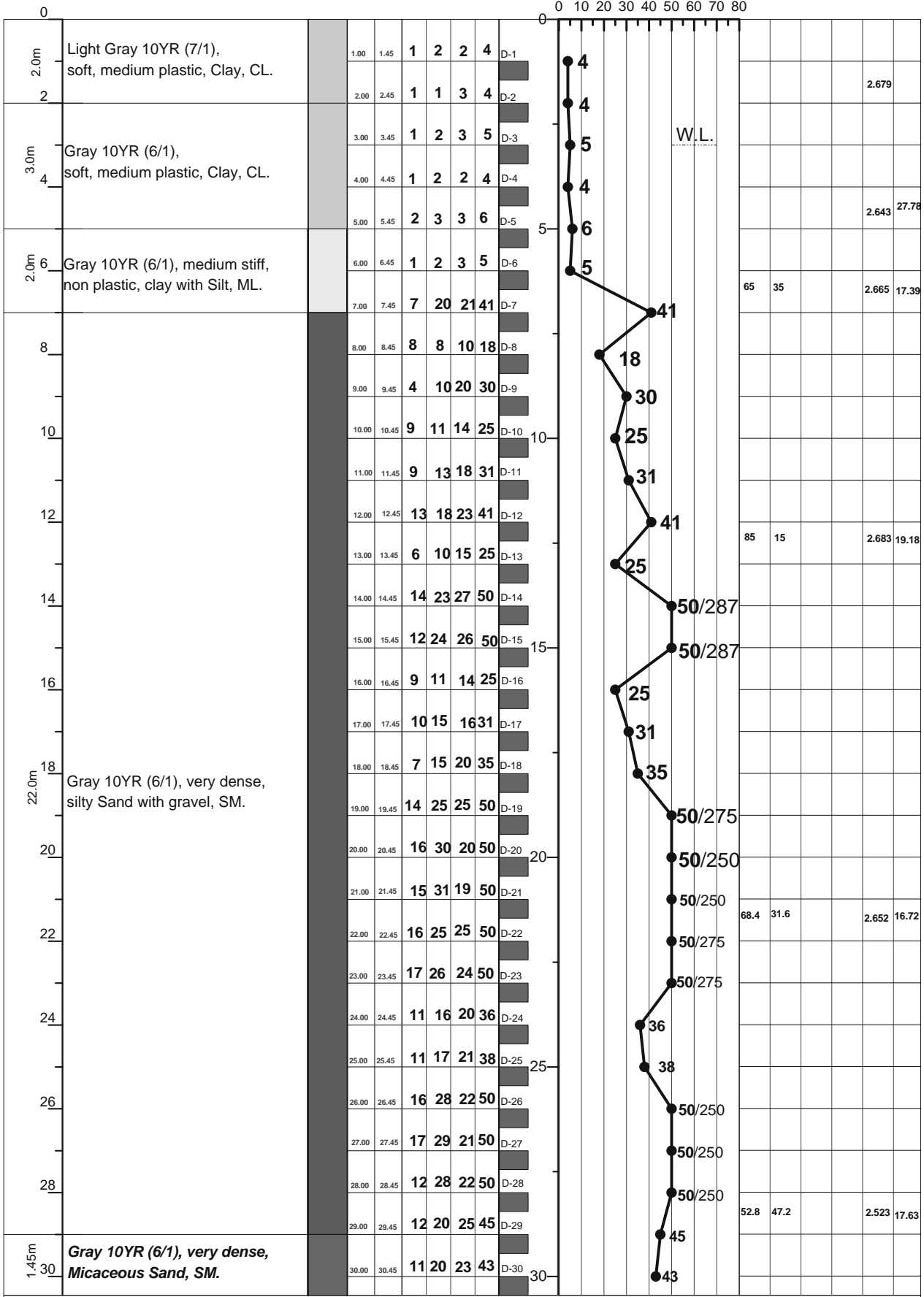
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 82
BRIDGE ID: Z8033_017a
LATITUDE: 22°46'41" LONGITUDE: 90°10'5"
CHAINAGE: 17.477



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 82	BOREHOLE NO: Z8033_017a		Longitude: N 90°10'5"	Latitude: E 22°46'41"	
			Brigde ID: Z8033_017a		Road Name: Gariarpar-Banaripara-Sawrupkati-Kawkhali-Naikati.		
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary		Borehole Depth: 60.0m		Chainage: 17.477, RL: -2.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 12-04-2014		Completed Date: 17-04-2014		G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



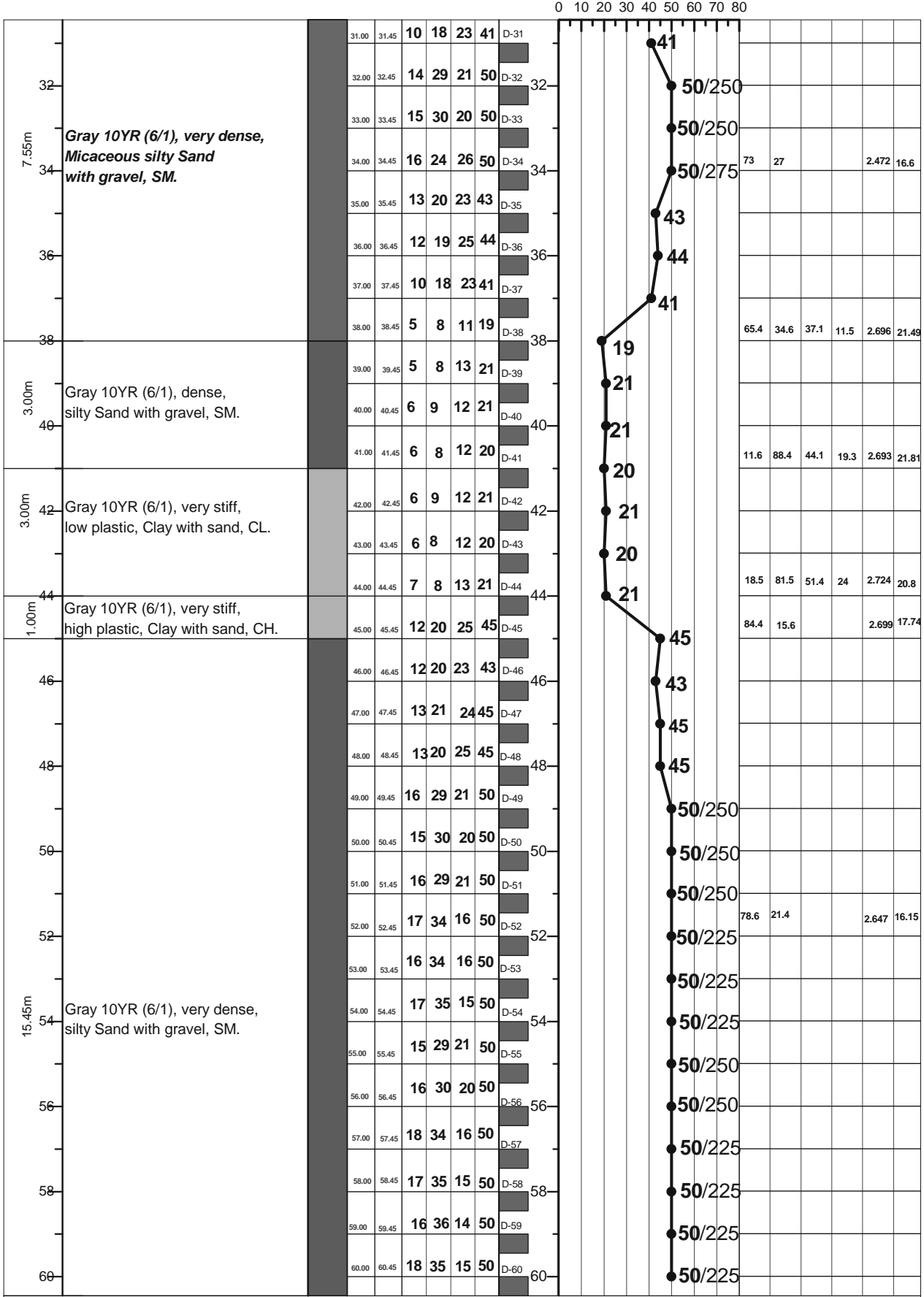
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^m PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 82	BOREHOLE NO: Z8033_017a	Longitude: N 90°10'5"	Latitude: E 22°46'41"
			Brigde ID: Z8033_017a	Road Name: Gariarpar-Banaripara-Sawrupkati-Kawkhali-Naikati.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 17.477, RL: -2.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 12-04-2014	Completed Date: 17-04-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								

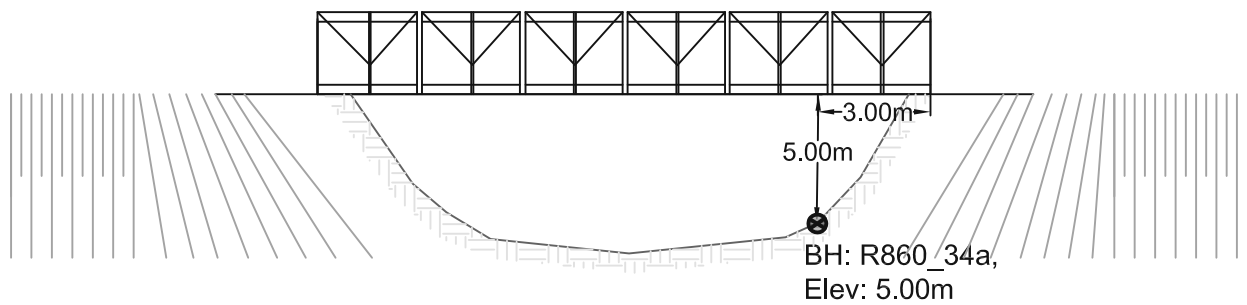
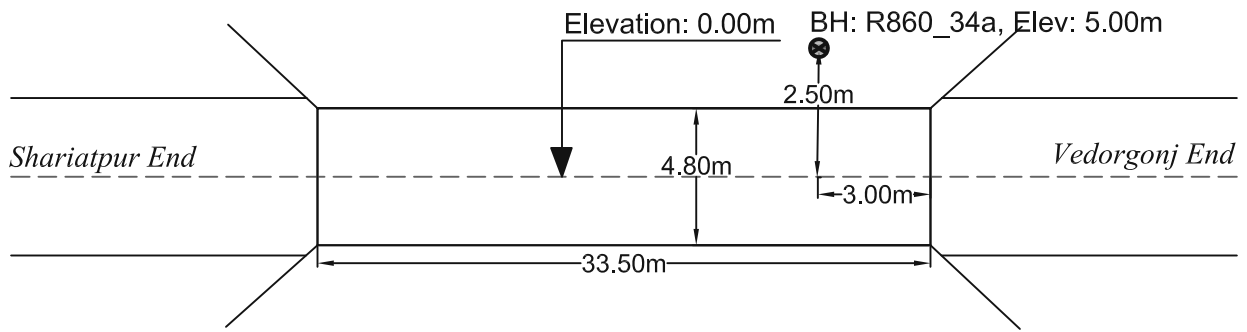
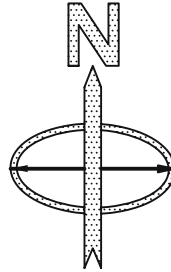


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

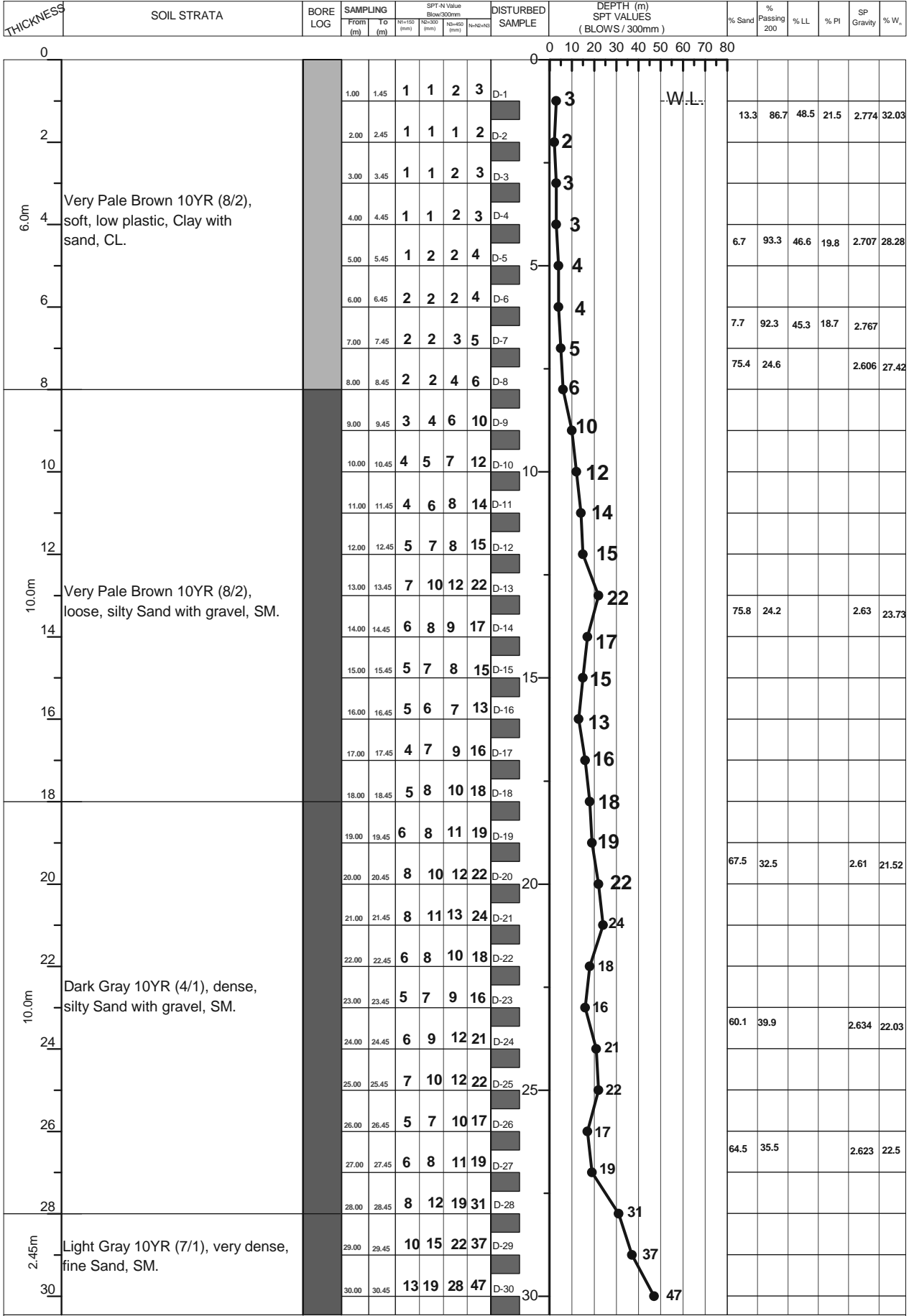
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 83
BRIDGE ID: R860_34a
LATITUDE: 23°11'30.221" LONGITUDE: 90°25'19.714"
CHAINAGE: 32.943



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 83	BOREHOLE NO: R860_34a	Longitude: N 90°25'19.71"	Latitude: E 23°11'30.22"
			Brigde ID: R860_34a	Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 32.943, RL: -5.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 22-03-2014	Completed Date: 25-03-2014	G. W. T : -2.0m.



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

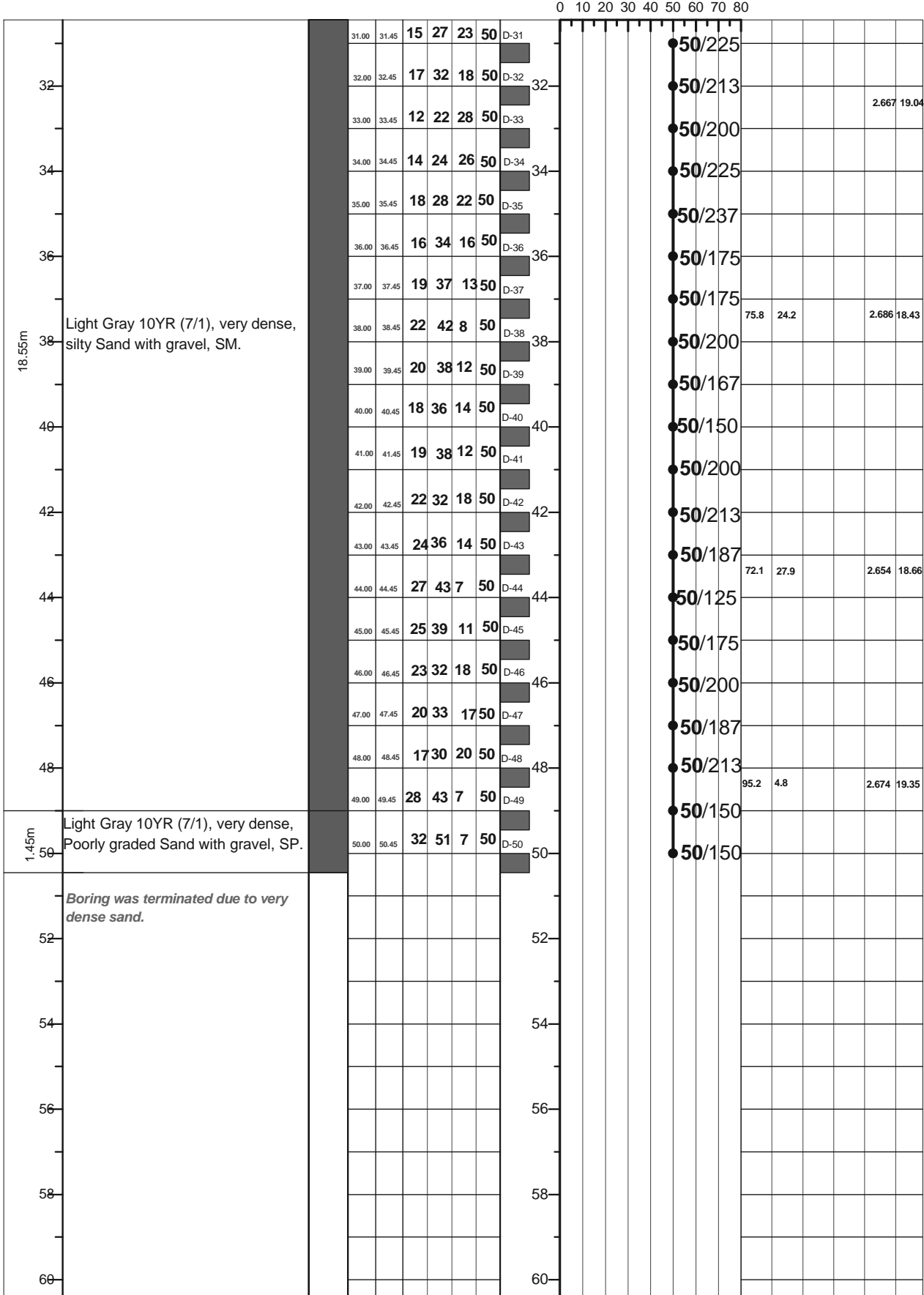
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 83	BOREHOLE NO: R860_34a	Longitude: N 90°25'19.71"	Latitude: E 23°11'30.22"
			Brigde ID: R860_34a	Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 32.943, RL: -5.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 22-03-2014	Completed Date: 25-03-2014	G. W. T : -2.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

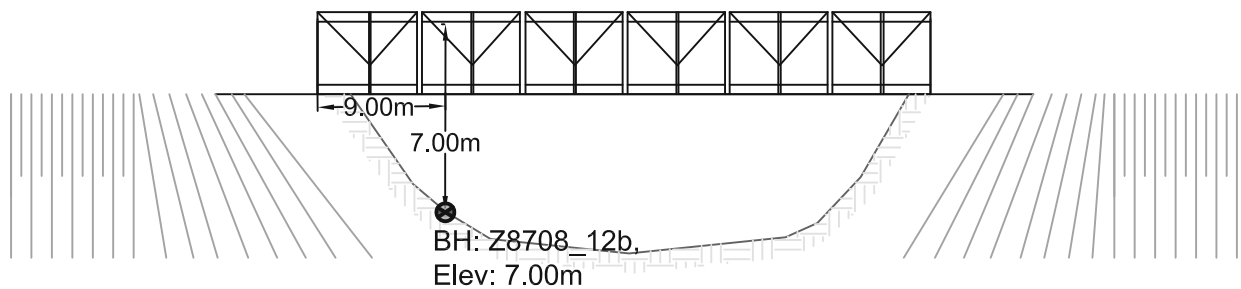
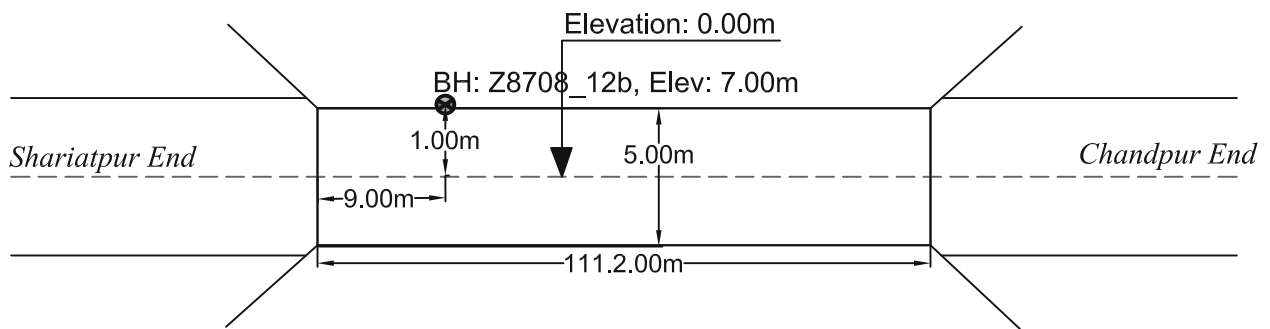
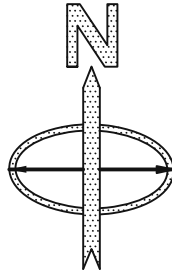
CLIENT: Oriental Consultants Company Limited.

RANK: 84

BRIDGE ID: R860_44c

LATITUDE: 23°10'11.055" LONGITUDE: 90°29'18.658"

CHAINAGE: 43.024



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 84	BOREHOLE NO: R860_44c	Longitude: N 90°29'18.65"	Latitude: E 23°10'11.05"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Brigde ID: R860_44c	Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.	
Type of Drill Rig: Manual Rotary			Borehole Depth: 60.0m	Chainage: 43.024, RL: -7.0m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 30-03-2014	Completed Date: 03-04-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								
0								0							
2.0m	Yellow 10YR (7/6), loose, silty Sand, SM.		1.00	1.45	1	2	2	4	D-1	4					
2			2.00	2.45	2	2	3	5	D-2	5	51.4	48.6			2.357 32.02
2.0m	Dark Gray 10YR (4/1), Peat and other highly Organic soils, Pt.		3.00	3.45	2	3	4	7	D-3	7					
4			4.00	4.45	4	6	9	15	D-4	15					
1.0m	Brown 10YR (8/3), medium dense to dense, fine Sand, SM.		5.00	5.45	6	8	10	18	D-5	18					
2.0m	Brown 10YR (8/3), dense, silty Sand, SM.		6.00	6.45	7	10	13	23	D-6	23					
6			7.00	7.45	5	7	9	16	D-7	16	83.2	16.8			2.622 22.64
3.0m	Brown 10YR (8/3), dense, silty Sand with gravel, SM.		8.00	8.45	7	10	13	23	D-8	23					
8			9.00	9.45	6	8	12	20	D-9	20					
10			10.00	10.45	9	12	14	26	D-10	26	85.6	14.4			2.632 20.32
12			11.00	11.45	7	10	15	25	D-11	25					
14			12.00	12.45	8	12	16	28	D-12	28					
13.0m	Gray 10YR (6/1), dense, silty Sand with gravel, SM.		13.00	13.45	4	6	8	14	D-13	14					
14			14.00	14.45	5	7	8	15	D-14	15					
16			15.00	15.45	5	6	7	13	D-15	13					
18			16.00	16.45	7	10	12	22	D-16	22					
20			17.00	17.45	10	13	15	28	D-17	28					
22			18.00	18.45	7	10	14	24	D-18	24					
24			19.00	19.45	8	12	17	29	D-19	29					
26			20.00	20.45	10	14	16	30	D-20	30	60.9	39.1			2.617 19.71
28			21.00	21.45	12	15	17	32	D-21	32					
7.45m	Gray 10YR (6/1), dense, Micaceous silty Sand with gravel, SM.		22.00	22.45	10	12	14	26	D-22	26					
28			23.00	23.45	8	10	12	22	D-23	22					
30			24.00	24.45	7	9	10	19	D-24	19					
			25.00	25.45	5	7	9	16	D-25	16					
			26.00	26.45	4	5	6	11	D-26	11	70.6	29.4			2.383 25.82
			27.00	27.45	4	6	7	13	D-27	13					
			28.00	28.45	6	8	10	18	D-28	18					
			29.00	29.45	5	7	10	17	D-29	17					
			30.00	30.45	6	8	11	19	D-30	19					

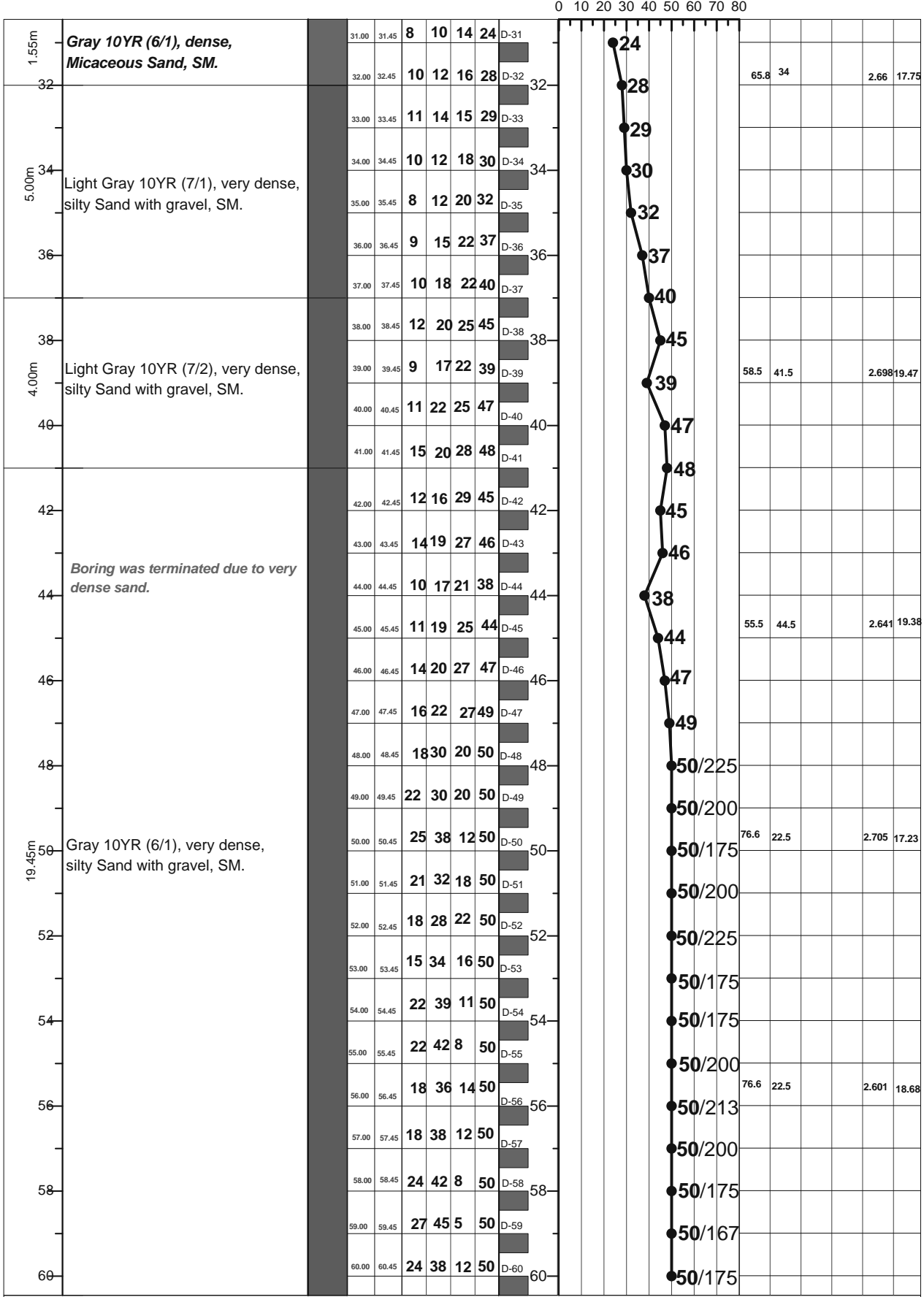
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 84	BOREHOLE NO: R860_44c	Longitude: N 90°29'18.65"	Latitude: E 23°10'11.05"
			Brigde ID: R860_44c	Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 43.024, RL: -7.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 30-03-2014	Completed Date: 03-04-2014	G. W. T : -3.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED
 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

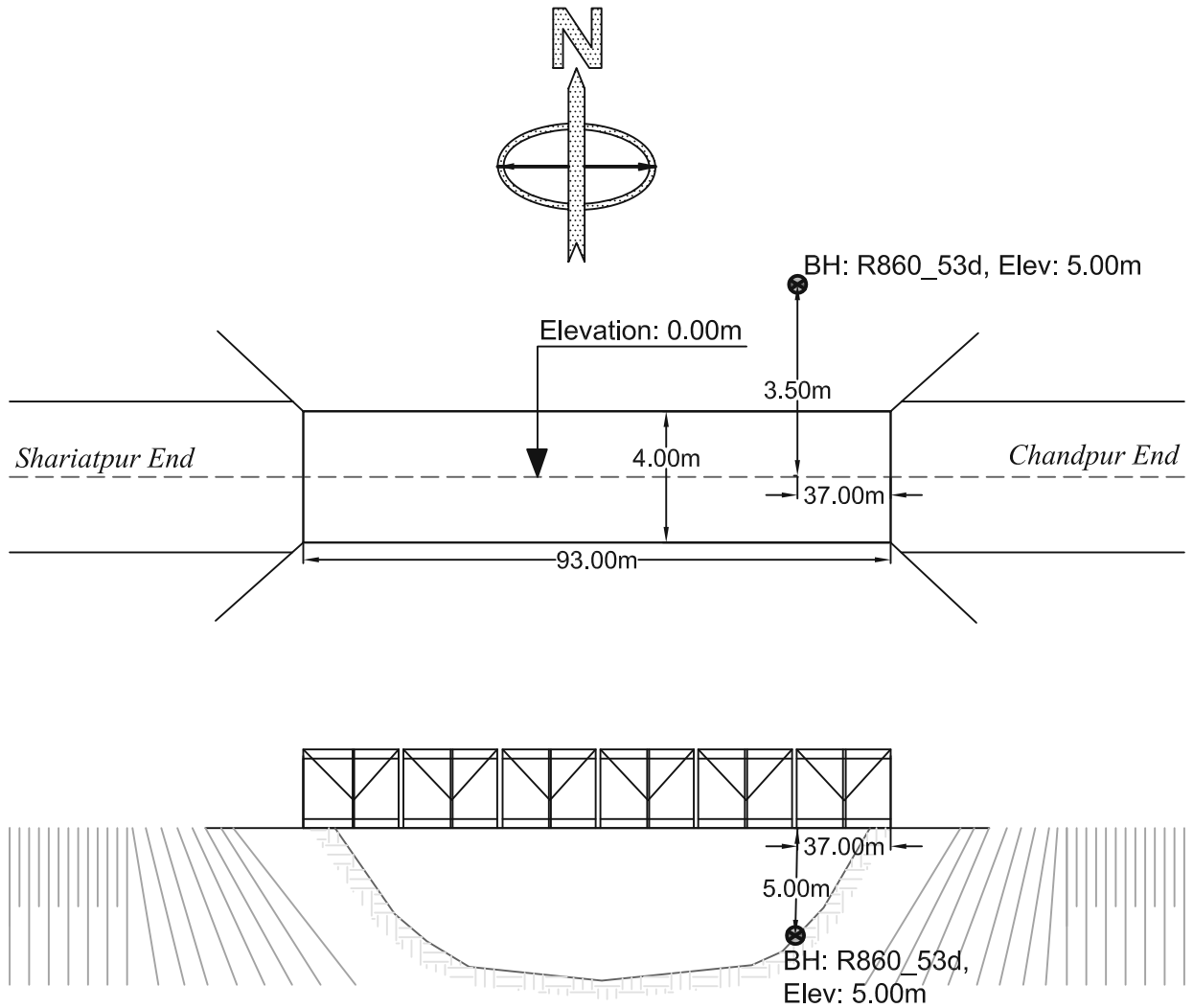
CLIENT: Oriental Consultants Company Limited.

RANK: 85

BRIDGE ID: R860_53d

LATITUDE: 23°11'30.522" LONGITUDE: 90°32'55.558"

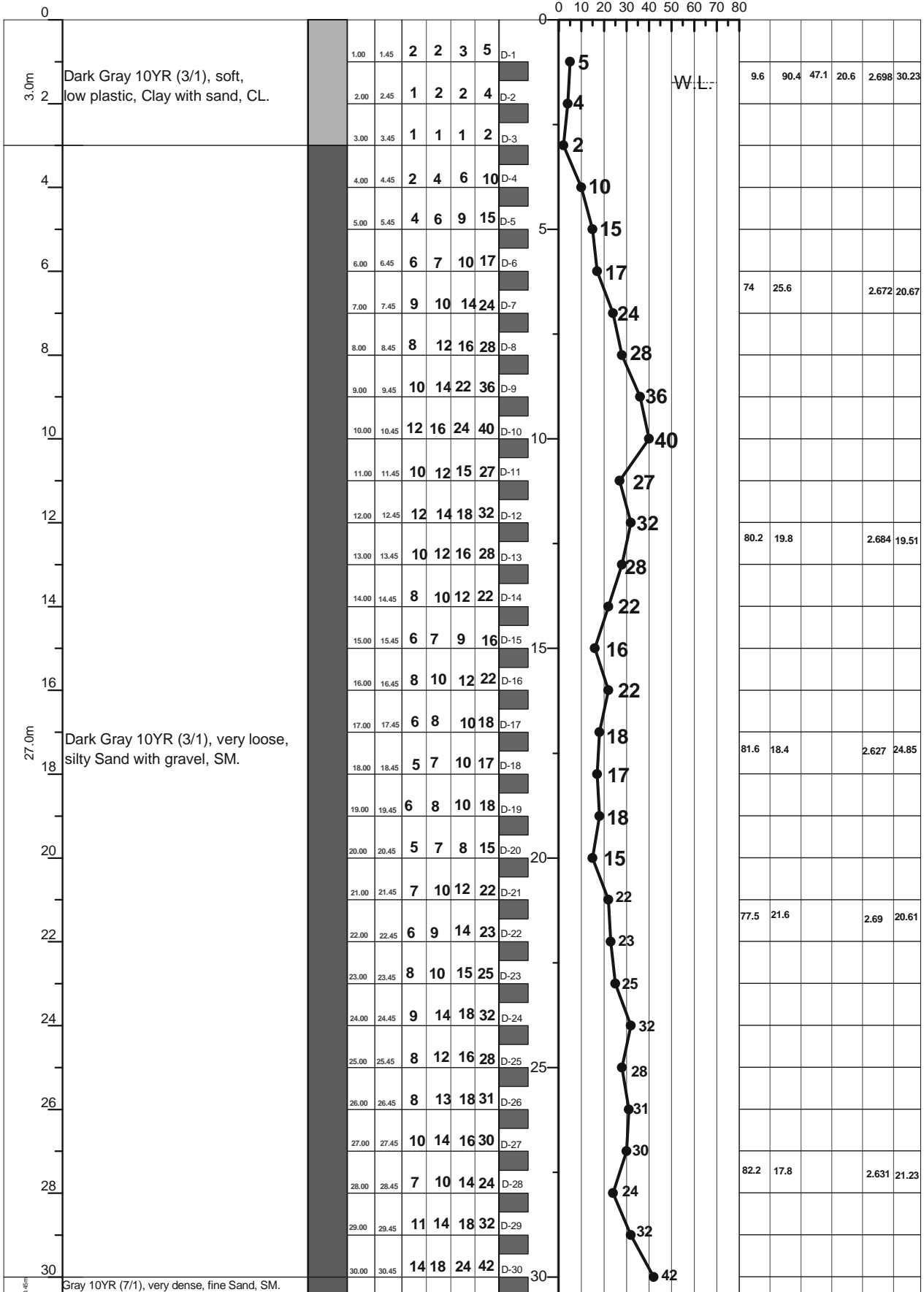
CHAINAGE: 52.069



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 85	BOREHOLE NO: R860_53d Brigde ID: R860_53d	Longitude: N 90°23'34"	Latitude: E 23°11'30.522"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 52.069, RL: -5.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 04-04-2014	Completed Date: 07-04-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



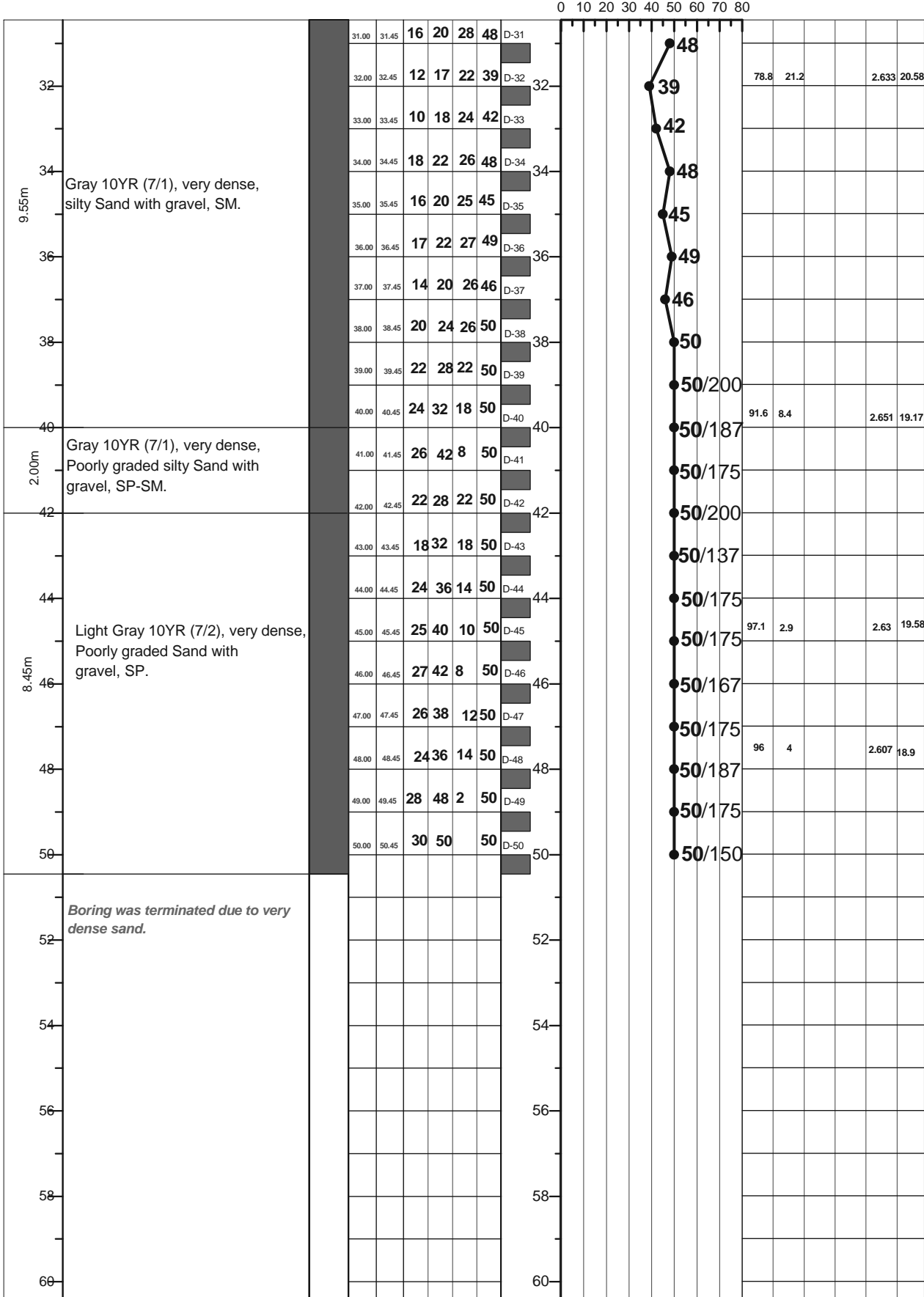
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 85	BOREHOLE NO: R860_53d	Longitude: N 90°23'34"	Latitude: E 23°11'30.522"
			Brigde ID: R860_53d	Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 52.069, RL: -5.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 04-04-2014	Completed Date: 07-04-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

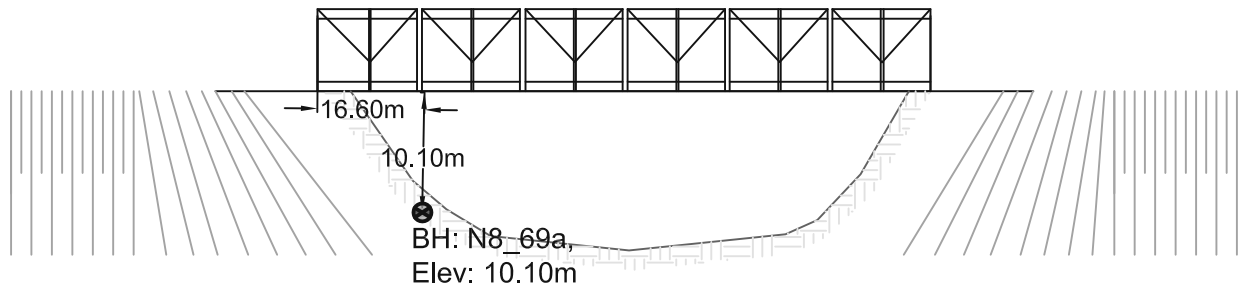
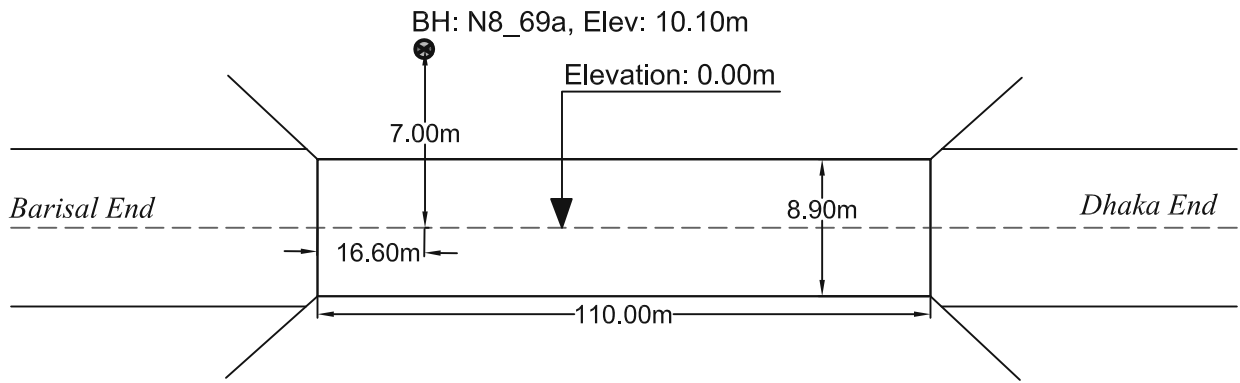
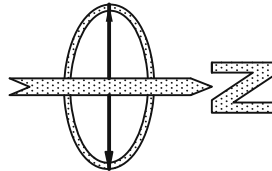
CLIENT: Oriental Consultants Company Limited.

RANK: 86

BRIDGE ID: N8_69a

LATITUDE: 23°23'10.281" LONGITUDE: 89°59'00"

CHAINAGE: 68.726



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 86	BOREHOLE NO: N8_69a	Longitude: N 089°58'59"	Latitude: E 23°23'09.2"
			Brigde ID: N8_69a	Road Name: Dhaka (Jatrabari)-Mawa-Bhanga-Barisal-Patuakhali.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 68.726, RL: -10.10m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 18-03-2014	Completed Date: 22-03-2014	G. W. T : -2.3m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0-2.0m	Brown 7.5YR (5/3), soft, low plastic, Clay with sand, CL.		1.00	1.45	1	2	3	5	D-1	5	11.2	88.8	31.9	11.4	2.682	31.04
2-2.0m			2.00	2.45	1	2	2	4	D-2	4						
2-4.0m	Grayish Brown 10YR (5/2), soft, low plastic, Clay with sand, CL.		3.00	3.45	1	0	1	1	D-3	1						
4-4.0m			4.00	4.45	1	1	2	3	D-4	3	14.3	85.7	49.4	22.4	2.711	31.61
4-5.0m			5.00	5.45	1	3	6	9	D-5	9						
5-6.0m	Gray 7.5YR (5/1), medium dense to dense, silty Sand, SM.		6.00	6.45	1	2	3	5	D-6	5	29.5	70.5	46.6	19.7	2.67	25.04
6-7.0m	Gray 7.5YR (5/1), soft, low plastic, Clay with sand, CL.		7.00	7.45	5	5	8	13	D-7	13						
7-8.0m			8.00	8.45	4	7	8	15	D-8	15						
8-9.0m	Gray 7.5YR (6/1), medium dense to dense, silty Sand, SM.		9.00	9.45	3	5	6	11	D-9	11						
9-10.0m			10.00	10.45	3	9	18	27	D-10	27						
10-11.0m			11.00	11.45	11	18	19	37	D-11	37	80.1	19.9			2.676	23.03
11-12.0m	Light Gray 7.5YR (5/1), dense, silty Sand with gravel, SM.		12.00	12.45	5	5	7	12	D-12	12						
12-13.0m			13.00	13.45	6	8	10	18	D-13	18						
13-14.0m			14.00	14.45	11	16	12	28	D-14	28						
14-15.0m			15.00	15.45	6	6	8	14	D-15	14	88.8	11.2			2.697	22.91
15-16.0m			16.00	16.45	9	9	11	20	D-16	20						
16-17.0m			17.00	17.45	9	11	16	27	D-17	27						
17-18.0m	Light Gray 7.5YR (5/1), dense, Poorly graded silty Sand with gravel, SP-SM.		18.00	18.45	10	12	15	27	D-18	27						
18-19.0m			19.00	19.45	9	13	17	30	D-19	30						
19-20.0m			20.00	20.45	10	15	16	31	D-20	31						
20-21.0m			21.00	21.45	17	10	10	20	D-21	20	80.5	19.5			2.62	21.34
21-22.0m			22.00	22.45	14	19	22	41	D-22	41						
22-23.0m			23.00	23.45	13	19	20	39	D-23	39						
23-24.0m			24.00	24.45	16	23	27	50	D-24	50						
24-25.0m			25.00	25.45	11	21	21	42	D-25	42						
25-26.0m	Light Gray 7.5YR (5/1), dense, silty Sand with gravel, SM.		26.00	26.45	12	14	16	30	D-26	30						
26-27.0m			27.00	27.45	11	13	15	28	D-27	28						
27-28.0m			28.00	28.45	21	44	6	50	D-28	50/175	87	13			2.619	18.11
28-29.0m			29.00	29.45	16	22	18	40	D-29	40						
29-30.0m			30.00	30.45	13	20	23	43	D-30	43						

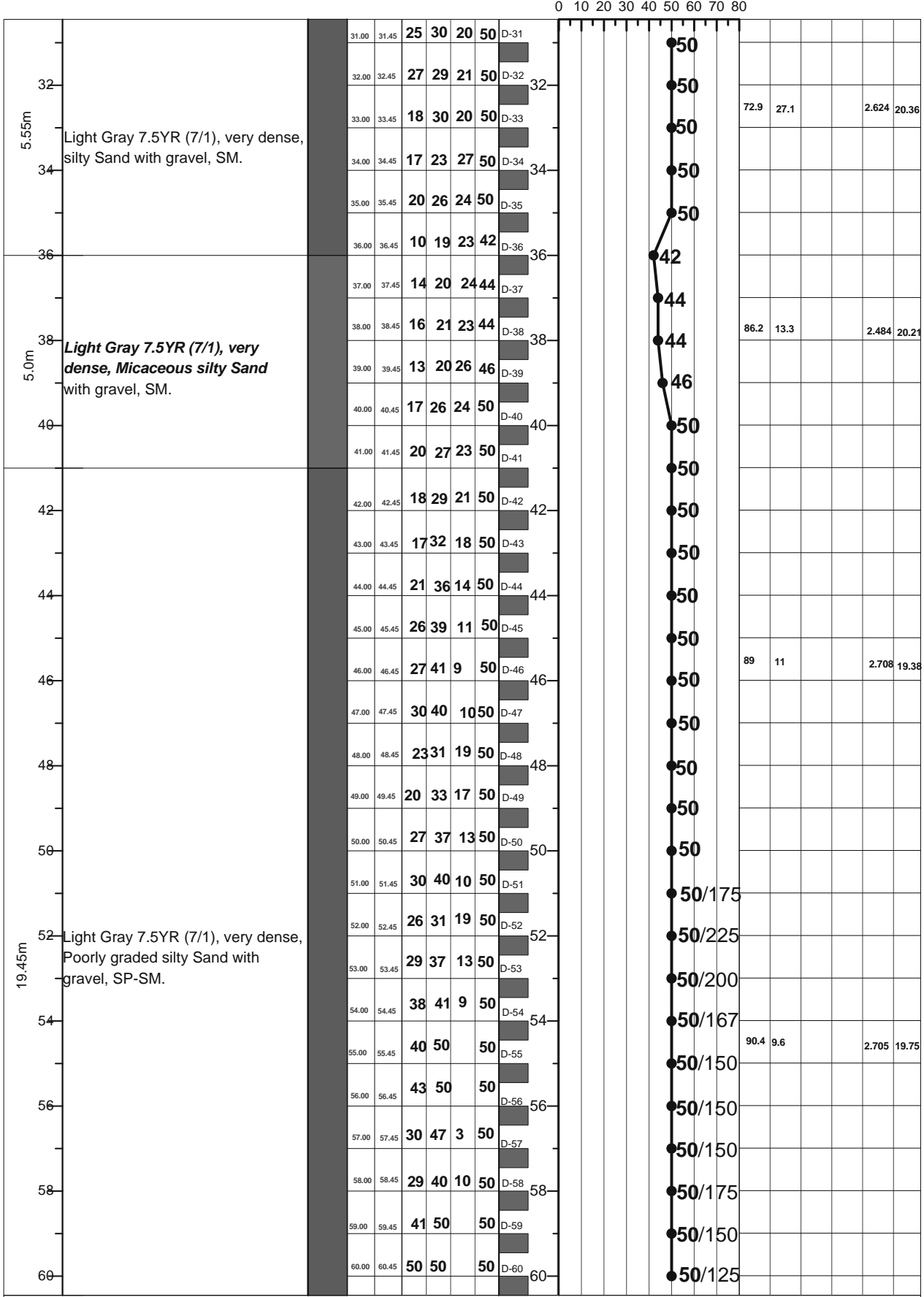
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 86	BOREHOLE NO: N8_69a	Longitude: N 089°58'59"	Latitude: E 23°23'09.2"
			Brigde ID: N8_69a	Road Name: Dhaka (Jatrabari)-Mawa-Bhanga-Barisal-Patuaakhali.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 68.726, RL: -10.10m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 18-03-2014	Completed Date: 22-03-2014	G. W. T : -2.3m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

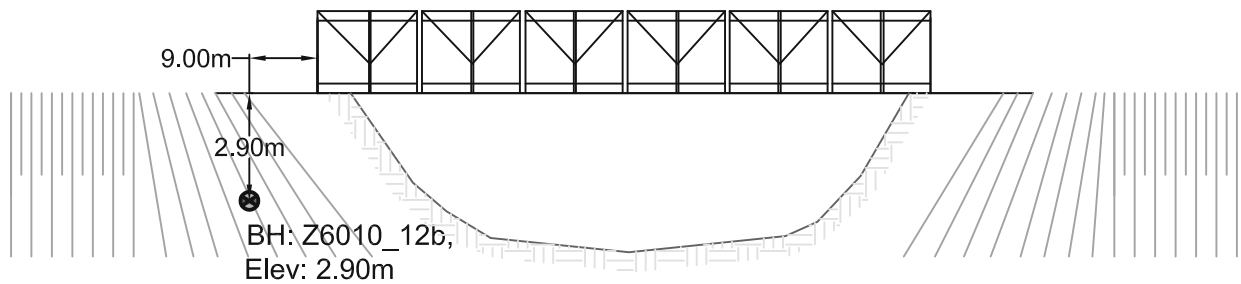
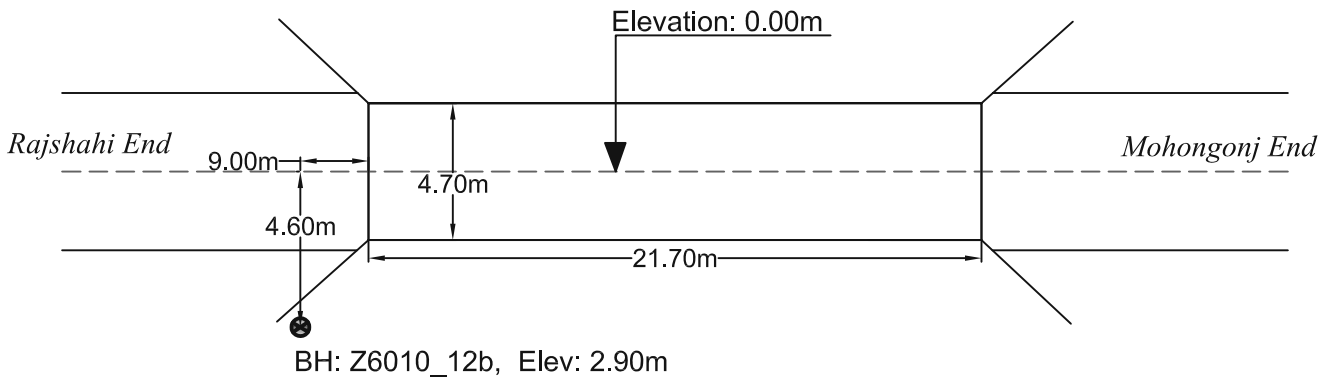
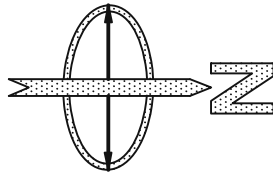


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

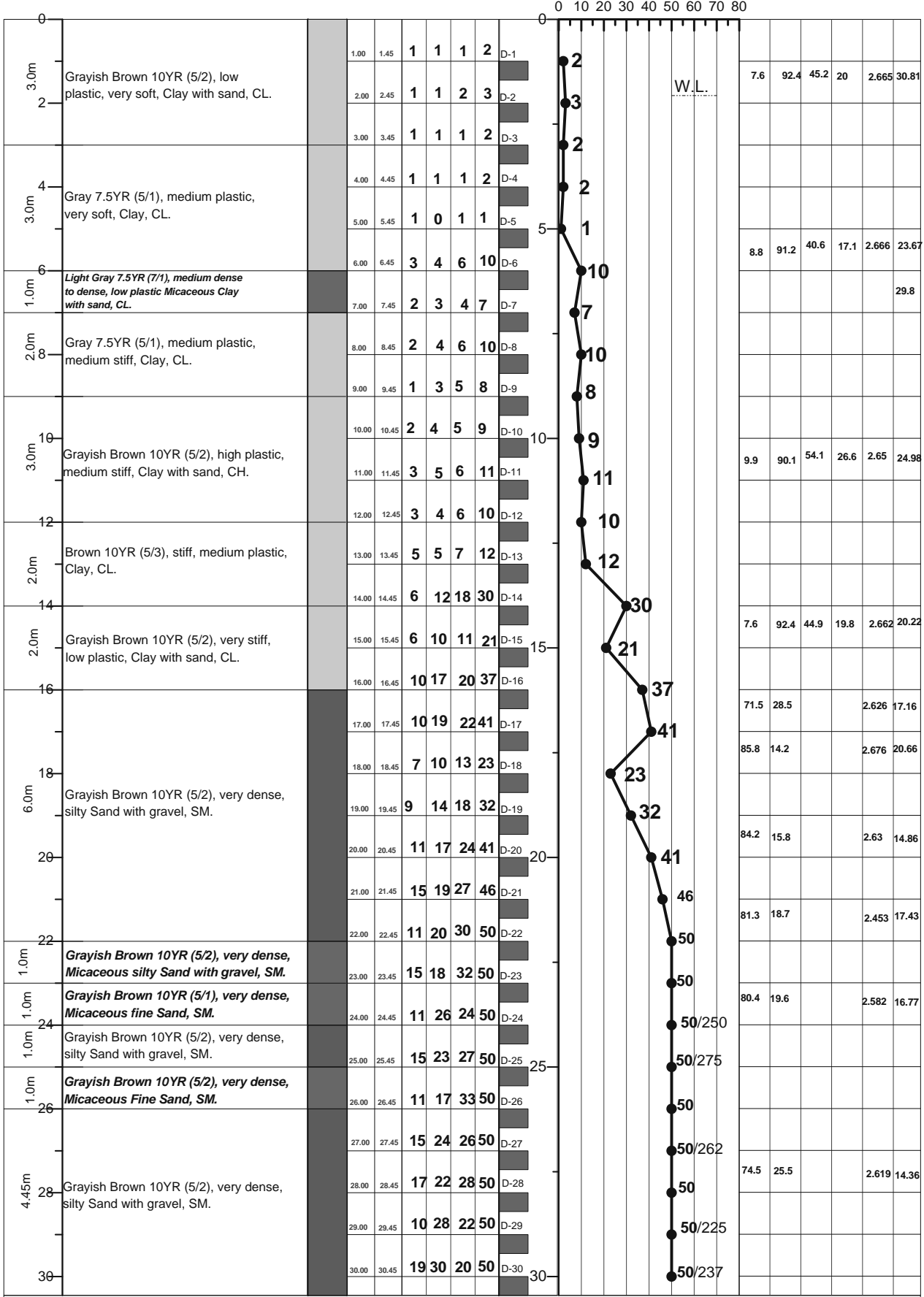
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 87
BRIDGE ID: Z6010_12b
LATITUDE: 24°26'39.871" LONGITUDE: 88d41'38.816"
CHAINAGE: 12.34



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 87	BOREHOLE NO: Z6010_12b	Longitude: N 088° 41' 38"	Latitude: E 24° 26' 39"
			Brigde ID: Z6010_12b	Road Name: Rajshahi-Hatgodagari-Faliarbil-Mohonganj.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 12.34, RL: -2.9m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 21-03-2014	Completed Date: 23-03-2014	G. W. T : -1.82m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

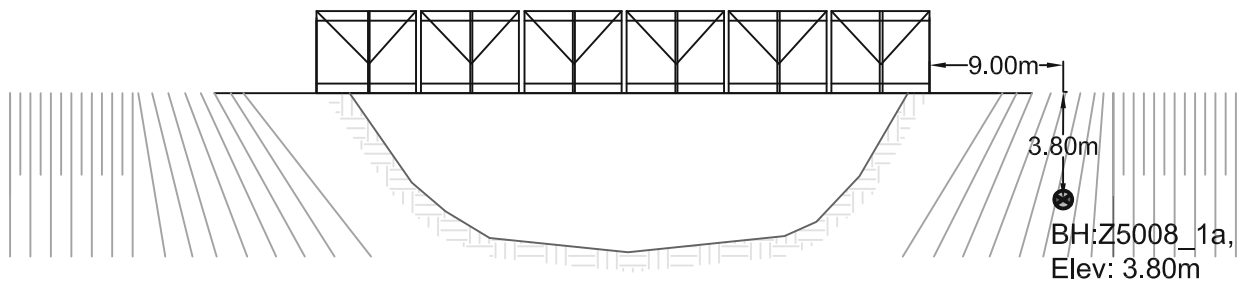
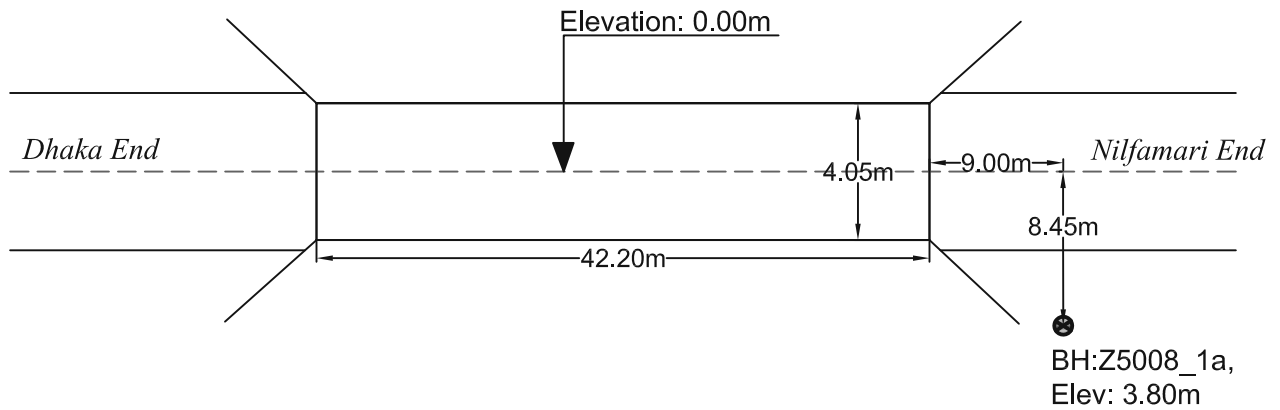
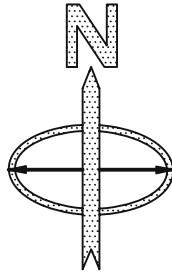


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 88
BRIDGE ID: Z5008_1a
LATITUDE: 25°52'5.621" LONGITUDE: 88°39'45.866"
CHAINAGE: 1.13



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 88	BOREHOLE NO: Z5008_1a	Longitude: N 88°50'8.5"	Latitude: E 25°52'5.621"
			Brigde ID: Z5008_1a	Road Name: Birganj-Khansama-Darwani.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 1.130, RL: -3.80
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 27-02-2014	Completed Date: 28-02-2014	G. W. T : -.50m.

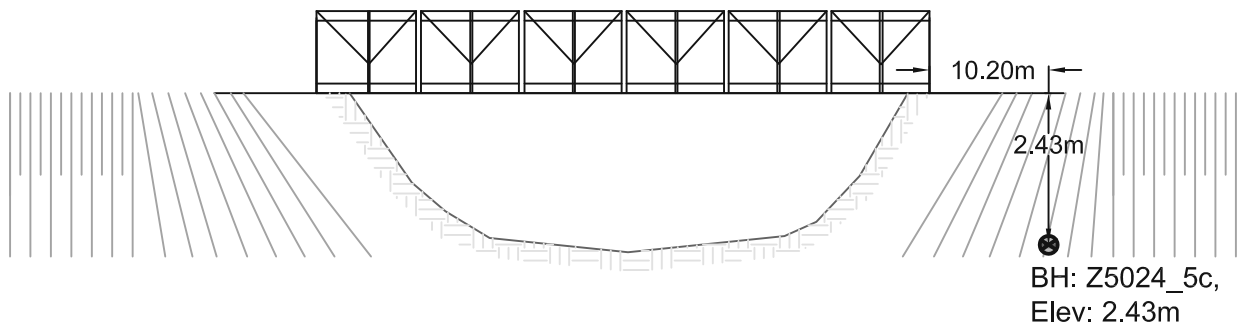
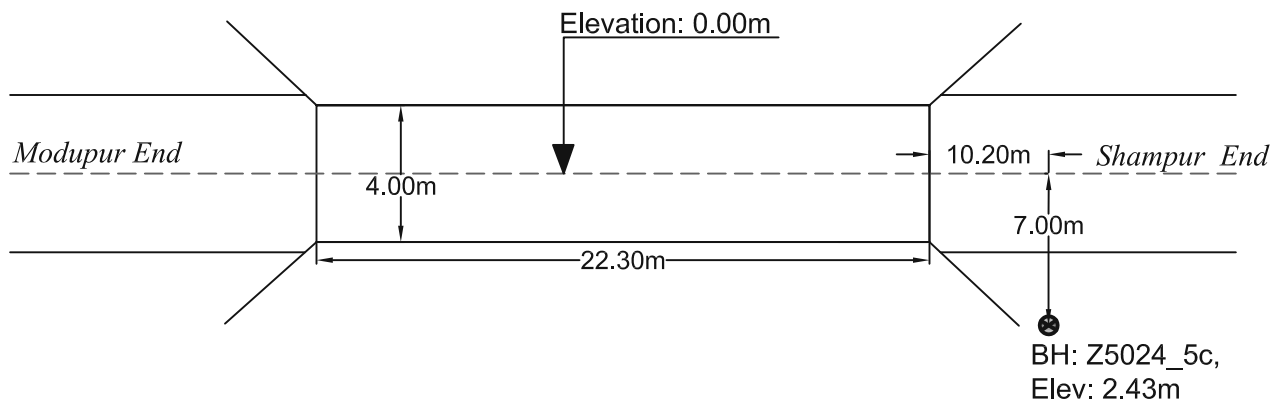
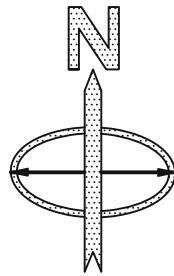
THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								
0 - 2.0m	Brown 7.5 YR (5/4), very loose, silty Sand, SM.		1.00	1.45	1	1	1	2	D-1						
2.0 - 4.0m	Pale Brown 10 YR (6/3), loose, micaceous silty Sand with gravel, SM.		2.00	2.45	2	2	2	4	D-2						
			3.00	3.45	2	2	3	5	D-3	84.9	15.1			2.629	16.65
4.0 - 7.0m	Light Brownish Gray 10 YR (6/2), medium dense, Poorly graded silty Sand with gravel, SP-SM.		4.00	4.45	3	4	4	8	D-4						
			5.00	5.45	5	6	8	14	D-5						
			6.00	6.45	6	10	13	23	D-6						
			7.00	7.45	6	12	15	27	D-7						
			8.00	8.45	7	12	16	28	D-8						
			9.00	9.45	7	14	17	31	D-9						
7.0 - 10.0m			10.00	10.45	7	14	17	31	D-10						
			11.00	11.45	7	15	18	33	D-11						
10.0 - 12.0m	Pale Brown 10YR (6/3), very dense, silty Sand, SM		12.00	12.45	6	10	14	24	D-12						
12.0 - 16.0m	Brownish Yellow 10YR (6/6), dense, Poorly graded silty Sand with gravel, SP-SM.		13.00	13.45	7	9	11	20	D-13						
			14.00	14.45	6	8	9	17	D-14						
			15.00	15.45	6	8	8	16	D-15						
			16.00	16.45	12	15	18	33	D-16						
16.0 - 18.0m	Gray 7.5YR (5/1), very dense, Poorly graded silty Sand with gravel, SP-SM.		17.00	17.45	13	18	22	40	D-17						
			18.00	18.45	16	18	36	50	D-18						
18.0 - 28.0m	Pale Brown 10YR (6/6), very dense, silty Sand with gravel, SM.		19.00	19.45	12	18	32	50	D-19						
			20.00	20.45	14	22	30	50	D-20						
			21.00	21.45	14	22	30	50	D-21						
			22.00	22.45	14	25	25	50	D-22						
			23.00	23.45	15	25	25	50	D-23						
			24.00	24.45	17	28	22	50	D-24						
			25.00	25.45	19	30	20	50	D-25						
			26.00	26.45	20	30	20	50	D-26						
			27.00	27.45	20	30	20	50	D-27						
			28.00	28.45	22	35	20	50	D-28						
28.0 - 29.0m	Pale Brown 10YR (6/6), very dense, Poorly graded silty Sand with gravel, SP-SM.		29.00	29.45	25	50	50	D-29							
29.0 - 30.0m	Pale Brown 10YR (6/6), very dense, Poorly graded Sand with gravel, SP.		30.00	30.45	25	50	15	50	D-30						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

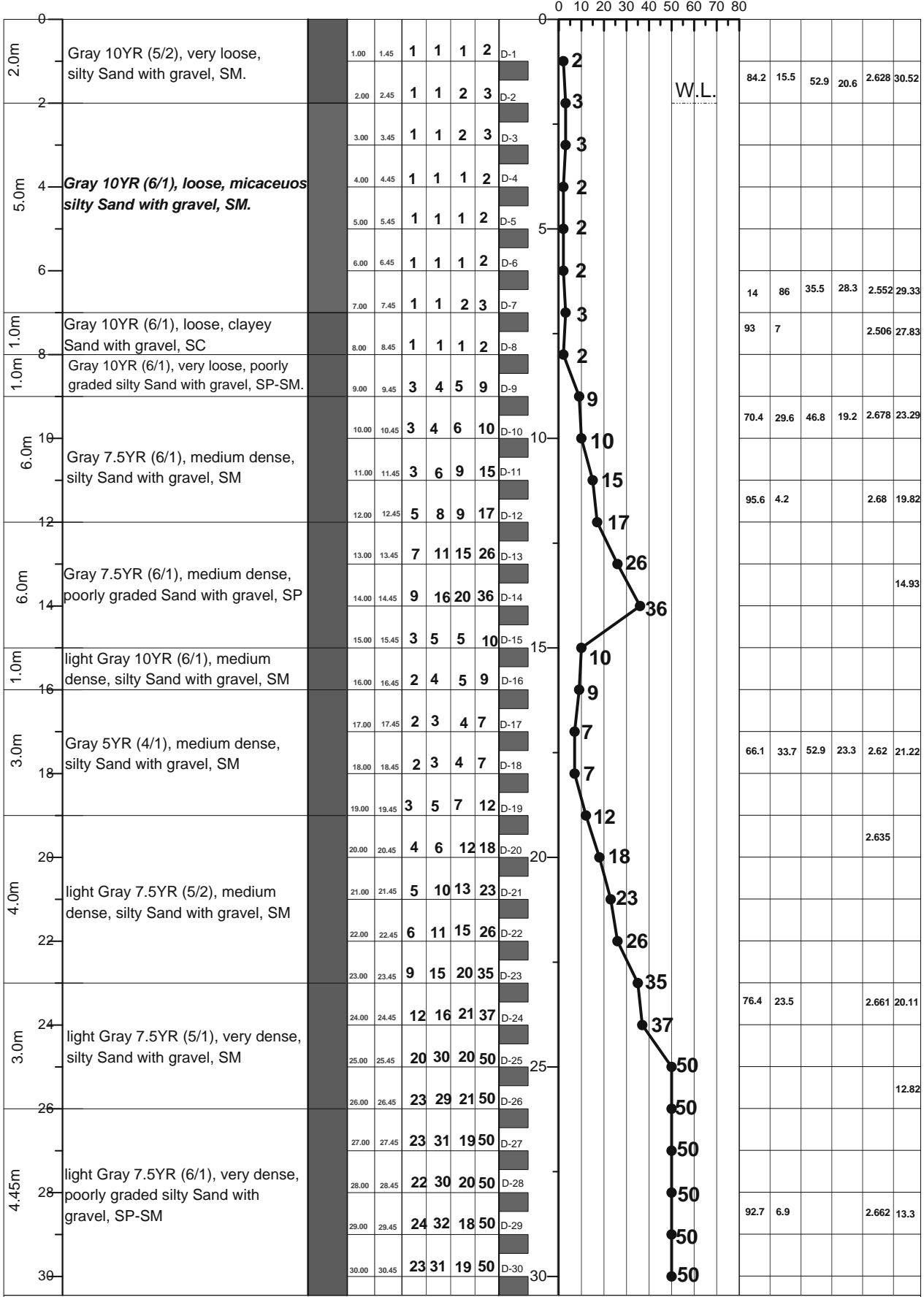
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 89
BRIDGE ID: Z5024_5c
LATITUDE: 25°41'45.973" LONGITUDE: 89°07'43.236"
CHAINAGE: 5.67



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 89	BOREHOLE NO: Z5024-5c	Longitude: N 89°01'9.875"	Latitude: E 25°41'45.973"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 30.0m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 27-02-2014		Completed Date: 28-02-2014	
			Road Name: Modhupur-Shampur		Chainage: 5.67, RL: -2.43m
			G. W. T : -2.0m.		

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

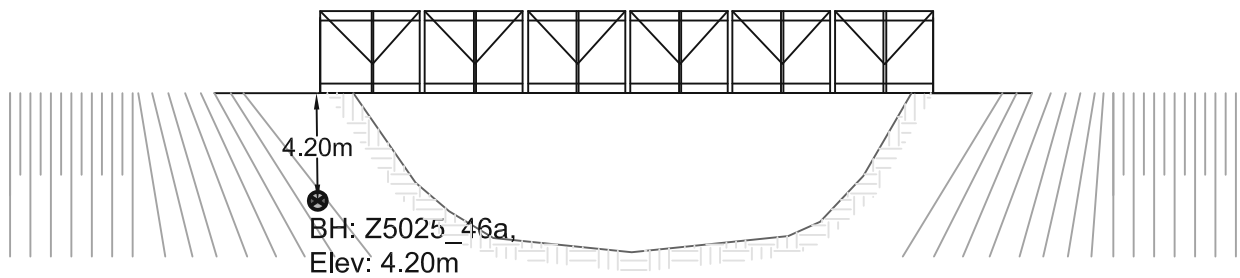
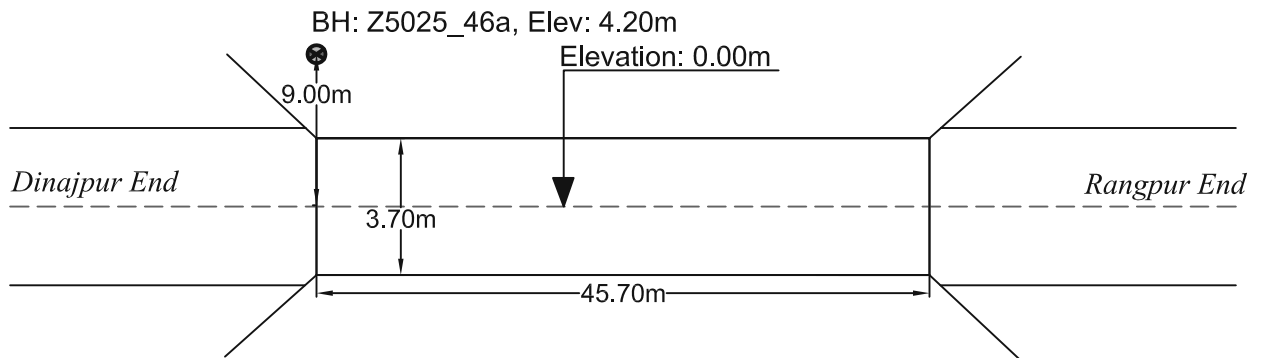
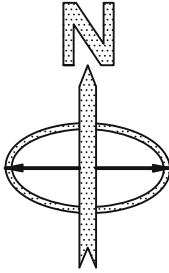


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

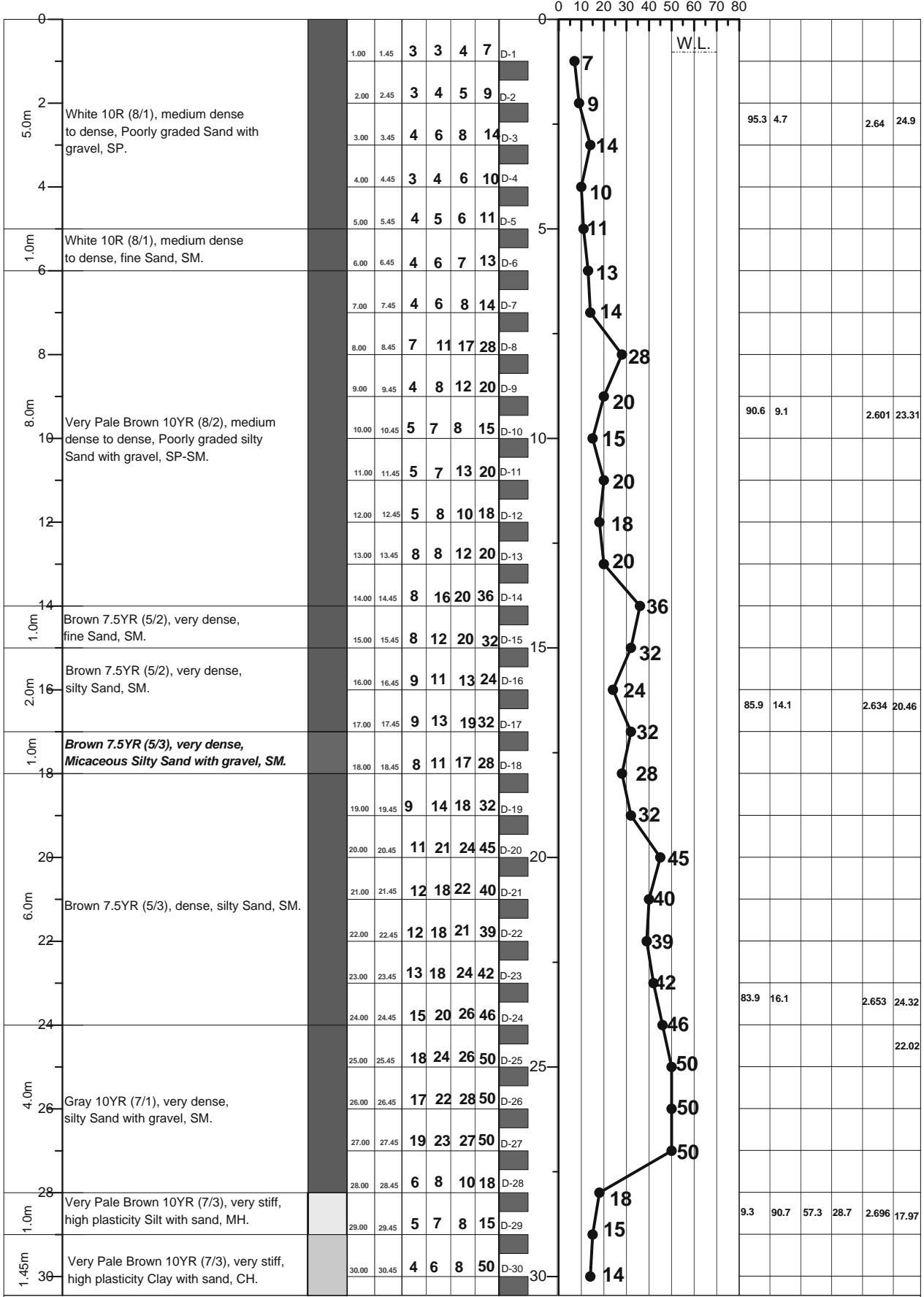
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 90
BRIDGE ID: Z5025_46a
LATITUDE: 25°39'37.292" LONGITUDE: 88°50'34.034"
CHAINAGE: 45.643



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 90	BOREHOLE NO: Z5025_46a	Longitude: N 088°50.543'	Latitude: E 25°39.629'
			Brigde ID: Z5025_46a	Road Name: Rangpur-Badarganj-Parbatipur-Dinajpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 38.0m	Chainage: 45.643, RL: -4.20m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 18-02-2014	Completed Date: 21-02-2014	G. W. T : -0.78m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



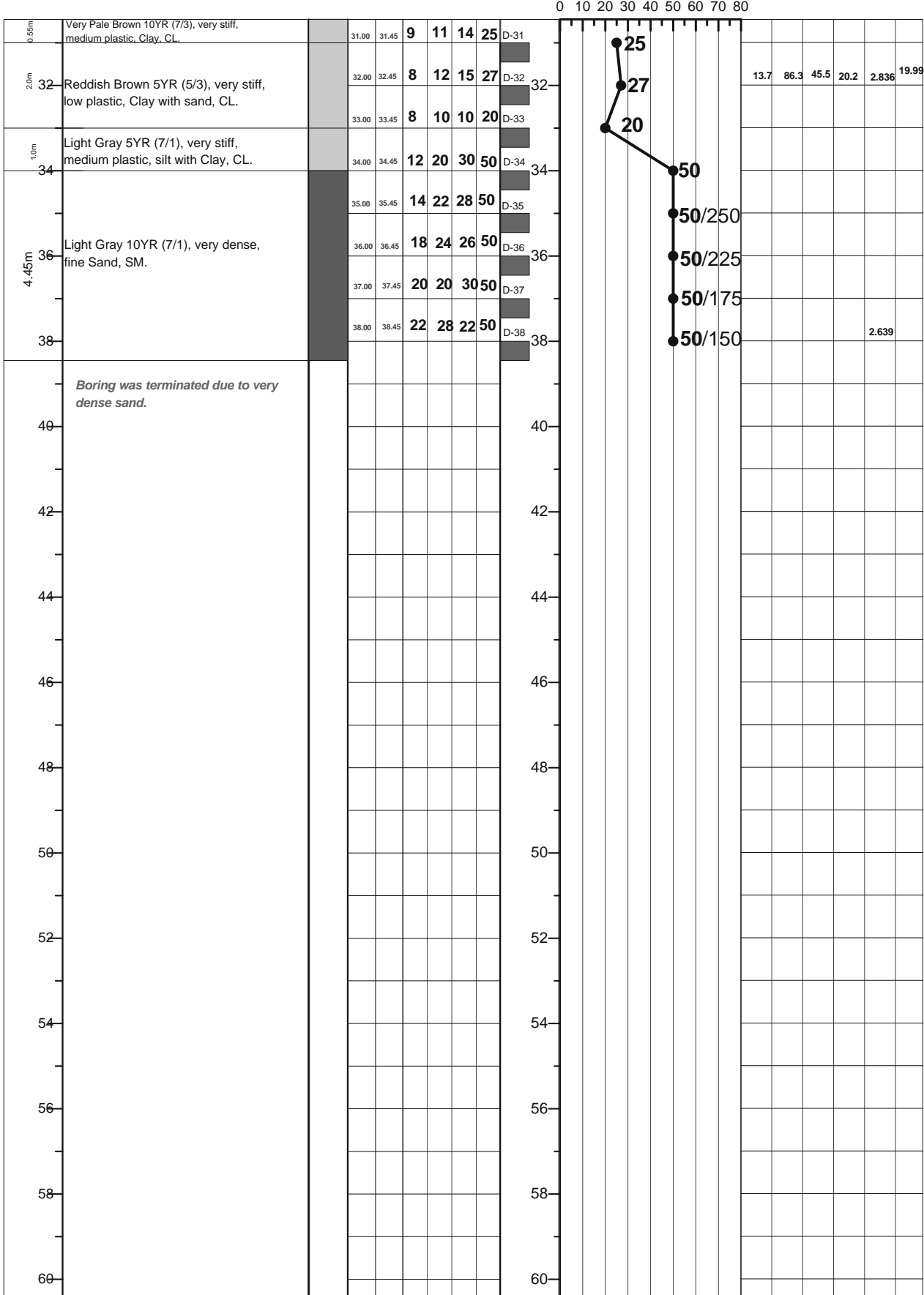
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 90	BOREHOLE NO: Z5025_46a	Longitude: N 088°50.543'	Latitude: E 25°39.629'
			Brigde ID: Z5025_46a	Road Name: Rangpur-Badarganj-Parbatipur-Dinajpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 38.0m	Chainage: 45.643, RL: -4.20m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 18-02-2014	Completed Date: 21-02-2014	G. W. T : -0.78m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING		SPT-N Value Blow/300mm				DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)	N1+N2+N3								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX^m PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

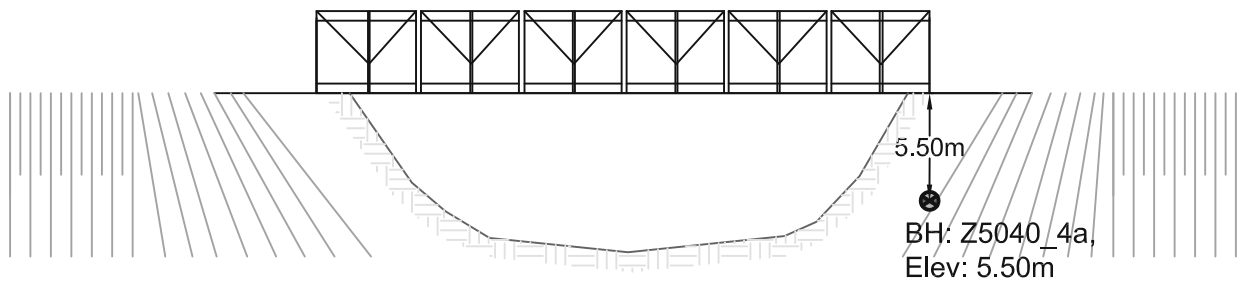
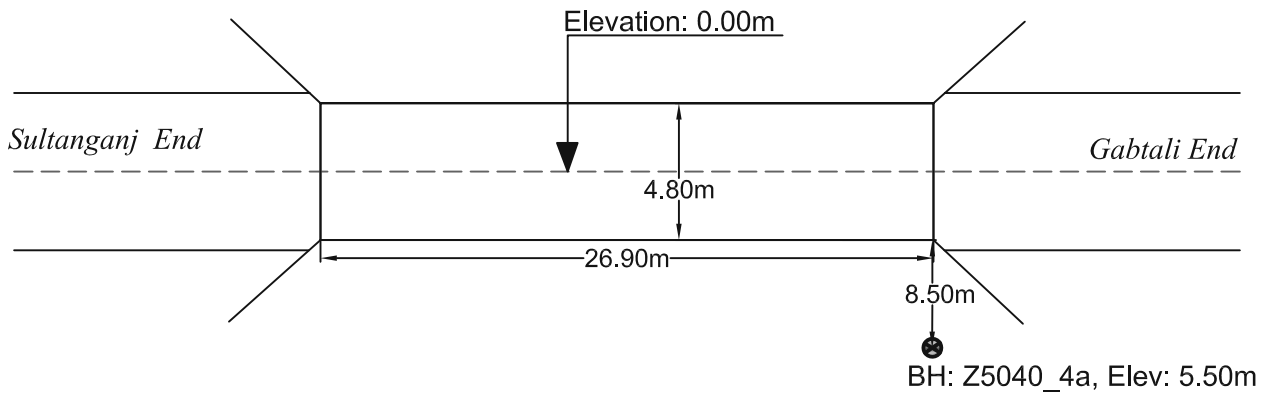
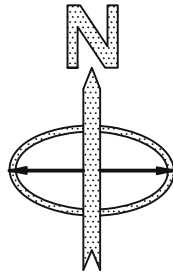
CLIENT: Oriental Consultants Company Limited.

RANK: 91

BRIDGE ID: Z5040_4a

LATITUDE: 24°47'49.824" LONGITUDE: 89°25'37.83"

CHAINAGE: 3.9



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 91	BOREHOLE NO: Z5040_4a	Longitude: N 89°25'37.3"	Latitude: E 24°47'52.0"
			Brigde ID: Z5040_4a	Road Name: Suitanganj (Lichutala)-Madla-Bagbari-Gabtal (Pachmie).	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 3.9, RL: -5.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-02-2014	Completed Date: 23-02-2014	G. W. T : -4.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0-3.0m	Light Brown 10YR (6/3), medium dense to dense, silty Sand with gravel, SM		1.00	1.45	2	3	5	8	D-1							
			2.00	2.45	3	5	6	11	D-2							
			3.00	3.45	1	2	3	5	D-3							
1.0m	Light Yelloowish Brown 10YR (6/4), loose, silty Sand, SM.		4.00	4.45	1	2	2	4	D-4							
1.0m	Gray 7.5YR (5/1), soft, low plasticity Silt with sand, ML		5.00	5.45	5	8	12	20	D-5							
2.0m	Gray 7.5YR (5/1), dense, silty Sand with gravel		6.00	6.45	5	9	12	21	D-6							
			7.00	7.45	5	8	10	18	D-7							
1.0m	Gray 7.5YR (5/1), dense, poorly graded Micaceous silty sand with gravel, SP-SM		8.00	8.45	6	11	14	25	D-8							
1.0m	Gray 7.5YR (5/1), dense, silty sand with gravel, SM		9.00	9.45	6	10	12	22	D-9							
3.0m	Gray 7.5YR (5/1), dense, poorly graded Micaceous silty Sand with gravel, SP-SM.		10.00	10.45	6	8	9	17	D-10							
			11.00	11.45	5	8	11	19	D-11							
			12.00	12.45	6	9	13	22	D-12							
7.0m	Gray 7.5YR (5/1), dense, poorly graded silty Sand with gravel, SP-SM		13.00	13.45	6	10	15	25	D-13							
			14.00	14.45	7	12	16	28	D-14							
			15.00	15.45	6	10	14	24	D-15							
			16.00	16.45	7	11	15	26	D-16							
			17.00	17.45	6	10	16	26	D-17							
			18.00	18.45	6	11	17	28	D-18							
			19.00	19.45	7	10	15	25	D-19							
5.0m	Grayish Brown 7.5YR (6/2), dense, silty Sand with gravel, SM		20.00	20.45	7	12	16	28	D-20							
			21.00	21.45	8	13	17	30	D-21							
			22.00	22.45	8	12	16	28	D-22							
			23.00	23.45	10	15	21	36	D-23							
			24.00	24.45	12	18	25	43	D-24							
6.45m	Light Brown 10YR (6/3), very dense poorly graded Sand with gravel, SP		25.00	25.45	14	24	26	50	D-25							
			26.00	26.45	16	29	21	50	D-26							
			27.00	27.45	15	32	18	50	D-27							
			28.00	28.45	14	35	15	50	D-28							
			29.00	29.45	16	34	16	50	D-29							
			30.00	30.45	18	37	13	50	D-30							

0 10 20 30 40 50 60 70 80

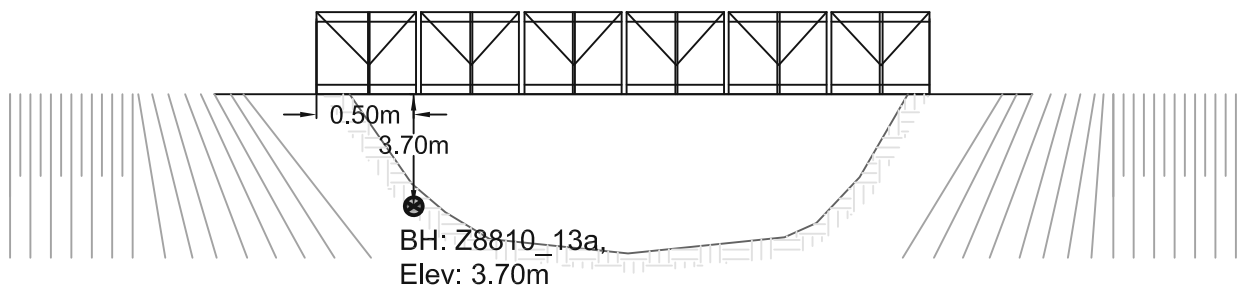
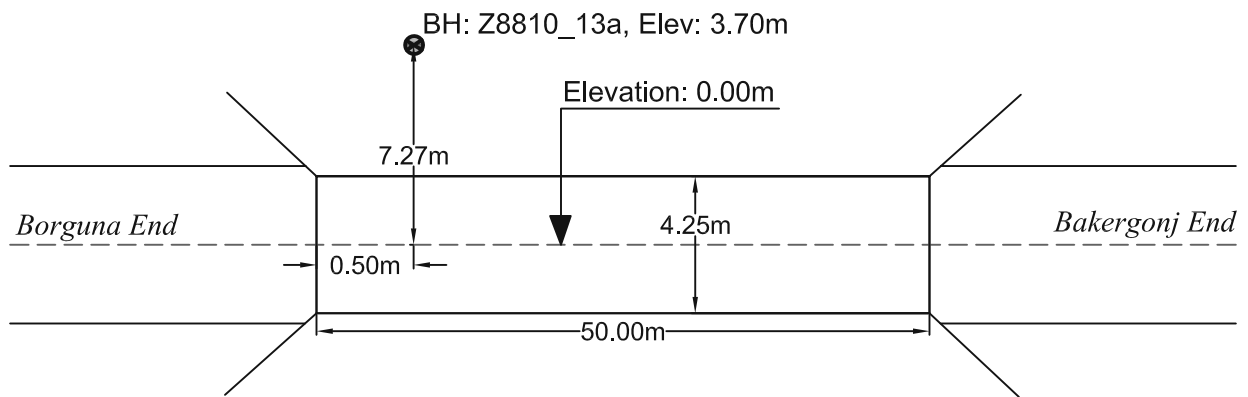
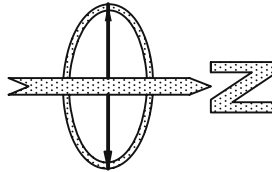
W.L.

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^m PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

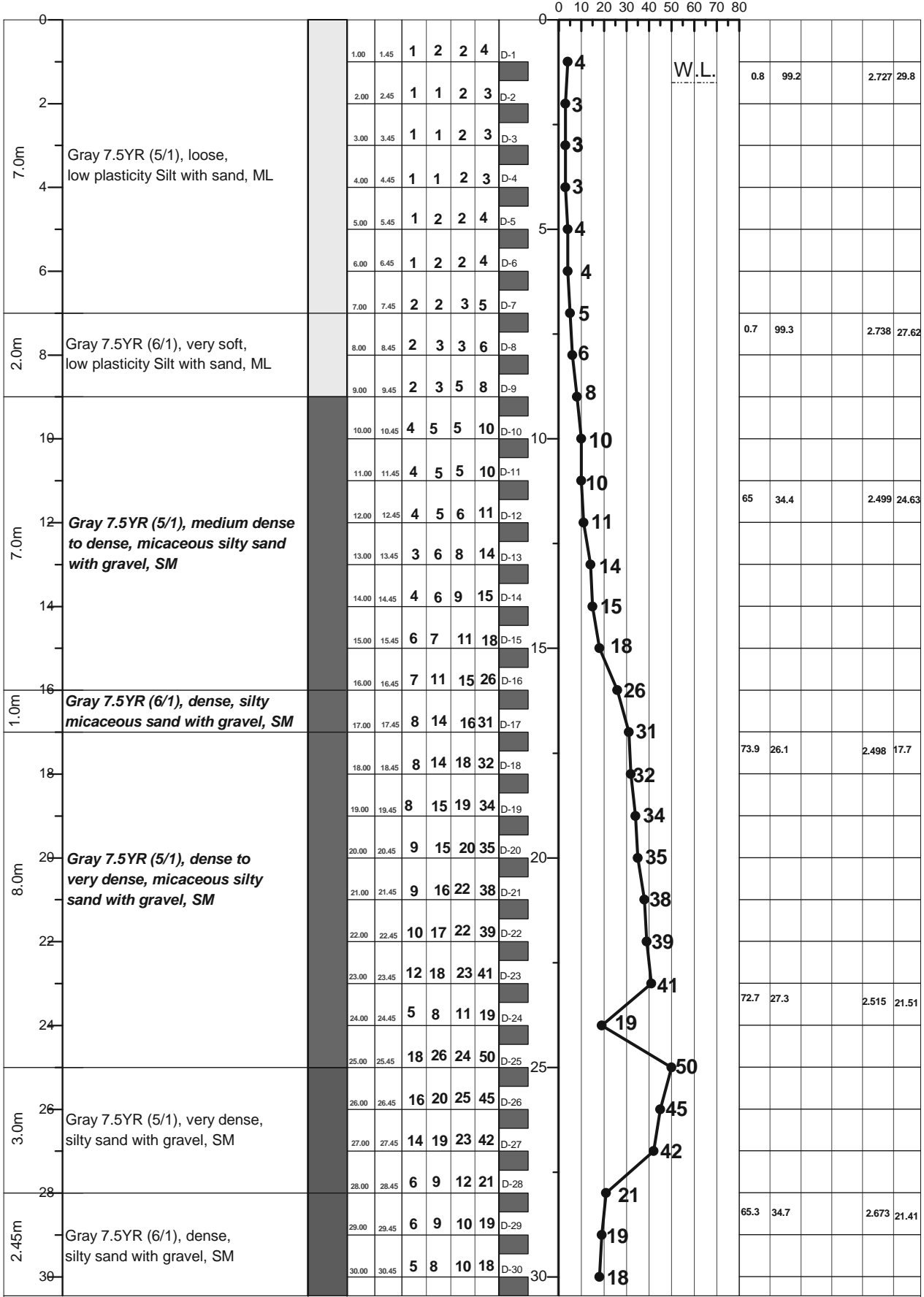
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 92
BRIDGE ID: Z8810_13a
LATITUDE: 22°27'35" LONGITUDE: 90°16'38"
CHAINAGE: 13.913



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 92	BOREHOLE NO: Z8810_13a	Longitude: N 90°16'38"	Latitude: E 22°27'35"
			Brigde ID: Z8810_13a	Road Name: Bakerganj-Padrishibpur-Kathaltali-Subidkhali-Barguna.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 13.913, RL: -3.70m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 26-03-2014	Completed Date: 5-04-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)									



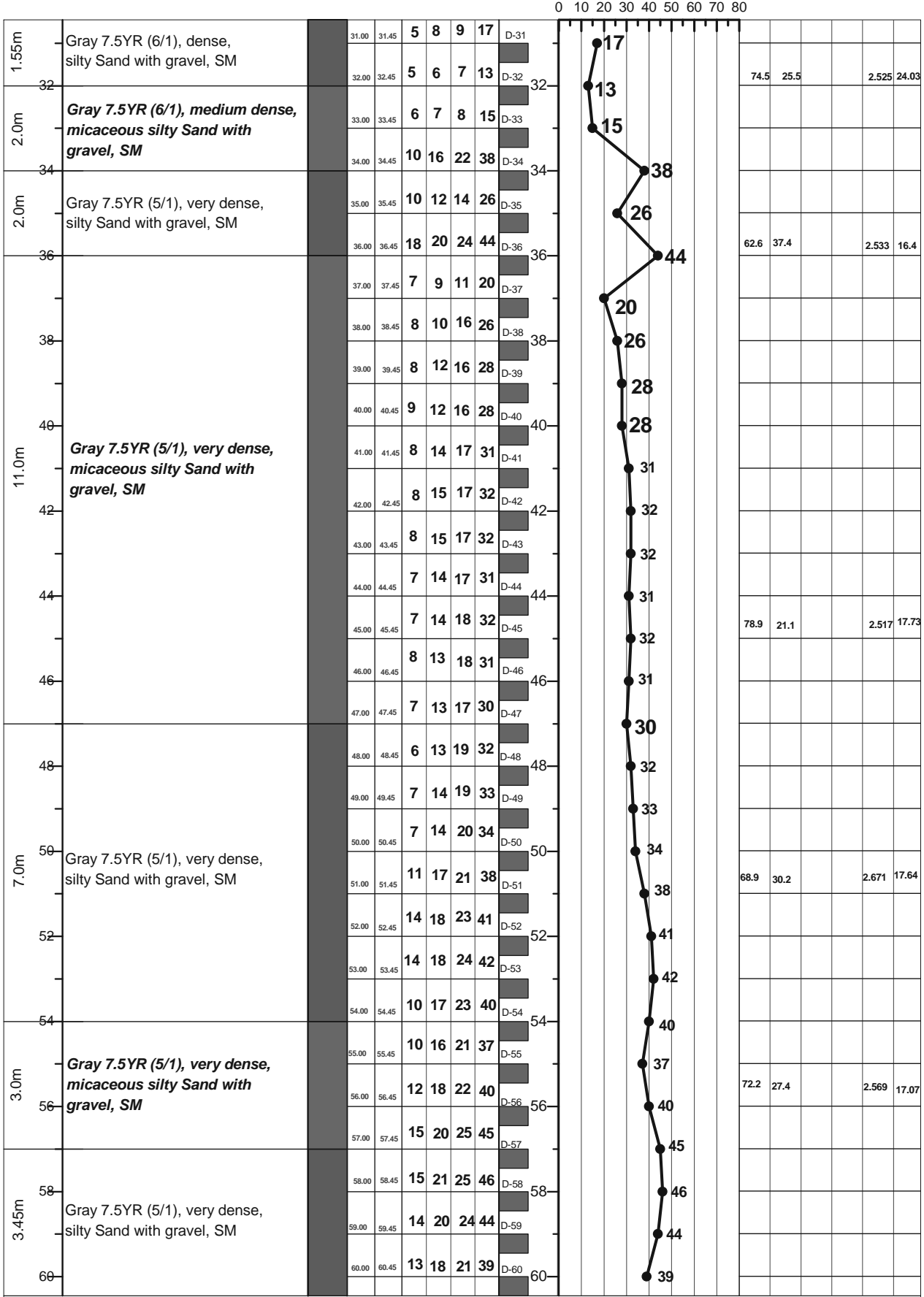
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 92	BOREHOLE NO: Z8810_13a	Longitude: N 90°16'38"	Latitude: E 22°27'35"
			Brigde ID: Z8810_13a	Road Name: Bakerganj-Padrishibpur-Kalthali-Subidkhal-Barguna	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 13.913, RL: -3.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 26-03-2014	Completed Date: 5-04-2014	G. W. T : -1.5m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



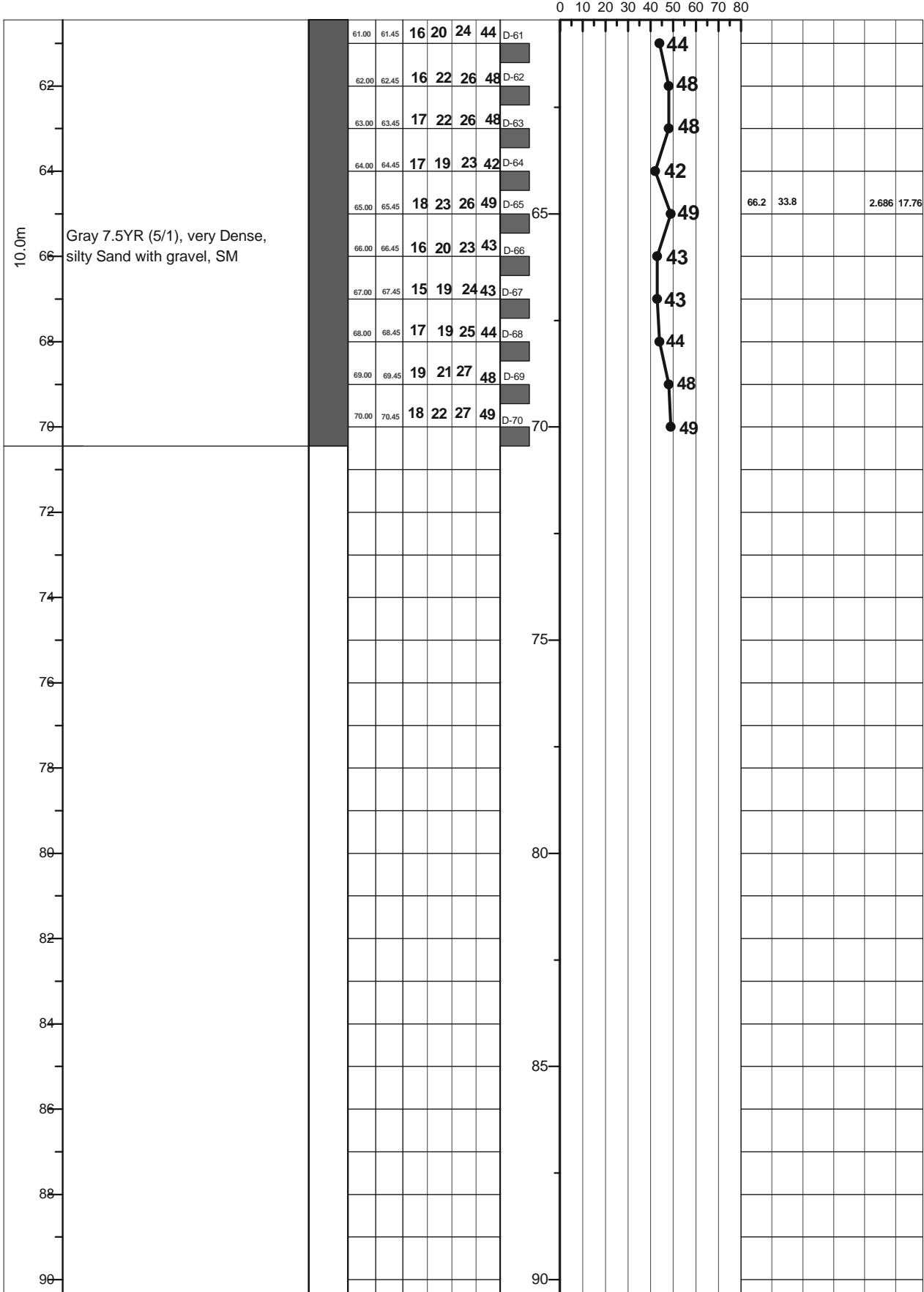
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 92	BOREHOLE NO: Z8810_13a	Longitude: N 90°16'38"	Latitude: E 22°27'35"
			Brigde ID: Z8810_13a	Road Name: Bakerganj-Padrishibpur-Kathaltali-Subidkhali-Barguna.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 13.913, RL: -3.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 26-03-2014	Completed Date: 5-04-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)					% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)			N4=600 (mm)	% Sand	% Passing 200	% LL	% PI						



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

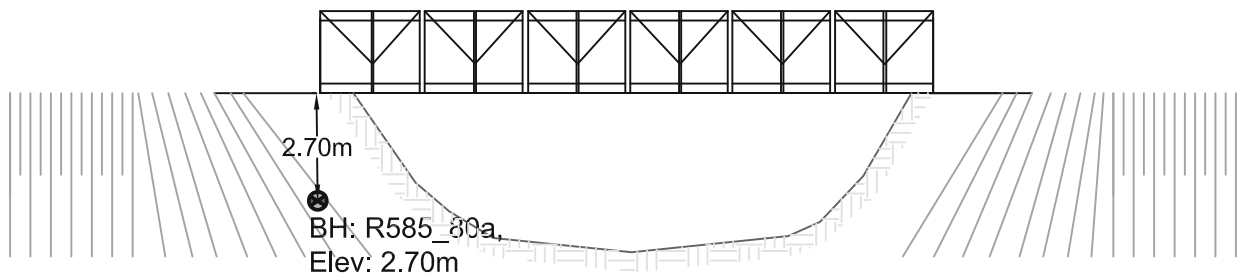
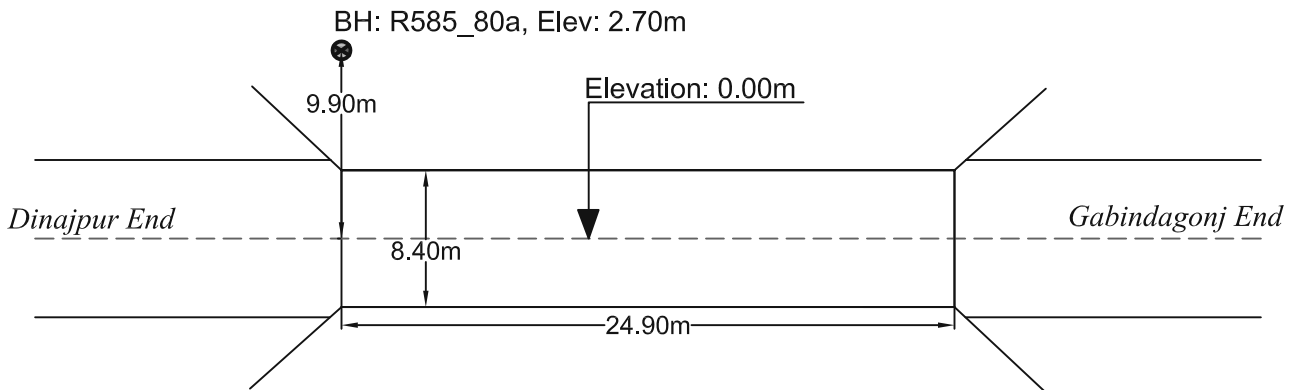
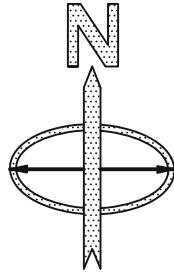
CLIENT: Oriental Consultants Company Limited.

RANK: 93

BRIDGE ID: R585_80a

LATITUDE: 25°32'34.9" LONGITUDE: 88°50'8.5"

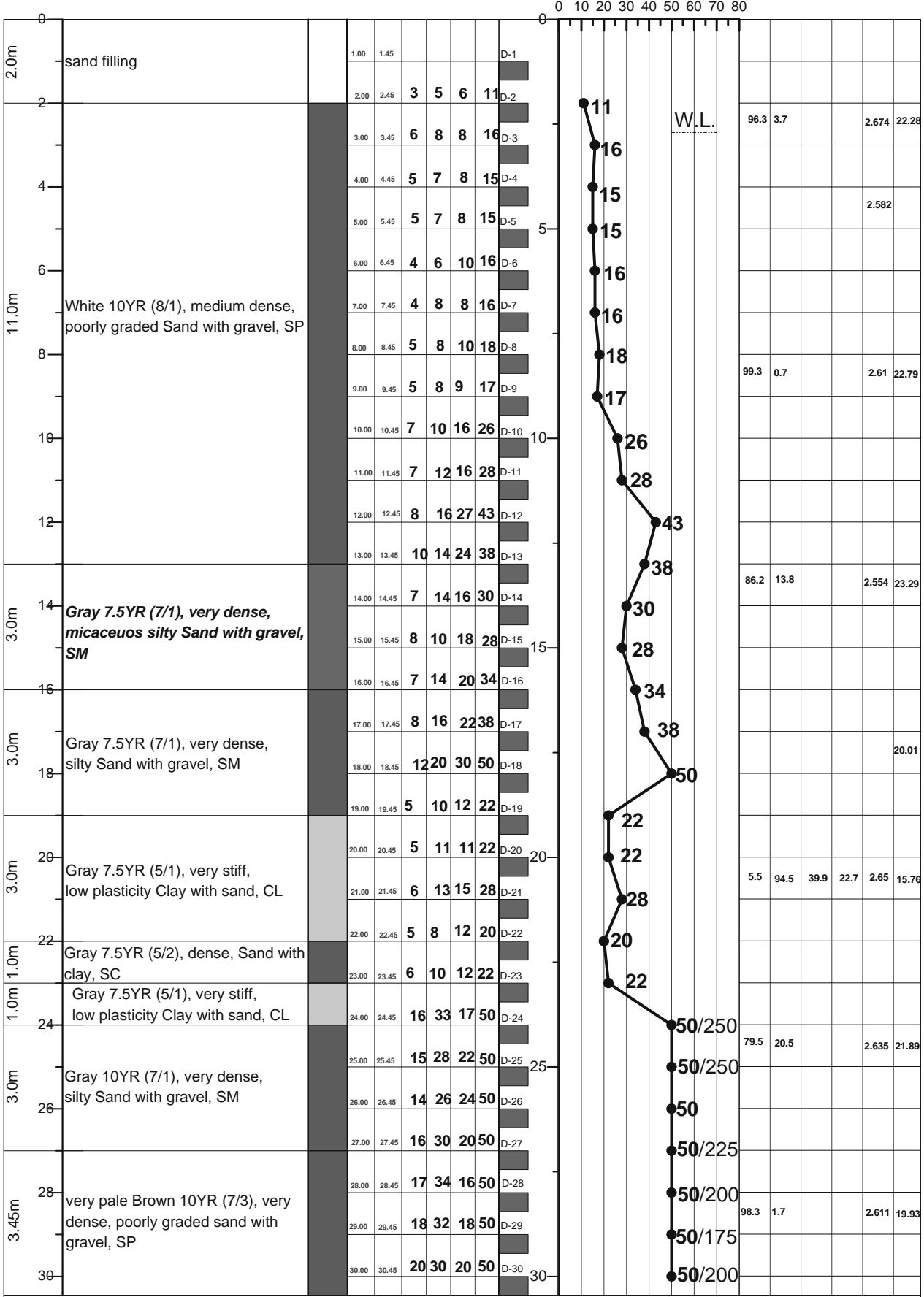
CHAINAGE: 80.501



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 93	BOREHOLE NO: R585-80a	Longitude: N 88°50'8.5"	Latitude: E 25°32'34.9"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Brigde ID: R585-80a	Road Name: Gobindagnj-Goraghat-Birampur-Fulbari-Dinajpur.	
Type of Drill Rig: Manual Rotary			Borehole Depth: 30.0m	Chainage: 80.501, RL: -2.7m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 28-02-2014	Completed Date: 2-03-2014	G. W. T : -2.7m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

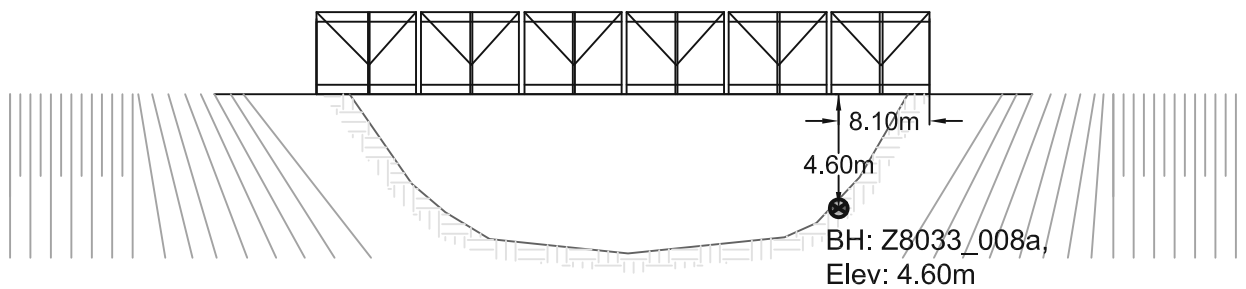
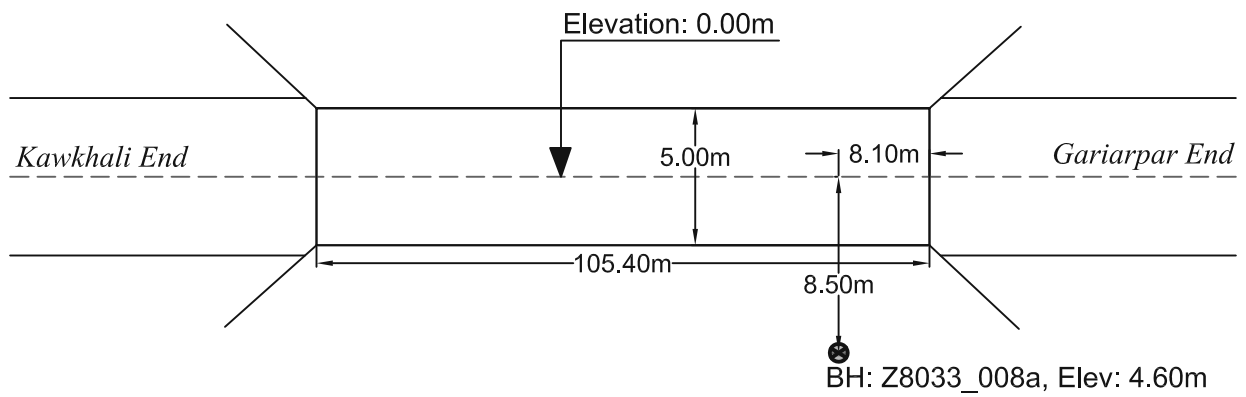
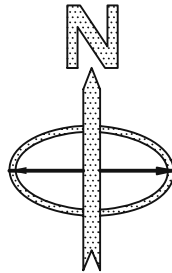
CLIENT: Oriental Consultants Company Limited.

RANK: 94

BRIDGE ID: Z8033_008a

LATITUDE: 22°46'51.94" LONGITUDE: 90°15'14"

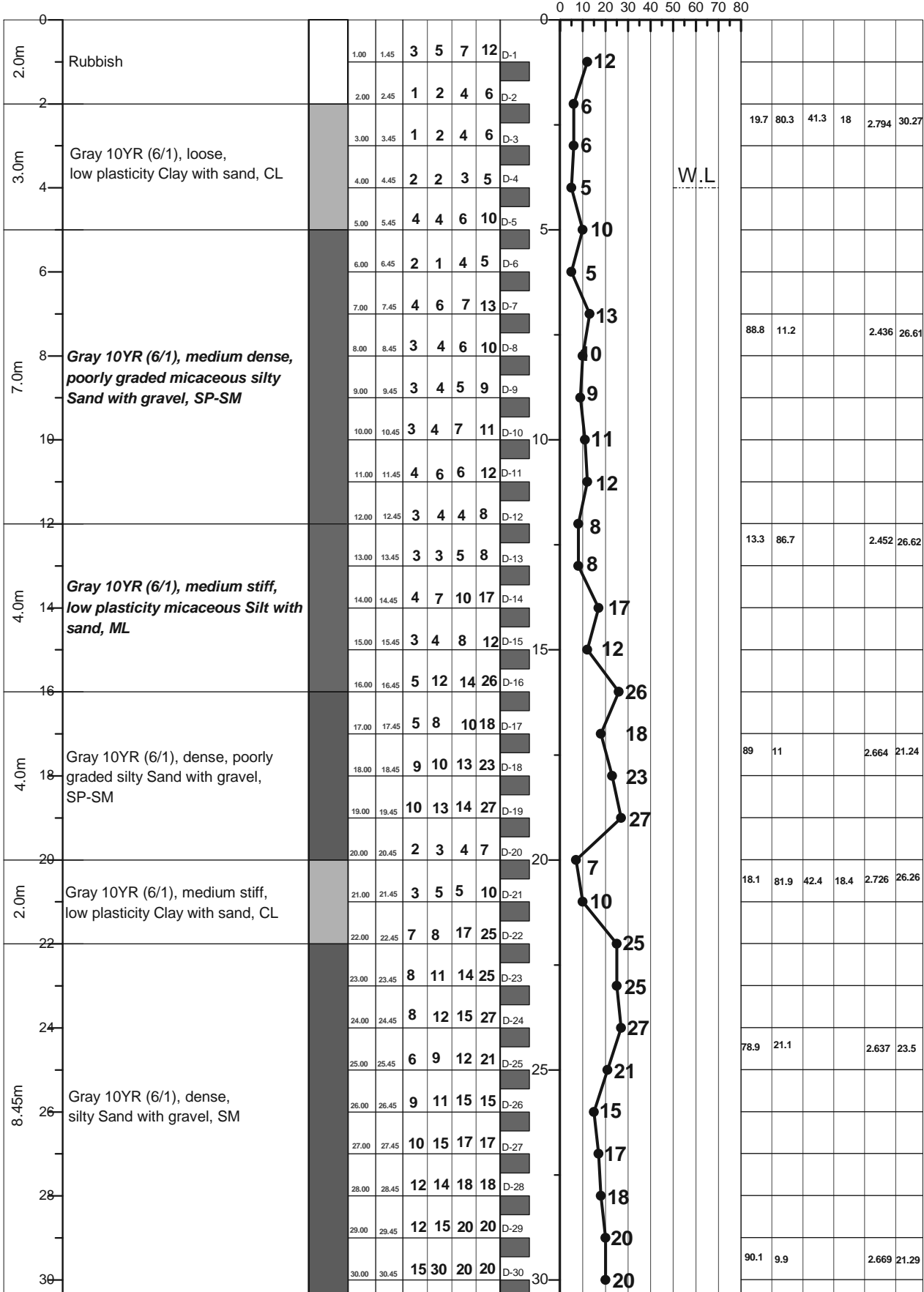
CHAINAGE: 0



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 94	BOREHOLE NO: Z8033_008a	Longitude: N 90°15'14"	Latitude: E 22°46'51.94"
			Brigde ID: Z8033_008a	Road Name: Gariarpar-Banaripara-Sawrupkati-Kawkhali-Naikati.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 0, RL: -4.6m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 6-04-2014	Completed Date: 11-04-2014	G. W. T : -4.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₆₀₀ (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

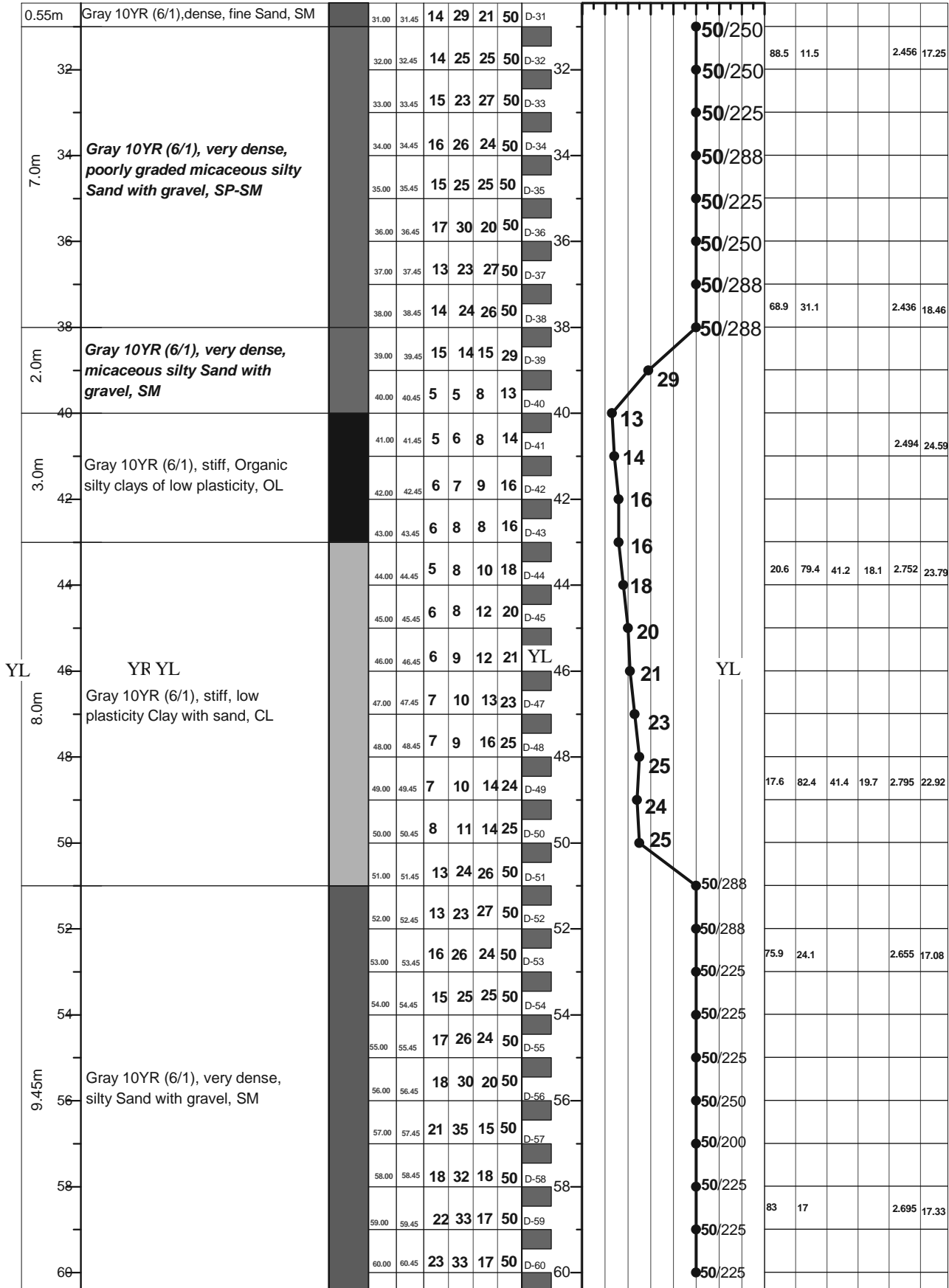
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 94	BOREHOLE NO: Z8033_008a	Longitude: N 90°15'14"	Latitude: E 22°46'51.94"
			Brigde ID: Z8033_008a	Road Name: Gariarpar-Banaripara-Sawrupkati-Kawkhali-Naikati	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 0, RL: -4.6m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 6-04-2014	Completed Date: 11-04-2014	G. W. T : -4.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH XT SPT VALL (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								

0 10 20 30 40 50 60 70 80

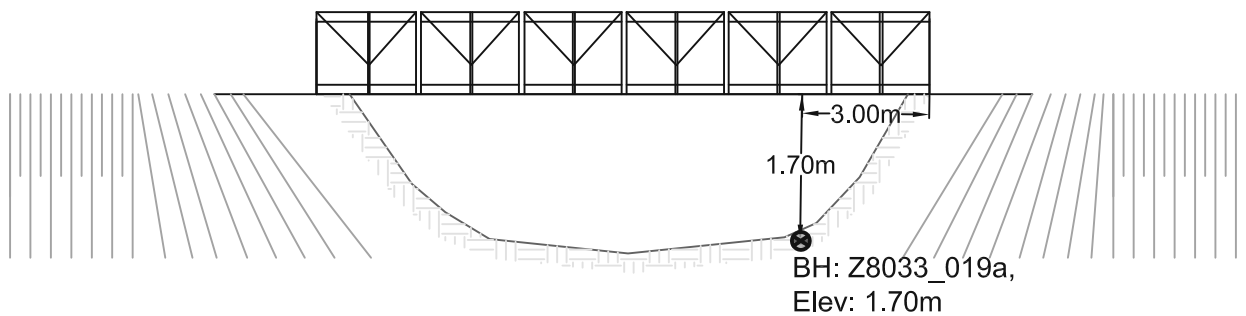
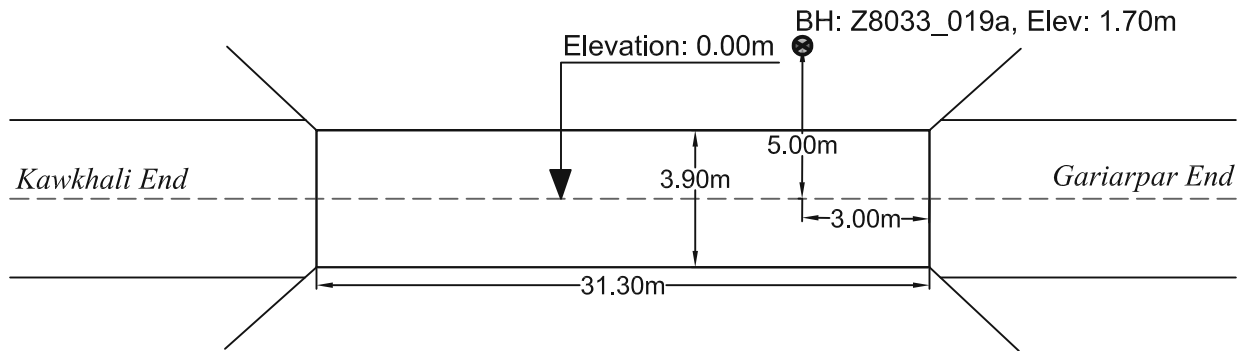
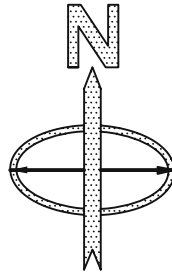


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY
 SILT
 PEAT/HIGHLY ORGANIC SOIL
 UNDISTURBED SAMPLE
 MICACEOUS FINE SAND/SILT
 SAND
 SHALE
 DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

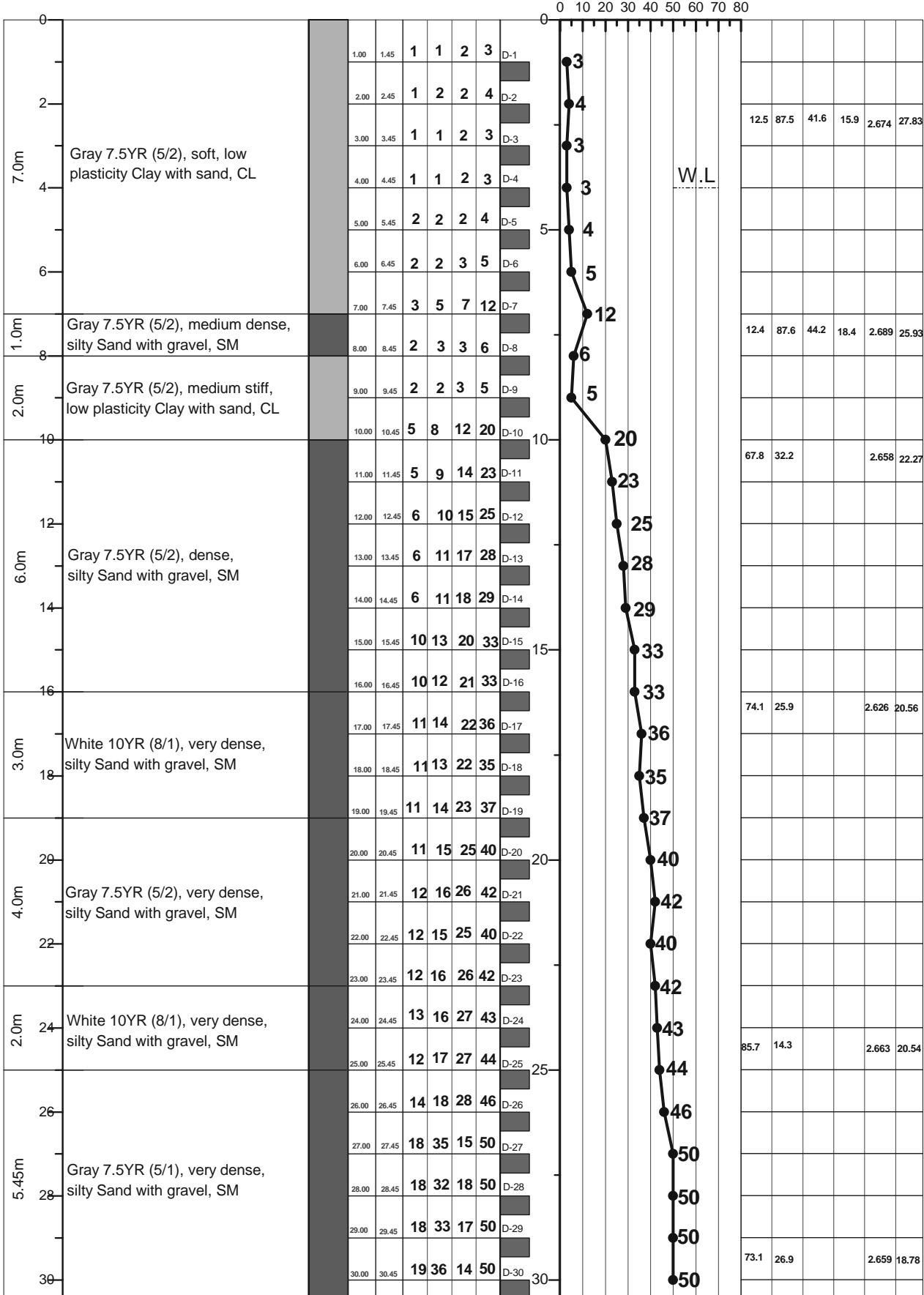
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 95
BRIDGE ID: Z8033_019a
LATITUDE: 22°46'26.488" LONGITUDE: 90°9'17.638"
CHAINAGE: 19.103



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 95	BOREHOLE NO: Z8033_019a	Longitude: N 90° 9' 17.638"	Latitude: E 22° 46' 26.488"
			Brigde ID: Z8033_019a	Road Name: Gariarpar-Banaripara-Sawrupkati-Kawkhali-Naikati.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 19.103, RL: -1.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 2-04-2014	Completed Date: 10-04-2014	G. W. T : -4.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

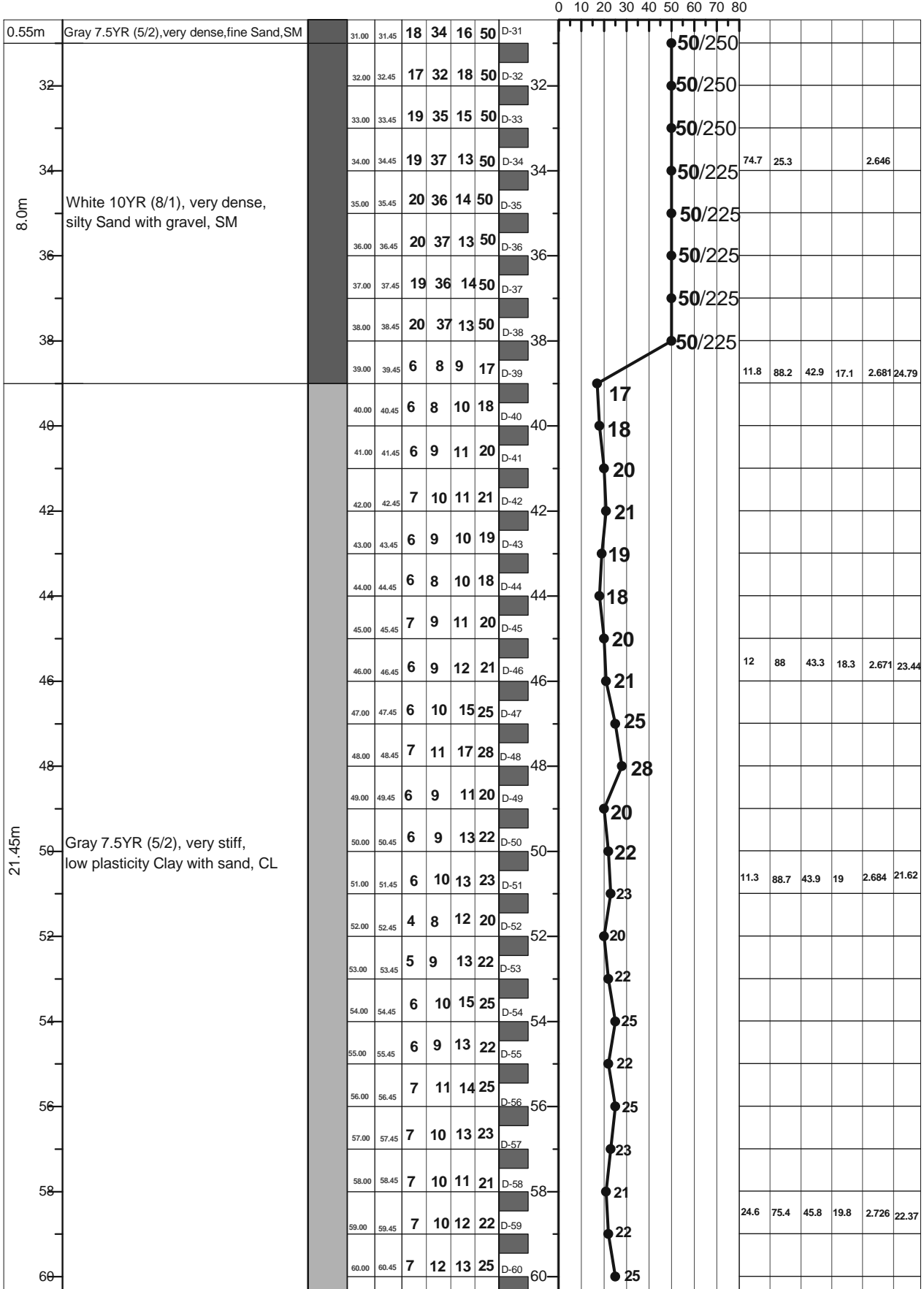
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 95	BOREHOLE NO: Z8033_019a	Longitude: N 90° 9' 17.638"	Latitude: E 22° 46' 26.488"
			Brigde ID: Z8033_019a	Road Name: Gariarpar-Banaripara-Sawrupkati-Kawkhali-Naikati	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: 19.103, RL: -1.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 2-04-2014	Completed Date: 10-04-2014	G. W. T : -4.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								



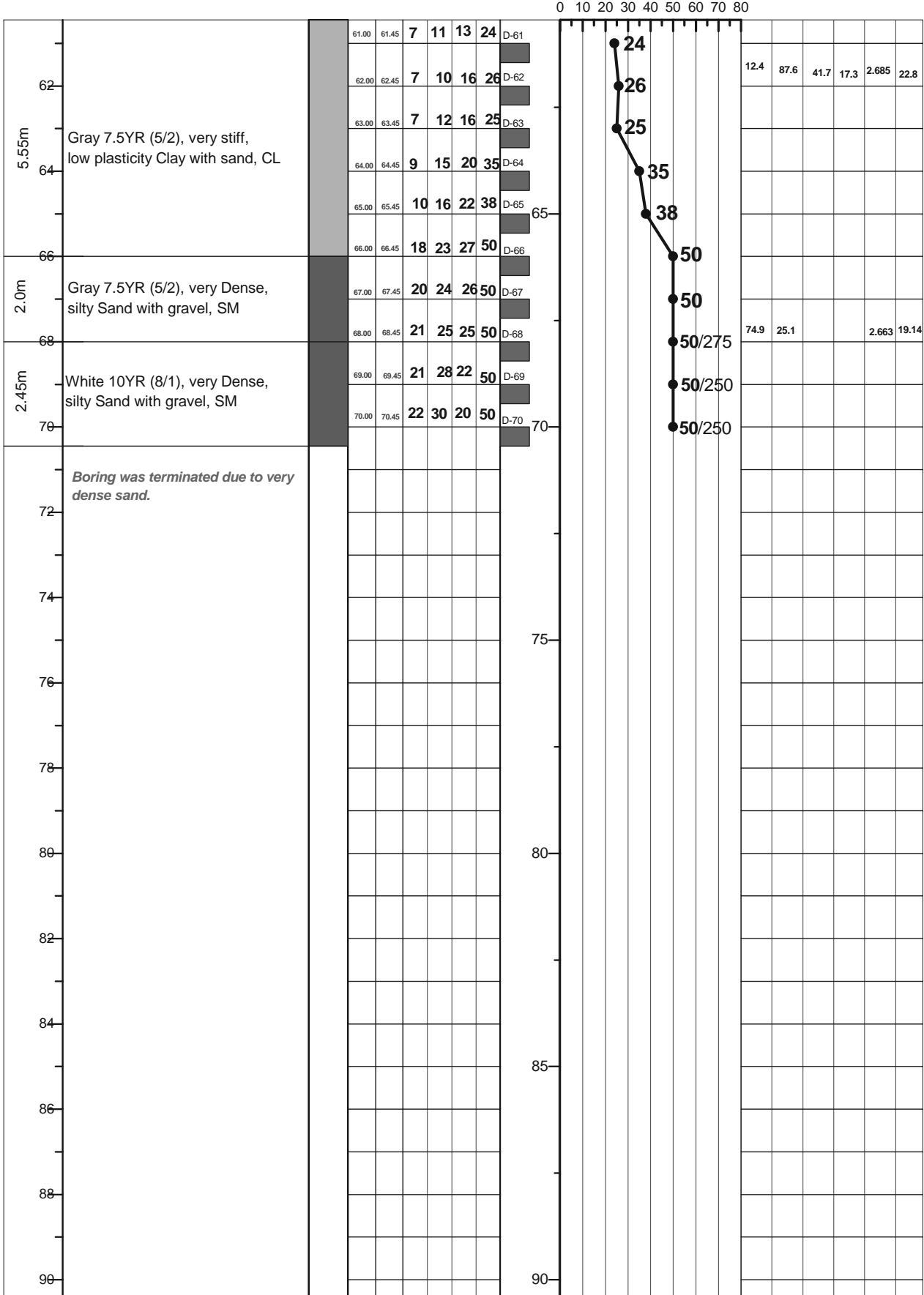
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 95	BOREHOLE NO: Z8033_019a	Longitude: N 90° 9' 17.638"	Latitude: E 22° 46' 26.488"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 70.0m	Chainage: 19.103, RL: -1.7m
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 2-04-2014		Completed Date: 10-04-2014	G. W. T : -4.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING				SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)									



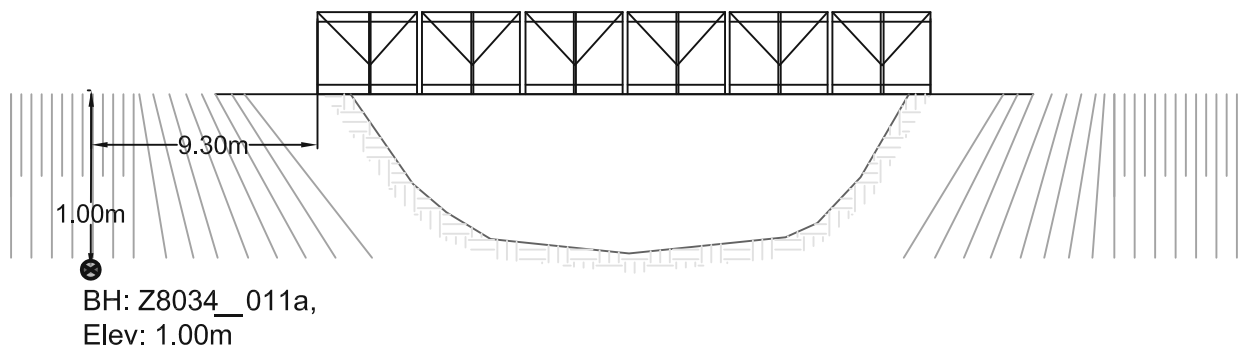
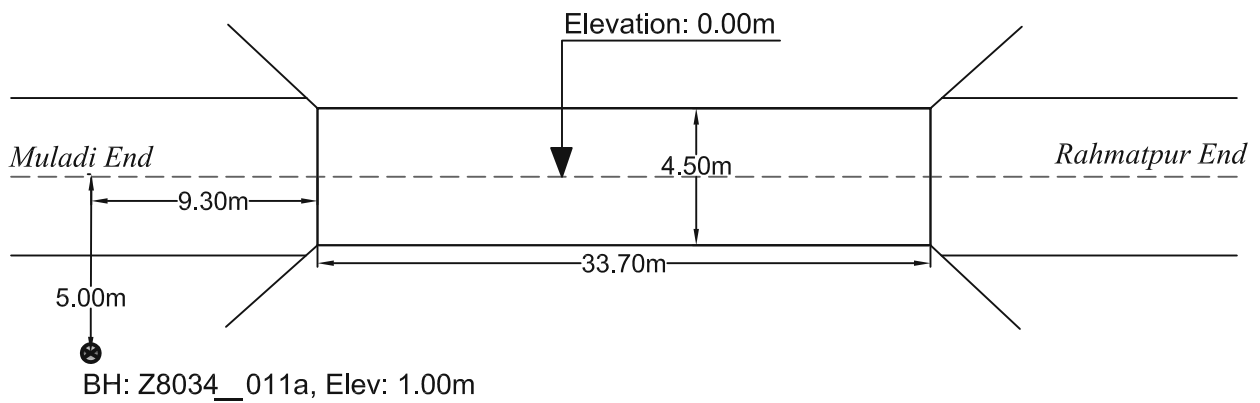
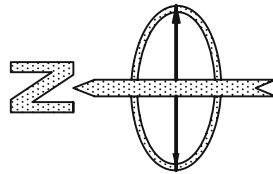
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 96
BRIDGE ID: Z8034_011a
LATITUDE: 22°50'15.485" LONGITUDE: 90°22'34.978"
CHAINAGE: 12.418



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 96	BOREHOLE NO: Z8034_011a	Longitude: N 90°9'17.638"	Latitude: E 22°50'15.485"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Brigde ID: Z8034_011a	Road Name: Rahamatpur-Babuganj-MuladiHizla.	
Type of Drill Rig: Manual Rotary			Borehole Depth: 60.0m	Chainage: 12.418, RL: -1.0m	
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 30-03-2014	Completed Date: 03-04-2014	G. W. T : -9.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)								
0								0							
2.0m	Filling sand.		1.00	1.45	2	3	3	6	D-1						
2			2.00	2.45	2	3	2	5	D-2						
1.0m	Brown 7.5YR (5/3), soft, low plastic, silt with Sand, SM.		3.00	3.45	1	0	2	2	D-3						
4			4.00	4.45	1	2	2	4	D-4		76.4	23.6		2.638	26.24
3.0m	Gray 7.5YR (6/1), very loose, silty Sand with gravel, SM.		5.00	5.45	1	2	1	3	D-5		7.2	92.8	41.4	17.8	2.781
6			6.00	6.45	1	1	1	2	D-6		98.3	1.7		2.698	26.73
1.0m	Gray 10YR (6/1), very soft, low plasticity Clay with sand, CL.		7.00	7.45	2	2	2	4	D-7						
2.0m	Gray 10YR (6/1), loose, Poorly graded Sand with gravel, SP.		8.00	8.45	2	3	4	7	D-8						
1.0m	Gray 7.5YR (6/1), medium dense to dense, fine Sand, SM.		9.00	9.45	2	3	5	8	D-9						
10			10.00	10.45	1	2	2	4	D-10						
3.0m	Gray 7.5YR (6/1), medium stiff, low plasticity Silt with sand, ML.		11.00	11.45	2	2	4	6	D-11		18.2	81.6		2.67	25.12
12			12.00	12.45	1	2	3	5	D-12						
14			13.00	13.45	4	6	8	14	D-13						
5.0m	Gray 10YR (6/1), medium stiff, low plasticity Silt with sand, ML.		14.00	14.45	3	5	6	11	D-14		26.6	73.4		2.648	23.53
16			15.00	15.45	4	4	5	9	D-15						
18			16.00	16.45	3	4	6	10	D-16						
20			17.00	17.45	3	4	6	10	D-17						
22	Gray 10YR (6/1), medium dense to dense, silty Sand with gravel, SM.		18.00	18.45	3	5	8	13	D-18						
24			19.00	19.45	5	7	10	17	D-19						
26			20.00	20.45	5	8	10	18	D-20		73.8	26.2		2.658	21.58
28			21.00	21.45	6	8	12	20	D-21						
30			22.00	22.45	8	14	16	30	D-22						
32			23.00	23.45	6	10	12	22	D-23						
34			24.00	24.45	6	8	10	18	D-24						
36			25.00	25.45	7	10	13	23	D-25						
38			26.00	26.45	7	10	13	23	D-26		67.6	32.4		2.622	15.97
40			27.00	27.45	8	10	15	25	D-27						
42			28.00	28.45	10	12	16	28	D-28						
44	Gray 7.5YR (6/1), dense, silty Sand with gravel, SM.		29.00	29.45	10	14	16	30	D-29						
46			30.00	30.45	12	16	20	36	D-30						

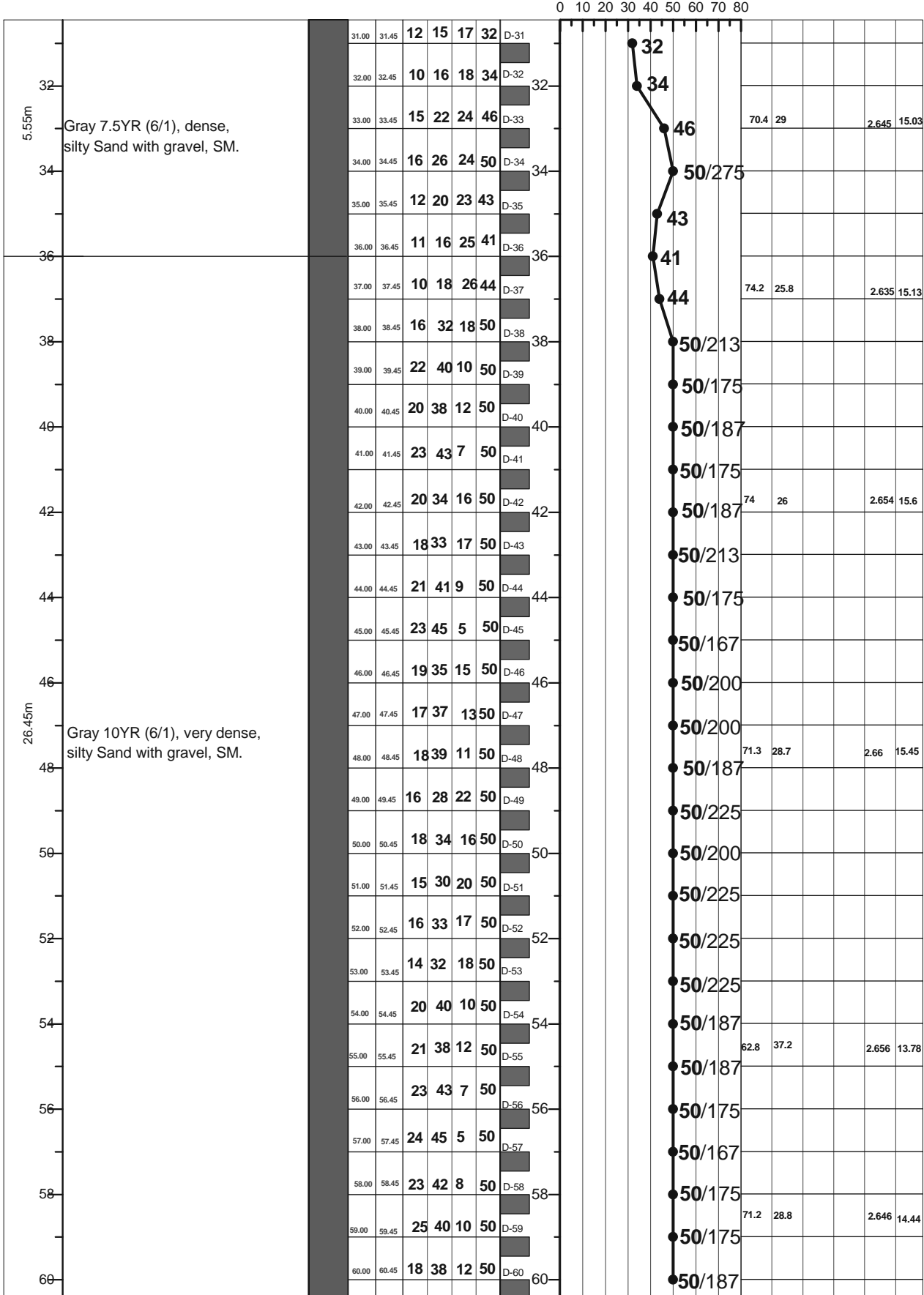
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 96	BOREHOLE NO: Z8034_011a	Longitude: N 90°9'17.638"	Latitude: E 22°50'15.485"
			Brigde ID: Z8034_011a	Road Name: Rahamatpur-Babuganj-MuladiHizia.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 12.418, RL: -1.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 30-03-2014	Completed Date: 03-04-2014	G. W. T : -9.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

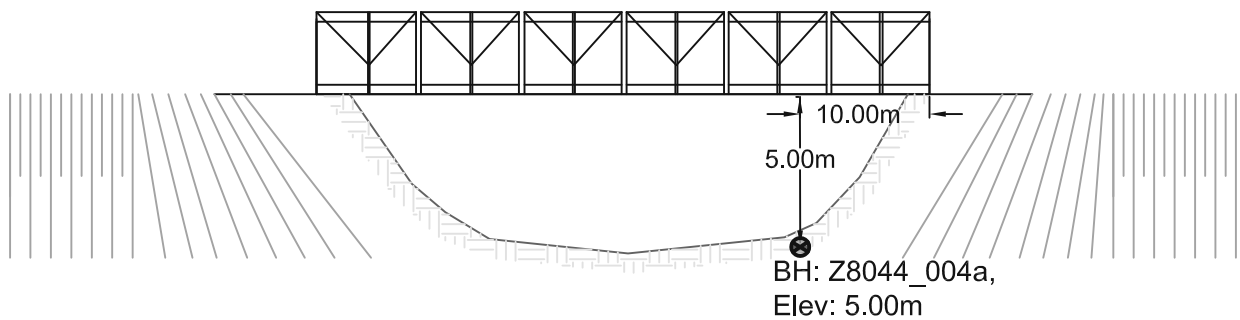
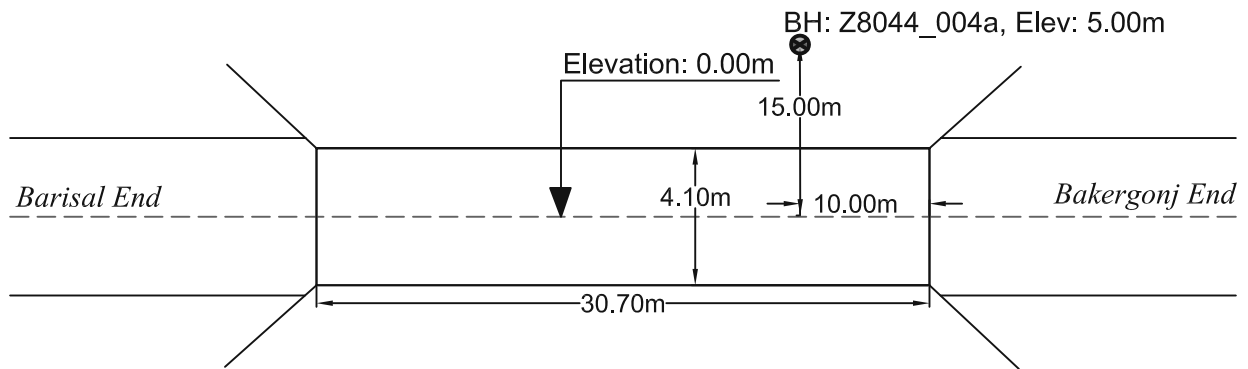
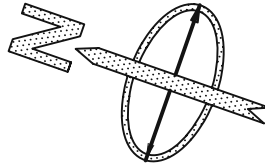


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

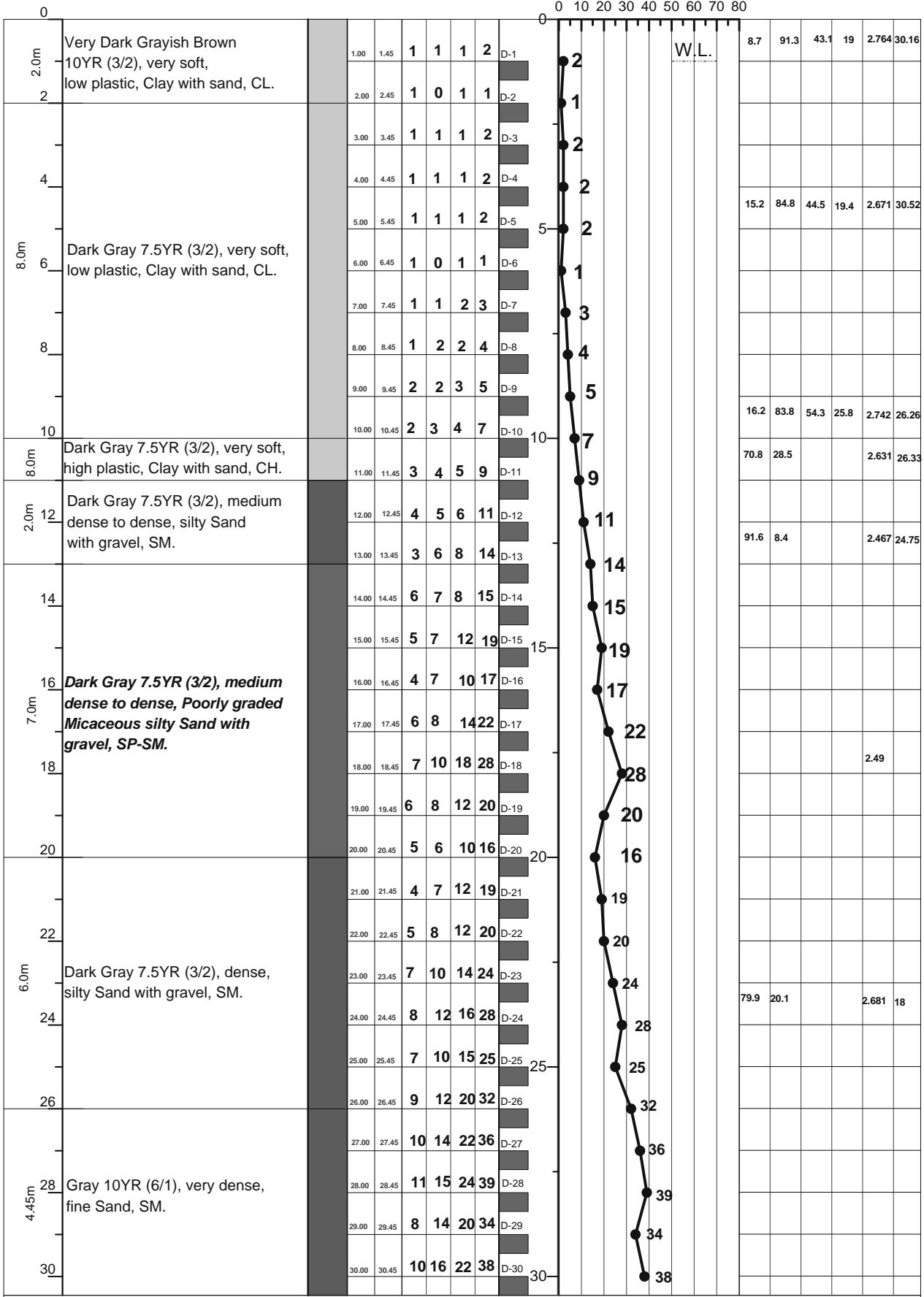
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 97
BRIDGE ID: Z8044_004a
LATITUDE: 22°39'45.663" LONGITUDE: 90°24'49.351"
CHAINAGE: 3.57



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 97	BOREHOLE NO: Z8044_004a		Longitude: N 90°9'17.638"		Latitude: E 22°39'45.663"		
			Brigde ID: Z8044_004a		Road Name: Barisal (Dinerpool)LaxmipashaDumki.				
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary		Borehole Depth: 60.0m		Chainage: 3.57, RL: -3m		
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 09-04-2014		Completed Date: 15-04-2014		G. W. T : -1.0m.		

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



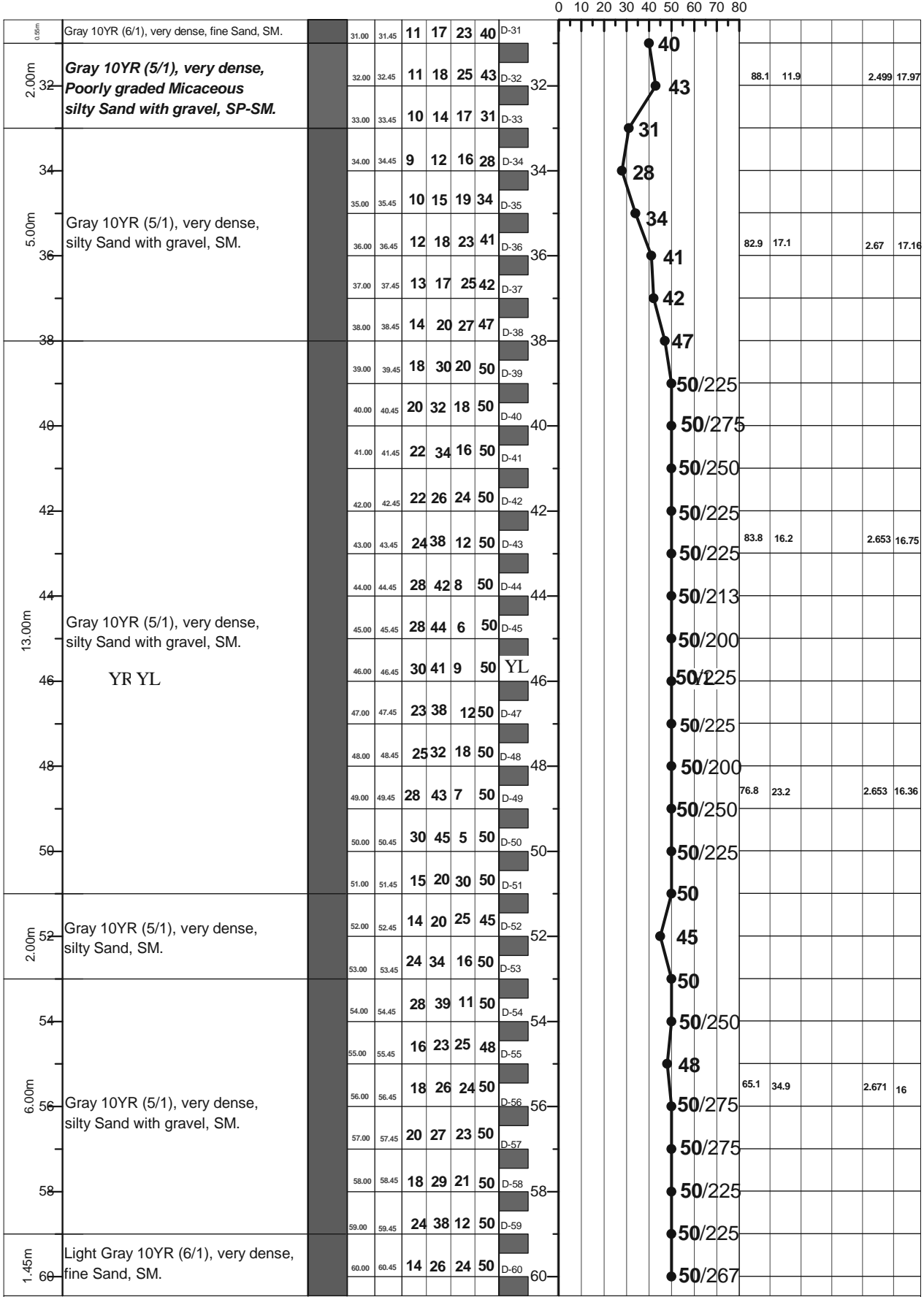
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 97	BOREHOLE NO: Z8044_004a	Longitude: N 90°9'17.638"	Latitude: E 22°39'45.663"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 60.0m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 09-04-2014		Completed Date: 15-04-2014	
				Chainage: 3.57, RL: -3m	
				G. W. T : -1.0m.	

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N ₁₀₀ (Blows/300mm)	DISTURBED SAMPLE	DEPTH SPT VALL (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₁₅₀₋₃₀₀ (mm)	N ₃₀₀₋₄₅₀ (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY
 SILT
 PEAT/HIGHLY ORGANIC SOIL
 UNDISTURBED SAMPLE
 MICACEOUS FINE SAND/SILT
 SAND
 SHALE
 DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^m PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

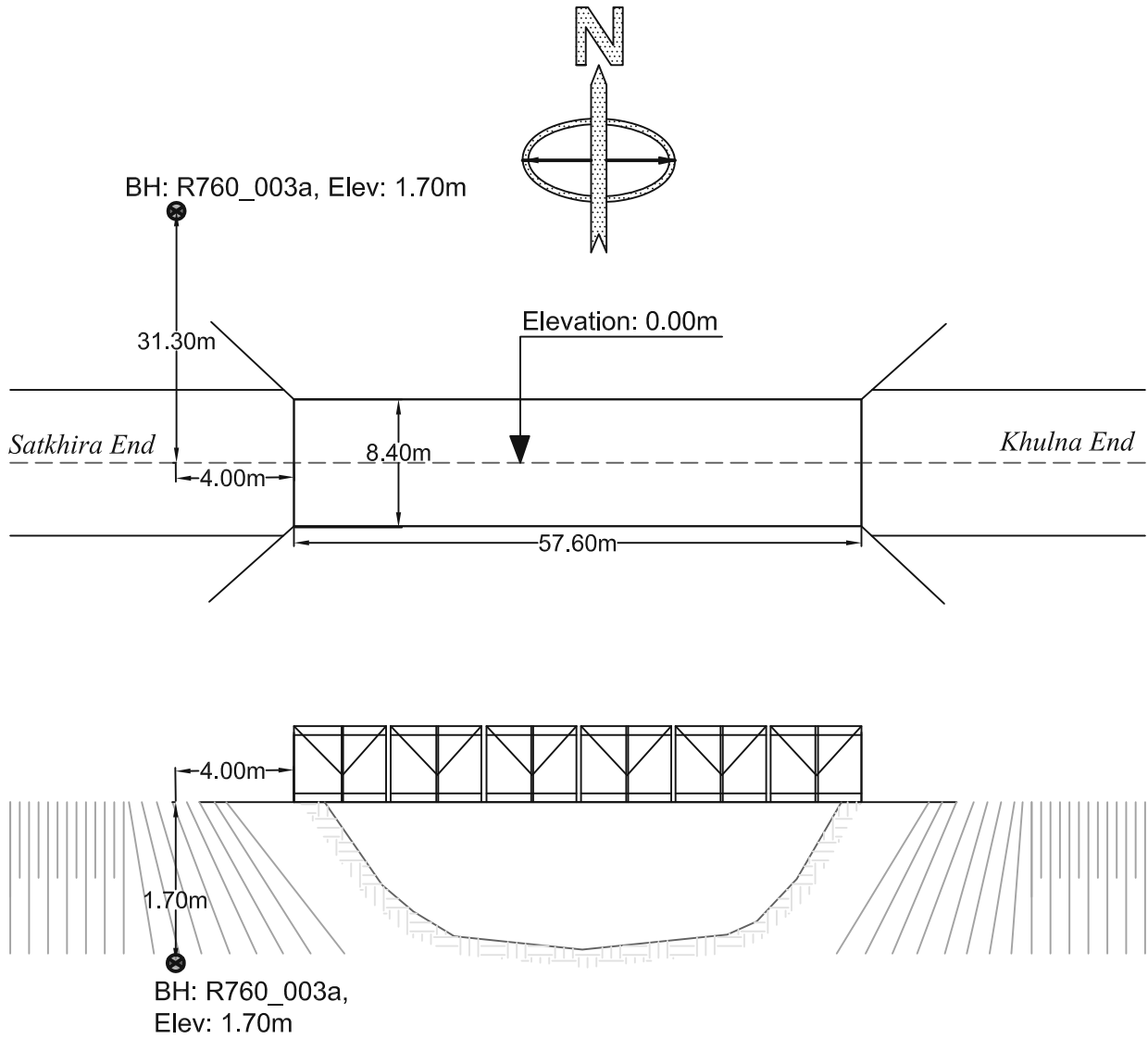
CLIENT: Oriental Consultants Company Limited.

RANK: 98

BRIDGE ID: R760_003a

LATITUDE: 22°48'2.516" LONGITUDE: 89°32'21.517"

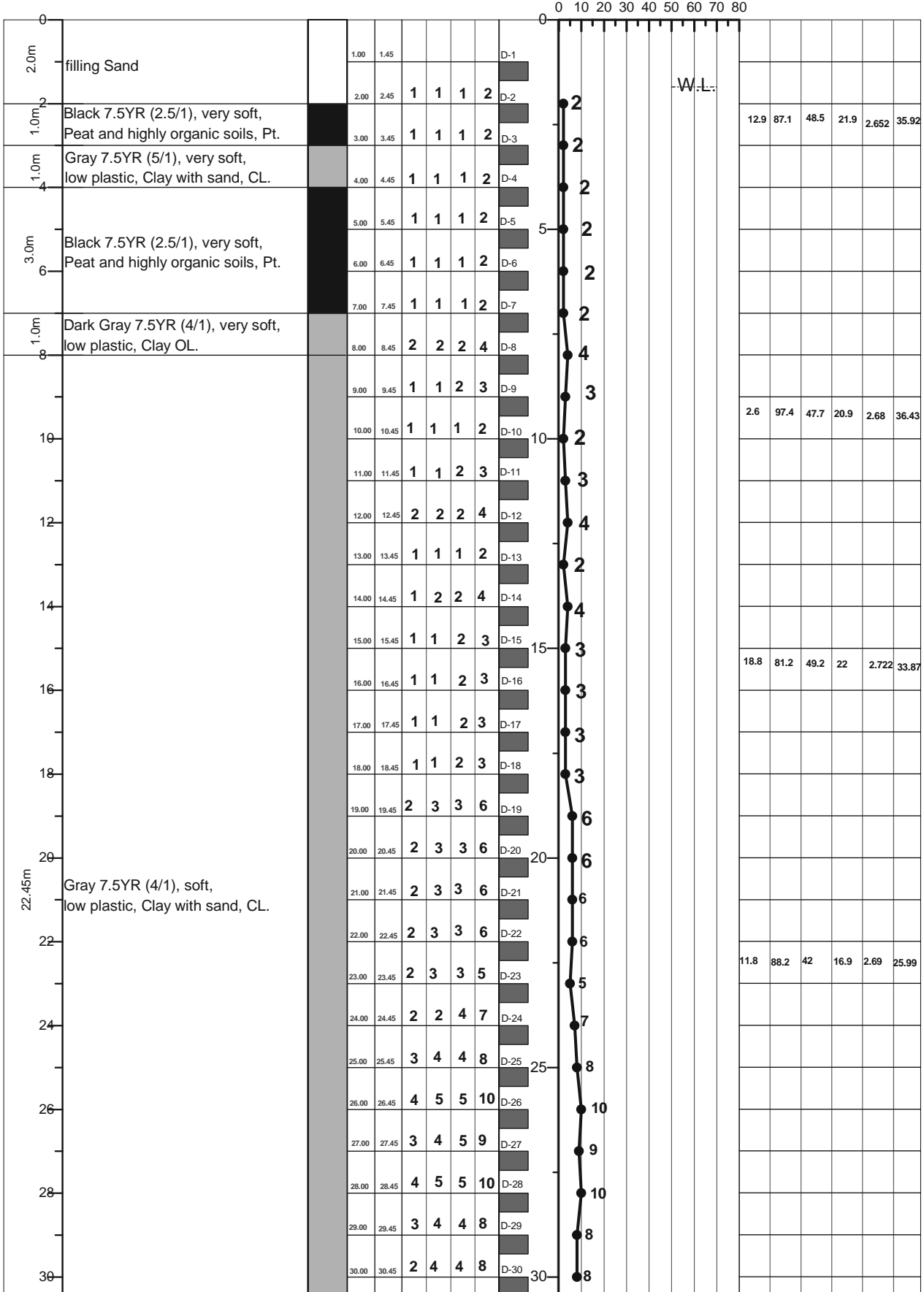
CHAINAGE: 3.37



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 98	BOREHOLE NO: R760_003a Brigde ID: R760_003a	Longitude: N 089°33'52.7" Road Name: Khulna - Chuknagar - Satkhira road.	Latitude: E 22°48'55.1"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 3.37, RL: -1.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 22-03-2014	Completed Date: 27-03-2014	G. W. T : -1.6m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

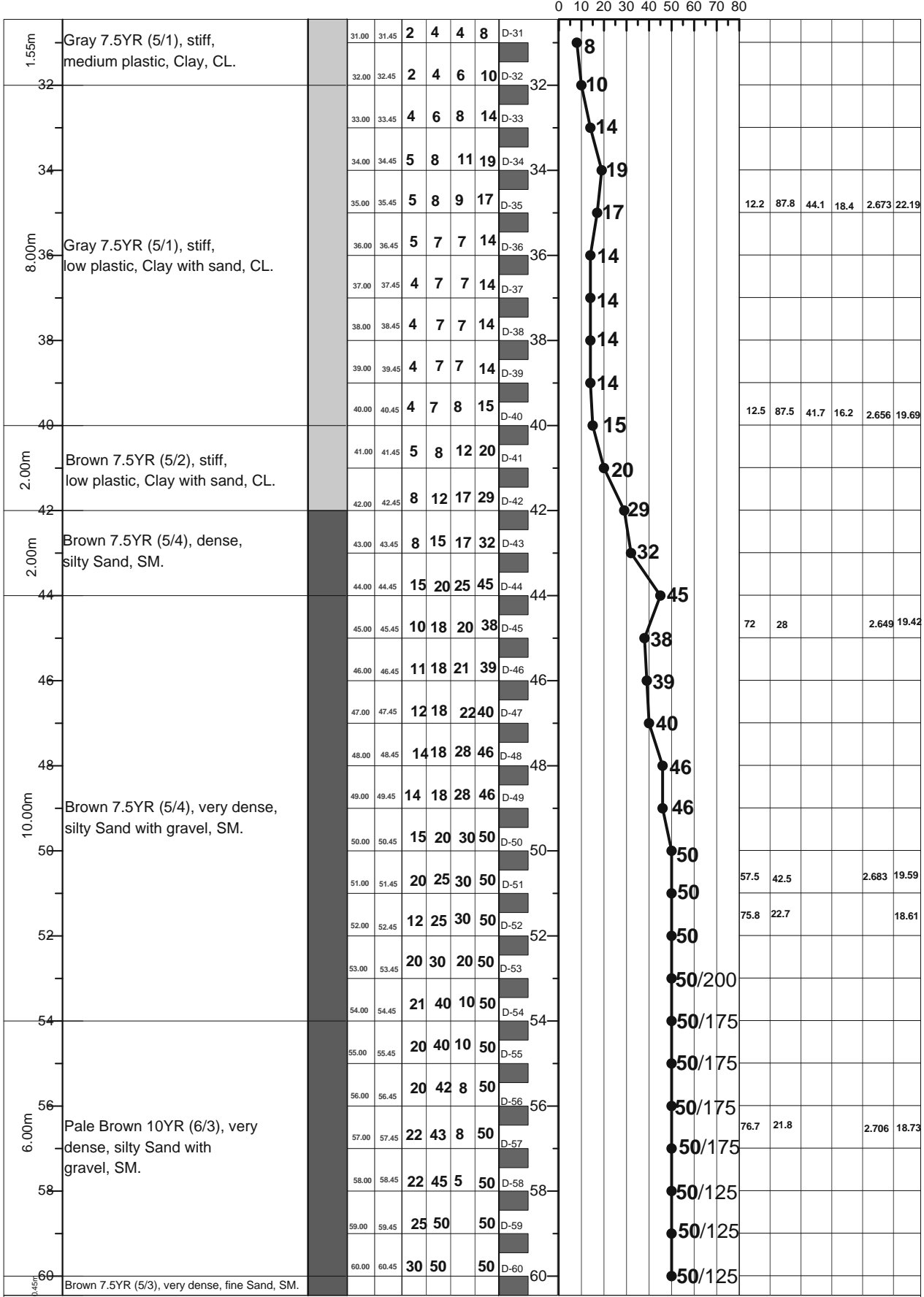
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 98	BOREHOLE NO: R760_003a	Longitude: N 089°33'52.7"	Latitude: E 22°48'55.1"
			Brigde ID: R760_003a	Road Name: Khulna - Chuknagar - Satkhira road.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 3.37, RL: -1.7m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 22-03-2014	Completed Date: 27-03-2014	G. W. T : -1.6m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING		SPT-N Value Blow/300mm				DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)	N4-N630 (mm)								

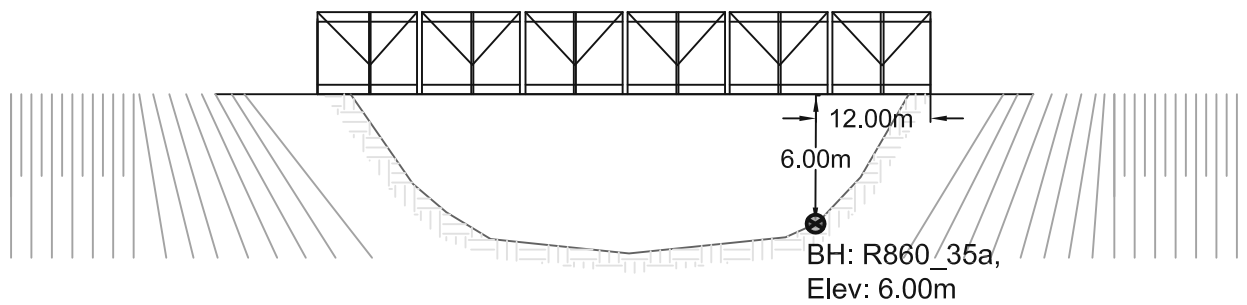
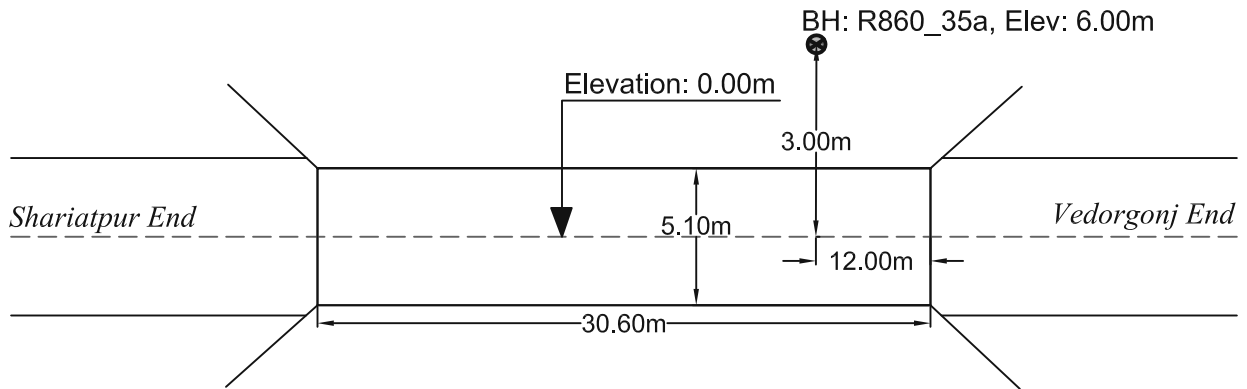
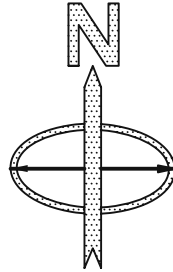


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 99
BRIDGE ID: R860_35a
LATITUDE: 23°11'32.295" LONGITUDE: 90°25'57.077"
CHAINAGE: 34.021



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 99	BOREHOLE NO: R860_35a	Longitude: N 90°23'34"	Latitude: E 23°11'32.295"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary		Borehole Depth: 50.0m	
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 26-03-2014		Completed Date: 29-03-2014	
			Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.		Chainage: 34.021, RL: -6.0m
			G. W. T : -2.5m.		

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								
0								0							
3.0m	Very Dark Gray 10YR (3/1), soft, low plastic, Clay with sand, CL.		1.00	1.45	1	2	2	4	D-1	4					
			2.00	2.45	1	1	2	3	D-2	3	9.1	90.9	42.7	17.7	2.635 32.5
			3.00	3.45	2	2	3	5	D-3	5					
4.0m	Very Dark Gray 10YR (3/1), soft, low plastic, Clay with sand, CL.		4.00	4.45	2	3	3	6	D-4	6					
			5.00	5.45	2	3	4	7	D-5	7					
			6.00	6.45	2	2	3	5	D-6	5	7.8	92.2	47.9	21.3	2.711 30.52
			7.00	7.45	2	2	4	6	D-7	6					
1.0m	Very Dark Gray 10YR (3/1), soft, high plastic, Clay with sand, CH.		8.00	8.45	2	3	5	8	D-8	8					
5.0m	Gray 10YR (5/1), medium dense to dense, Poorly graded silty Sand with gravel, SP-SM.		9.00	9.45	3	4	5	9	D-9	9					
			10.00	10.45	2	3	5	8	D-10	8					
			11.00	11.45	2	2	4	6	D-11	6					
			12.00	12.45	3	5	8	13	D-12	13					
			13.00	13.45	7	10	13	23	D-13	23					
12.00m	Gray 10YR (6/1), dense, silty Sand with gravel, SM.		14.00	14.45	8	12	17	29	D-14	29					
			15.00	15.45	10	14	16	30	D-15	30					
			16.00	16.45	7	10	14	24	D-16	24					
			17.00	17.45	6	9	12	21	D-17	21					
			18.00	18.45	7	10	14	24	D-18	24					
			19.00	19.45	8	13	17	30	D-19	30					
			20.00	20.45	11	15	18	33	D-20	33					
			21.00	21.45	13	18	20	38	D-21	38					
			22.00	22.45	10	14	16	30	D-22	30					
			23.00	23.45	9	11	14	25	D-23	25					
			24.00	24.45	8	12	16	28	D-24	28					
			25.00	25.45	6	9	12	21	D-25	21					
1.00m	Gray 10YR (5/1), dense, silty Sand with gravel, SM.		26.00	26.45	8	13	15	28	D-26	28					
1.00m	Gray 10YR (6/1), dense, fine Sand, SM.		27.00	27.45	11	15	18	33	D-27	33					
			28.00	28.45	15	20	27	47	D-28	47					
			29.00	29.45	12	15	17	32	D-29	32					
0.46m	Gray 10YR (5/1), dense, silty Sand, SM.		30.00	30.45	8	10	13	23	D-30	23					

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

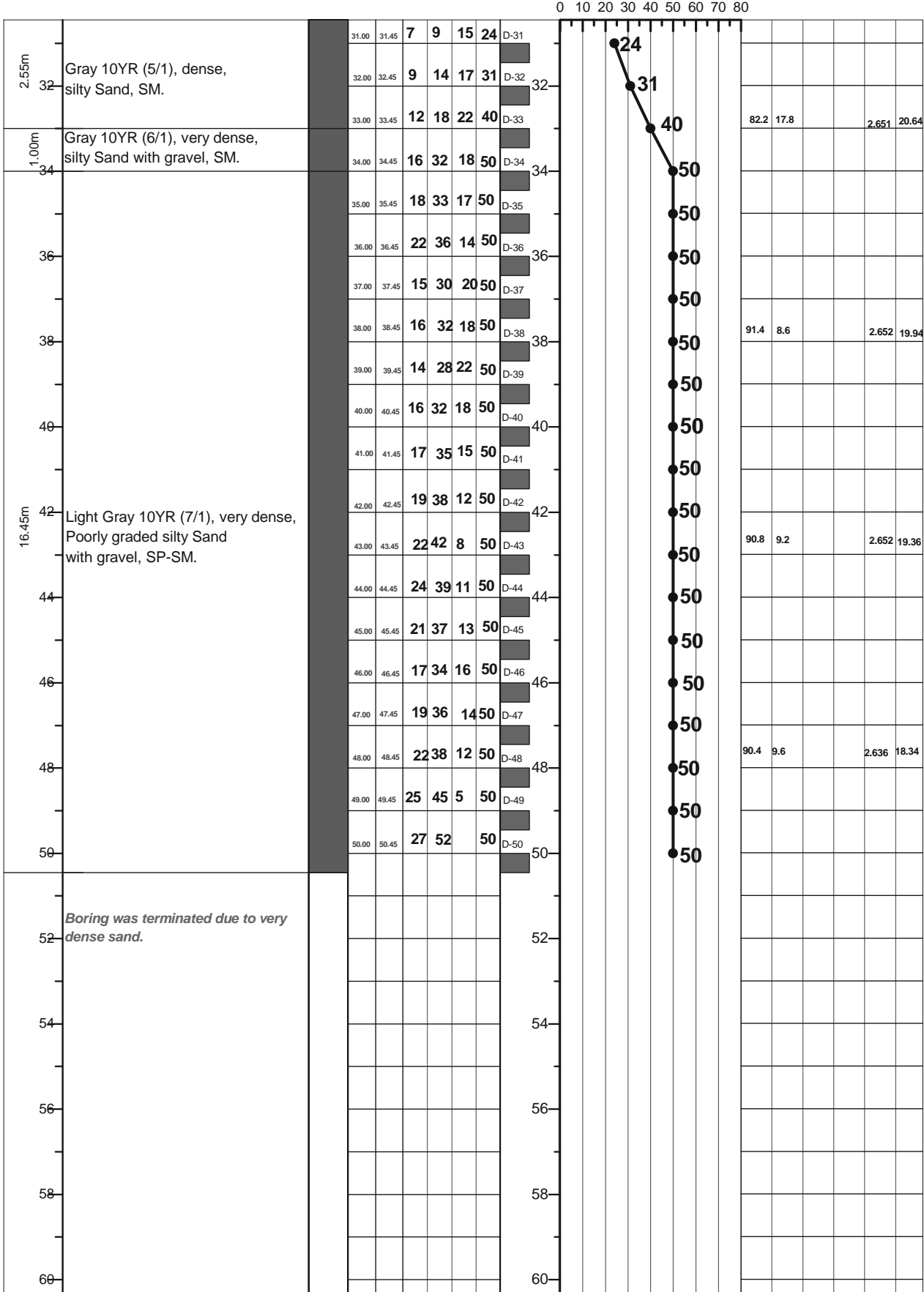
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX^m PENETRATION= 50 BLOWS AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 99	BOREHOLE NO: R860_35a	Longitude: N 90°23'34"	Latitude: E 23°11'32.295"
			Brigde ID: R860_35a	Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 34.021, RL: -6.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 26-03-2014	Completed Date: 29-03-2014	G. W. T : -2.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

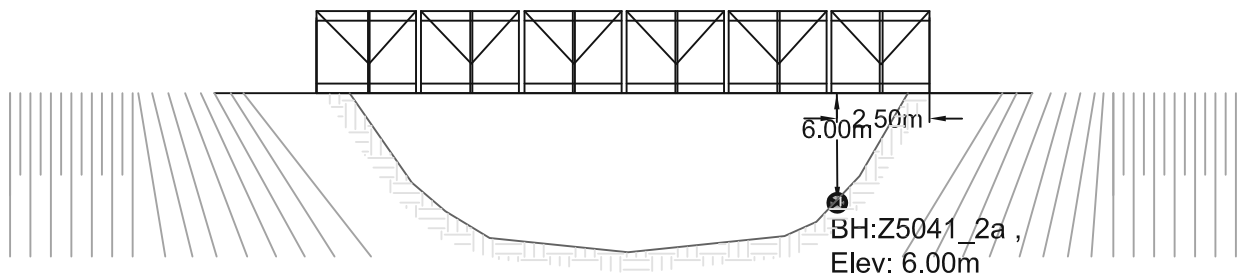
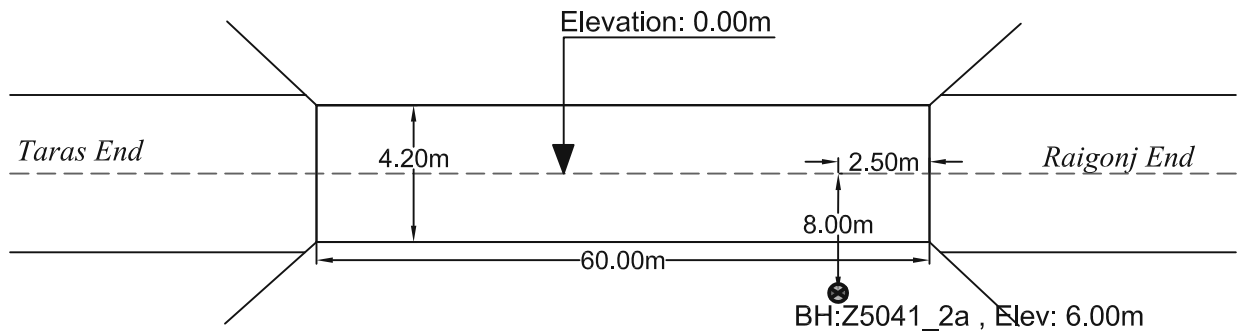
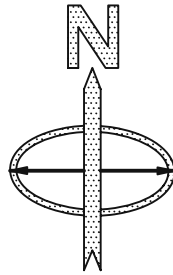


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

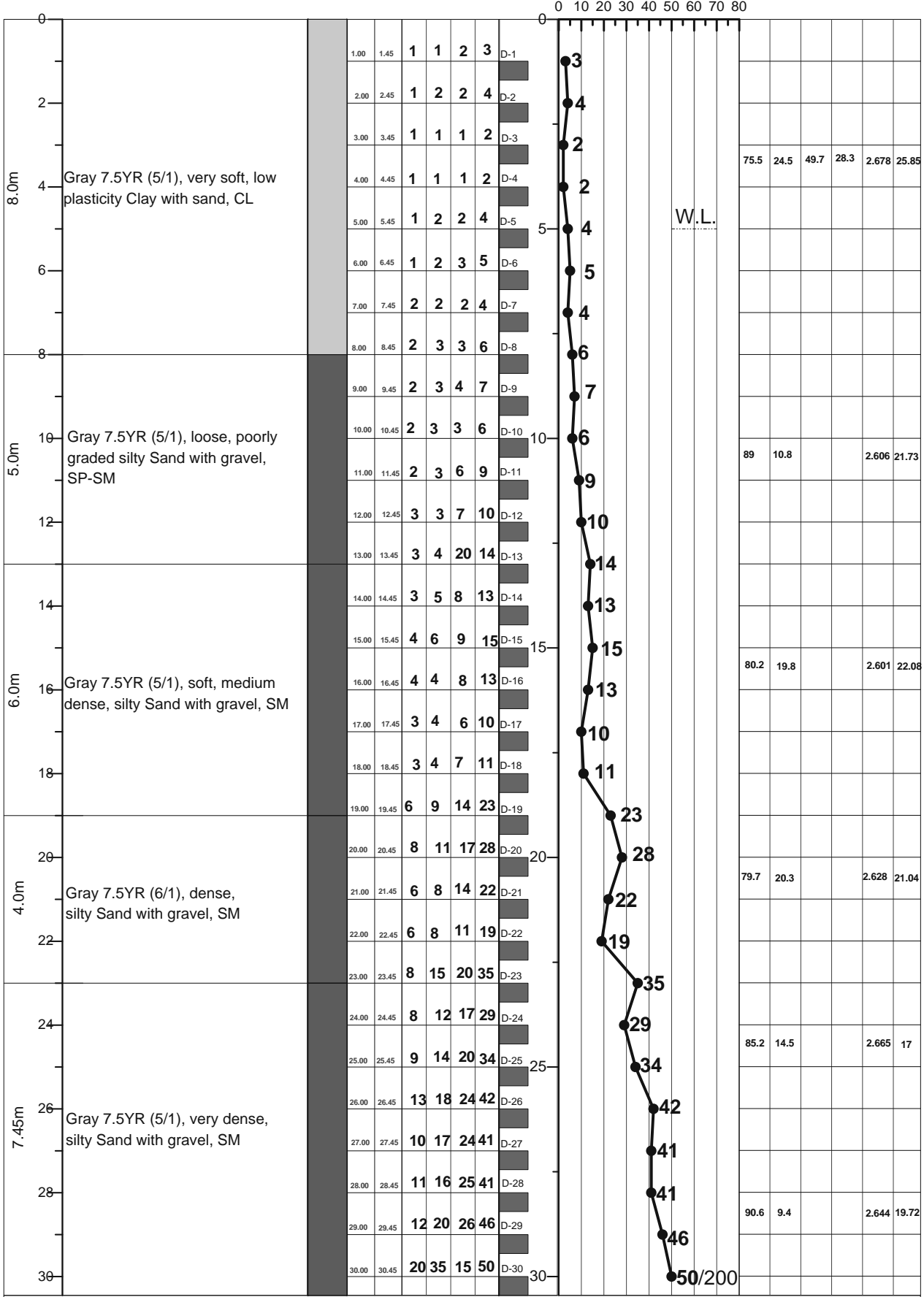
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: 100
BRIDGE ID: Z5041_2a
LATITUDE: 24°29'15.602" LONGITUDE: 89°29'22.773"
CHAINAGE: 1.8



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: 100	BOREHOLE NO: Z5041-2a	Longitude: N 89°39'1.616"	Latitude: E 24°29'15.602"
			Brigde ID: Z5041-2a	Road Name: Raiganj (Bhuiyagati)-Nimgachhi-Taras Road.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 40.0m	Chainage: 1.8, RL: -6.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 7-03-2014	Completed Date: 8-03-2014	G. W. T : -5.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



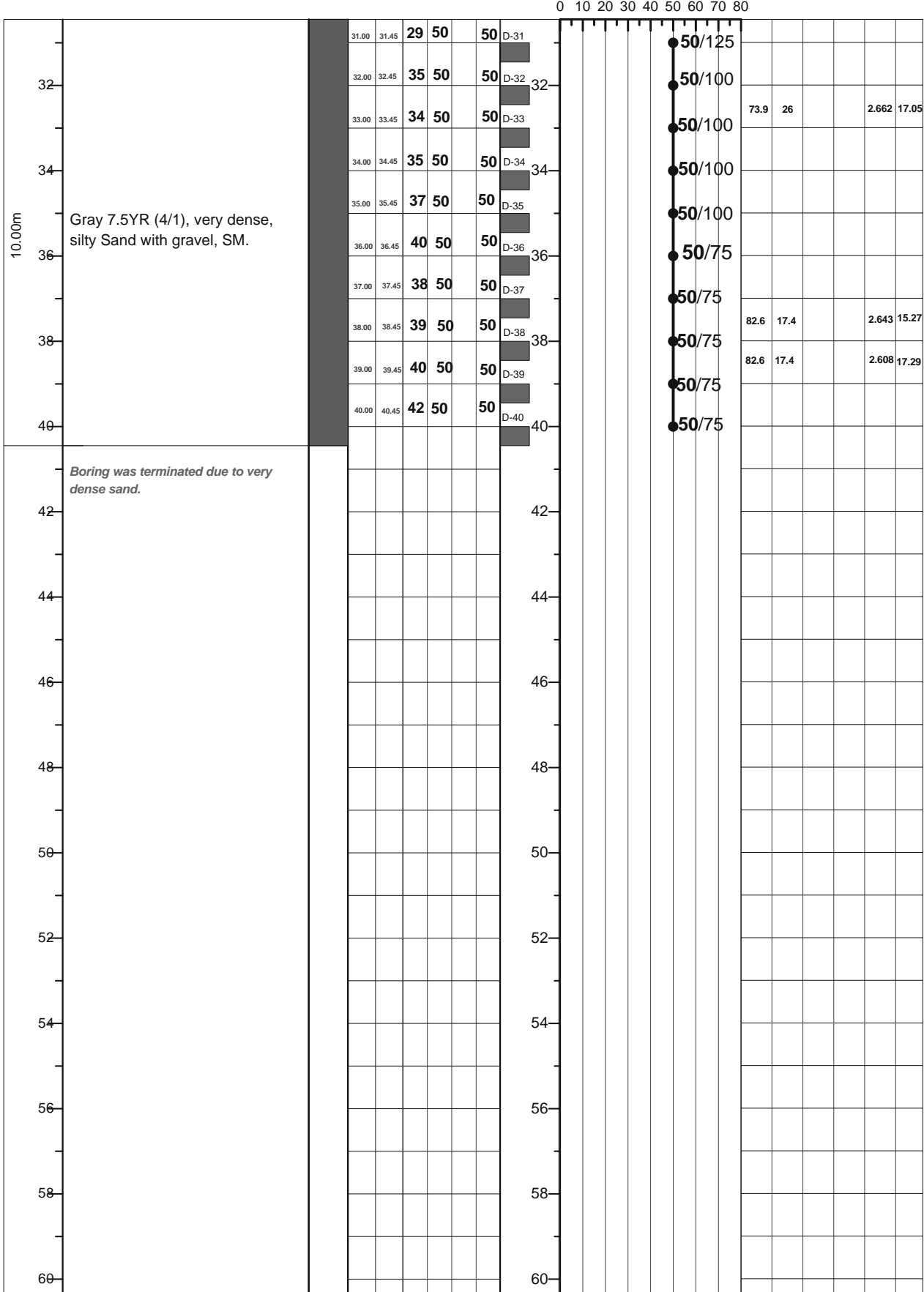
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: 100	BOREHOLE NO: Z5041-2a	Longitude: N 89°39'1.616"	Latitude: E 24°29'15.602"
			Brigde ID: Z5041-2a	Road Name: Raiganj (Bhuiyagati)-Nimgachhi-Taras Road	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 40.0m	Chainage: 1.8, RL: -6.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 7-03-2014	Completed Date: 8-03-2014	G. W. T : -5.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

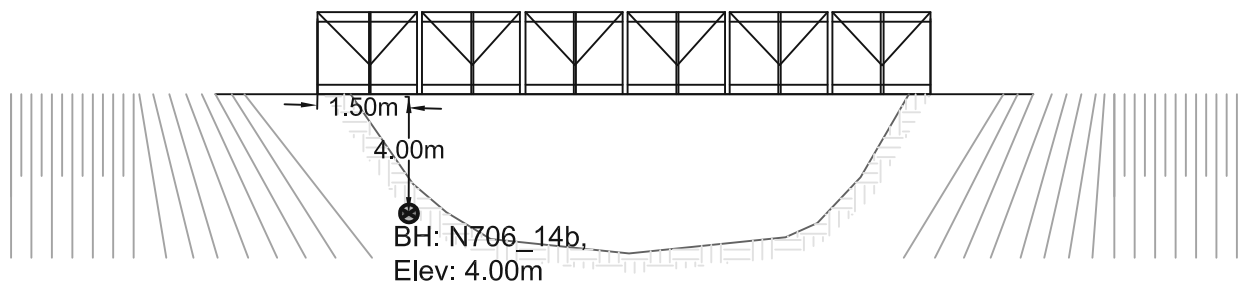
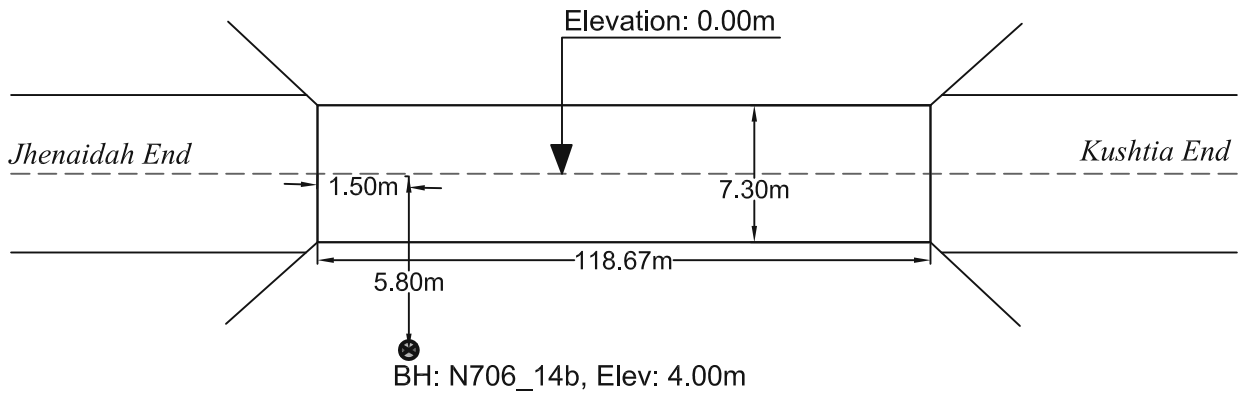
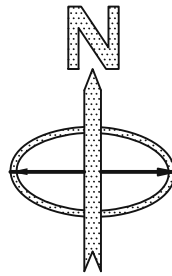
CLIENT: Oriental Consultants Company Limited.

RANK: I

BRIDGE ID: N706_14b

LATITUDE: 23°6'0.078" **LONGITUDE:** 89°5'54.804"

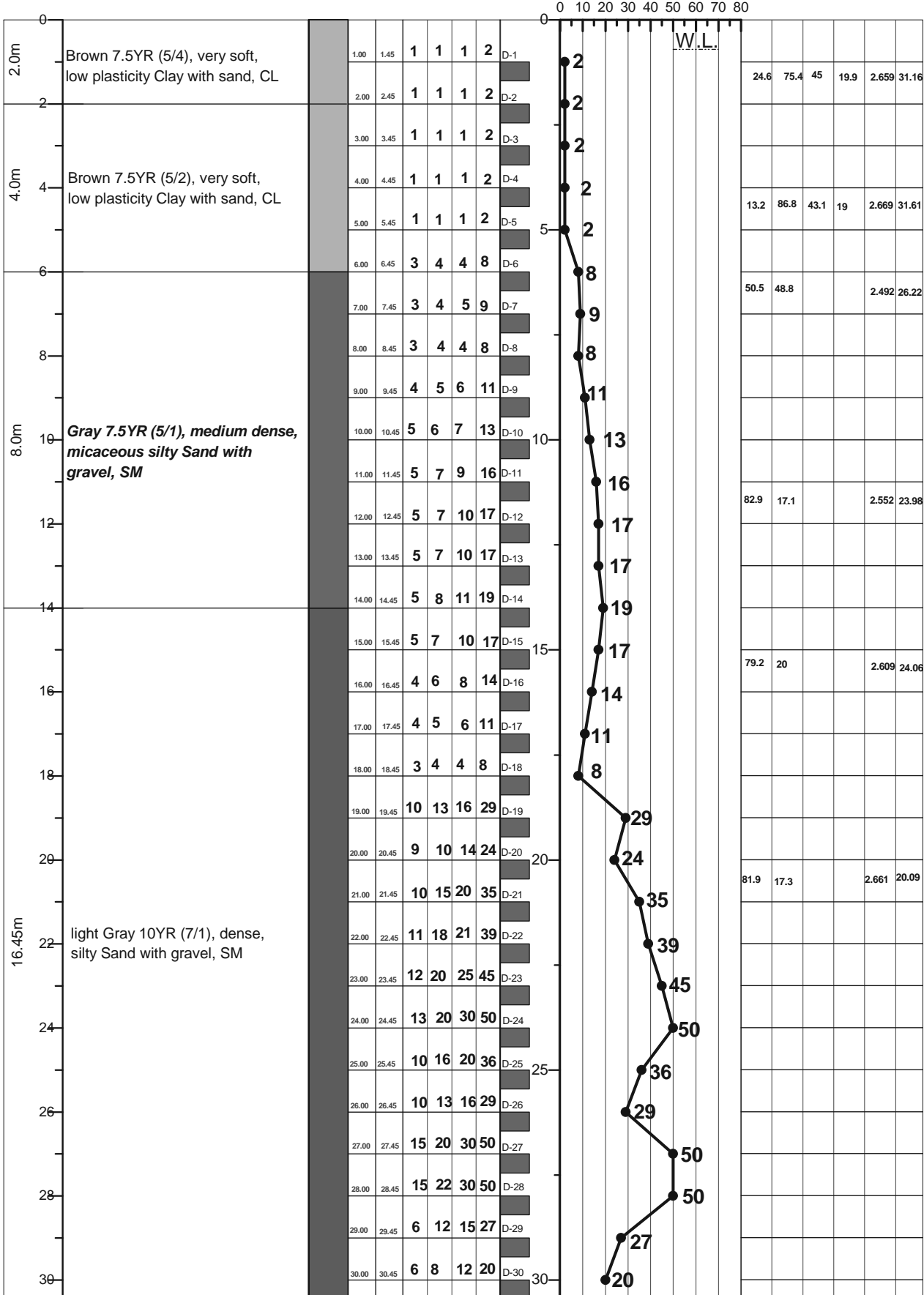
CHAINAGE: 14.349



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: I	BOREHOLE NO: N706_14b	Longitude: N 89°05'54.804"	Latitude: E 23°06'0.078"
			Brigde ID: N706_14b	Road Name: Jessore (Daratana More)-Benapole .	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 14.349, RL: -4.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 16-03-2014	Completed Date: 20-03-2014	G. W. T : -0.7m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

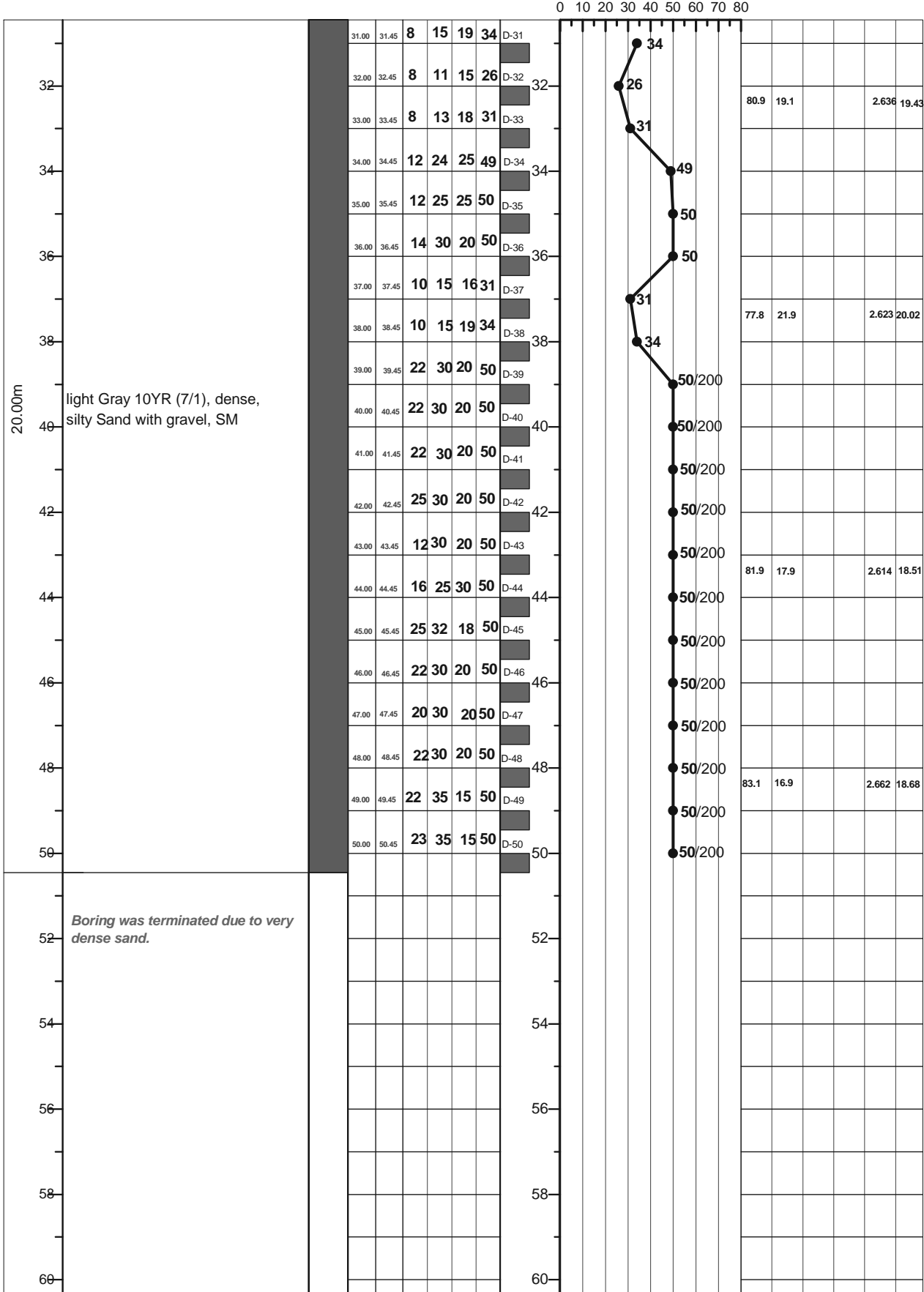
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: I	BOREHOLE NO: N706_14b	Longitude: N 89°05'54.804"	Latitude: E 23°06'0.078"
			Brigde ID: N706_14b	Road Name: Jessore (Daratana More)-Benapole	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 14.349, RL: -4.0m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 16-03-2014	Completed Date: 20-03-2014	G. W. T : -0.7m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

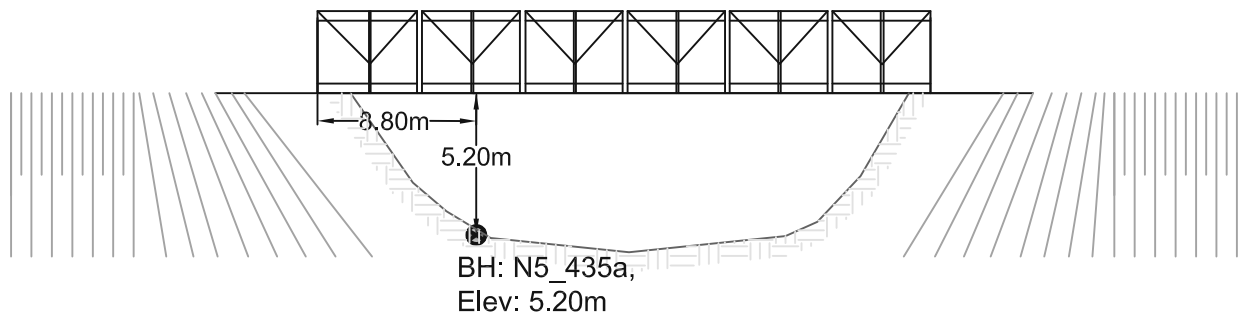
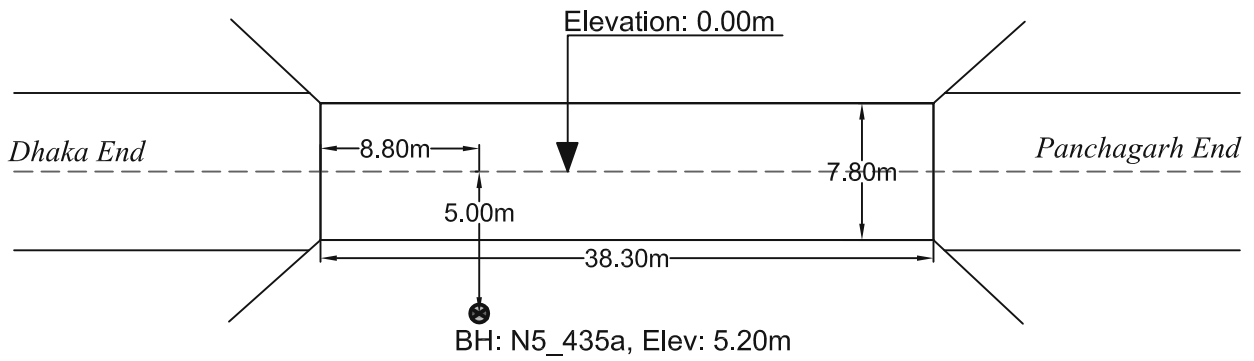
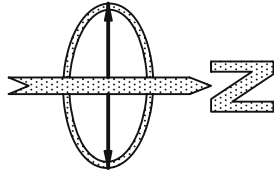
CLIENT: Oriental Consultants Company Limited.

RANK: II

BRIDGE ID: N5_435a

LATITUDE: 26°1'11.002" LONGITUDE: 88°28'9.029"

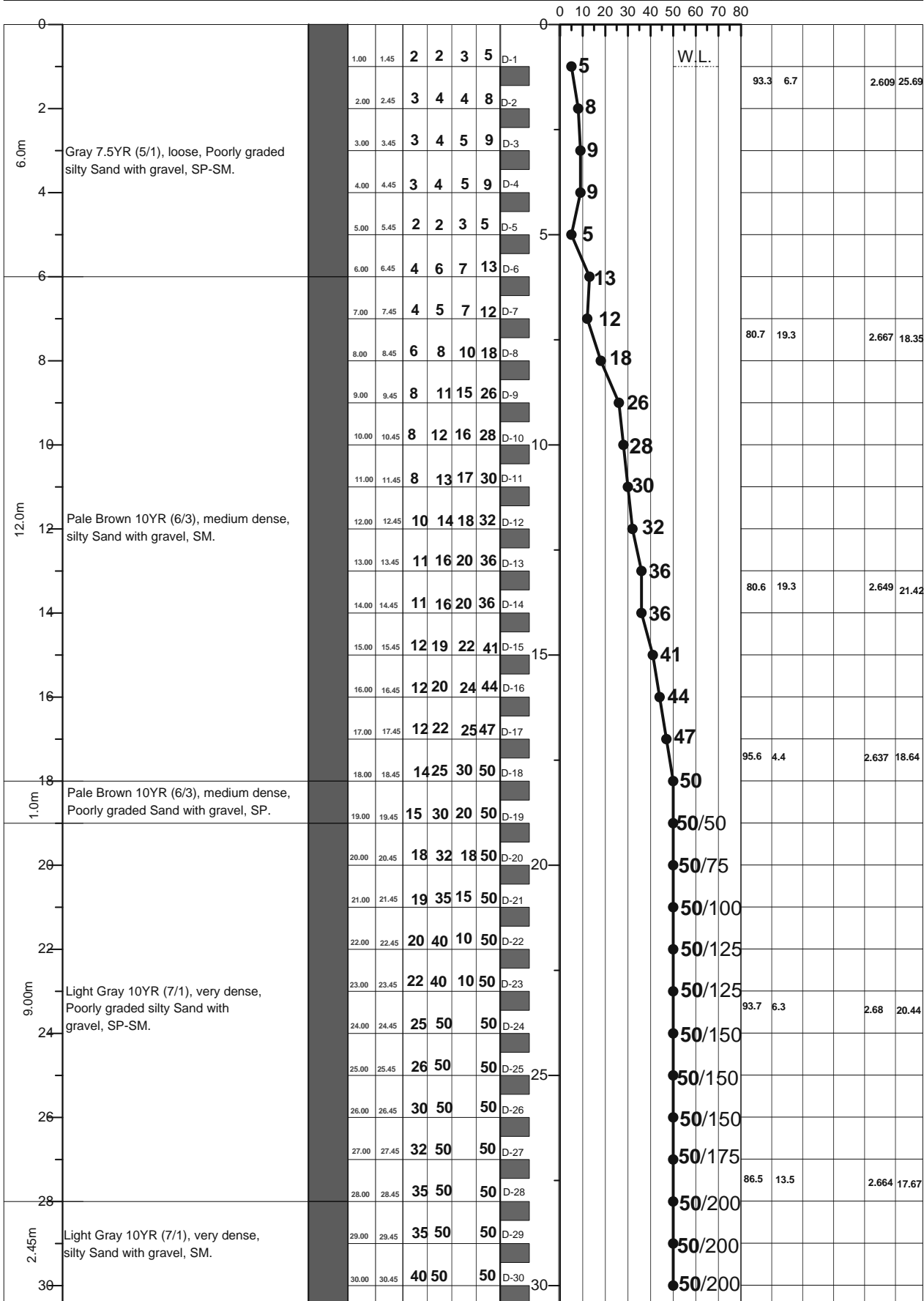
CHAINAGE: 432.44



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: II	BOREHOLE NO: N5_435a	Longitude: N 88°28'9.029"	Latitude: E 26°11'11.002"
			Brigde ID: N5_435a	Road Name: Dhaka (Mirpur)-Paturia-Natakhola-Bogra-Rangpur-Banglabandh	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 30.0m	Chainage: 14.349, RL: -5.2m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 25-02-2014	Completed Date: 26-02-2014	G. W. T : -1.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

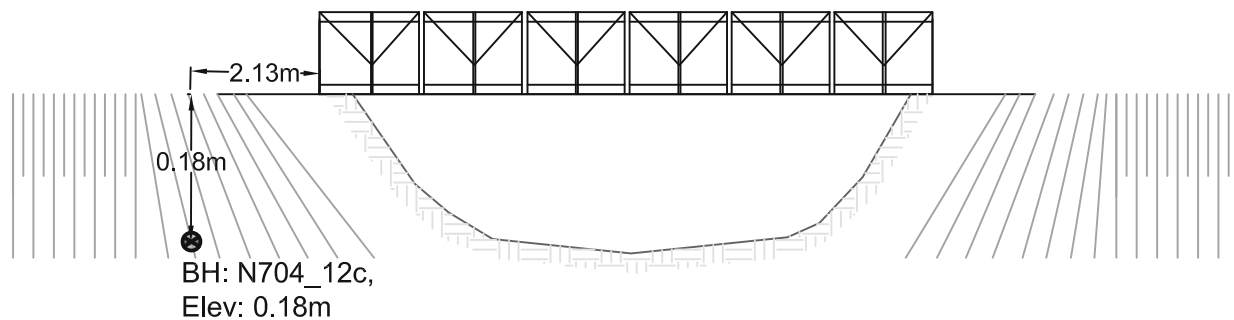
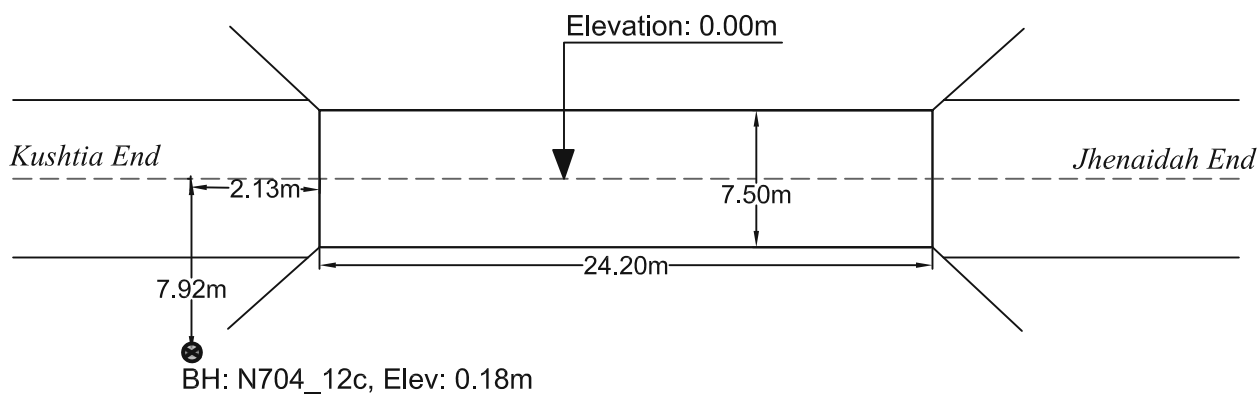
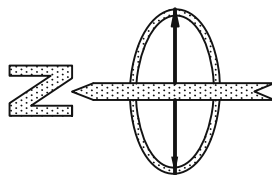
CLIENT: Oriental Consultants Company Limited.

RANK: III

BRIDGE ID: N704_12c

LATITUDE: 23°39'20.143" LONGITUDE: 89°11'55.114"

CHAINAGE: 13.855



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: III	BOREHOLE NO: N704_12c	Longitude: N 89°11'6.079"	Latitude: E 23°39'20.143"
			Brigde ID: N704_12c	Road Name: Jhenaidah-Kushtia-Paksey Ferry-Dasuria.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 13.855, RL: -0.18m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-03-2014	Completed Date: 26-03-2014	G. W. T : -3.65m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									N4-600 (mm)
6.0m	Brown 7.5YR (5/3), soft, low plasticity Clay with sand, CL	[Disturbed]	1.00	1.45	1	2	2	4	D-1	4	14.4	85.6	44.6	19.7	2.766	28.69
			2.00	2.45	1	1	2	3	D-2	3						
			3.00	3.45	1	1	2	3	D-3	3						
			4.00	4.45	1	2	2	4	D-4	4						
			5.00	5.45	1	2	3	5	D-5	5						
			6.00	6.45	1	1	2	3	D-6	3						
1.0m	Gray 7.5YR (5/2), soft, low plasticity Clay with sand, CL	[Disturbed]	7.00	7.45	1	2	2	4	D-7	4	17.4	82.6	46.1	20.2	2.733	26.54
6.0m	Gray 7.5YR (5/1), soft, low plasticity Clay with sand, CL	[Disturbed]	8.00	8.45	1	2	2	4	D-8	4						
			9.00	9.45	1	2	3	5	D-9	5						
			10.00	10.45	2	3	4	7	D-10	7						
			11.00	11.45	2	3	3	6	D-11	6						
			12.00	12.45	1	1	1	2	D-12	2						
			13.00	13.45	6	8	12	20	D-13	20						
2.0m	Gray 10YR (7/1), dense, poorly graded silty Sand with gravel, SP-SM	[Disturbed]	14.00	14.45	5	10	11	21	D-14	21	90.2	9.8		2.663	23.61	
3.0m	Gray 7.5YR (7/1), dense, micaceous silty Sand with gravel, SM	[Disturbed]	15.00	15.45	7	12	18	30	D-15	30						
			16.00	16.45	6	8	12	20	D-16	20						
			17.00	17.45	5	7	12	19	D-17	19						
			18.00	18.45	7	12	17	29	D-18	29						
			19.00	19.45	12	15	20	35	D-19	35						
			20.00	20.45	15	18	23	41	D-20	41						
7.0m	Gray 10YR (8/1), dense, silty Sand with gravel, SM	[Disturbed]	21.00	21.45	11	17	17	34	D-21	34	8.3	91.7	46.8	19.9	2.7	
3.0m	Gray 7.5YR (5/2), stiff, low plasticity Clay with sand, CL	[Disturbed]	22.00	22.45	8	15	16	31	D-22	31						
			23.00	23.45	13	13	20	33	D-23	33						
			24.00	24.45	12	14	20	34	D-24	34						
			25.00	25.45	4	6	8	14	D-25	14						
			26.00	26.45	3	6	6	12	D-26	12						
			27.00	27.45	3	5	7	12	D-27	12						
1.0m	Brown 7.5YR (5/3), stiff, medium plastic, silty Clay, CH	[Disturbed]	28.00	28.45	5	7	9	16	D-28	16	38	62	47.1	20.1	2.684	20.39
1.45m	strong Brown 7.5YR (5/6), very stiff, low plasticity Clay with sand, CL	[Disturbed]	29.00	29.45	6	10	14	24	D-29	24						
		[Disturbed]	30.00	30.45	7	11	17	28	D-30	28						

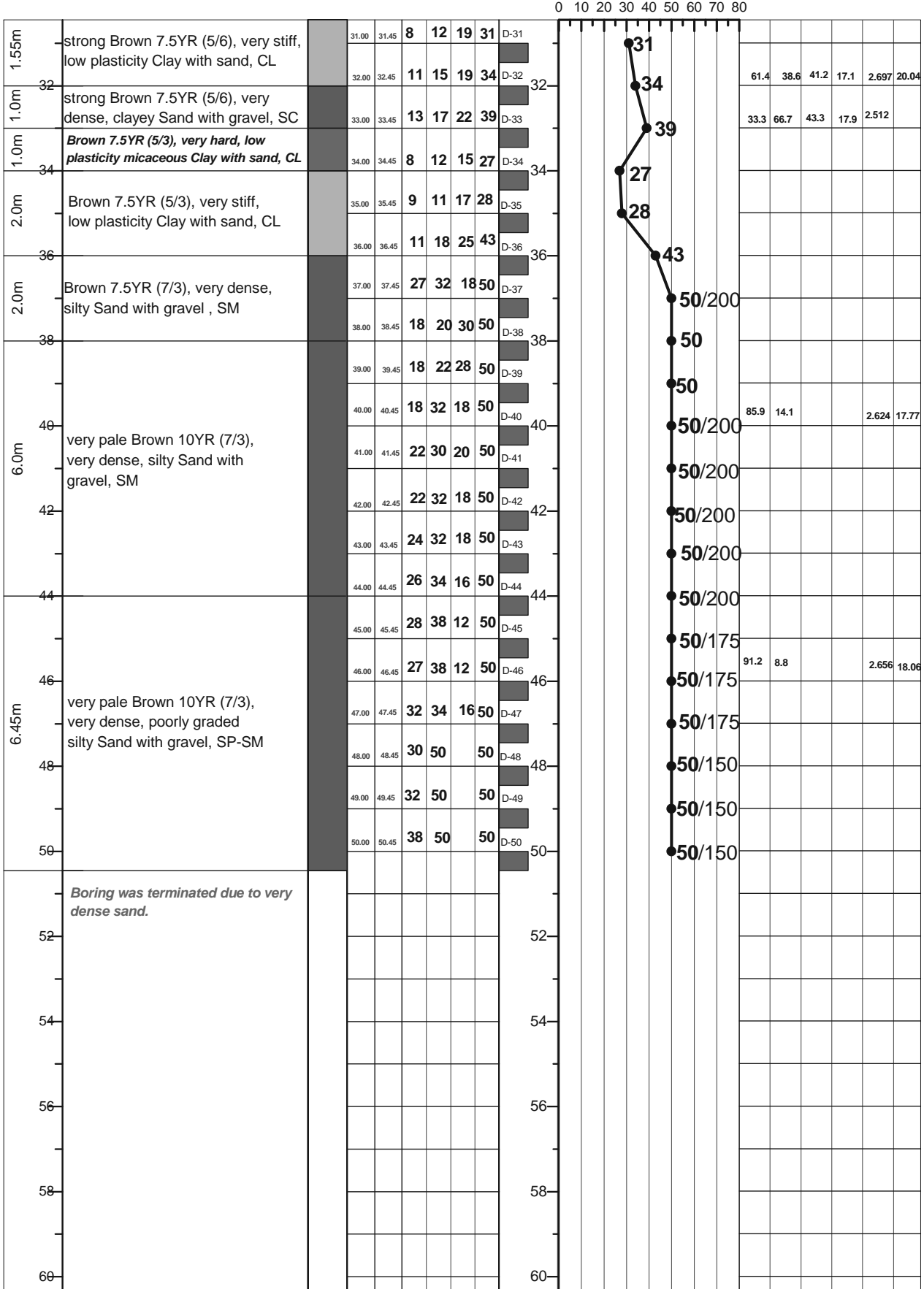
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

[Light Gray Box] PLASTIC CLAY	[White Box] SILT	[Dark Gray Box] PEAT/HIGHLY ORGANIC SOIL	[Medium Gray Box] UNDISTURBED SAMPLE
[Dark Gray Box] MICACEOUS FINE SAND/SILT	[Light Gray Box] SAND	[Dark Gray Box] SHALE	[Medium Gray Box] DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX^o PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: III	BOREHOLE NO: N704_12c	Longitude: N 89°11'6.079"	Latitude: E 23°39'20.143"
			Brigde ID: N704_12c	Road Name: Jhenaidah-Kushtia-Paksey Ferry-Dasuria	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 13.855, RL: -0.18m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 20-03-2014	Completed Date: 26-03-2014	G. W. T : -3.65m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)								

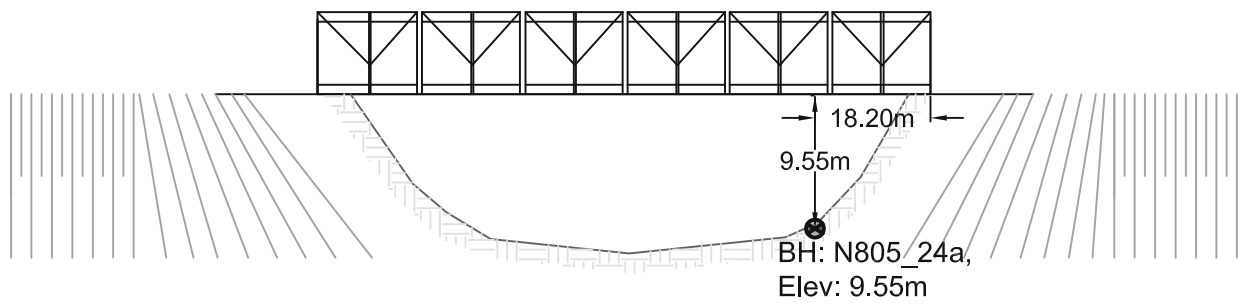
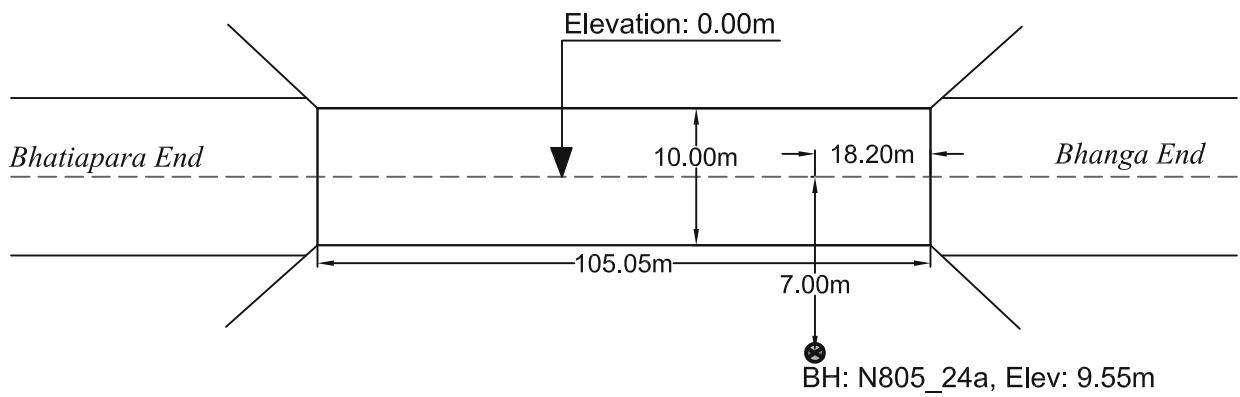
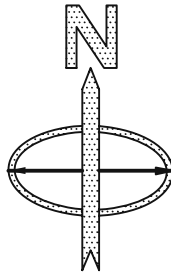


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

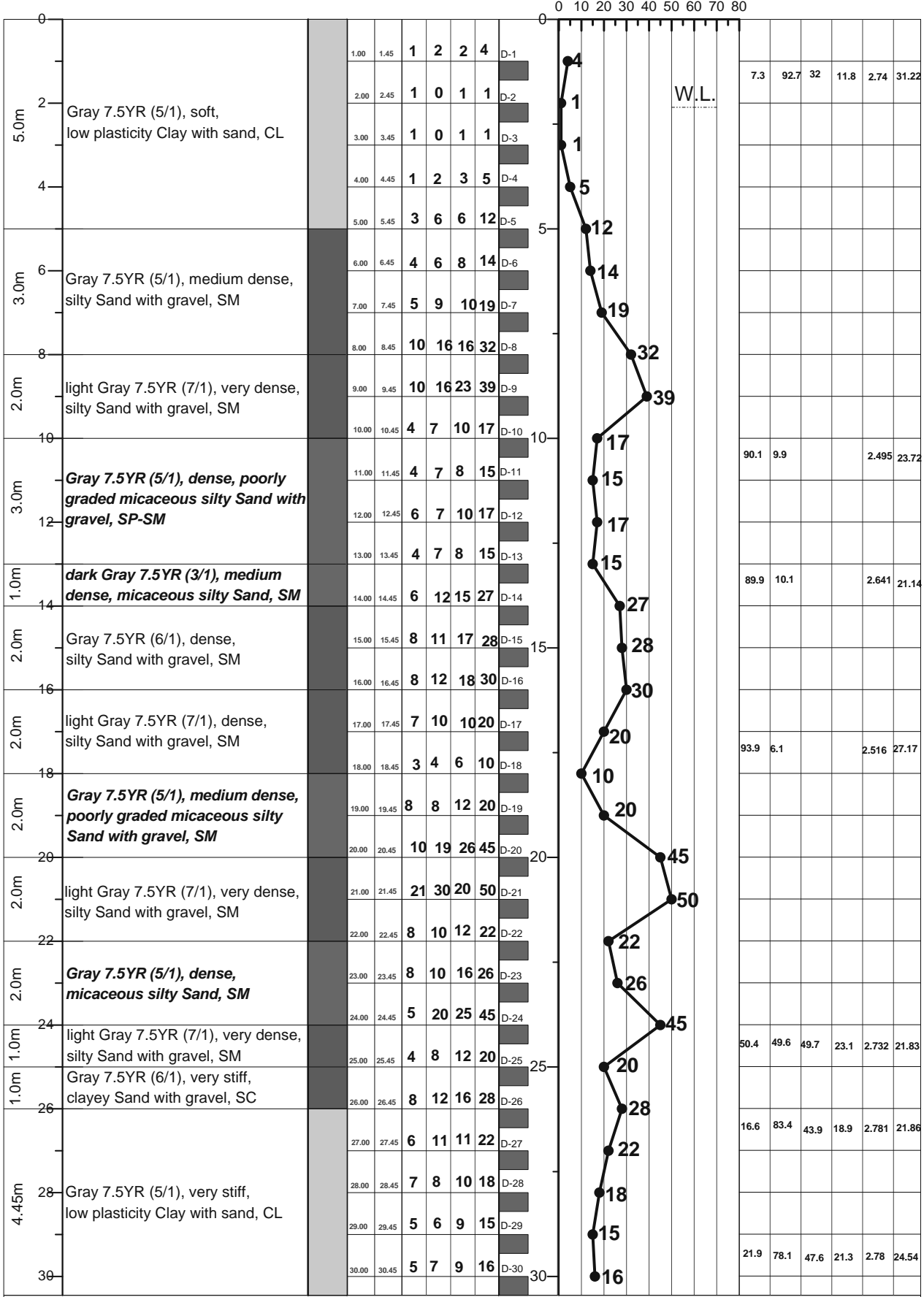
A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: IV
BRIDGE ID: N805_24a
LATITUDE: 23°17'16" LONGITUDE: 89°48'39"
CHAINAGE: 24.19



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: IV	BOREHOLE NO: N805_24a	Longitude: N 89°48'39"	Latitude: E 23°17'16"
			Brigde ID: N805_24a	Road Name: Bhanga-Bhatiapara-Mollahhat.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 24.19, RL: -9.55m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 7-04-2014	Completed Date: 10-04-2014	G. W. T : -2.1m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



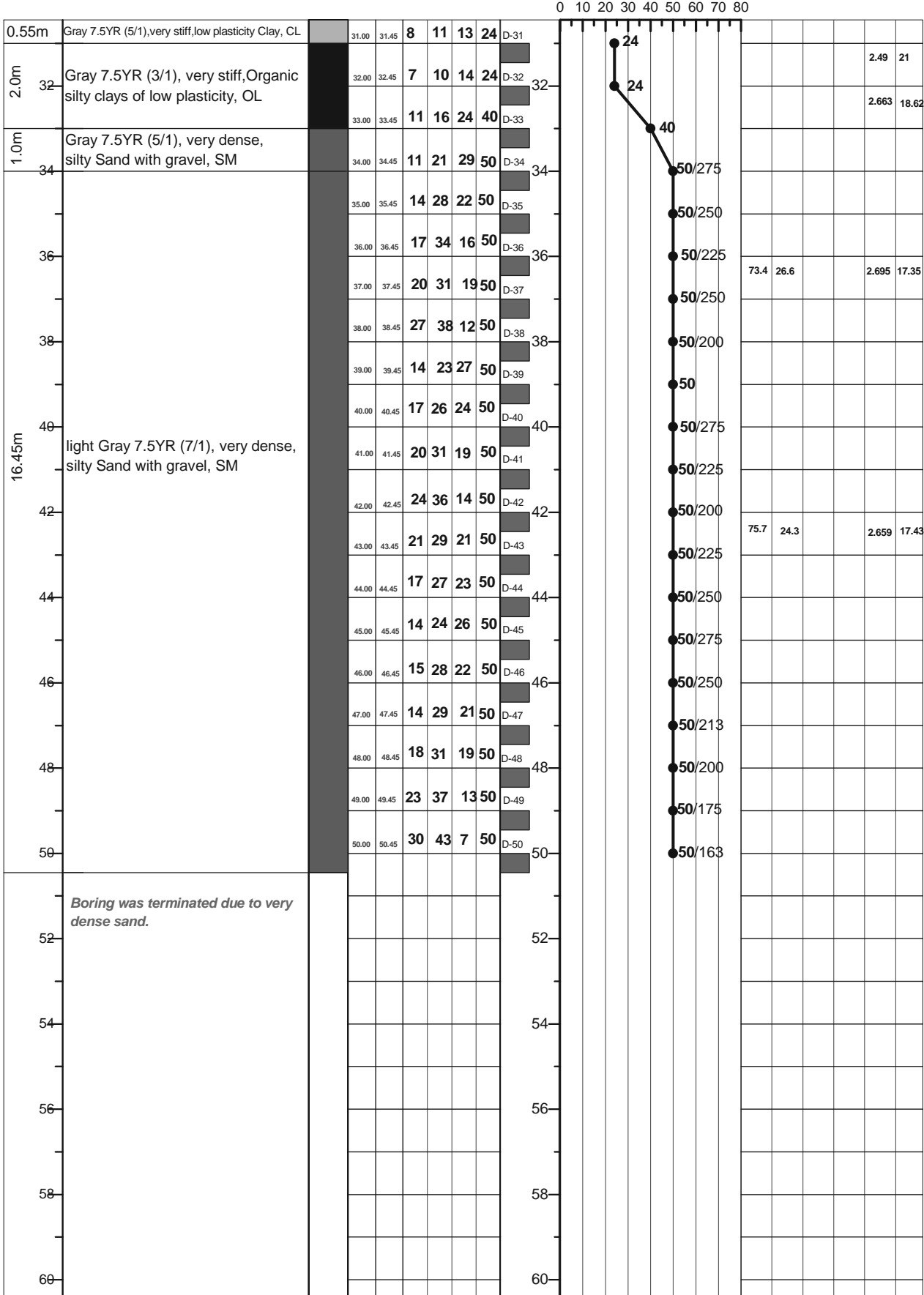
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: IV	BOREHOLE NO: N805_24a	Longitude: N 89° 48' 39"	Latitude: E 23° 17' 16"
			Brigde ID: N805_24a	Road Name: Bhanga-Bhatiapara-Mollahhat	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 24.19, RL: -9.5m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 7-04-2014	Completed Date: 10-04-2014	G. W. T : -2.1m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

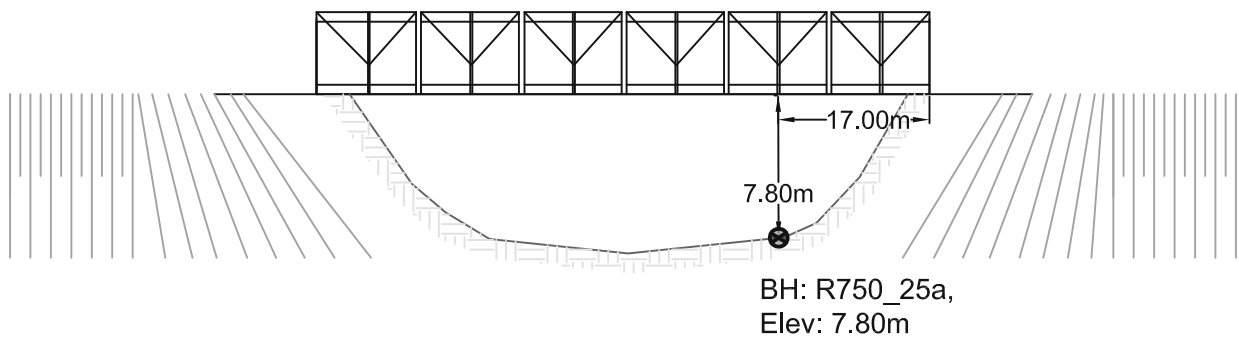
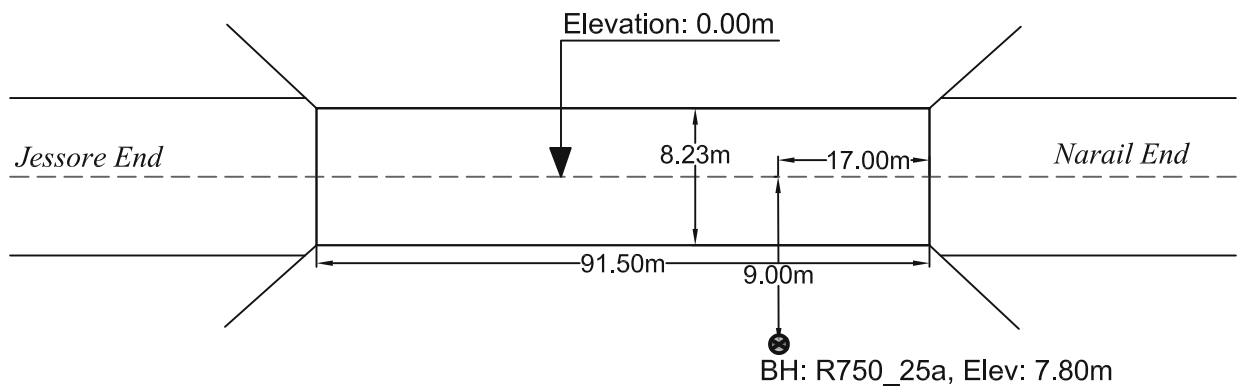
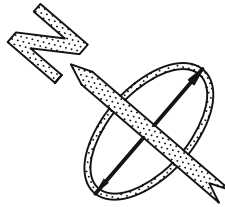


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: V
BRIDGE ID: R750_25a
LATITUDE: 23°10'01" LONGITUDE: 89°26'30"
CHAINAGE: 24.18



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: V	BOREHOLE NO: R750_25a	Longitude: N 89°26'32"	Latitude: E 23°10'03"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 24.18, RL: -7.8m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 28-03-2014	Completed Date: 31-03-2014	G. W. T : -2.7m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N ₁₋₁₅₀ (mm)	N ₂₋₃₀₀ (mm)	N ₄₋₄₅₀ (mm)									N ₆₋₆₀₀ (mm)
0								0								
3.0m	Gray 10YR (6/1), soft, low plastic, Clay with sand, CL.		1.00	1.45	1	1	2	3	D-1	3	9.8	90.2	35.7	14.4	2.718	29.18
2			2.00	2.45	1	1	1	2	D-2	2						
			3.00	3.45	1	1	1	2	D-3	2						
1.0m	Dark Gray 10YR (4/1), Peat and other highly Organic soils, Pt.		4.00	4.45	1	2	2	4	D-4	4	33.3	66.7	34.6	12.7	2.721	
1.0m	Gray 10YR (6/1), soft, low plastic, Clay with sand, CL.		5.00	5.45	1	2	5	7	D-5	7	44	56			2.727	27.75
1.0m	Gray 10YR (6/1), medium stiff, low plastic, Silt with sand, ML.		6.00	6.45	5	6	7	13	D-6	13						
13.0m	Gray 10YR (6/1), medium dense to dense, silty Sand with gravel, SM.		7.00	7.45	6	7	9	16	D-7	16						
			8.00	8.45	5	7	8	15	D-8	15						
			9.00	9.45	5	9	11	20	D-9	20						
			10.00	10.45	8	12	13	25	D-10	25						
			11.00	11.45	8	12	14	26	D-11	26						
			12.00	12.45	7	11	15	26	D-12	26						
			13.00	13.45	6	7	9	16	D-13	16	68.3	31.7			2.671	23.81
			14.00	14.45	6	8	10	18	D-14	18						
			15.00	15.45	8	12	15	27	D-15	27						
			16.00	16.45	10	14	16	30	D-16	30						
18	Gray 10YR (6/1), medium dense to dense, silty Sand with gravel, SM.		17.00	17.45	10	15	16	31	D-17	31						
			18.00	18.45	8	10	13	23	D-18	23						
			19.00	19.45	9	15	17	32	D-19	32						
			20.00	20.45	8	12	15	27	D-20	27						
			21.00	21.45	7	10	13	23	D-21	23	76.3	23.7			2.519	21.02
1.0m	Gray 10YR (6/1), dense, Micaceous silty Sand with gravel, SM.		22.00	22.45	17	35	15	50	D-22	50/200						
3.0m	Gray 10YR (6/1), very dense, fine Sand, SM.		23.00	23.45	16	30	20	50	D-23	50/225						
			24.00	24.45	14	23	27	50	D-24	50/275						
			25.00	25.45	12	15	19	34	D-25	34						
5.45m	Gray 10YR (6/1), very dense, Micaceous silty Sand with gravel, SM.		26.00	26.45	11	15	18	33	D-26	33						
			27.00	27.45	12	15	19	34	D-27	34	70.4	29.6			2.532	19.37
			28.00	28.45	12	15	18	33	D-28	33						
			29.00	29.45	11	14	17	31	D-29	31						
			30.00	30.45	10	13	17	30	D-30	30						

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

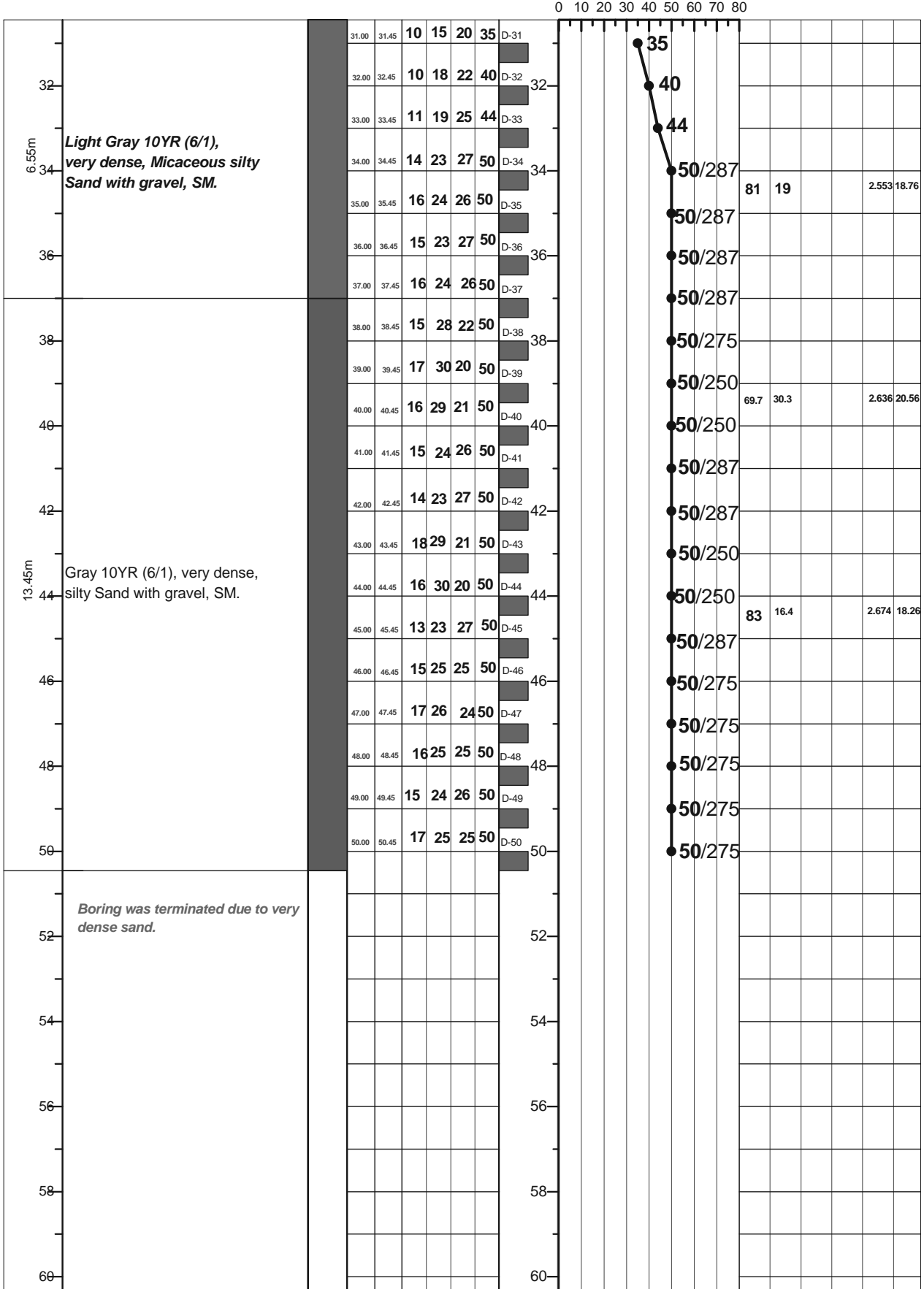
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: V	BOREHOLE NO: R750_25a	Longitude: N 89°26'32"	Latitude: E 23°10'03"
			Brigde ID: R750_25a	Road Name: Jessore-Narail.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	Chainage: 24.18, RL: -7.8m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 28-03-2014	Completed Date: 31-03-2014	G. W. T : -2.7m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Values Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

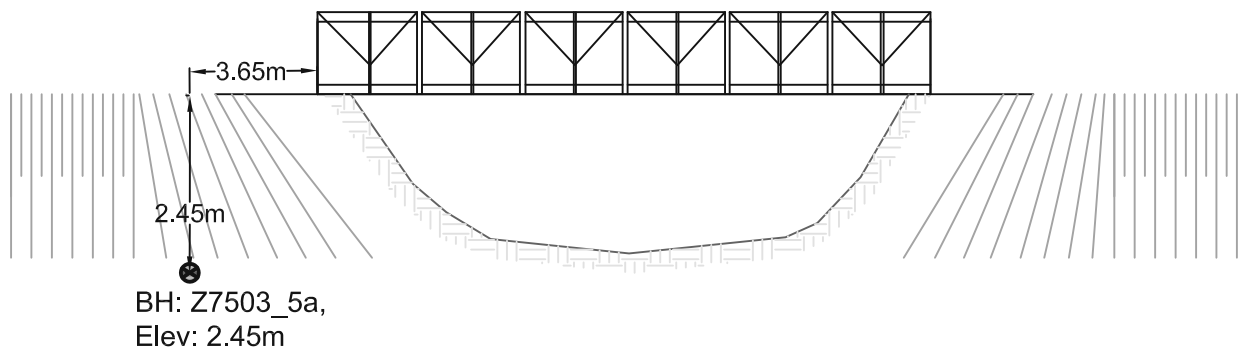
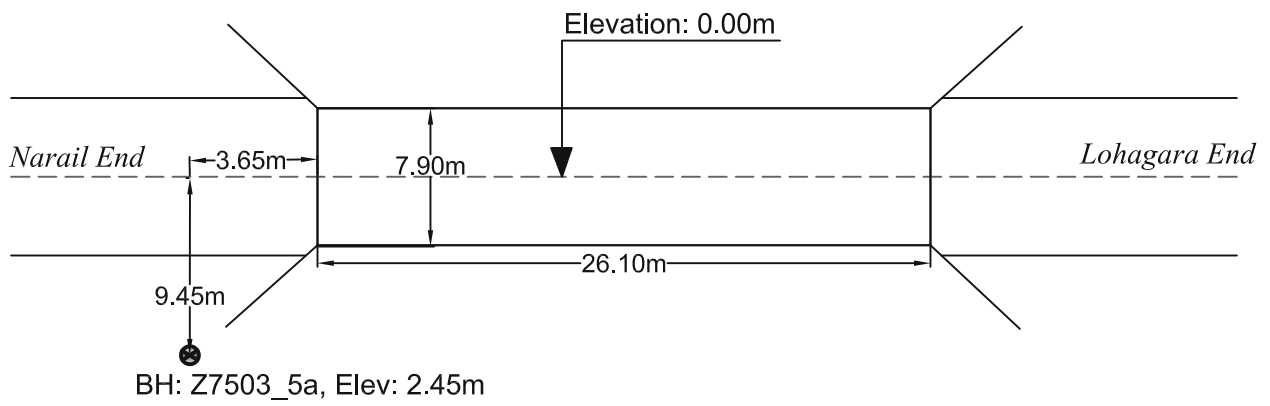
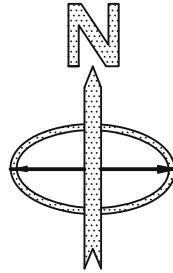


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

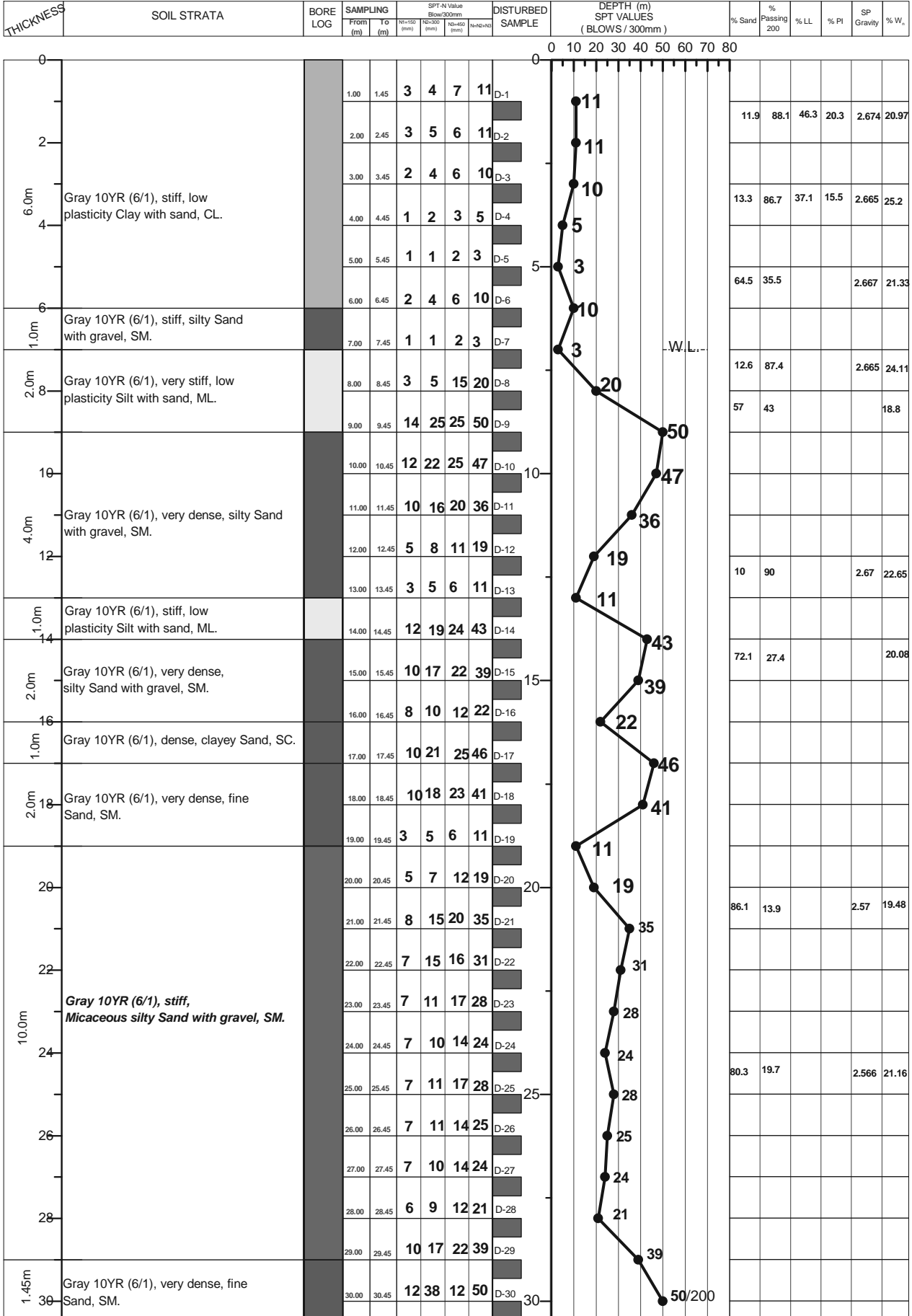
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole
CLIENT: Oriental Consultants Company Limited.
RANK: VI
BRIDGE ID: Z7503_5a
LATITUDE: 23°10'48" LONGITUDE: 89°33'31"
CHAINAGE: 5.213



PROSOIL FOUNDATION CONSULTANT

A2	PROSOIL	RANK: VI	BOREHOLE NO: Z7503_5a Brigde ID: Z7503_5a	Longitude: N 089°33'31" Road Name: Narail-Lohagara Bazar-Naragati.	Latitude: E 23°10'48"
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 5.21, RL: -2.45m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 17-03-2014	Completed Date: 22-03-2014	G. W. T : -7.0m.



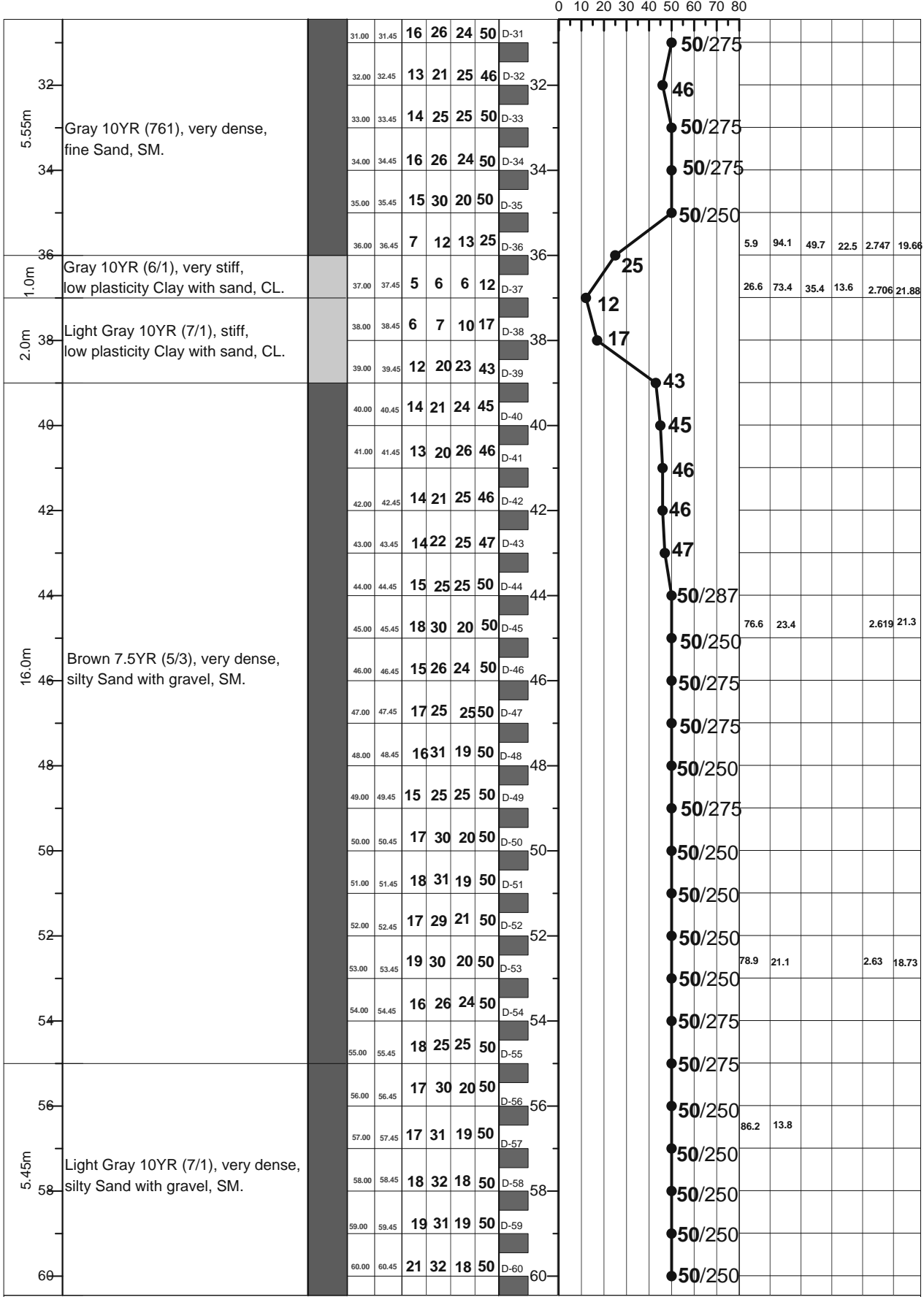
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	RANK: VI	BOREHOLE NO: Z7503_5a	Longitude: N 089°33'31"	Latitude: E 23°10'48"
			Brigde ID: Z7503_5a	Road Name: Narail-Lohagara Bazar-Naragati.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			Type of Drill Rig: Manual Rotary	Borehole Depth: 60.0m	Chainage: 5.21, RL: -2.45m
CLIENT : Oriental Consultants Company Limited.			Commencement Date: 17-03-2014	Completed Date: 22-03-2014	G. W. T : -7.0m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

R301

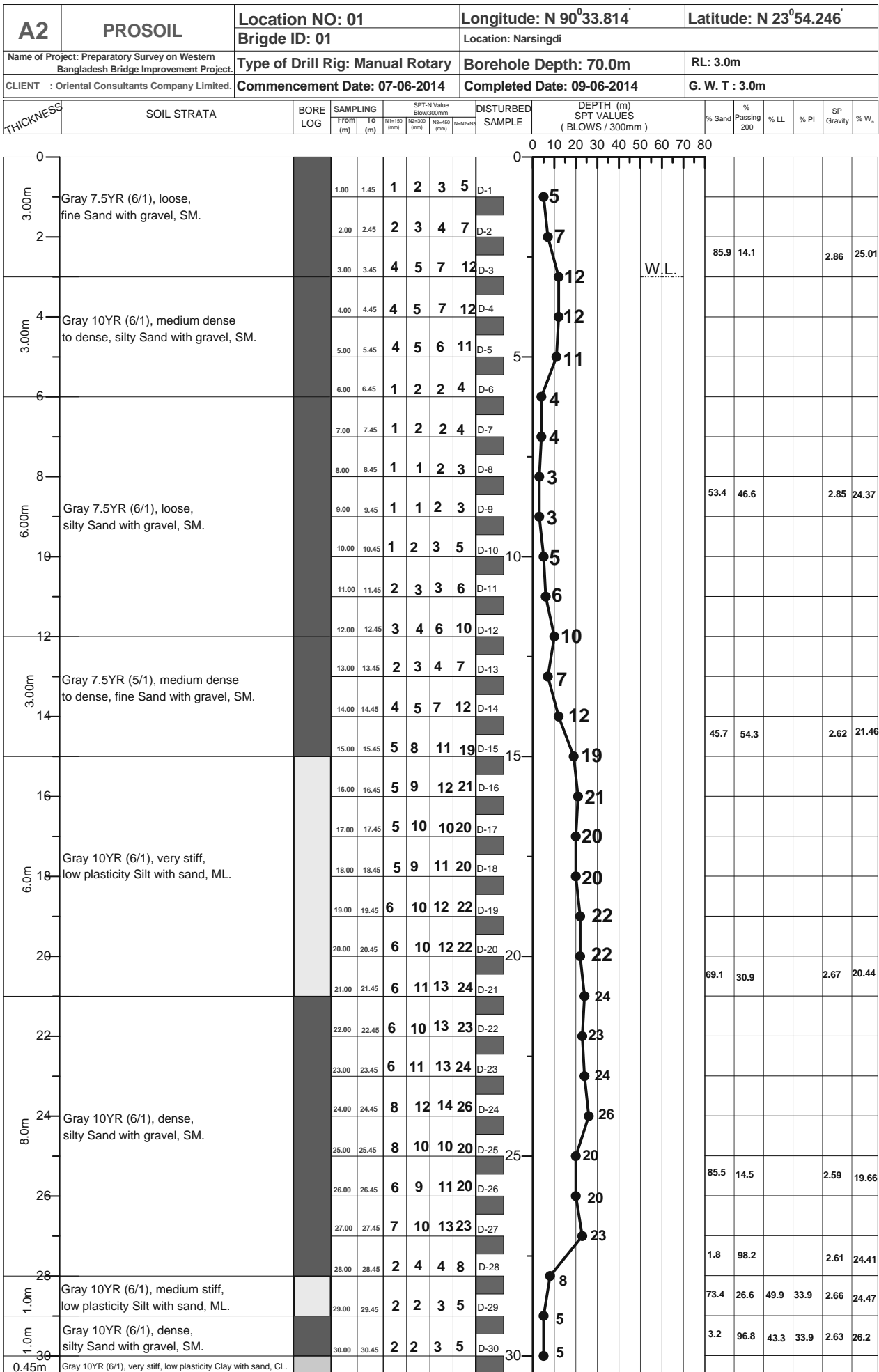
Google earth

Google earth

Coordinate System: Bangladesh Transverse Mercator, Central Meridian 90 deg East
Coordinate Code: P-BTM
Setting by AutoCad CIV3D

Google





LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	Location NO: 01	Longitude: N 90°33.814'	Latitude: N 23°54.246'
		Brigde ID: 01	Location: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	RL: 3.0m
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 07-06-2014	Completed Date: 09-06-2014	G. W. T : 3.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)								

0 10 20 30 40 50 60 70 80															
9.55m	Gray 10YR (6/1), soft, low plasticity clay with sand, CL.	31.00	31.45	2	3	3	6	D-31	6						
		32.00	32.45	2	2	3	5	D-32	5	10.7	89.3	47.8	35.4	2.65	26.11
		33.00	33.45	2	2	3	5	D-33	5						
		34.00	34.45	2	3	3	6	D-34	6	36	64	43.6	20.9	2.61	26.21
		35.00	35.45	2	3	3	6	D-35	6					2.73	26.47
		36.00	36.45	2	4	5	11	D-36	11	8.1	91.9	46.2	33.8	2.77	25.23
		37.00	37.45	3	5	5	10	D-37	10						
		38.00	38.45	3	5	6	11	D-38	11	9.1	90.9	41	17.5	2.66	25.39
		39.00	39.45	3	4	6	10	D-39	10	17.3	82.7	48.9	35.5	2.67	24.89
		40.00	40.45	3	4	5	9	D-40	9	76.9	23.1	53.1	39.3	2.6	24.14
1.0m	Gray 10YR (6/1), medium dense to dense, silty Sand with gravel, SM.	41.00	41.45	3	5	5	10	D-41	10	2.5	97.5	49	33.5	2.69	24.6
1.0m	Gray 10YR (6/1), stiff, low plasticity clay with sand, CL.	42.00	42.45	3	5	7	12	D-42	12	35.5	64.5			2.59	23.87
1.0m	Gray 10YR (6/1), stiff, low plasticity Silt with sand, ML.	43.00	43.45	3	5	6	11	D-43	11	3	97	45.5	31.3	2.64	27.88
1.0m	Gray 10YR (6/1), stiff, low plasticity clay with sand, CL.	44.00	44.45	4	6	6	12	D-44	12	68.8	31.2			2.68	24.51
2.0m	Gray 10YR (6/1), medium dense to dense, silty Sand with gravel, SM.	45.00	45.45	4	6	7	13	D-45	13						
		46.00	46.45	4	6	7	13	D-46	13	35.5	64.5			2.65	24.42
2.0m	Gray 10YR (6/1), stiff, low plasticity Silt with sand, ML.	47.00	47.45	4	6	6	12	D-47	12	17.8	82.2			2.63	26.22
		48.00	48.45	4	6	8	14	D-48	14	6	94	46.5	35.6	2.62	23.5
2.0m	Gray 10YR (6/1), stiff, low plasticity clay with sand, CL.	49.00	49.45	3	5	5	10	D-49	10						
		50.00	50.45	2	4	5	9	D-50	9	27.5	72.5			2.45	23.1
2.0m	Gray 10YR (6/1), stiff, low plasticity Silt with sand, ML.	51.00	51.45	3	4	4	8	D-51	8						
		52.00	52.45	2	4	5	9	D-52	9	52.1	47.9			2.64	25.4
1.0m	Gray 10YR (6/1), medium dense to dense, silty Sand with gravel, SM.	53.00	53.45	2	4	4	8	D-53	8	44.8	55.2			2.63	25.22
1.0m	Gray 10YR (6/1), stiff, low plasticity Silt with sand, ML.	54.00	54.45	3	4	6	10	D-54	10	50.6	49.4			2.65	24.47
5.0m	Gray 10YR (6/1), medium dense to dense, silty Sand with gravel, SM.	55.00	55.45	3	5	6	11	D-55	11						
		56.00	56.45	2	4	4	8	D-56	8	52.1	47.9			2.74	24.47
		57.00	57.45	3	4	6	10	D-57	10	63.6	36.4			2.68	24.24
		58.00	58.45	3	5	7	12	D-58	12	66.5	33.5			2.69	24.68
		59.00	59.45	3	5	5	10	D-59	10	42	58			2.67	23.86
1.45m	Gray 10YR (6/1), stiff, low plasticity Silt with sand, ML.	60.00	60.45	3	5	6	11	D-60	11	49.7	50.3			2.67	24.09

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

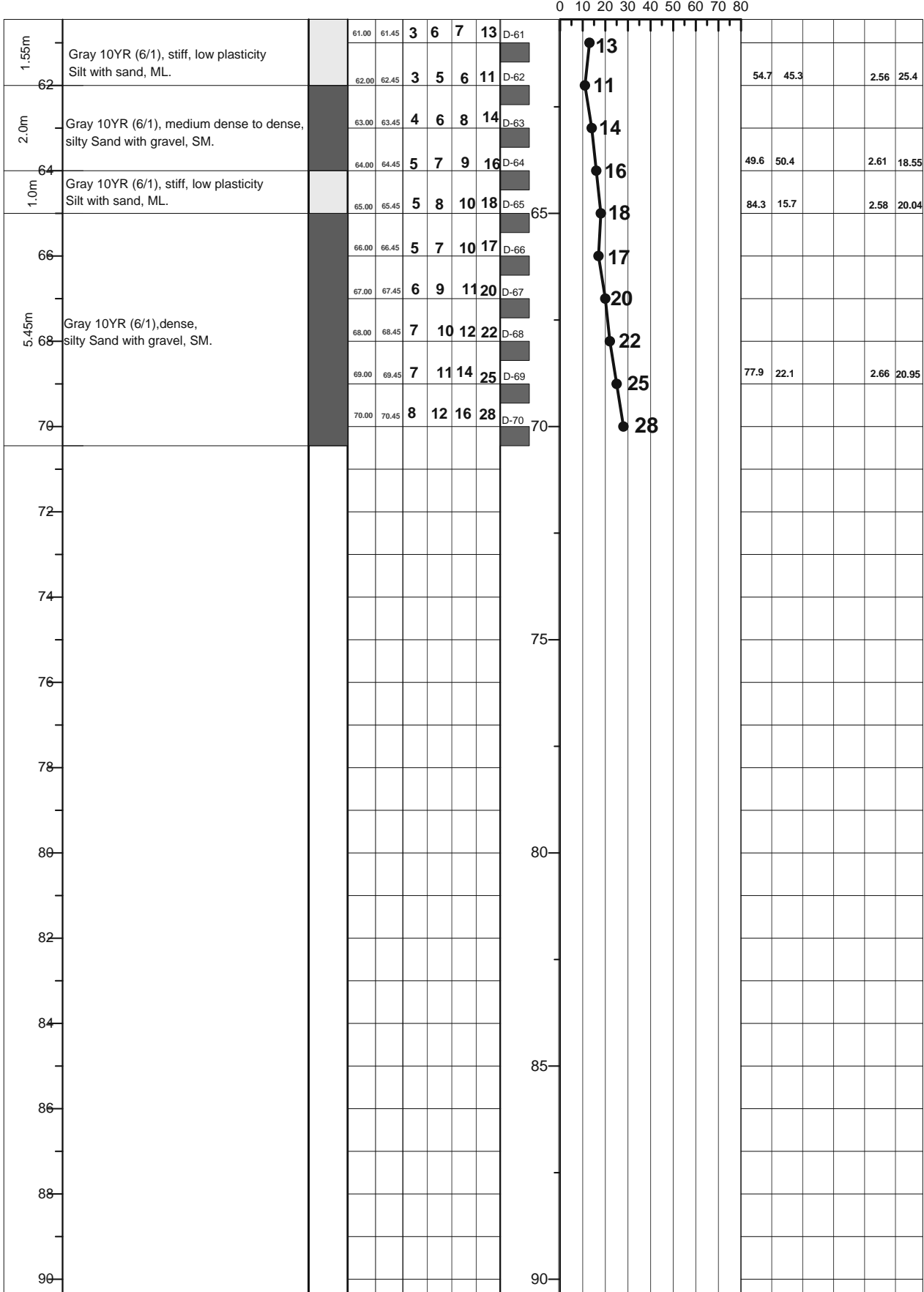
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAXTH PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	Location NO: 01	Longitude: N 90°33.814'	Longitude: N 23°54.246'
		Brigde ID: 01	Location: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	RL: 3.0m
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 07-06-2014	Completed Date: 09-06-2014	G. W. T : 3.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

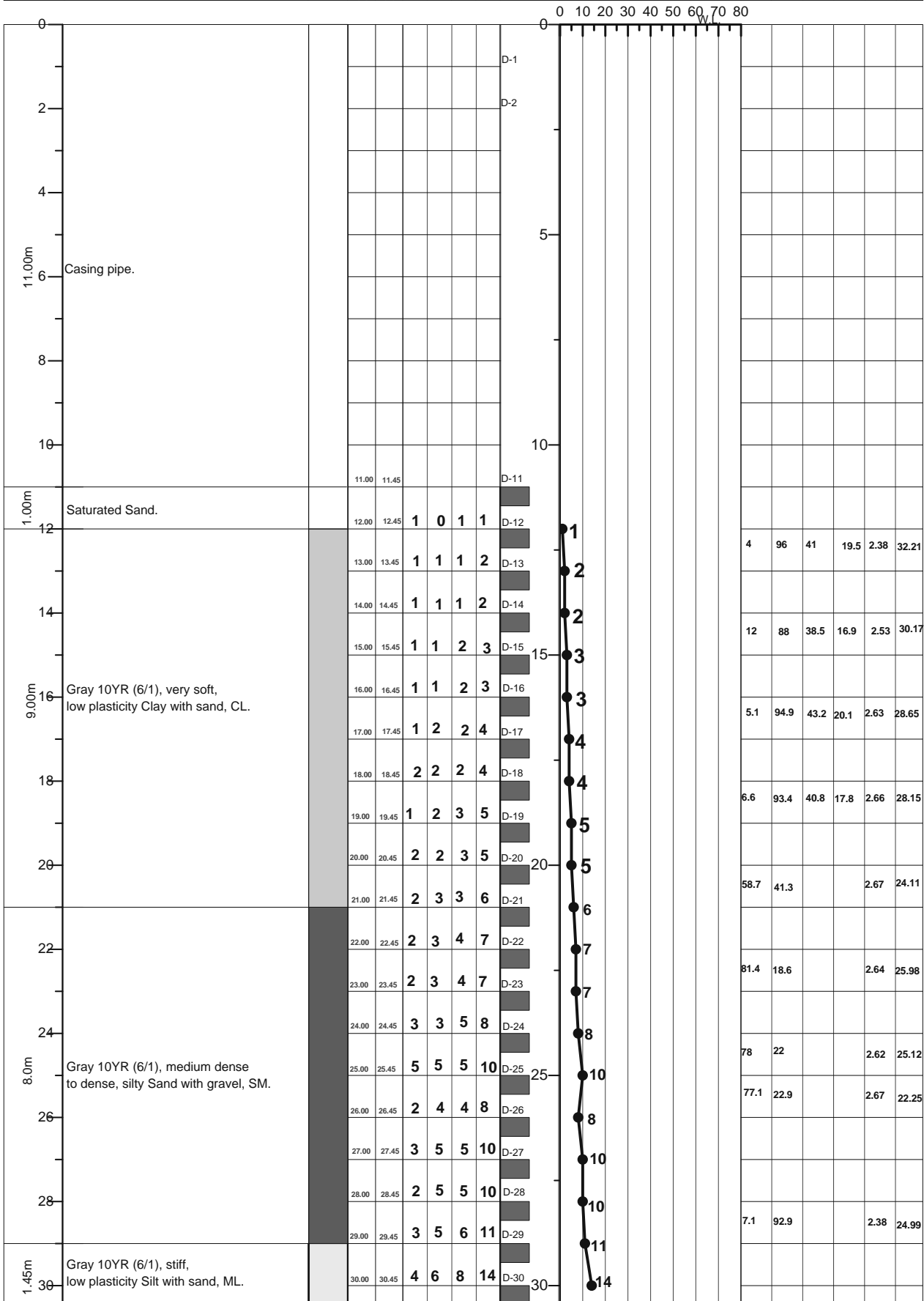
[Light Gray Box] PLASTIC CLAY	[Light Blue Box] SILT	[Dark Gray Box] PEAT/HIGHLY ORGANIC SOIL	[Dark Blue Box] UNDISTURBED SAMPLE
[Dark Gray Box] MICACEOUS FINE SAND/SILT	[Dark Blue Box] SAND	[Dark Blue Box] SHALE	[Dark Blue Box] DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	Location NO: 02	Longitude: N 90°33'39.12"	Latitude: E 23°54'23.41"
		Brigde ID: 02	Location: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	RL: From water level
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 11-06-2014	Completed Date: 13-06-14	G. W. T : 0.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



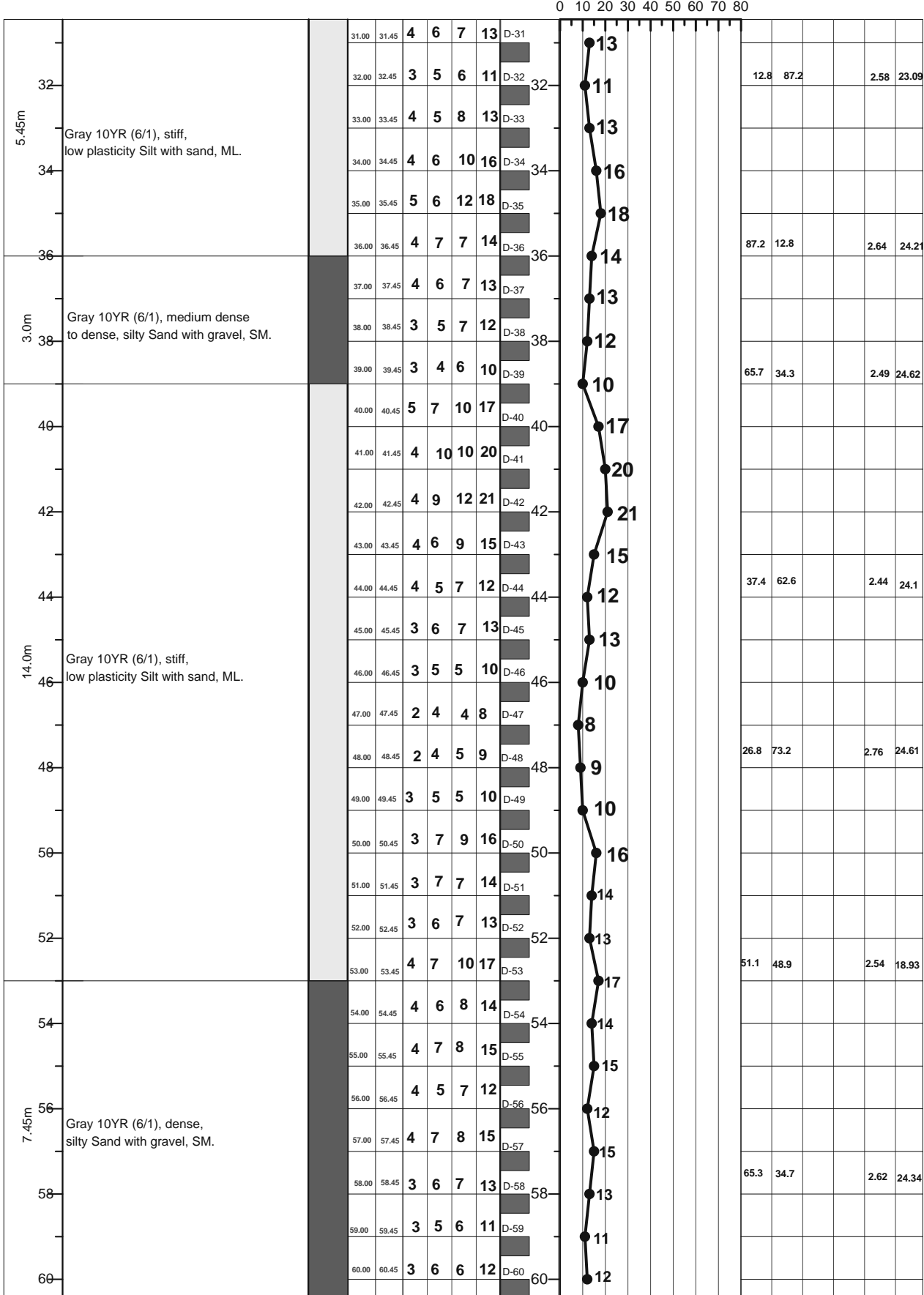
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	Location NO: 02	Longitude: N 90°33'39.12"	Latitude: E 23°54'23.41"
		Brigde ID: 02	Location: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	RL: From water level
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 11-06-2014	Completed Date: 13-06-14	G. W. T : 10.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	Location NO: 02	Longitude: N 90°33'39.12"	Latitude: E 23°54'23.41"
		Brigde ID: 02	Location: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	RL: From water level
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 11-06-2014	Completed Date: 13-06-14	G. W. T : 10.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _c
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									

0 10 20 30 40 50 60 70 80

1.55m	Gray 10YR (6/1), dense, silty Sand with gravel, SM.		61.00	61.45	3	6	8	14	D-61								
62			62.00	62.45	4	7	9	16	D-62		35.8	64.2			2.67	19.09	
2.0m	Gray 10YR (6/1), stiff, low plasticity Silt with sand, ML.		63.00	63.45	4	8	8	16	D-63								
64			64.00	64.45	5	8	10	18	D-64		87	13			2.54	20.71	
6.45m	Gray 10YR (6/1), dense, silty Sand with gravel, SM.		65.00	65.45	5	9	11	20	D-65								
		66		66.00	66.45	5	10	12	22	D-66							
				67.00	67.45	5	10	10	20	D-67							
		68		68.00	68.45	6	10	13	23	D-68							
				69.00	69.45	6	13	15	28	D-69		80.3	19.7			2.58	18.33
		70		70.00	70.45	6	12	14	26	D-70							
72																	
74																	
76																	
78																	
80																	
82																	
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90																	

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

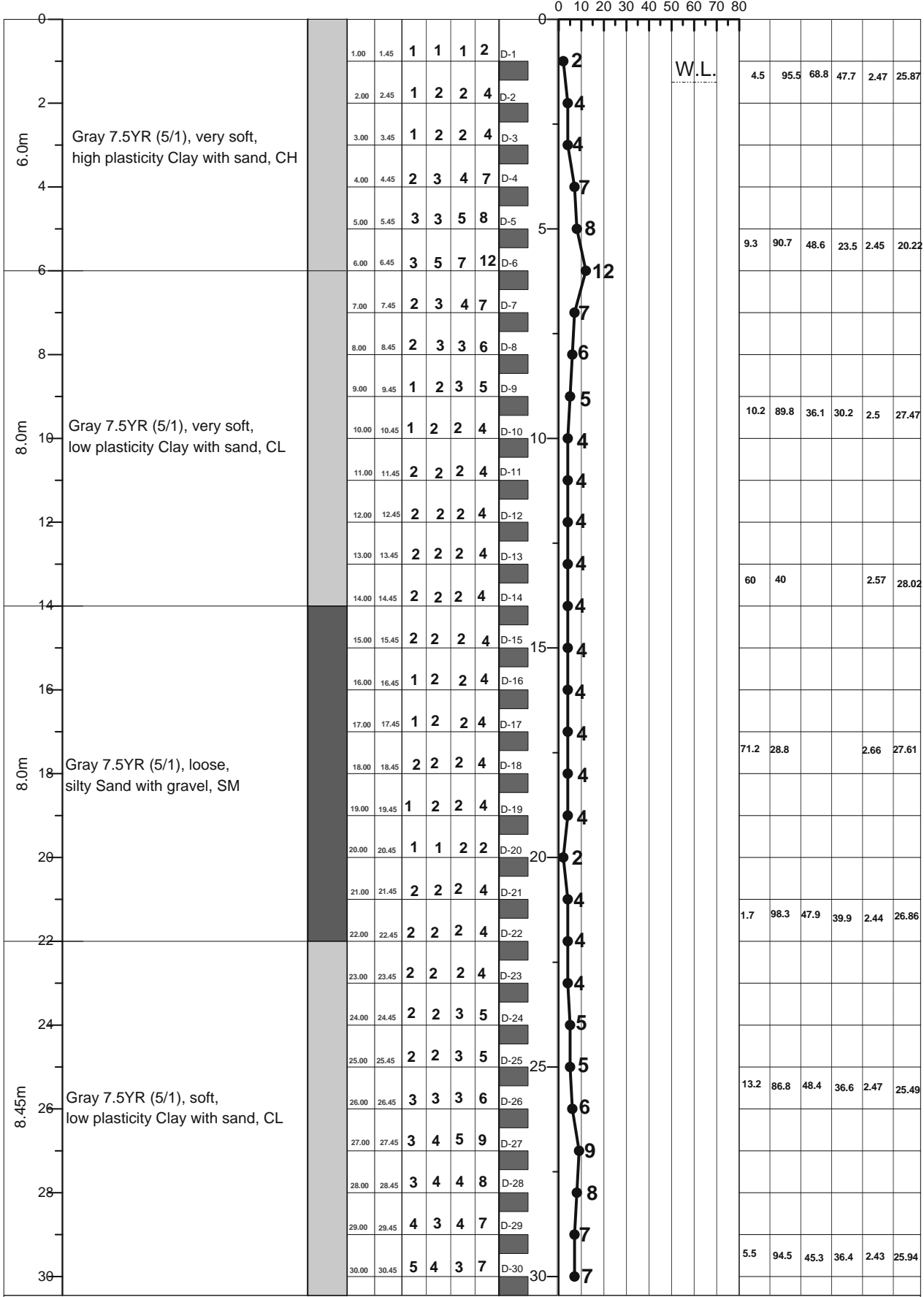
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	BOREHOLE NO: 3	Longitude: N 90°33.701'	Latitude: E 23°54.185'
		Brigde ID: 3	Road Name: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: ?, RL: -2.0m
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 7-06-2014	Completed Date: 10-06-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)								



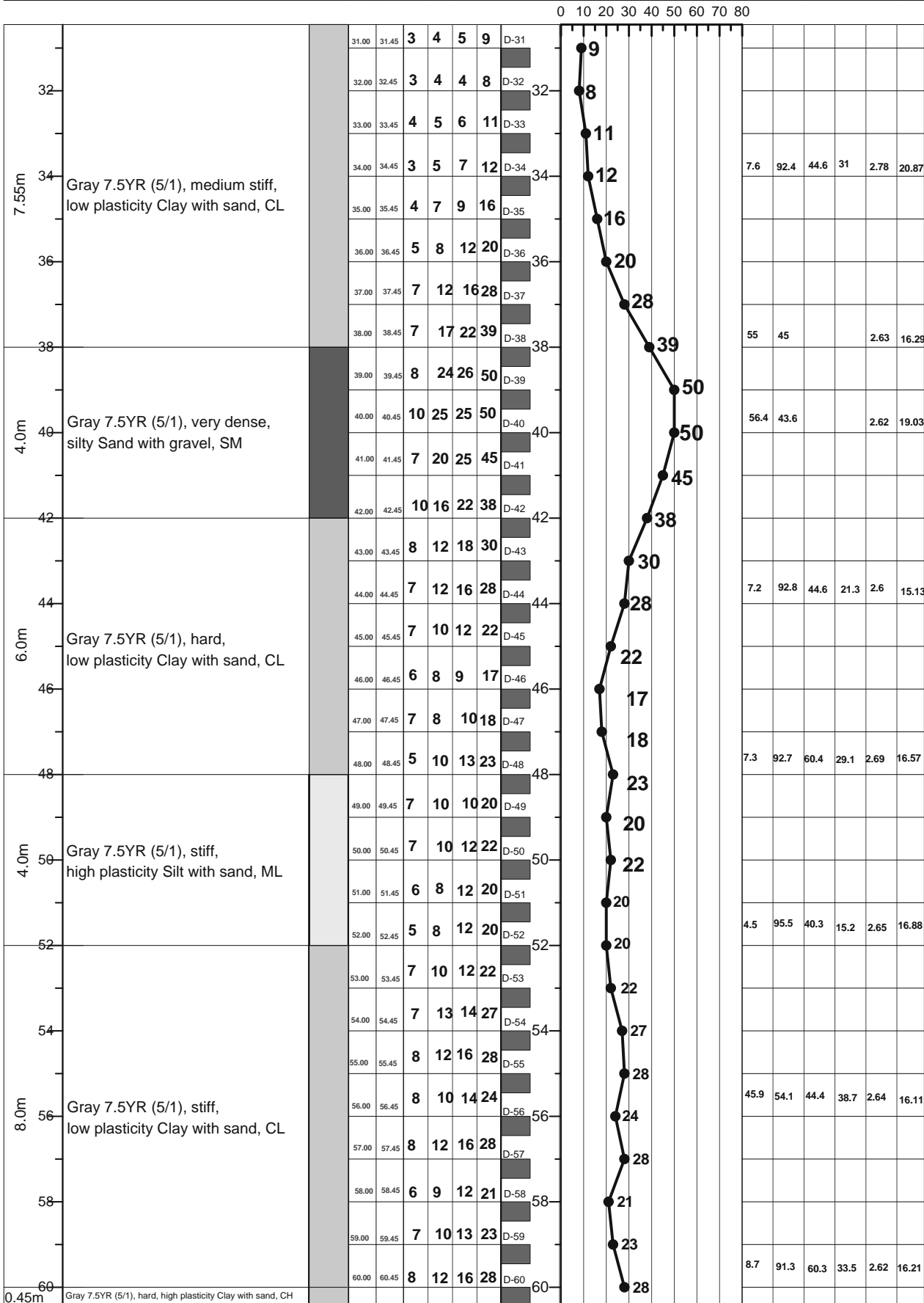
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTH PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED
 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	BOREHOLE NO: 3	Longitude: N 90°33.701'	Latitude: E 23°54.185'
		Brigde ID: 3	Road Name: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: ?, RL: -2.0m
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 7-06-2014	Completed Date: 10-06-2014	G. W. T : -1.5m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _L
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								



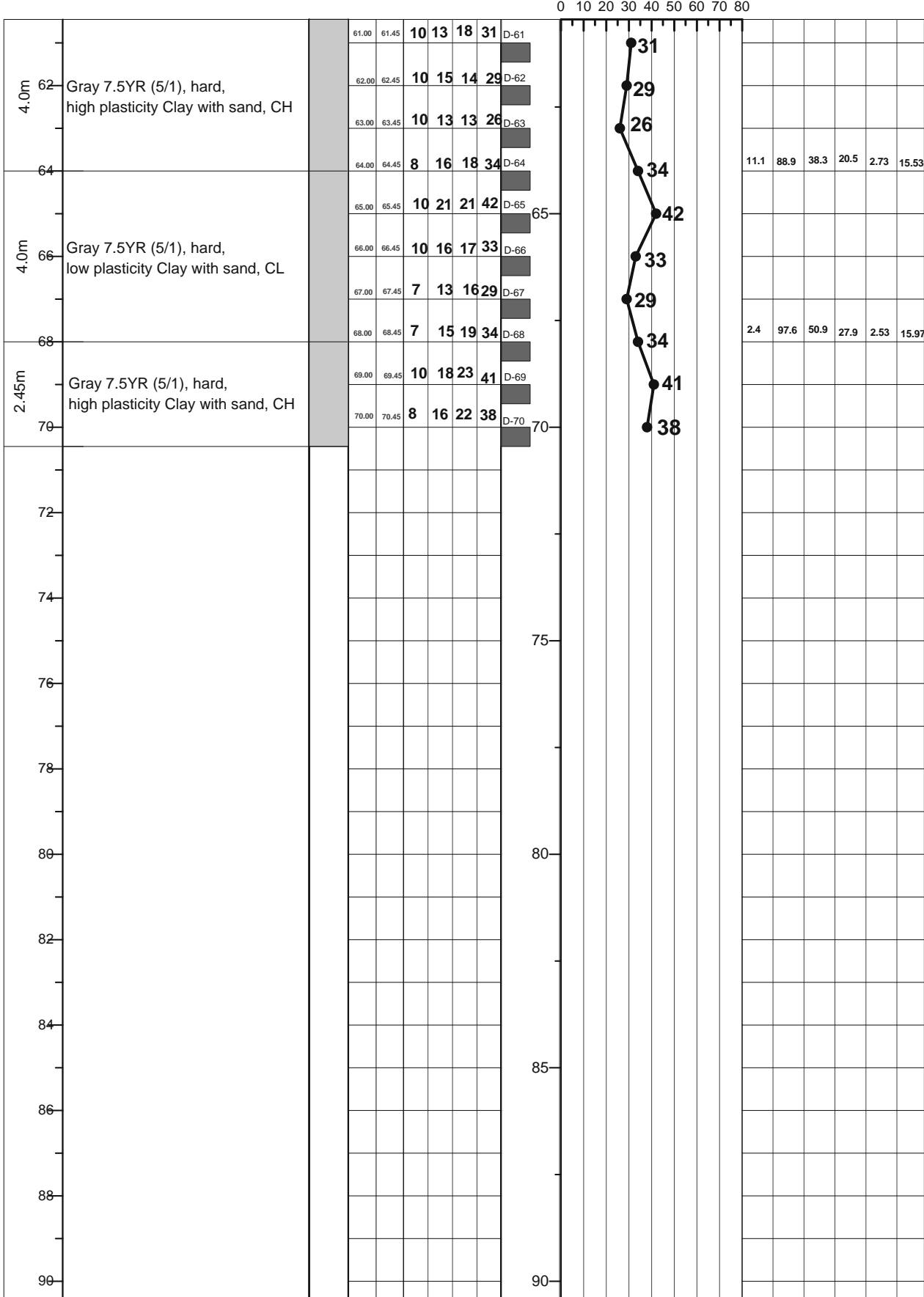
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAXTM PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	BOREHOLE NO: 3	Longitude: N 90°33.701'	Latitude: E 23°54.185'
		Brigde ID: 3	Road Name: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 70.0m	Chainage: ??, RL: -2.0m
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 7-06-2014	Completed Date: 10-06-2014	G. W. T : -1.5m.

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	Location NO: 04	Longitude: N 90°32.383'	Latitude: N 23°54.4'
		Brigde ID: 04	Location: Narsingdi.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	RL: -1.3m
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 06-06-2014	Completed Date: 09-06-2014	G. W. T : -3.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0-2.00m	Dark Gray 7.5YR (4/1), soft, low plasticity Clay with sand, CL.		1.00	1.45	1	1	2	3	D-1	3	1.6	98.4	40.4	19.4	2.62	32.85
2-2.00m			2.00	2.45	1	2	2	4	D-2	4	1	99	36.1	15.5	2.79	32.14
2-3.00m	Very Dark Gray 7.5YR (3/1), low plasticity partially decomposed Organic Clay, OL.		3.00	3.45	1	2	2	4	D-3	4	1.9	98.1	53.5	29.6	2.23	30.15
3-4.00m			4.00	4.45	1	1	2	3	D-4	3						
4-3.00m	Dark Gray 7.5YR (4/1), soft, high plasticity Clay with sand, CH.		5.00	5.45	1	1	1	2	D-5	2	2.6	97.4	55.3	27.9	2.73	31.57
3-6.00m			6.00	6.45	1	1	1	2	D-6	2	6.9	93.1	45.6	20.6	2.66	25.62
6-2.00m	Dark Gray 7.5YR (4/1), soft, low plasticity Clay with sand, CL.		7.00	7.45	1	1	1	2	D-7	2	5	95	43.8	33.5	2.75	26.36
2-8.00m			8.00	8.45	1	1	2	3	D-8	3						
8-2.00m	Pinkish Gray 7.5YR (6/2), soft, low plasticity Clay with sand, CL.		9.00	9.45	2	3	3	5	D-9	5	12	88	48	38.2	2.95	23.33
2-10.00m			10.00	10.45	2	3	3	6	D-10	6						
10-3.00m	Yellow 10YR (7/8), medium stiff, high plasticity Clay with sand, CH.		11.00	11.45	3	4	4	8	D-11	8	10	90	57.1	43.5	2.66	23.51
3-12.00m			12.00	12.45	3	4	5	9	D-12	9						
12-3.00m	Yellow 10YR (7/8), medium stiff, low plasticity Clay with sand, CL.		13.00	13.45	3	4	5	9	D-13	9	2.1	97.9	44.2	20.4	2.69	23.8
3-14.00m			14.00	14.45	4	5	6	11	D-14	11						
14-3.00m	Yellow 10YR (7/8), medium stiff, low plasticity Clay with sand, CL.		15.00	15.45	5	7	10	17	D-15	17	2.9	97.1	55.1	43	2.92	19.25
3-16.00m			16.00	16.45	6	7	10	17	D-16	17						
16-4.00m	Yellow 10YR (7/8), very stiff, high plasticity Clay with sand, CH.		17.00	17.45	6	7	10	17	D-17	17	2.2	97.8	60.5	47.2	2.81	19.43
4-18.00m			18.00	18.45	6	8	10	18	D-18	18						
18-2.00m	Yellow 10YR (7/8), very stiff, low plasticity Clay with sand, CL.		19.00	19.45	6	9	10	19	D-19	19	1.9	98.1	46.3	37.7	2.61	17.39
2-20.00m			20.00	20.45	7	10	10	20	D-20	20						
20-2.00m	Yellow 10YR (7/8), very stiff, low plasticity Silt with sand, ML.		21.00	21.45	8	10	10	20	D-21	20	34.8	65.2			2.49	16.51
2-22.00m			22.00	22.45	8	10	12	22	D-22	22						
22-2.00m	Yellow 10YR (7/8), very stiff, low plasticity Silt with sand, ML.		23.00	23.45	8	11	14	25	D-23	25	7.1	92.9	63.4	51.4	2.56	16.54
2-24.00m			24.00	24.45	8	12	15	27	D-24	27						
24-4.00m	Yellow 10YR (7/8), very stiff, high plasticity Clay with sand, CH.		25.00	25.45	9	12	16	28	D-25	28	1.7	98.3	58.5	33.5	2.78	16.02
4-26.00m			26.00	26.45	10	12	18	30	D-26	30						
26-2.00m	Yellow 10YR (7/8), very stiff, low plasticity Clay with sand, CL.		27.00	27.45	10	12	18	30	D-27	30	3.1	96.9	54.6	38.6	2.82	16.05
2-28.00m			28.00	28.45	12	15	20	35	D-28	35						
28-3.00m	Yellow 10YR (7/8), very stiff, low plasticity Clay with sand, CL.		29.00	29.45	13	16	20	26	D-29	26	9.3	90.7	28.4	9.8	2.63	16.4
3-30.00m			30.00	30.45	16	22	30	50	D-30	50						
0.45m	Gray 7.5YR (5/1), very dense, clayey Sand, SC.															

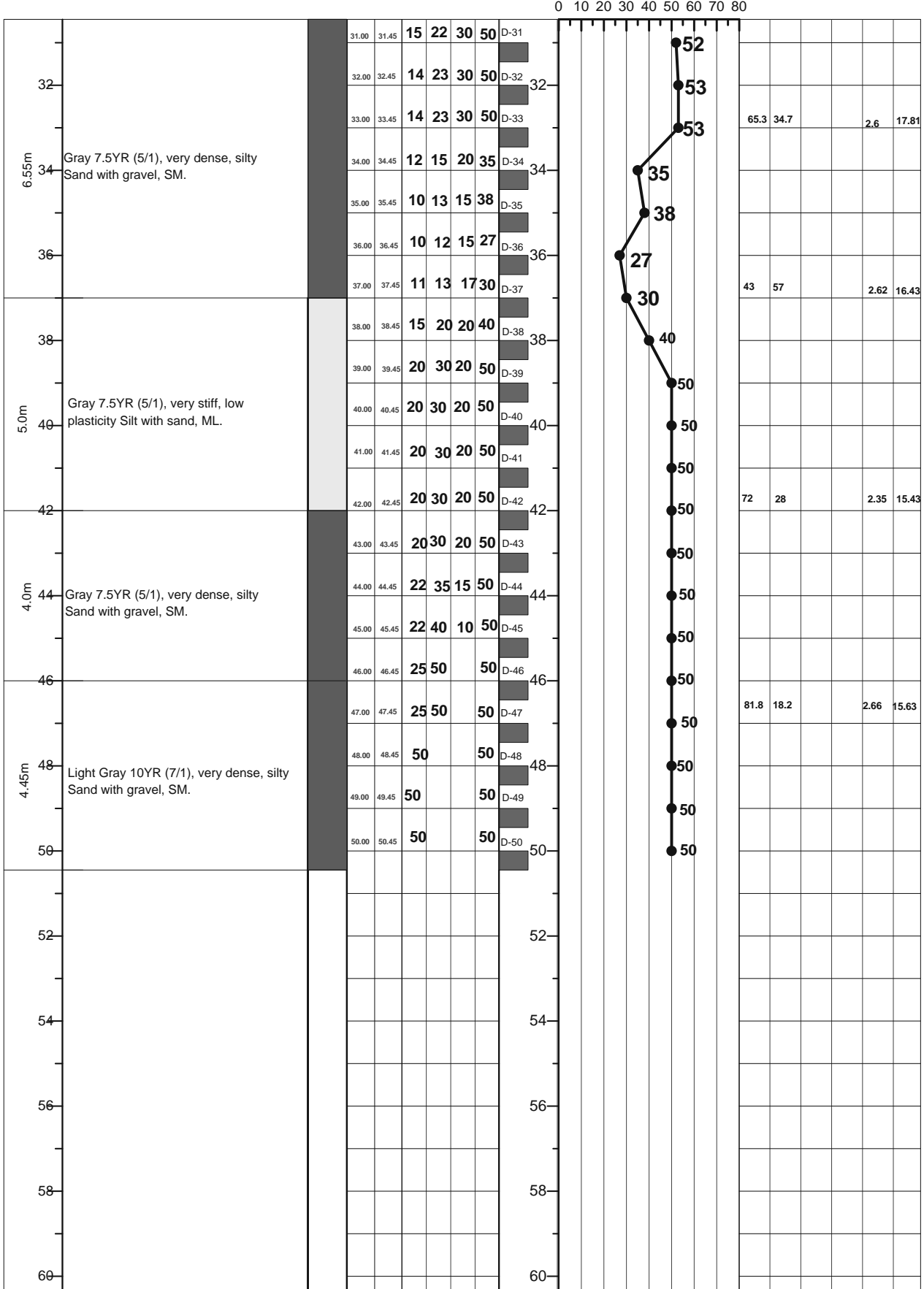
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	Location NO: 04	Longitude: N 90°32.383'	Latitude: N 23°54.4'
		Brigde ID: 04	Location: Narsingdi.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	RL: -1.3m
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 06-06-2014	Completed Date: 09-06-2014	G. W. T : -3.0m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	Location NO: 05	Longitude: N 90°32'14"	Latitude: N 23°55'32.24"
		Brigde ID: 05	Location: Narsingdi.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	RL: 0.3m
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 06-06-2014	Completed Date: 09-06-2014	G. W. T : 4.30m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)								

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _v	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0 - 2.00m	Grayish Brown 10YR (5/2), stiff, low plasticity Clay with sand, CL.		1.00	1.45	4	4	6	10	D-1	10	8.7	91.3	42.3	21.2	2.66	31.34
			2.00	2.45	2	3	3	6	D-2	6						
			3.00	3.45	2	2	2	4	D-3	4						
			4.00	4.45	2	2	3	5	D-4	5	22.7	77.3	43.6	18.1	2.67	26.73
2.00m - 4.00m	Gray 7.5YR (5/1), soft, low plasticity Clay with sand, CL.		5.00	5.45	2	2	3	5	D-5	5						
			6.00	6.45	2	2	3	5	D-6	5	0.3	99.7	37.8	11.9	2.63	26.53
2.00m - 4.00m	Dark Gray 7.5YR (4/1), soft, low plasticity Silt with sand, ML.		7.00	7.45	1	1	2	3	D-7	3						
			8.00	8.45	1	2	2	4	D-8	4	0.3	99.7	41.9	24.4	2.61	28.15
9.0m - 17.00m	Gray 7.5YR (5/1), soft, low plasticity Clay with sand, CL.		9.00	9.45	1	1	2	3	D-9	3						
			10.00	10.45	1	1	1	2	D-10	2	0.6	99.4	40.5	18.4	2.61	33.31
			11.00	11.45	1	1	1	2	D-11	2						
			12.00	12.45	1	1	1	2	D-12	2	0.7	99.3	44.8	33.5	2.58	32.88
			13.00	13.45	1	1	1	2	D-13	2						
			14.00	14.45	1	1	1	2	D-14	2	0.8	99.2	43.6	32	2.7	32.64
			15.00	15.45	1	1	1	2	D-15	2						
			16.00	16.45	1	1	1	2	D-16	2	8.8	91.2	42	22.9	2.61	31.47
			17.00	17.45	1	1	1	2	D-17	2						
4.0m - 18.00m	Gray 7.5YR (5/1), very soft, low plasticity Silt with sand, ML.		18.00	18.45	1	1	1	2	D-18	2	1.9	98.1	37.6	11.6	2.7	25.49
			19.00	19.45	1	1	1	2	D-19	2						
			20.00	20.45	1	2	1	3	D-20	3	49	51	42.4	34	2.57	25.69
			21.00	21.45	1	1	1	2	D-21	2	5.2	94.8	48.7	36.6	2.59	25.29
1.0m - 22.00m	Gray 7.5YR (5/1), very soft, low plasticity Clay with sand, CL.		22.00	22.45	1	2	1	3	D-22	3	50.9	49.1			2.62	26.22
4.0m - 23.00m	Gray 7.5YR (5/1), very loose, silty Sand with gravel, SM.		23.00	23.45	1	1	1	2	D-23	2						
			24.00	24.45	1	1	1	2	D-24	2	55.3	44.7			2.55	26
			25.00	25.45	1	1	1	2	D-25	2						
			26.00	26.45	1	2	2	4	D-26	4	50.7	49.3			2.54	27.19
2.0m - 27.00m	Gray 7.5YR (6/1), loose, silty Sand with gravel, SM.		27.00	27.45	2	2	2	4	D-27	4						
			28.00	28.45	2	2	2	4	D-28	4	12.5	87.5	48.8	39.4	2.52	22.71
2.0m - 29.00m	Gray 7.5YR (6/1), very soft, low plasticity Clay with sand, CL.		29.00	29.45	2	2	2	4	D-29	4						
			30.00	30.45	2	2	2	4	D-30	4	47.5	52.5			2.56	23.92
0.45m - 30.00m	Gray 7.5YR (6/1), soft, low plasticity Silt with sand, ML.															

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES
 MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED
 50/X = BLOWS 50, "X" MM PENETRATION

A2	PROSOIL	Location NO: 05	Longitude: N 90°32'14"	Latitude: N 23°55'32.24"
		Brigde ID: 05	Location: Narsingdi.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		Type of Drill Rig: Manual Rotary	Borehole Depth: 50.0m	RL: 0.3m
CLIENT : Oriental Consultants Company Limited.		Commencement Date: 06-06-2014	Completed Date: 09-06-2014	G. W. T : 4.30m

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N Value Blow/300mm	DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W _L
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									

0 10 20 30 40 50 60 70 80

0.55m	Gray 7.5YR (6/1), very soft, low plastic clayey Silt, ML.		31.00	31.45	2	2	3	5	D-31	5	0.5	99.5	48.9	40.1	2.61	24.28	
3.0m	Light Gray 7.5YR (7/1), soft, low plasticity Clay with sand, CL.		32.00	32.45	2	3	3	6	D-32	6	0.6	99.4	26.9	12.1	2.6	25.04	
			33.00	33.45	3	3	3	6	D-33	6							
			34.00	34.45	2	3	3	6	D-34	6	41	59			2.62	26.11	
3.0m	Light Gray 7.5YR (7/1), soft, low plasticity Silt with sand, ML.		35.00	35.45	4	3	3	6	D-35	6							
			36.00	36.45	3	4	6	10	D-36	10	44.6	55.4			2.33	24.49	
			37.00	37.45	5	7	11	18	D-37	18							
2.0m	Grayish Brown 10YR (5/2), very stiff, low plasticity Silt with sand, ML.		38.00	38.45	8	10	17	27	D-38	27	35.2	64.8			2.61	15.54	
			39.00	39.45	9	14	20	34	D-39	34							
11.45m	Pale Brown 10YR (6/3), very dense, silty Sand with gravel, SM.		40.00	40.45	10	17	20	37	D-40	37							
			41.00	41.45	16	24	26	50	D-41	50/287	71.5	28.5			2.59	22.98	
			42.00	42.45	20	28	22	50	D-42	50/275							
			43.00	43.45	21	30	20	50	D-43	50/250							
			44.00	44.45	17	23	27	50	D-44	50/275							
			45.00	45.45	25	33	17	50	D-45	50/200	82.1	17.9			2.65	17.97	
			46.00	46.45	19	30	20	50	D-46	50/225							
			47.00	47.45	26	36	14	50	D-47	50/200							
			48.00	48.45	30	38	12	50	D-48	50/175	79	21			2.43	18.97	
			49.00	49.45	24	32	18	50	D-49	50/200							
	50.00	50.45	31	40	10	50	D-50	50/175									

LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX[™] PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

APPENDIX 1.5
Additional Investigation for Application of
Weathering Steel

ADDITIONAL INVESTIGATION FOR APPLICATION OF WEATHERING STEEL

1 Introduction

As a result of airborne salt tests as well as exposure tests, it is concluded that weathering steel bridges can be adopted in northern Bangladesh as part of the WBBIP. In addition to above test, “Measurement of Thickness of Rust” and “Measurement of Humidity and Temperature” are carried out in this survey. Though these studies do not related directly to the decision on whether weathering steel can be applied in Bangladesh, these results are useful information for weathering steel.

2 Thickness of Rust

2.1 Necessity of measurement of thickness of rust

This measurement is carried out in order to investigate the relationship between corrosion loss and thickness of rust. Thickness of rust can be measured easily. At present, some studies to estimate corrosion loss by measuring thickness of rust is ongoing in Japan. If the relationship between corrosion loss and thickness of rust is revealed, corrosion loss of existing bridge can be checked easily.

2.2 Method

When exposure test specimens were collected, the thicknesses of rust were measured at ten points by using electric thickness measurement device and its average is recorded. Collections of test specimens were carried out two times; after half year and one year.

2.3 Result

The results for after half year and one year¹ are shown in Table 1 and Table 2 respectively. The ratio of thickness and corrosion loss is shown in Figure1 and Figure 2.

¹ Actually, the test had been carried out for 13 months. JICA survey team could not collect it in appropriate time due to general strike.

Table 1 Thickness of Rust after Half Year

Region	Position	Specimen No	thickness of rust (mm)	thickness reduction (mm)	thickness of rust / thickness reduction	average
Rangpur	Outside/Upper	1	0.0971	0.0242	4.01	3.63
		2	0.0767	0.0236	3.25	
	Inside/Upper	5	0.0538	0.0160	3.35	3.42
		6	0.0605	0.0174	3.48	
	Inside/Lower	9	0.0468	0.0112	4.17	4.59
		10	0.0560	0.0112	5.02	
Bogra	Outside/Upper	17	0.1412	0.0378	3.73	3.55
		18	0.1069	0.0318	3.37	
	Inside/Upper	21	0.0740	0.0202	3.67	4.02
		22	0.0844	0.0194	4.36	
	Inside/Lower	25	0.0626	0.0171	3.66	4.58
		26	0.0844	0.0154	5.49	
Pabna	Outside/Upper	29	0.0554	0.0211	2.63	2.63
		30	0.0543	0.0207	2.62	
	Inside/Upper	33	0.0768	0.0179	4.29	3.91
		34	0.0602	0.0171	3.52	
	Inside/Lower	37	0.0502	0.0119	4.23	4.08
		38	0.0475	0.0120	3.94	
Kanchan Bridge	Outside/Upper	45	0.2279	0.0444	5.14	4.33
		46	0.1126	0.0320	3.52	
	Inside/Upper	49	0.0711	0.0235	3.03	3.08
		50	0.0725	0.0232	3.13	
	Inside/Lower	53	0.0416	0.0154	2.70	2.73
		54	0.0410	0.0148	2.76	
Jessore	Outside/Upper	57	0.0530	0.0178	2.98	3.58
		58	0.1007	0.0240	4.19	
	Inside/Upper	61	0.0521	0.0128	4.08	4.36
		62	0.0587	0.0126	4.65	
	Inside/Lower	65	0.0493	0.0113	4.36	4.51
		66	0.0529	0.0114	4.65	
Madaripur	Outside/Upper	69	0.1001	0.0275	3.64	3.08
		70	0.0592	0.0235	2.52	
	Inside/Upper	73	0.0632	0.0178	3.55	3.76
		74	0.0691	0.0174	3.97	
	Inside/Lower	77	0.0639	0.0139	4.59	4.42
		78	0.0579	0.0136	4.25	

Table 2 Thickness of Rust after One Year

Region	Position	No.	Specimen No	Data (µm)	thickness of rust (mm)	thickness reduction (mm)	thickness of rust / thickness reduction	average
				Av.				
Rangpur	Outside/Upper	Outside/Upper No.3	3	87.7	0.0877	0.0311	2.82	2.89
		Outside/Upper No.4	4	83.9	0.0839	0.0283	2.96	
	Inside/Upper	Inside/Upper No.7	7	61.7	0.0617	0.0172	3.59	3.84
		Inside/Upper No.8	8	69.6	0.0696	0.0170	4.10	
	Inside/Lower	Inside/Lower No.11	11	66.4	0.0664	0.0132	5.01	4.55
		Inside/Lower No.12	12	48.5	0.0485	0.0119	4.09	
Z5015-22a	Upper	Upper No.13	13	117.3	0.1173	0.0338	3.47	3.20
		Upper No.14	14	135.6	0.1356	0.0385	3.52	
		Upper No.15	15	93.6	0.0936	0.0336	2.78	
		Upper No.16	16	96.3	0.0963	0.0320	3.01	
	Lower	Lower No.85	85	63.6	0.0636	0.0229	2.77	2.86
		Lower No.86	86	65.3	0.0653	0.0275	2.37	
Lower No.87		87	65.8	0.0658	0.0397	1.66		
	Lower No.88	88	115.9	0.1159	0.0249	4.65		
Bogra	Outside/Upper	Outside/Upper No.19	19	101.0	0.1010	0.0399	2.53	2.49
		Outside/Upper No.20	20	82.3	0.0823	0.0337	2.44	
	Inside/Upper	Inside/Upper No.23	23	86.3	0.0863	0.0239	3.61	3.31
		Inside/Upper No.24	24	78.3	0.0783	0.0260	3.01	
	Inside/Lower	Inside/Lower No.27	27	76.4	0.0764	0.0184	4.16	4.33
		Inside/Lower No.28	28	82.1	0.0821	0.0182	4.51	
Pabna	Outside/Upper	Outside/Upper No.31	31	70.4	0.0704	0.0257	2.74	2.70
		Outside/Upper No.32	32	86.2	0.0862	0.0323	2.67	
	Inside/Upper	Inside/Upper No.35	35	74.1	0.0741	0.0218	3.39	3.55
		Inside/Upper No.36	36	66.0	0.0660	0.0178	3.70	
	Inside/Lower	Inside/Lower No.39	39	61.7	0.0617	0.0125	4.95	5.76
		Inside/Lower No.40	40	80.8	0.0808	0.0123	6.57	
N505-2a	Upper	Upper No.41	41	108.9	0.1089	0.0295	3.70	2.67
		Upper No.42	42	104.7	0.1047	0.0317	3.30	
		Upper No.89	89	103.4	0.1034	0.0399	2.59	
		Upper No.90	90	104.1	0.1041	0.0963	1.08	
	Lower	Lower No.43	43	71.6	0.0716	0.0245	2.92	4.22
		Lower No.44	44	81.0	0.0810	0.0170	4.76	
Lower No.91		91	74.7	0.0747	0.0161	4.65		
	Lower No.92	92	72.8	0.0728	0.0161	4.53		
Kanchan Bridge	Outside/Upper	Outside/Upper No.47	47	124.7	0.1247	0.0505	2.47	2.36
		Outside/Upper No.48	48	84.1	0.0841	0.0374	2.25	
	Inside/Upper	Inside/Upper No.51	51	64.7	0.0647	0.0248	2.61	2.62
		Inside/Upper No.52	52	64.1	0.0641	0.0244	2.63	
	Inside/Lower	Inside/Lower No.55	55	62.3	0.0623	0.0202	3.08	2.70
		Inside/Lower No.56	56	44.1	0.0441	0.0190	2.33	
Jessore	Outside/Upper	Outside/Upper No.59	59	93.7	0.0937	0.0251	3.74	3.28
		Outside/Upper No.60	60	93.0	0.0930	0.0328	2.83	
	Inside/Upper	Inside/Upper No.63	63	56.4	0.0564	0.0159	3.54	3.93
		Inside/Upper No.64	64	62.1	0.0621	0.0144	4.31	
	Inside/Lower	Inside/Lower No.67	67	59.9	0.0599	0.0147	4.06	4.65
		Inside/Lower No.68	68	79.0	0.0790	0.0151	5.23	
Madaripur	Outside/Upper	Outside/Upper No.71	71	80.3	0.0803	0.0328	2.45	2.46
		Outside/Upper No.72	72	69.8	0.0698	0.0282	2.47	
	Inside/Upper	Inside/Upper No.75	75	69.4	0.0694	0.0235	2.96	2.82
		Inside/Upper No.76	76	59.5	0.0595	0.0222	2.69	
	Inside/Lower	Inside/Lower No.79	79	65.5	0.0655	0.0146	4.47	4.52
		Inside/Lower No.80	80	68.5	0.0685	0.0150	4.58	
R860-53d	Upper	Upper No.81	81	85.3	0.0853	0.0238	3.58	4.72
		Upper No.82	82	94.6	0.0946	0.0203	4.66	
		Upper No.93	93	80.9	0.0809	0.0172	4.71	
		Upper No.94	94	85.0	0.0850	0.0143	5.93	
	Lower	Lower No.83	83	68.6	0.0686	0.0269	2.55	2.86
		Lower No.84	84	69.9	0.0699	0.0272	2.57	
Lower No.95		95	74.7	0.0747	0.0251	2.97		
	Lower No.96	96	77.9	0.0779	0.0232	3.36		

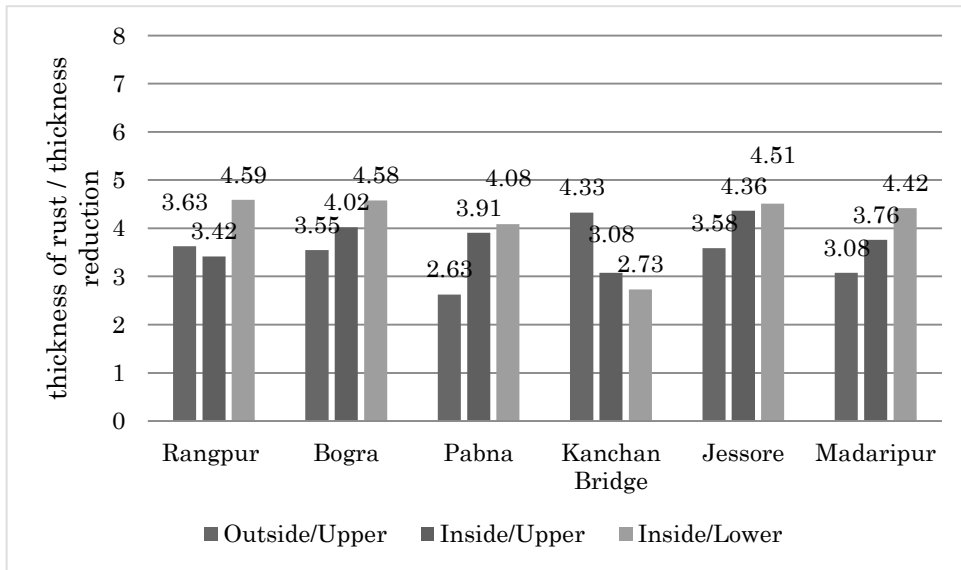


Figure 1 The Ratio between Thickness of Rust and Corrosion Loss after Half Year

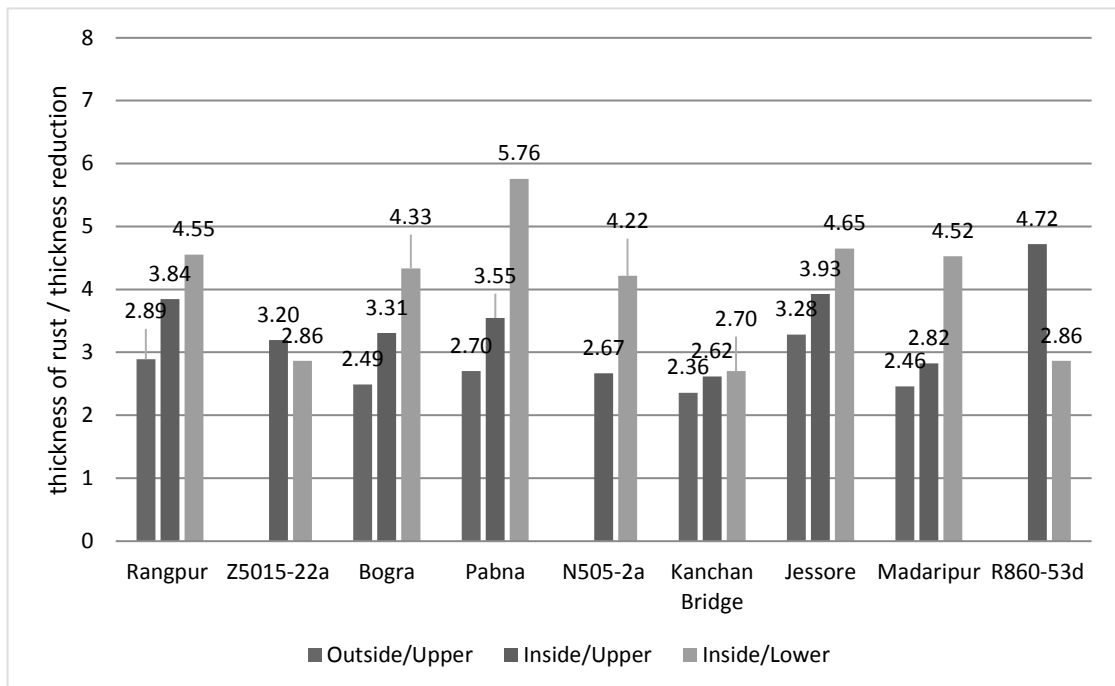


Figure 2 The Ratio between Thickness of Rust and Corrosion Loss after One Year

2.4 Consideration

The ratio for half year and one year is between 2.6 and 4.6 and between 2.4 and 5.8 respectively. In Japan, it is reported that the ratio is between 3.0 and 5.0. The result is the almost same in Japan.

In Japan, some research to establish new method to check easily corrosion loss of existing bridge is ongoing. The data of relationship between corrosion loss and thickness of rust will be useful information for checking thickness of existing bridge.

3 Time of Wetness

3.1 Necessity of measurement of Time of Wetness (TOW)

The major factors that cause corrosion on steel plates are airborne salt, temperature and humidity. Yearly temperature and humidity variation can be combined and converted into a value called Time of Wetness (TOW)*. The purpose of this study is collection of TOW at each test location and comparison with TOW in Japan

3.2 Method

The temperature and humidity had been collected every hour for one year by data logger. Measurements are conducted at each RHD office. Data logger is installed with gauze frames for airborne salt test and weathering steel specimen in small wooden shed.

3.3 Result

Time of Wetness (TOW) is the amount of time in which the steel plate surface is wet during a year. TOW is defined in ISO9223 (International Organization for Standardization), and is universally recognized.

According to ISO 9223, TOW is defined as the yearly time² period during which the relative humidity is in excess of 80% and the temperature is above 0 degrees Celsius.

TOWs at each test location are shown in Table3.

² 1 year = $365 \times 24 + 24 \div 6 = 8766$

Table 3 TOW at Each Test Location

Year	Month	Rangpur		Bogra		Pabna		Dhaka		Jessore		Madaripur	
		days	TOW	days	TOW	days	TOW	days	TOW	days	TOW	days	TOW
2014	Feb	24	250	24	193	-	-	28	238	-	-	-	-
	Mar	31	116	31	141	31	147	31	154	31	122	31	177
	Apr	30	64	30	119	30	129	30	173	30	143	30	198
	May	31	202	31	233	31	251	31	277	31	167	31	339
	Jun	30	379	30	445	30	451	30	403	30	337	30	421
	Jul	31	257	31	445	24	370	31	334	31	461	31	438
	Aug	10	64	31	479	-	-	31	477	31	453	13	315
	Sep	-	-	30	440	-	-	30	387	30	390	-	-
	Oct	-	-	31	334	11	0	31	367	31	348	-	-
	Nov	-	-	30	161	30	140	30	299	30	209	-	-
Dec	-	-	31	393	31	435	31	452	31	341	21	306	
2015	Jan	26	314	6	46	31	406	31	355	31	322	31	425
	Feb	28	240	-	-	28	257	-	-	28	239	28	301
Observed Total		241	1886	336	3429	277	2586	365	3916	365	3532	246	2920
Interpolated Total ^{*2}		365	2856	365	3725	365	3408	365	3916	365	3532	365	4333

*Some data is missing because data logger is stolen.

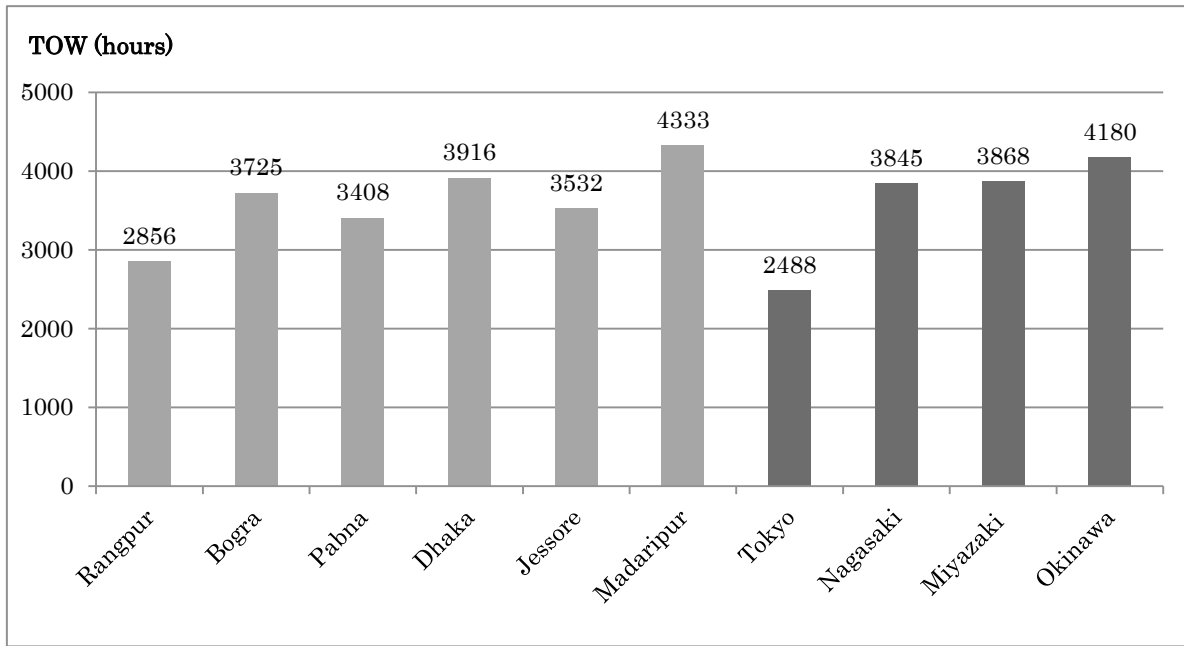
* Interpolated Total = Observed total × 365 / Total of observational days

3.4 Consideration

Figure 3 shows the TOW at each location in Bangladesh and Japan.

The TOW in Bangladesh is between 2856 and 4333. It is almost the same as those in Kyushu area and Okinawa prefectures. Weathering steel bridges are being applied in Kyushu area and Okinawa prefecture in case the annual average airborne salt amount is less than 0.05mdd.

It is evaluated that Japanese Criteria can be applied in Bangladesh, since Bangladesh has the same TOW condition as Kyushu area and Okinawa prefecture.



*TOW in Japan is calculated by using estimation method proposed by Japan weathering center

Figure 3 Comparison of TOW between Japan and Banbladesh

