

**APPENDIX 1.4**  
**Geological Survey Works**

A1: Location of Borehole

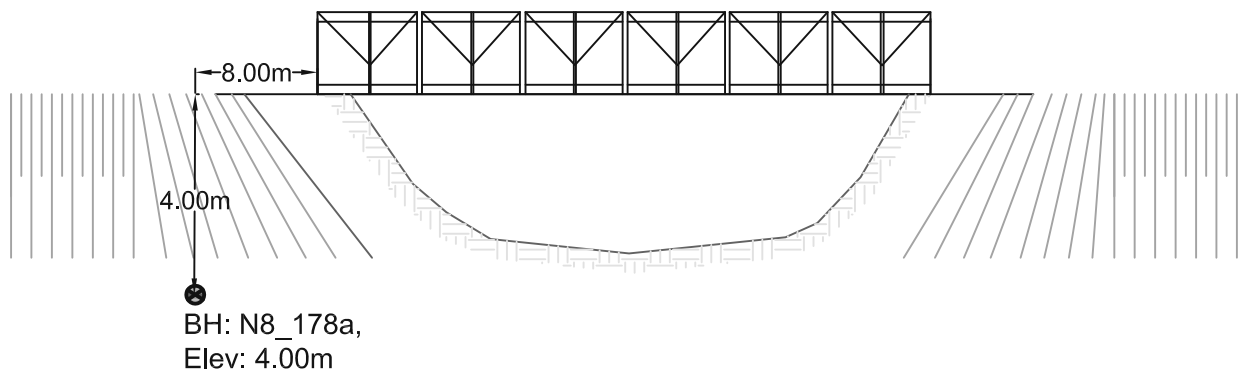
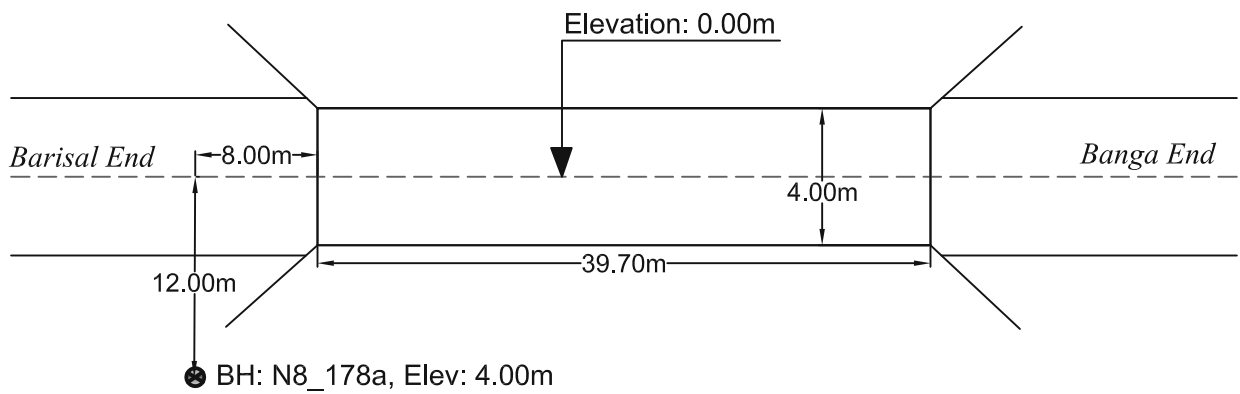
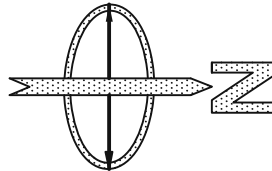
CLIENT: Oriental Consultants Company Limited.

RANK: 1

BRIDGE ID: N8\_178a

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

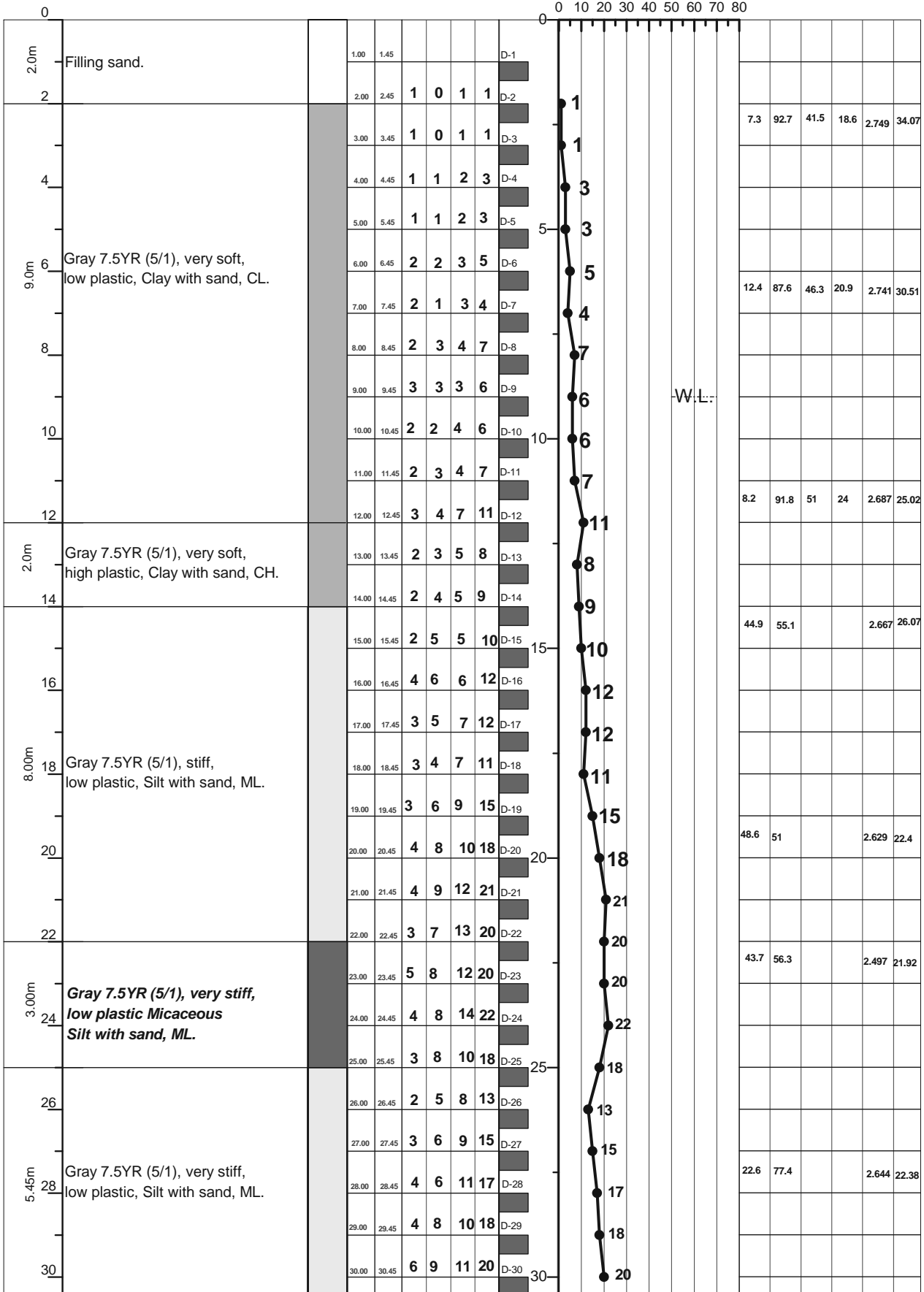
CHAINAGE: 176.88



PROSOIL FOUNDATION CONSULTANT

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

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



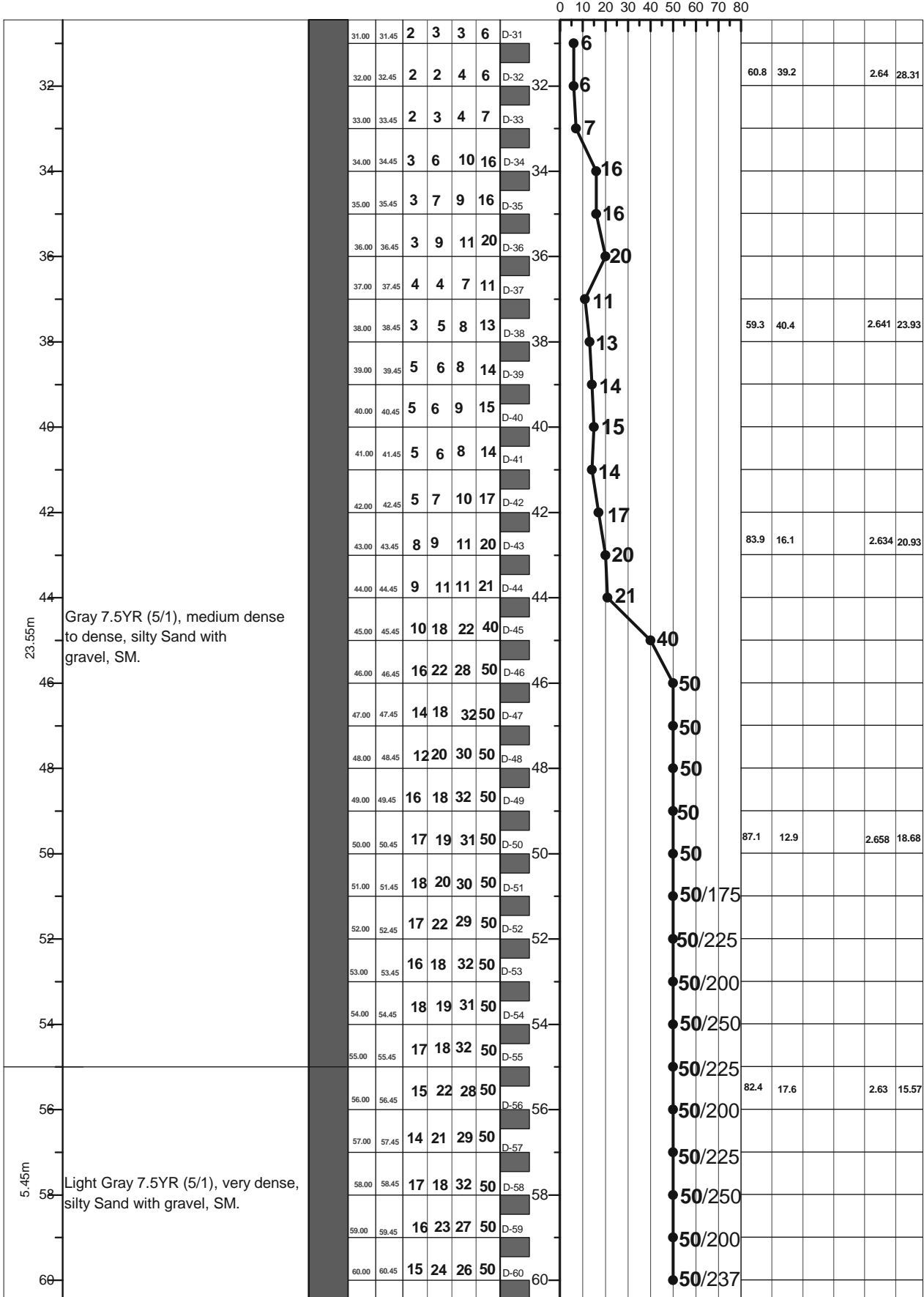
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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



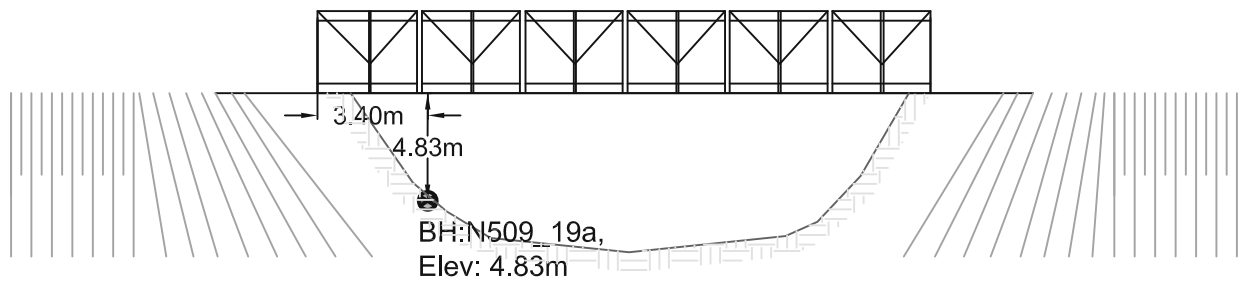
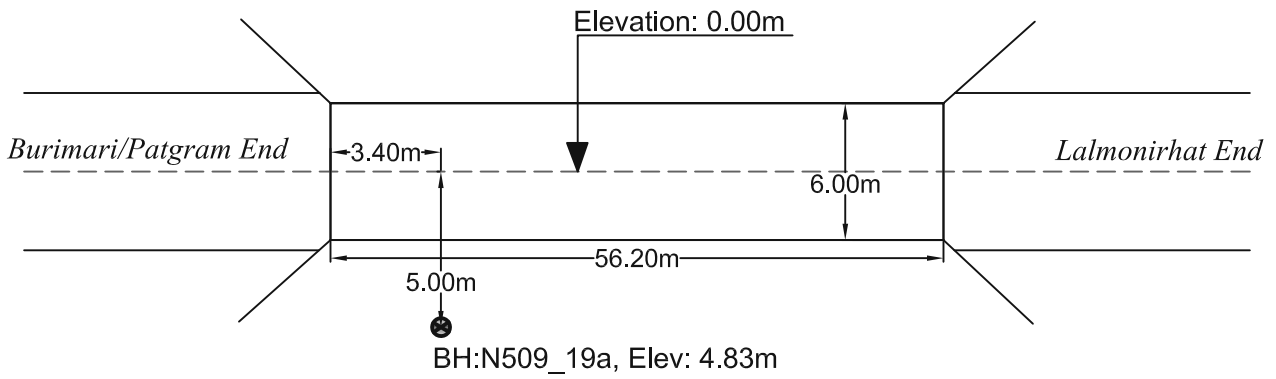
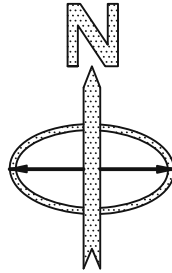
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

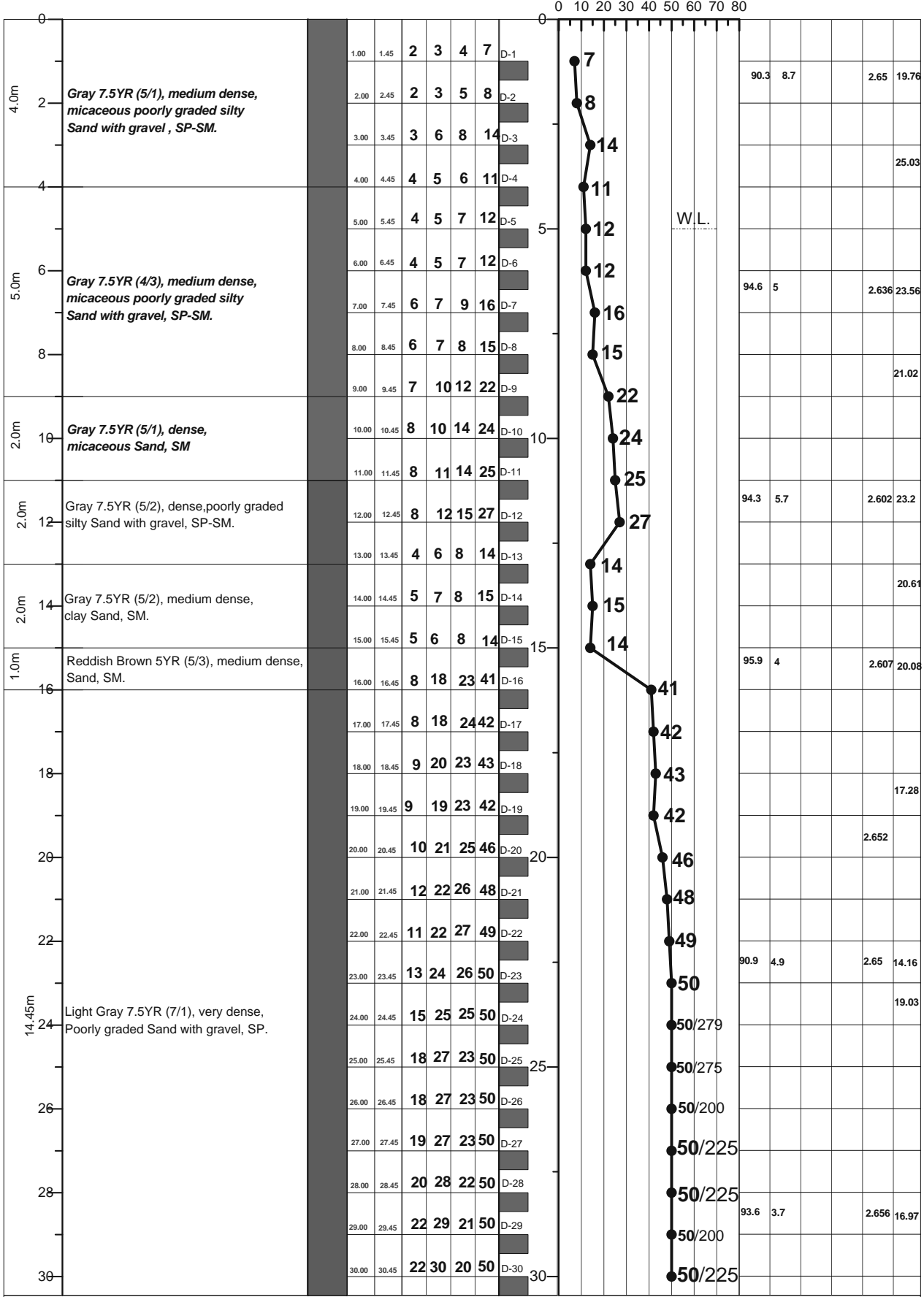
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 2  
BRIDGE ID: N509\_19a  
LATITUDE: 25°54'33.978" LONGITUDE: 89°21'57.998"  
CHAINAGE: 19.553



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

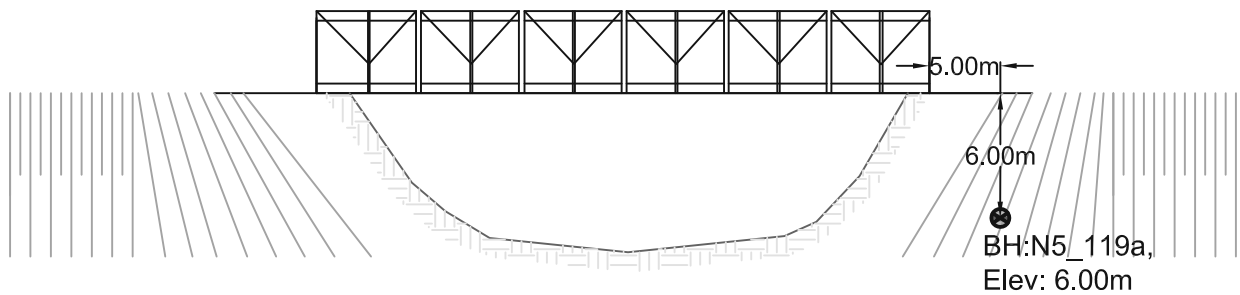
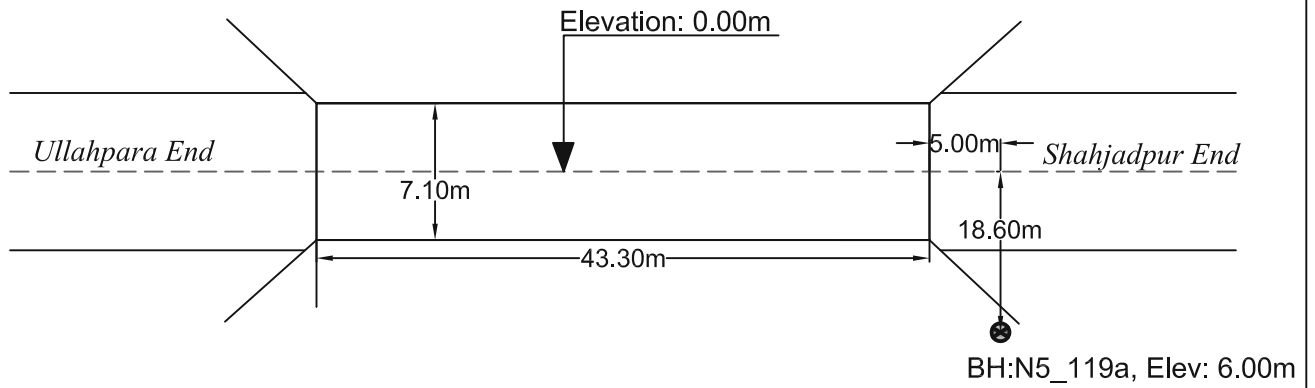
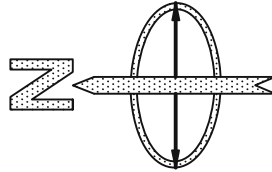
CLIENT: Oriental Consultants Company Limited.

RANK: 3

BRIDGE ID: N5\_119a

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

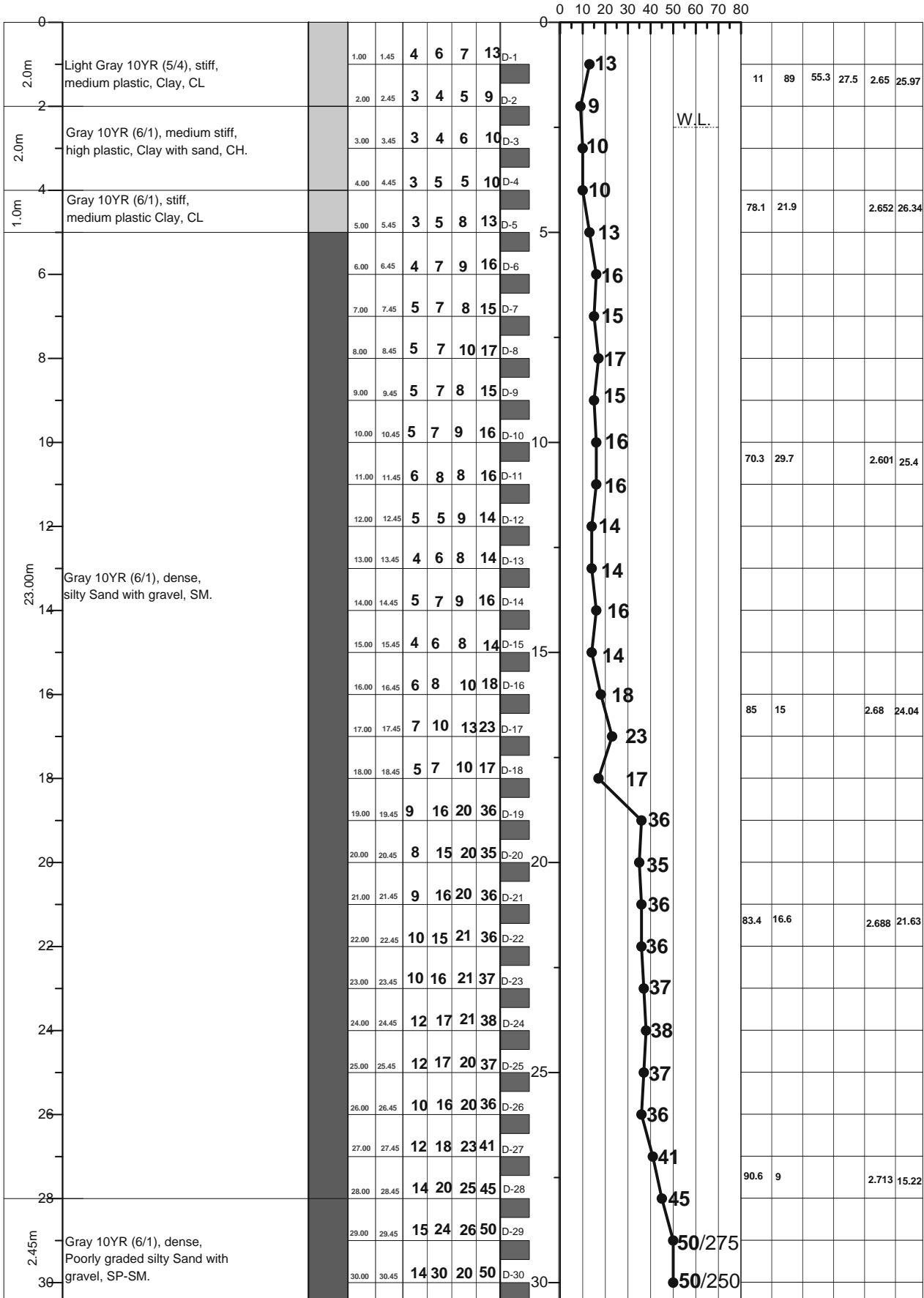
CHAINAGE: 118.748



PROSOIL FOUNDATION CONSULTANT

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

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 <sub>v</sub>
			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

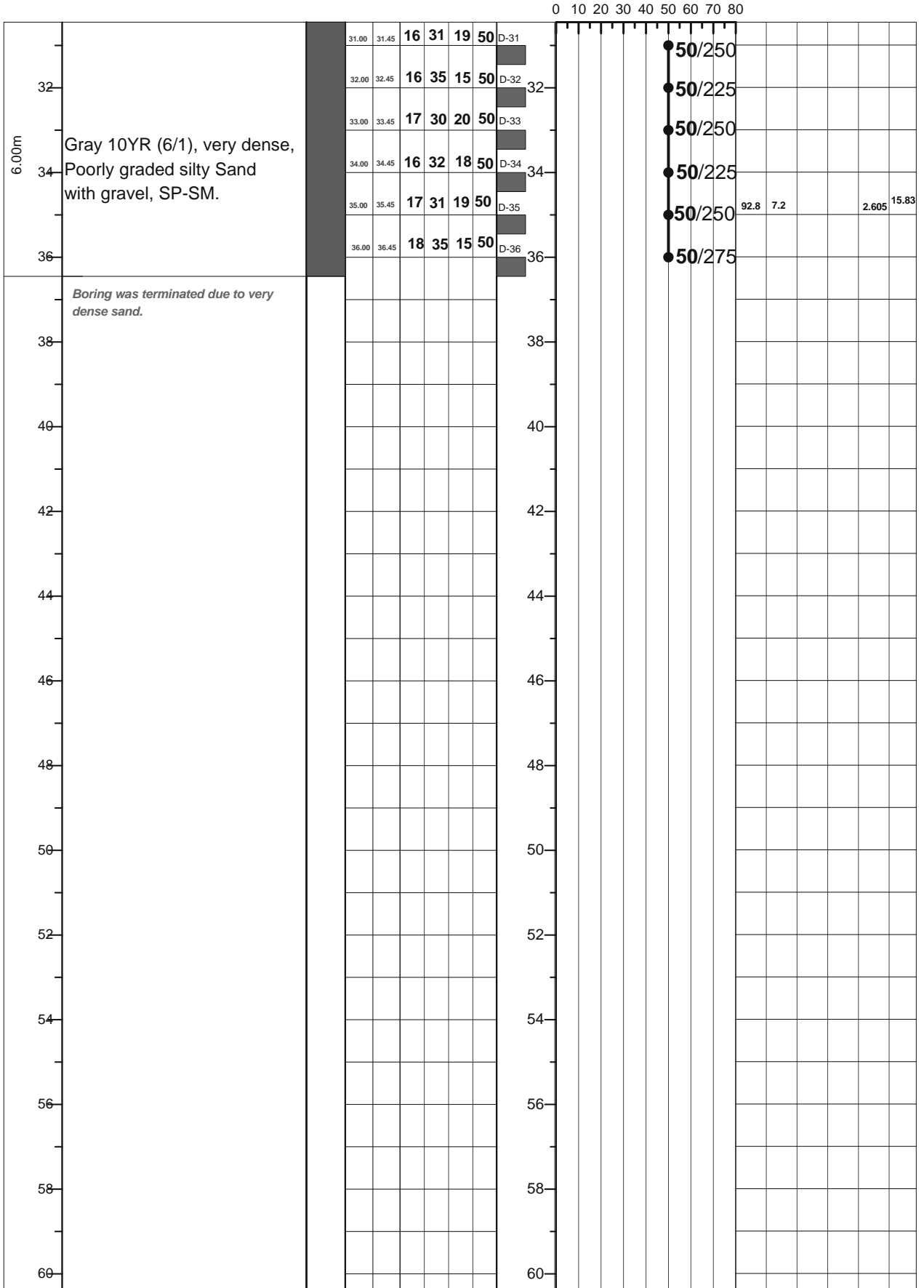
N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



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

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 <sub>v</sub>
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



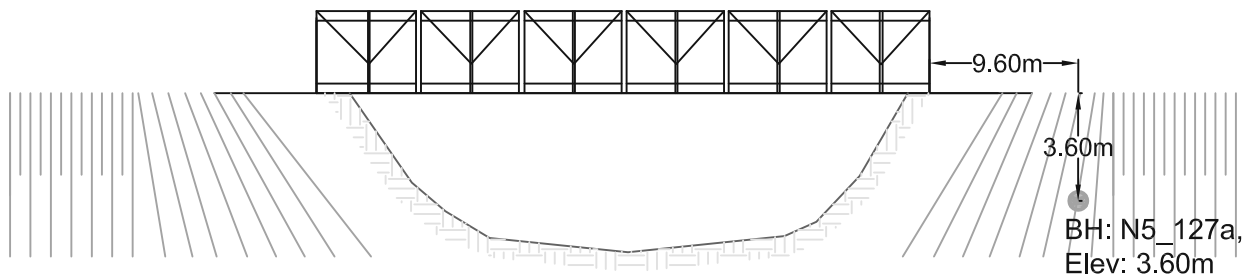
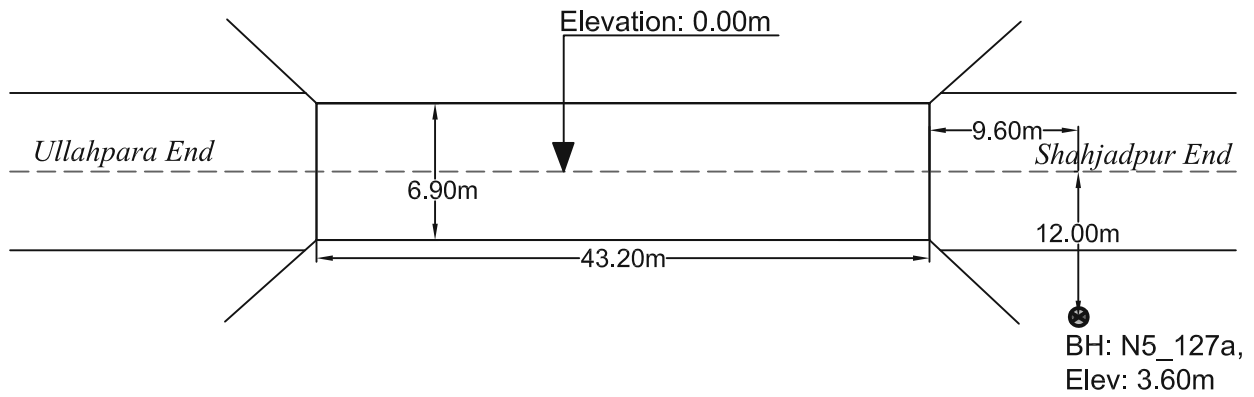
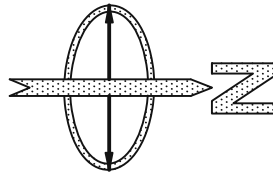
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

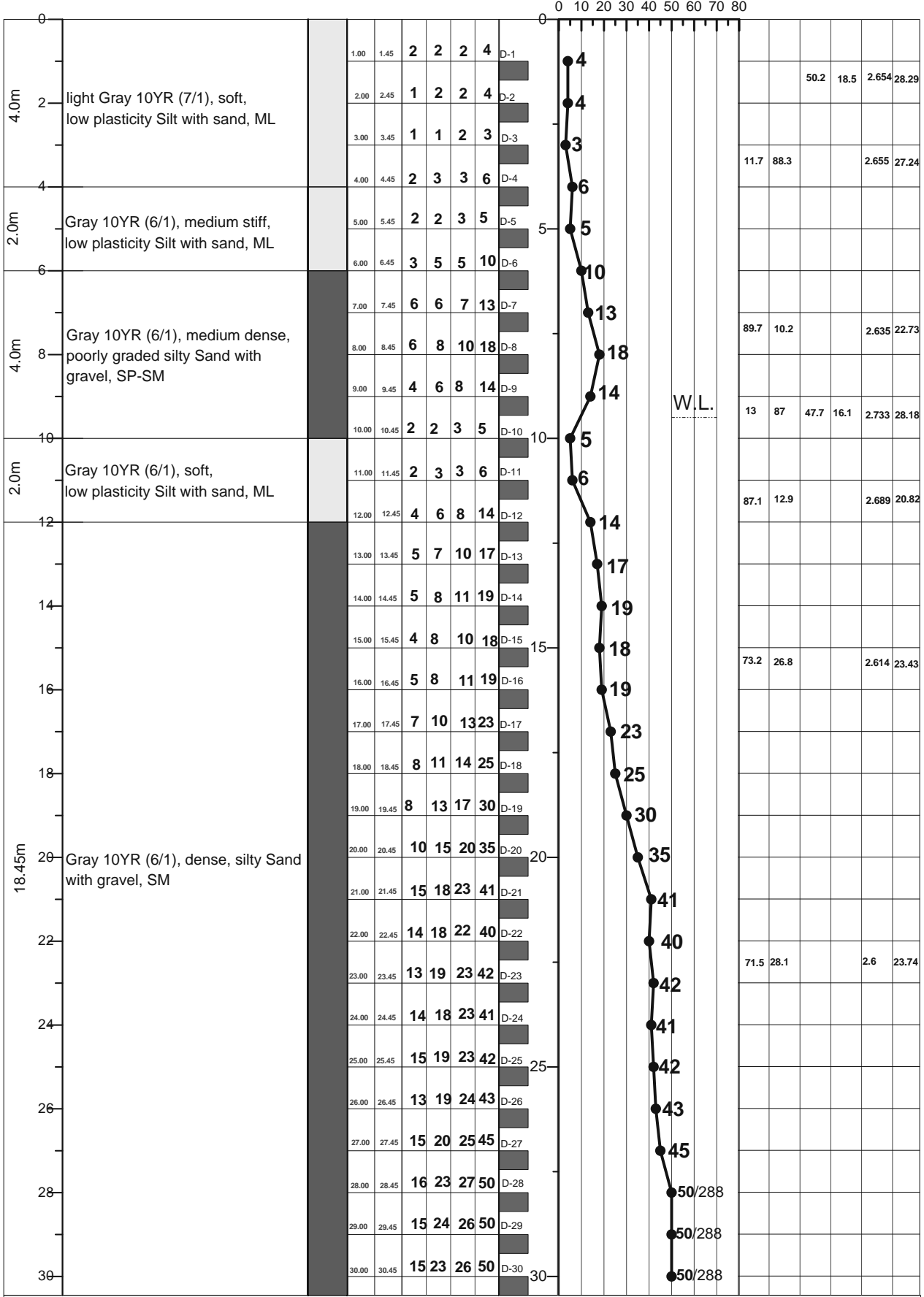
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 4  
BRIDGE ID: N5\_127a  
LATITUDE: 24°06'24.672" LONGITUDE: 89°34'52.711"  
CHAINAGE: 126.806



PROSOIL FOUNDATION CONSULTANT

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

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



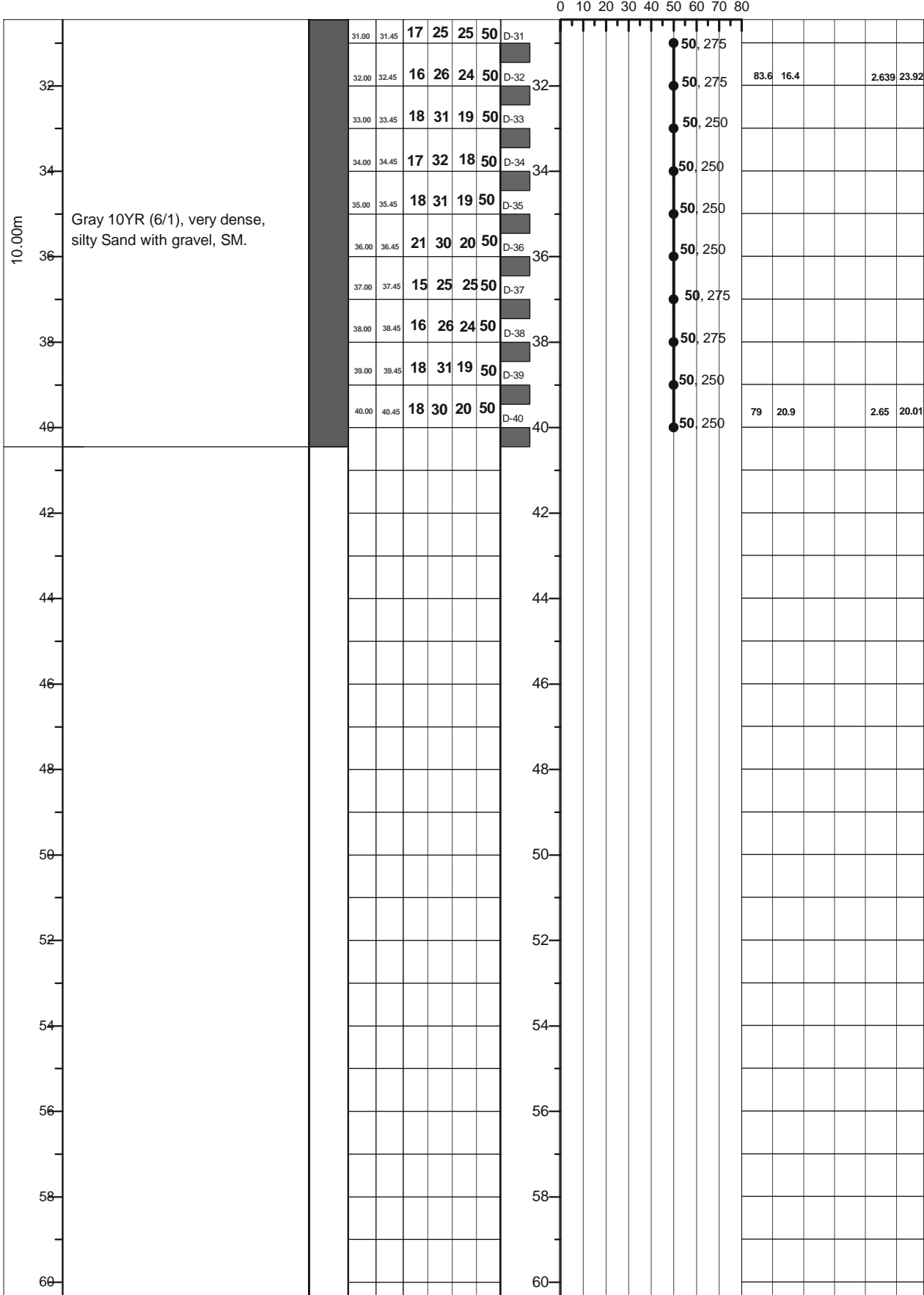
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>m</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED  
 50/X = BLOWS 50, "X" MM PENETRATION

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

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

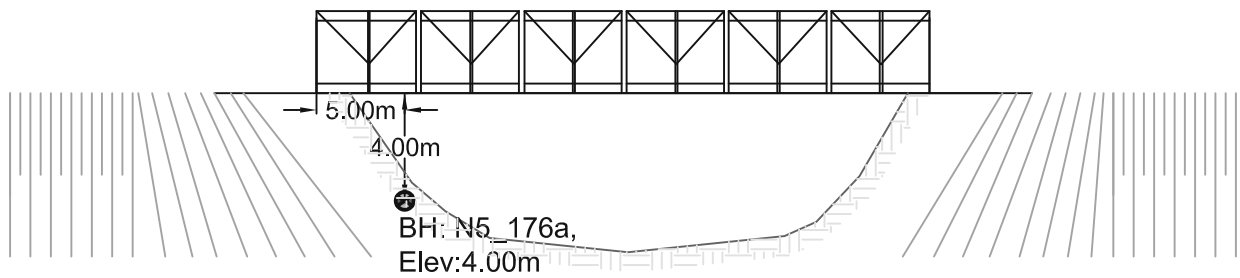
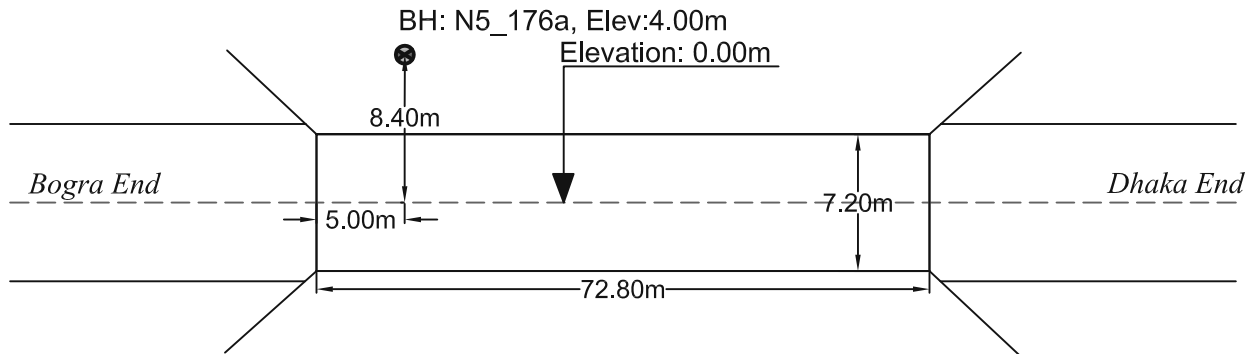
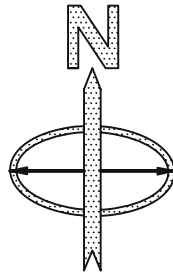


**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)**

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

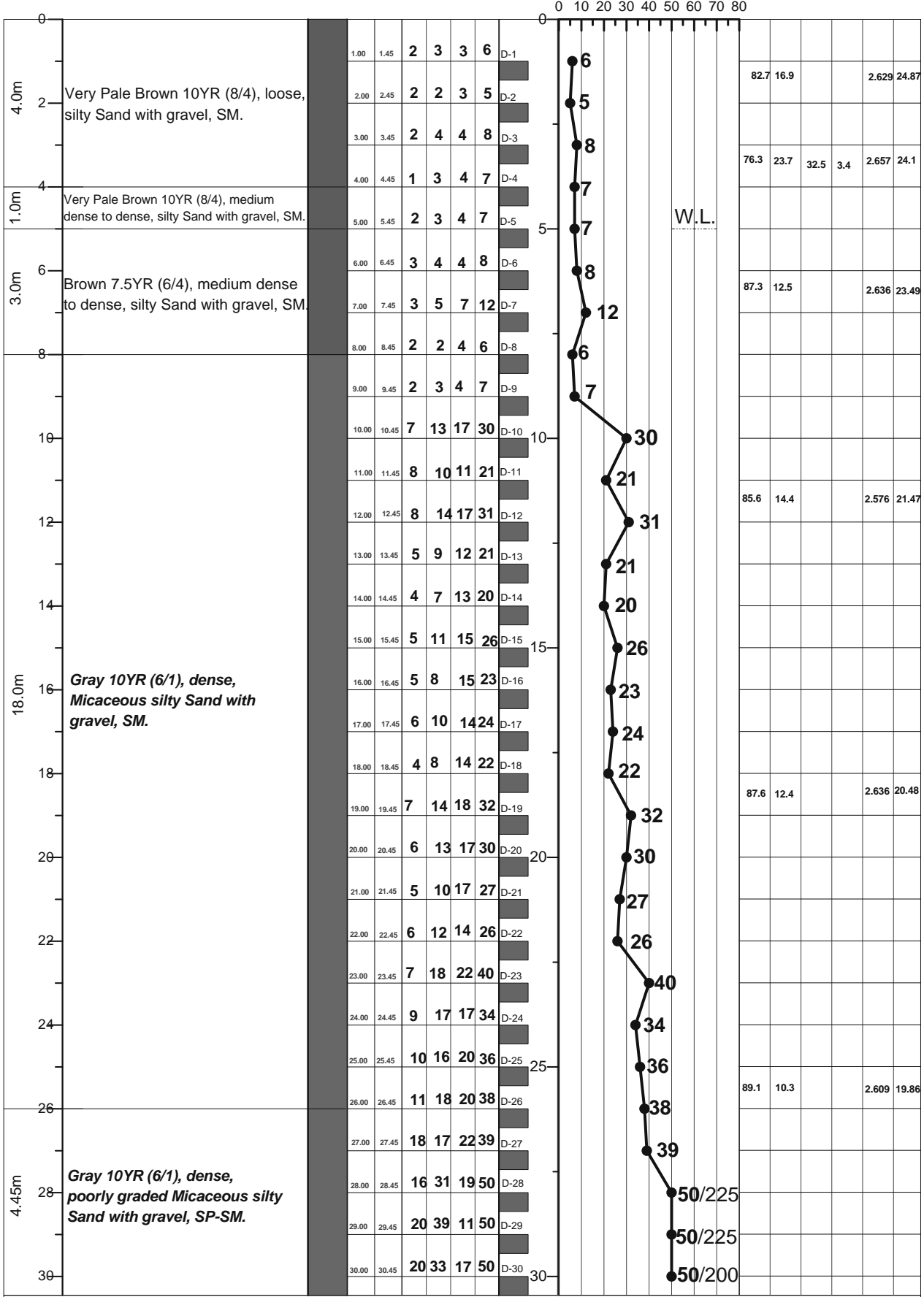
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 5  
BRIDGE ID: N5\_176a  
LATITUDE: 24°29'27.535" LONGITUDE: 89°30'34.912"  
CHAINAGE: 173.833



PROSOIL FOUNDATION CONSULTANT

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

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



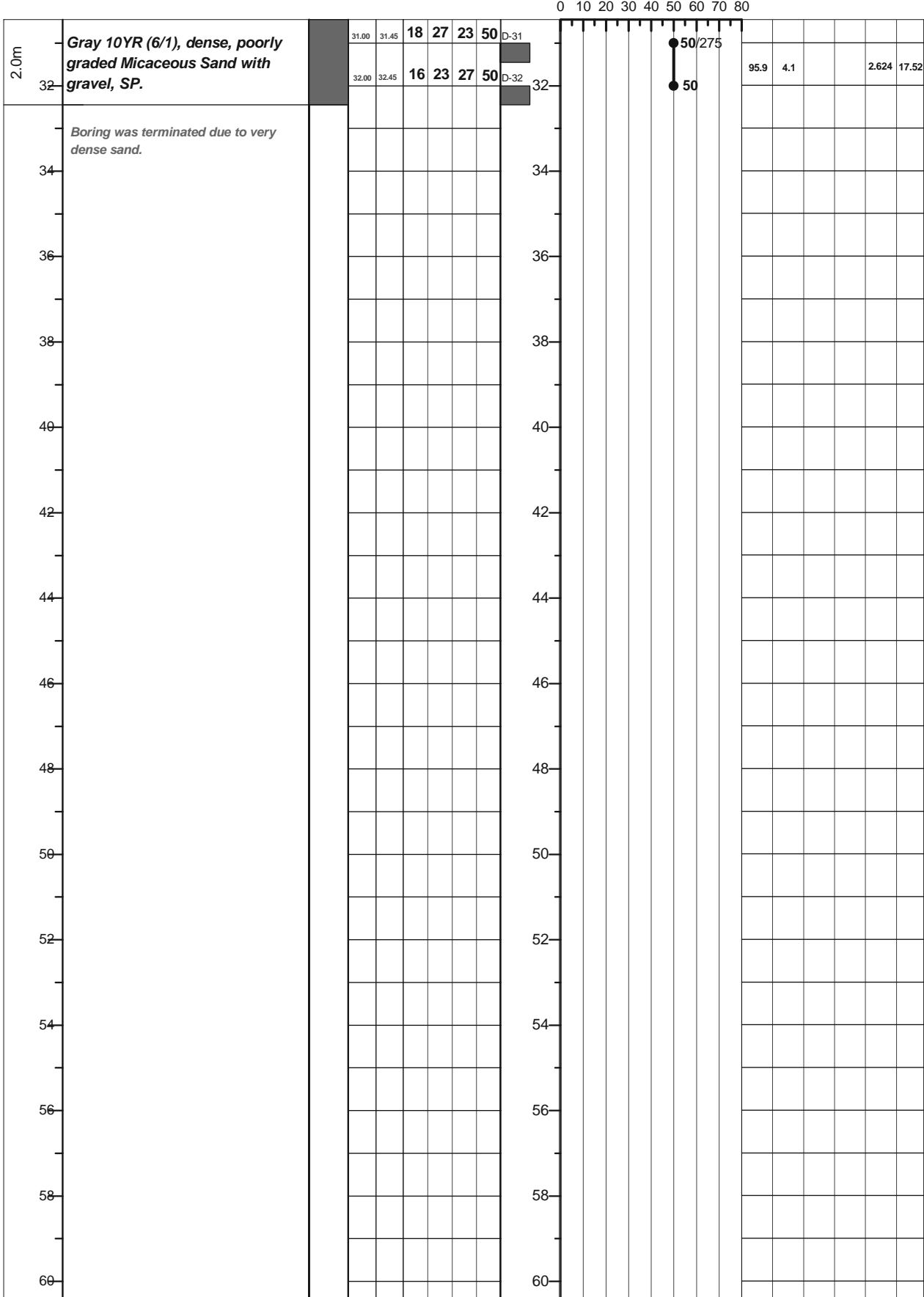
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES ( BLOWS / 300mm )	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

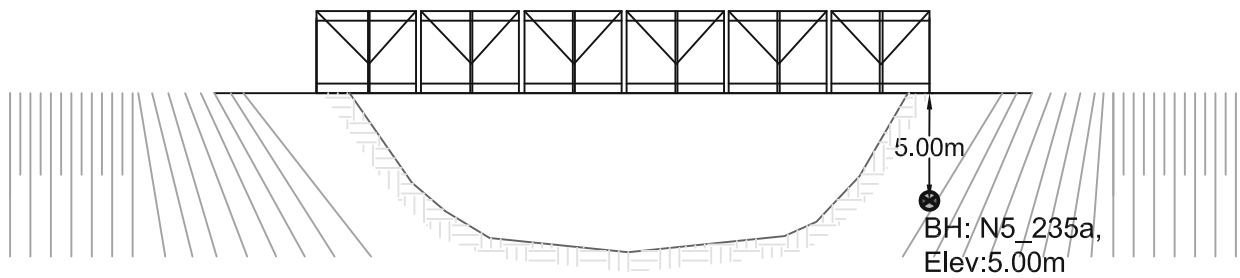
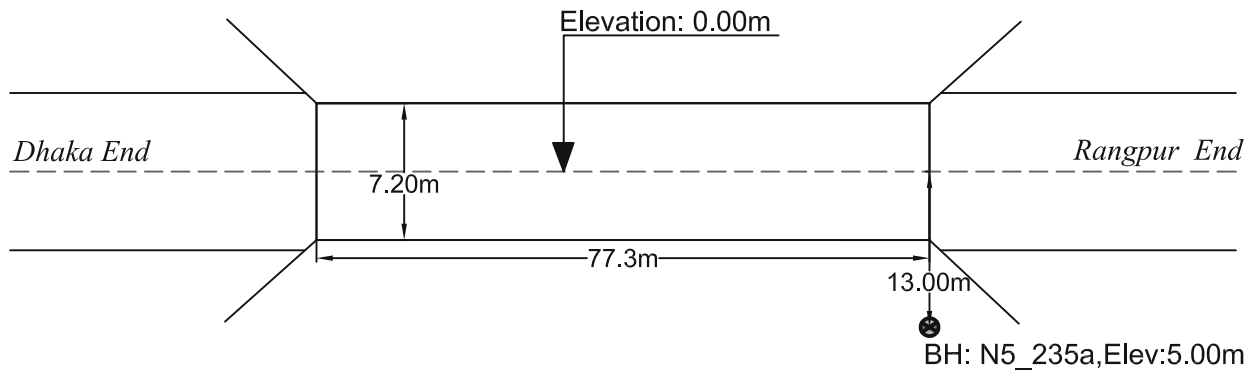
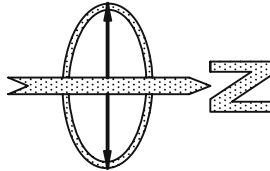
CLIENT: Oriental Consultants Company Limited.

RANK: 6

BRIDGE ID: N5\_235a

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

CHAINAGE: 232.973



PROSOIL FOUNDATION CONSULTANT



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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING						DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)	N4-600 (mm)								
0-2.0m	Brown 7.5YR (5/4), loose, silty Sand with gravel, SM.		1.00	1.45	2	3	3	6	D-1	6	83.9	16.1			2.654	10.19
2-3.0m	Brown 7.5YR (5/4), medium dense to dense, silty Sand with gravel, SM		2.00	2.45	3	4	6	10	D-2	10						
			3.00	3.45	3	4	5	9	D-3	9						
			4.00	4.45	4	5	6	11	D-4	11						
			5.00	5.45	4	5	7	12	D-5	12						
1.0m	Brown 7.5YR (5/2), medium dense to dense, silty Sand with gravel, SM.		6.00	6.45	6	8	11	19	D-6	19						
1.0m	Brownish Gray 7.5YR (6/2), dense, silty Sand with gravel, SM.		7.00	7.45	6	9	12	21	D-7	21	89	10.5			2.65	22.46
2.0m	Gray 7.5YR (5/1), dense, poorly graded silty Sand with gravel, SP-SM		8.00	8.45	5	8	12	20	D-8	20						
			9.00	9.45	5	7	12	19	D-9	19						
1.0m	Gray 7.5YR (5/1), dense, silty Sand with gravel, SM.		10.00	10.45	6	10	14	24	D-10	24						
2.0m	Gray 7.5YR (5/1), dense, fine Sand, SM.		11.00	11.45	7	11	15	26	D-11	26						
			12.00	12.45	7	13	17	30	D-12	30						
4.0m	Grayish Brown 7.5YR (6/2), dense, poorly graded silty Sand with gravel, SP-SM.		13.00	13.45	6	12	17	29	D-13	29						
			14.00	14.45	7	14	18	32	D-14	32	89.5	10			2.665	20.37
			15.00	15.45	9	17	21	38	D-15	38						
			16.00	16.45	8	18	24	42	D-16	42						
3.0m	Gray 7.5YR (5/1), very dense, silty Sand with gravel, SM.		17.00	17.45	8	19	26	45	D-17	45						
			18.00	18.45	12	17	24	41	D-18	41						
			19.00	19.45	10	19	25	44	D-19	44						
2.0m	Grayish Brown 7.5YR (6/2), very dense, poorly graded silty Sand with gravel, SP-SM		20.00	20.45	11	21	27	48	D-20	48	93.2	6.6			2.641	22.87
			21.00	21.45	10	19	27	46	D-21	46						
2.0m	Light Brown 10YR (6/3), very dense, poorly graded silty Sand with gravel, SM.		22.00	22.45	12	20	28	48	D-22	48						
			23.00	23.45	11	21	26	47	D-23	47						
4.0m	Brown 7.5YR (5/4), very dense, poorly graded silty Sand with gravel, SP-SM		24.00	24.45	10	19	27	46	D-24	46						
			25.00	25.45	12	23	27	50	D-25	50/275	90.3	9.5			2.667	19.75
			26.00	26.45	13	22	28	50	D-26	50/275						
			27.00	27.45	12	24	26	50	D-27	50/250	82.4	17.6			2.653	17.76
3.45m	Brown 7.5YR (5/4), very dense, silty Sand with gravel, SM.		28.00	28.45	12	23	27	50	D-28	50/250						
			29.00	29.45	11	25	25	50	D-29	50/250						
			30.00	30.45	13	24	26	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<sup>m</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

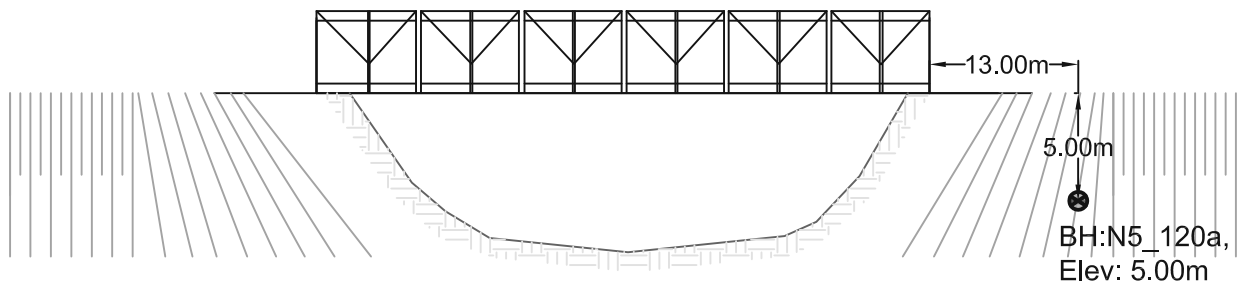
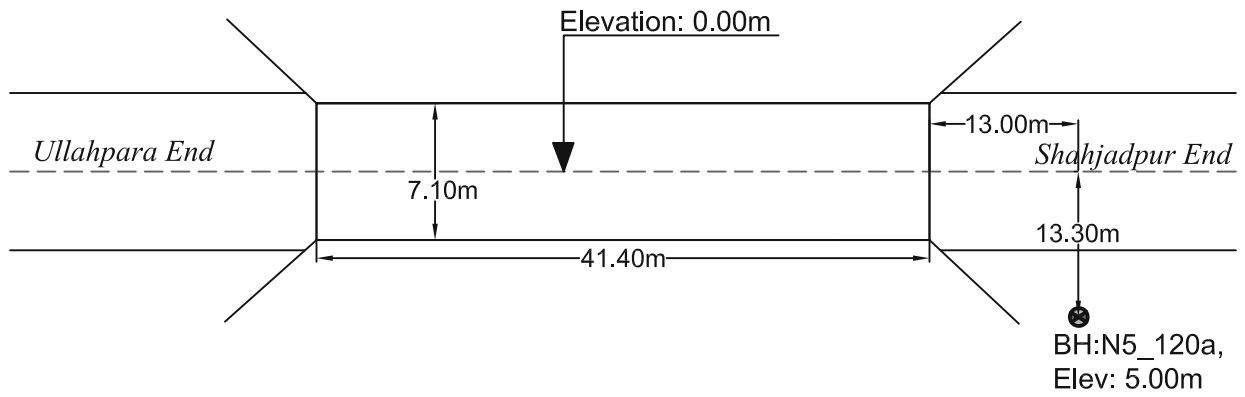
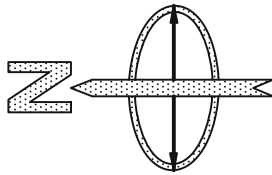
CLIENT: Oriental Consultants Company Limited.

RANK: 7

BRIDGE ID: N5\_120a

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

CHAINAGE: 119.227



PROSOIL FOUNDATION CONSULTANT

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

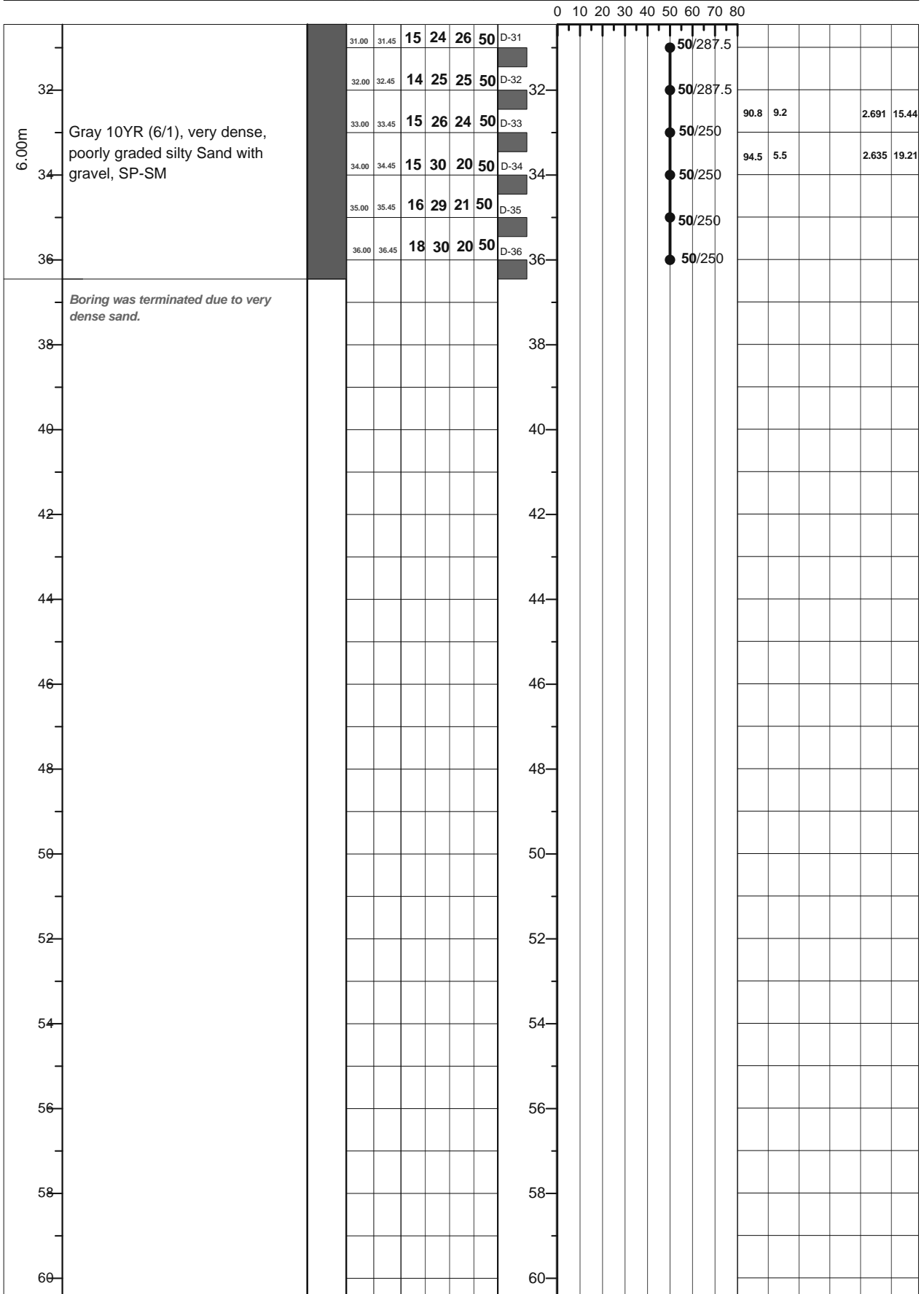
THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
4.0m	light Gray 10YR (7/1), very soft, low plasticity Clay with sand, 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<sup>m</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 7</b>	<b>BOREHOLE NO: N5-120a</b>	<b>Longitude: N 89°33'31"</b>	<b>Latitude: E 24°03'0.213"</b>
			<b>Brigde ID: N5-120a</b>	<b>Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 36.0m</b>	<b>Chainage: 119.227, RL: -5.0</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 26-02-2014</b>	<b>Completed Date: 27-02-2014</b>	<b>G. W. T : -5.2m</b>



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<sup>m</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED    50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

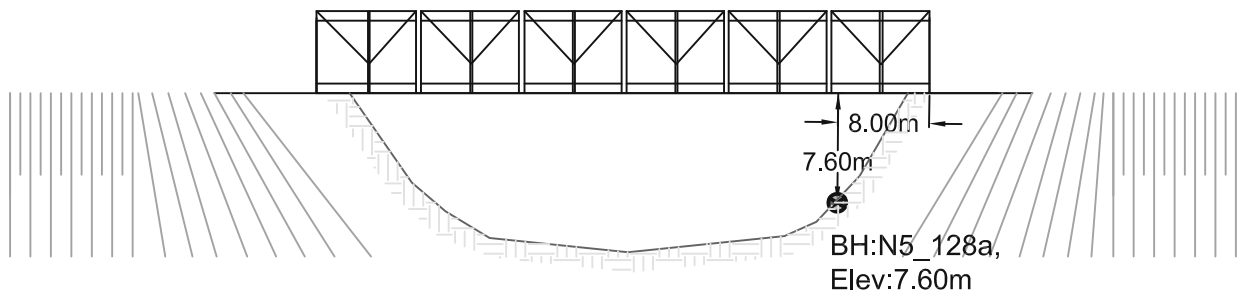
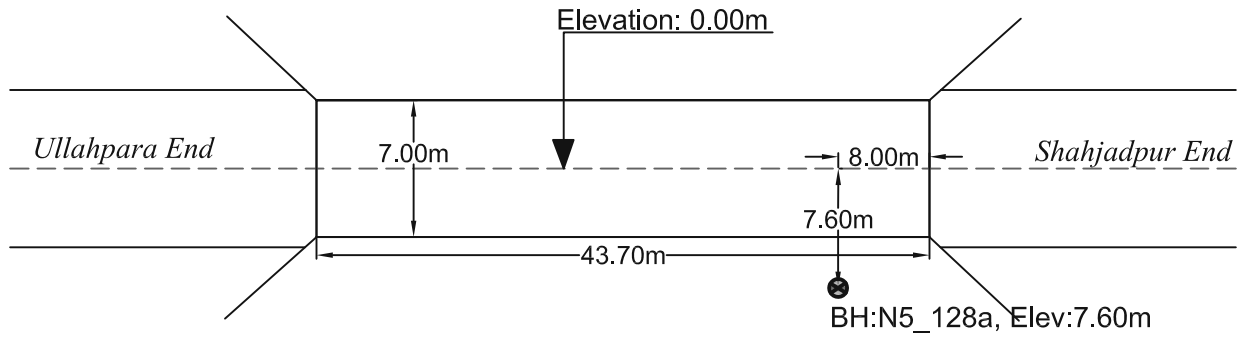
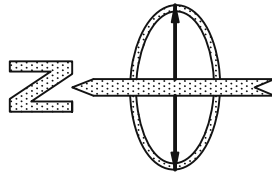
CLIENT: Oriental Consultants Company Limited.

RANK: 8

BRIDGE ID: N5\_128a

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

CHAINAGE: 127.046



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			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

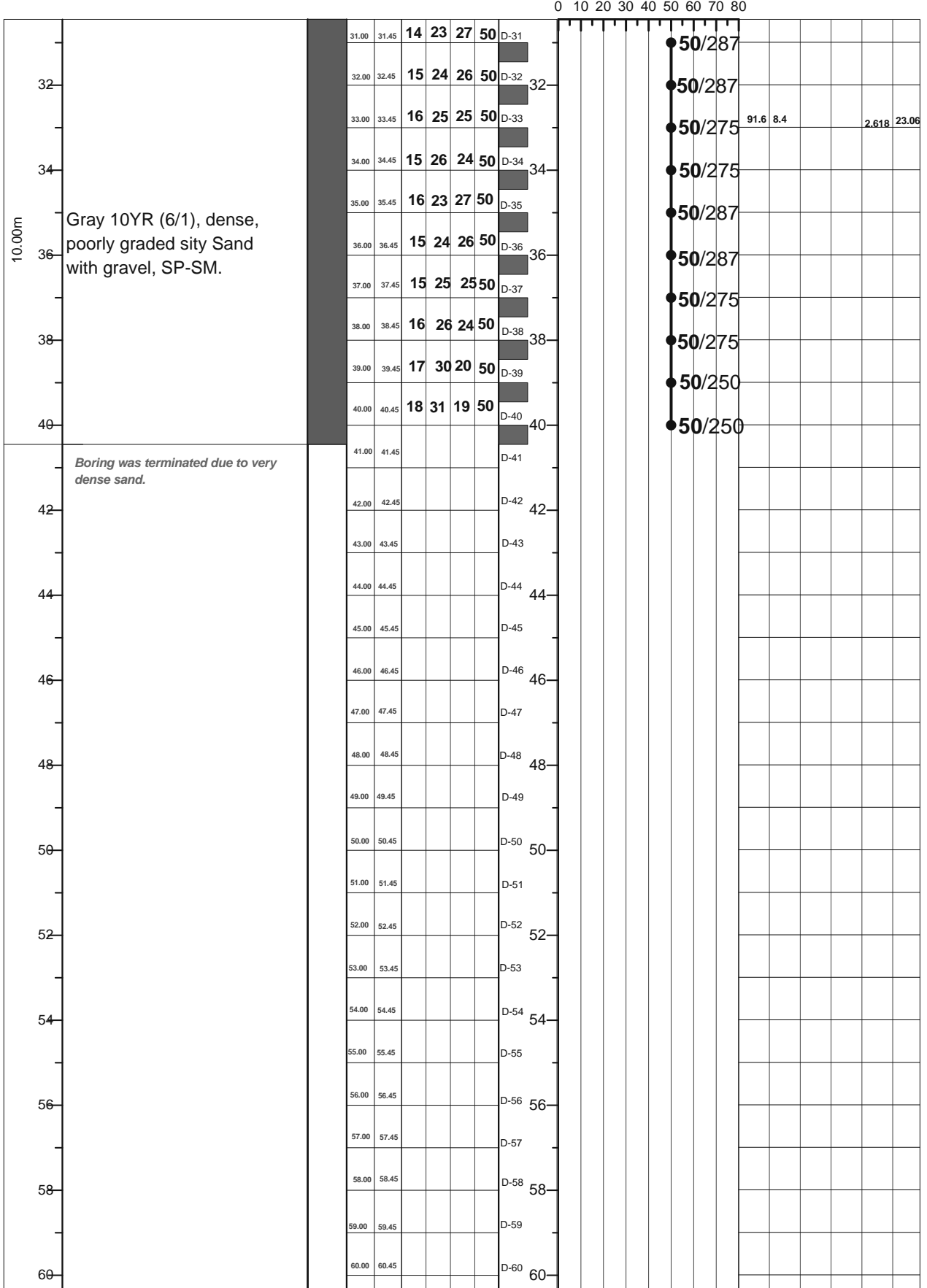
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

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

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 <sub>v</sub>
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



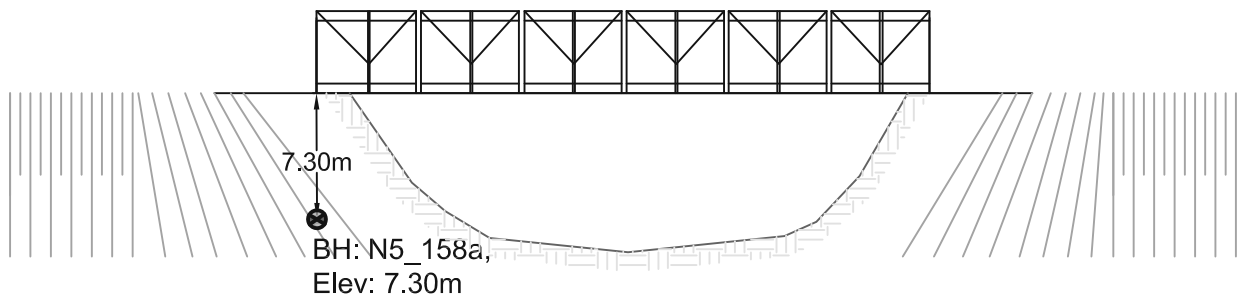
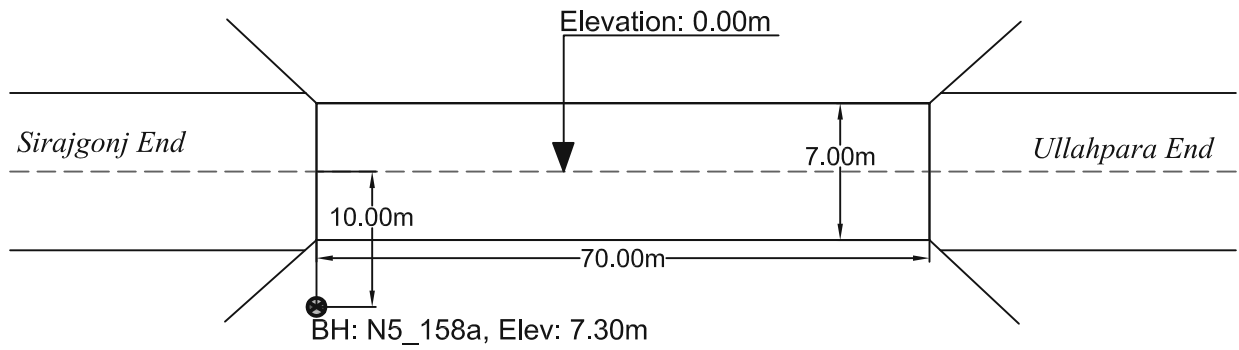
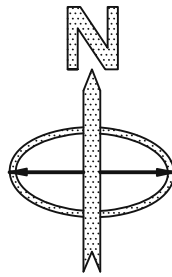
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> 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

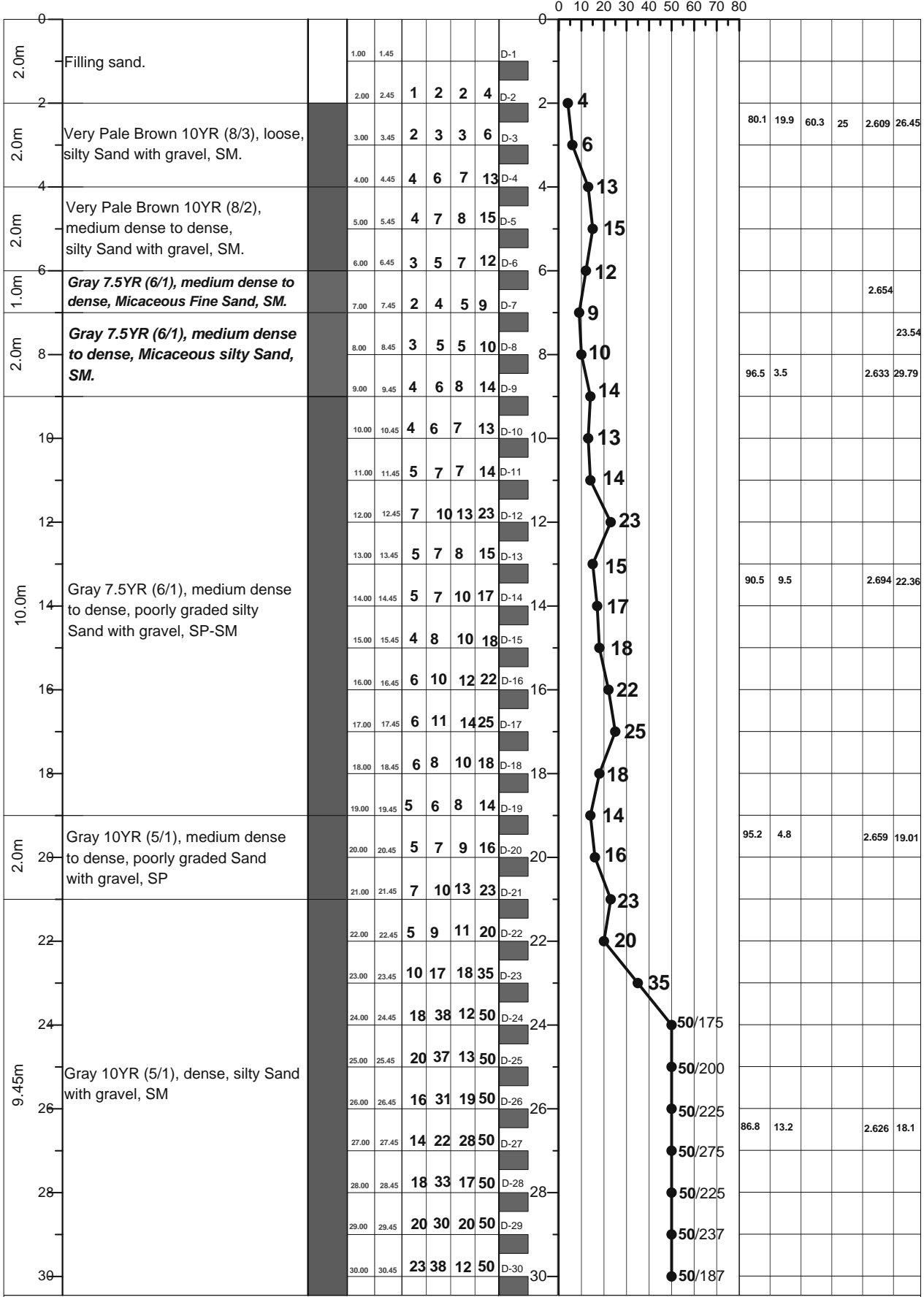


PROSOIL FOUNDATION CONSULTANT



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

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

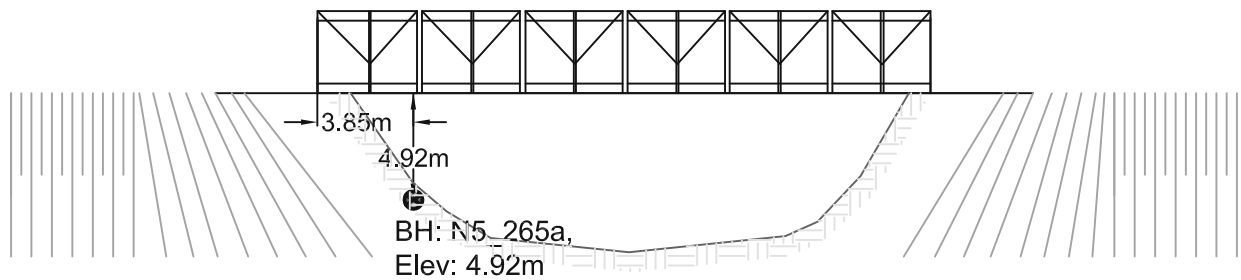
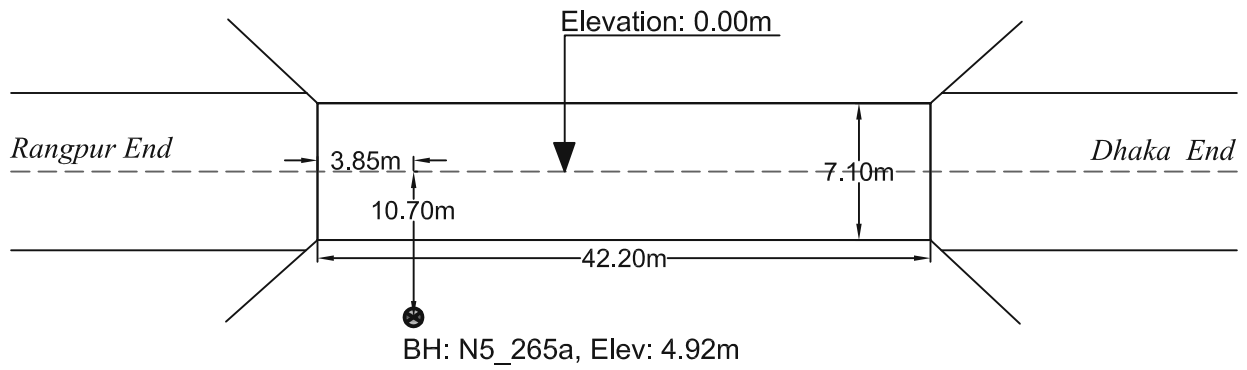
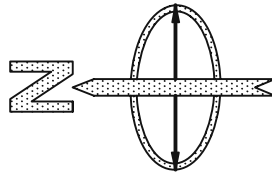


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> 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

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			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	<b>Gray 10YR (5/1), medium dense to dense, Micaceous silty Sand with gravel, SM.</b>		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	<b>Gray 7.5YR (5/1), dense, Micaceous silty Sand with gravel, SM.</b>		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							
8.0m	Light Gray 10YR (5/2), very dense, Poorly graded Sand with Gravel, SP.		20.00	20.45	16	23	26	49	D-20							
			21.00	21.45	16	22	26	48	D-21							
			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')

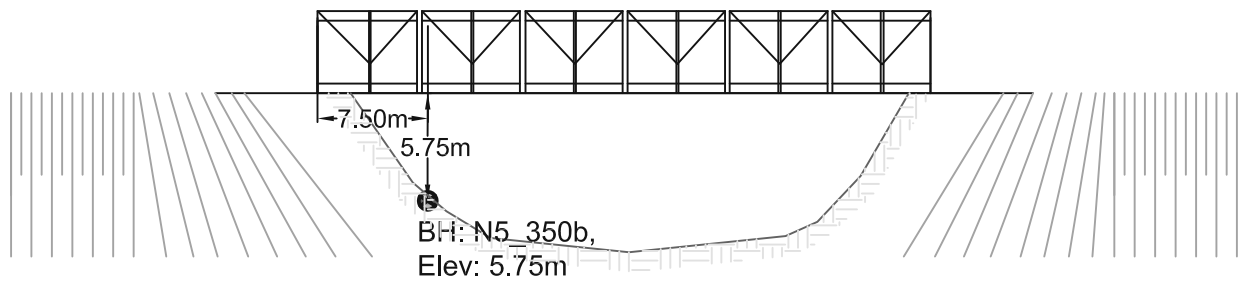
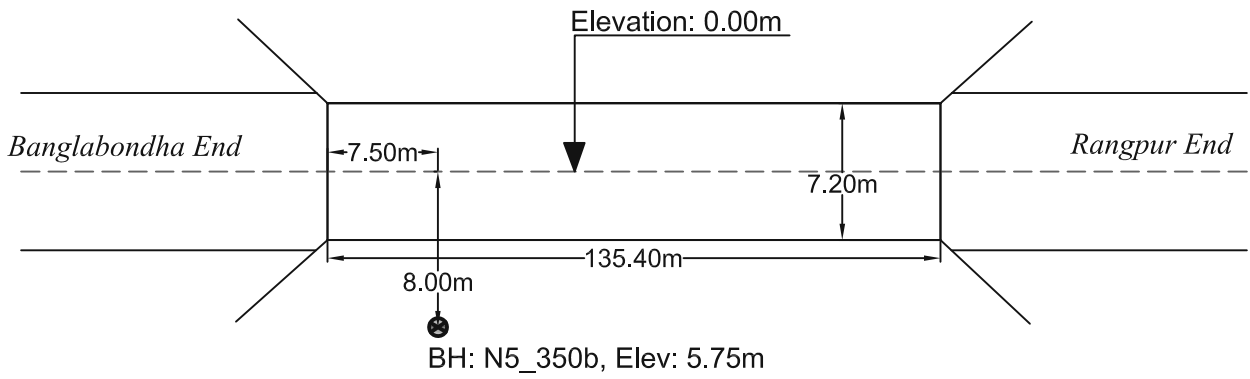
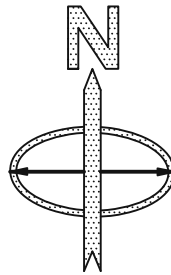
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

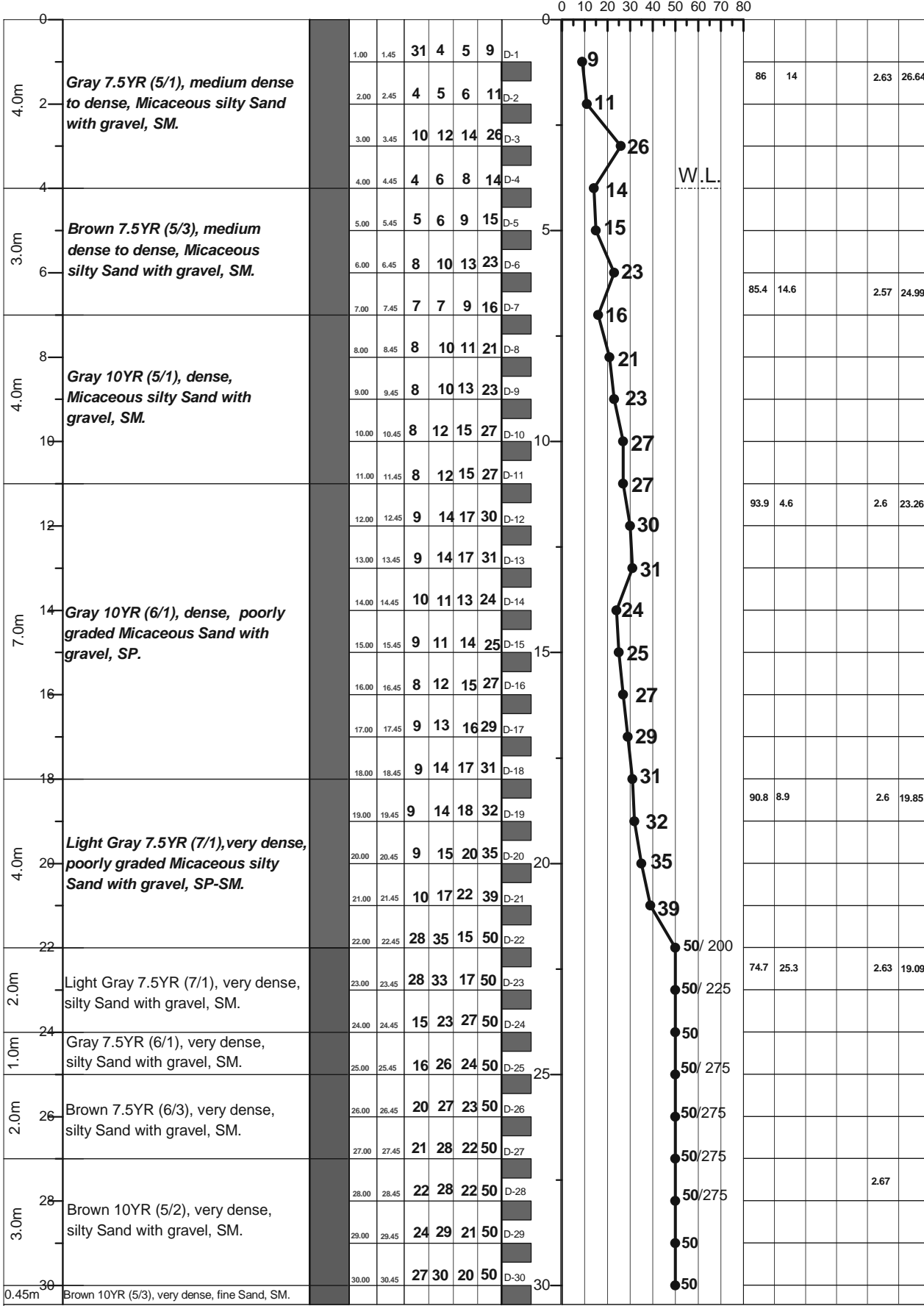
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 11  
BRIDGE ID: N5\_350b  
LATITUDE: 25°48'40.794" LONGITUDE: 89°2'47.211"  
CHAINAGE: 348.448



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

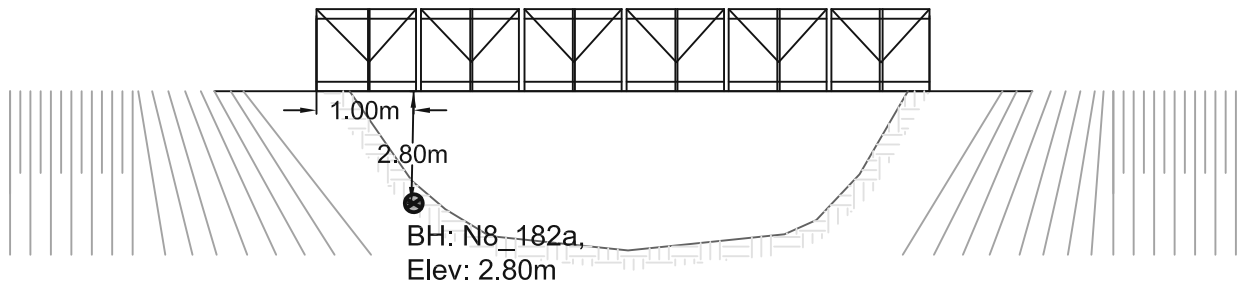
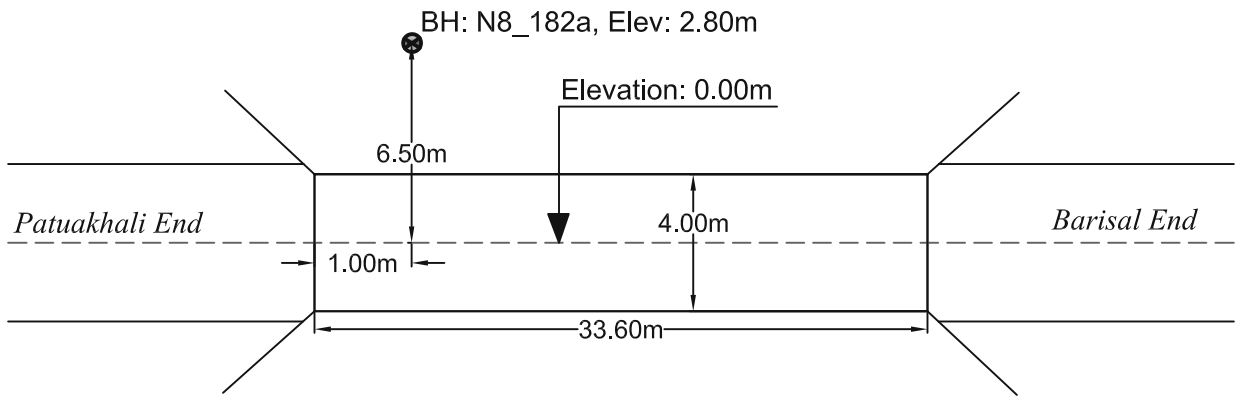
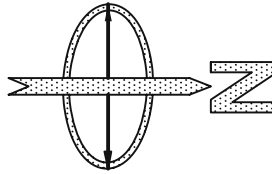
**CLIENT: Oriental Consultants Company Limited.**

**RANK: 12**

**BRIDGE ID: N8\_182a**

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

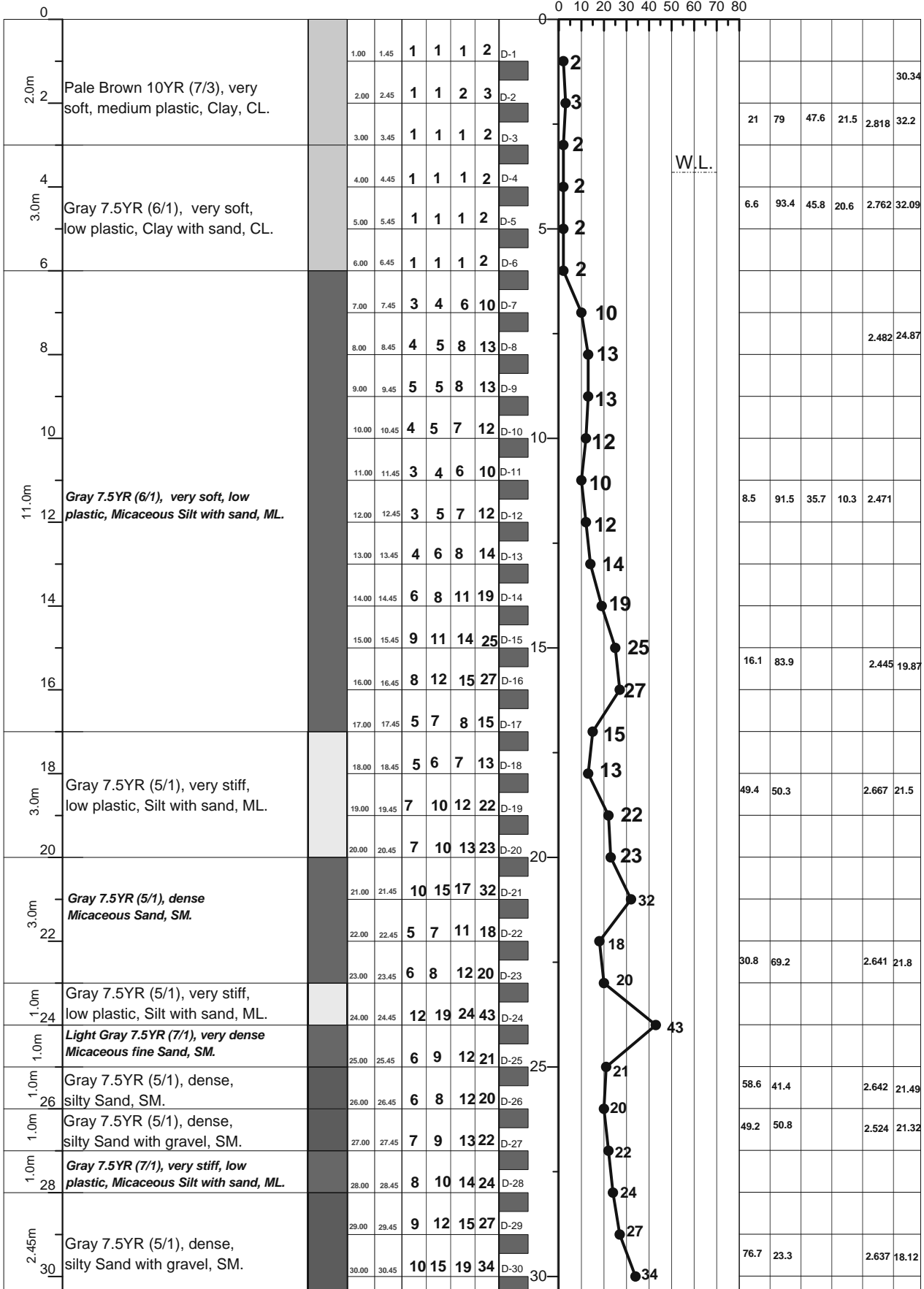
**CHAINAGE: 180.819**



**PROSOIL FOUNDATION CONSULTANT**

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

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



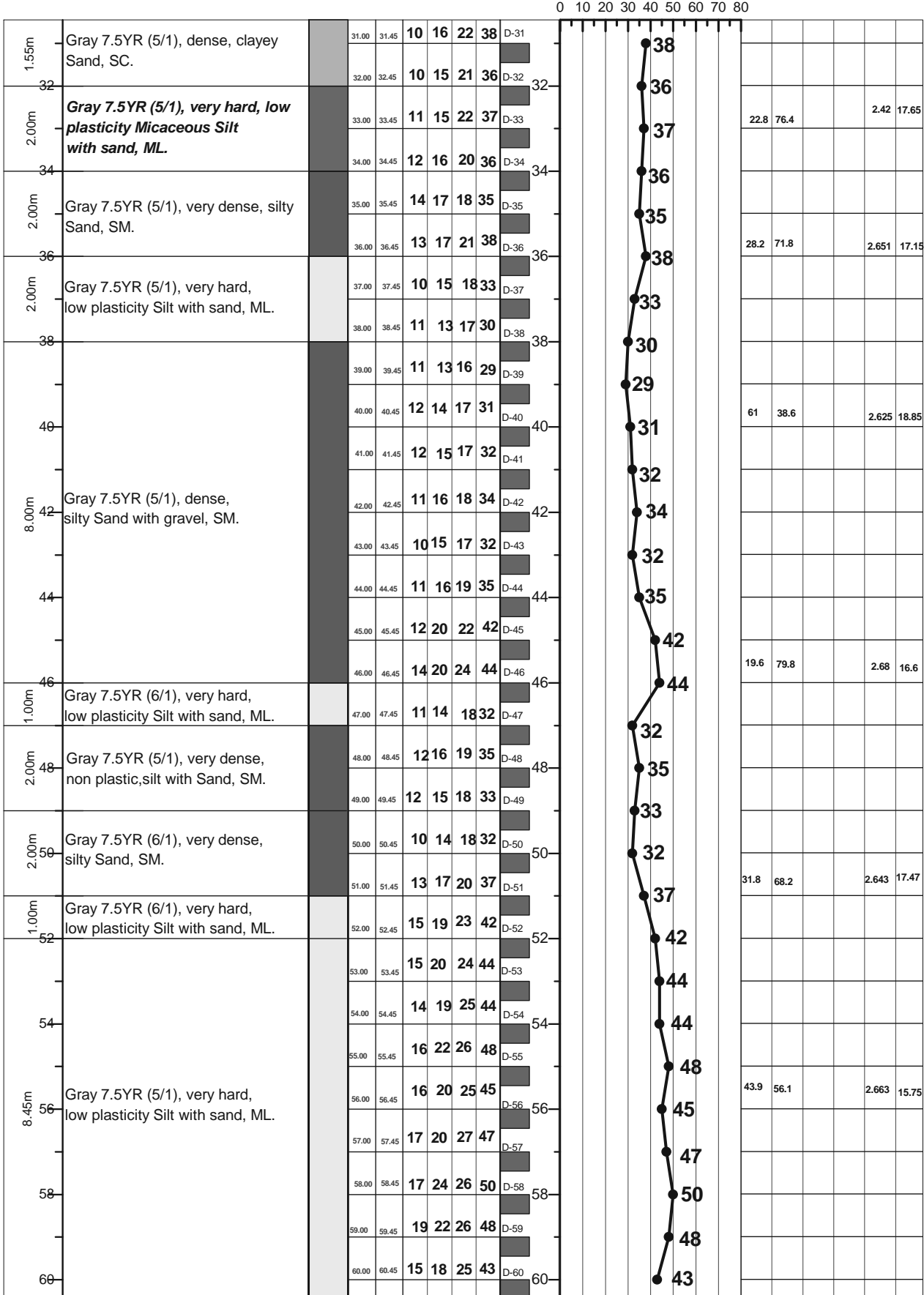
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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

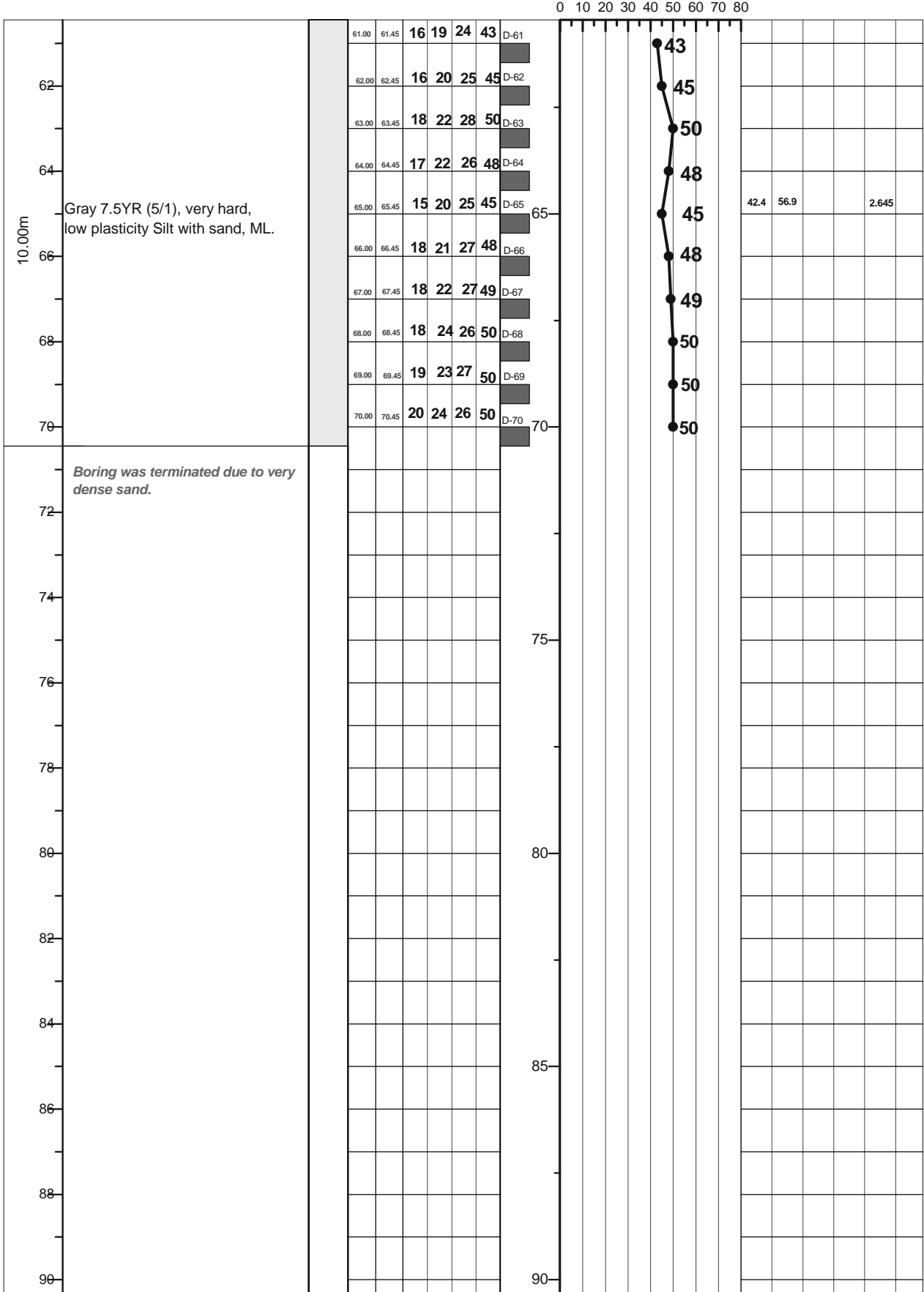
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

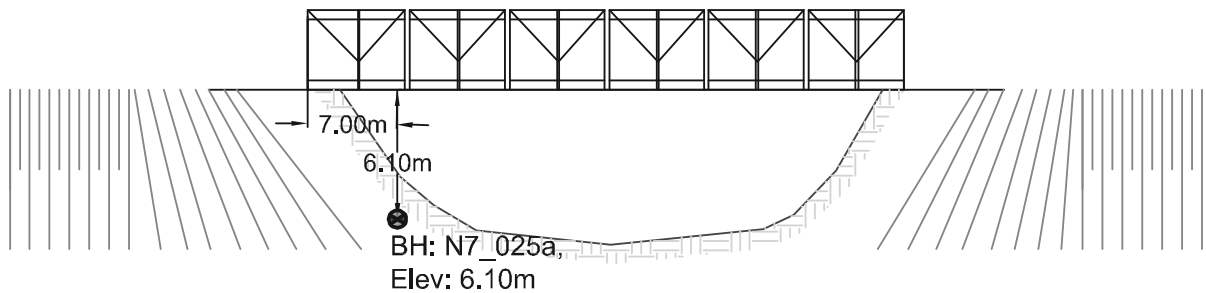
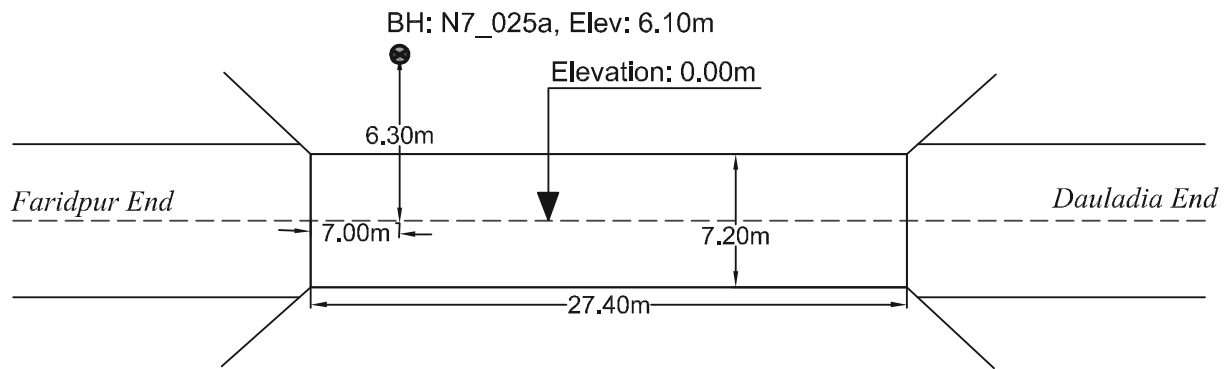
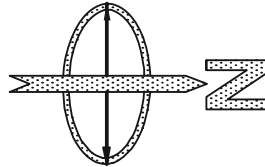
CLIENT: Oriental Consultants Company Limited.

RANK: 13

BRIDGE ID: N7\_025a

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

CHAINAGE: 25.993



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			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						
2-2.0m			2.00	2.45	1	2	2	4	D-2	4						
2-3.0m			3.00	3.45	1	0	1	1	D-3	1						
3-4.0m			4.00	4.45	1	0	1	1	D-4	1						
4-5.0m	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
5-6.0m			6.00	6.45	1	0	1	1	D-6	1						
6-7.0m			7.00	7.45	1	0	1	1	D-7	1						
7-8.0m			8.00	8.45	2	2	2	4	D-8	4						
8-9.0m			9.00	9.45	2	2	6	8	D-9	8	9.7	90.3	48.2	21.8	2.652	30.96
9-10.0m	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						
10-11.0m			11.00	11.45	6	11	13	24	D-11	24						
11-12.0m	4.0m Gray 7.5YR (5/1), dense, poorly graded silty Sand with gravel, SP-SM		12.00	12.45	5	7	8	15	D-12	15						
12-13.0m			13.00	13.45	4	6	9	15	D-13	15	89.1	10.9			2.654	23.19
13-14.0m			14.00	14.45	5	7	9	16	D-14	16						
14-15.0m			15.00	15.45	5	8	13	21	D-15	21						
15-16.0m	1.0m Grayish Brown 10YR (5/2), dense, silty Sand with gravel, SM		16.00	16.45	2	3	4	7	D-16	7						
16-17.0m	7.0m Gray 7.5YR (5/1), medium dense to dense, silty Sand with gravel, SM		17.00	17.45	3	4	6	10	D-17	10	65.7	34.3			2.659	24.92
17-18.0m			18.00	18.45	5	8	11	19	D-18	19						
18-19.0m			19.00	19.45	11	12	12	24	D-19	24						
19-20.0m			20.00	20.45	10	10	12	22	D-20	22						
20-21.0m			21.00	21.45	7	11	12	23	D-21	23						
21-22.0m			22.00	22.45	9	9	10	19	D-22	19						
22-23.0m			23.00	23.45	9	11	26	37	D-23	37	91.6	8.4			2.648	17.9
23-24.0m	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						
24-25.0m	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						
25-26.0m	1.0m Gray 7.5YR (5/1), dense, silty Sand with gravel, SM		26.00	26.45	7	12	18	30	D-26	30						
26-27.0m	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
27-28.0m			28.00	28.45	10	13	15	28	D-28	28						
28-29.0m	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						
29-30.0m			30.00	30.45	9	16	22	38	D-30	38						

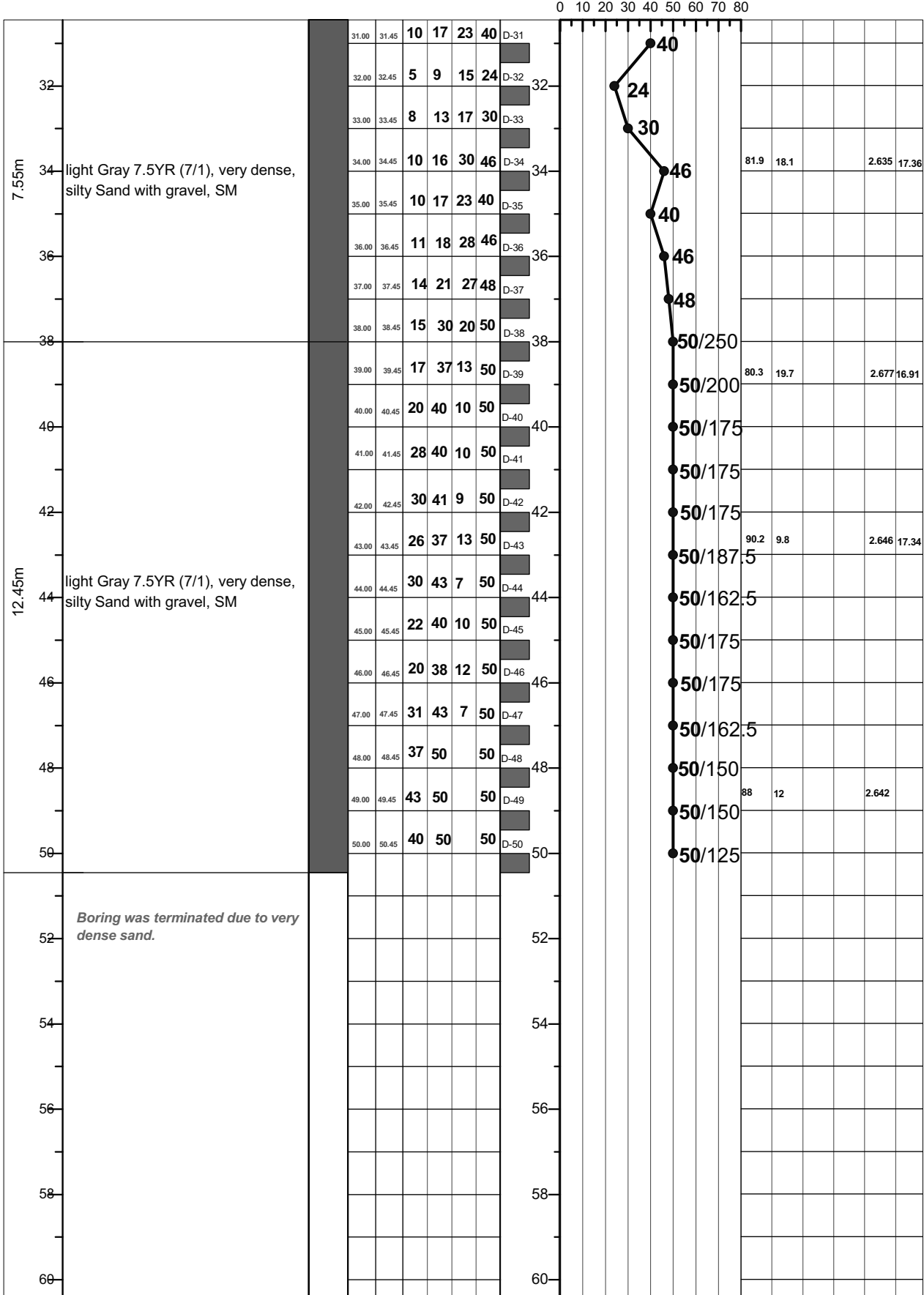
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

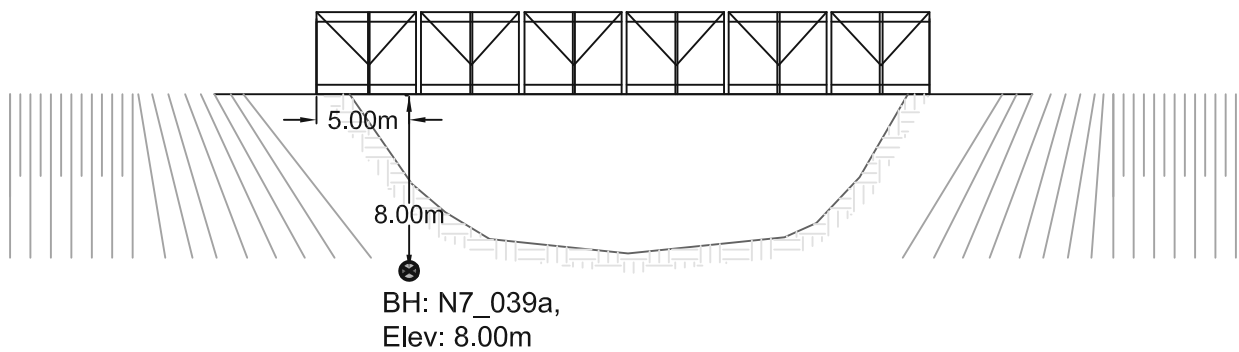
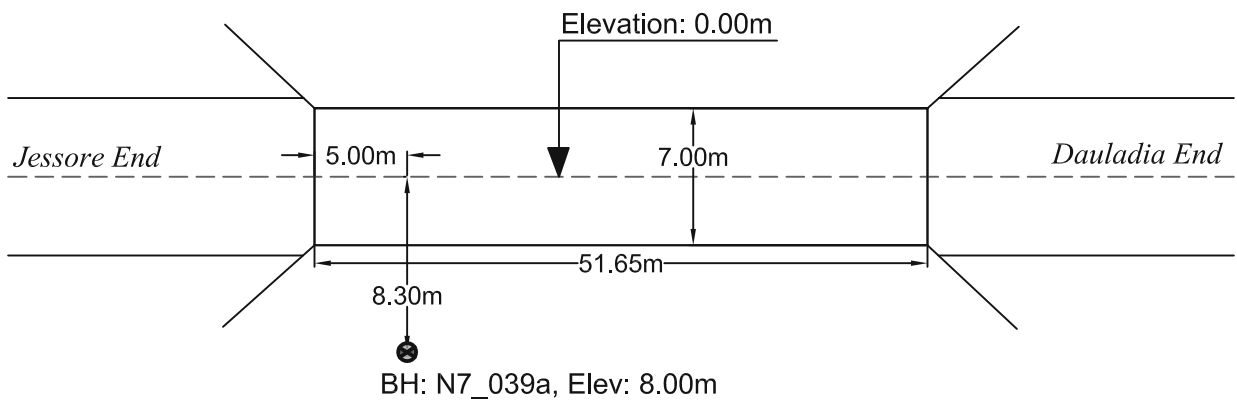
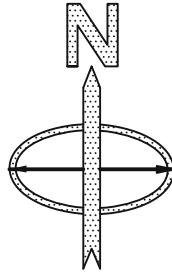
**CLIENT: Oriental Consultants Company Limited.**

**RANK: 14**

**BRIDGE ID: N7\_039a**

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

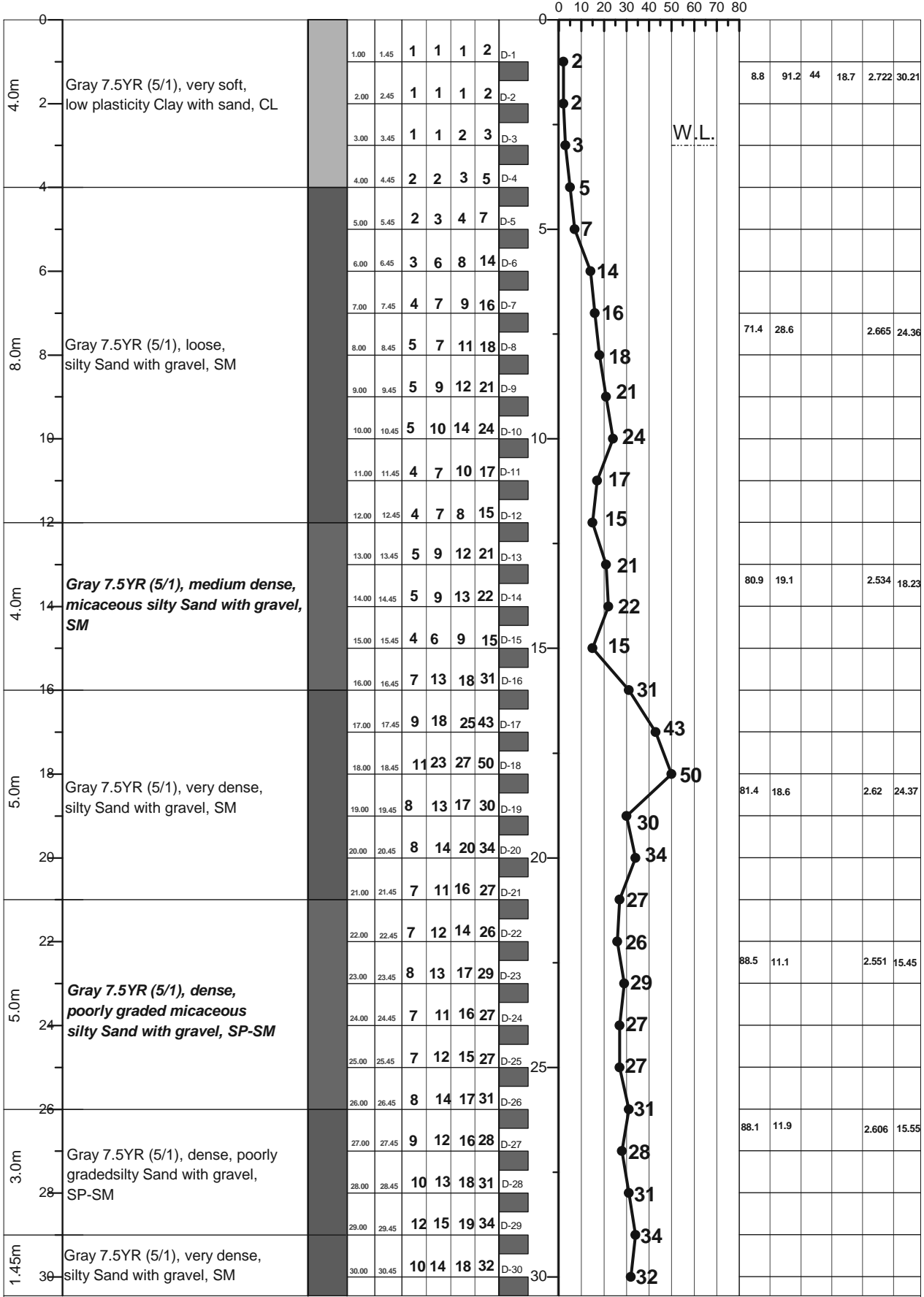
**CHAINAGE: 39.64**



**PROSOIL FOUNDATION CONSULTANT**

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

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



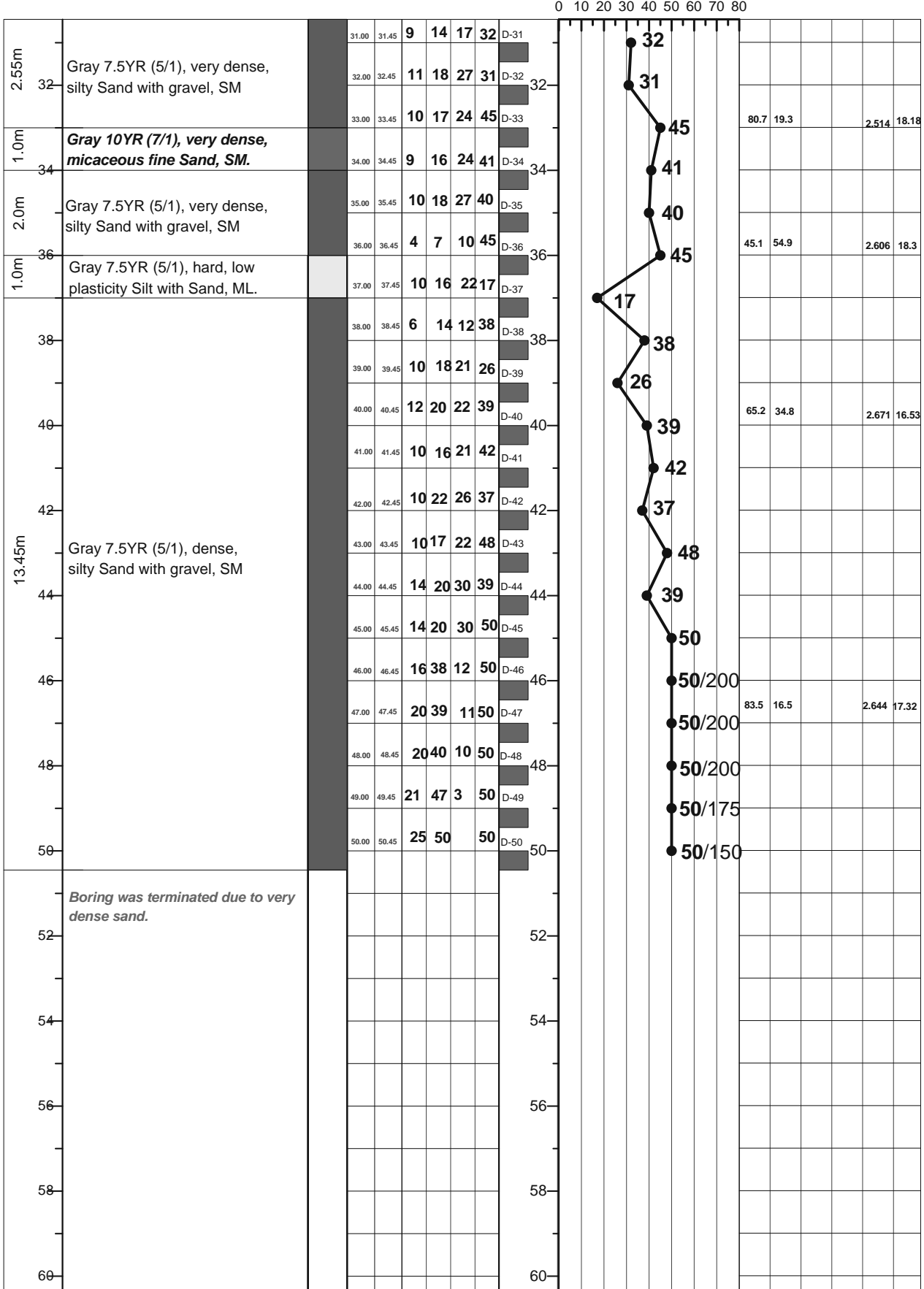
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>v</sub>
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)	N4=600 (mm)								



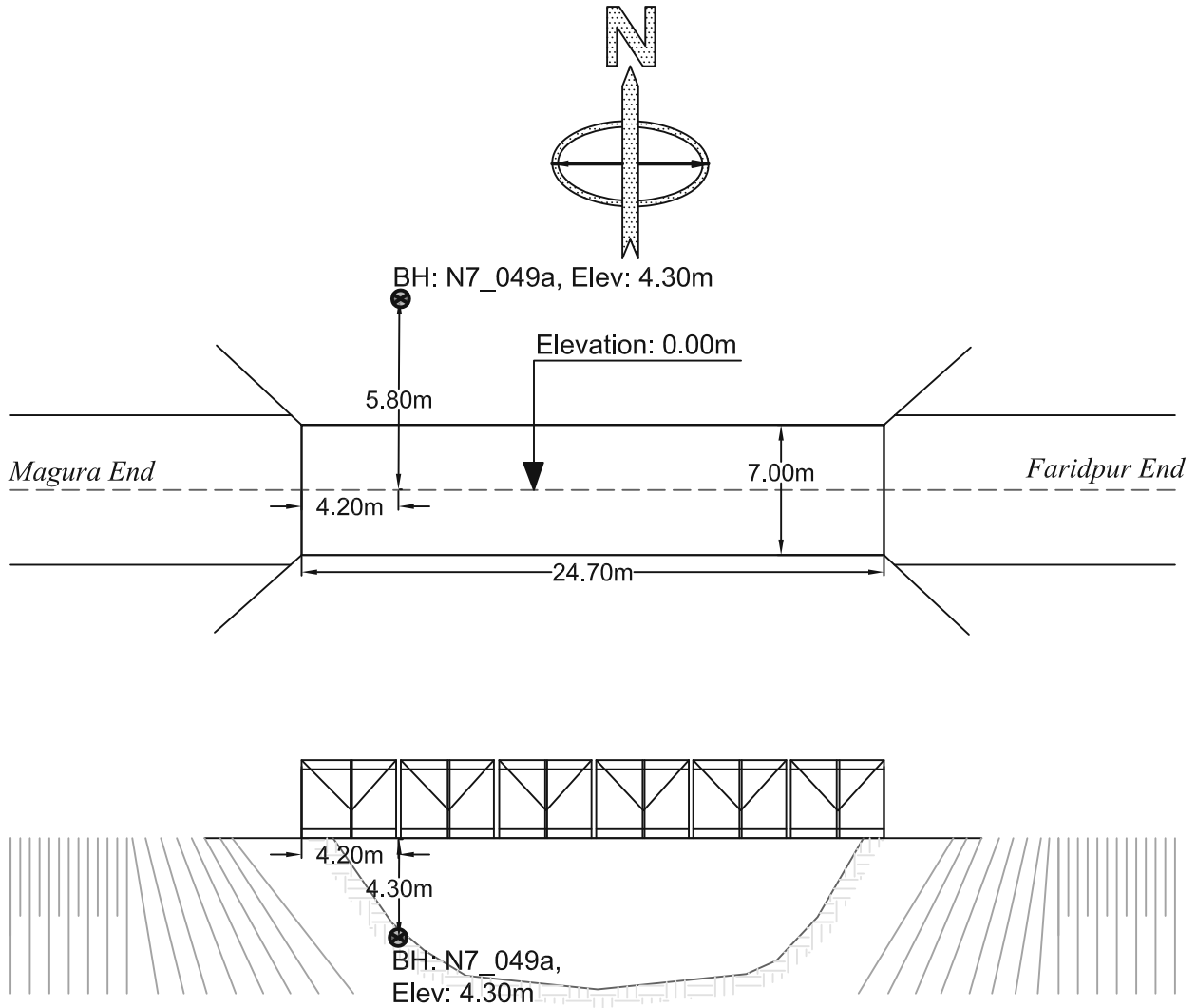
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>m</sup> 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

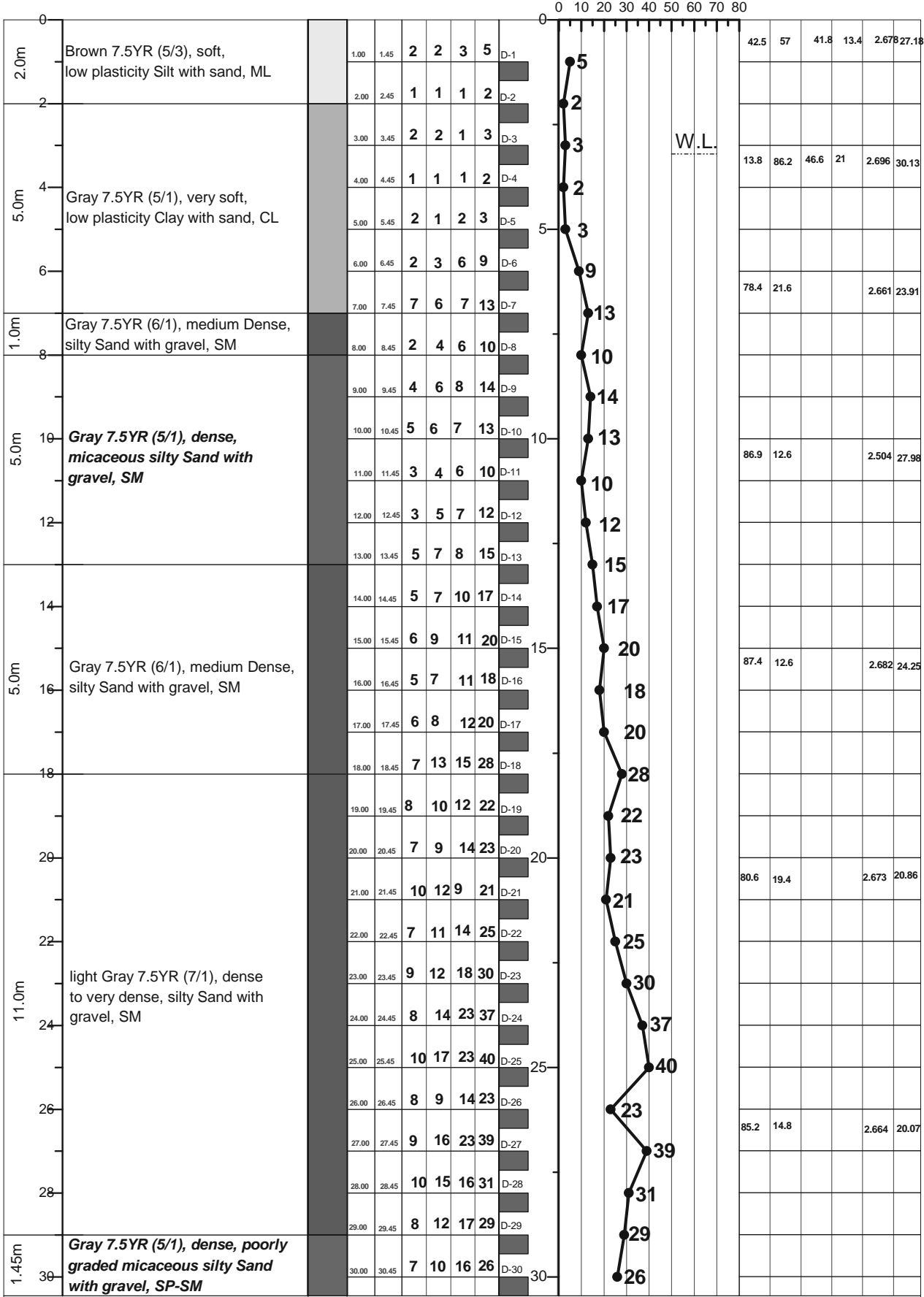


PROSOIL FOUNDATION CONSULTANT



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

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



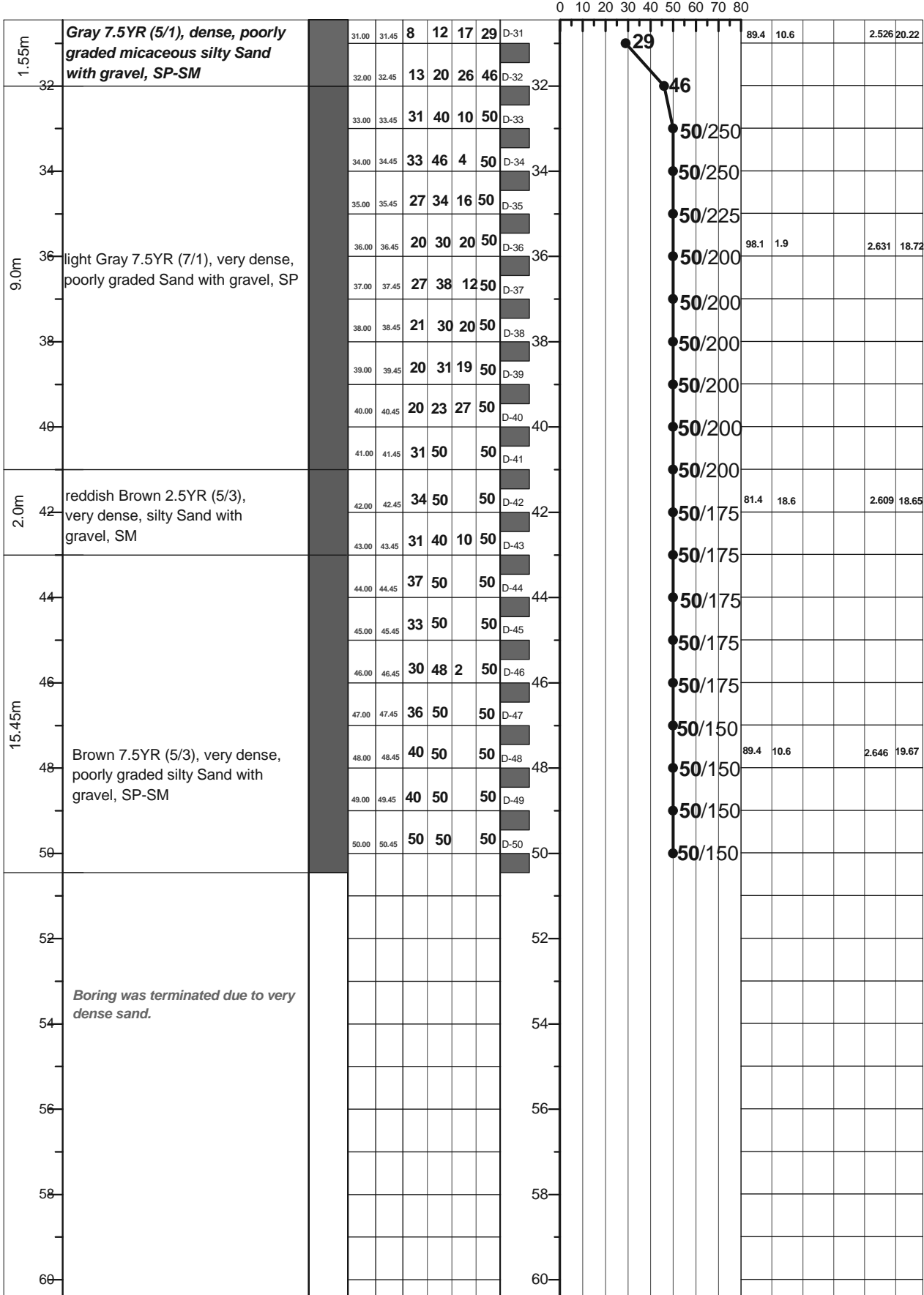
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>c</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)				N4-600 (mm)	% Sand	% Passing 200	% LL	% PI						

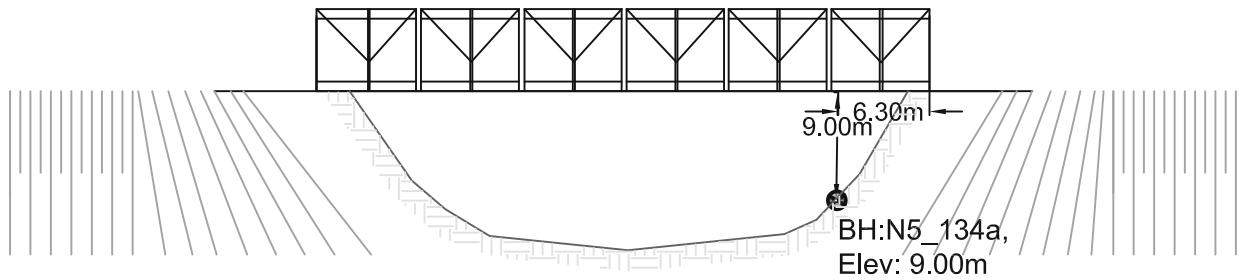
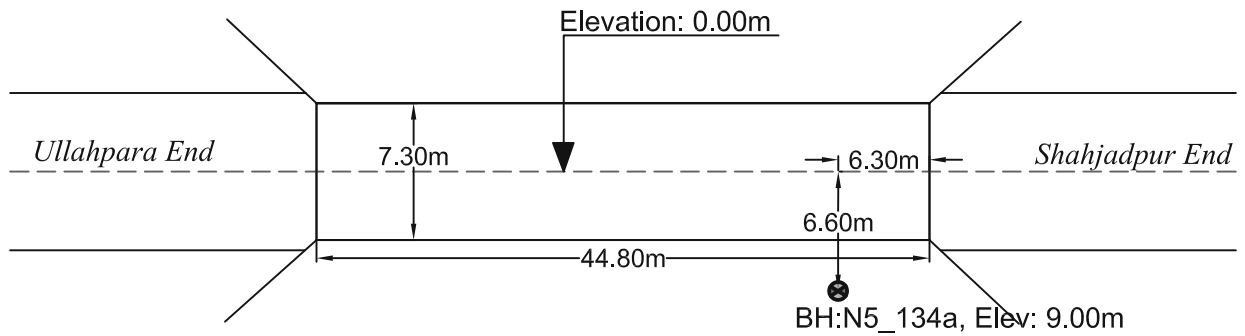
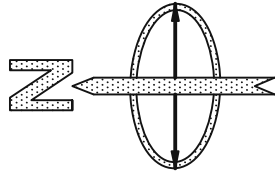


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

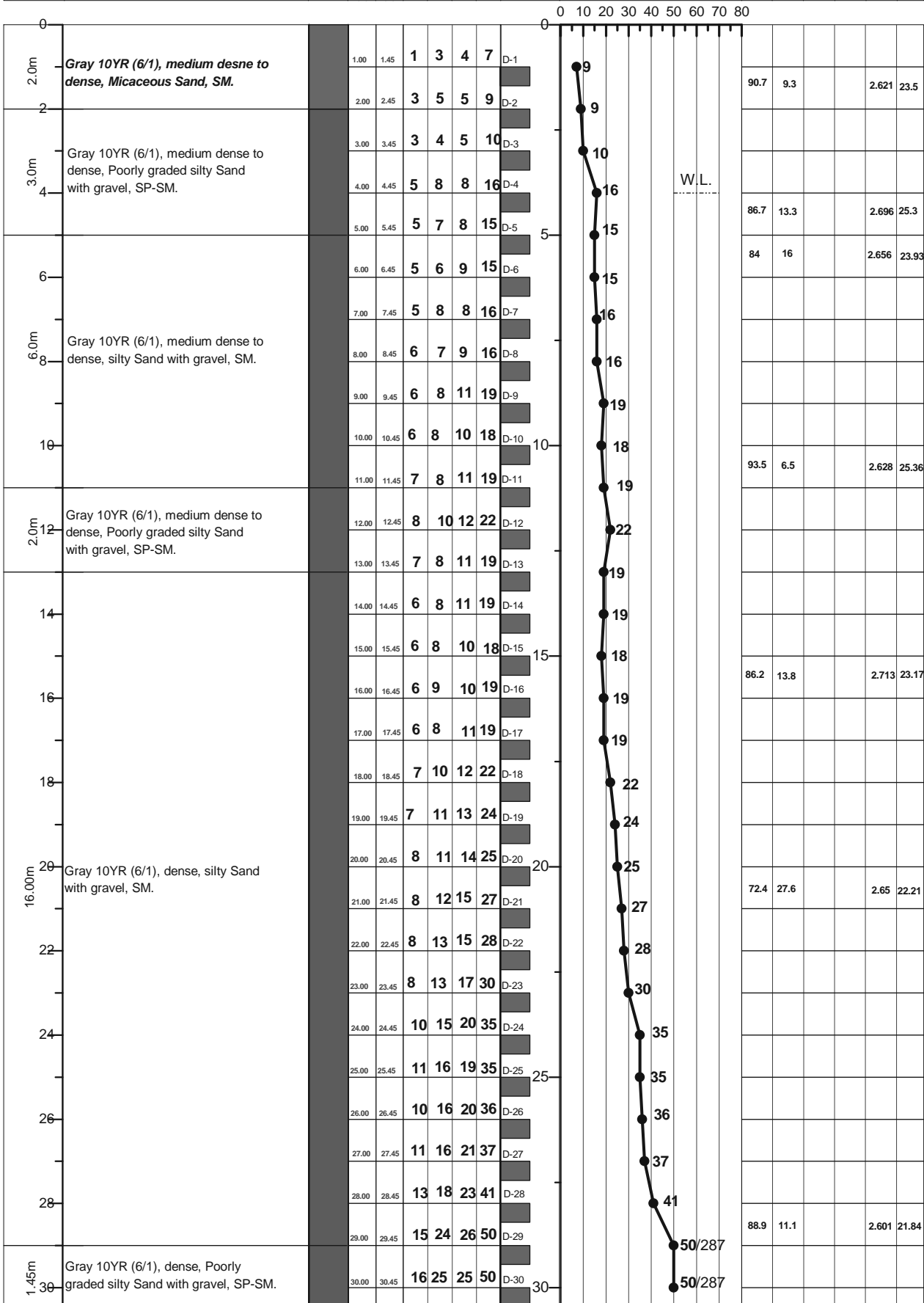
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 16  
BRIDGE ID: N5\_134a  
LATITUDE: 24°09'04.062" LONGITUDE: 89°35'11.352"  
CHAINAGE: 132.062



PROSOIL FOUNDATION CONSULTANT

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

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 <sub>v</sub>
			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

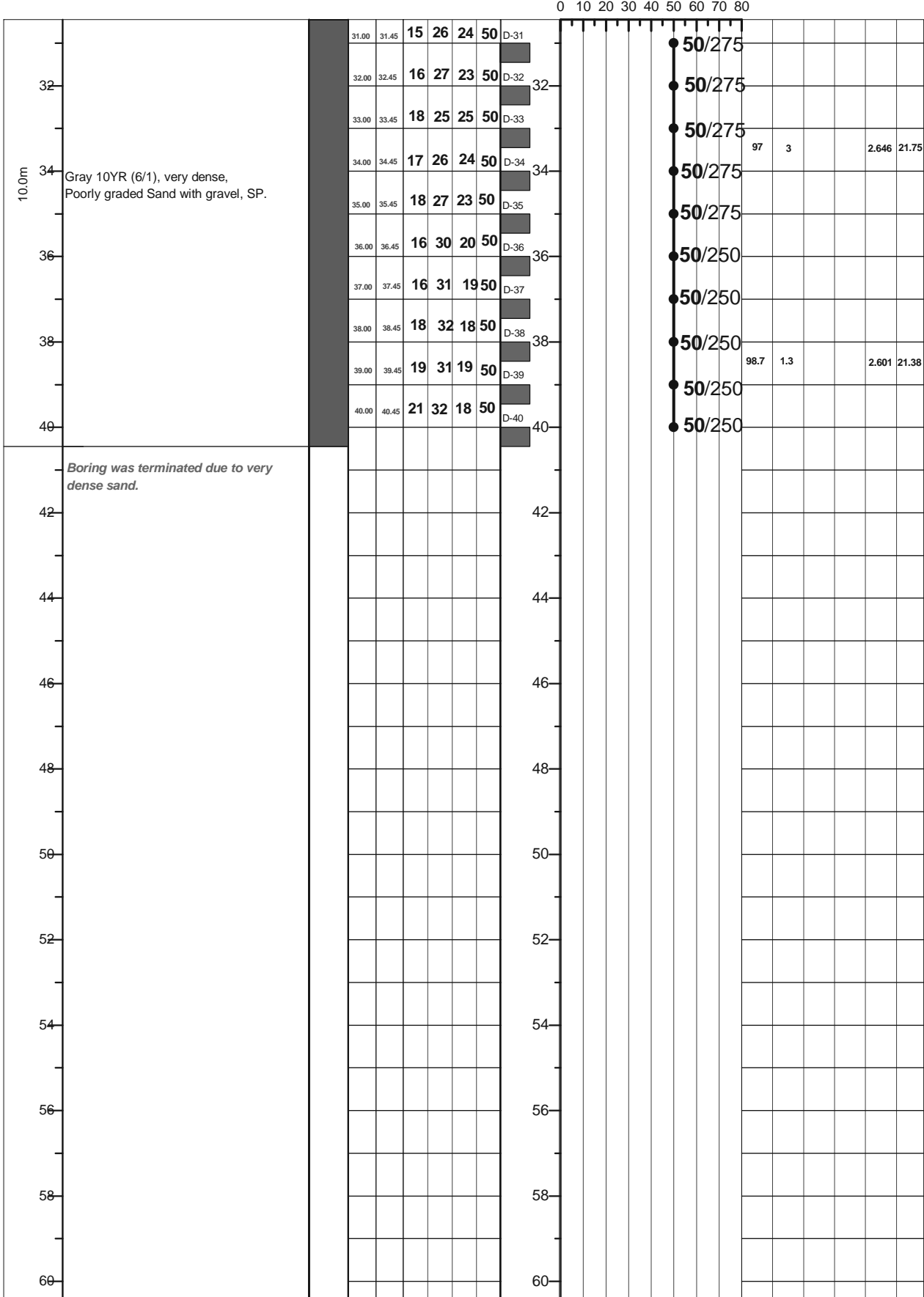
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES ( BLOWS / 300mm )	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

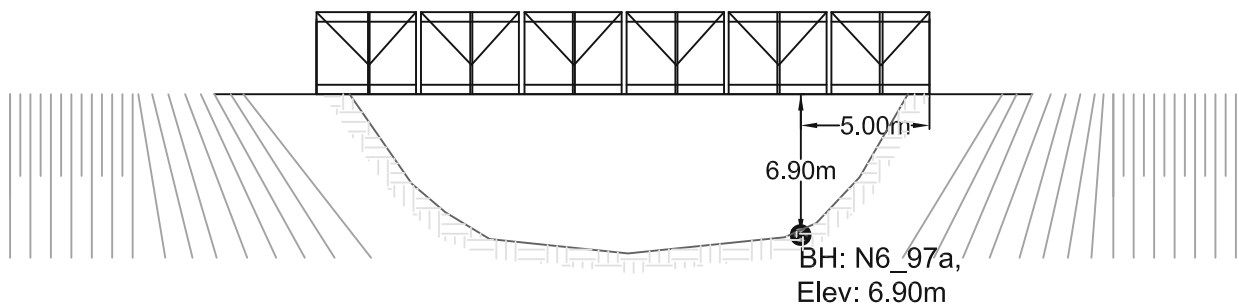
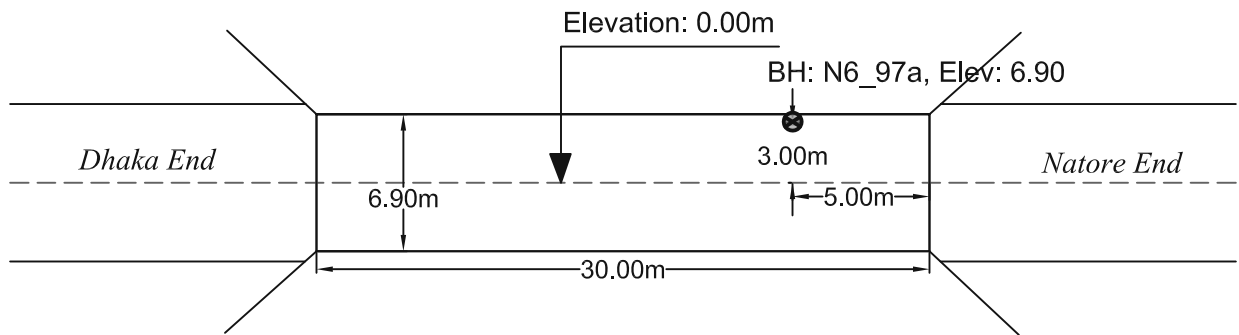
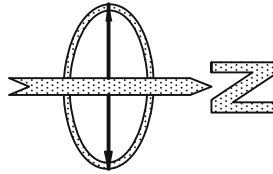
CLIENT: Oriental Consultants Company Limited.

RANK: 17

BRIDGE ID: N6\_97a

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

CHAINAGE: 97.587



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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 <sub>v</sub>	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
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	11	89	54.3	26.7	2.687	28.64
2.0m		2.00	2.45	2	3	3	6	D-2	6							
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						2.609
12.0m		12.00	12.45	3	5	9	14	D-12	14							
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						
2.0m	Grayish Brown 10YR (5/2), very dense, Micaceous Sand, SM.		23.00	23.45	16	33	17	50	D-23	50						
24.0m		24.00	24.45	13	30	20	50	D-24	50	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						
1.0m	Grayish Brown 10YR (5/2), very dense, Sand, SM.		26.00	26.45	18	29	21	50	D-26	50						
1.0m	Gray 7.5YR (5/1), very dense, Micaceous Sand, SM.		27.00	27.45	18	26	24	50	D-27	50						
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						
29.0m		29.00	29.45	25	42	8	50	D-29	50	95.2	4.8			2.714	14.77	
30.0m		30.00	30.45	26	46	4	50	D-30	50							

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

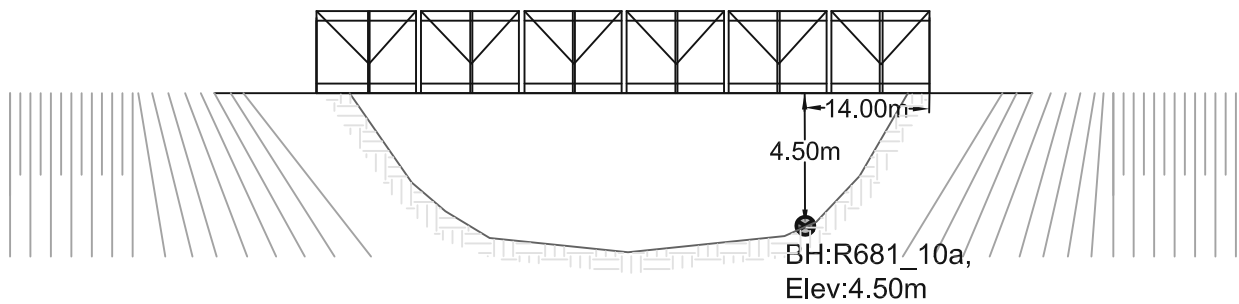
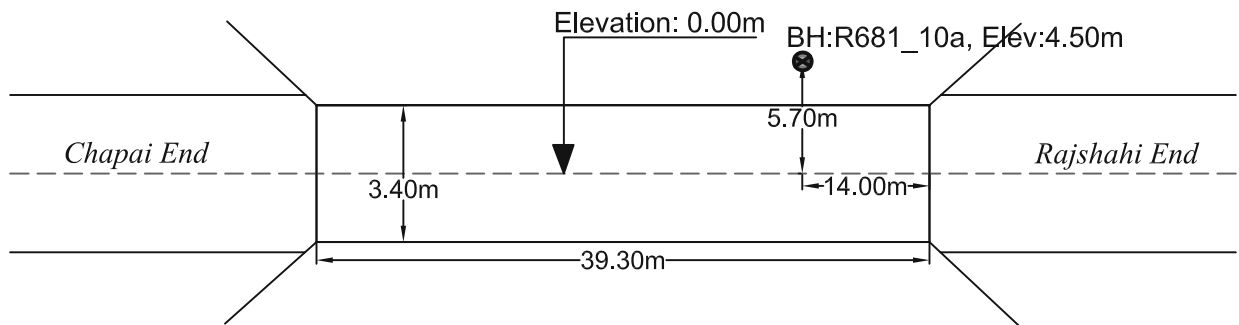
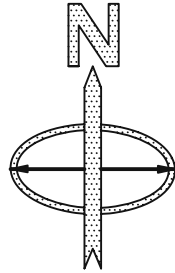
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>™</sup> 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

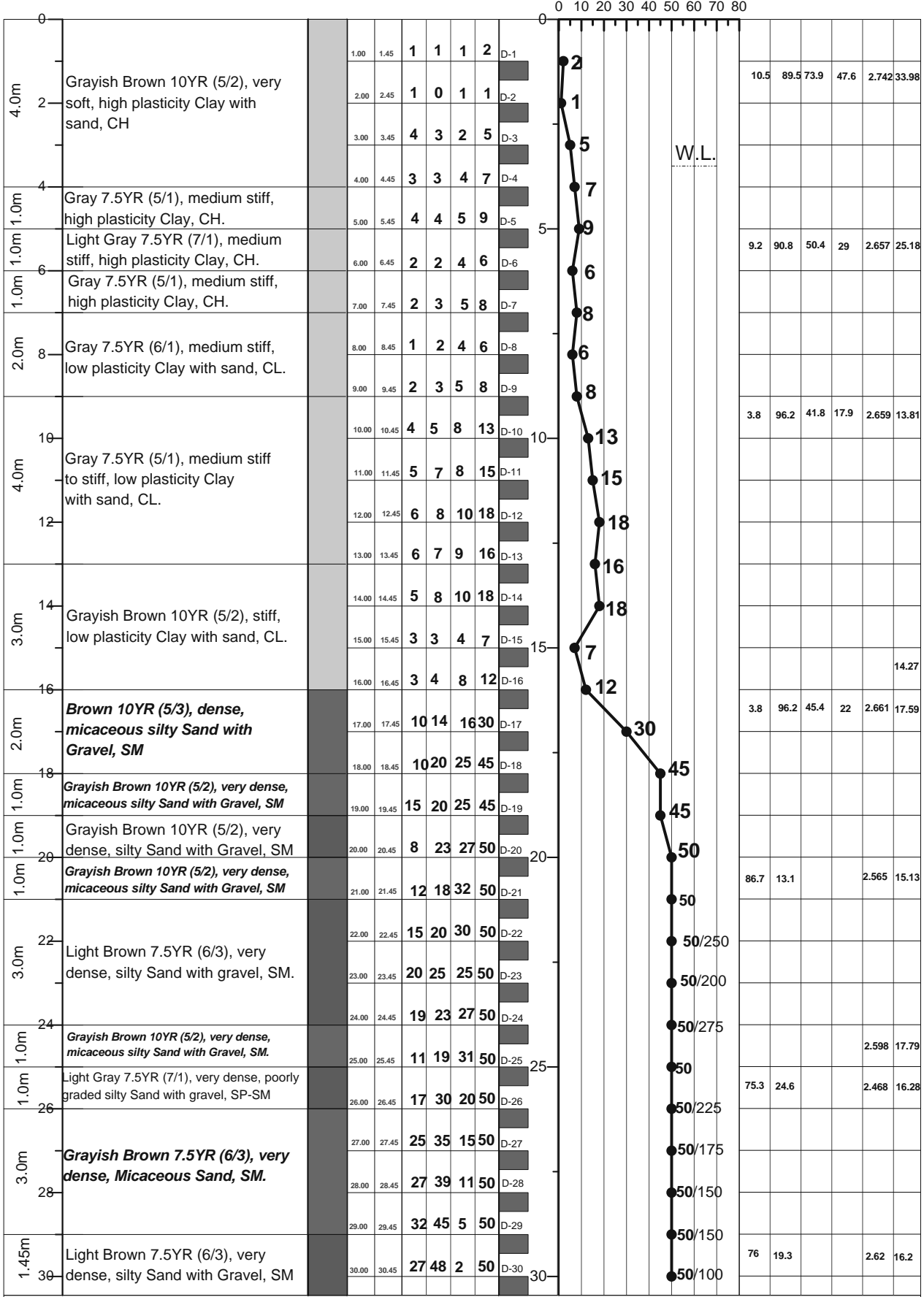


PROSOIL FOUNDATION CONSULTANT



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

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

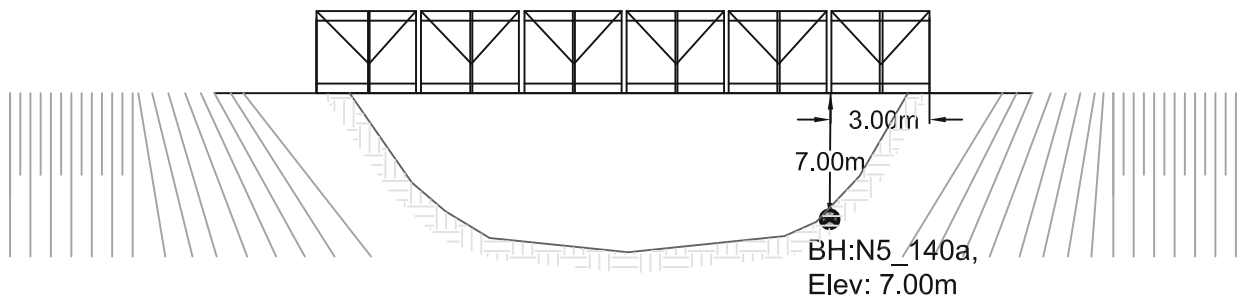
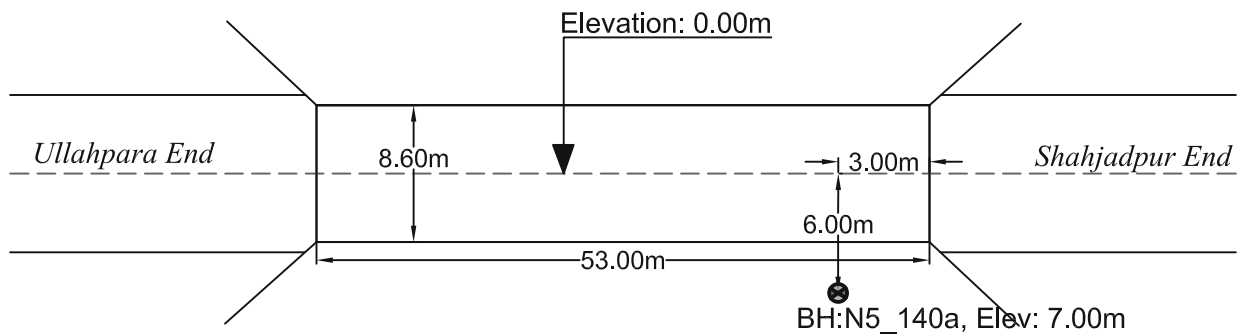
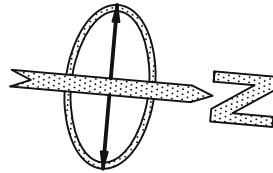


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

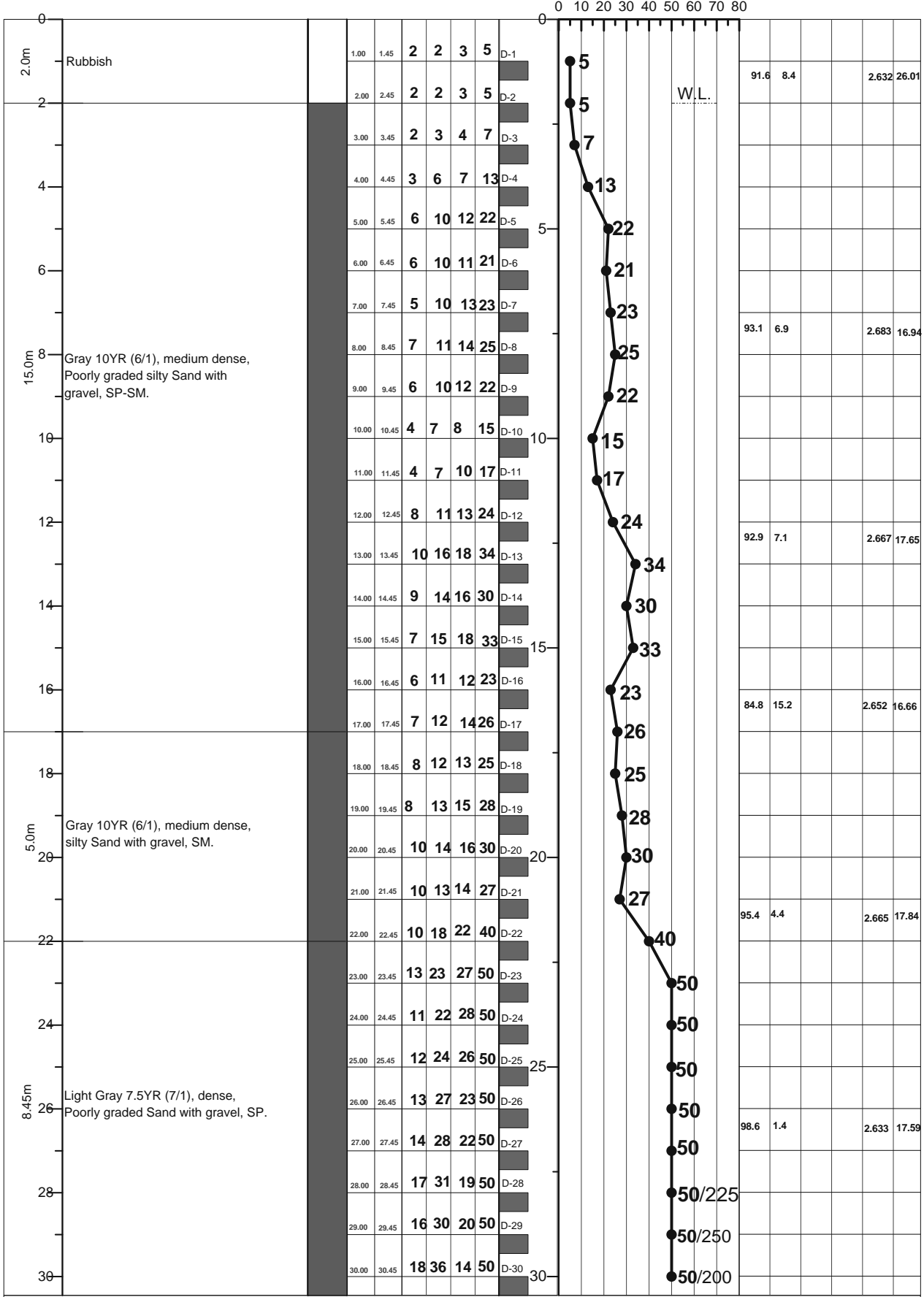
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 19  
BRIDGE ID: N5\_140a  
LATITUDE: 24°12'08.099" LONGITUDE: 89°35'23.106"  
CHAINAGE: 138.201



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 19</b>	<b>BOREHOLE NO: N5_140a</b>	<b>Longitude: N 89°34'49.15"</b>	<b>Latitude: E 24°12'08.099"</b>
			<b>Brigde ID: N5_140a</b>	<b>Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 30.0m</b>	<b>Chainage: 138.201, RL: -7.0m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 9-03-2014</b>	<b>Completed Date: 10-03-2014</b>	<b>G. W. T : -2.0m.</b>

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

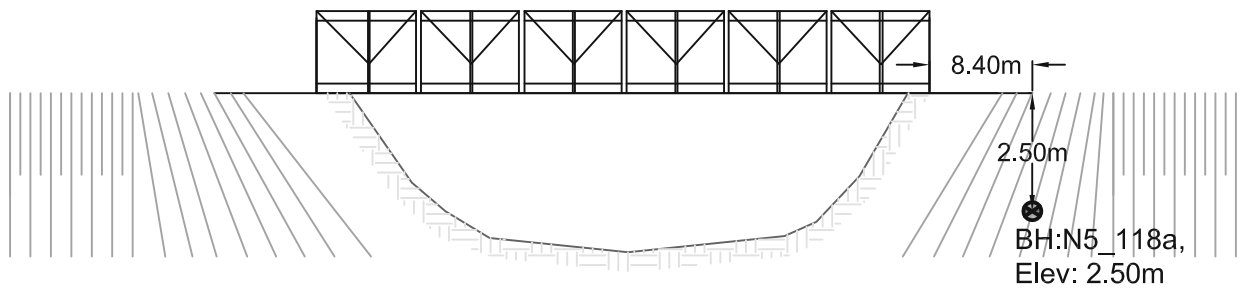
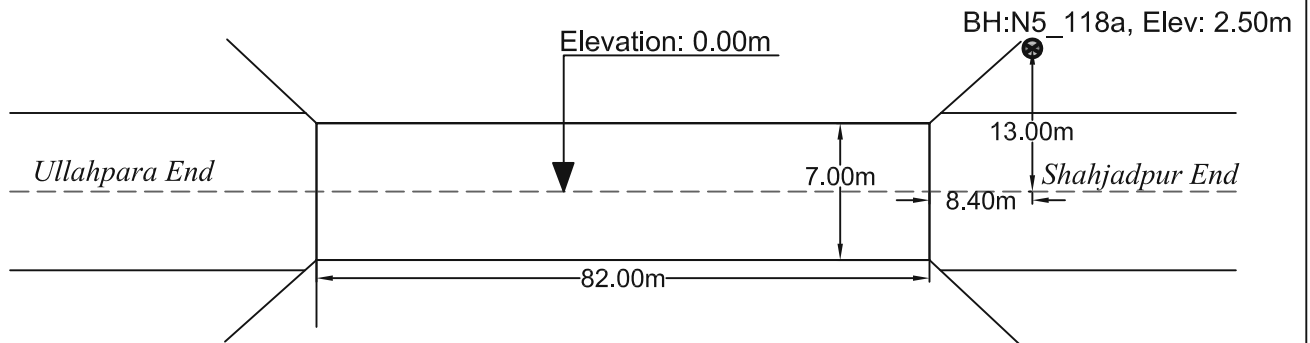
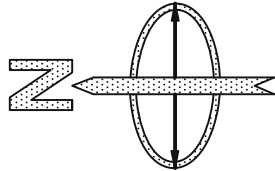


**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

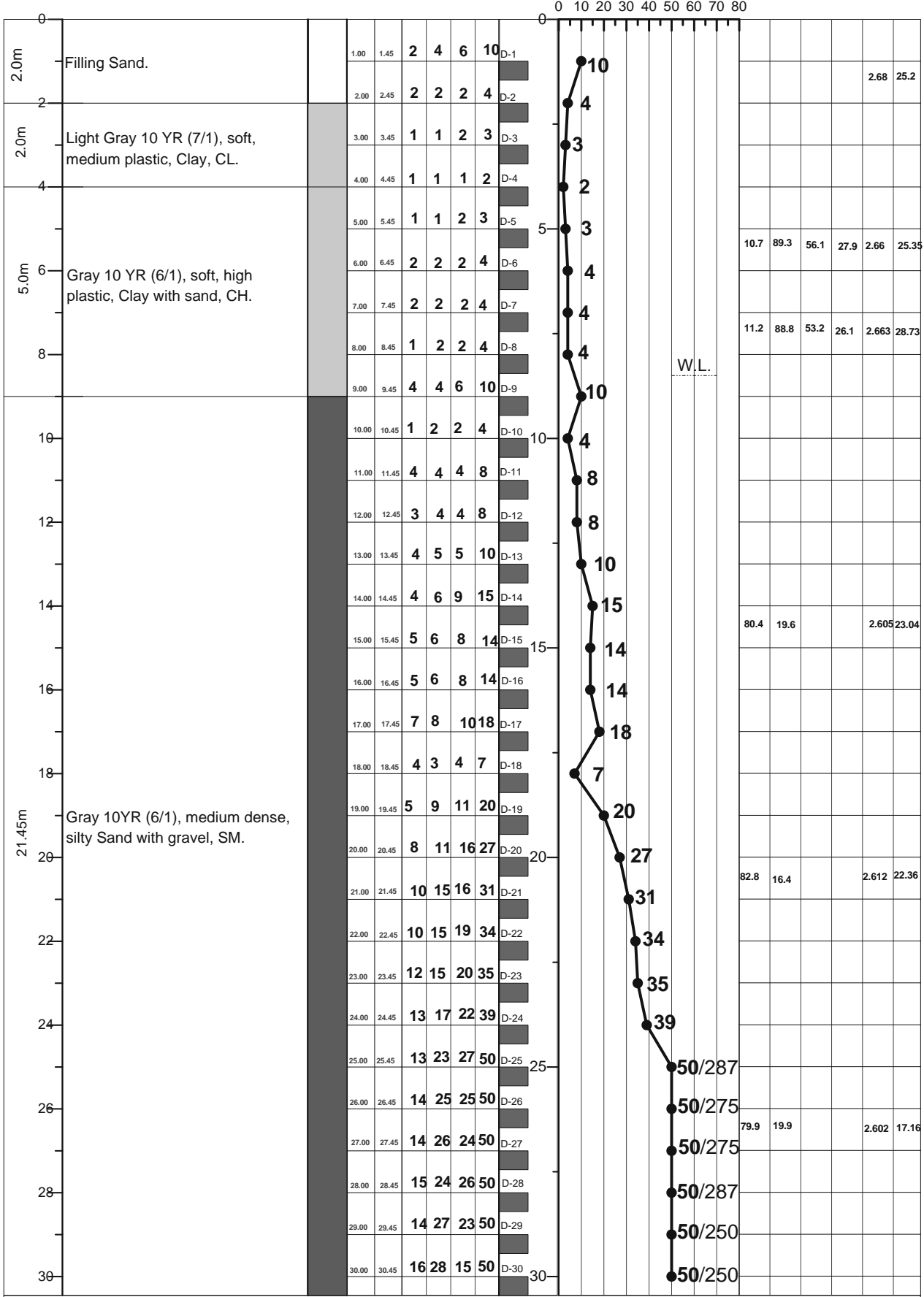
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 20  
BRIDGE ID: N5\_118a  
LATITUDE: 24°01'57.443" LONGITUDE: 89°36'15.207"  
CHAINAGE: 117.143



PROSOIL FOUNDATION CONSULTANT

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

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

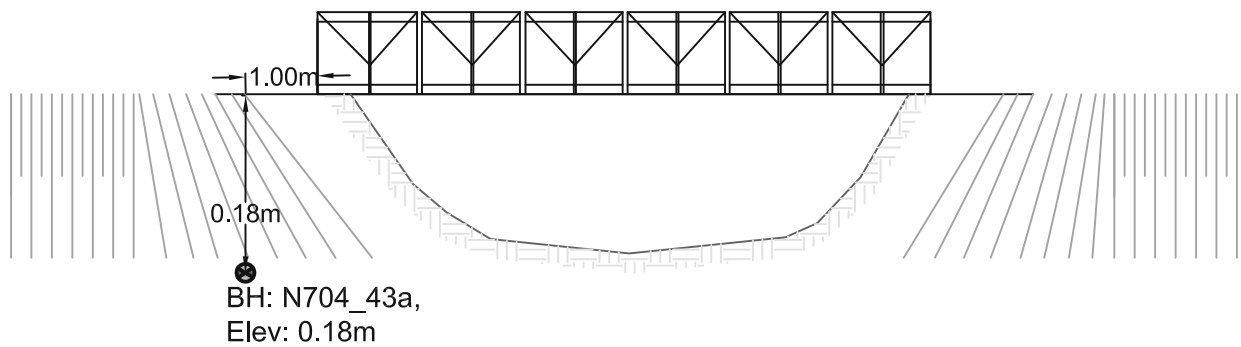
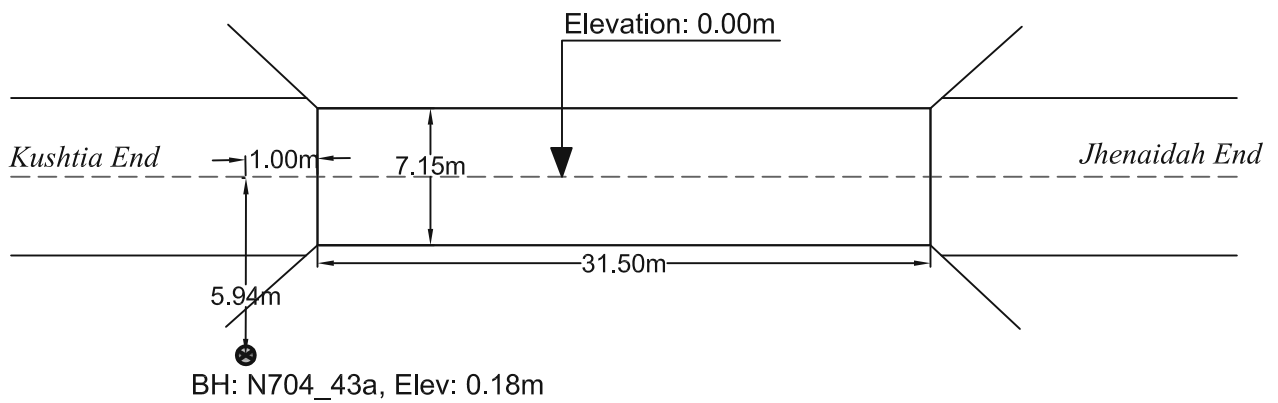
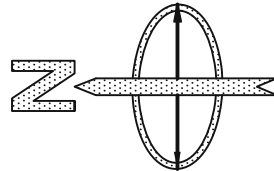


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> 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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								
0								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					
3.2			2.00	2.45	1	1	2	3	D-2	3	11.3	88.7	41.7	16.1	2.675 29.22
			3.00	3.45	1	1	1	2	D-3	2					
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					
2.4			5.00	5.45	2	3	4	7	D-5	7					
2.0m	Gray 7.5YR (5/1), medium stiff, medium plastic, silty Clay, CL.		6.00	6.45	2	3	3	6	D-6	6					
2.6			7.00	7.45	1	1	2	3	D-7	3	12.1	87.9	49.9	22.7	2.66 31.32
2.0m	Gray 7.5YR (5/2), soft, low plastic, Clay with sand, CL.		8.00	8.45	1	2	3	5	D-8	5					
2.8			9.00	9.45	4	6	8	14	D-9	14	78.4	21.2			2.676 22.3
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					
2.0m	Gray 7.5YR (5/1), soft, low plastic, silty Clay, CL.		11.00	11.45	1	1	2	3	D-11	3					
12			12.00	12.45	2	2	3	5	D-12	5					
3.0m	Gray 7.5YR (5/2), soft, low plastic, Clay with sand, CL.		13.00	13.45	1	2	3	5	D-13	5					
14			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					
5.0m	Gray 7.5YR (5/1), medium stiff, low plastic, Clay with sand, CL.		16.00	16.45	3	6	6	12	D-16	12					
16			17.00	17.45	4	5	10	15	D-17	15					
18			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		20.00	20.45	2	3	5	8	D-20	8						
6.0m	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			22.00	22.45	2	3	4	7	D-22	7					
24			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
2.0m	Gray 7.5YR (5/2), very stiff, high plastic, silty Clay, CL.		26.00	26.45	3	7	10	17	D-26	17					
28			27.00	27.45	2	6	12	18	D-27	18					
2.0m	Brown 7.5YR (5/3), dense, silty Sand, SM.		28.00	28.45	9	11	17	28	D-28	28					
30			29.00	29.45	12	20	22	42	D-29	42					
0.45m	Brown 7.5YR (5/3), very dense, silty Sand with gravel, SM.		30.00	30.45	13	22	28	50	D-30	50	82.1	17.9			2.623 17.86

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

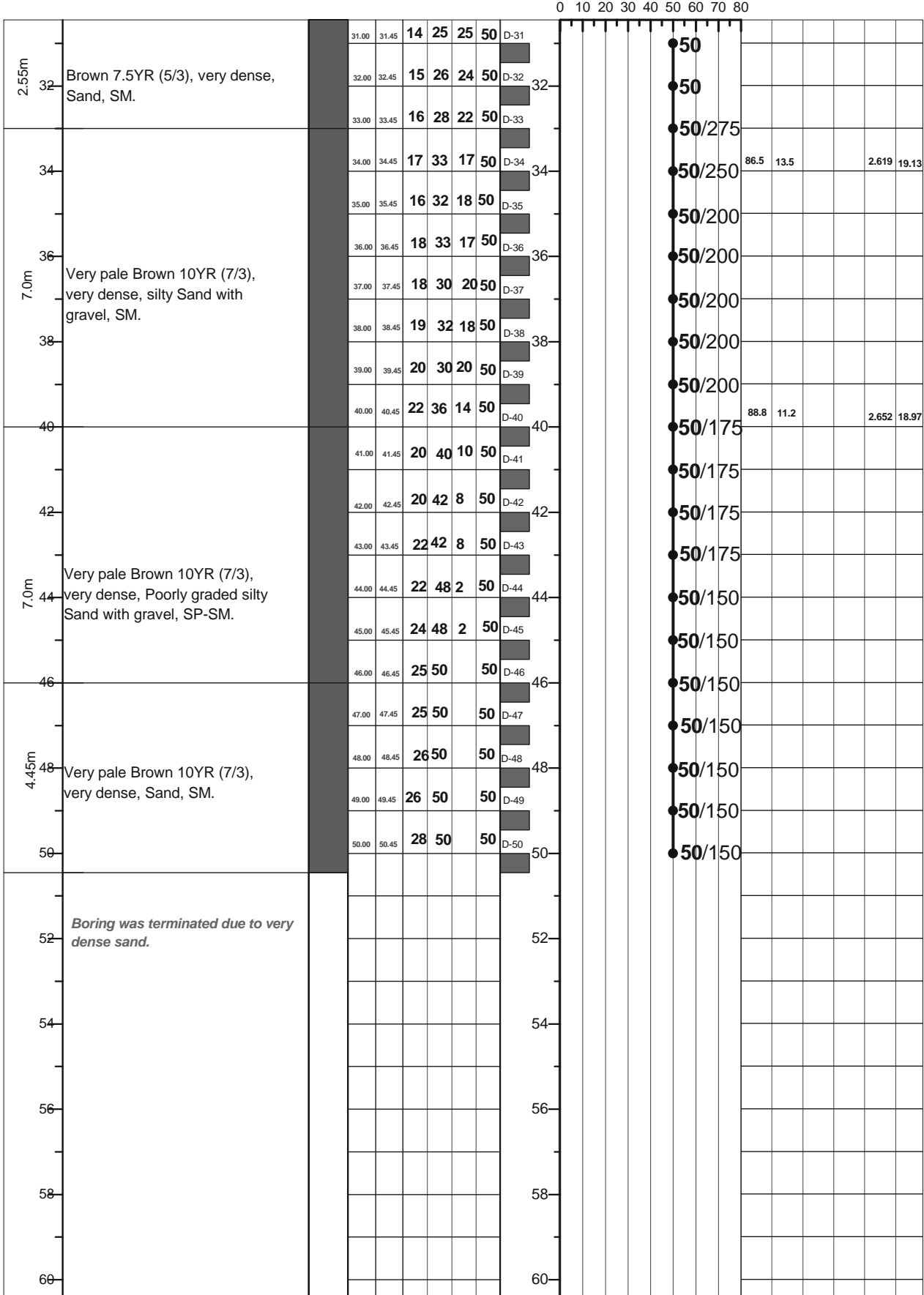
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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



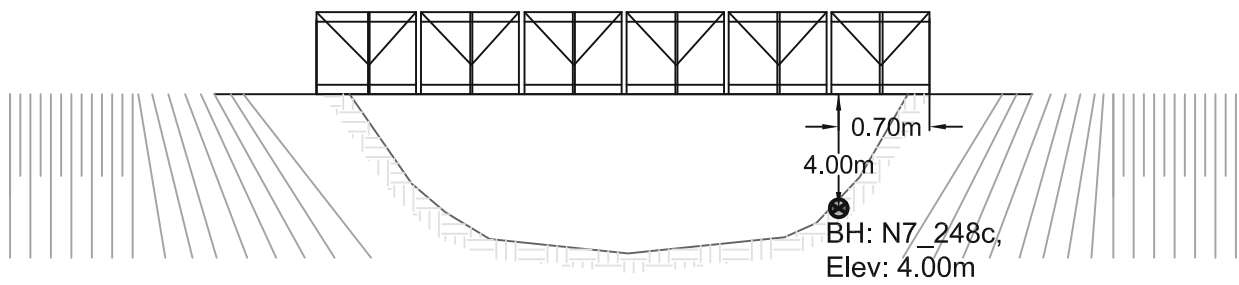
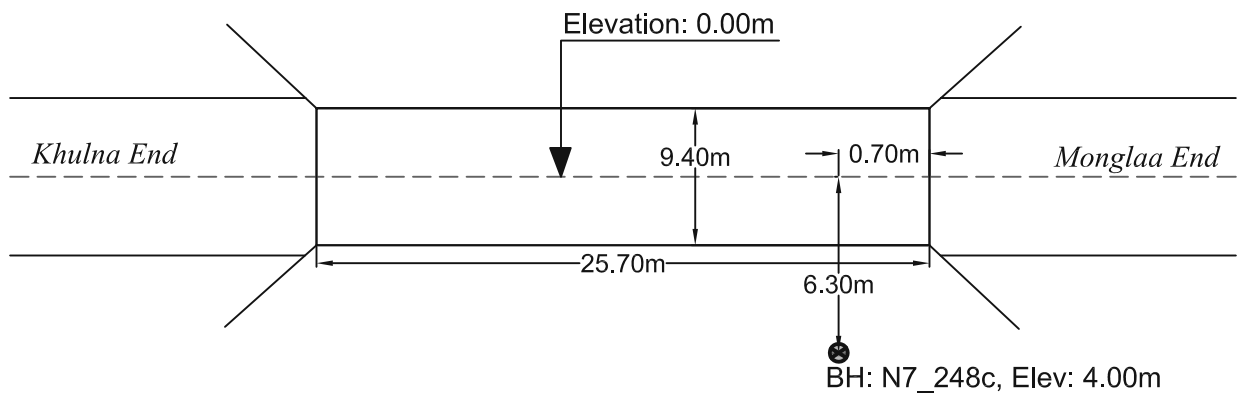
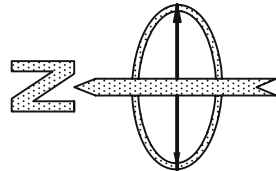
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



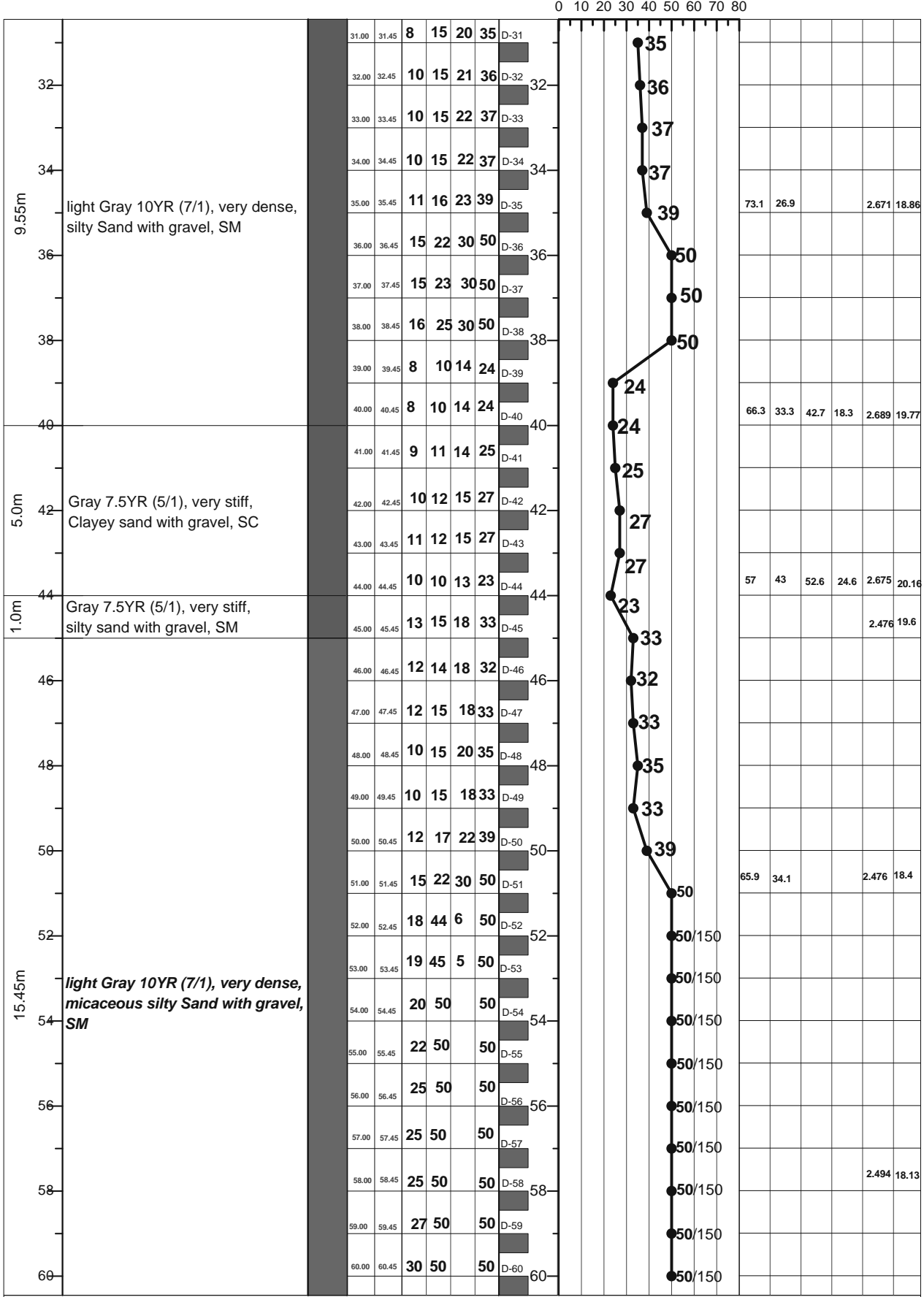
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 22  
BRIDGE ID: N7\_248c  
LATITUDE: 22°33'21.514" LONGITUDE: 89°35'41.885"  
CHAINAGE: 248.844



PROSOIL FOUNDATION CONSULTANT

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

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



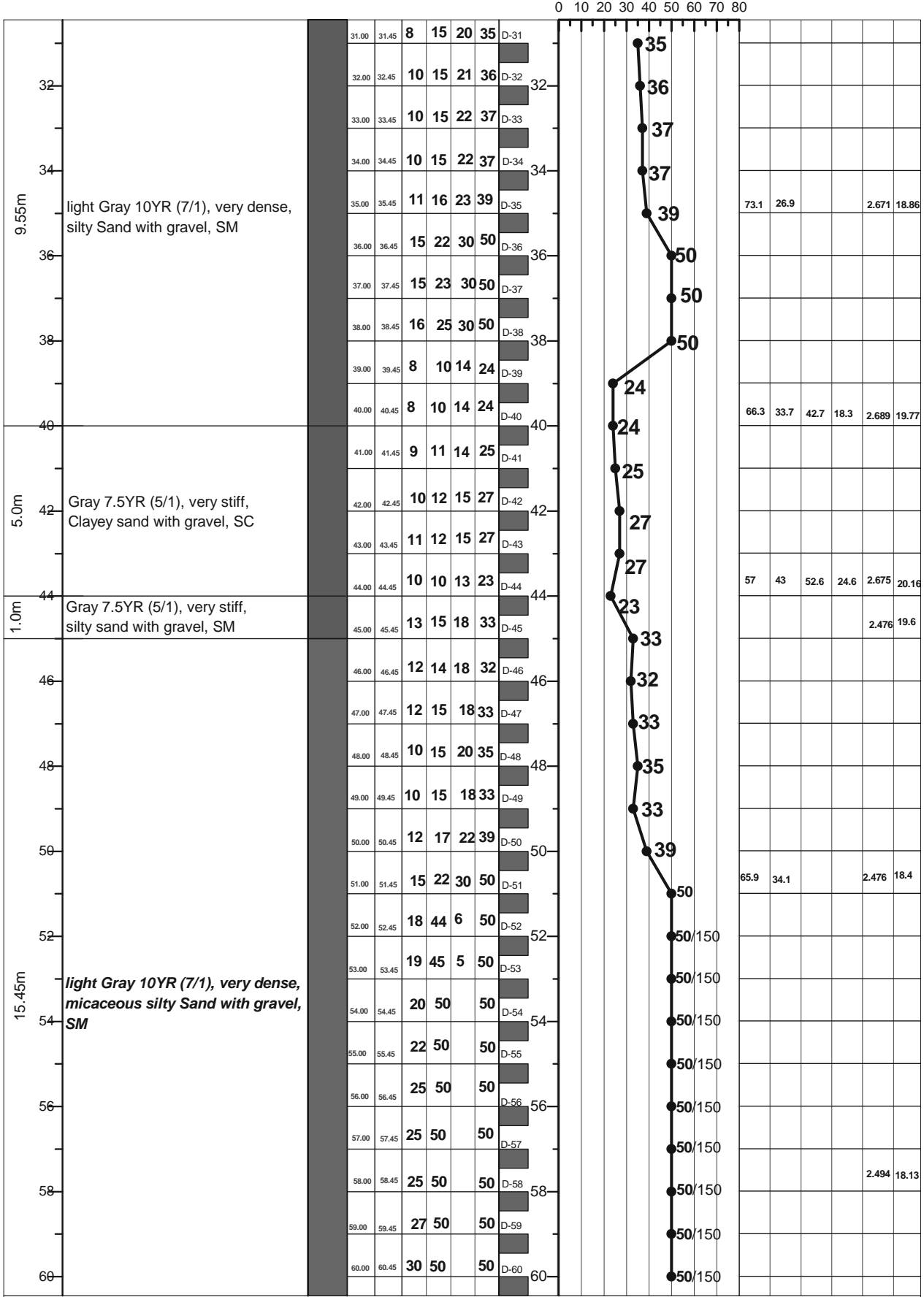
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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

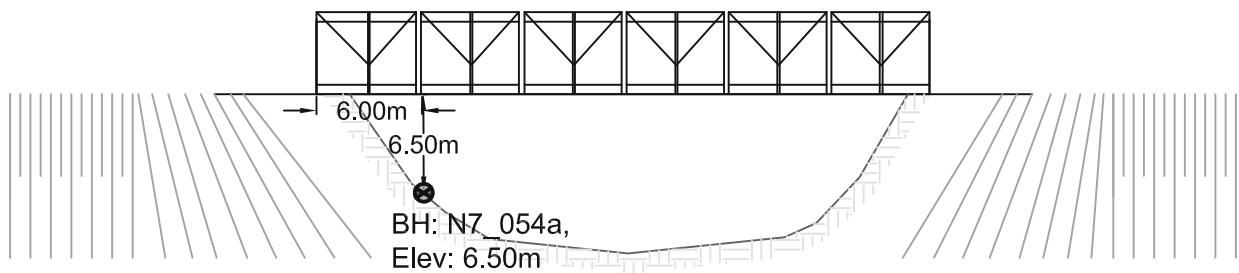
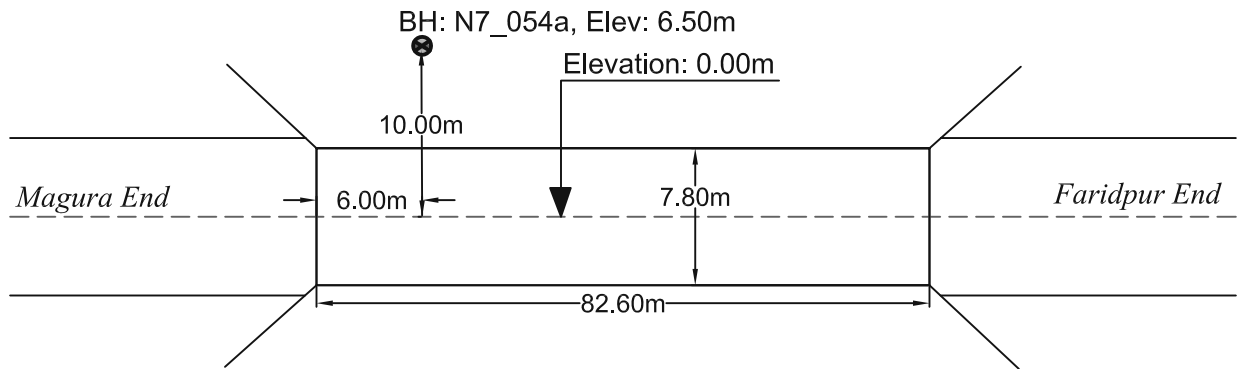
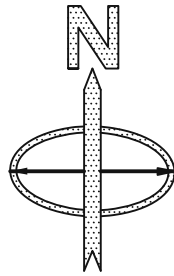


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

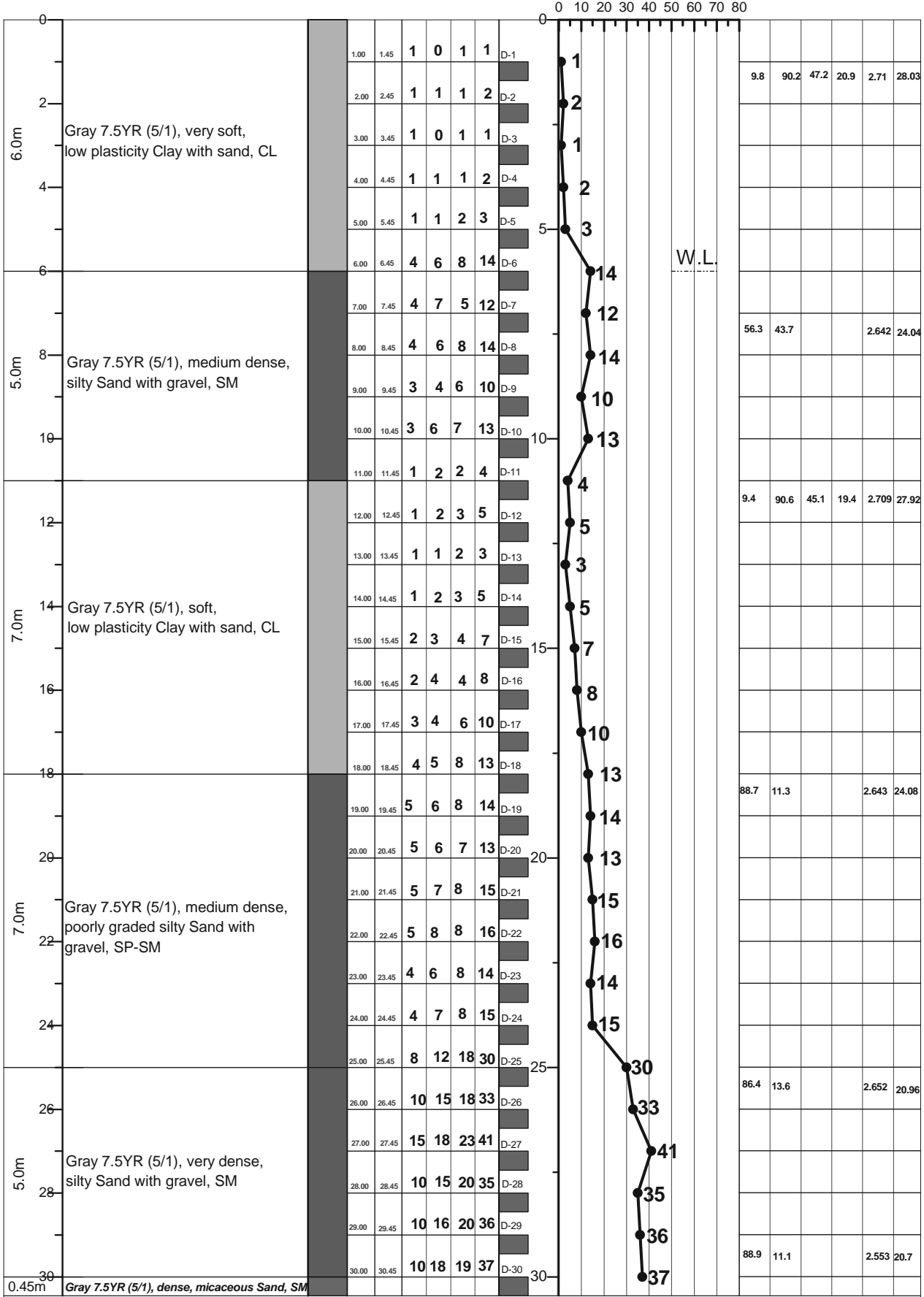
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 23  
BRIDGE ID: N7\_054a  
LATITUDE: 23°31'45.434" LONGITUDE: 89°36'30.335"  
CHAINAGE: 55.168



PROSOIL FOUNDATION CONSULTANT

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

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



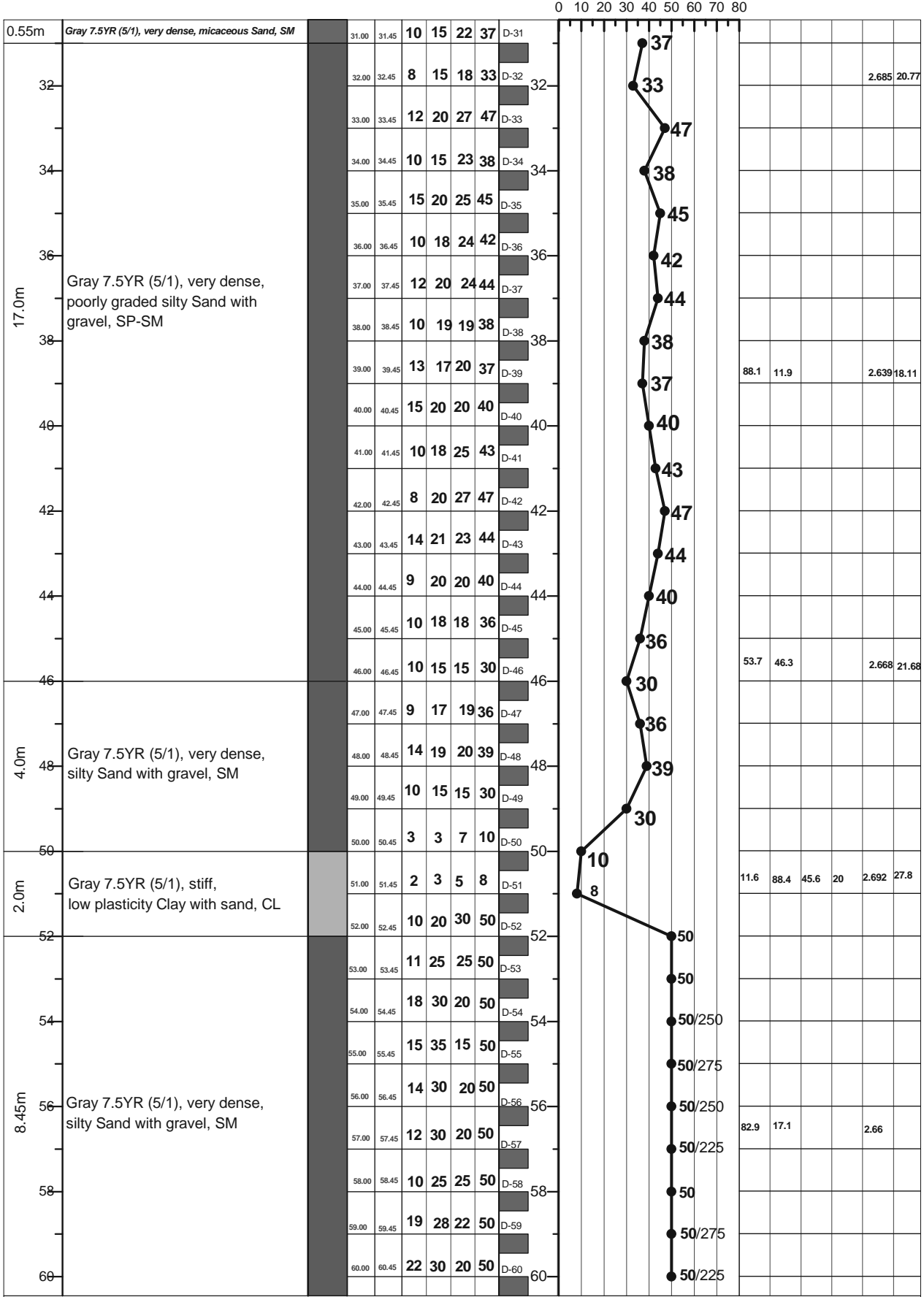
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)

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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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



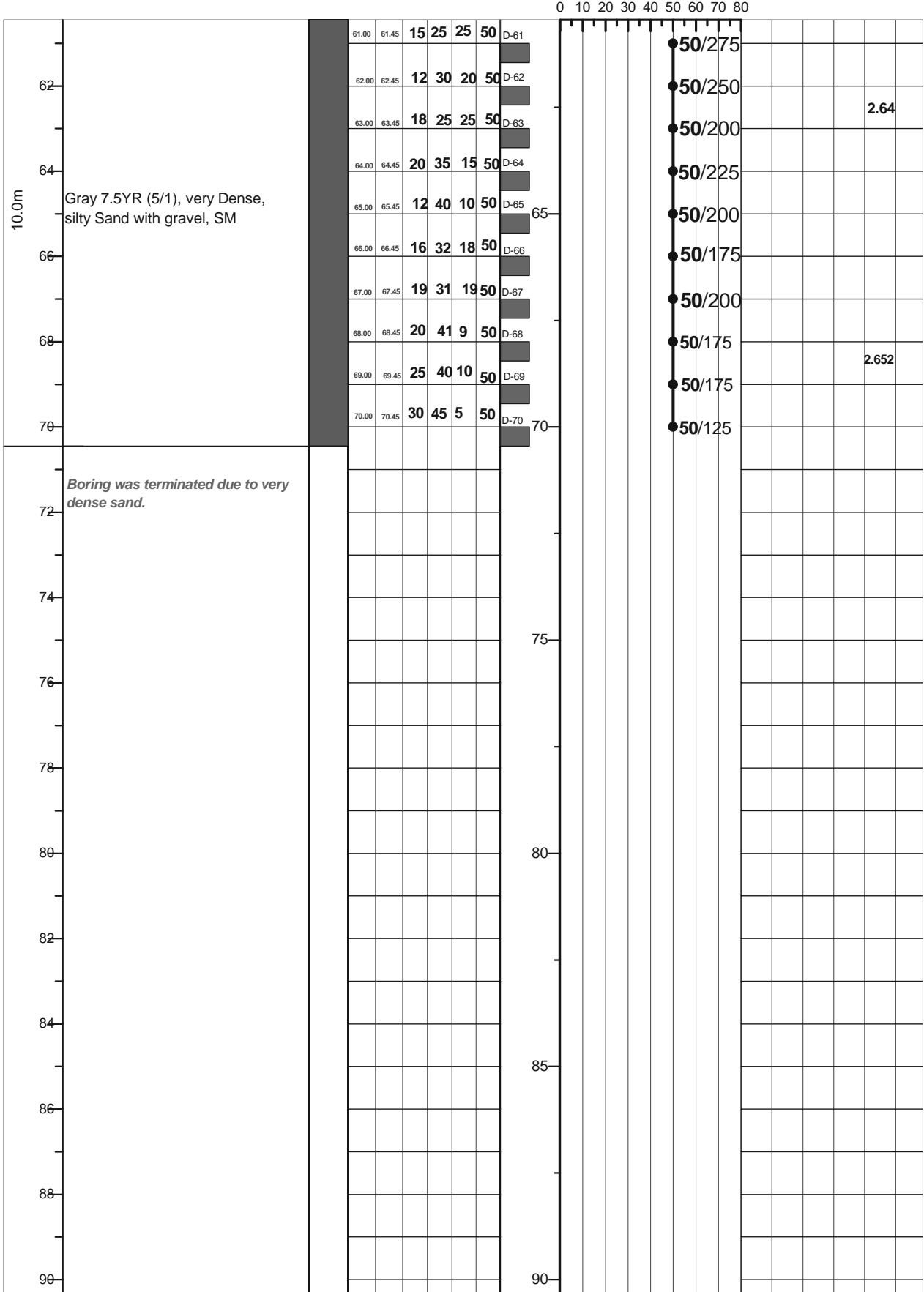
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>c</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

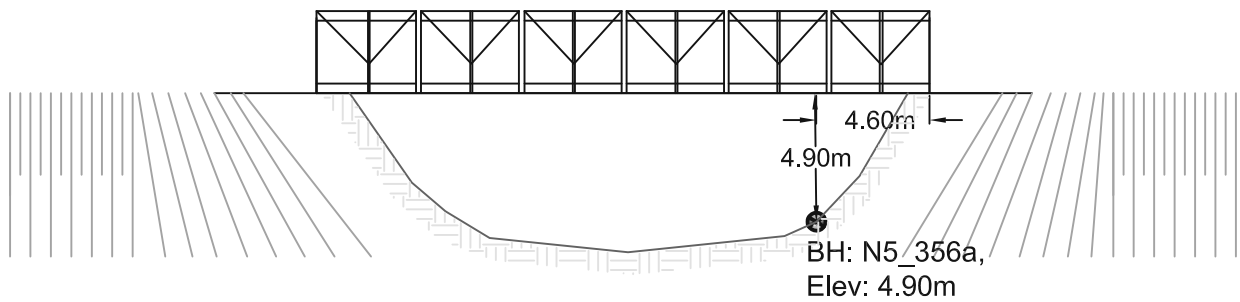
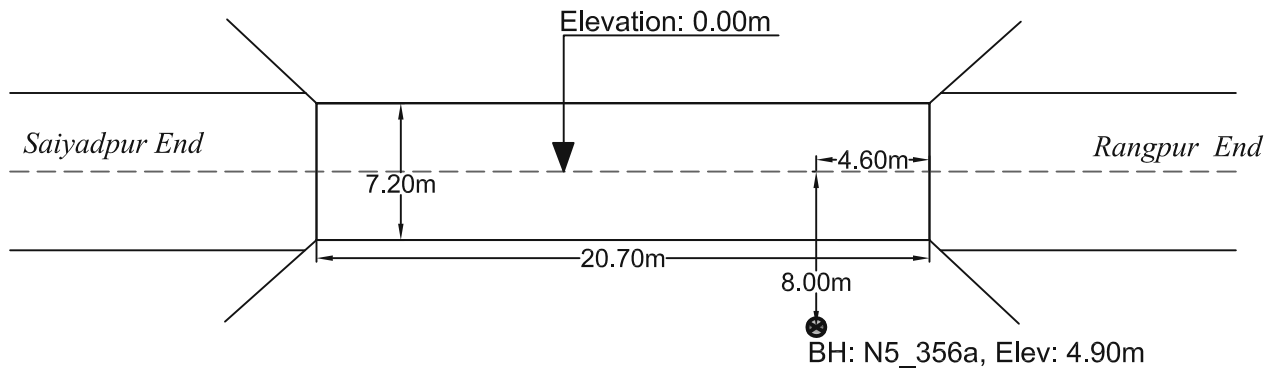
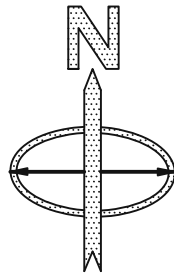
**CLIENT: Oriental Consultants Company Limited.**

**RANK: 24**

**BRIDGE ID: N5\_356a**

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

**CHAINAGE: 354.204**

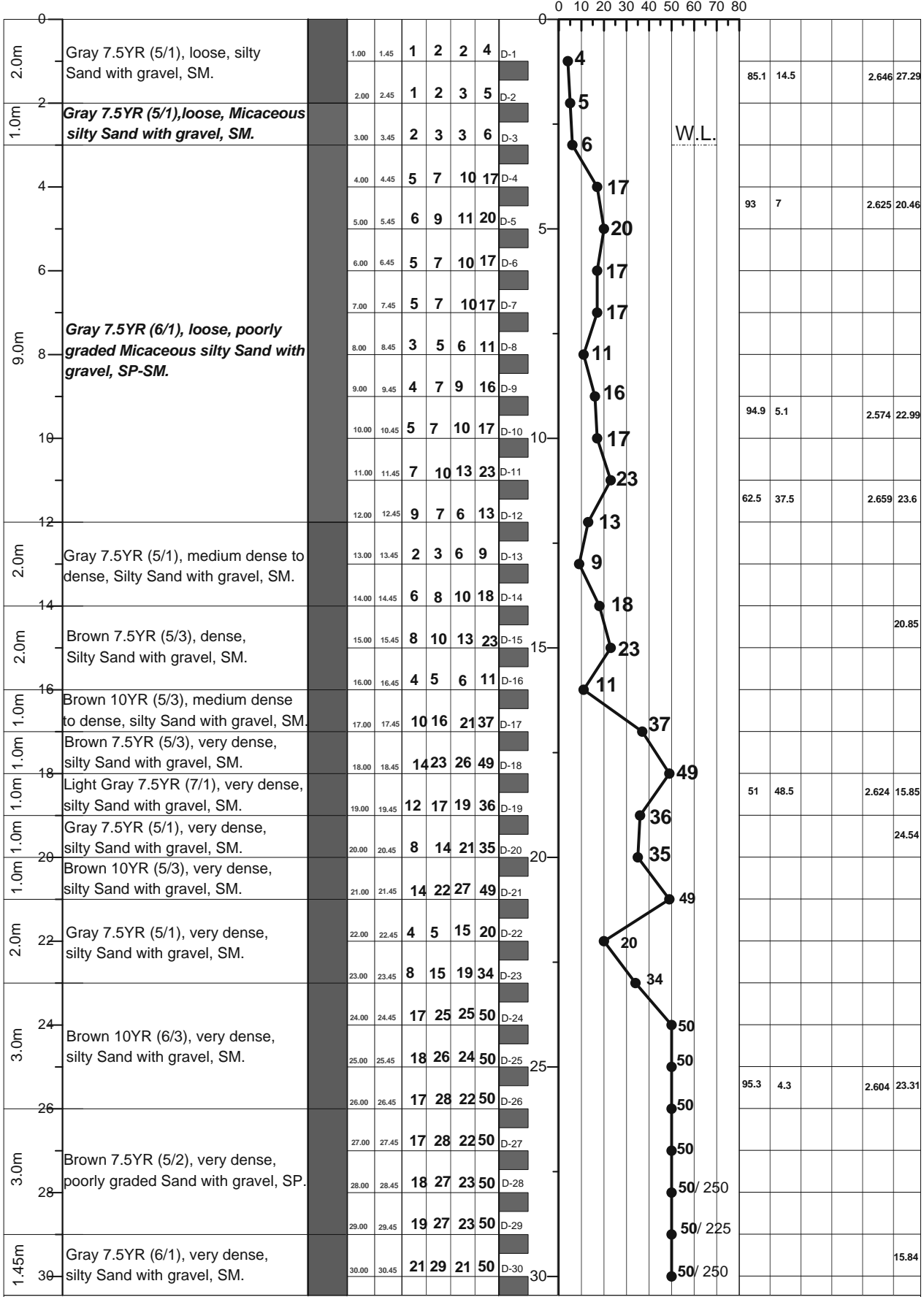


**PROSOIL FOUNDATION CONSULTANT**



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

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

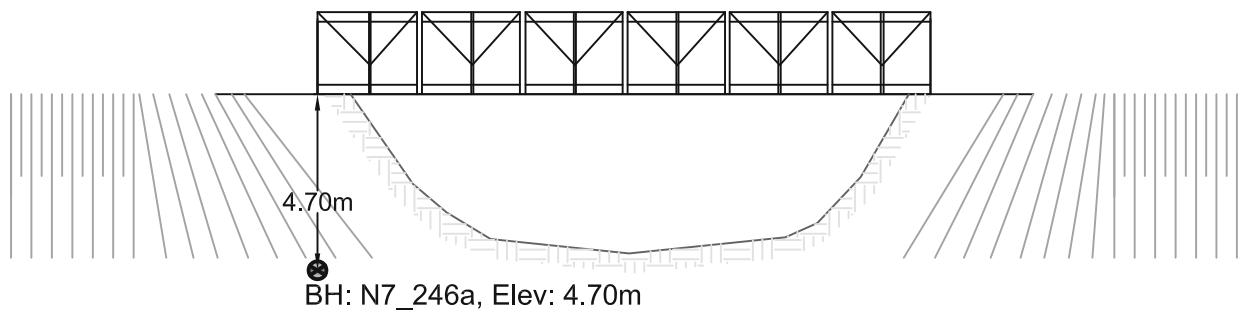
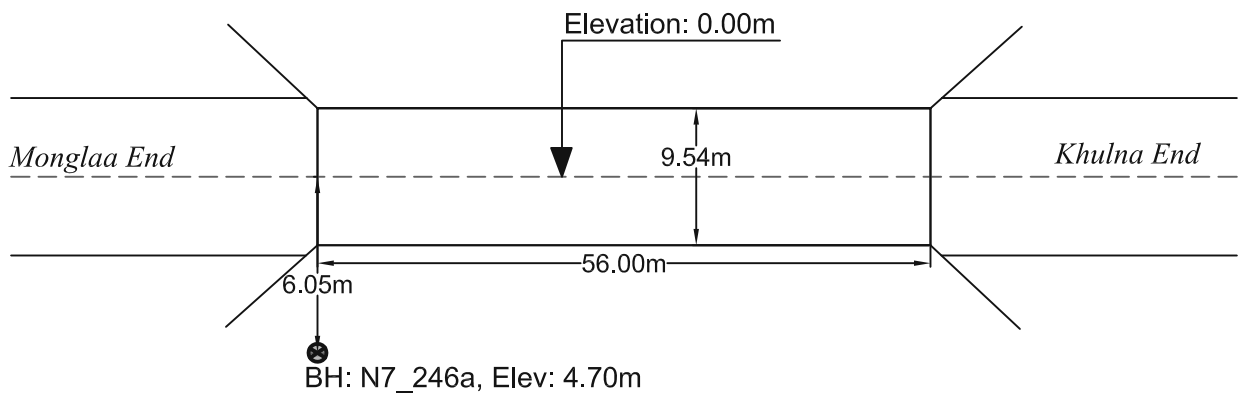
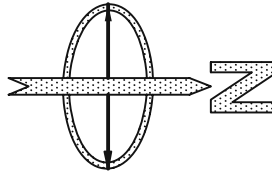


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

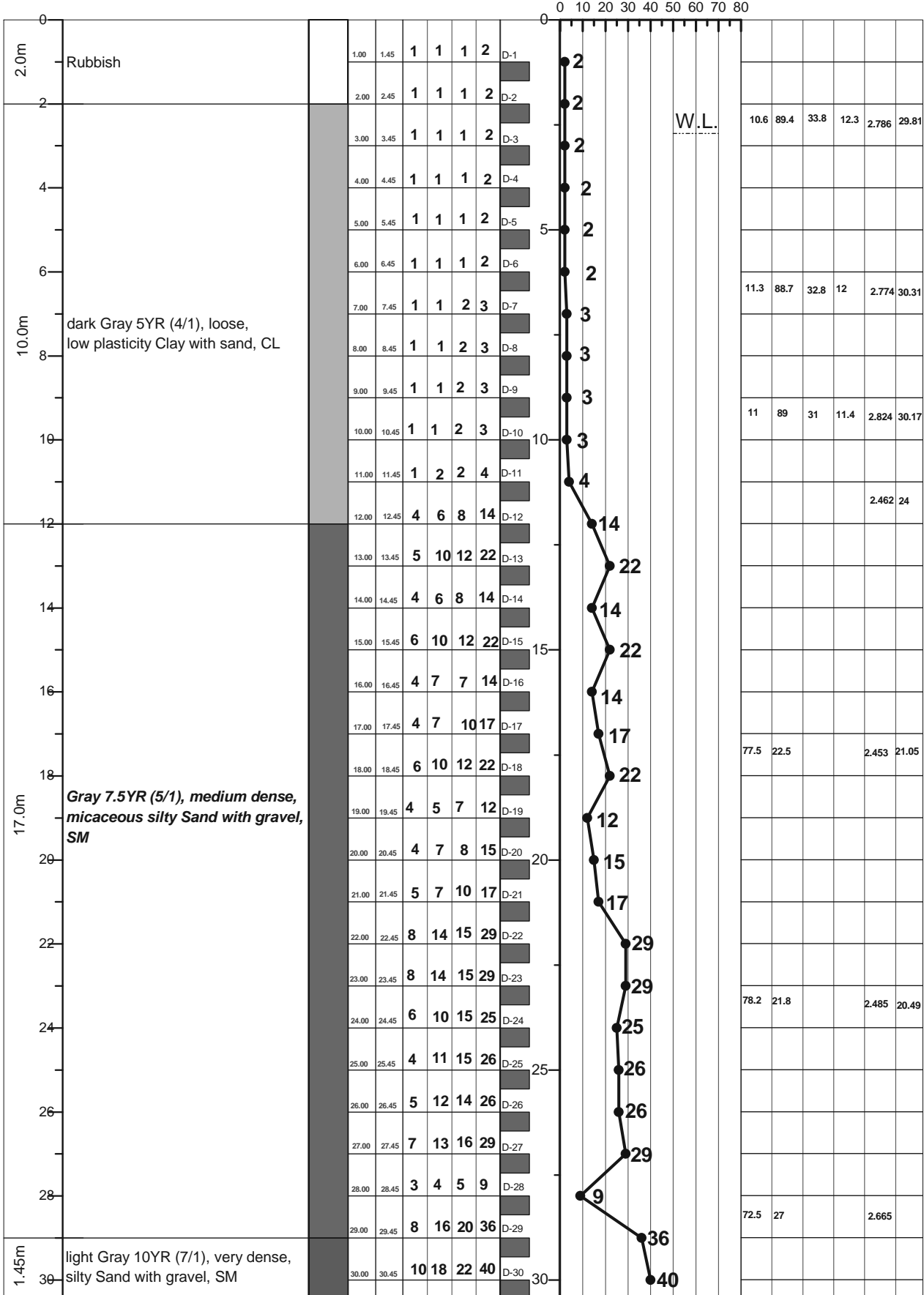
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 25  
BRIDGE ID: N7\_246a  
LATITUDE: 22°34'23" LONGITUDE: 89°36'51"  
CHAINAGE: 246.112



PROSOIL FOUNDATION CONSULTANT

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

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



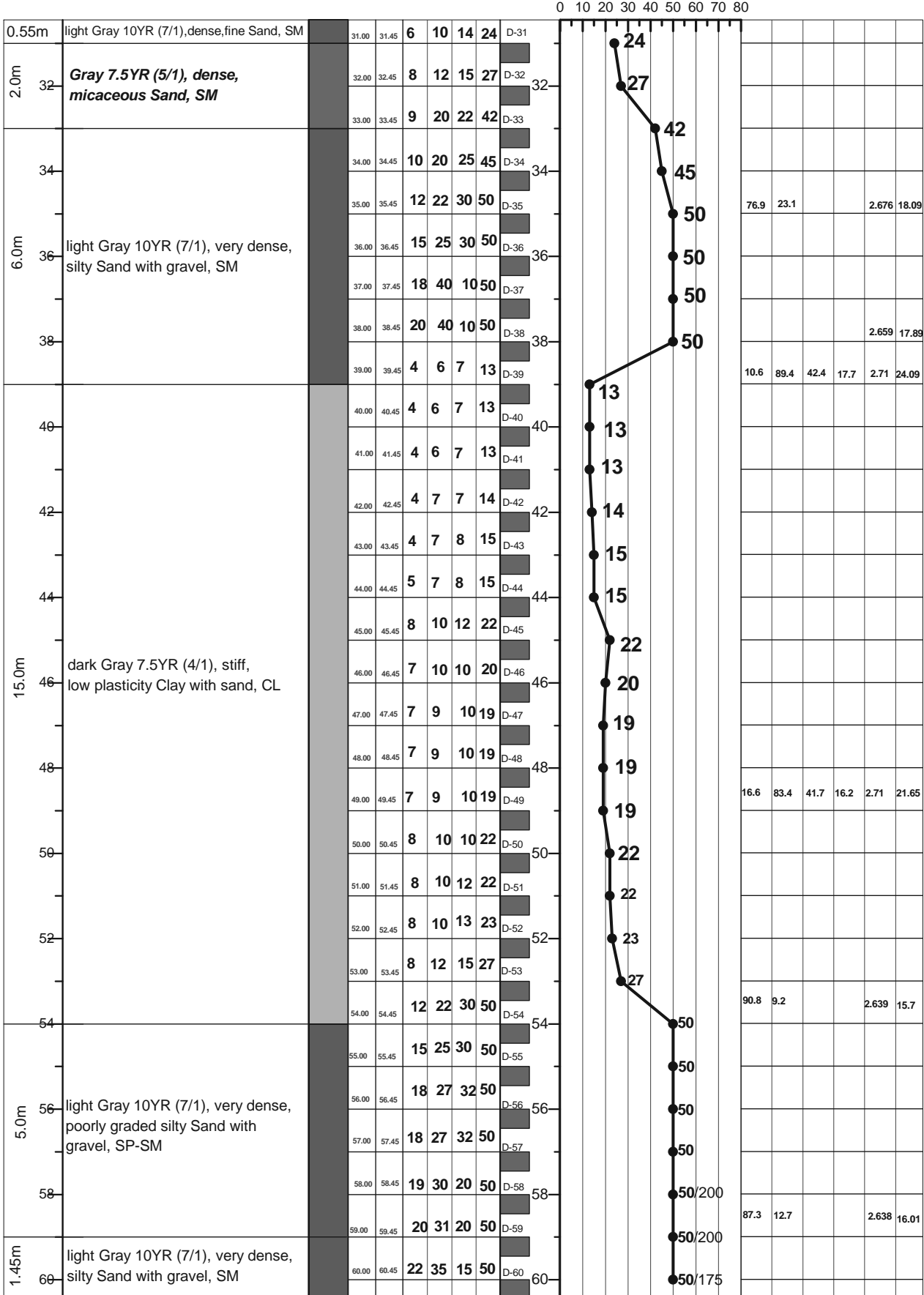
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>v</sub>
			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')

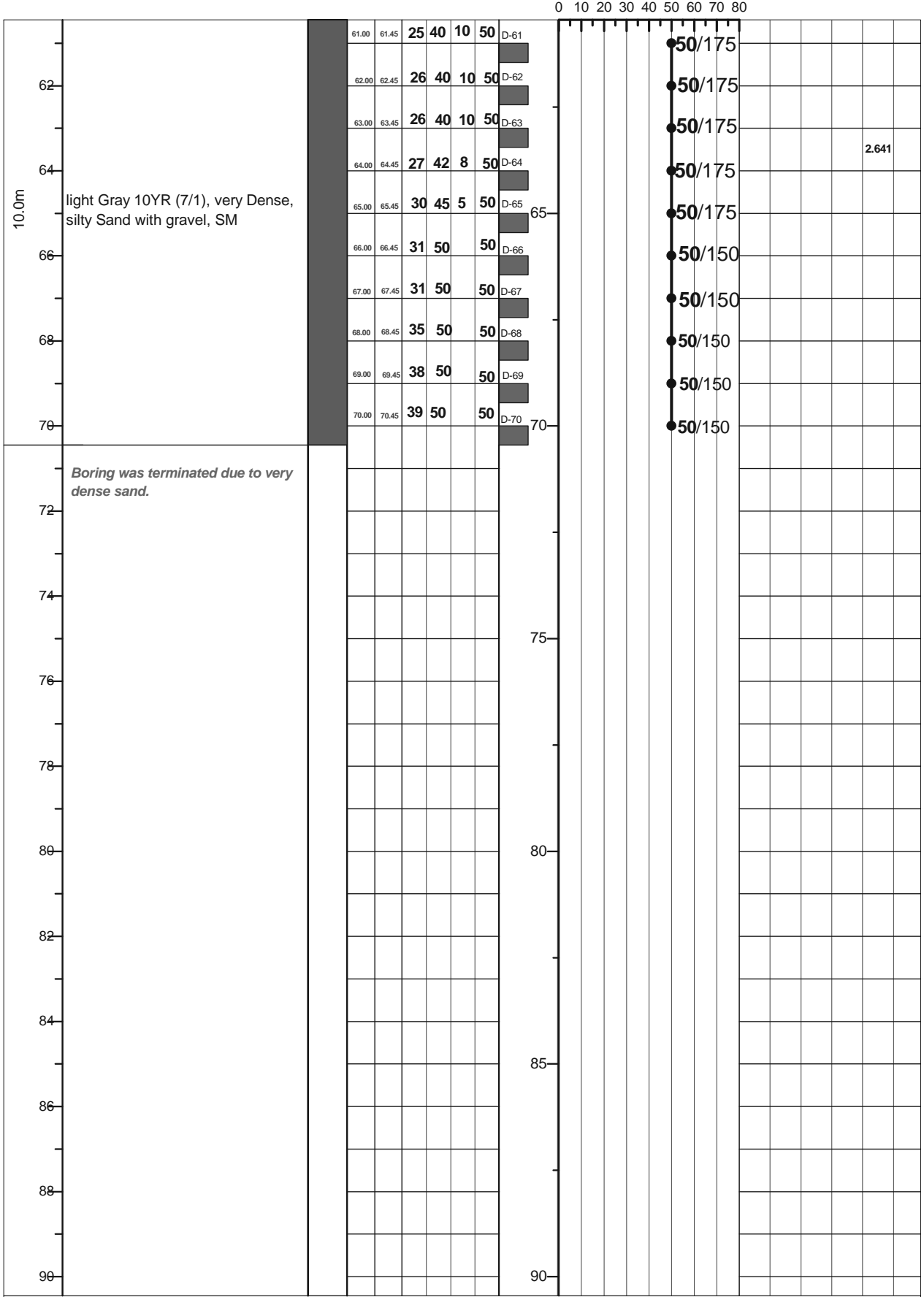
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED    50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

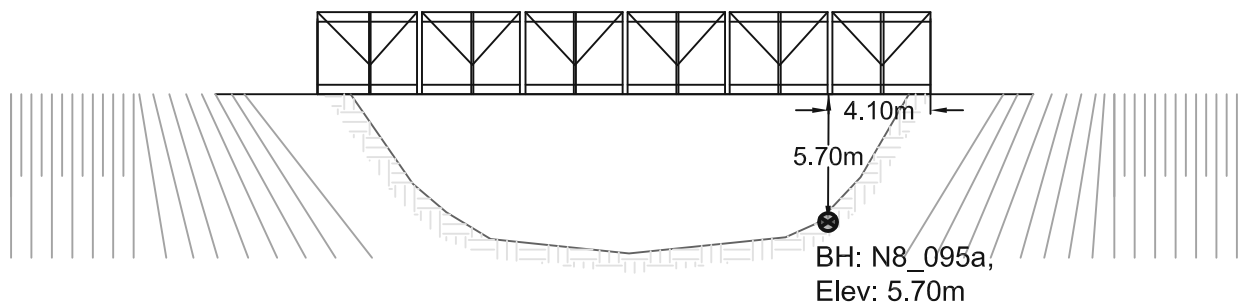
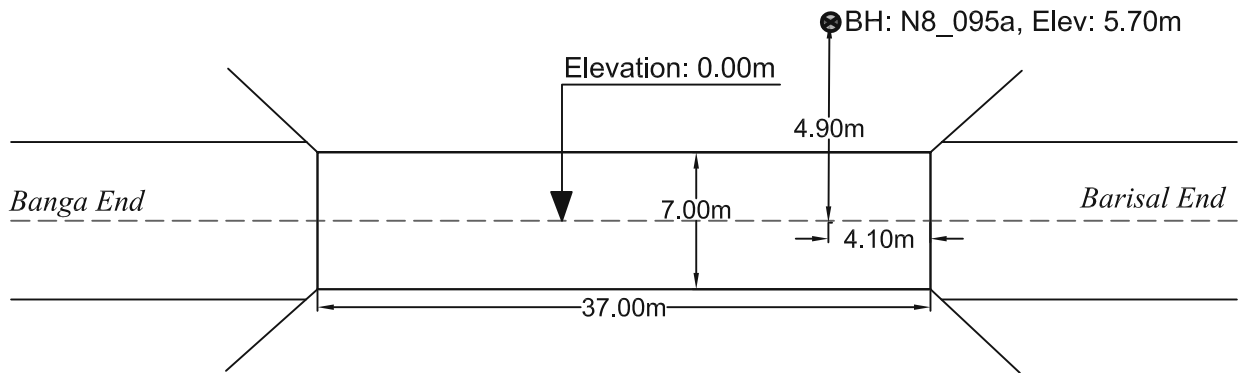
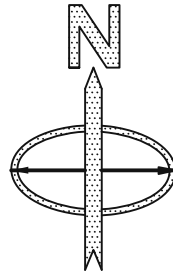
CLIENT: Oriental Consultants Company Limited.

RANK: 26

BRIDGE ID: N8\_095a

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

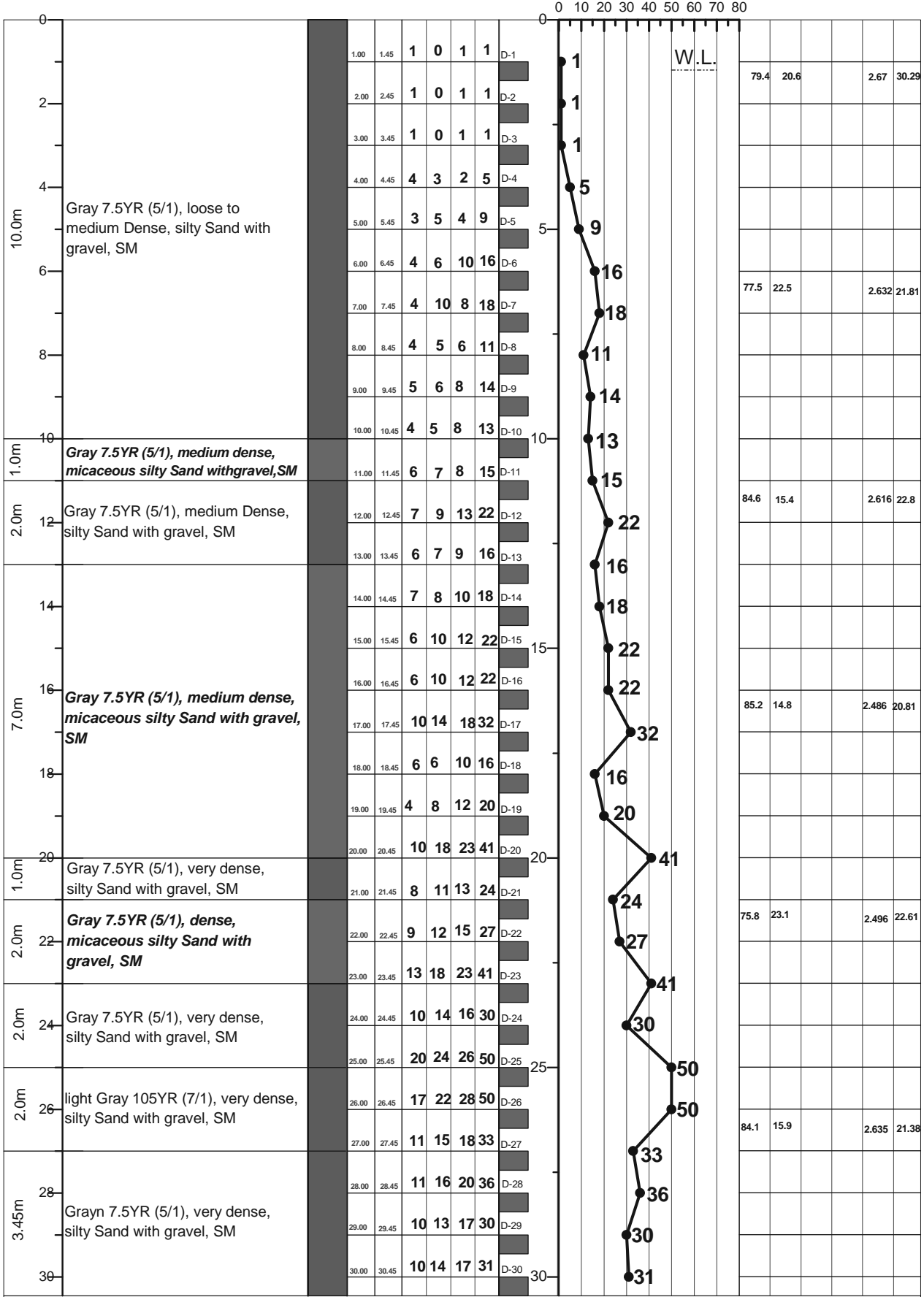
CHAINAGE: 94.098



PROSOIL FOUNDATION CONSULTANT

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

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

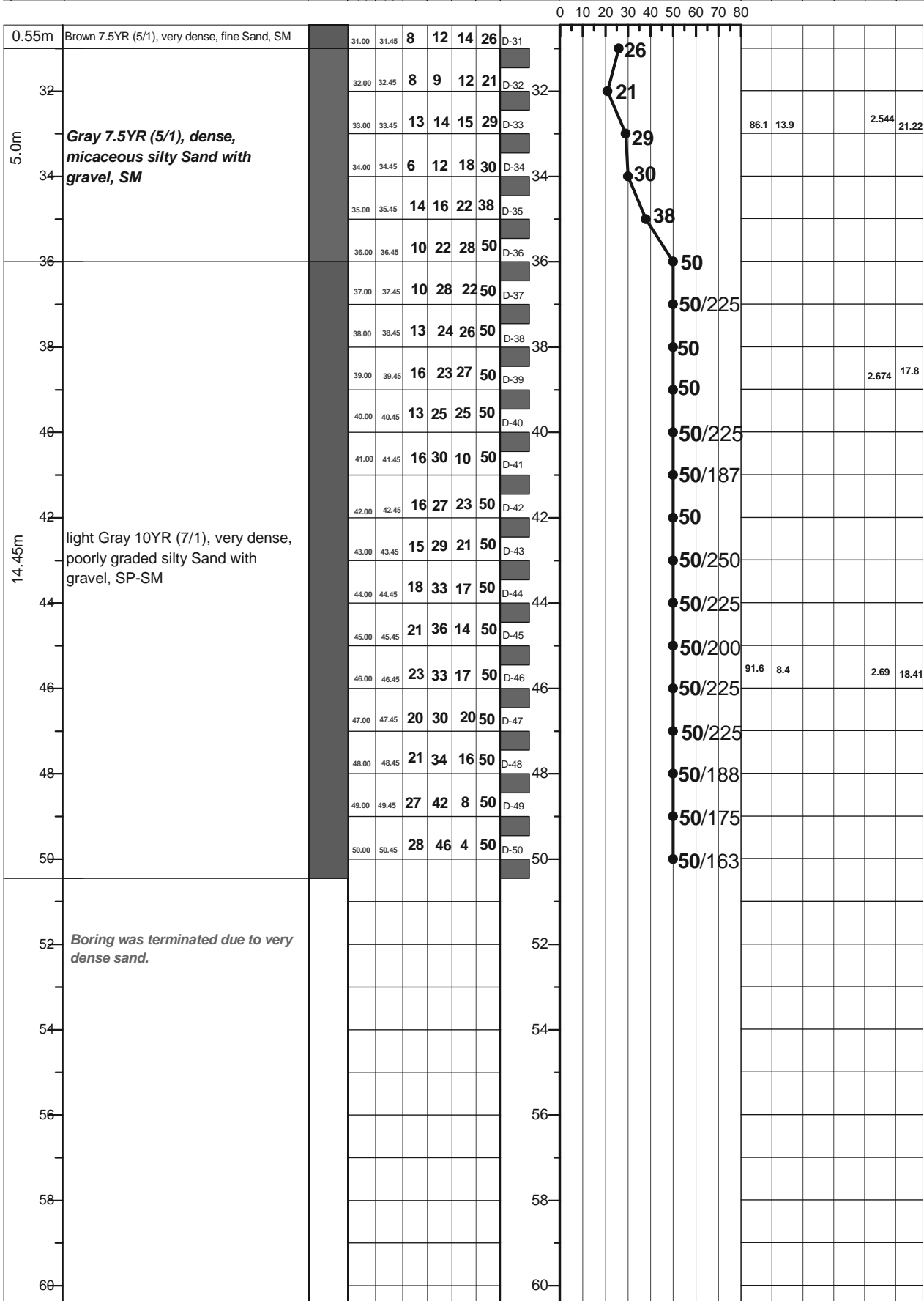


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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



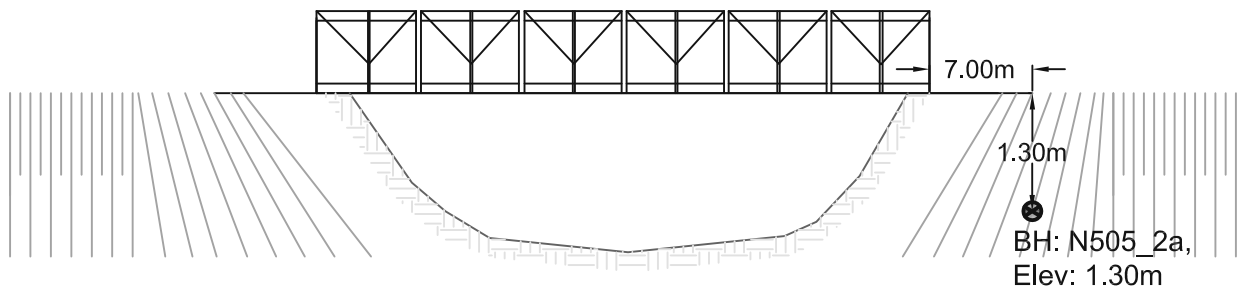
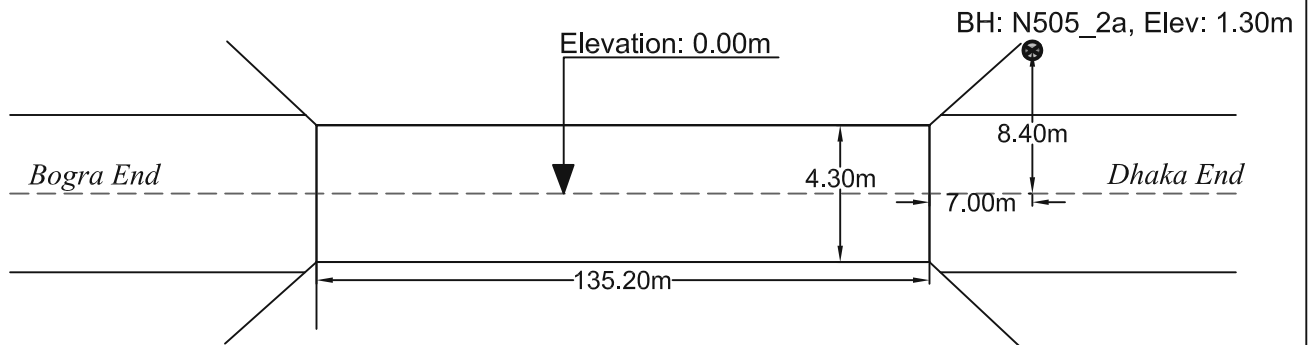
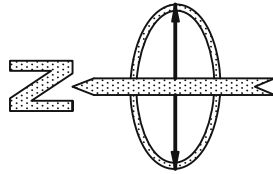
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



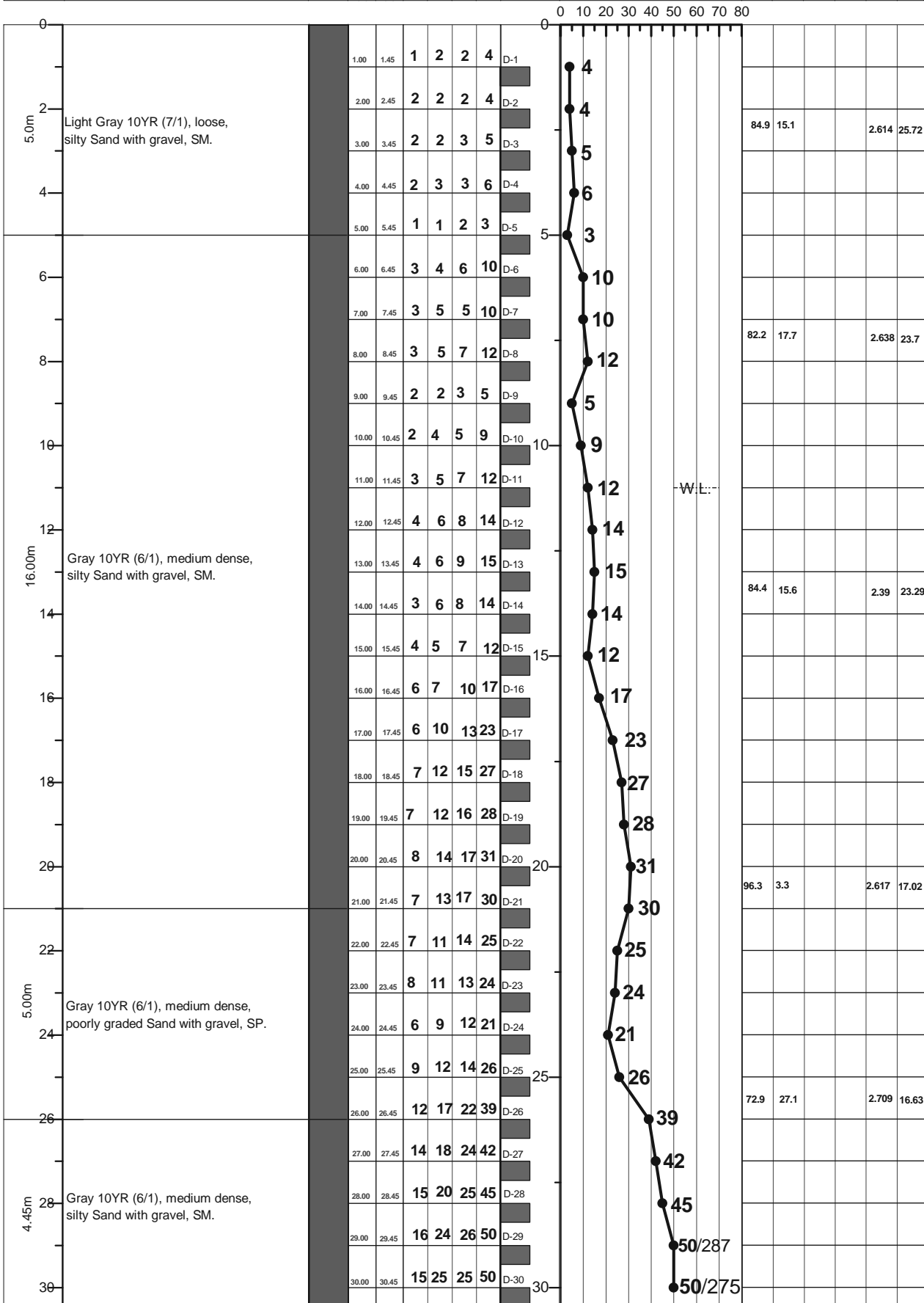
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 27  
BRIDGE ID: N505\_2a  
LATITUDE: 23°52'49.845" LONGITUDE: 89°39'52.2"  
CHAINAGE: 2.47



PROSOIL FOUNDATION CONSULTANT

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

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



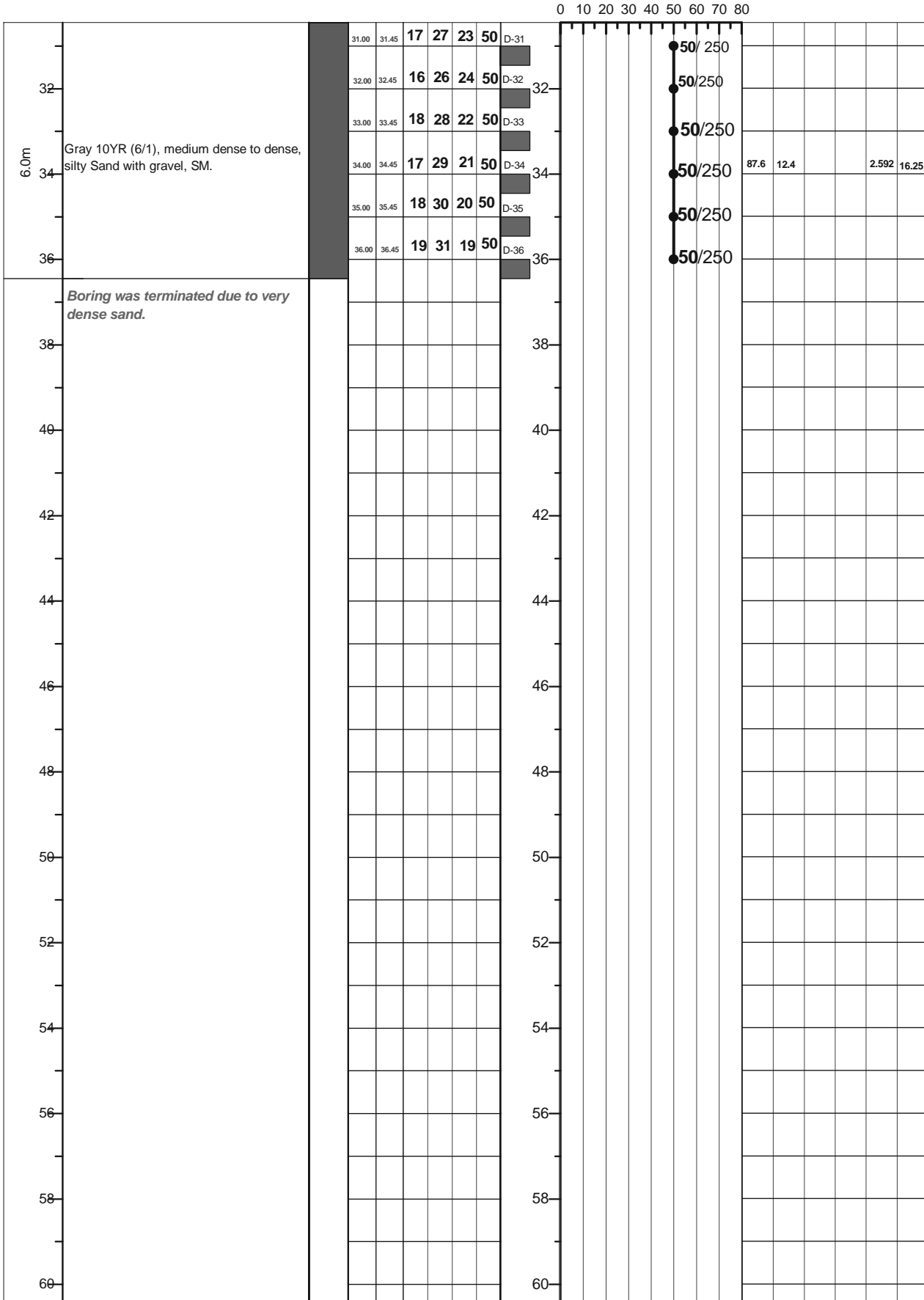
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>m</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

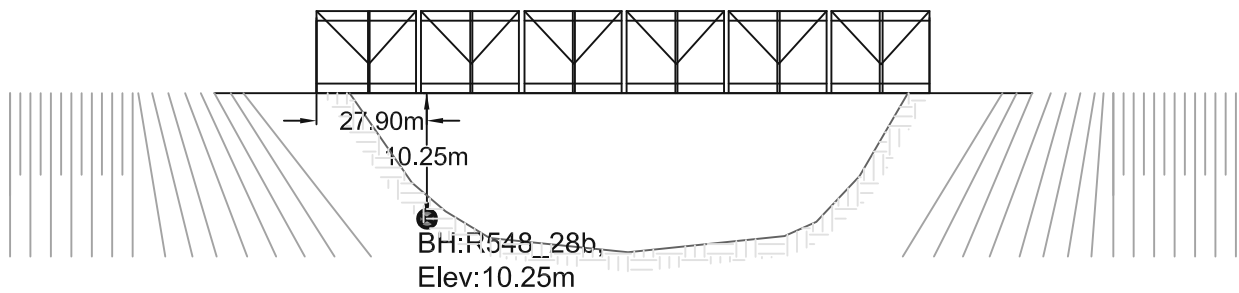
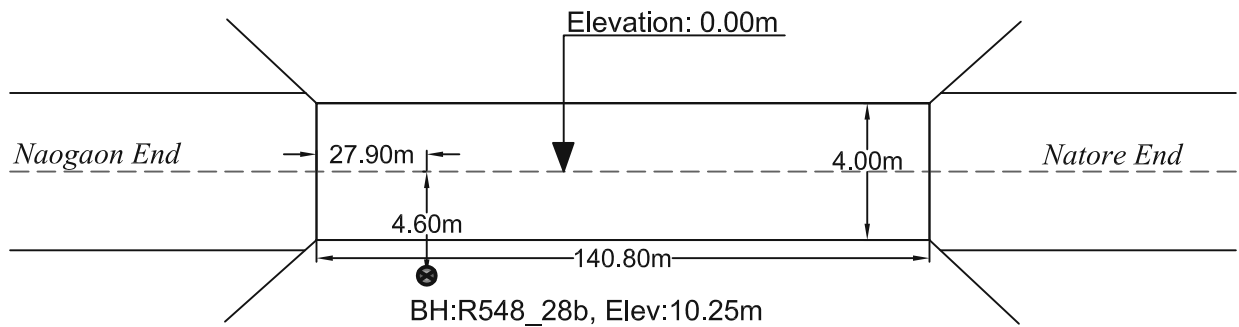
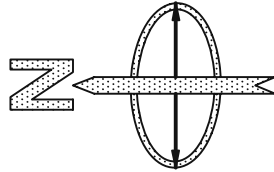
CLIENT: Oriental Consultants Company Limited.

RANK: 28

BRIDGE ID: R548\_28b

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

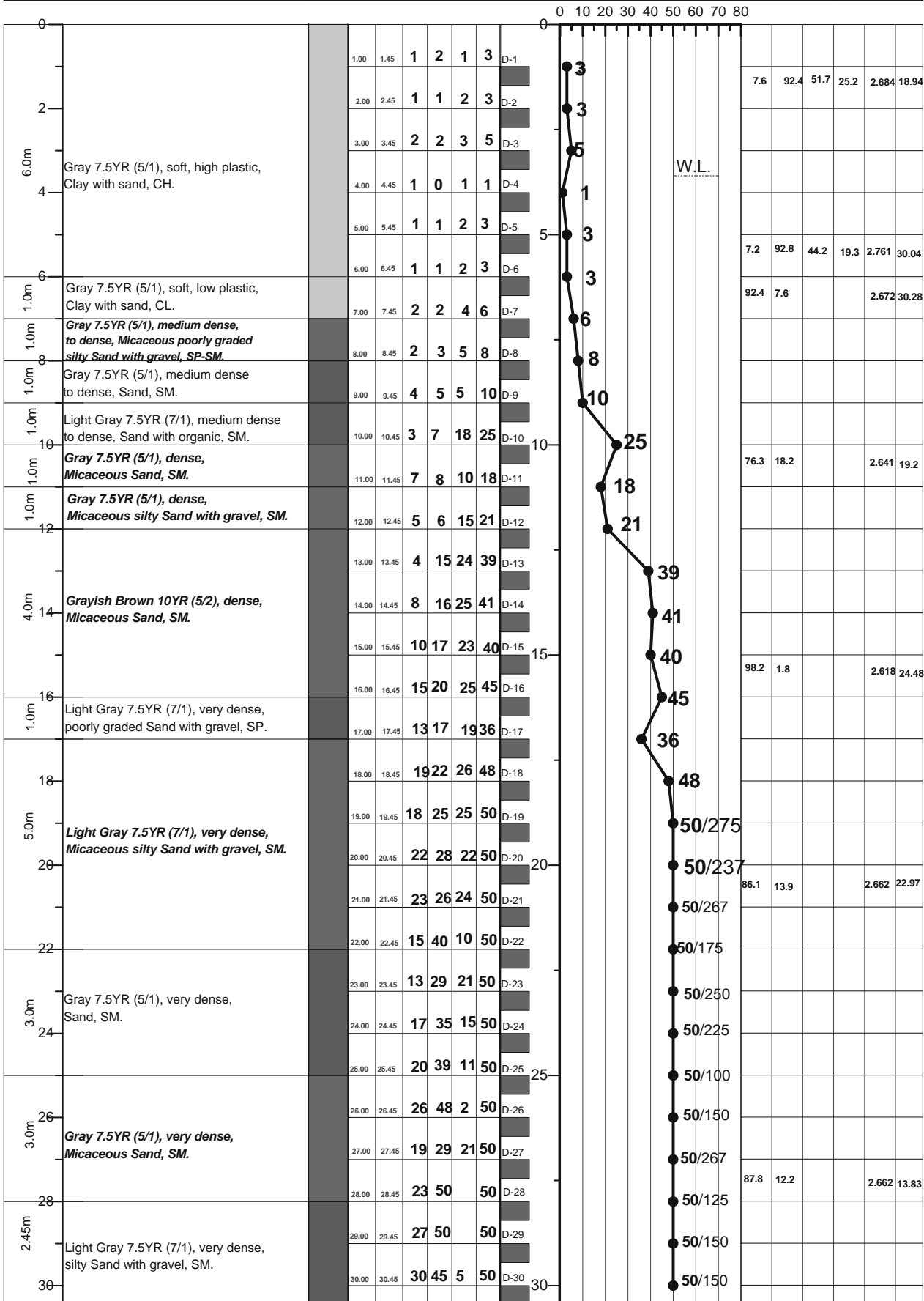
CHAINAGE: 27.8



PROSOIL FOUNDATION CONSULTANT

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

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



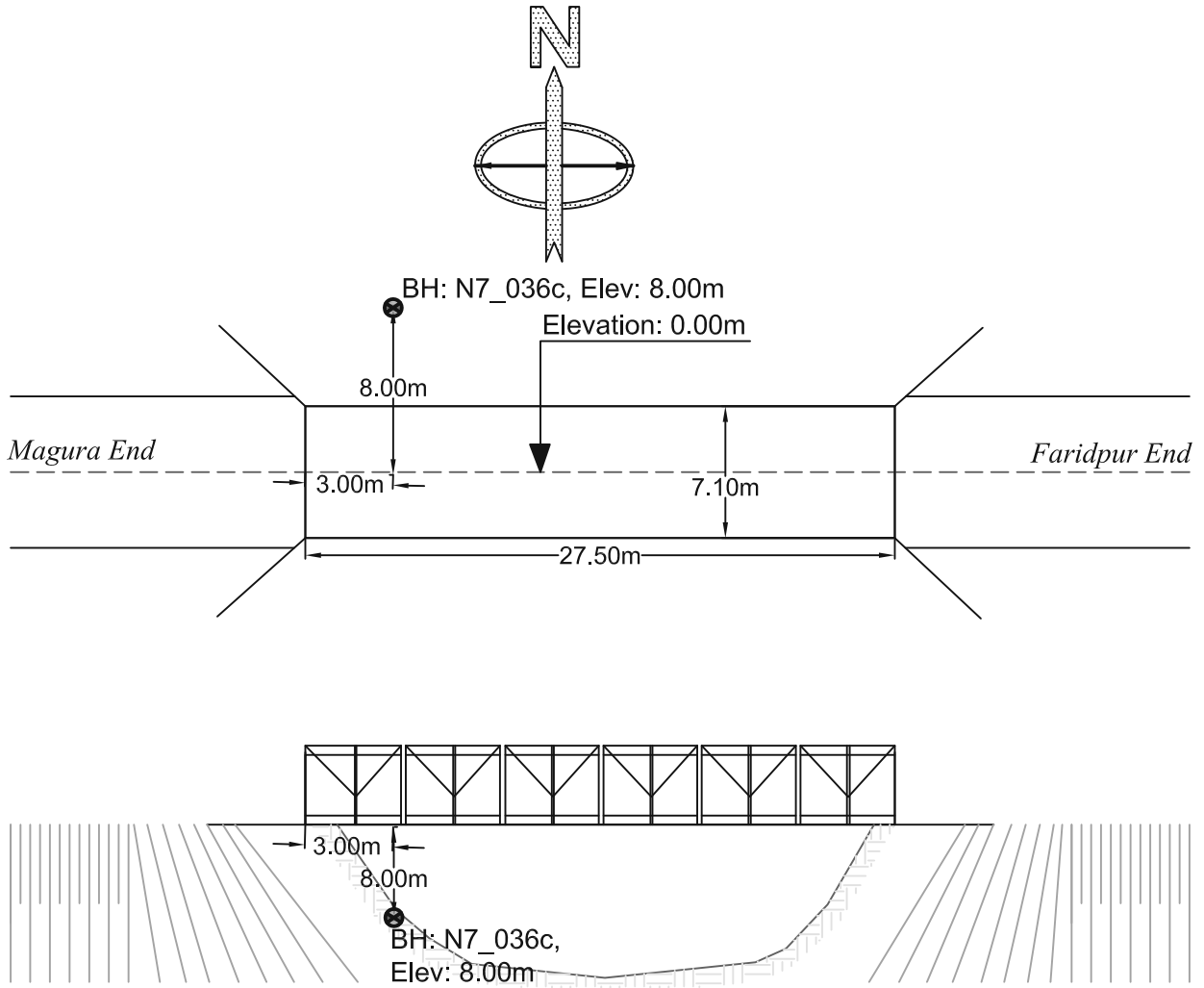
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> 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

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>s</sub>	
			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	[Disturbed]	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	[Disturbed]	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	[Disturbed]	6.00	6.45	2	2	3	5	D-6	5	66.7	33.3			2.622	22.01
			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	[Disturbed]	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	[Disturbed]	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	[Disturbed]	20.00	20.45	7	10	12	22	D-20	22	92.6	7.4			2.625	19.52
			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	[Disturbed]	27.00	27.45	7	13	16	29	D-27	29	81.9	17.8			2.636	17.72
			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						

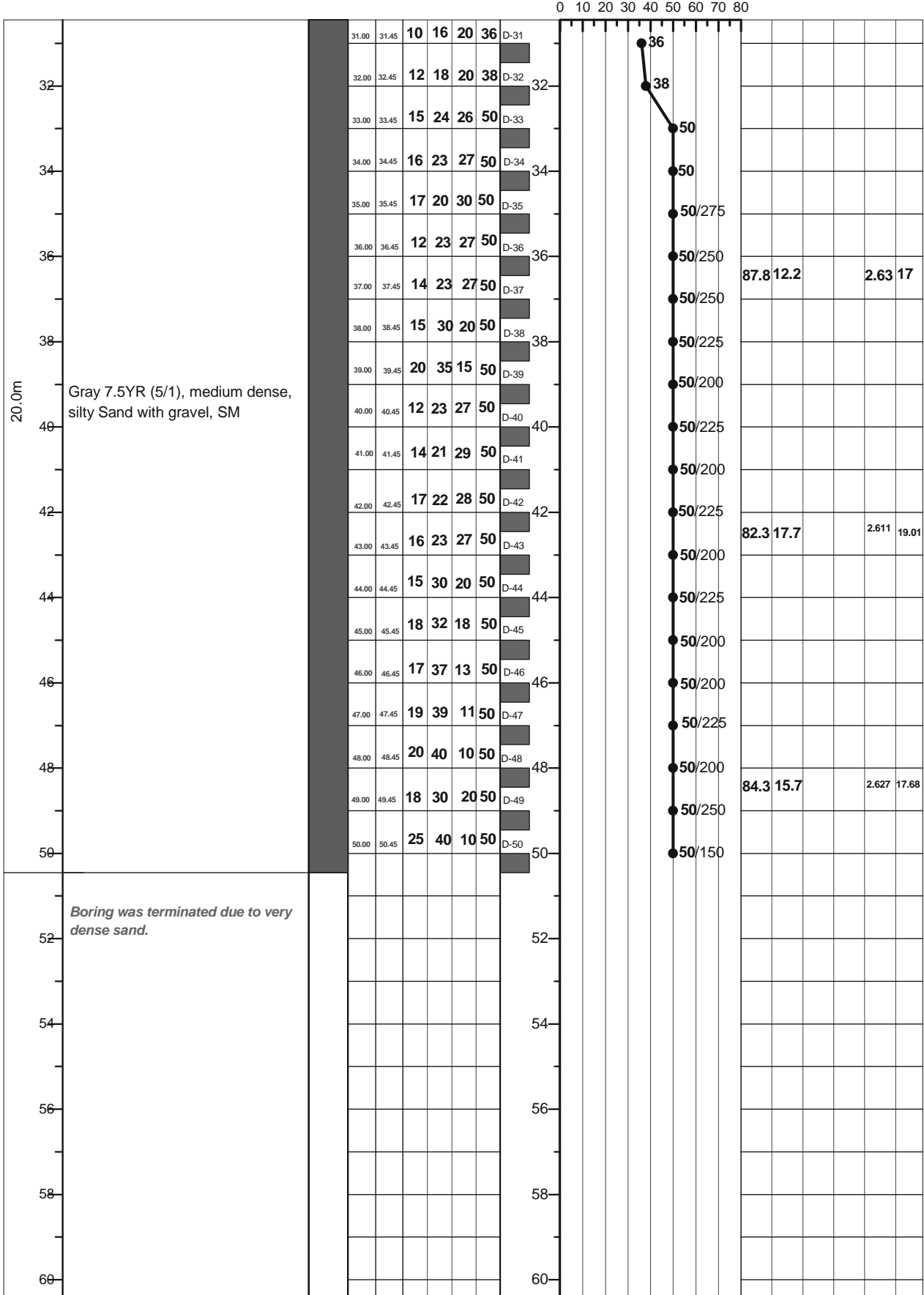
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

[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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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



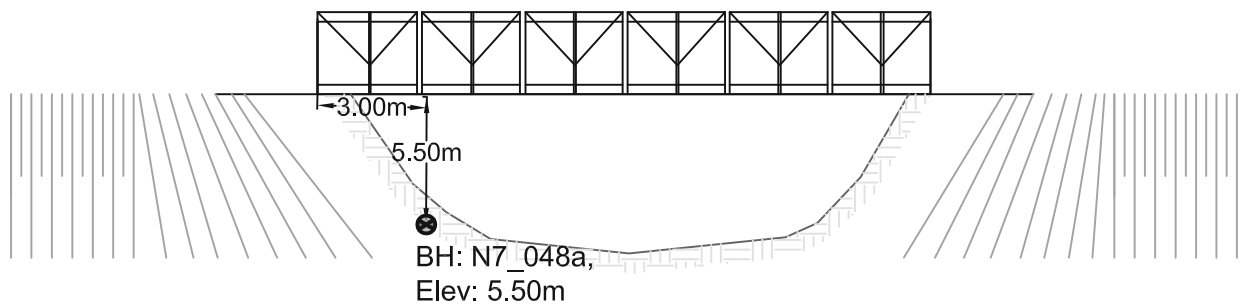
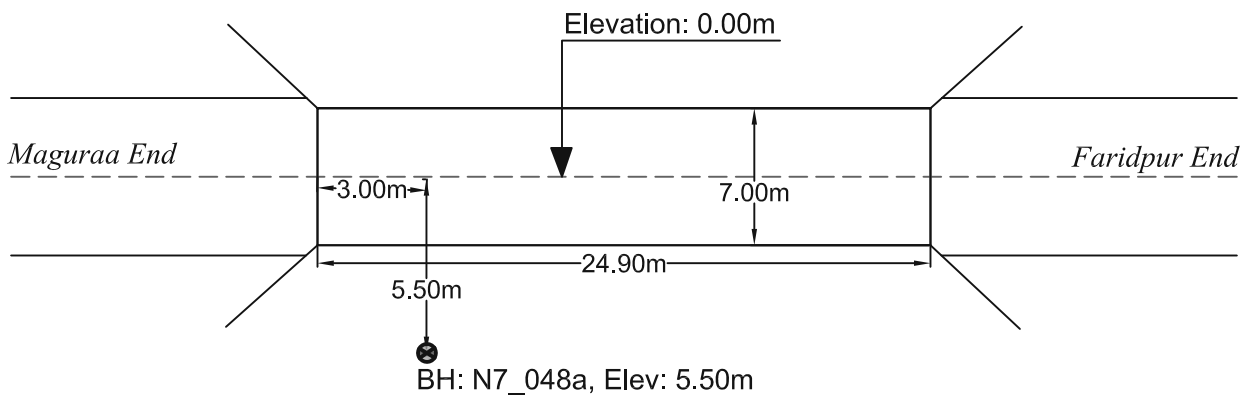
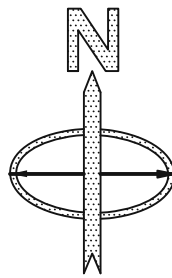
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

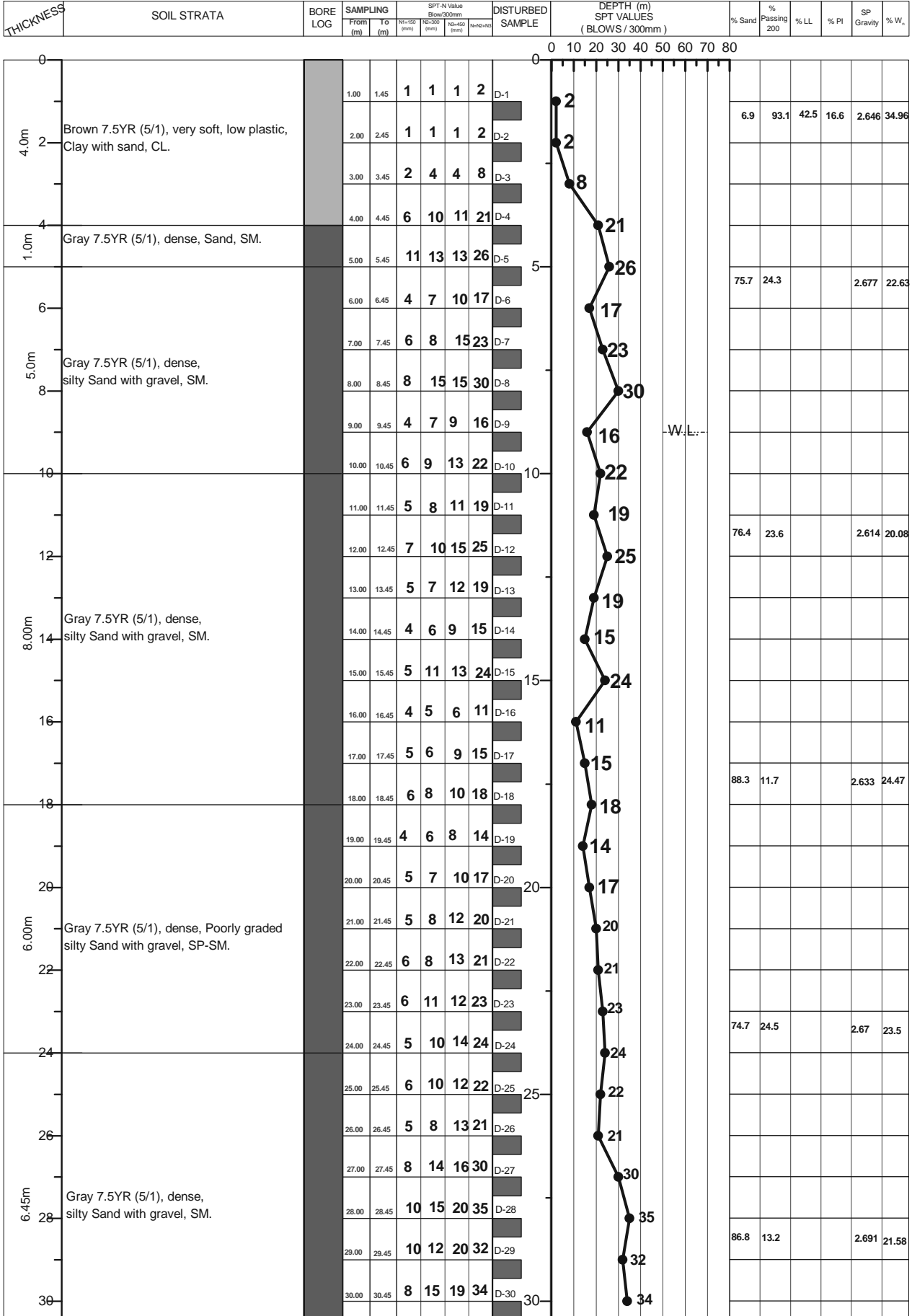


A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 30  
BRIDGE ID: N7\_048a  
LATITUDE: 23°32'06.95" LONGITUDE: 89°39'57.073"  
CHAINAGE: 48.48



PROSOIL FOUNDATION CONSULTANT

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



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

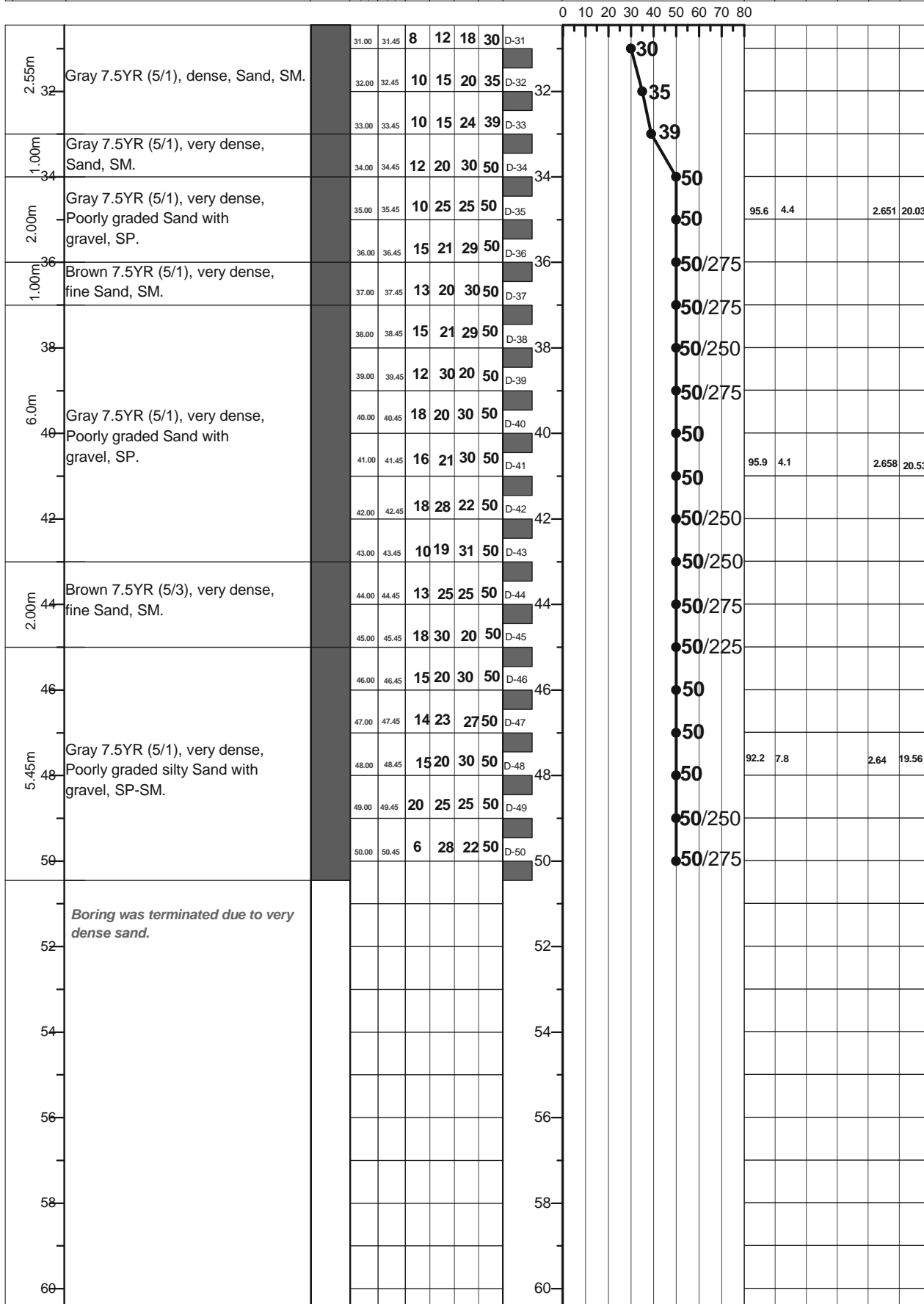
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

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

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 <sub>v</sub>
			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')**

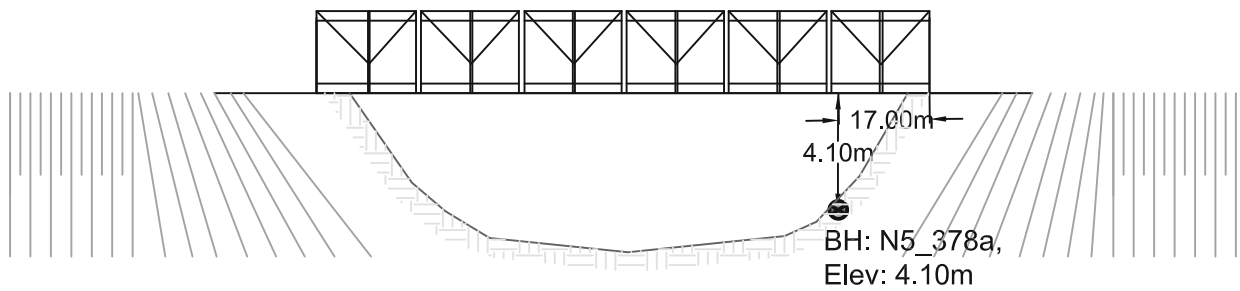
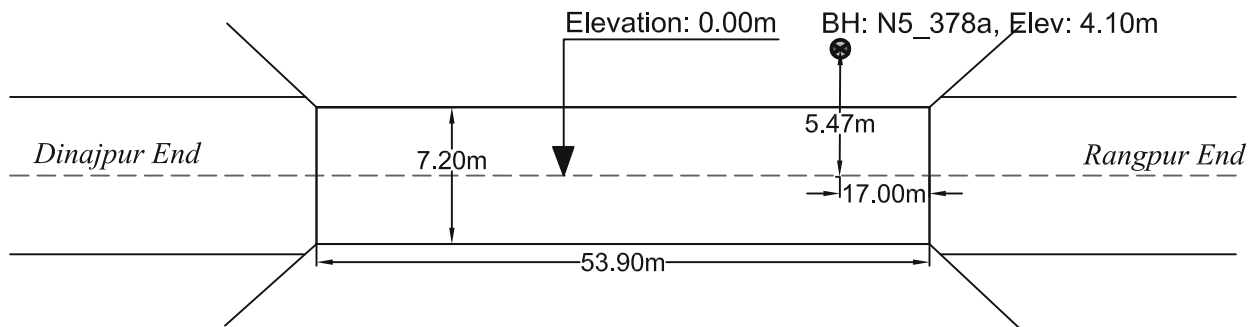
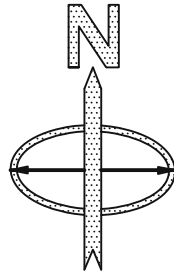
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

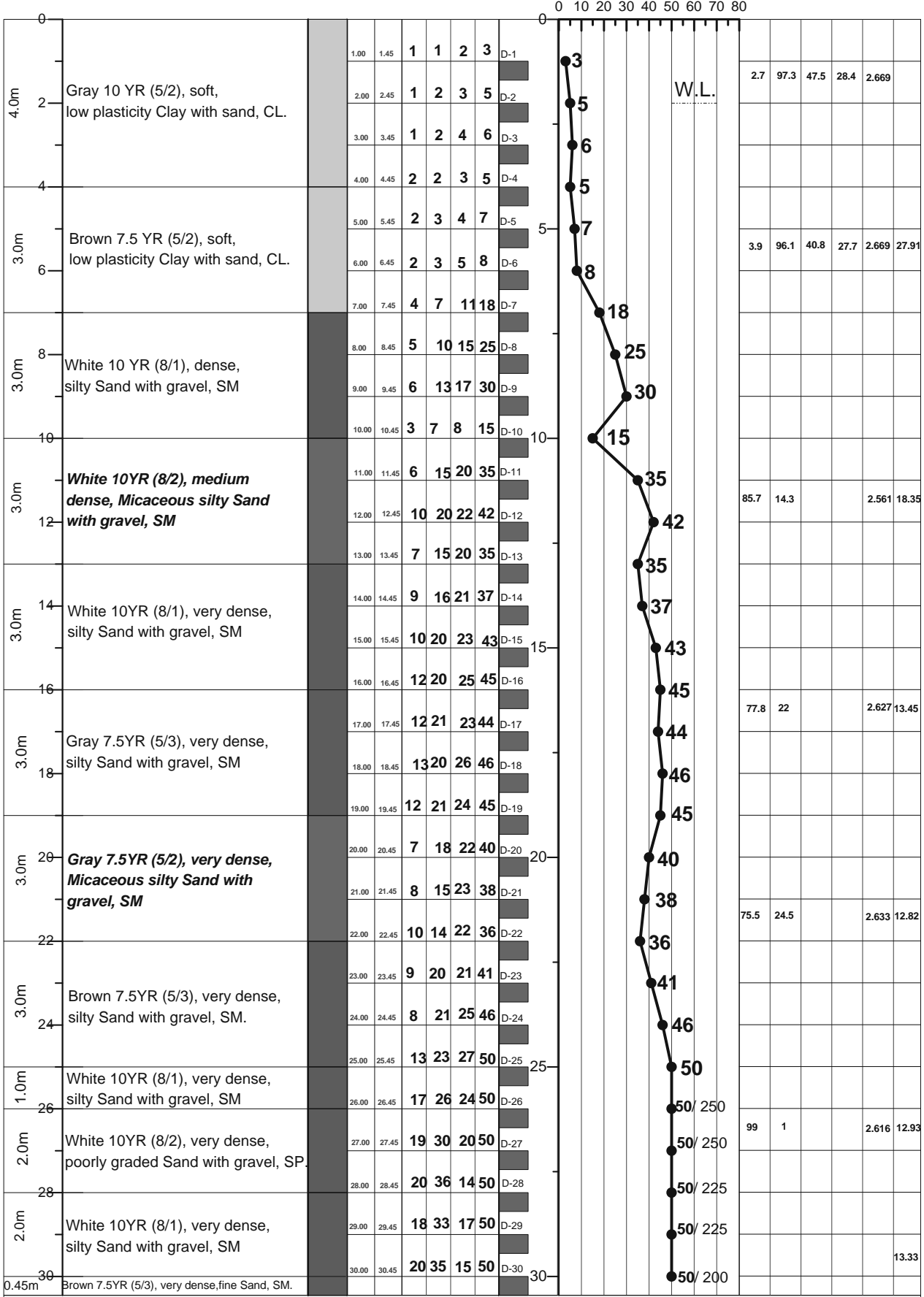
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 31  
BRIDGE ID: N5\_378a  
LATITUDE: 25°45'59.723" LONGITUDE: 88°49'58.692"  
CHAINAGE: 375.421



PROSOIL FOUNDATION CONSULTANT

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

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

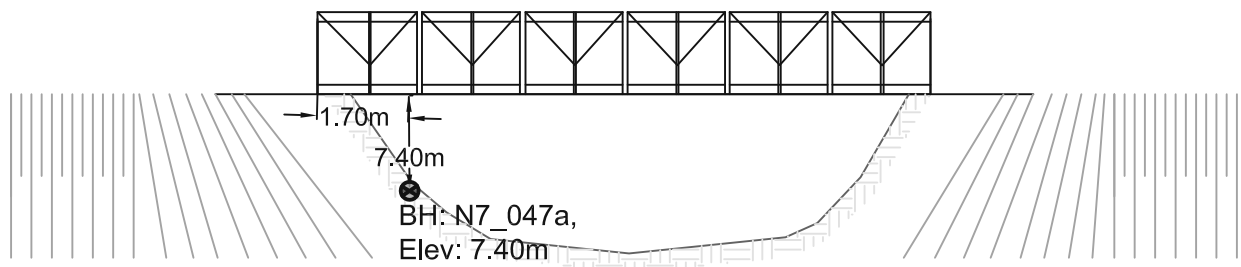
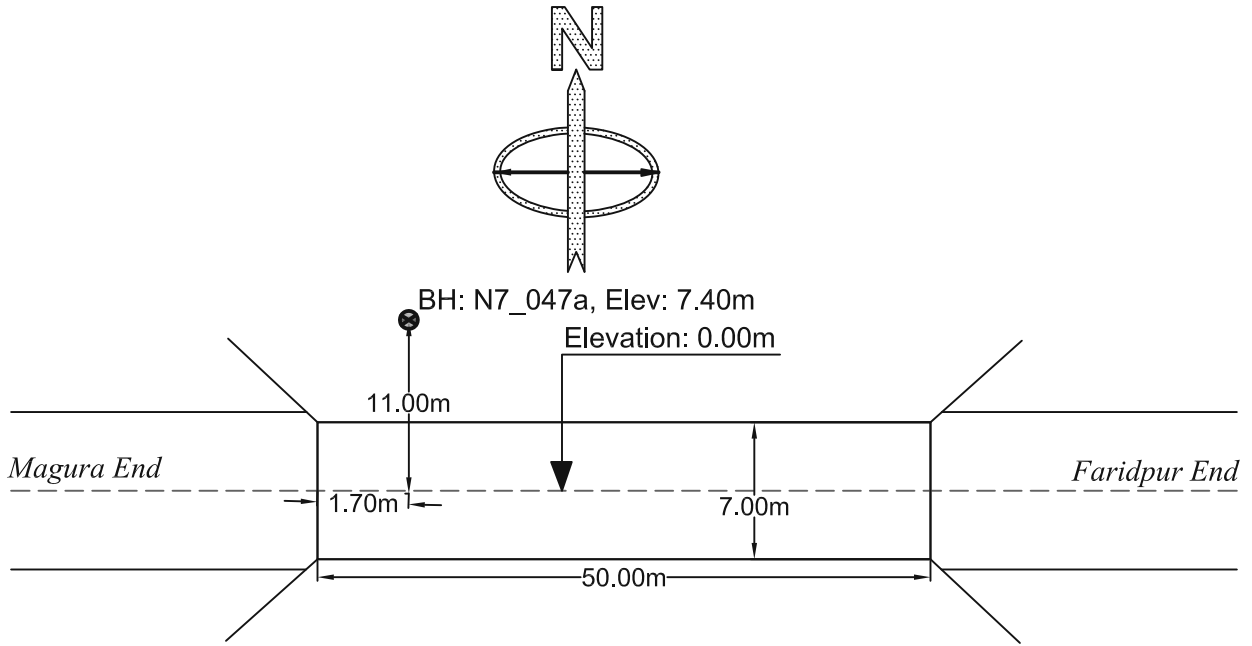


**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

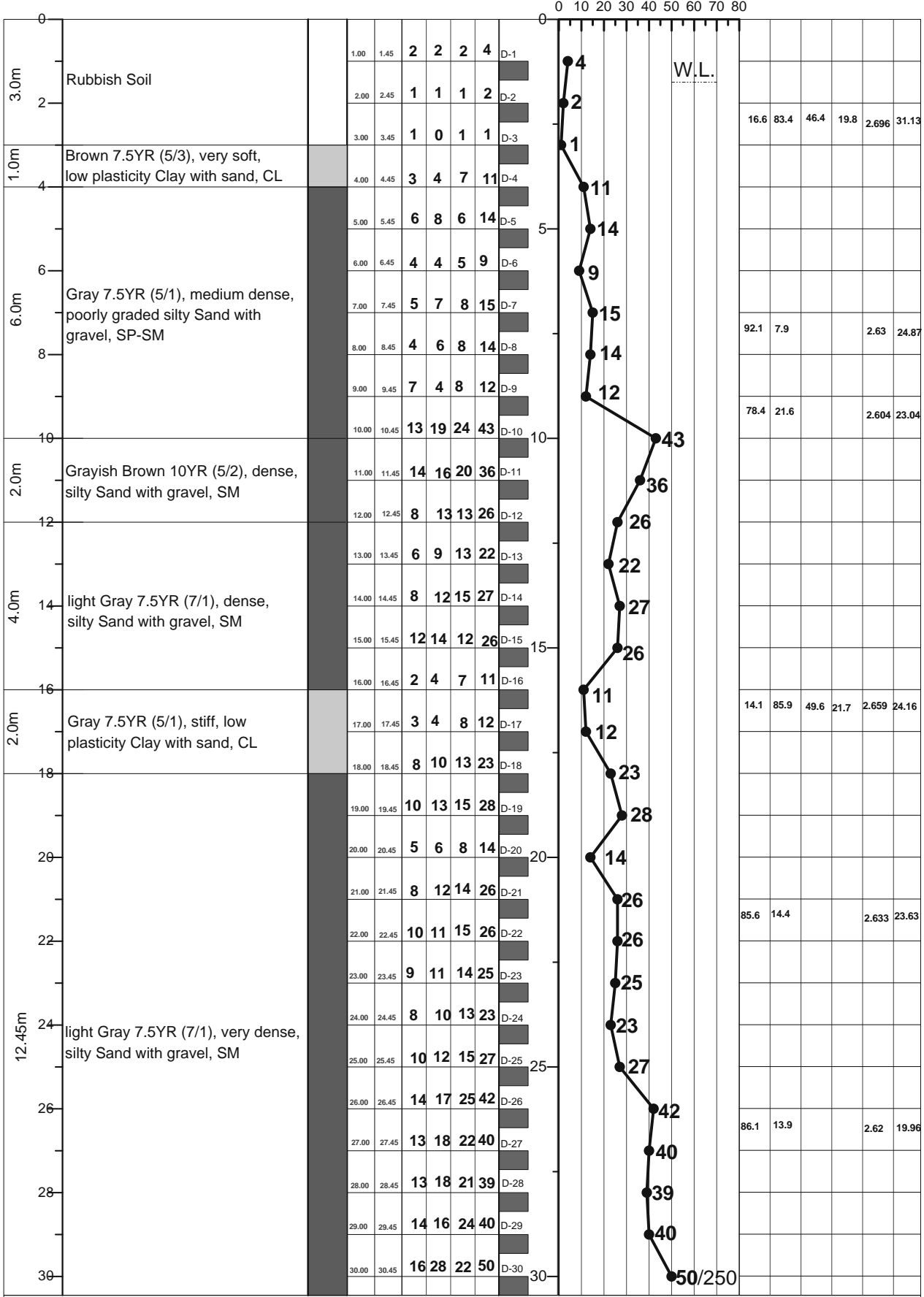
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 32  
BRIDGE ID: N7\_047a  
LATITUDE: 23°32'03.719" LONGITUDE: 89°40'18.717"  
CHAINAGE: 47.833



PROSOIL FOUNDATION CONSULTANT

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

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



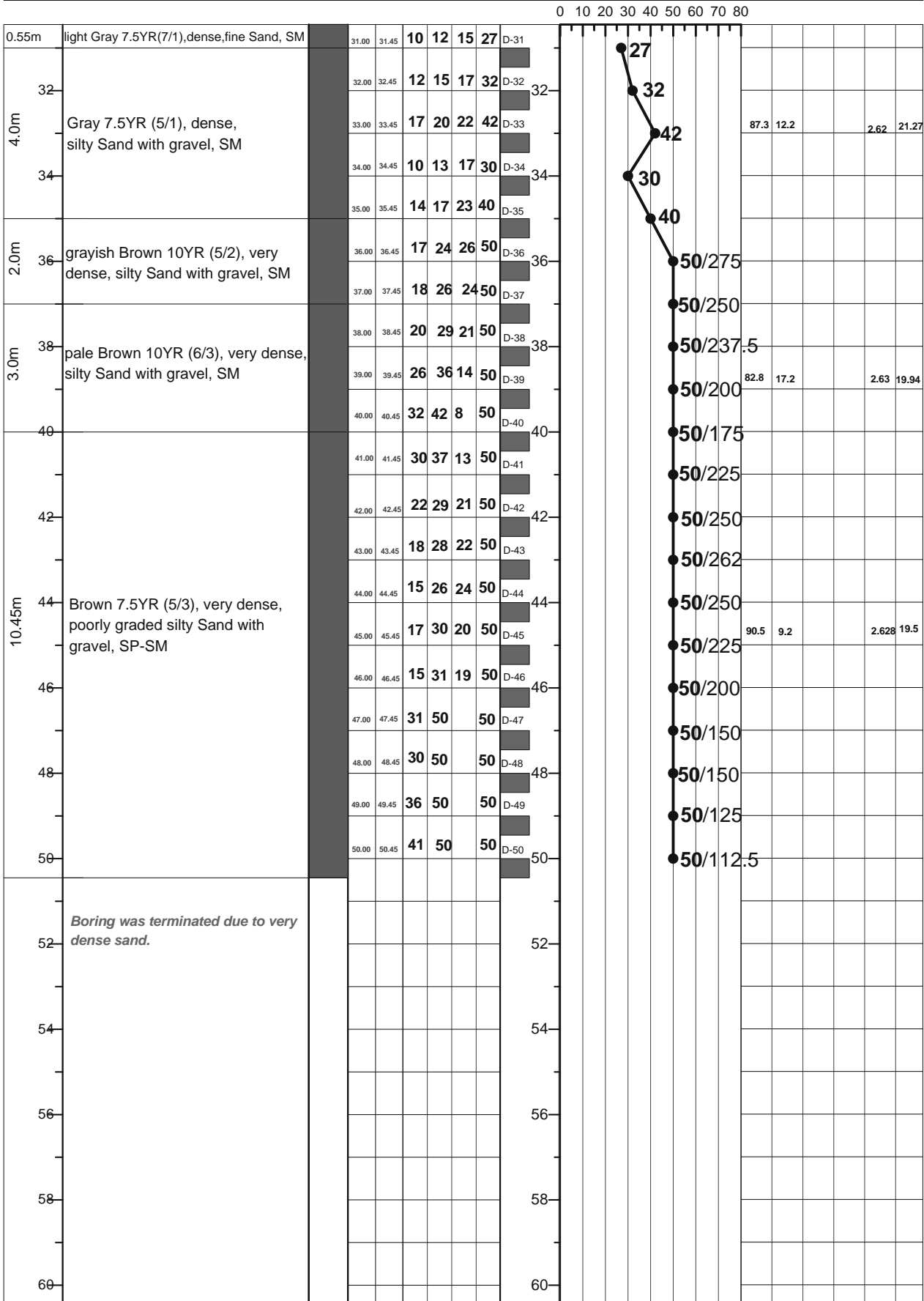
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>m</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>v</sub>
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



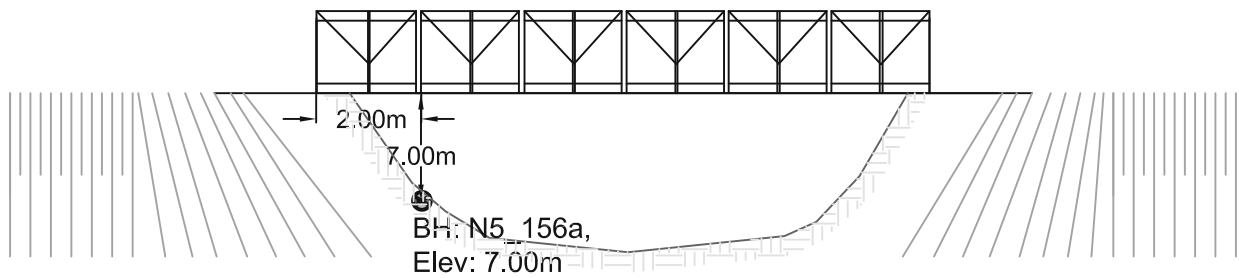
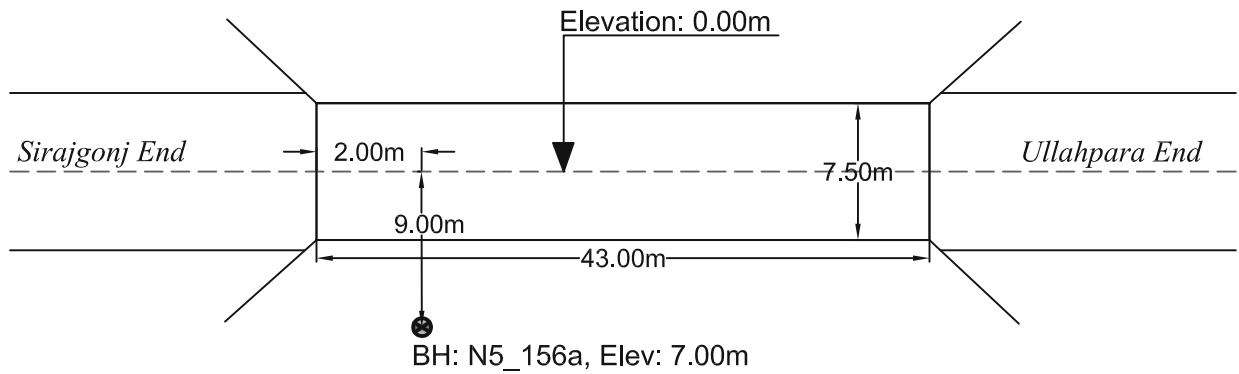
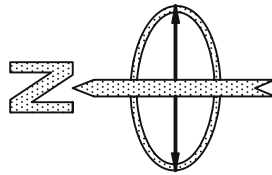
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



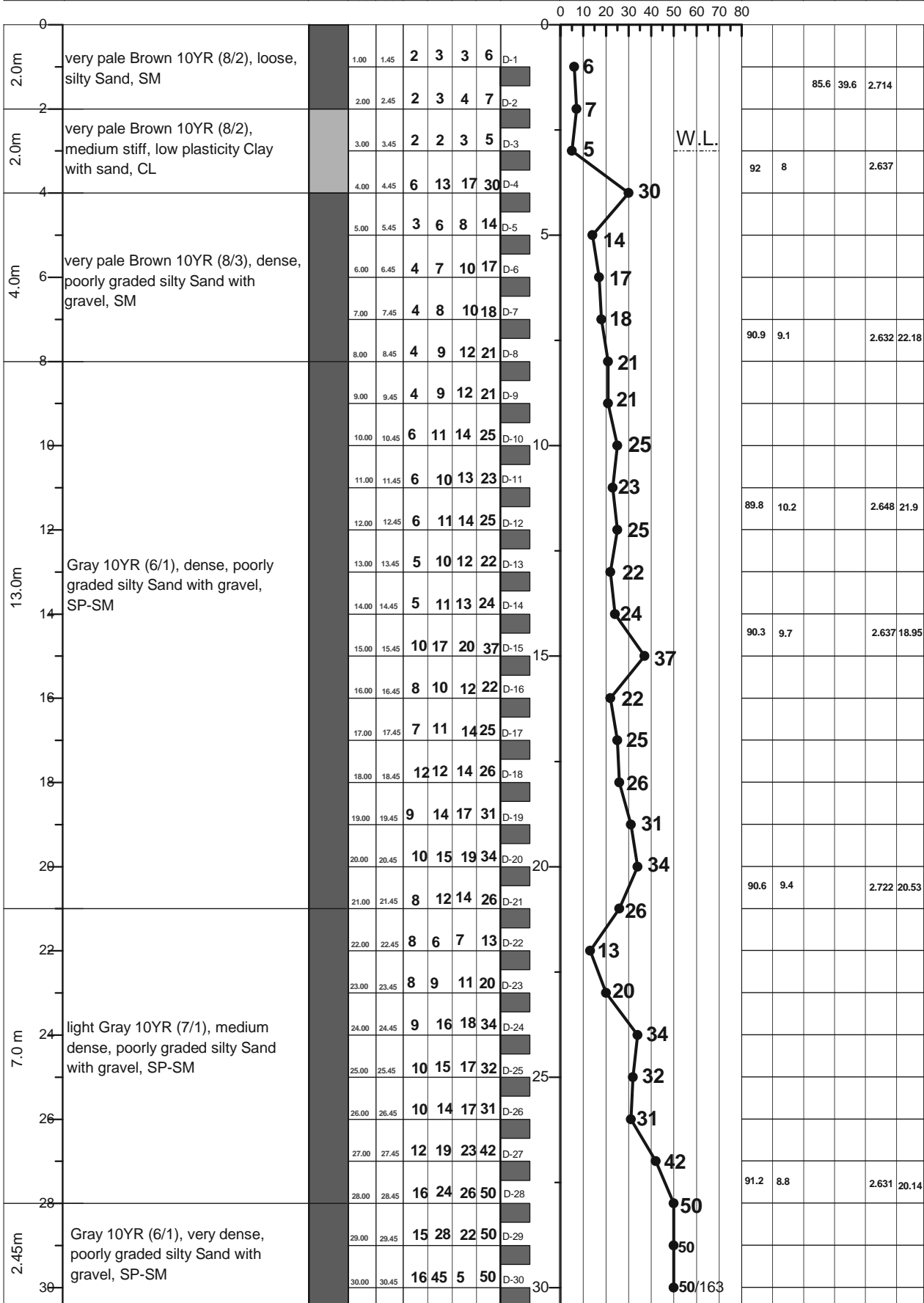
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 33  
BRIDGE ID: N5\_156a  
LATITUDE: 24°19'59.876" LONGITUDE: 89°33'42.921"  
CHAINAGE: 153.977



PROSOIL FOUNDATION CONSULTANT

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

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



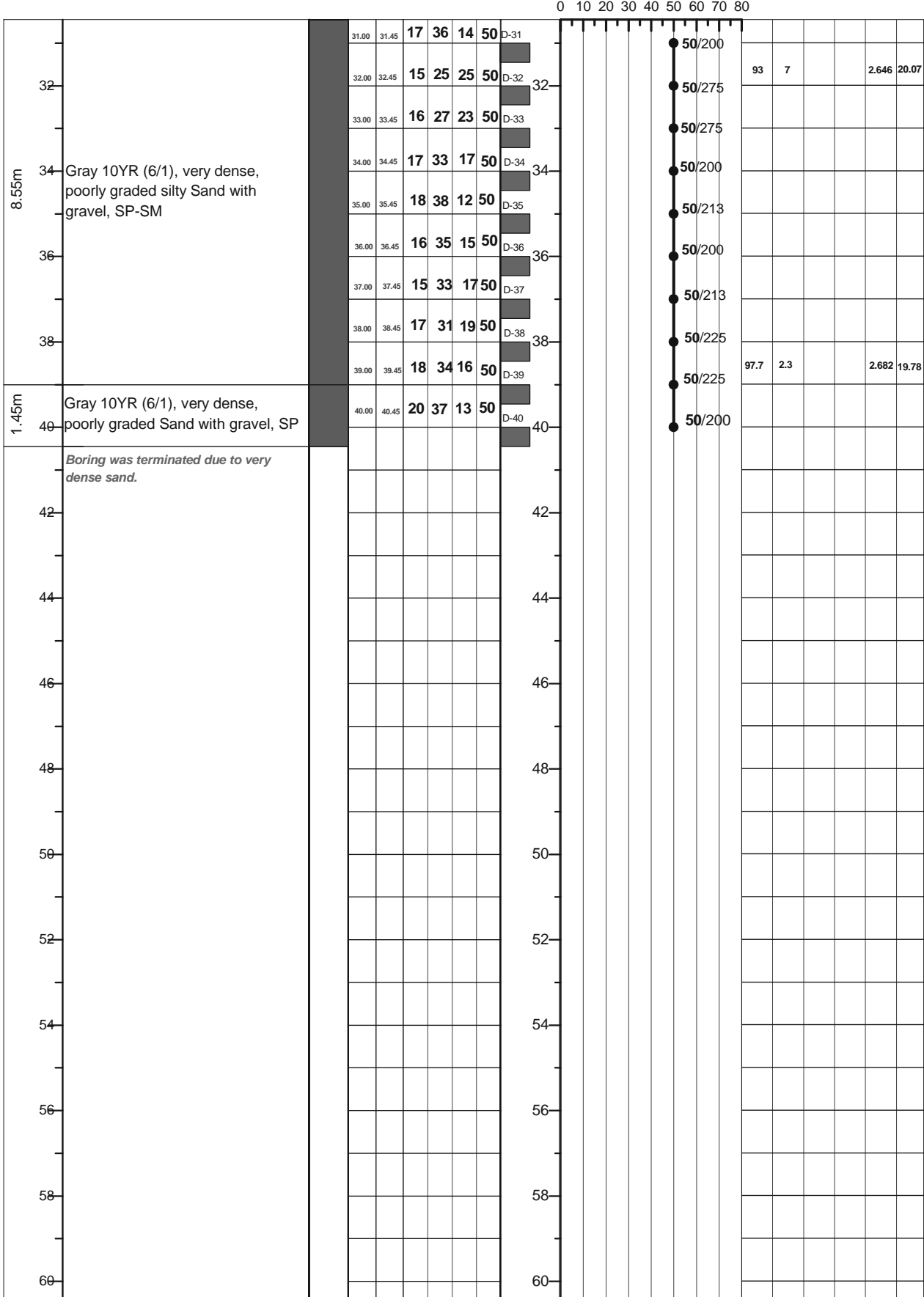
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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

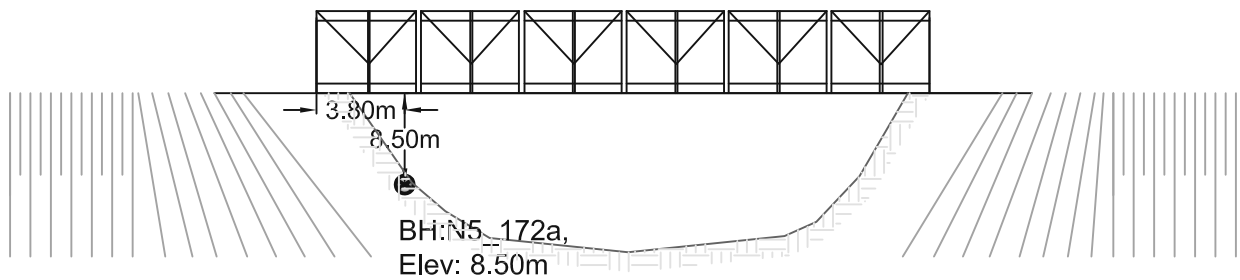
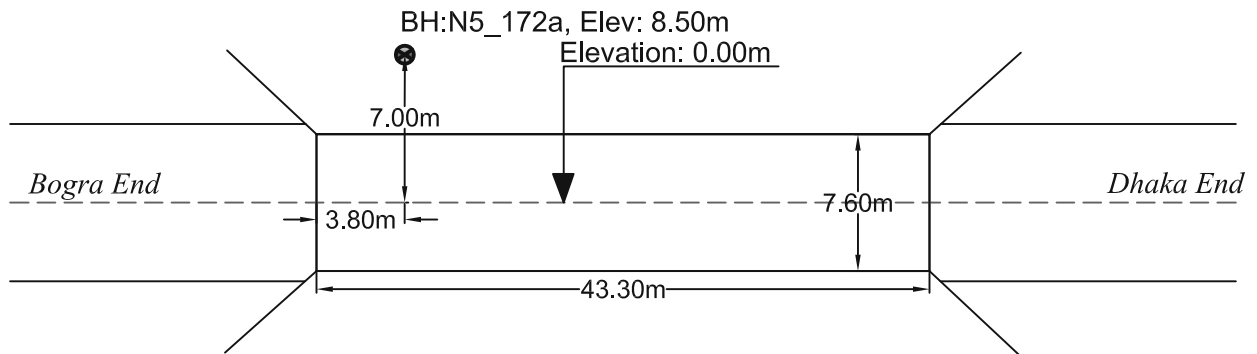
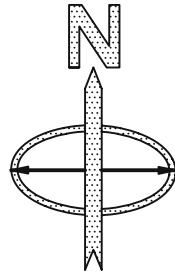


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

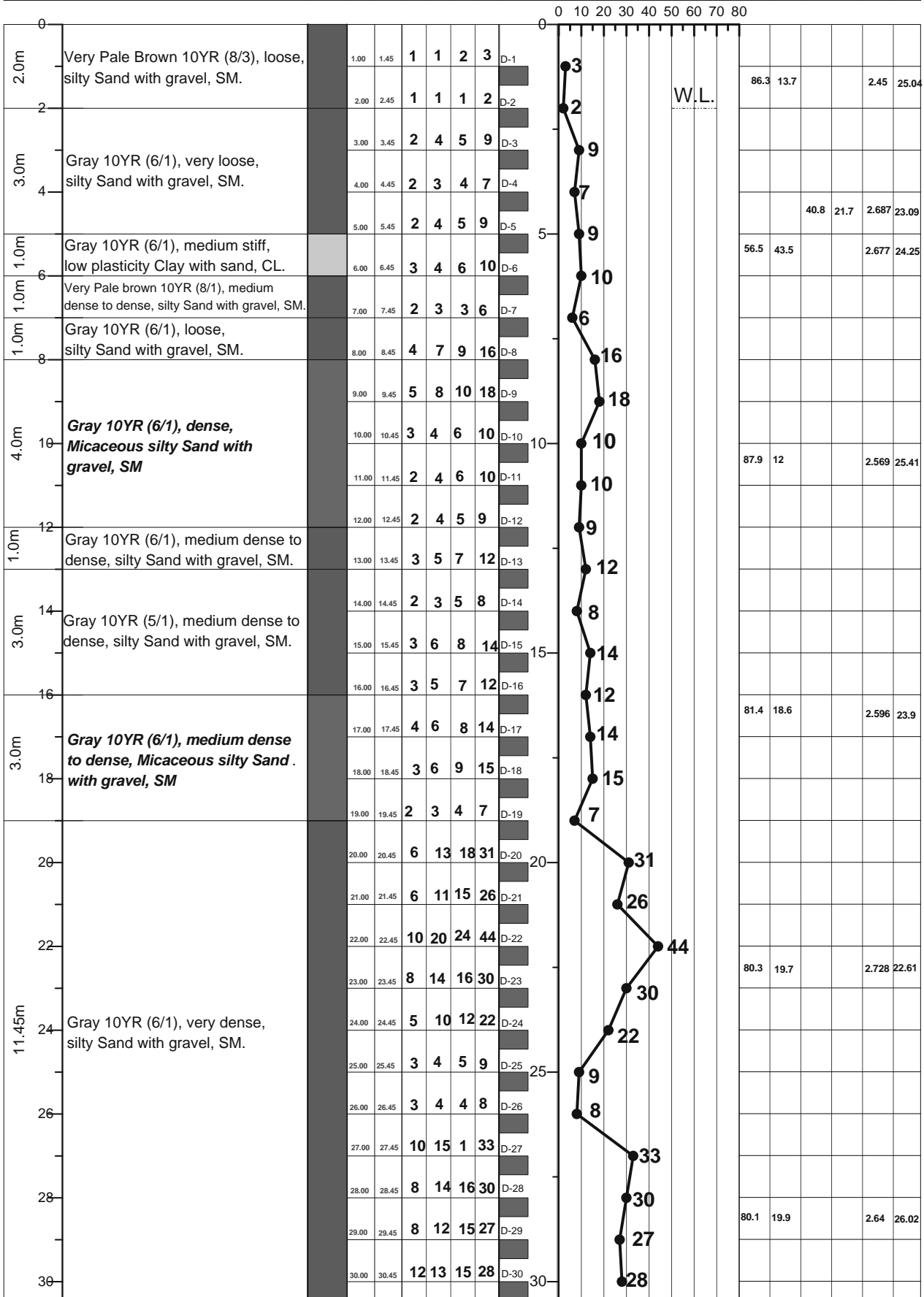
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 34  
BRIDGE ID: N5\_172a  
LATITUDE: 24°27'46.143" LONGITUDE: 89°32'8.998"  
CHAINAGE: 169.626



PROSOIL FOUNDATION CONSULTANT

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

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



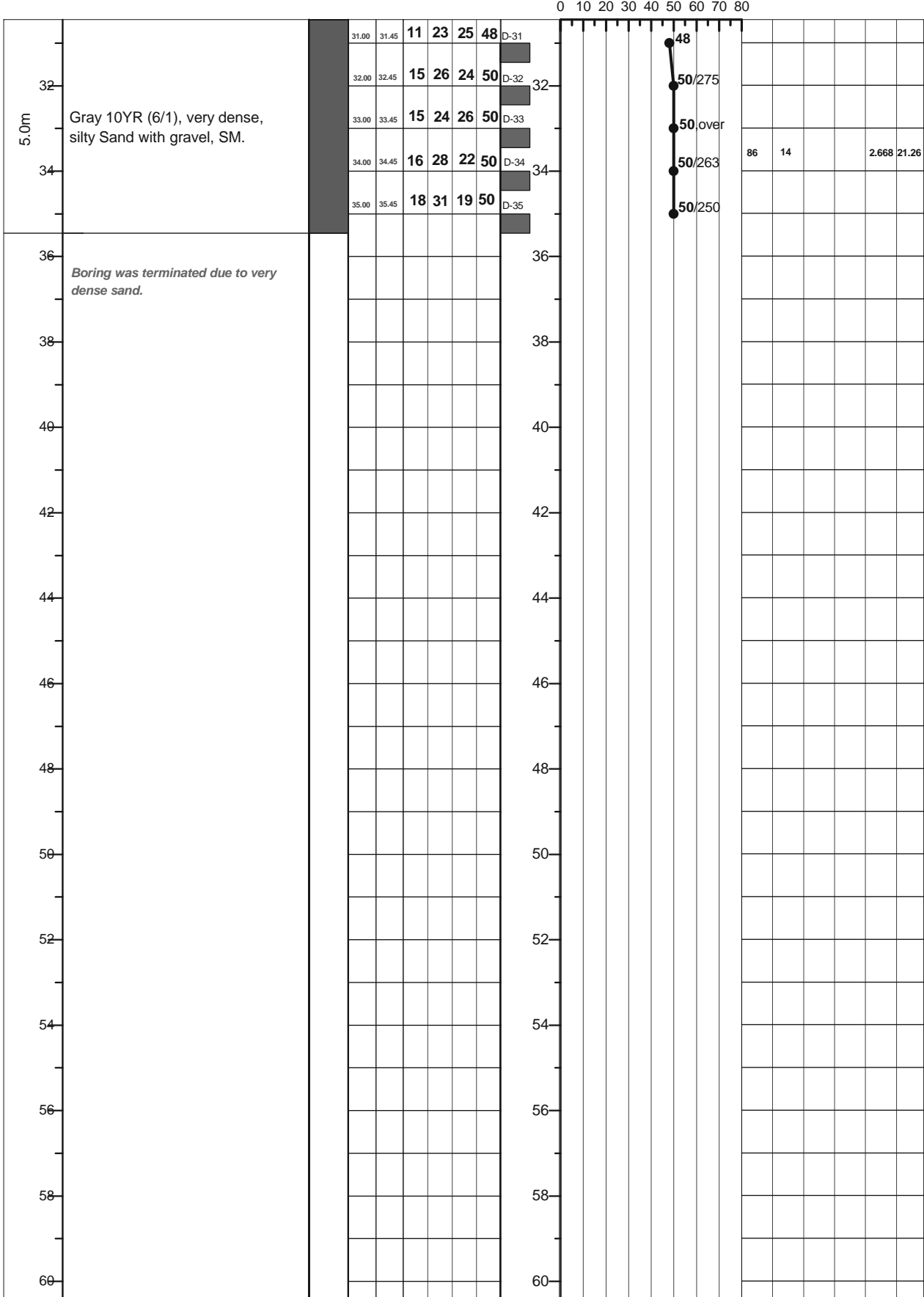
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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

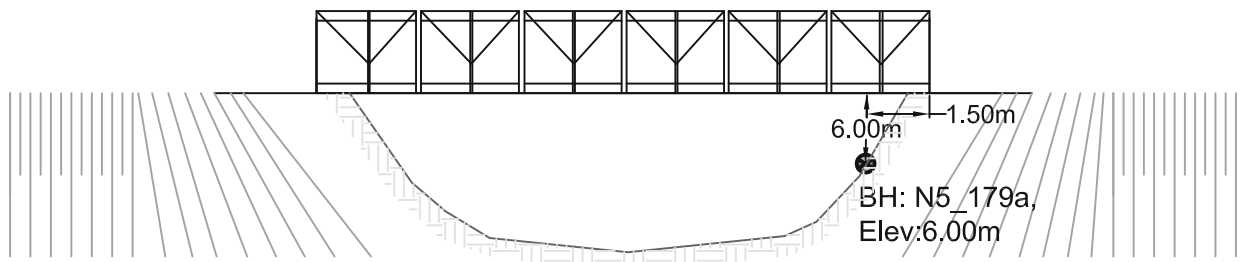
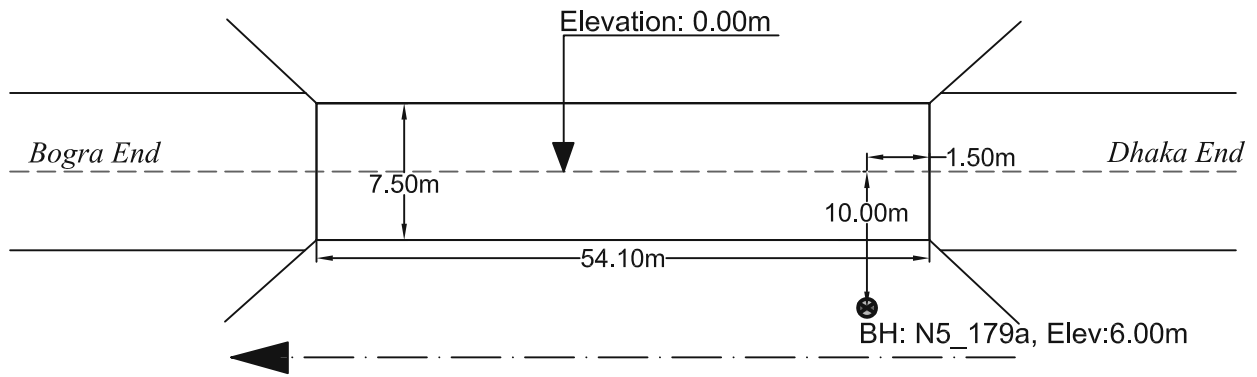
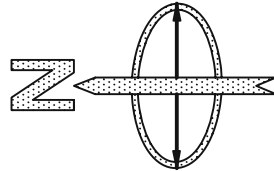


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> 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

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 35</b>	<b>BOREHOLE NO: N5_179a</b>	<b>Longitude: N 89°30'42.8"</b>	<b>Latitude: E 24°30'54.6"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>		<b>Borehole Depth: 30.0m</b>	
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 20-02-2014</b>		<b>Completed Date: 23-02-2014</b>	
			<b>Brigde ID: N5_179a</b>		<b>Road Name: Dhaka (Mirpur)-Paturia- Natakholo-Bogra-Rangpur- Banglabandh.</b>
			<b>Chainage: 176.746, RL: -6.0m</b>		<b>G. W. T : -4.0m.</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			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						
8.0m-16.0m	Gray 7.5YR (5/1), dense Micaceous silty Sand with gravel, SM.		16.00	16.45	5	8	10	18	D-16	18						
			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						
16.0m-18.0m	Gray 7.5YR (5/1), dense, fine Sand, SM.		22.00	22.45	5	7	11	17	D-22	17						
18.0m-20.0m	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						
20.0m-22.0m	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						
22.0m-28.0m	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						

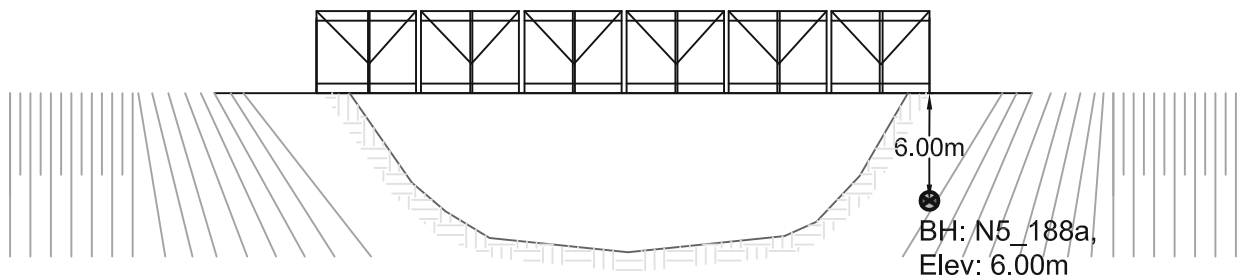
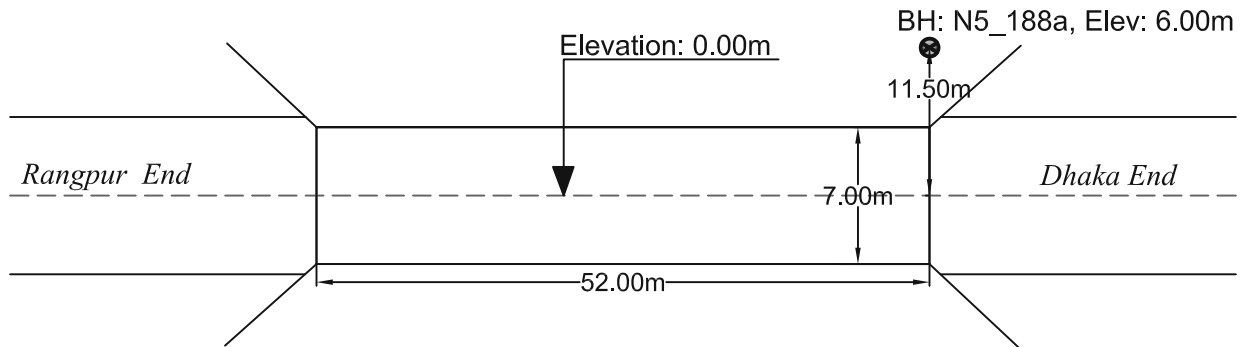
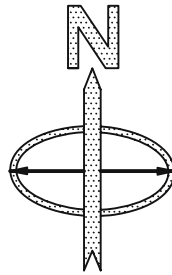
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> 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

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 36</b>	<b>BOREHOLE NO: N5_188a</b>	<b>Longitude: N 89°27'59.5"</b>	<b>Latitude: E 24°34'24.3"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>		<b>Borehole Depth: 30.0m</b>	
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 20-02-2014</b>		<b>Completed Date: 23-02-2014</b>	
				<b>Chainage: 185.73, RL: -6.0m</b>	
				<b>G. W. T : -1.5m.</b>	

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING						DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)	N4-600 (mm)								
0-3.0m	Gray 7.5YR (5/1), very soft, low plasticity Clay with sand, CL		1.00	1.45	1	1	1	2	D-1	2	9.5	90.5	34	14.9	2.69	32.65
3.0-4.0m	Gray 7.5YR (5/1), medium dense to dense, silty Sand, SM.		2.00	2.45	1	1	1	2	D-2	2						
4.0-5.0m	Brownish Gray 10YR (5/2), stiff, low plasticity Clay with sand, CL		3.00	3.45	3	4	5	9	D-3	9						
5.0-6.0m	Brown 7.5YR (5/3), medium dense to dense, silty Sand, SM.		4.00	4.45	2	4	6	10	D-4	10						
6.0-7.0m	Brownish Gray 10YR (5/2), medium dense to dense, silty Sand, SM.		5.00	5.45	3	6	8	14	D-5	14						
7.0-8.0m	Brownish Gray 10YR (5/2), medium dense to dense, silty Sand, SM.		6.00	6.45	2	3	5	8	D-6	8						
8.0-9.0m	Gray 7.5YR (5/1), dense, silty Sand with gravel, SM.		7.00	7.45	4	6	10	16	D-7	16						
9.0-10.0m			8.00	8.45	4	7	10	17	D-8	17						
10.0-11.0m			9.00	9.45	5	8	12	20	D-9	20						
11.0-12.0m			10.00	10.45	6	9	14	23	D-10	23	64.5	35.5			2.624	18.1
12.0-13.0m			11.00	11.45	5	8	13	21	D-11	21						
13.0-14.0m			12.00	12.45	5	9	14	23	D-12	23						
14.0-15.0m	Gray 7.5YR (5/1), dense, Micaceous silty Sand with gravel, SM.		13.00	13.45	5	10	15	25	D-13	25						
15.0-16.0m	Gray 7.5YR (5/1), dense, silty Sand with gravel, SM.		14.00	14.45	4	8	14	22	D-14	22	85.4	14.6			2.681	22.8
16.0-17.0m			15.00	15.45	5	12	18	30	D-15	30						
17.0-18.0m			16.00	16.45	5	12	16	28	D-16	28						
18.0-19.0m			17.00	17.45	6	13	16	29	D-17	29						
19.0-20.0m			18.00	18.45	6	13	18	31	D-18	31						
20.0-21.0m			19.00	19.45	5	12	15	27	D-19	27						
21.0-22.0m	Brownish Gray 10YR (5/2), very dense, poorly graded silty Sand with gravel, SP-SM		20.00	20.45	6	14	20	34	D-20	34						
22.0-23.0m			21.00	21.45	14	23	27	50	D-21	50	94.9	5.1			2.693	19.97
23.0-24.0m			22.00	22.45	17	35	15	50	D-22	50/200						
24.0-25.0m			23.00	23.45	19	37	13	50	D-23	50/200						
25.0-26.0m	Gray 7.5YR (5/2), very dense, silty Sand with gravel, SM.		24.00	24.45	17	33	17	50	D-24	50/200						
26.0-27.0m			25.00	25.45	18	35	15	50	D-25	50/200						
27.0-28.0m			26.00	26.45	28	40	10	50	D-26	50/175	87.9	12.1			2.644	23.26
28.0-29.0m			27.00	27.45	40	50		50	D-27	50/125						
29.0-30.0m			28.00	28.45	40	50		50	D-28	50/125						
30.0-30.45m			29.00	29.45	40	50		50	D-29	50/125						
			30.00	30.45	40	50		50	D-30	50/100						

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

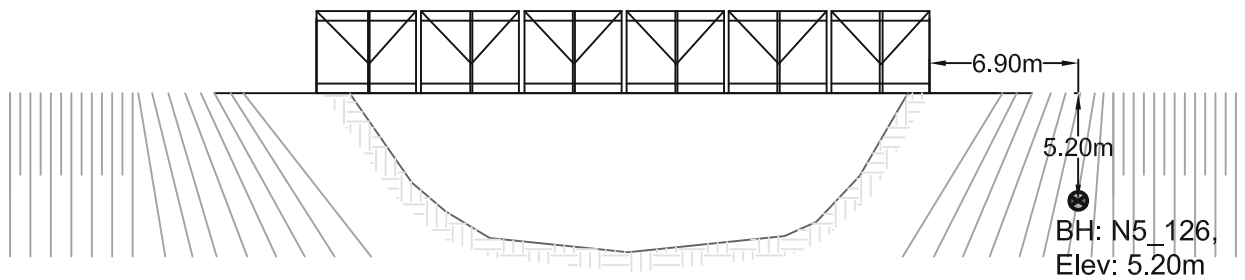
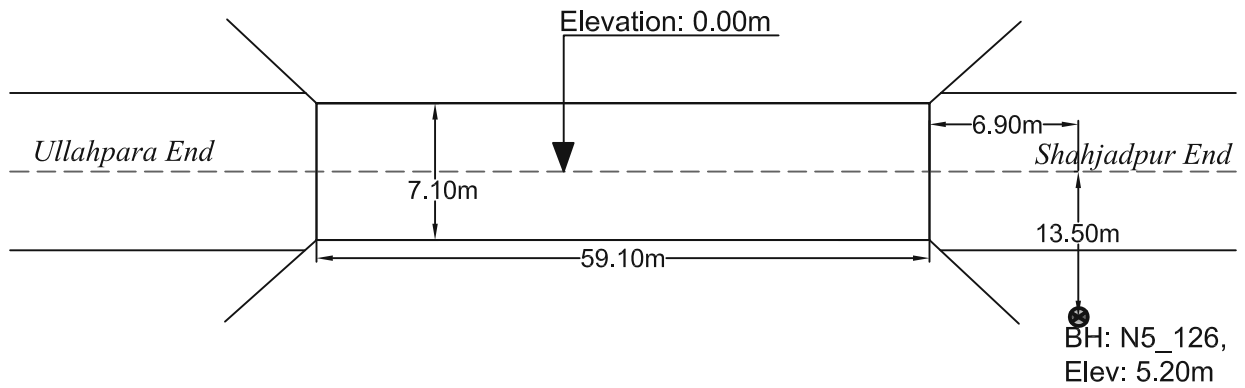
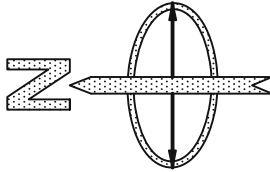
CLIENT: Oriental Consultants Company Limited.

RANK: 37

BRIDGE ID: N5\_126a

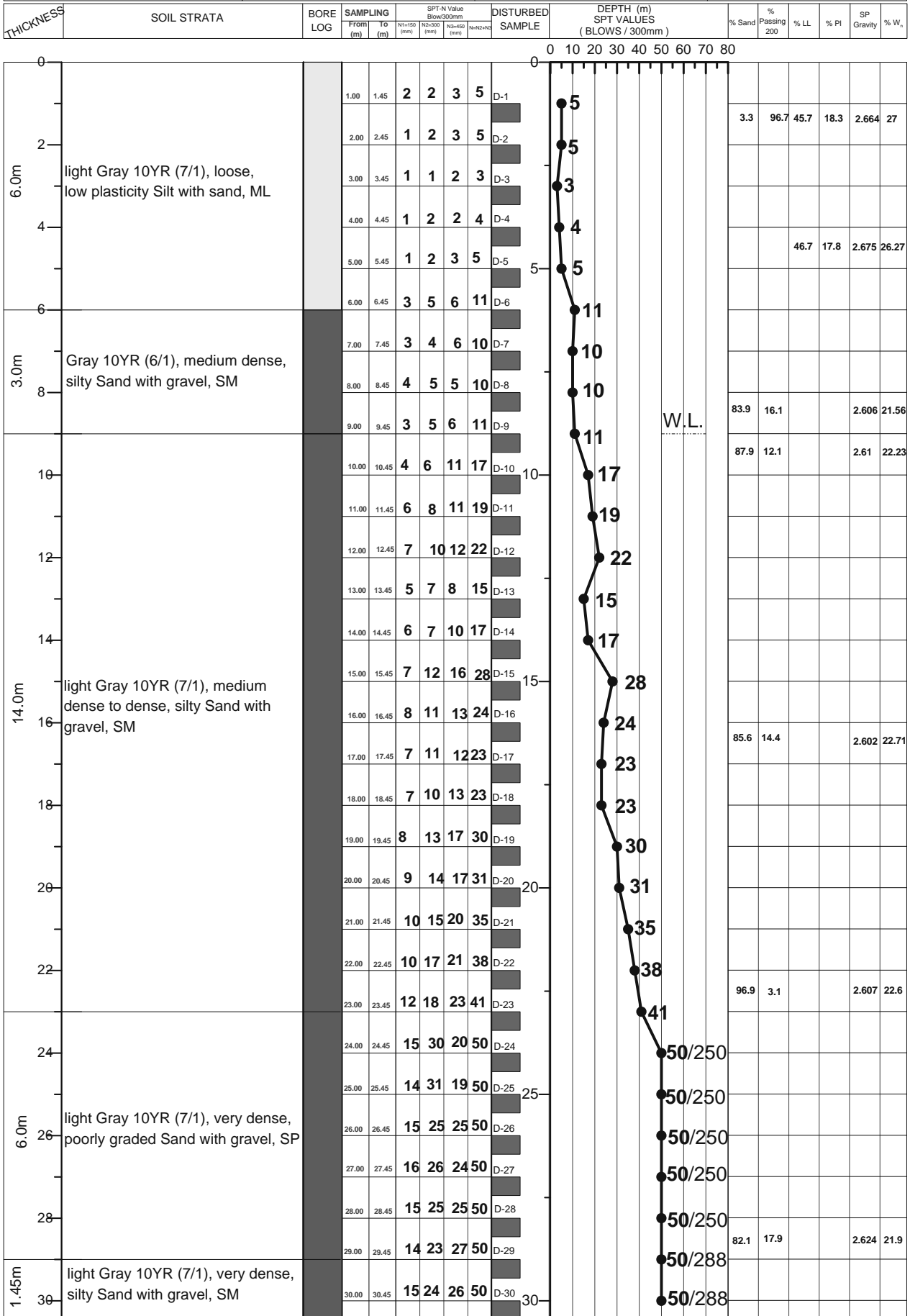
LATITUDE: 24°05'34.63" LONGITUDE: 89°35'19.67"

CHAINAGE: 125.093



PROSOIL FOUNDATION CONSULTANT

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

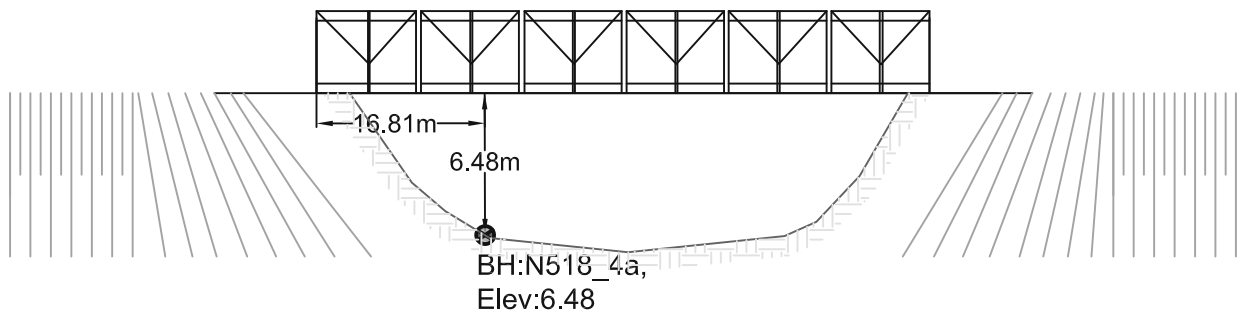
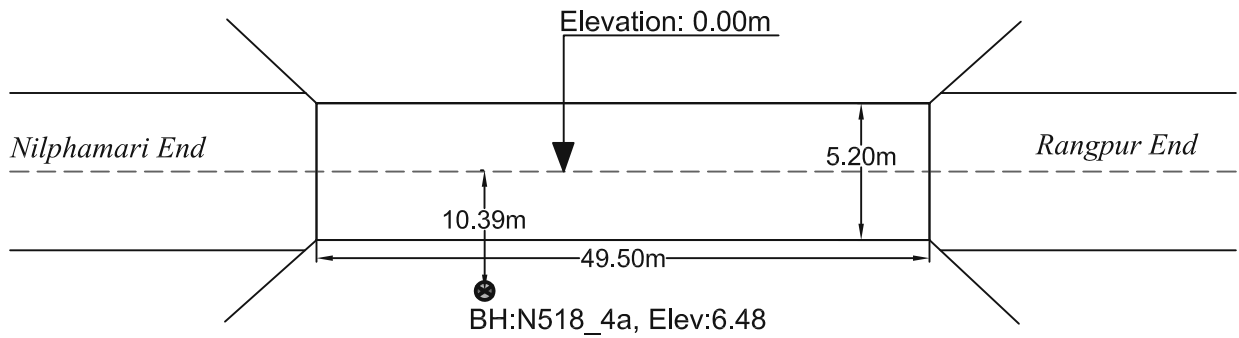
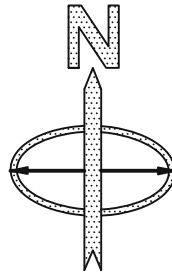


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED  
 50/X = BLOWS 50, "X" MM PENETRATION

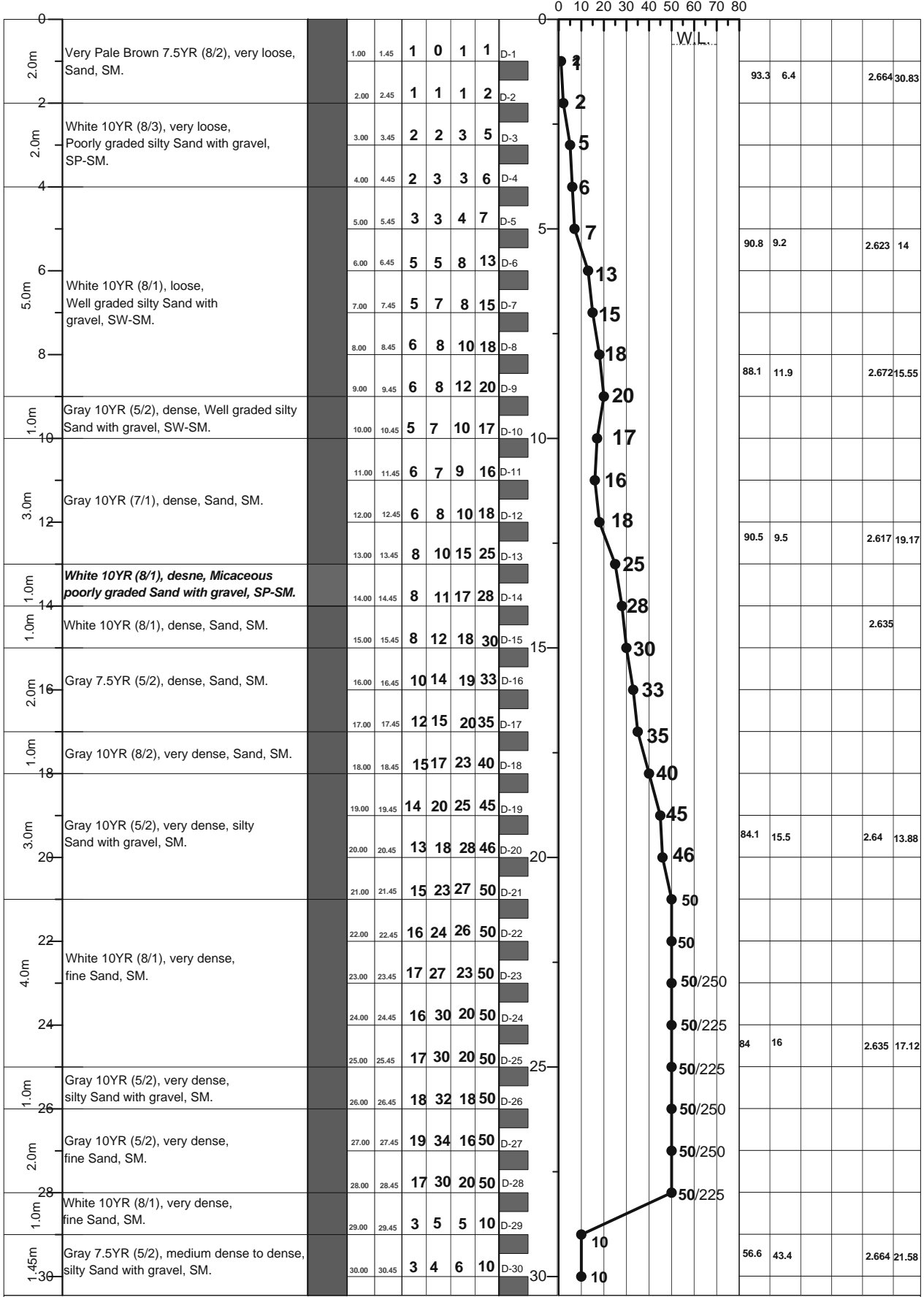
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 38  
BRIDGE ID: N518\_4a  
LATITUDE: 25°46'24.845" LONGITUDE: 88°52'39.156"  
CHAINAGE: 3.959



PROSOIL FOUNDATION CONSULTANT

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

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



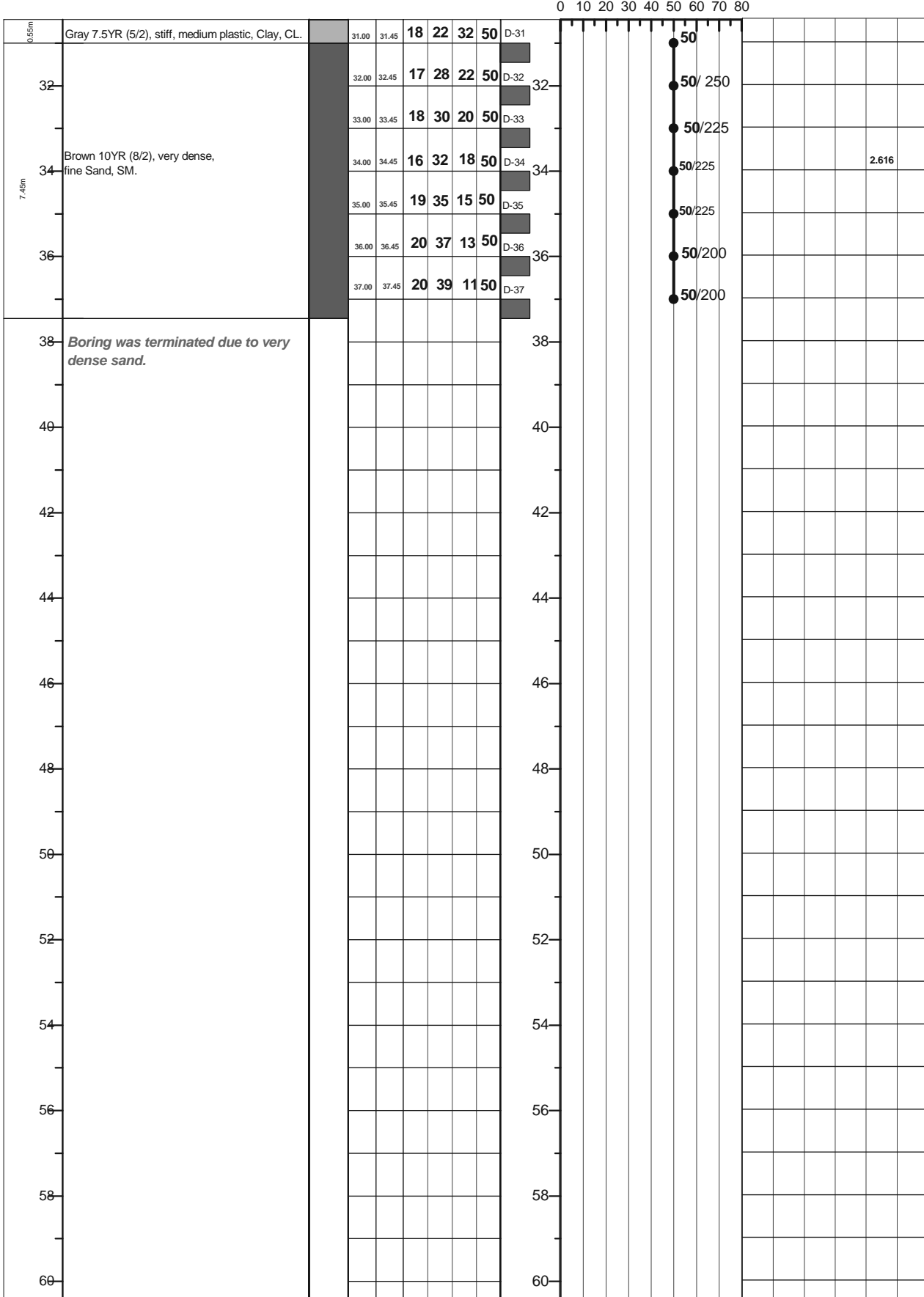
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>c</sub>
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									

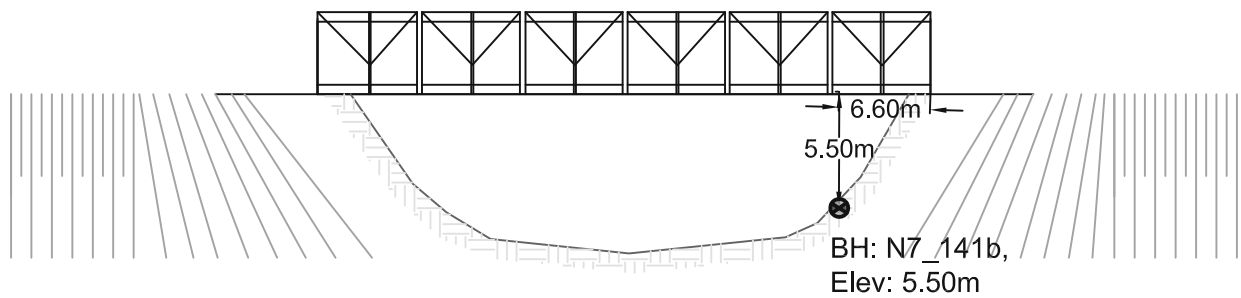
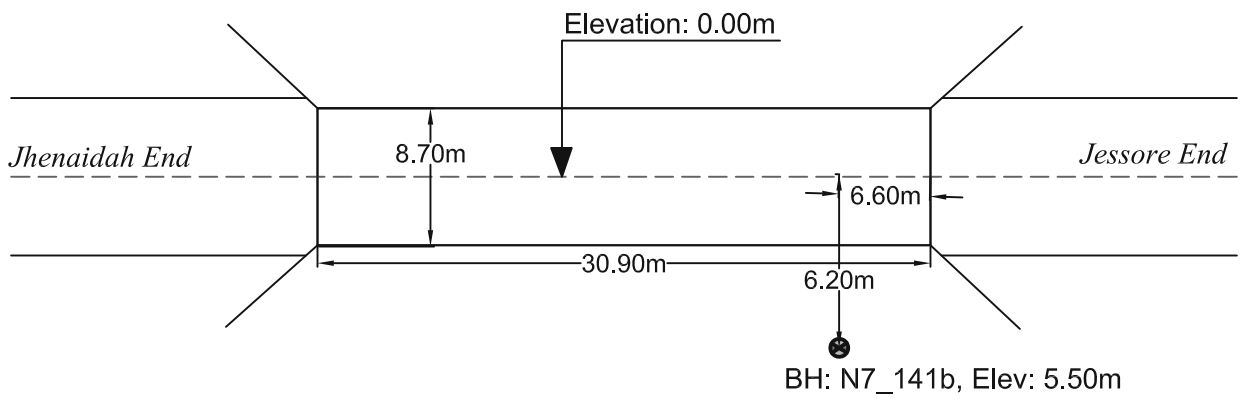
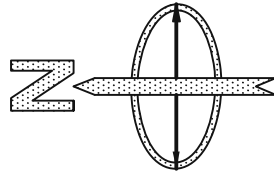


**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>TM</sup> 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

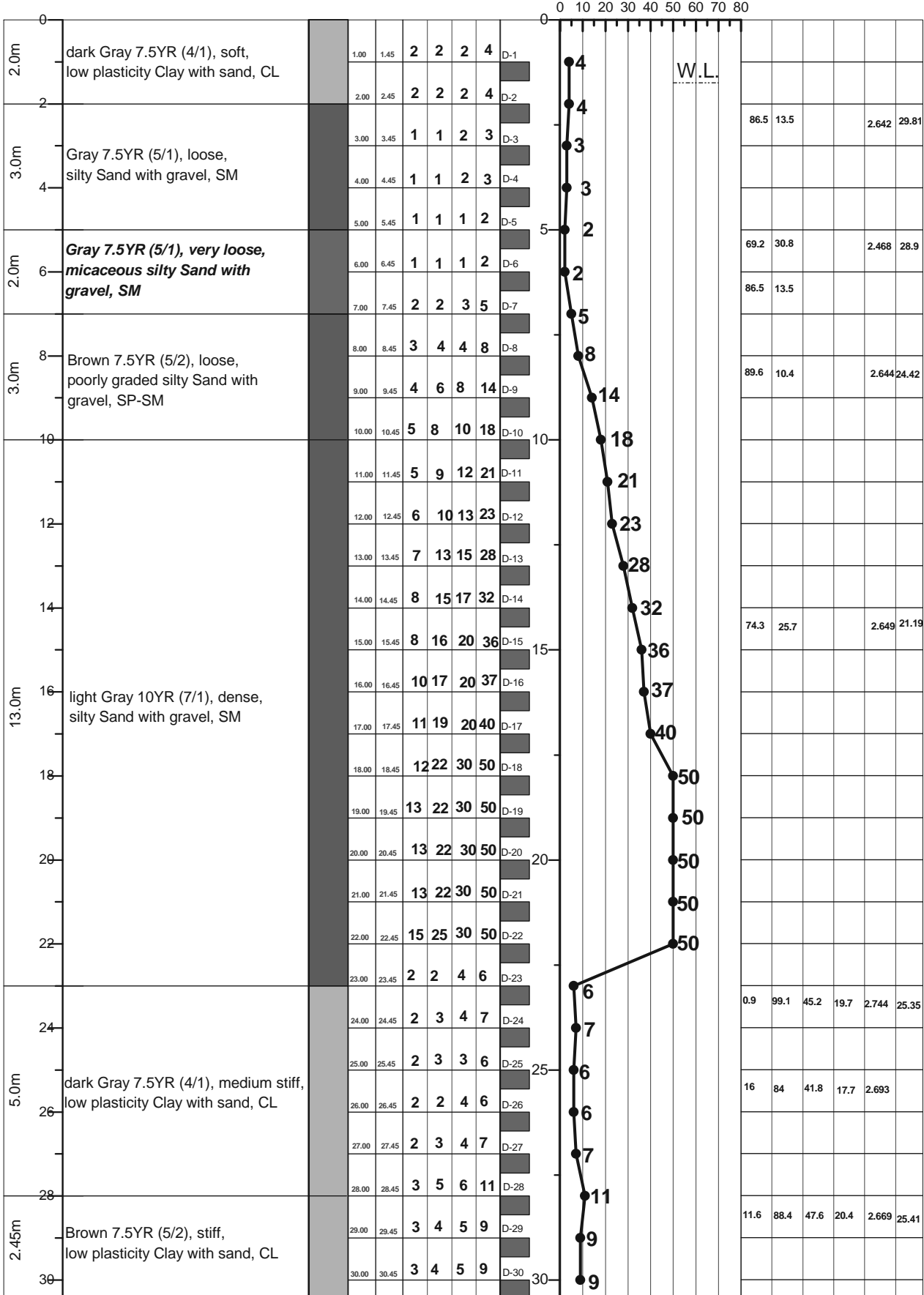


PROSOIL FOUNDATION CONSULTANT



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

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



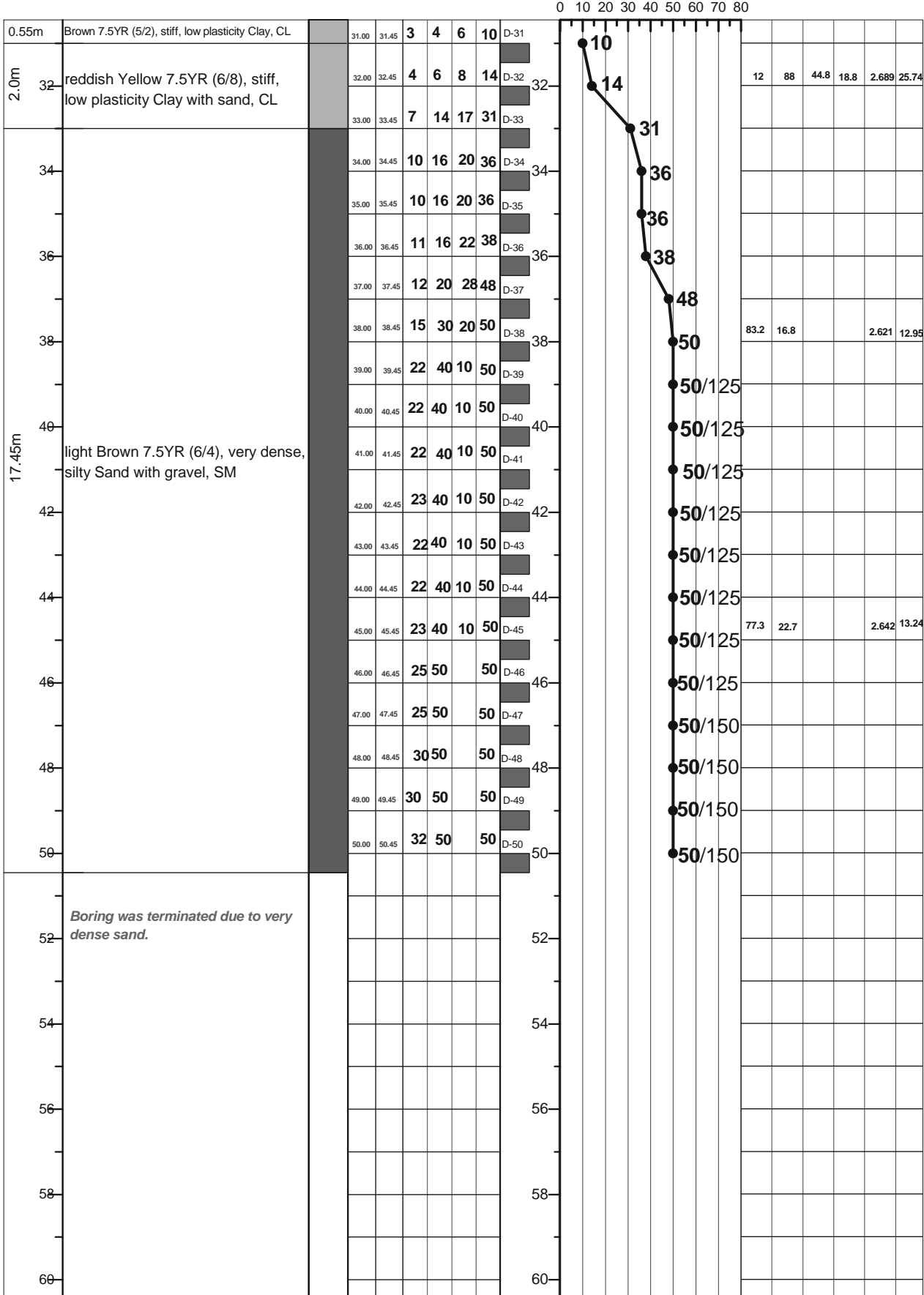
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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

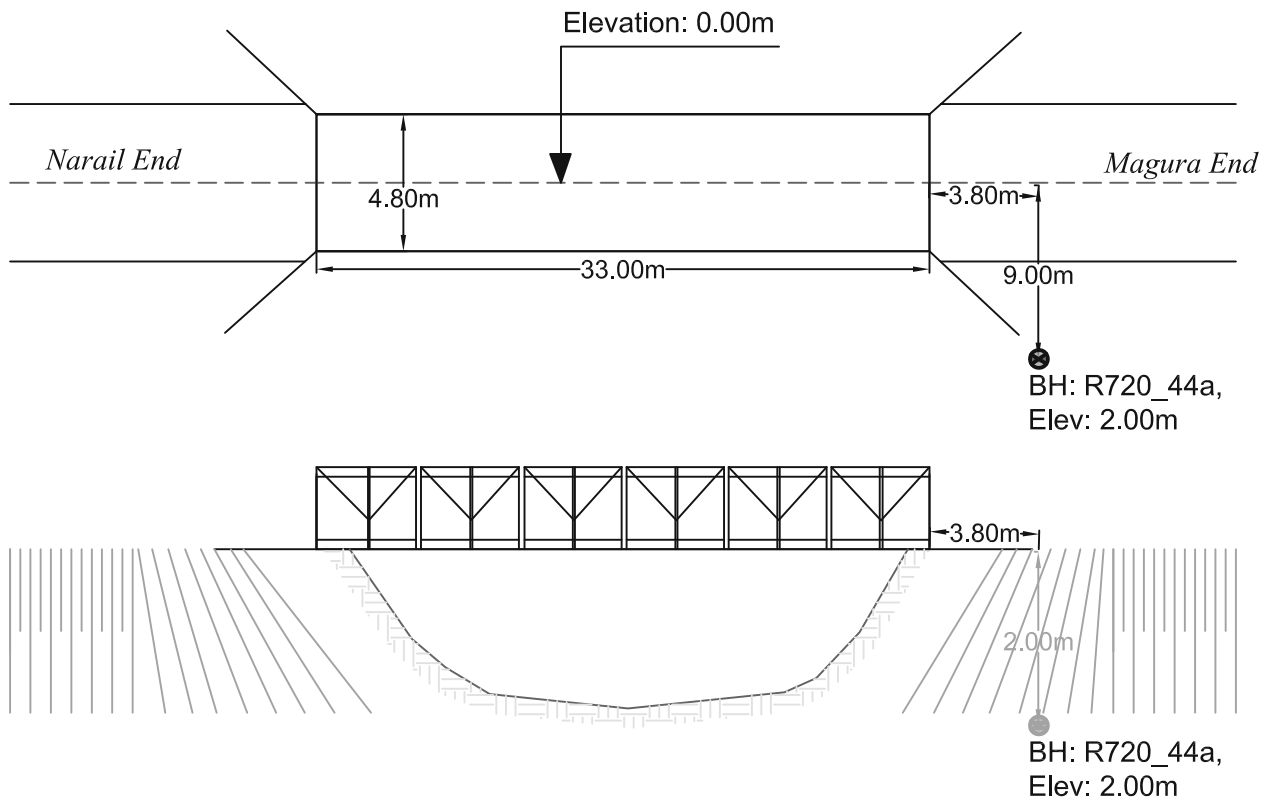
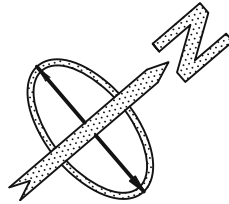


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> 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

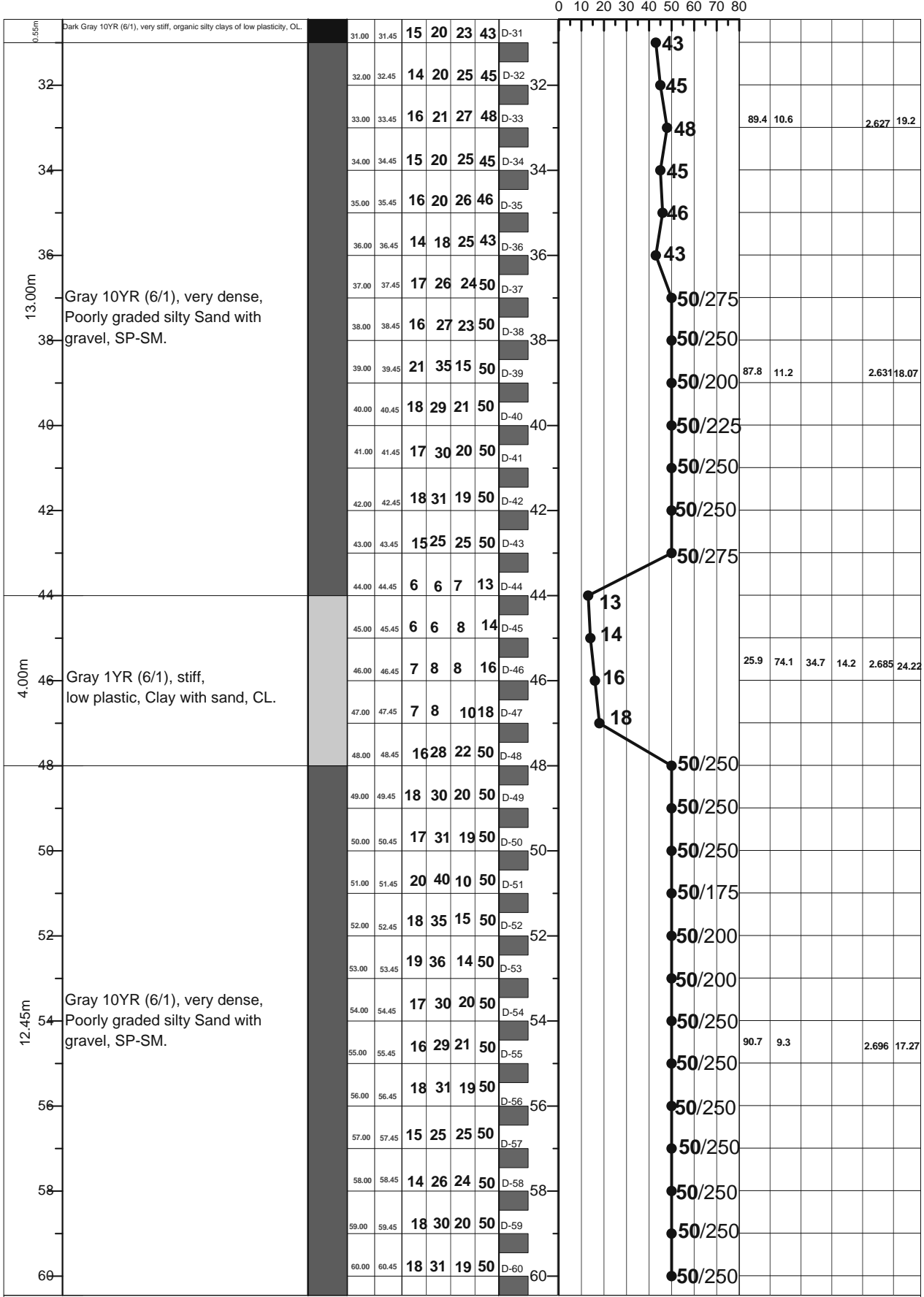
THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								
0-2.0m	Light Gray 10YR (7/1), stiff, low plastic, Clay with sand, CL.		1.00	1.45	3	5	7	12	D-1	11.9	88.1	33.9	12.8	2.686	27.34
2-4.0m	filling Sand		2.00	2.45	3	4	7	11	D-2						
4-6.0m	Gray 10YR (6/1), soft, low plastic, clayey Silt, ML.		3.00	3.45	3	5	7	12	D-3						
6-7.0m			4.00	4.45	2	2	3	5	D-4						
7.0-8.0m			5.00	5.45	2	2	2	4	D-5						
8.0-9.0m			6.00	6.45	2	2	3	5	D-6						
9.0-10.0m			7.00	7.45	2	2	2	4	D-7	13.1	86.9	35.7	14.2	2.669	31.04
10.0-11.0m	Gray 10YR (6/1), loose, low plastic, Clay with sand, CL.		8.00	8.45	2	3	5	8	D-8	45.1	54.3				24.39
11.0-12.0m			9.00	9.45	2	2	3	5	D-9						
12.0-13.0m			10.00	10.45	2	2	4	6	D-10						
13.0-14.0m			11.00	11.45	2	2	3	5	D-11						
14.0-15.0m			12.00	12.45	2	2	4	6	D-12						
15.0-16.0m			13.00	13.45	2	3	3	6	D-13						
16.0-17.0m			14.00	14.45	2	2	4	6	D-14						
17.0-18.0m			15.00	15.45	2	3	3	6	D-15						
18.0-19.0m			16.00	16.45	2	3	4	7	D-16	13.4	86.6	47.4	21.1	2.675	25.92
19.0-20.0m			17.00	17.45	4	4	6	10	D-17						
20.0-21.0m			18.00	18.45	4	5	5	10	D-18						
21.0-22.0m	Gray 10YR (6/1), stiff, non plastic, clayey Silt, ML.		19.00	19.45	5	5	6	11	D-19						
22.0-23.0m			20.00	20.45	4	6	8	14	D-20						
23.0-24.0m			21.00	21.45	6	8	10	18	D-21						
24.0-25.0m			22.00	22.45	6	9	12	21	D-22						
25.0-26.0m			23.00	23.45	7	13	17	30	D-23	72.3	27.7			2.61	19.31
26.0-27.0m			24.00	24.45	8	15	20	35	D-24						
27.0-28.0m			25.00	25.45	13	23	27	50	D-25						
28.0-29.0m			26.00	26.45	14	24	26	50	D-26						
29.0-30.0m			27.00	27.45	16	24	26	50	D-27						
30.0-31.0m			28.00	28.45	25	36	14	50	D-28						
31.0-32.0m			29.00	29.45	18	25	25	50	D-29						
32.0-33.0m			30.00	30.45	7	7	10	17	D-30						
33.0-34.0m	Dark Gray 10YR (6/1), very stiff, organic silty clays of low plasticity, OL.														

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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



**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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

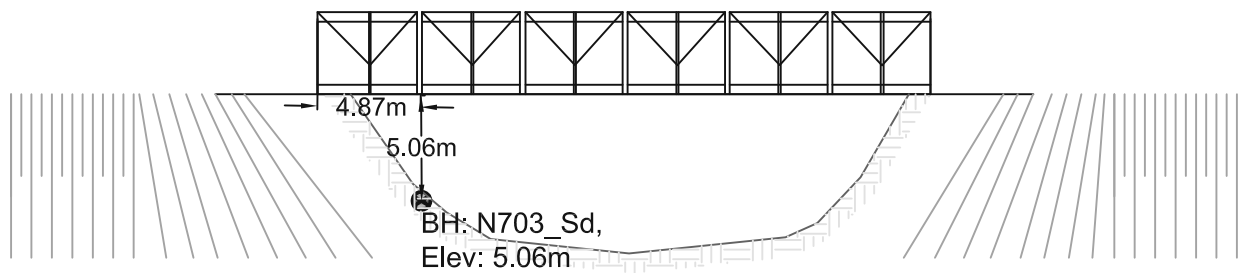
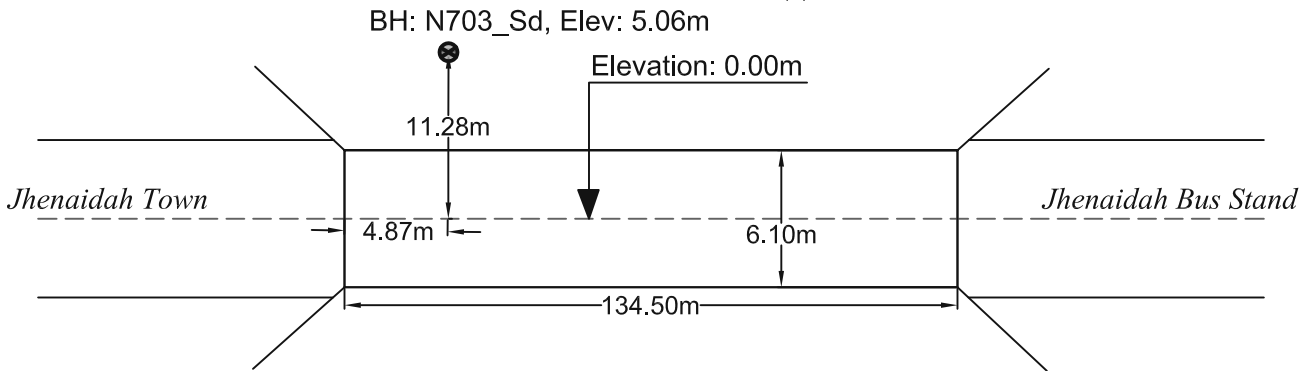
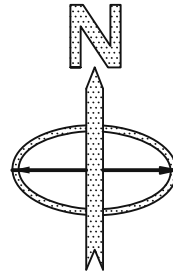
**CLIENT: Oriental Consultants Company Limited.**

**RANK: 41**

**BRIDGE ID: N703\_Sd**

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

**CHAINAGE: 0.508**



**PROSOIL FOUNDATION CONSULTANT**

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									N6-600 (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	10.2	89.8	41.7	18	2.776	
		2.00	2.45	1	1	1	2	D-2	2							
		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	92.6	7.4			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	88.2	11.8			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	91.9	8.1			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							
7.0m	Gray 10YR (7/1), dense, fine Poorly graded silty Sand with gravel, SP-SM.		15.00	15.45	10	12	18	30	D-15	30	92.2	7.8			2.657	21.03
		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							
10.0m	Gray 7.5YR (5/1), medium dense to dense, Micaceous silty Sand with gravel, SM.		21.00	21.45	9	13	17	30	D-21	30	87.8	12.2			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							
		30.00	30.45	19	28	22	50	D-30	50							
1.45m	Gray 10YR (7/1), very dense, fine Sand, SM.															

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

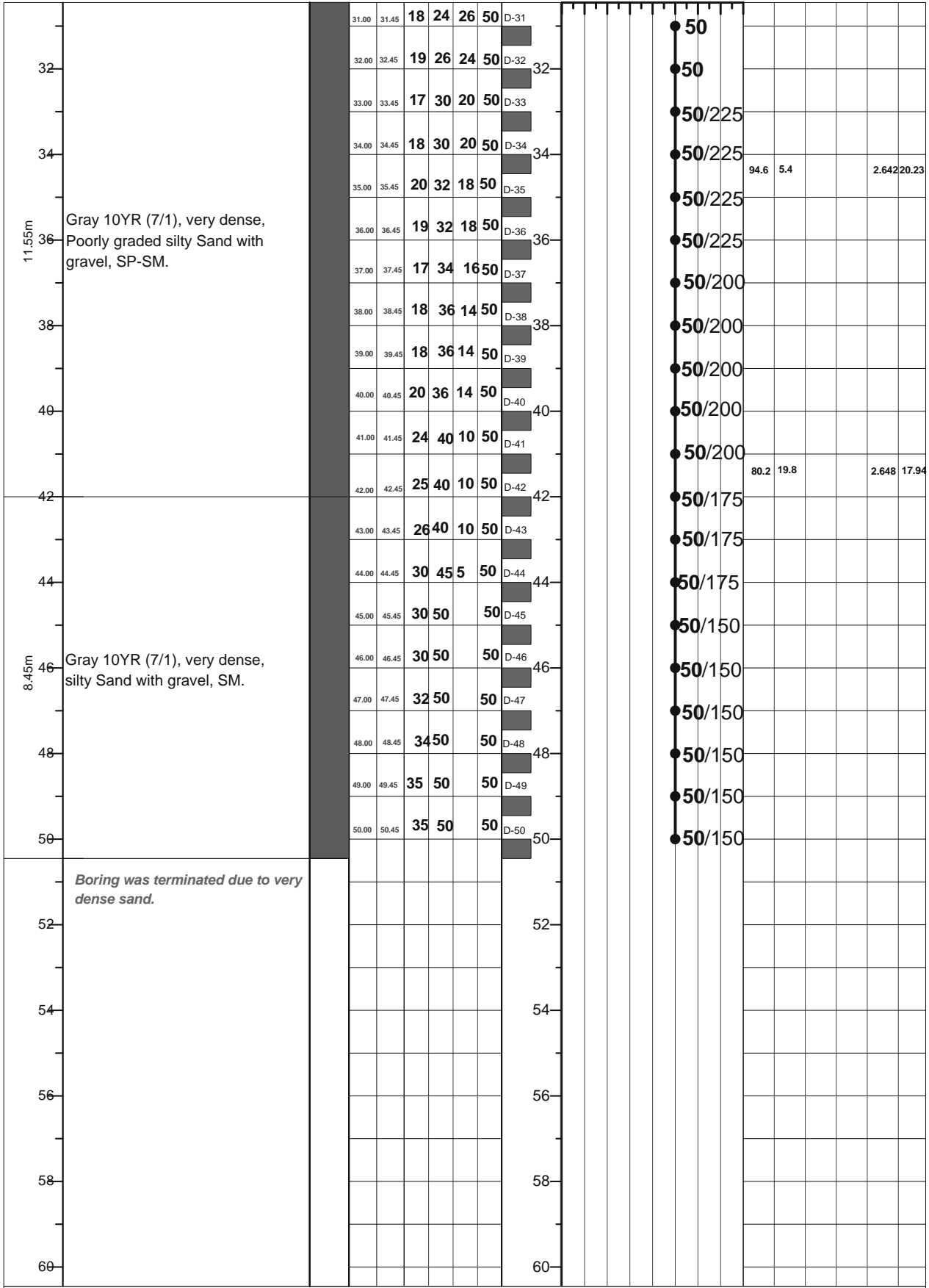
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>v</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED    50/X = BLOWS 50, "X" MM PENETRATION



A1: Location of Borehole

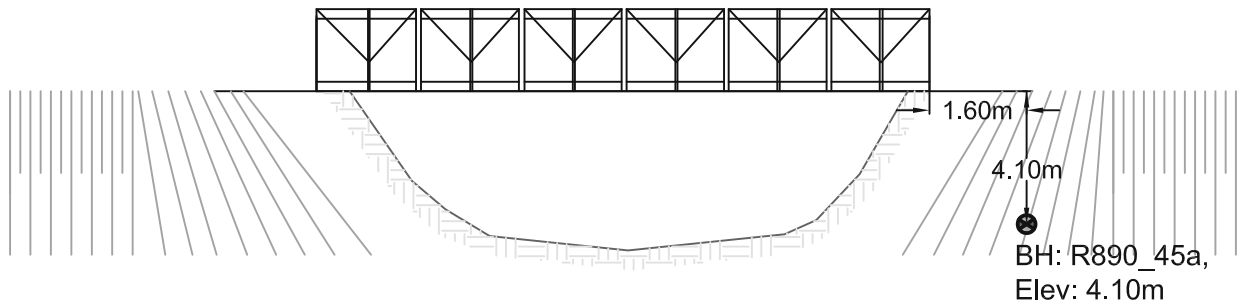
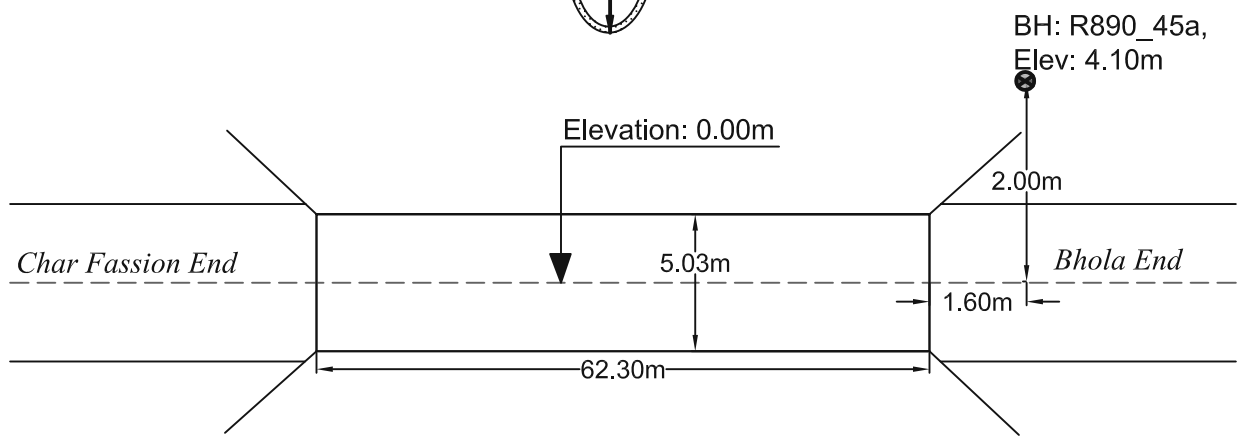
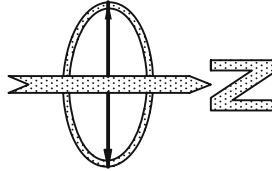
CLIENT: Oriental Consultants Company Limited.

RANK: 42

BRIDGE ID: R890\_45a

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

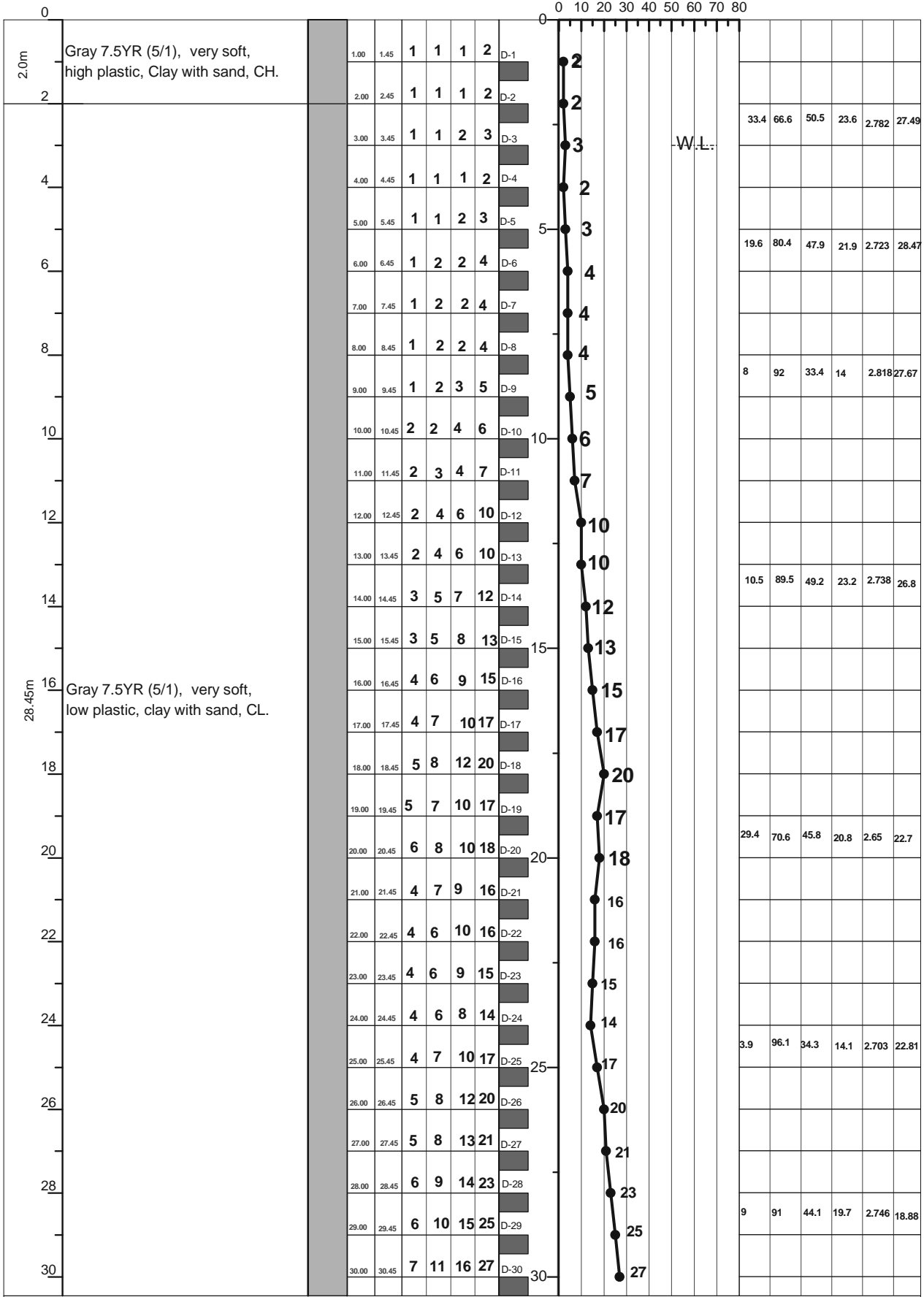
CHAINAGE: 45.766



PROSOIL FOUNDATION CONSULTANT

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

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



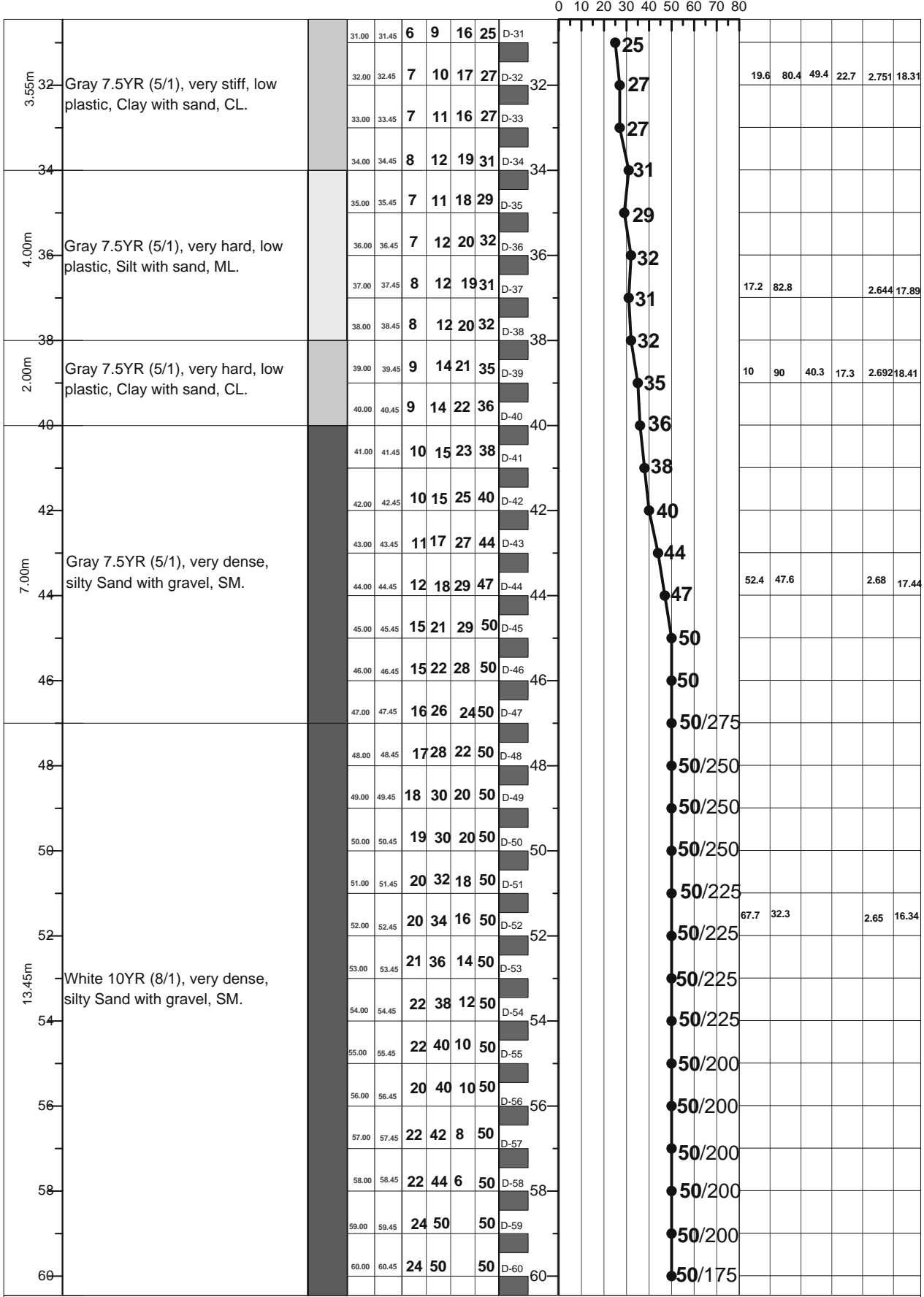
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

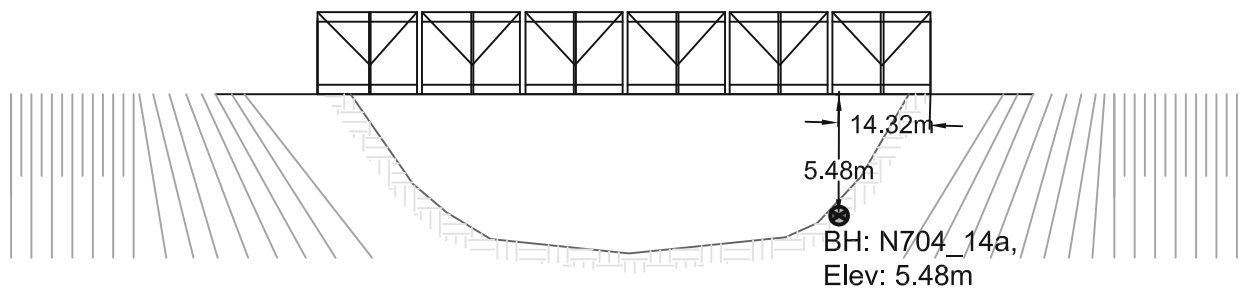
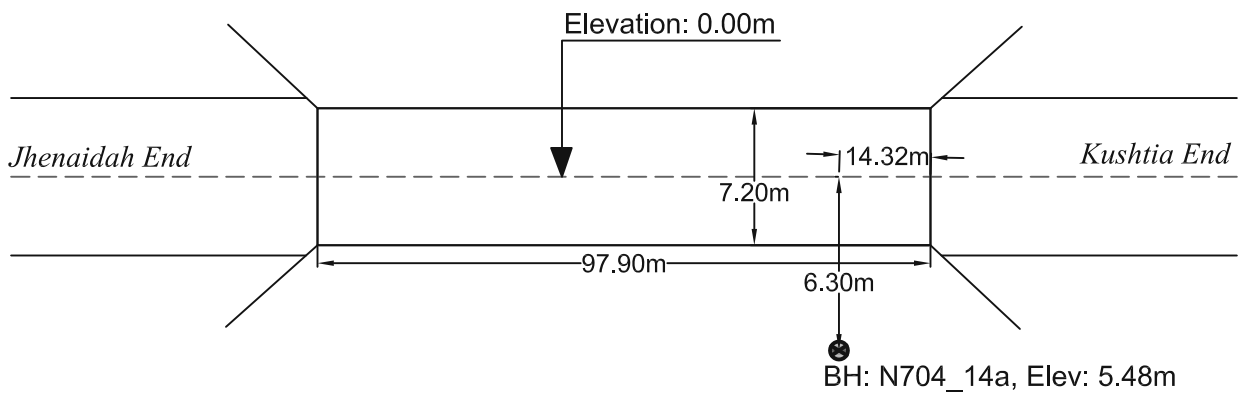
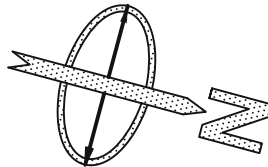
CLIENT: Oriental Consultants Company Limited.

RANK: 43

BRIDGE ID: N704\_14a

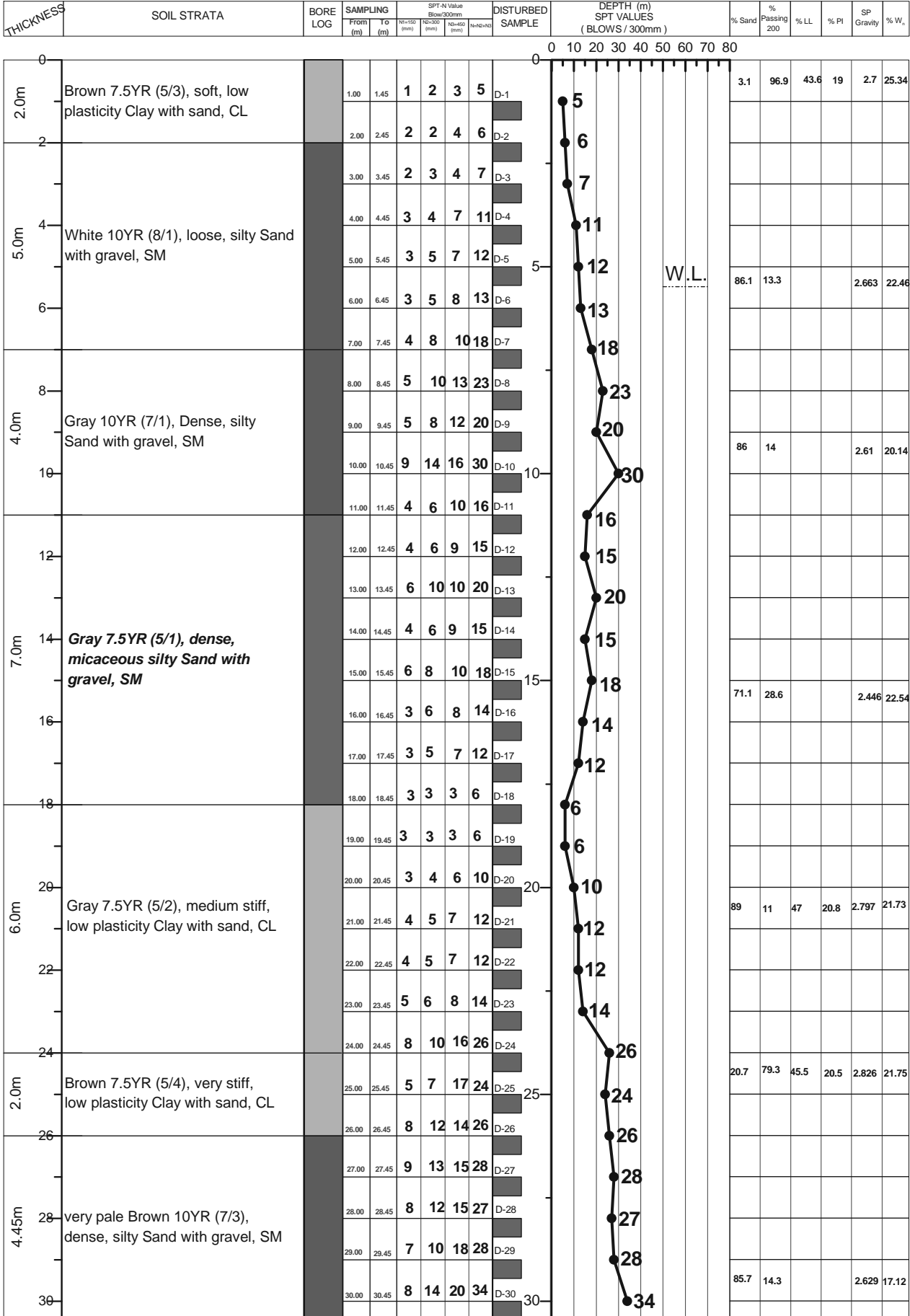
LATITUDE: 23°40'0.948" LONGITUDE: 89°11'26.474"

CHAINAGE: 15.342



PROSOIL FOUNDATION CONSULTANT

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



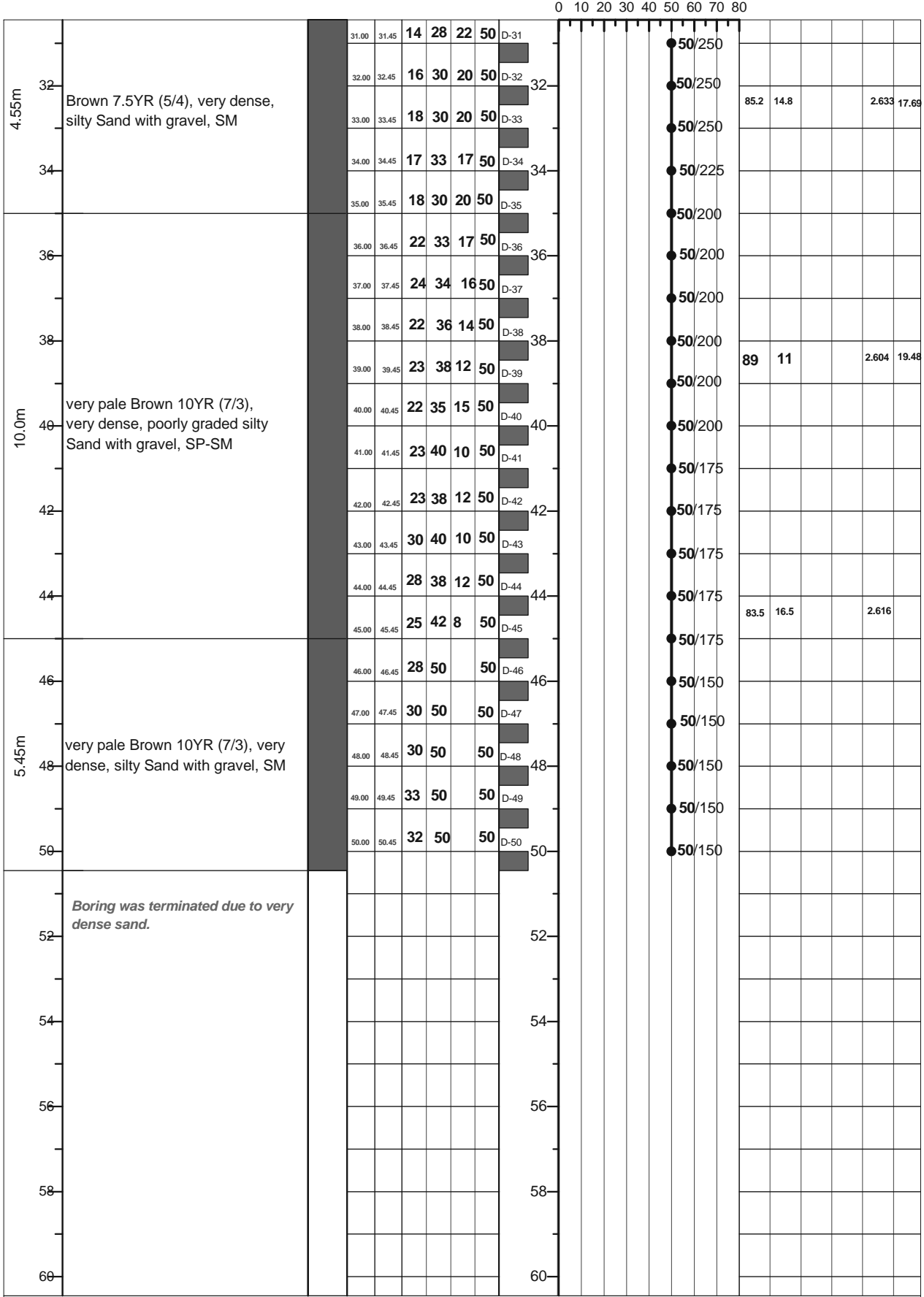
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>c</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

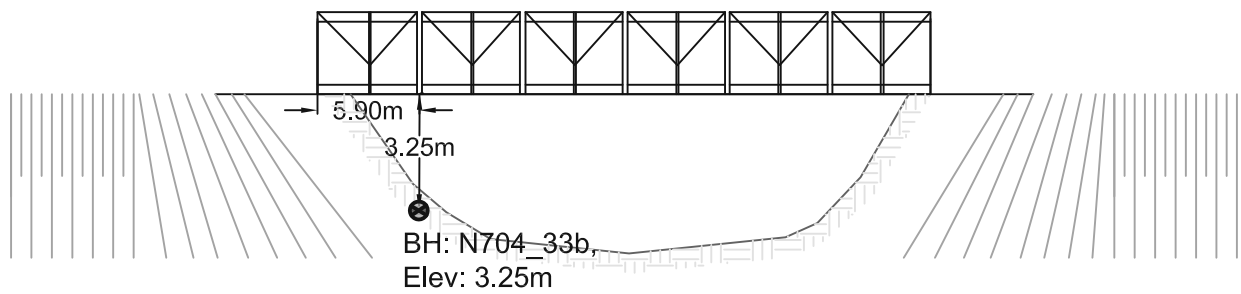
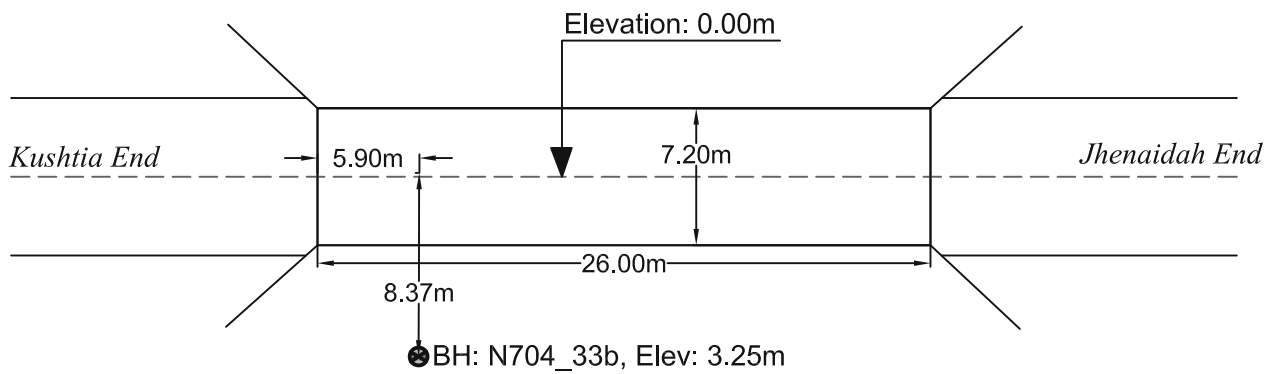
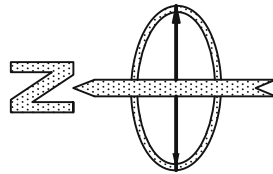
CLIENT: Oriental Consultants Company Limited.

RANK: 44

BRIDGE ID: N704\_33b

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

CHAINAGE: 34.625



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>						
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									N4-600 (mm)					
4.0m	Brown 7.5YR (5/3), medium stiff, low plasticity Clay with sand, CL		1.00	1.45	3	4	5	9	D-1	9	7.8	92.2	44.1	19	2.761	25.08					
			2.00	2.45	2	3	4	7	D-2								7				
			3.00	3.45	1	2	2	4	D-3									4			
			4.00	4.45	1	0	1	1	D-4										1		
2.0m	light Brown 7.5YR (6/4), very soft, low plasticity Clay with sand, CL		5.00	5.45	1	0	1	1	D-5	1	26.9	73.1		2.713	25.03						
			6.00	6.45	2	3	4	7	D-6							7					
1.0m	dark Gray 7.5YR (4/1), medium dense, low plasticity Silt with sand, ML		7.00	7.45	3	4	5	9	D-7	9											
7.0m	<b>Gray 7.5YR (5/1), dense, poorly graded micaceous silty Sand with gravel, SP-SM</b>		8.00	8.45	2	5	6	11	D-8	11	13.8	86.2		2.548	25.58						
			9.00	9.45	3	5	6	11	D-9							11					
			10.00	10.45	5	6	8	14	D-10								14				
			11.00	11.45	6	7	8	15	D-11									15			
			12.00	12.45	7	8	9	17	D-12										17		
			13.00	13.45	8	10	14	24	D-13											24	
			14.00	14.45	6	10	19	29	D-14												29
			15.00	15.45	9	16	23	39	D-15												
16.00	16.45	11	15	22	37	D-16	37														
3.0m	<b>Gray 7.5YR (6/1), very dense, poorly graded micaceous silty Sand with gravel, SP-SM</b>		17.00	17.45	6	12		15	27	D-17	27	88.4	11.6	2.518	18.66						
			18.00	18.45	7	13		17	30	D-18						30					
			19.00	19.45	2	4		5	9	D-19							9				
2.0m	dark Gray 5YR (6/1), medium stiff, low plasticity Clay with sand, CL		20.00	20.45	4	6		8	14	D-20	14										
			21.00	21.45	5	7		10	17	D-21						17					
3.0m	Gray 7.5YR (6/1), very stiff, low plasticity Clay with sand, CL		22.00	22.45	7	12		17	29	D-22	29	14.6	85.4	41.6	17.6		2.787	18.11			
			23.00	23.45	10	14		19	33	D-23						33					
			24.00	24.45	14	19	23	42	D-24	42											
2.0m	Brown 7.5YR (5/4), very dense, silty Sand with gravel, SM		25.00	25.45	16	20	24	44	D-25		44										
			26.00	26.45	9	19	25	44	D-26							44					
4.45m	Brown 7.5YR (5/3), very dense, silty Sand with gravel, SM		27.00	27.45	16	24	26	50	D-27	50	84.8	15.2		2.636	16.03						
			28.00	28.45	20	34	16	50	D-28							50					
			29.00	29.45	20	30	20	50	D-29								50				
			30.00	30.45	21	35	15	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

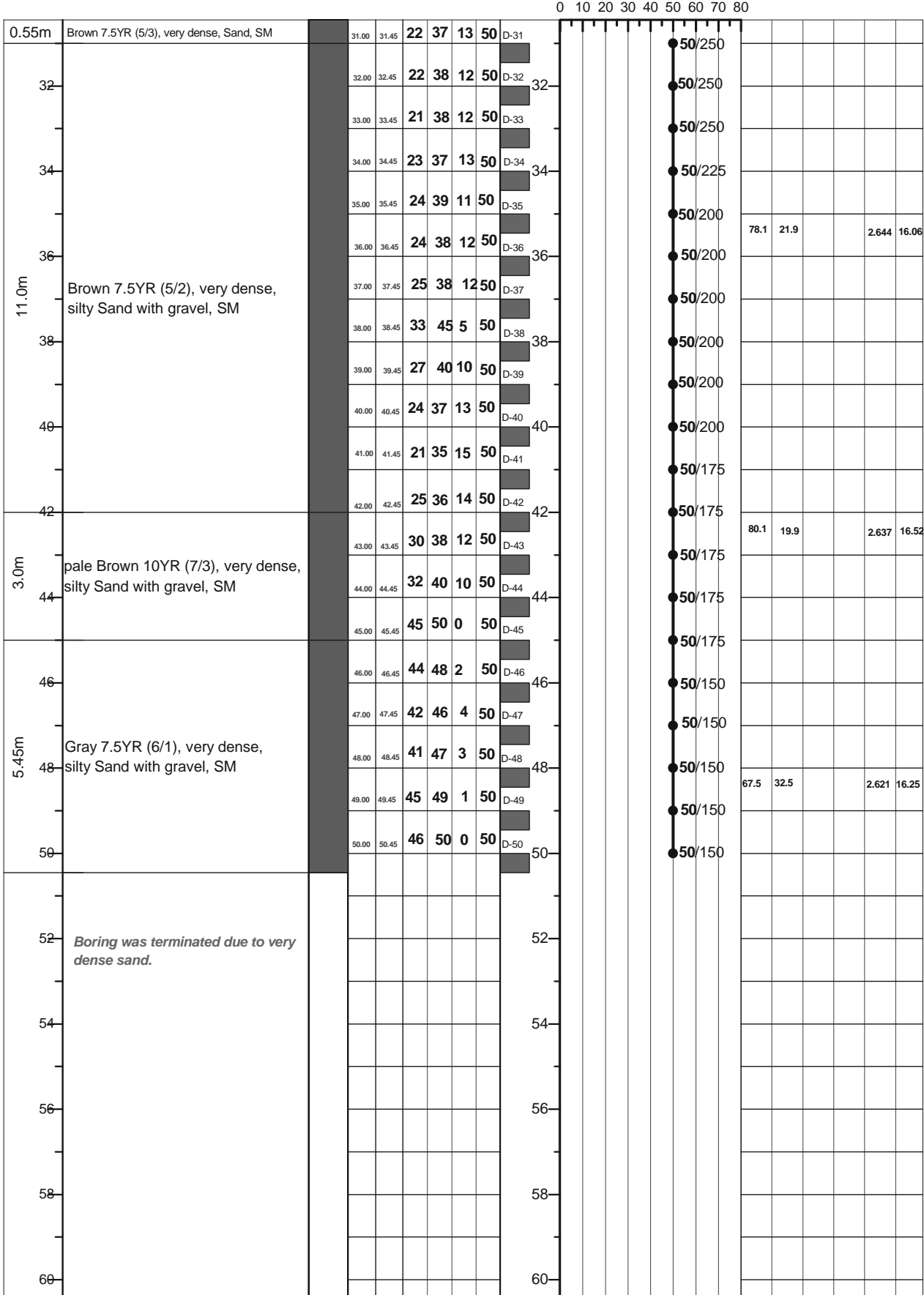
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



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

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

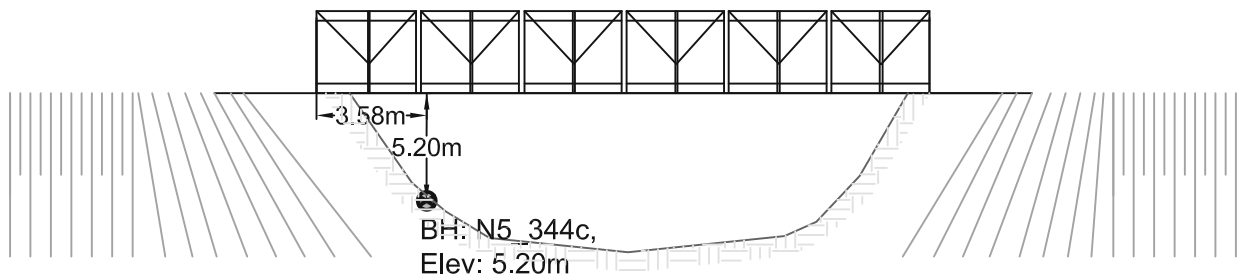
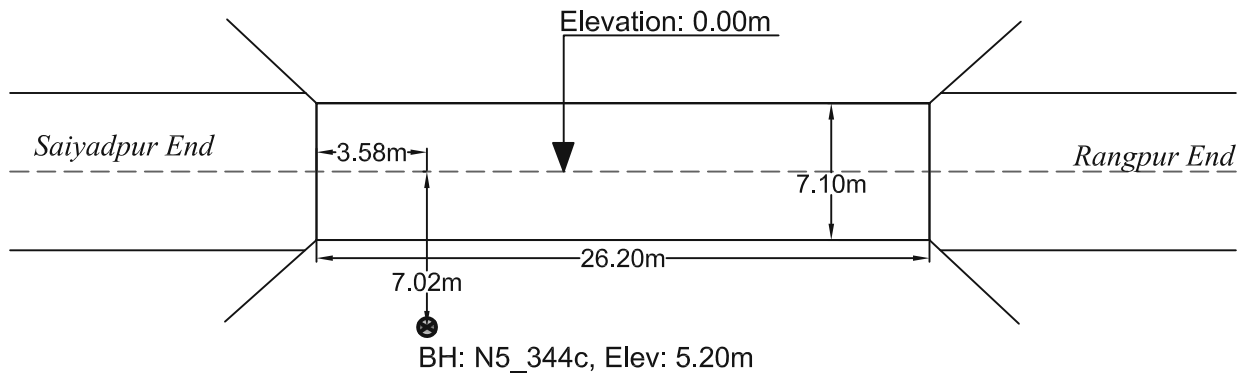
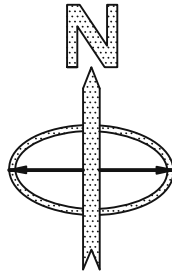


**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

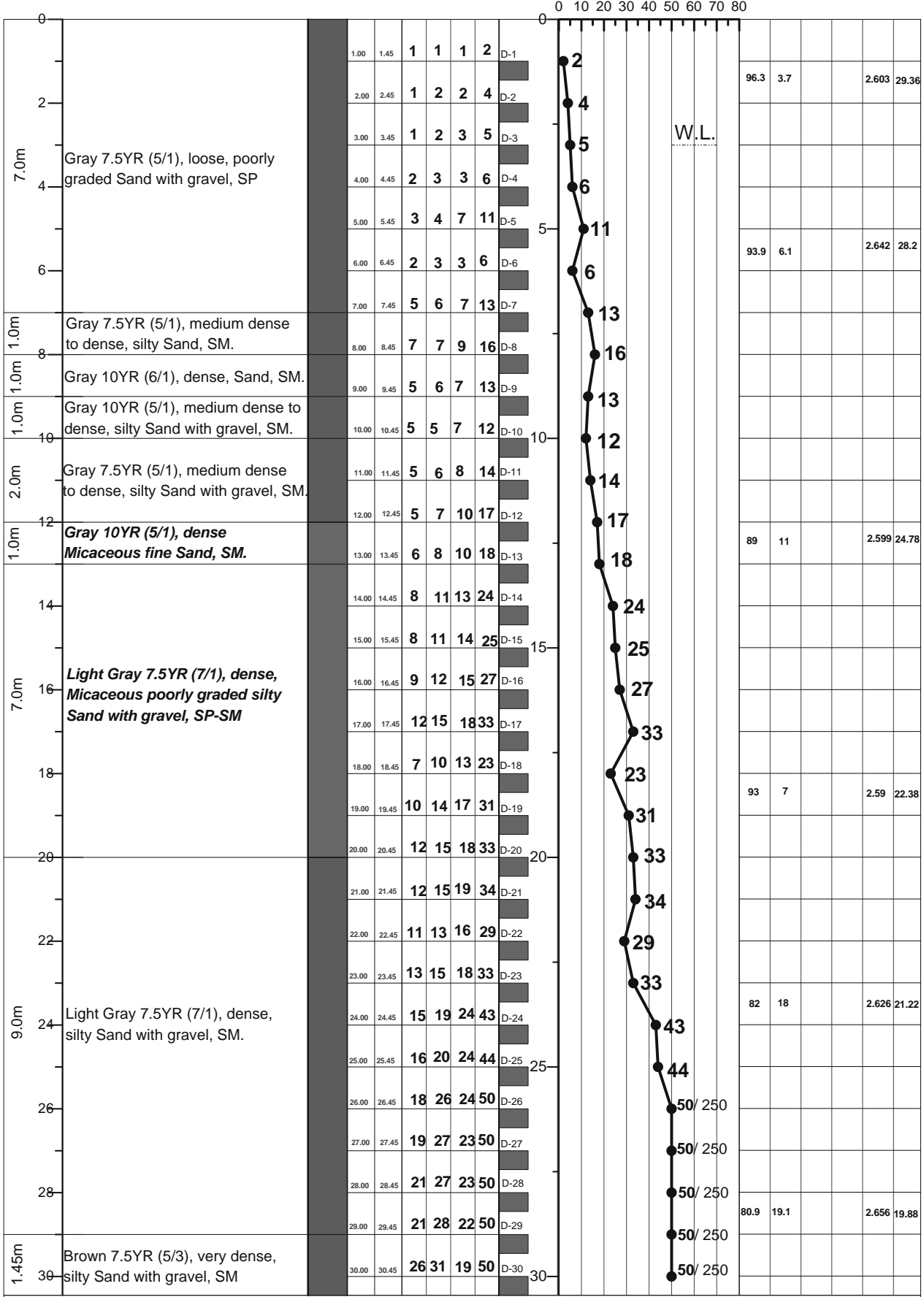
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 45  
BRIDGE ID: N5\_344c  
LATITUDE: 25°48'41.813" LONGITUDE: 89°6'026.938"  
CHAINAGE: 342.366



PROSOIL FOUNDATION CONSULTANT

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

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 <sub>v</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

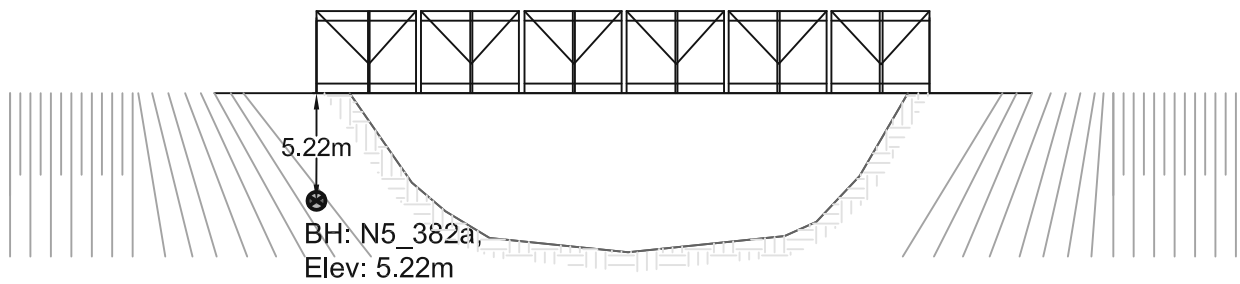
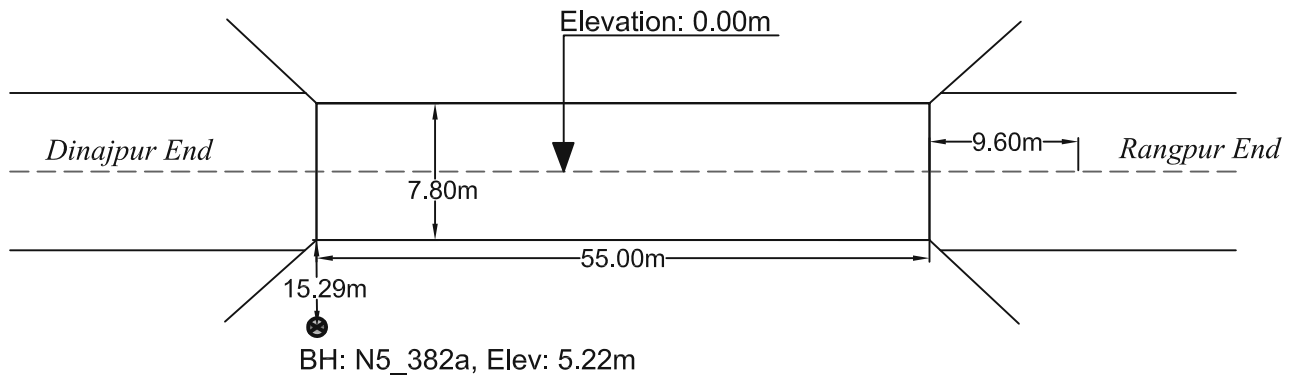
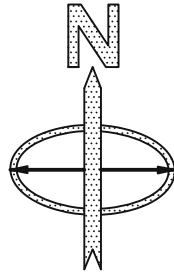
CLIENT: Oriental Consultants Company Limited.

RANK: 46

BRIDGE ID: N5\_382a

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

CHAINAGE: 379.45



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			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						
			2.00	2.45	3	4	5	9	D-2	9						
			3.00	3.45	2	3	4	7	D-3	7						
3.0m-4.0m	Gray 7.5YR (5/2), medium stiff, high plastic Clay with sand, CH.		4.00	4.45	1	1	2	3	D-4	3						
			5.00	5.45	1	3	4	7	D-5	7						
			6.00	6.45	5	8	10	18	D-6	18						
4.0m-6.0m	Gray 7.5YR (5/2), dense, Micaceous fine Sand, SM.		7.00	7.45	5	7	9	16	D-7	16						
			8.00	8.45	6	9	11	20	D-8	20						
6.0m-7.0m	White 10YR (8/2), dense, Sand, SM.		9.00	9.45	10	18	20	38	D-9	38						
7.0m-10.0m	White 10YR (8/1), very dense, Micaceous silty Sand with gravel, SM.		10.00	10.45	8	10	12	22	D-10	22						
			11.00	11.45	5	7	7	14	D-11	14						
			12.00	12.45	6	7	9	16	D-12	16						
			13.00	13.45	7	9	15	24	D-13	24						
10.0m-11.0m	Gray 7.5YR (5/2), dense, Sand, SM.		14.00	14.45	6	10	17	27	D-14	27						
11.0m-13.0m	Gray 7.5YR (5/2), dense, Micaceous Fine Sand, SM.		15.00	15.45	5	8	15	23	D-15	23						
			16.00	16.45	6	10	11	21	D-16	21						
13.0m-15.0m	White 10YR (8/1), dense, Micaceous silty Sand with gravel, SM.		17.00	17.45	10	15	32	47	D-17	47						
			18.00	18.45	8	12	34	45	D-18	45						
15.0m-17.0m	Gray 7.5YR (5/2), very dense, Sand with pebble, SM.		19.00	19.45	7	19	21	40	D-19	40						
			20.00	20.45	8	18	23	41	D-20	41						
17.0m-19.0m	White 10YR (8/1), very dense, Micaceous Fine Sand, SM.		21.00	21.45	10	15	18	33	D-21	33						
			22.00	22.45	10	18	23	41	D-22	41						
19.0m-21.0m	Brown 10YR (8/3), very dense, Micaceous fine Sand, SM.		23.00	23.45	12	20	25	45	D-23	45						
			24.00	24.45	10	22	26	48	D-24	48						
21.0m-23.0m	White 10YR (8/1), very dense, Sand, SM.		25.00	25.45	3	4	5	9	D-25	9						
			26.00	26.45	2	3	3	6	D-26	6						
23.0m-26.0m	Brown 7.5YR (8/3), medium plastic, medium stiff, high plastic Clay with sand, CH.		27.00	27.45	4	5	5	10	D-27	10						
			28.00	28.45	2	4	4	8	D-28	8						
26.0m-27.0m	Brown 7.5YR (8/3), medium stiff, low plastic Silt with sand, ML.		29.00	29.45	3	4	4	8	D-29	8						
			30.00	30.45	10	15	18	50	D-30	50						
27.0m-30.0m	Brown 7.5YR (8/3), medium dense to dense, clay with Sand, SM.															
30.0m-31.0m	Light Brown 10YR (5/2), very dense, silty Sand, SM.															

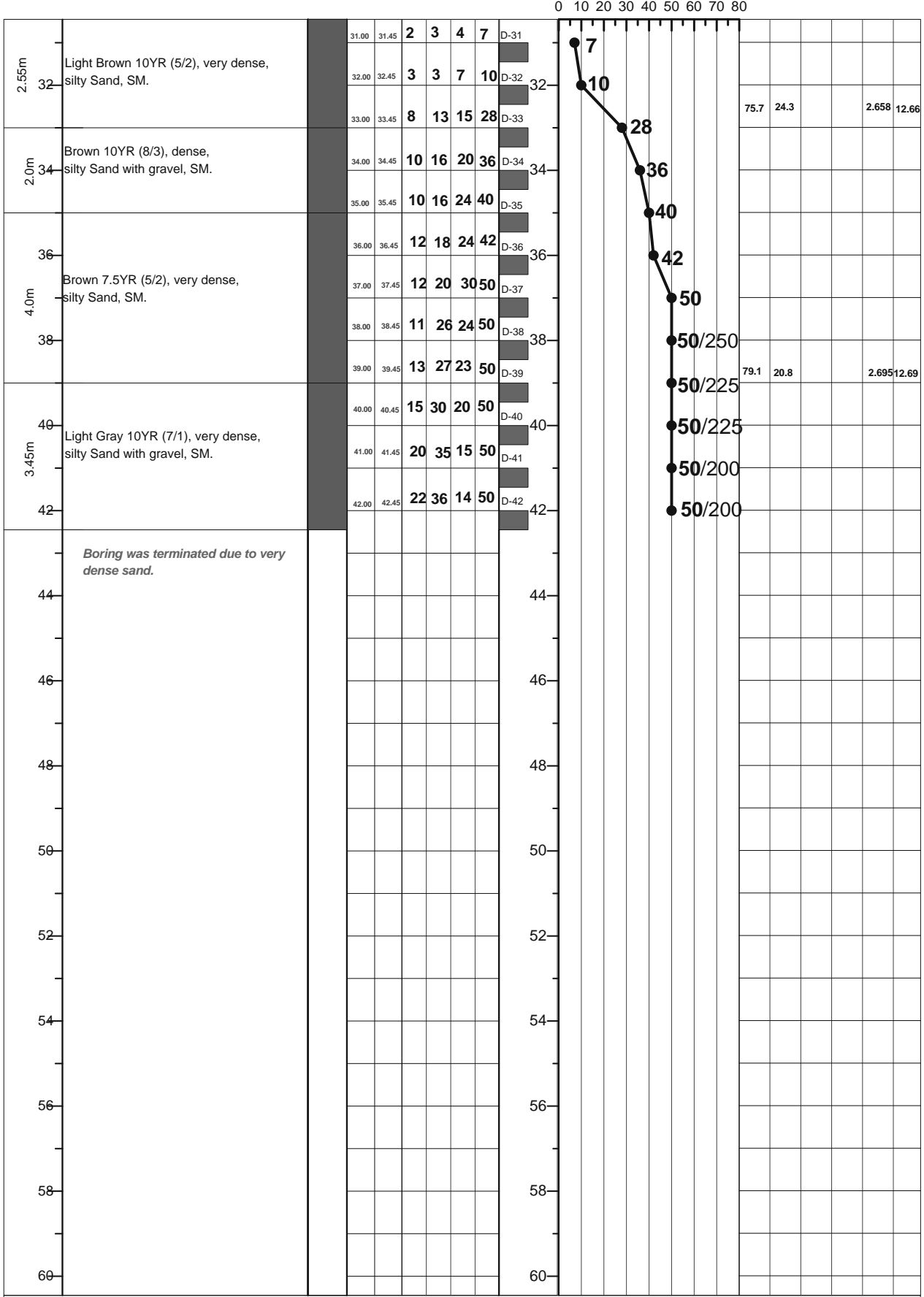
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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  
 MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>v</sub>
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									

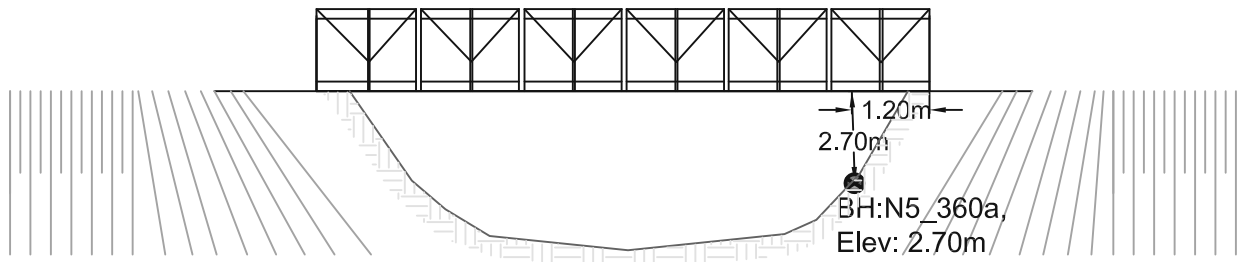
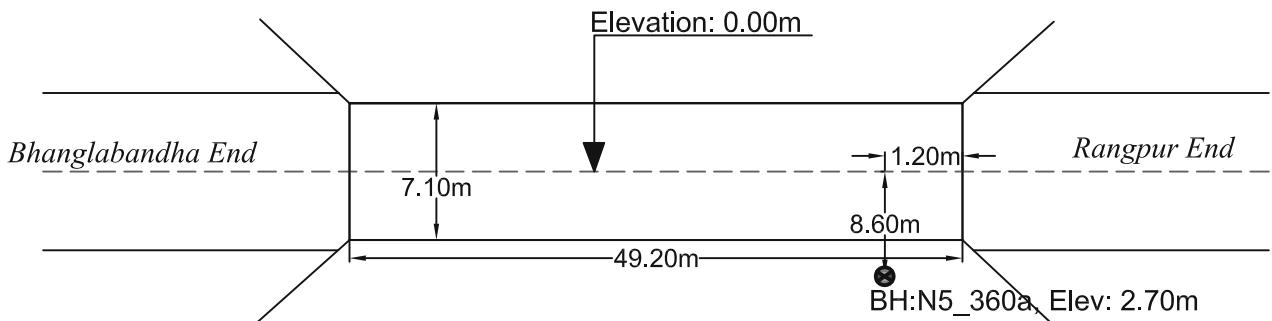
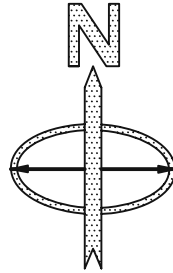


**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> 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

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			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						
3.0m	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
7.00		7.45	1	2	2	4	D-7	4								
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		11.45	2	3	4	7	D-11	7								
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		14.45	2	3	4	7	D-14	7	11.2	88.8	51.9	25.4	2.689	21.95		
15.00		15.45	3	6	8	14	D-15	14								
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		18.45	4	5	6	11	D-18	11								
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		21.45	4	7	8	15	D-21	15								
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		26.45	1	2	3	5	D-26	5								
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		29.45	14	24	26	50	D-29	50/250						2.558		
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

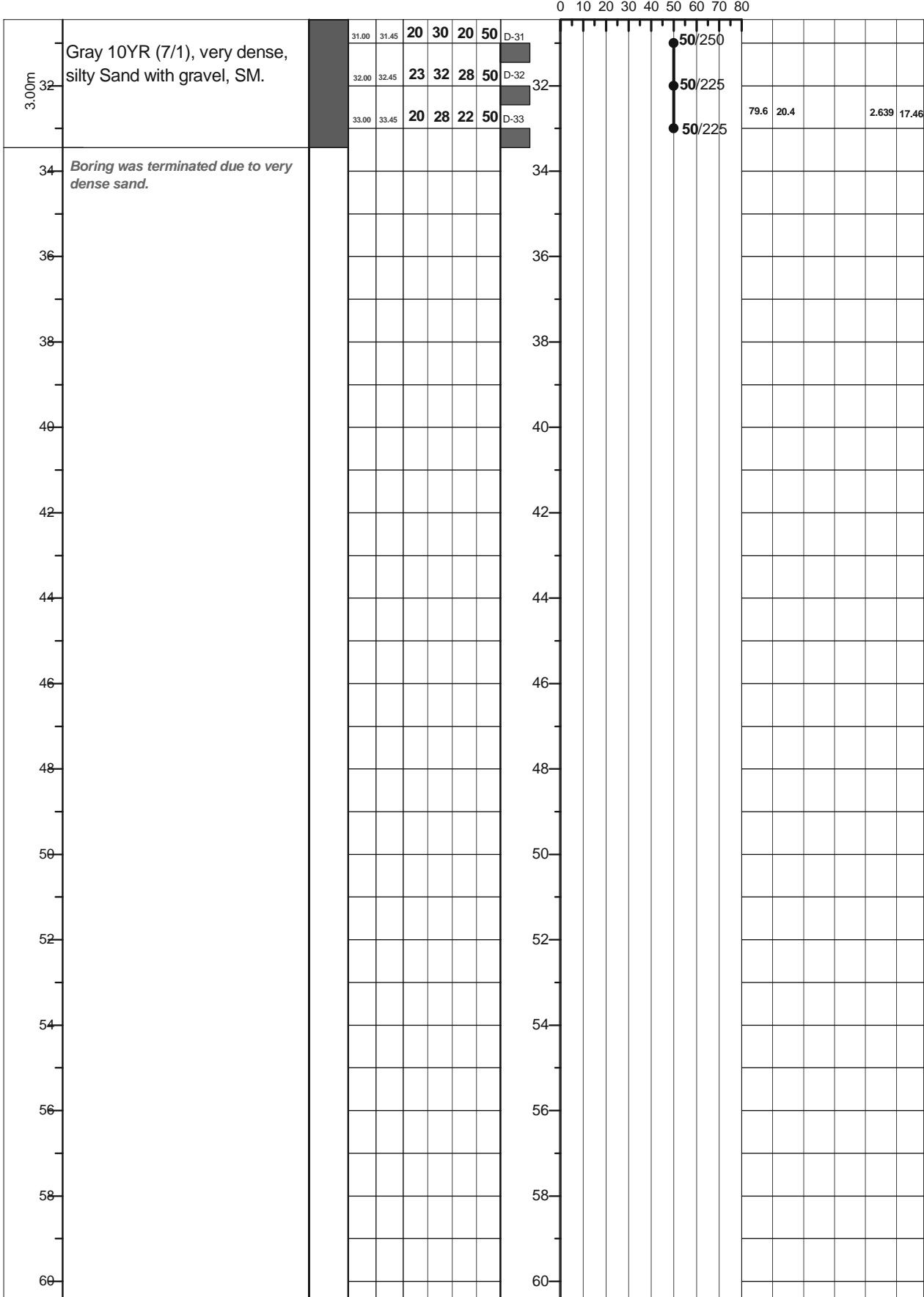
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



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

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

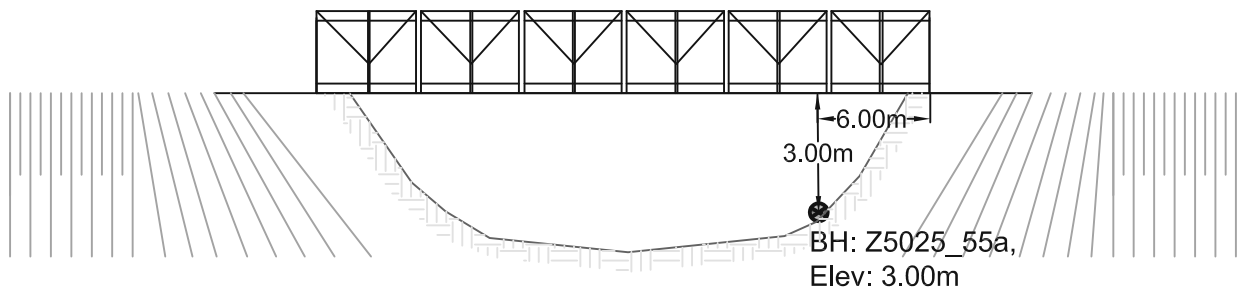
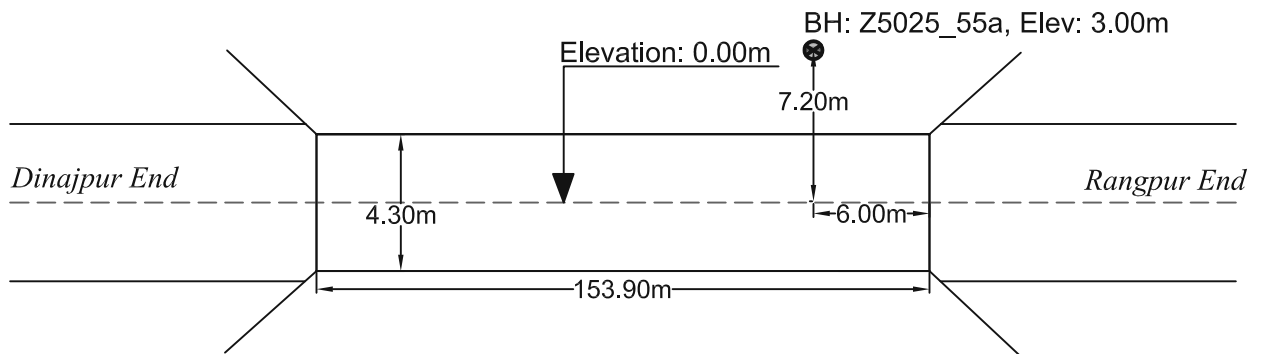
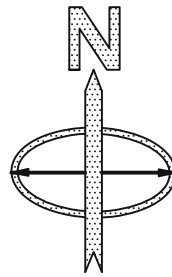


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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

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

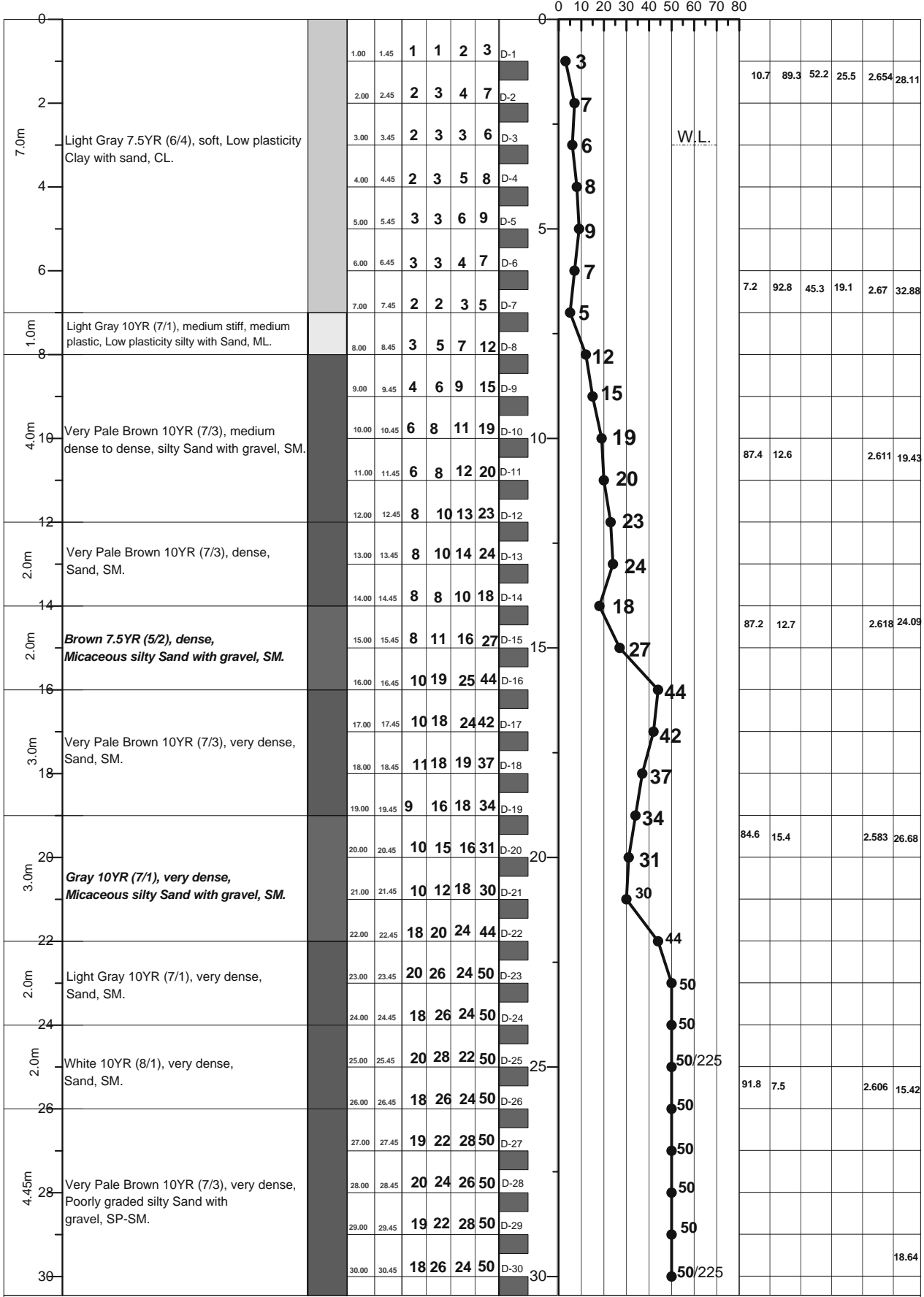
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 48  
BRIDGE ID: Z5025\_55a  
LATITUDE: 25°39'08.493" LONGITUDE: 88°45'39.608"  
CHAINAGE: 54.359



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

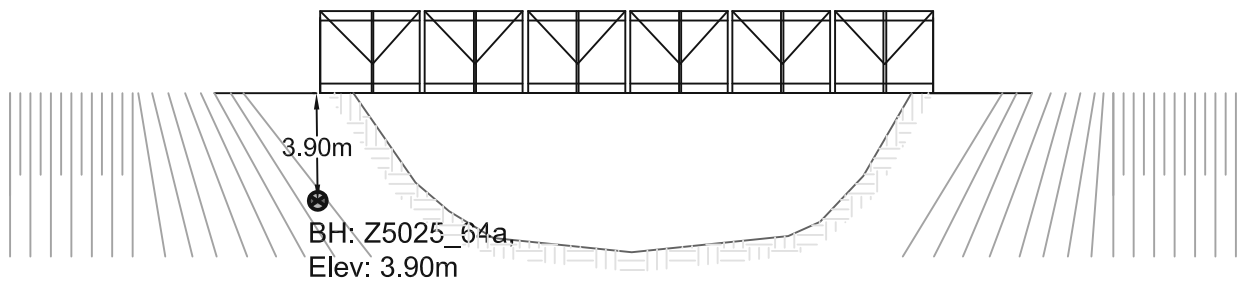
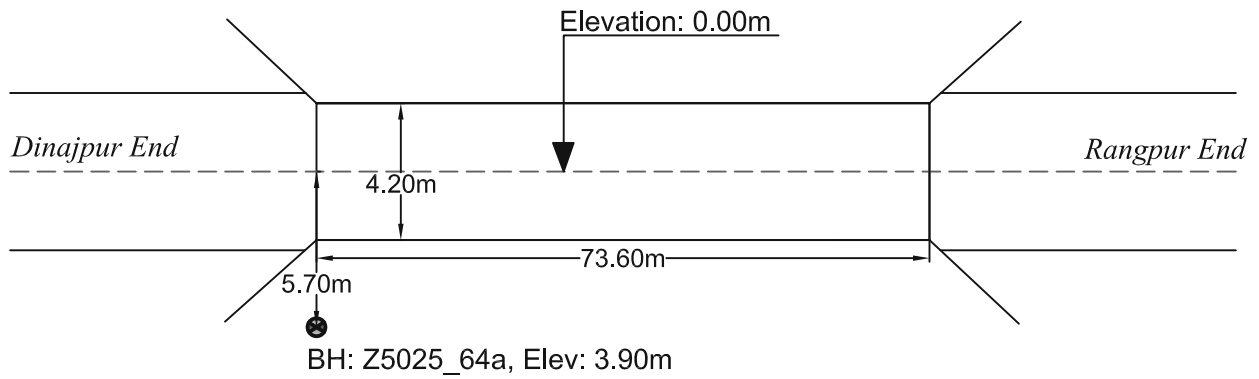
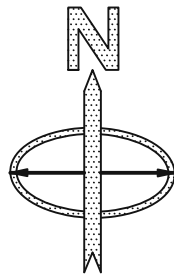
**CLIENT: Oriental Consultants Company Limited.**

**RANK: 49**

**BRIDGE ID: Z5025\_64a**

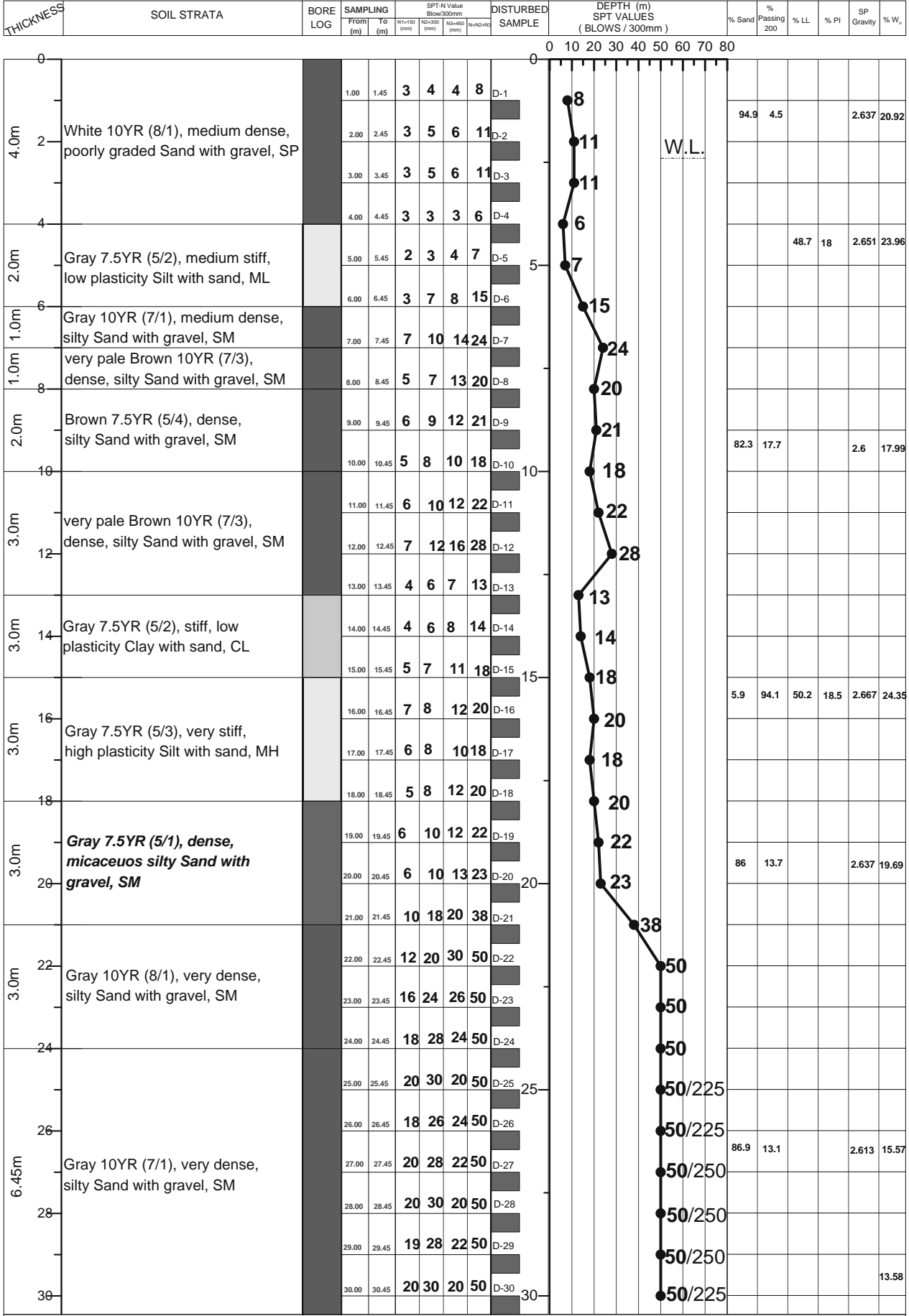
**LATITUDE: 25°38'20.874" LONGITUDE:88°40'13.865"**

**CHAINAGE: 63.739**



**PROSOIL FOUNDATION CONSULTANT**

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

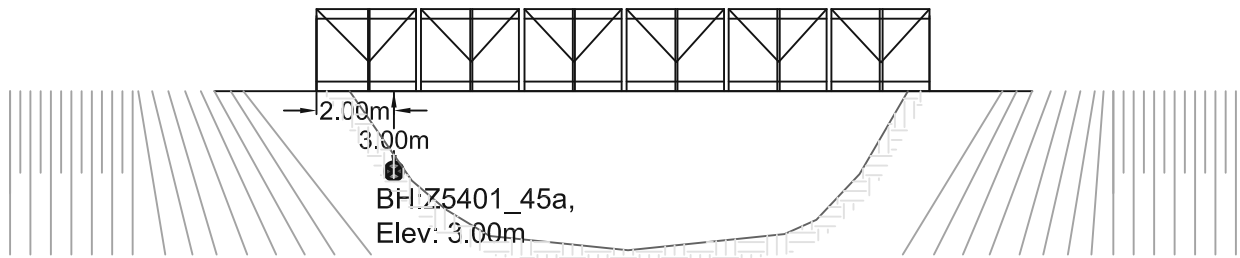
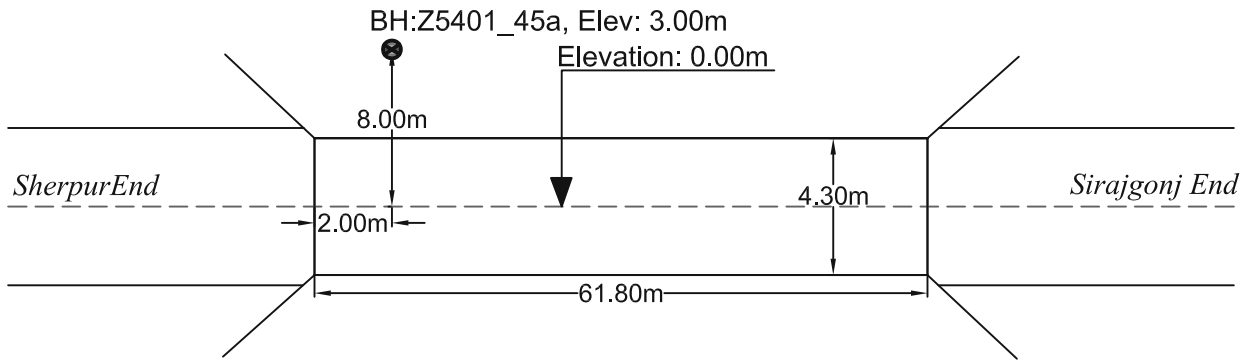
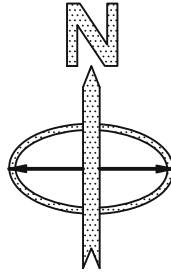


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

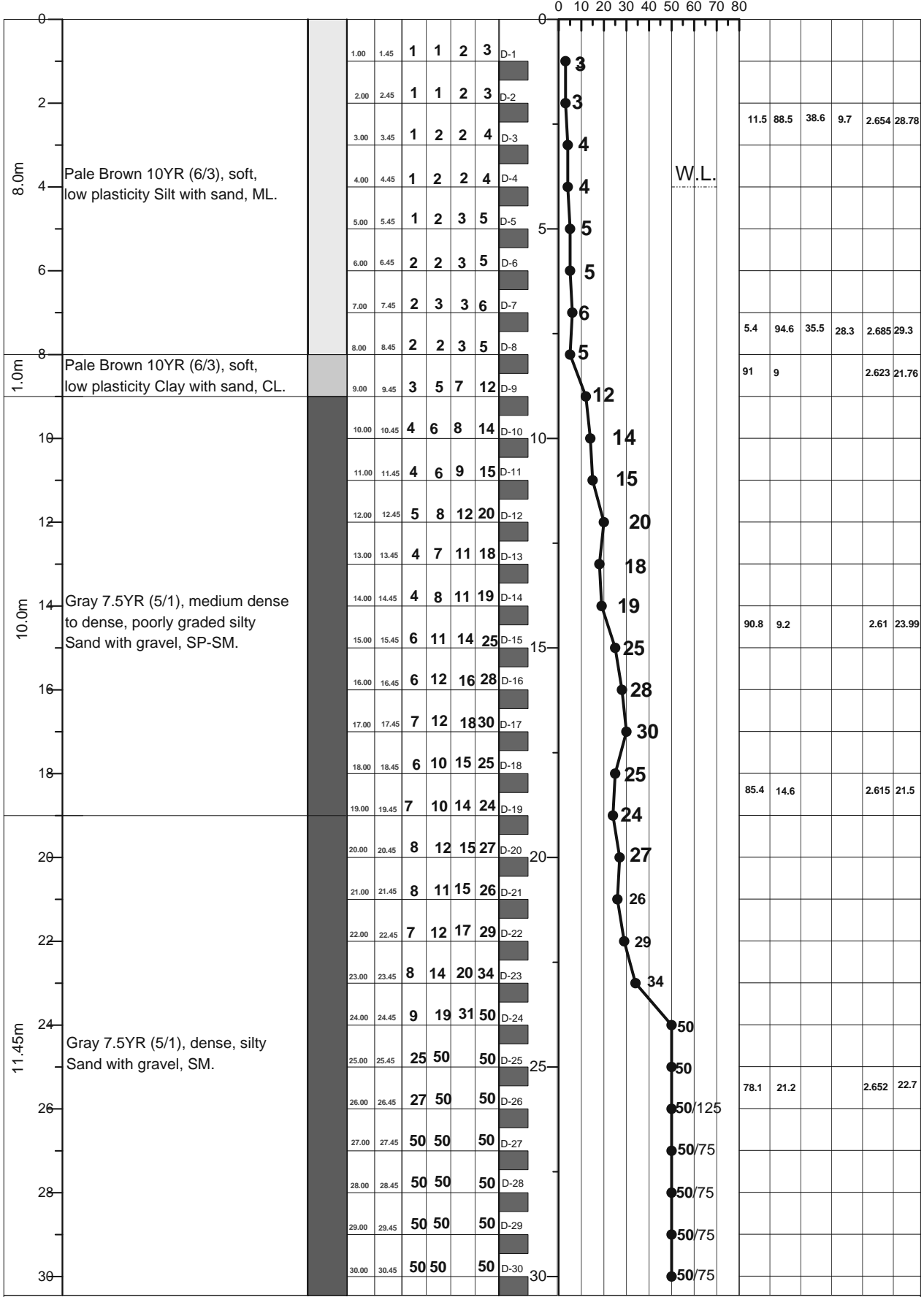
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 50  
BRIDGE ID: Z5401\_45a  
LATITUDE: 24°40'23.002" LONGITUDE: 89°30'58.126"  
CHAINAGE: 44.585



PROSOIL FOUNDATION CONSULTANT

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

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

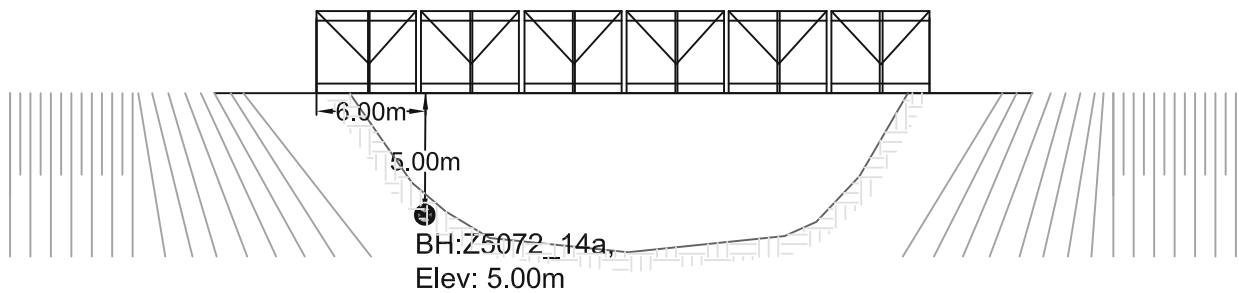
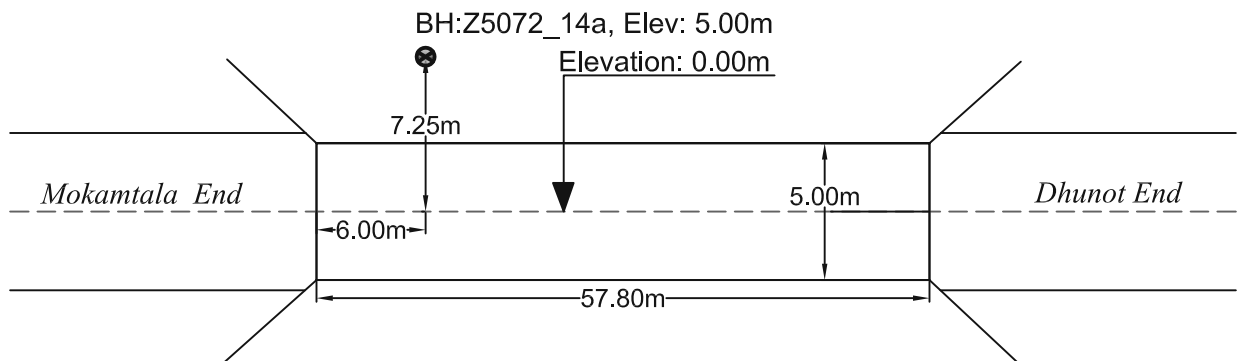
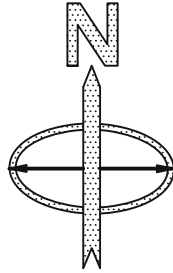


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> 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



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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0 - 2.0m	Grayish Brown 10YR (6/2), loose, silty Sand with gravel, SM		1.00	1.45	2	3	3	6	D-1							
2.0 - 2.0m			2.00	2.45	1	2	3	5	D-2							
2.0 - 3.0m	Gray 7.5YR (5/1), loose, silty Sand with gravel, SM		3.00	3.45	3	2	1	3	D-3							
3.0 - 4.0m	Gray 7.5YR (5/1), soft, silty Clay, CL		4.00	4.45	1	2	3	5	D-4							
4.0 - 6.0m	Gray 7.5YR (5/1), loose, silty Sand with gravel, SM		5.00	5.45	2	2	3	5	D-5							
6.0 - 6.0m			6.00	6.45	2	3	4	7	D-6							
6.0 - 7.0m	Gray 7.5YR (5/1), medium dense, low plasticity Silt with sand, ML		7.00	7.45	2	3	6	9	D-7							
7.0 - 8.0m			8.00	8.45	3	4	7	11	D-8							
8.0 - 9.0m	Gray 7.5YR (5/1), medium dense to dense, silty Sand with gravel, SM		9.00	9.45	3	4	11	15	D-9							
9.0 - 10.0m			10.00	10.45	7	10	13	23	D-10							
10.0 - 11.0m			11.00	11.45	8	11	15	26	D-11							
11.0 - 12.0m			12.00	12.45	7	11	14	25	D-12							
12.0 - 13.0m	Gray 7.5YR (5/1), dense, poorly graded silty Sand with gravel, SP-SM		13.00	13.45	6	10	13	23	D-13							
13.0 - 14.0m			14.00	14.45	7	12	15	27	D-14							
14.0 - 15.0m			15.00	15.45	4	7	14	21	D-15							
15.0 - 16.0m	Gray 7.5YR (5/1), dense, poorly graded silty Sand with gravel, SP-SM		16.00	16.45	6	12	16	28	D-16							
16.0 - 17.0m			17.00	17.45	7	12	15	27	D-17							
17.0 - 18.0m			18.00	18.45	8	15	19	34	D-18							
18.0 - 19.0m			19.00	19.45	8	16	21	37	D-19							
19.0 - 20.0m	Gray 7.5YR (5/1), medium dense, poorly graded silty Sand with gravel, SP-SM		20.00	20.45	9	14	23	37	D-20							
20.0 - 21.0m			21.00	21.45	8	12	18	30	D-21							
21.0 - 22.0m			22.00	22.45	9	14	19	33	D-22							
22.0 - 23.0m			23.00	23.45	15	27	23	50	D-23							
23.0 - 24.0m			24.00	24.45	23	50	50	50	D-24							
24.0 - 25.0m	light yellowish Brown 10YR (6/4), very dense, silty Sand with gravel, SM		25.00	25.45	27	50	50	50	D-25							
25.0 - 26.0m			26.00	26.45	28	50	50	50	D-26							
26.0 - 27.0m	light yellowish Brown 10YR (6/2), very dense, silty Sand with gravel, SM		27.00	27.45	33	50	50	50	D-27							
27.0 - 28.0m			28.00	28.45	40	50	50	50	D-28							
28.0 - 29.0m	Gray, Sedimentary State, hard compact layered Shale, binding element Sand		29.00	29.45	45	50	50	50	D-29							
29.0 - 30.0m	light yellowish Brown Sedimentary State, hard compact layered Shale, binding element Sand		30.00	30.45	47	50	50	50	D-30							

0 10 20 30 40 50 60 70 80

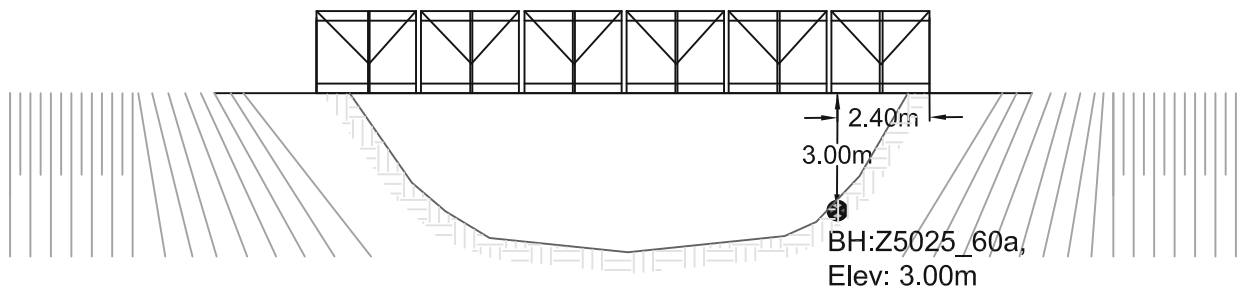
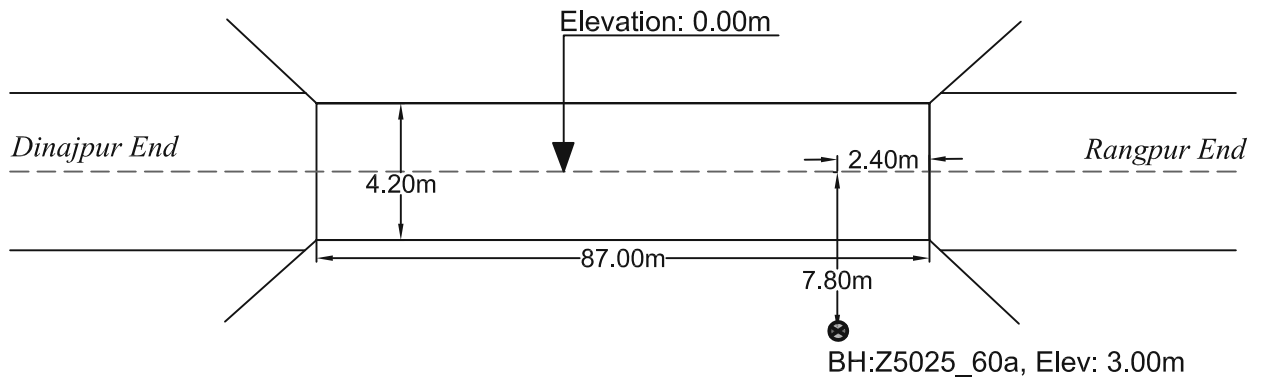
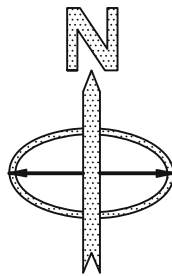
W.L.

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

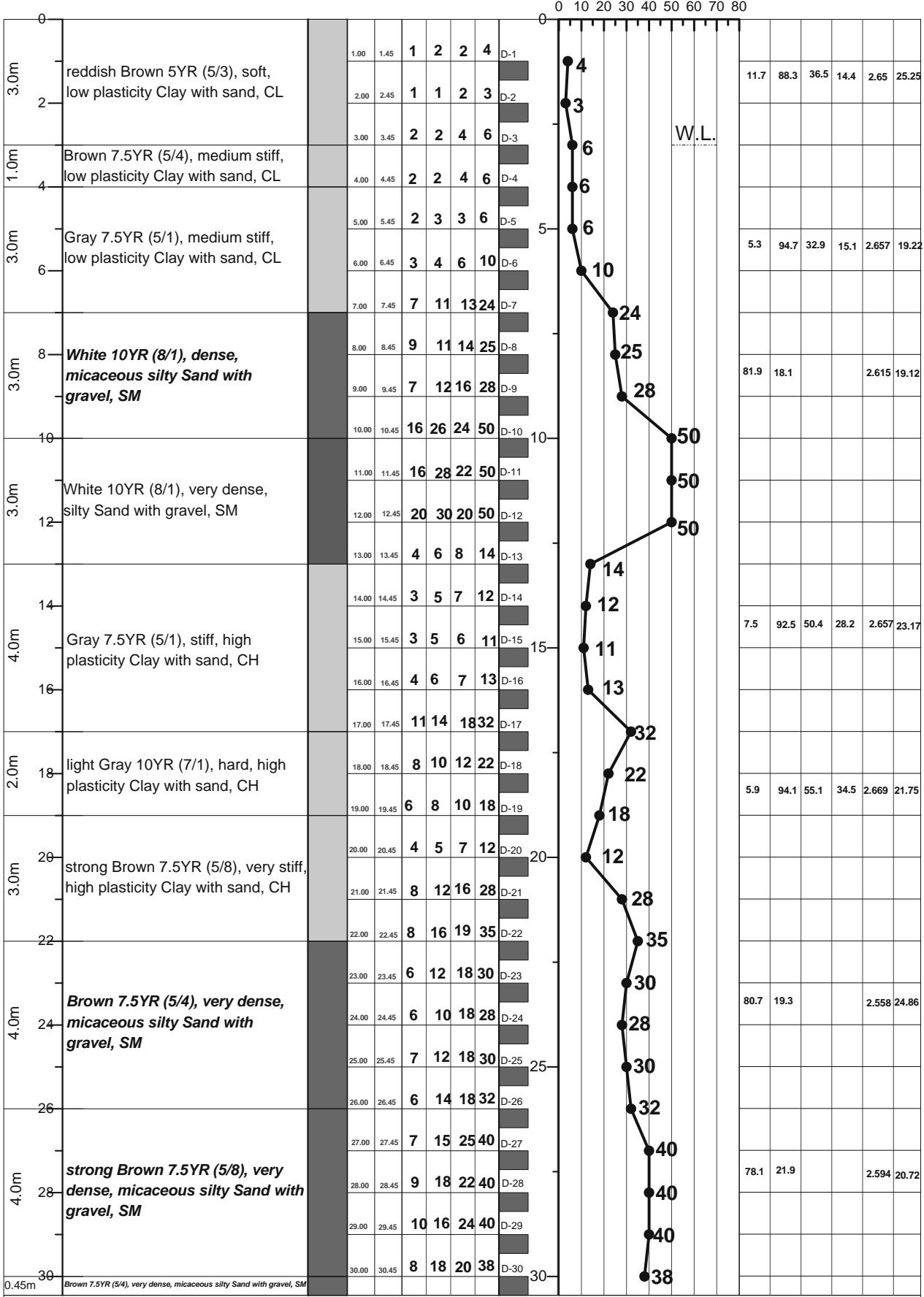
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 52  
BRIDGE ID: Z5025\_60a  
LATITUDE: 25°38'35.58" LONGITUDE: 88°42'46.39"  
CHAINAGE: 59.364



PROSOIL FOUNDATION CONSULTANT

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

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



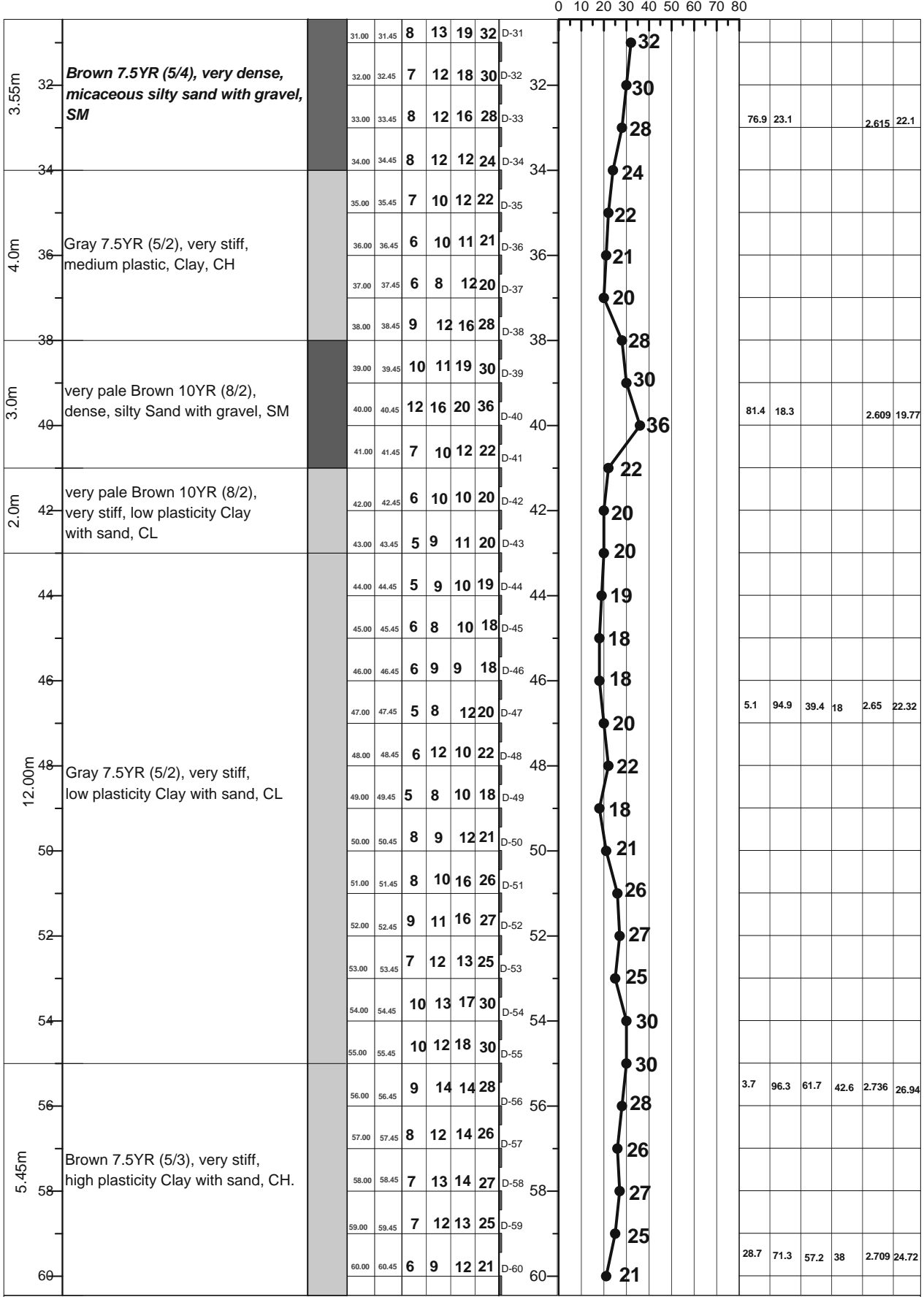
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

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

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



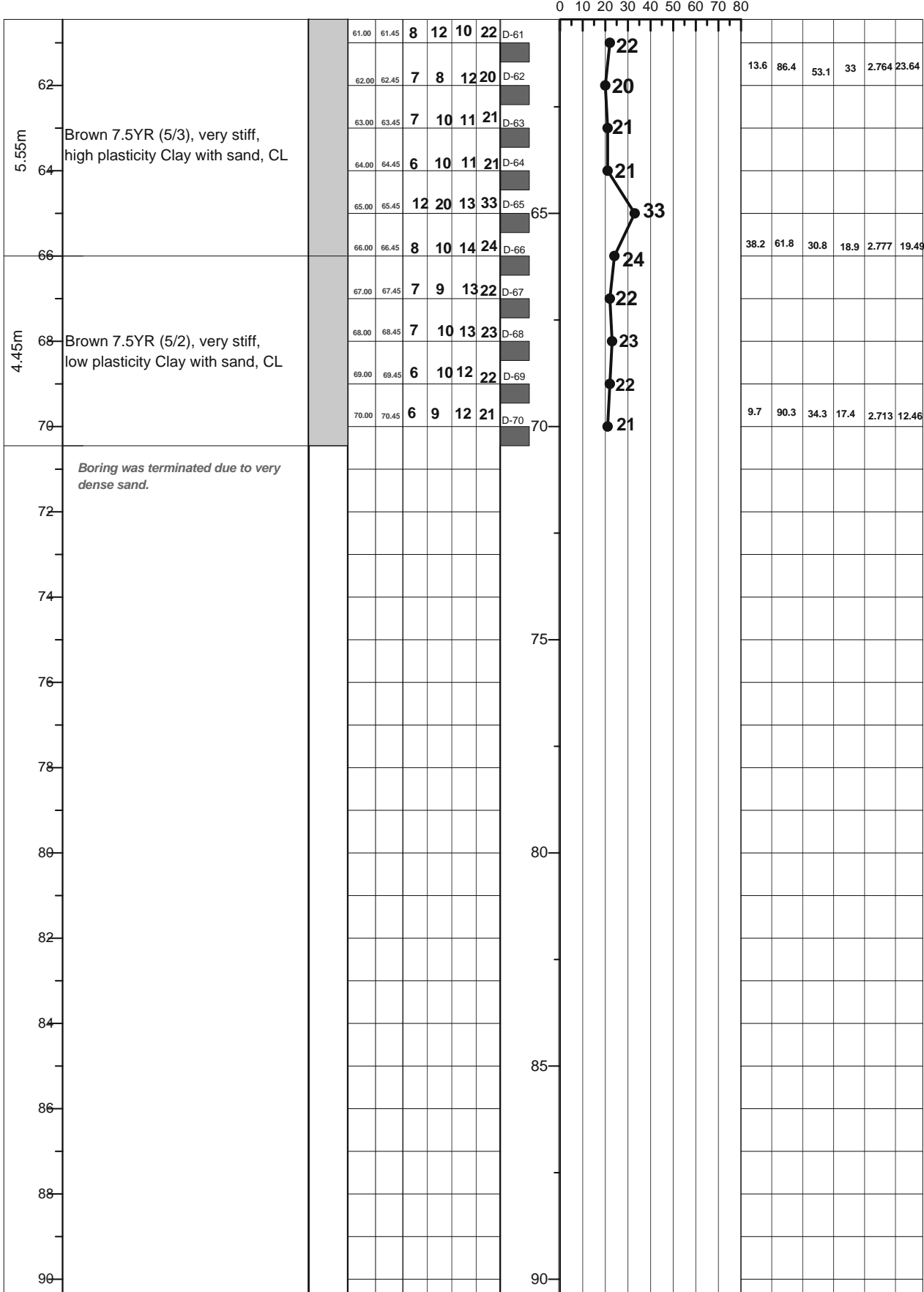
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED    50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>v</sub>
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



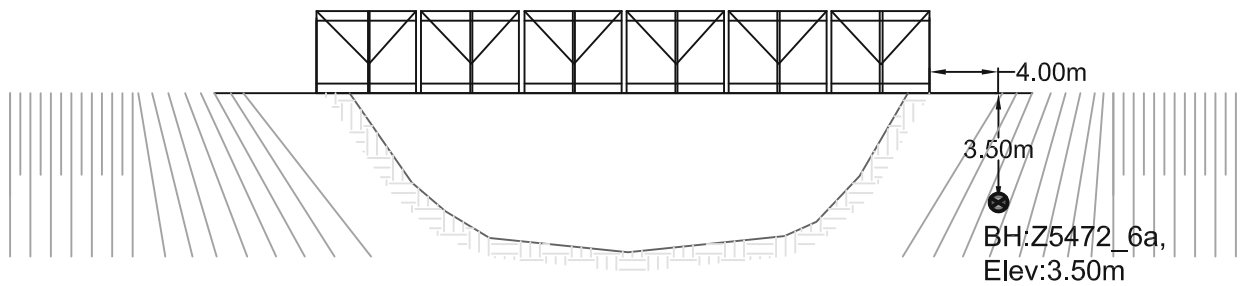
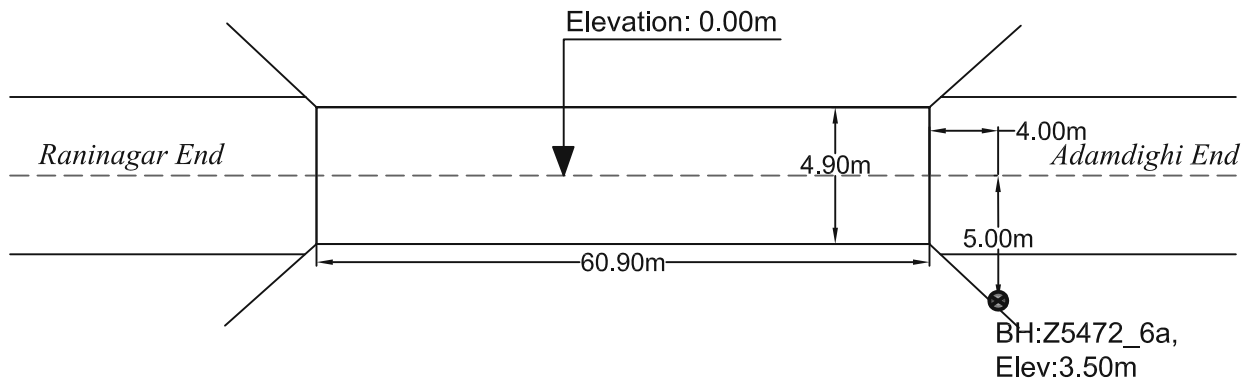
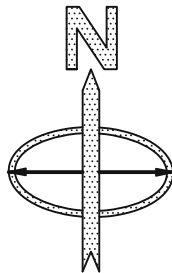
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

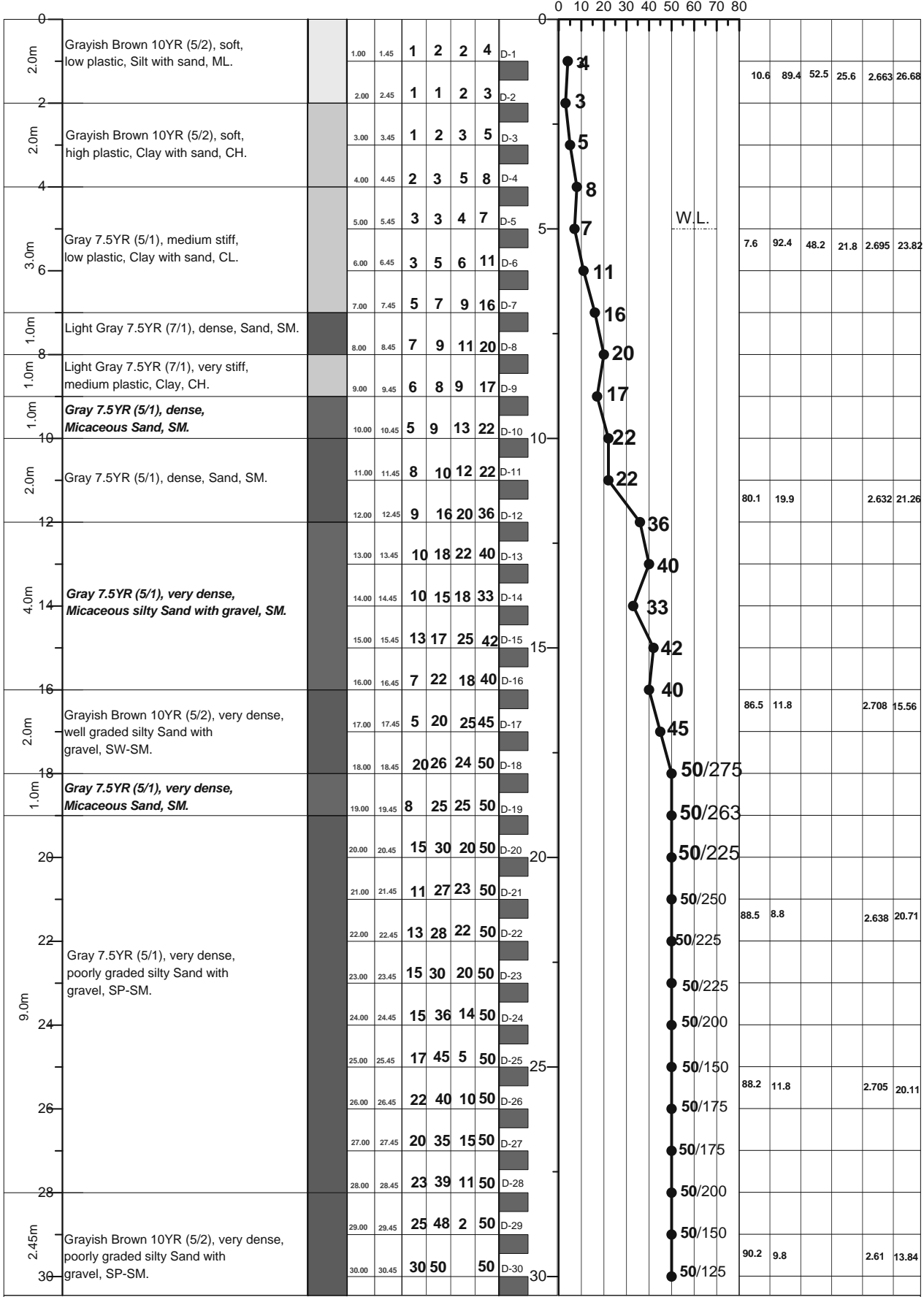
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 53  
BRIDGE ID: Z5472\_6a  
LATITUDE: 24°47'9.847" LONGITUDE: 89°0'30.036"  
CHAINAGE: 6.28



PROSOIL FOUNDATION CONSULTANT

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

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

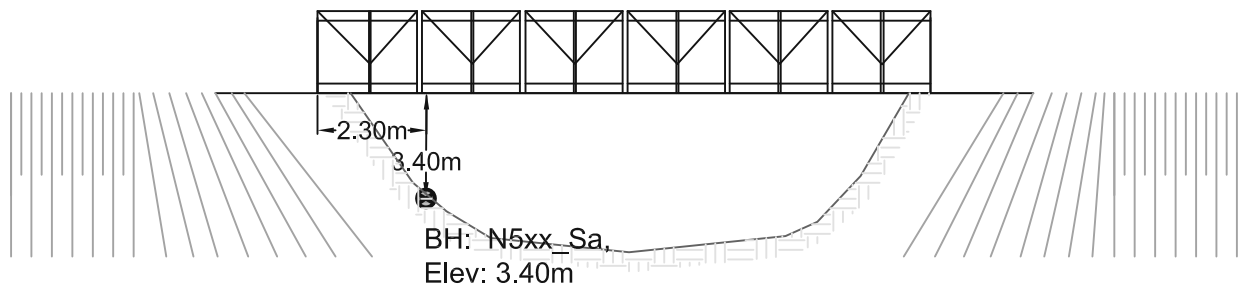
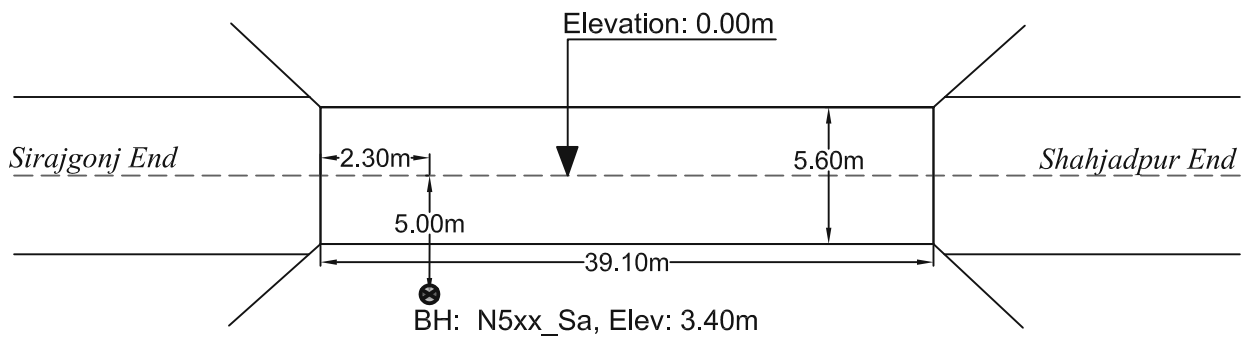
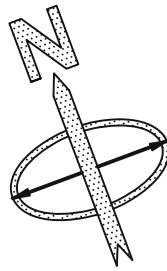


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> 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



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

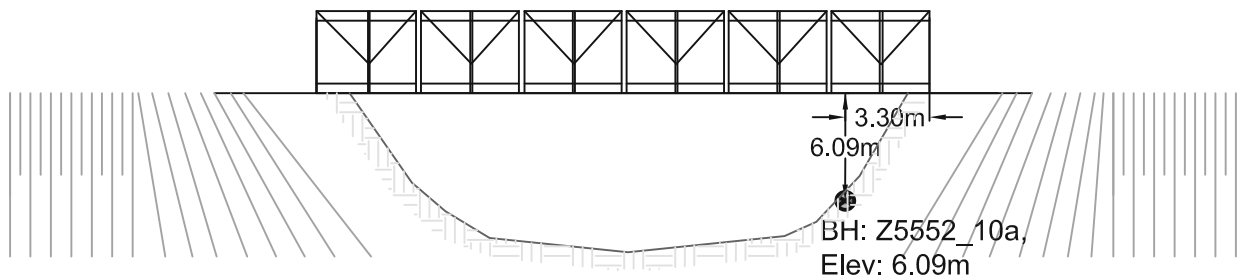
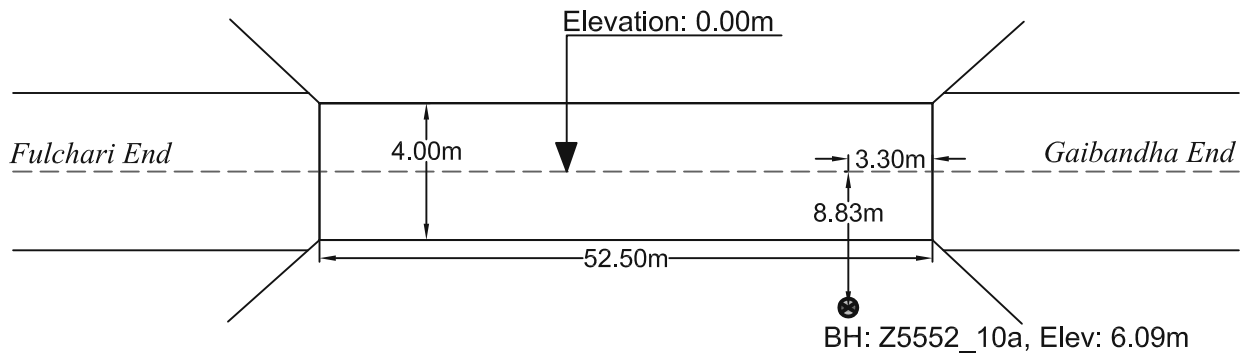
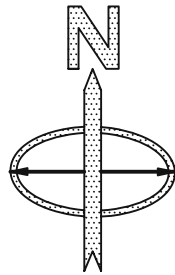
THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-750 (mm)
0-2.0m	filled sand with rubbish		1.00	1.45	1	1	1	2	D-1							
2-2.0m	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							
2-4.0m	very pale Brown 10YR (8/2), medium dense, poorly graded silty Sand with gravel, SP-SM		3.00	3.45	2	3	4	7	D-3		94.9	5.1		2.616	24.29	
4-4.0m			4.00	4.45	1	1	1	2	D-4							
4-6.0m	Gray 10YR (8/2), very loose, high plasticity Clay with sand, CH		5.00	5.45	1	2	2	4	D-5							
6-6.0m	White 10YR (8/1), medium dense, silty Sand with gravel, SM		6.00	6.45	3	5	6	11	D-6		4.5	95.5	75	49.4	2.653	29.75
6-7.0m			7.00	7.45	3	4	5	9	D-7							
7-8.0m	very pale Brown 10YR (8/2), medium dense, poorly graded silty Sand with gravel, SP-SM		8.00	8.45	4	5	7	12	D-8							
8-9.0m			9.00	9.45	3	6	8	14	D-9							
9-10.0m			10.00	10.45	3	7	9	16	D-10							
10-11.0m			11.00	11.45	4	8	10	18	D-11		93.3	6.7		2.67	18.2	
11-12.0m			12.00	12.45	4	9	11	20	D-12							
12-13.0m			13.00	13.45	4	8	10	18	D-13							
13-14.0m		14.00	14.45	4	8	11	19	D-14								
14-15.0m		15.00	15.45	3	4	7	11	D-15								
15-16.0m	Gray 10YR (6/1), medium dense, silty Sand with gravel, SM		16.00	16.45	5	7	10	17	D-16							
16-17.0m	Gray 7.5YR (6/1), dense, silty Sand with gravel, SM		17.00	17.45	5	8	10	18	D-17		76.2	23.6		2.627	18.76	
17-18.0m			18.00	18.45	16	27	23	50	D-18							
18-19.0m	Gray 7.5YR (6/1), very dense, poorly graded silty Sand with gravel, SP-SM		19.00	19.45	15	24	26	50	D-19							
19-20.0m			20.00	20.45	10	22	28	50	D-20							
20-21.0m			21.00	21.45	13	25	25	50	D-21							
21-22.0m			22.00	22.45	15	28	22	50	D-22		90.3	9.7		2.606	15.24	
22-23.0m			23.00	23.45	16	24	26	50	D-23							
23-24.0m			24.00	24.45	12	23	27	50	D-24							
24-25.0m			25.00	25.45	13	30	20	50	D-25							
25-26.0m			26.00	26.45	14	29	21	50	D-26							
26-27.0m			27.00	27.45	16	32	18	50	D-27		88.9	11		2.609	15.13	
27-28.0m		Gray 10YR (6/1), very dense, poorly graded silty Sand with gravel, SP-SM		28.00	28.45	20	38	12	50	D-28						
28-29.0m			29.00	29.45	13	33	17	50	D-29							
29-30.0m			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

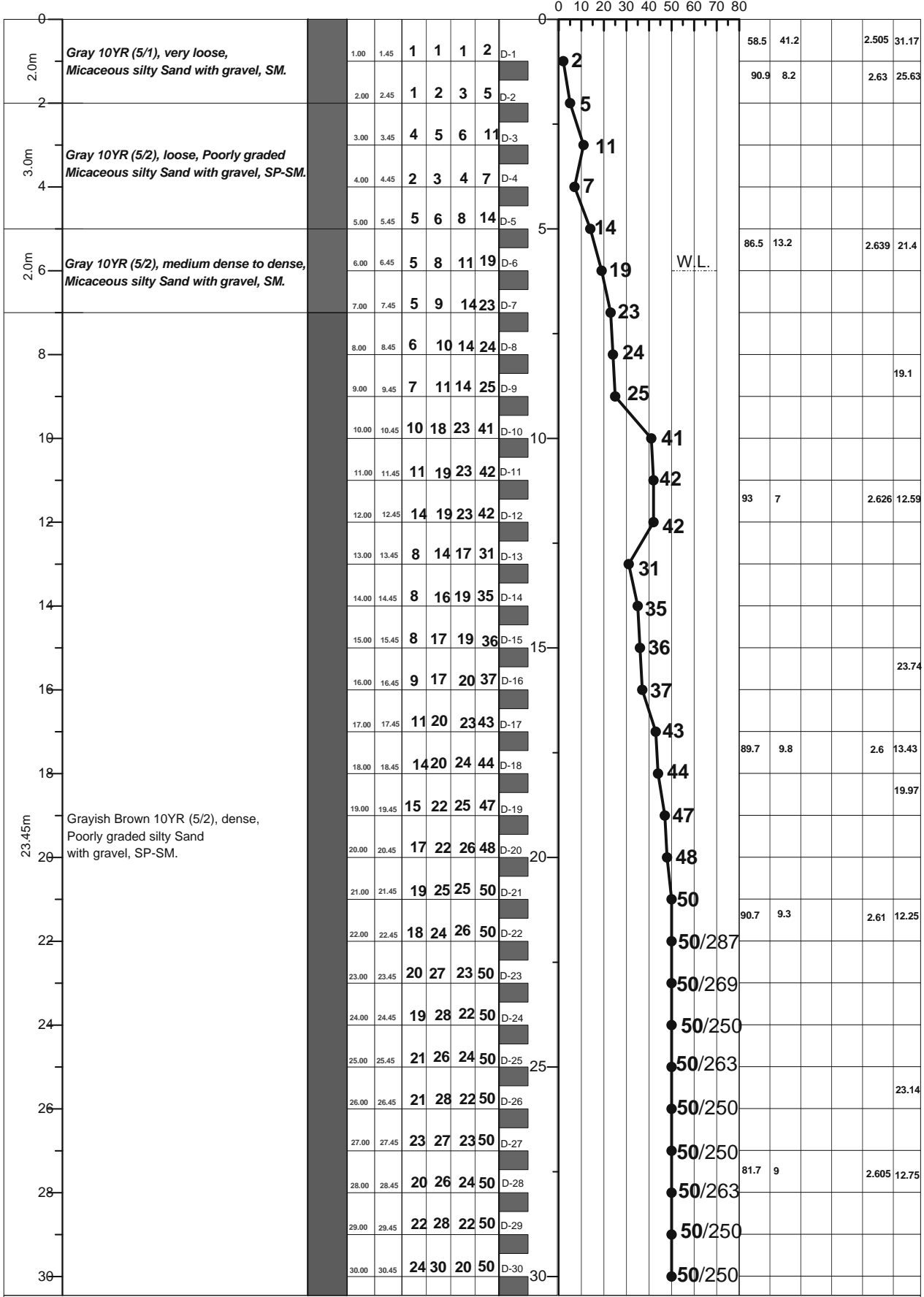
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 55  
BRIDGE ID: Z5552\_10a  
LATITUDE: 25°14'34.830" LONGITUDE: 89°33'30.305"  
CHAINAGE: 10.295



PROSOIL FOUNDATION CONSULTANT

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

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

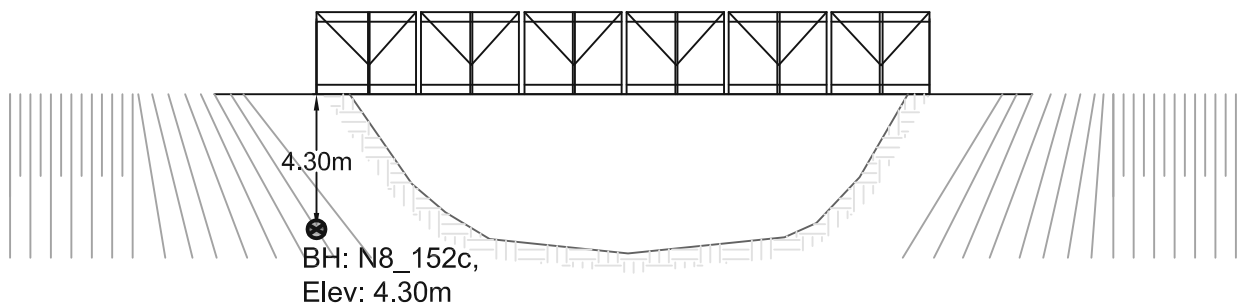
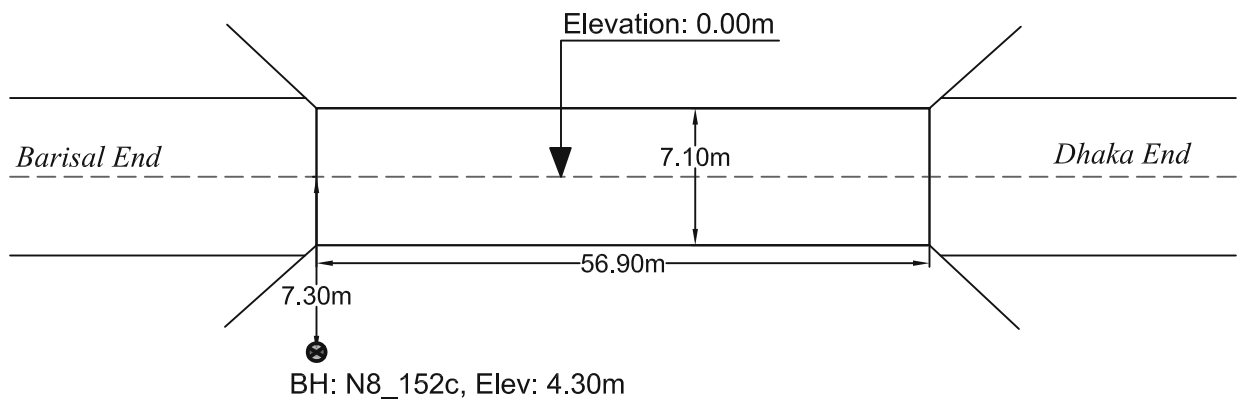
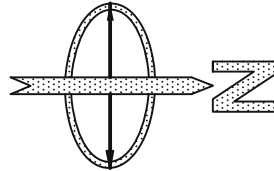


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> 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

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (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						
2.0m - 2.0m			2.00	2.45	2	2	2	4	D-2	4						
2.0m - 3.0m	Gray 10YR (6/1), loose, clay silty Sand with gravel, SM		3.00	3.45	2	2	3	5	D-3	5						
3.0m - 4.0m	very pale Brown 10YR (8/1), loose, silty Sand with gravel, SM		4.00	4.45	3	2	2	4	D-4	4	81.4	18.6			2.663	31.21
4.0m - 5.0m	Gray 7.5YR (6/1), loose, silty Sand with gravel, SM		5.00	5.45	4	3	5	8	D-5	8						
5.0m - 6.0m	<b>Gray 7.5YR (6/1), medium dense, micaceous silty Sand with gravel, SM</b>		6.00	6.45	6	4	3	7	D-6	7						
6.0m - 7.0m			7.00	7.45	2	1	1	2	D-7	2						
7.0m - 8.0m			8.00	8.45	1	1	2	3	D-8	3						
8.0m - 9.0m	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
9.0m - 10.0m			10.00	10.45	1	2	3	5	D-10	5						
10.0m - 11.0m			11.00	11.45	2	2	3	5	D-11	5						
11.0m - 12.0m			12.00	12.45	2	2	4	6	D-12	6						
12.0m - 13.0m			13.00	13.45	3	4	6	10	D-13	10						
13.0m - 14.0m			14.00	14.45	3	5	7	12	D-14	12						
14.0m - 15.0m	Gray 7.5YR (6/1), loose, silty Sand with gravel, SM		15.00	15.45	3	3	5	8	D-15	8	77.8	22.2			2.659	27.67
15.0m - 16.0m			16.00	16.45	2	4	6	10	D-16	10						
16.0m - 17.0m			17.00	17.45	3	6	6	12	D-17	12						
17.0m - 18.0m			18.00	18.45	8	10	16	26	D-18	26						
18.0m - 19.0m			19.00	19.45	8	11	13	24	D-19	24						
19.0m - 20.0m			20.00	20.45	8	10	12	22	D-20	22						
20.0m - 21.0m			21.00	21.45	9	7	10	17	D-21	17	69.1	30.9			2.639	24.21
21.0m - 22.0m			22.00	22.45	7	8	11	19	D-22	19						
22.0m - 23.0m	Gray 10YR (6/1), dense, silty Sand with gravel, SM		23.00	23.45	6	7	10	17	D-23	17						
23.0m - 24.0m			24.00	24.45	5	7	9	16	D-24	16						
24.0m - 25.0m			25.00	25.45	5	6	8	14	D-25	14						
25.0m - 26.0m			26.00	26.45	5	7	10	17	D-26	17						
26.0m - 27.0m			27.00	27.45	5	6	11	17	D-27	17	57.5	42.5			2.663	24.54
27.0m - 28.0m			28.00	28.45	6	7	8	15	D-28	15						
28.0m - 29.0m	Gray 7.5YR (6/1), dense, silty Sand with gravel, SM		29.00	29.45	6	8	10	18	D-29	18						
29.0m - 30.0m			30.00	30.45	10	14	17	31	D-30	31						
30.0m - 30.45m	Gray 10YR (6/1), very dense, fine Sand, SM															

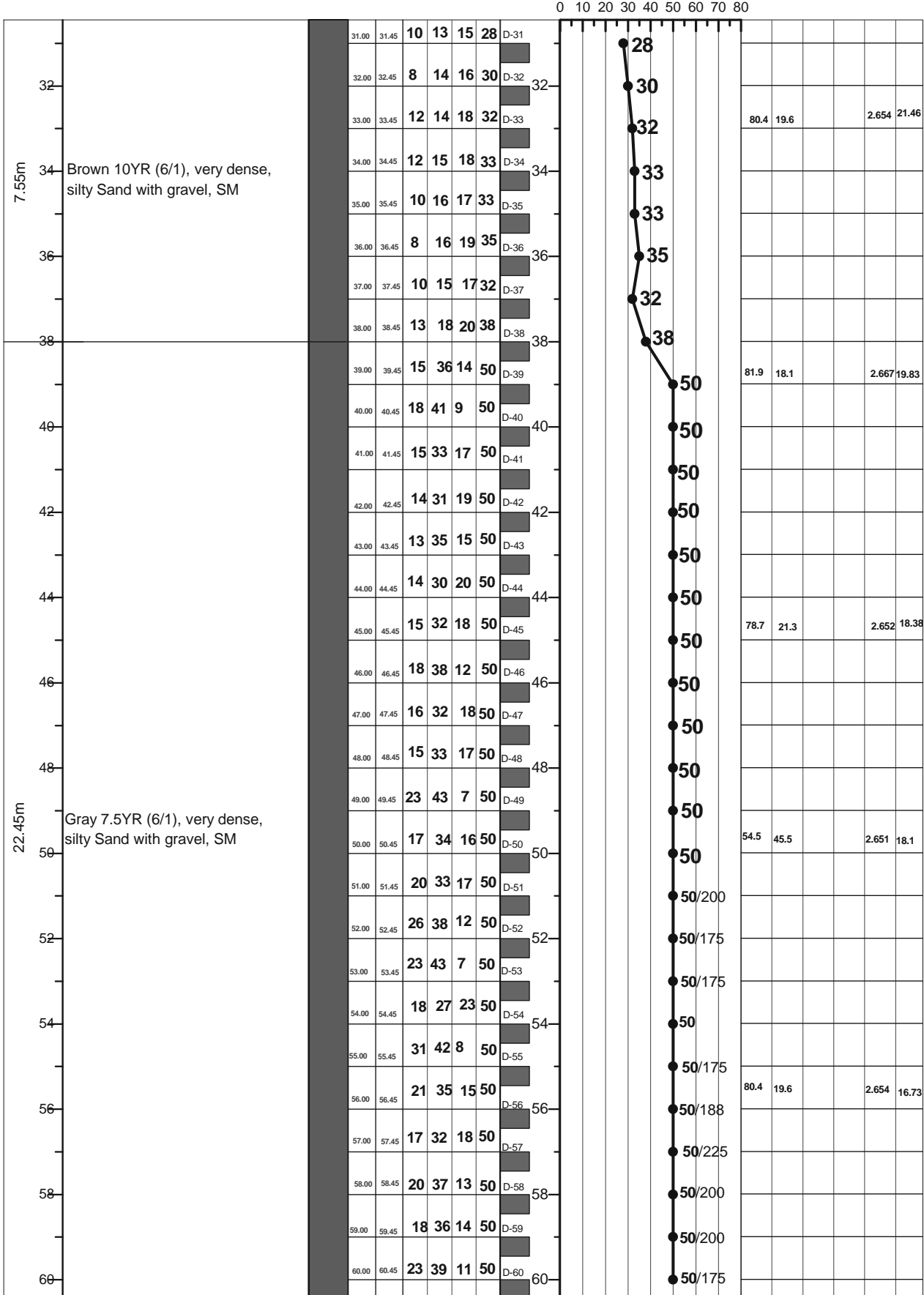
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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

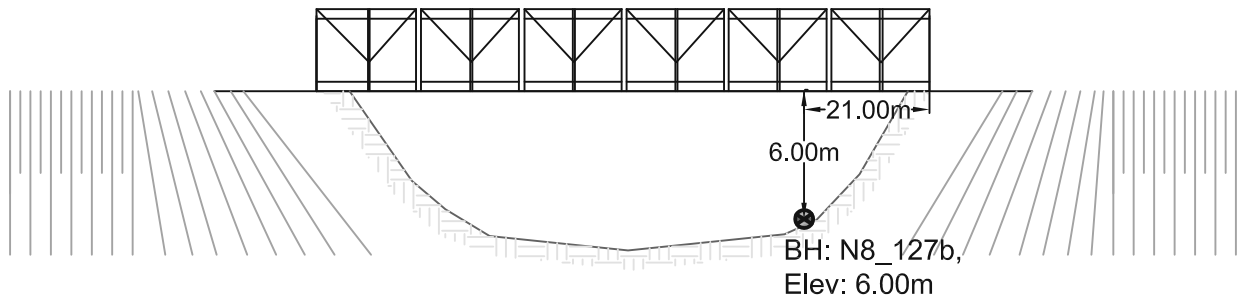
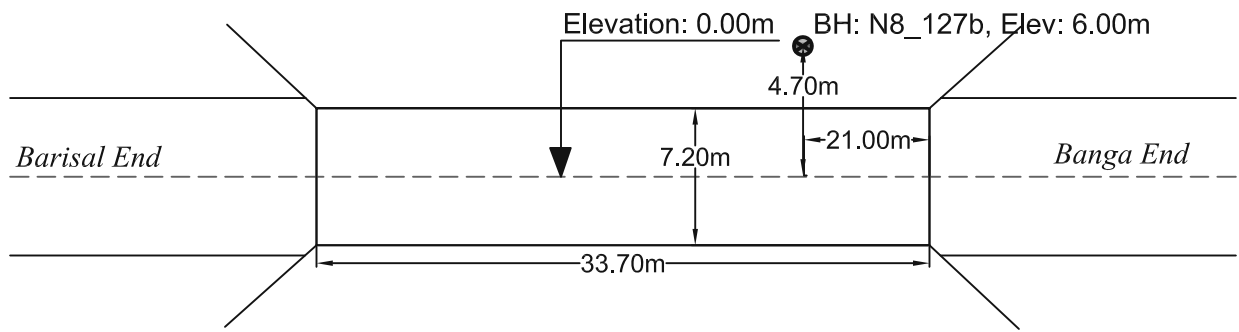
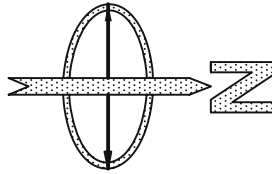


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

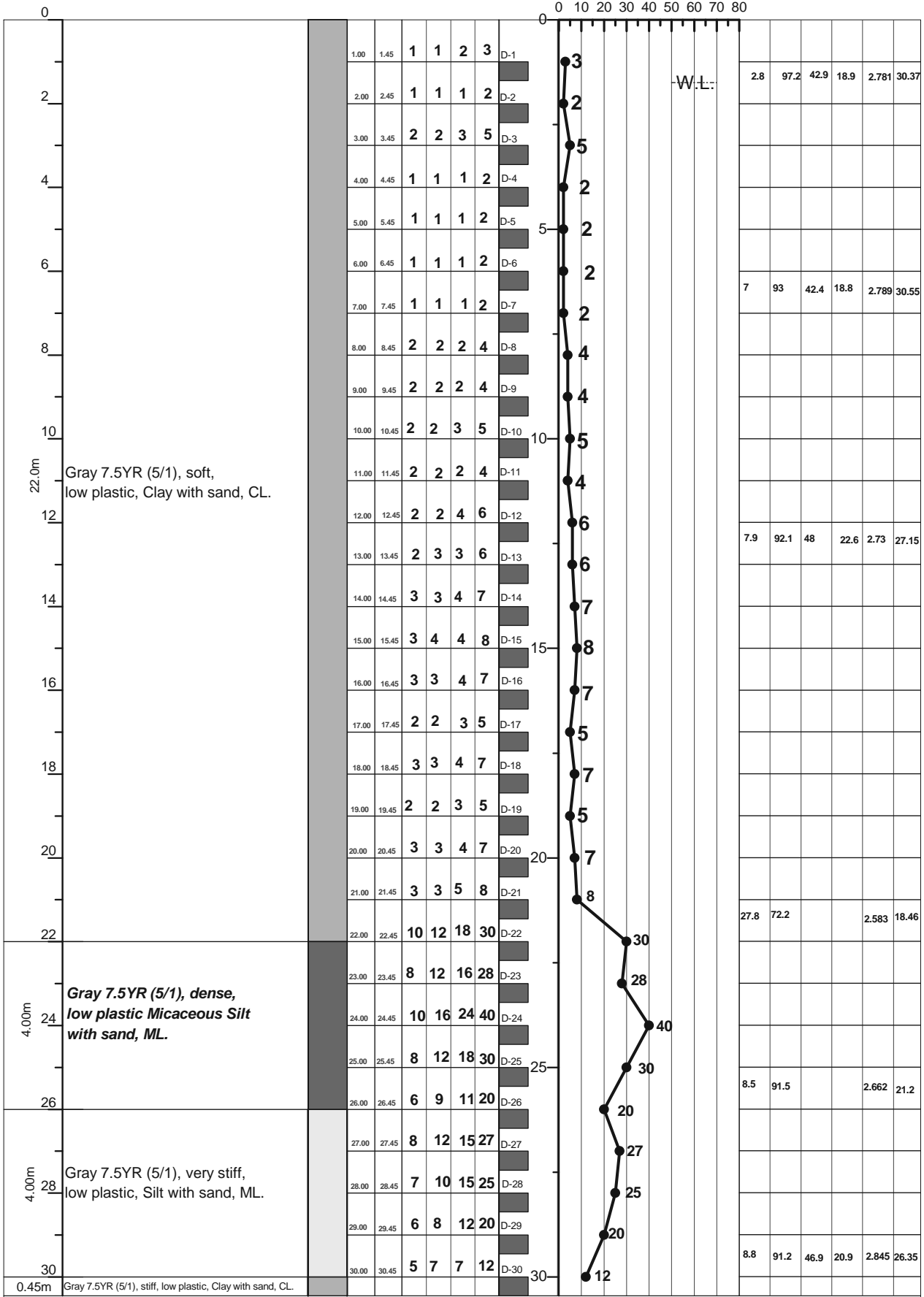
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 57  
BRIDGE ID: N8\_127b  
LATITUDE: 22°58'29.143" LONGITUDE: 90°13'20.172"  
CHAINAGE: 126.358



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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)**

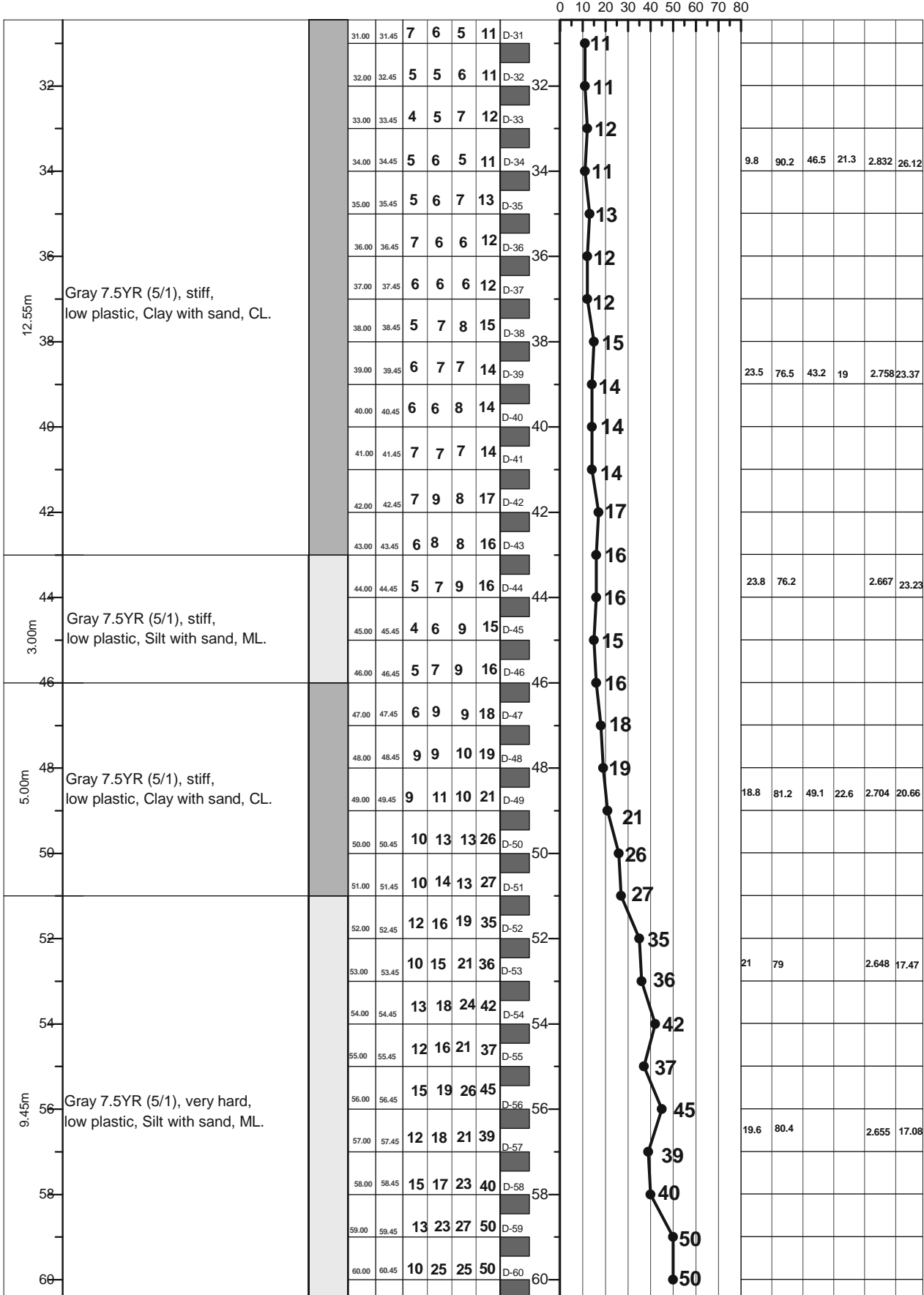
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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



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

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



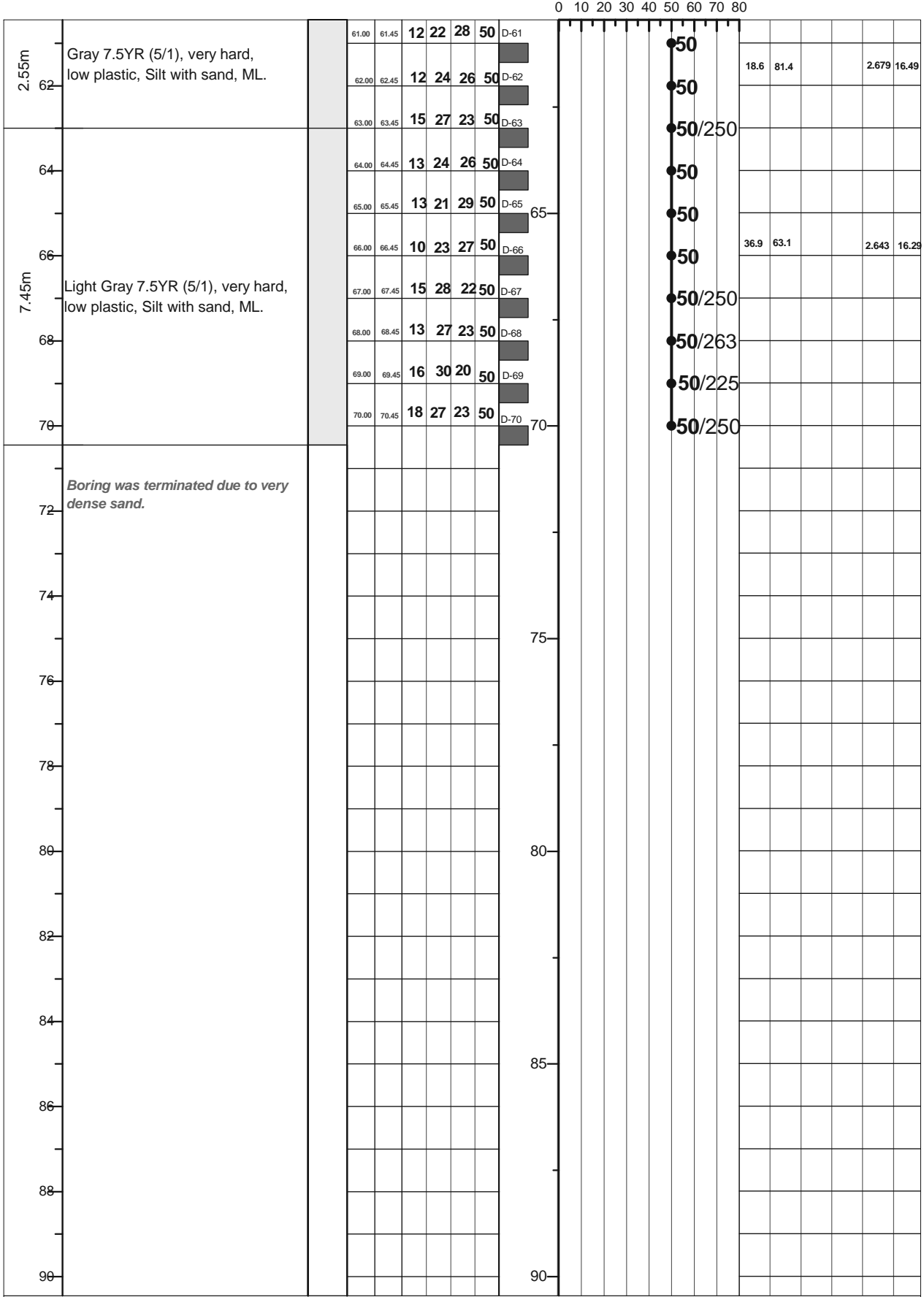
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>c</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

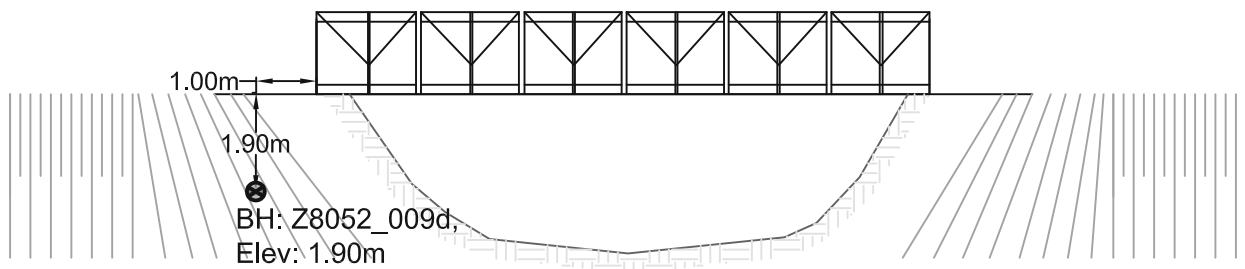
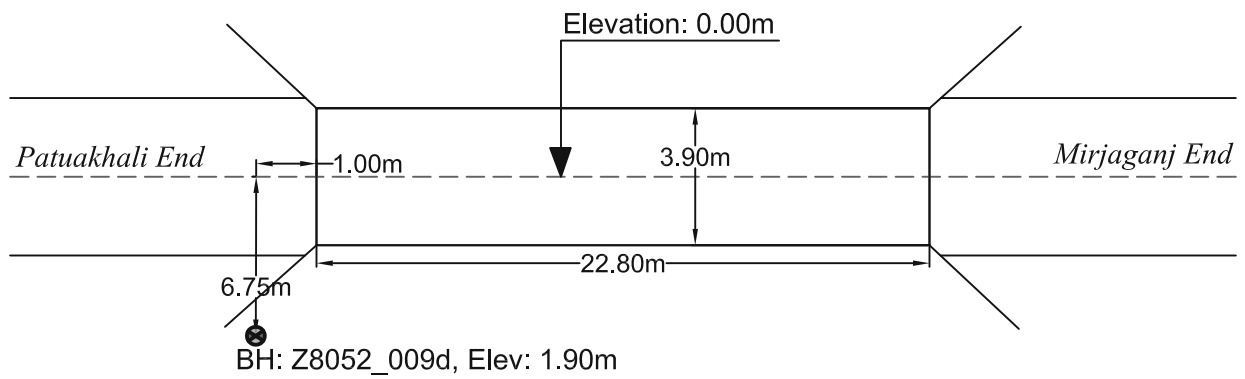
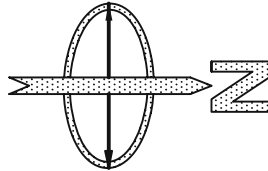
CLIENT: Oriental Consultants Company Limited.

RANK: 58

BRIDGE ID: Z8052\_009d

LATITUDE: 22°21'41.377" LONGITUDE: 90°14'8.925"

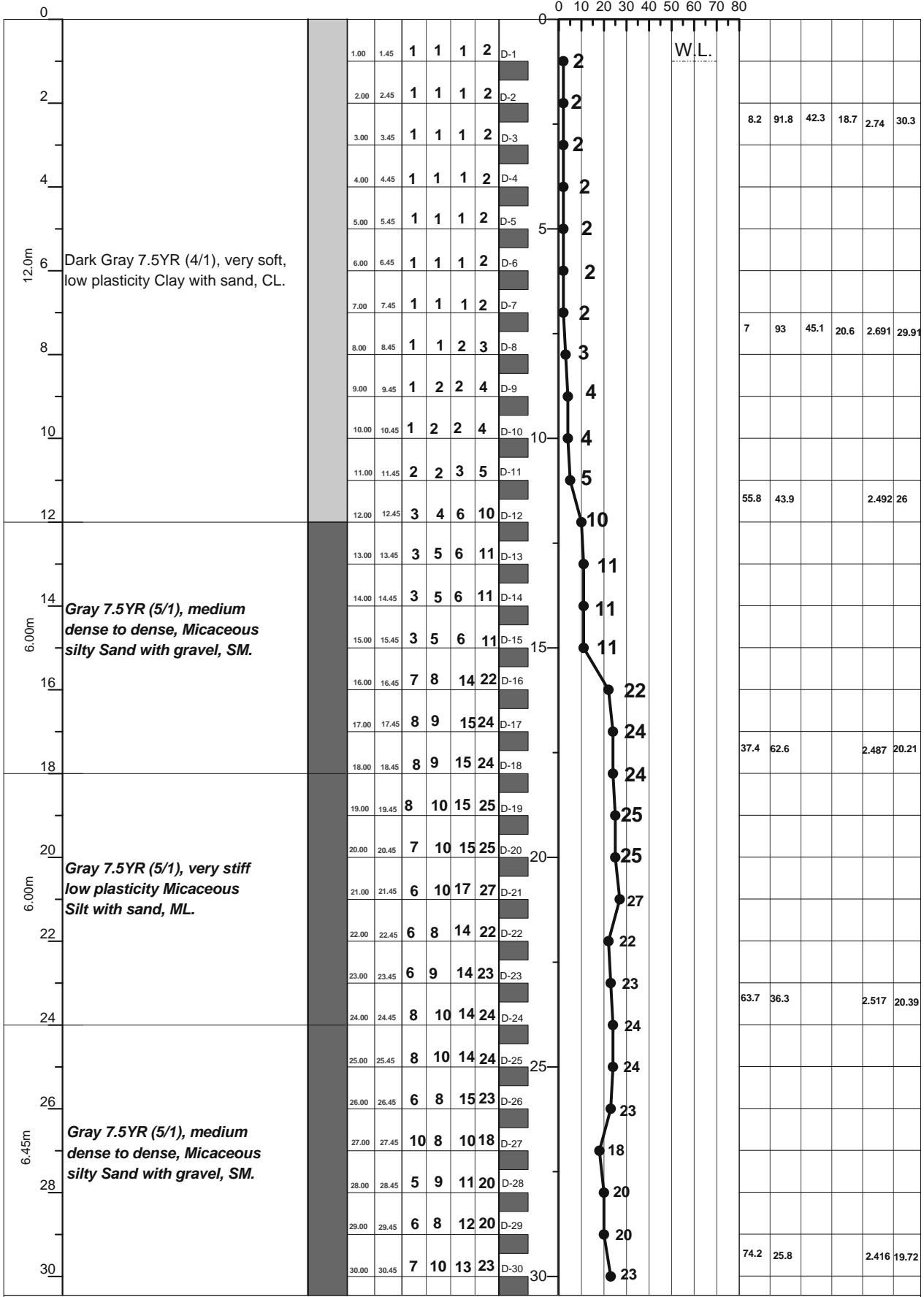
CHAINAGE: 9.88



PROSOIL FOUNDATION CONSULTANT

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

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

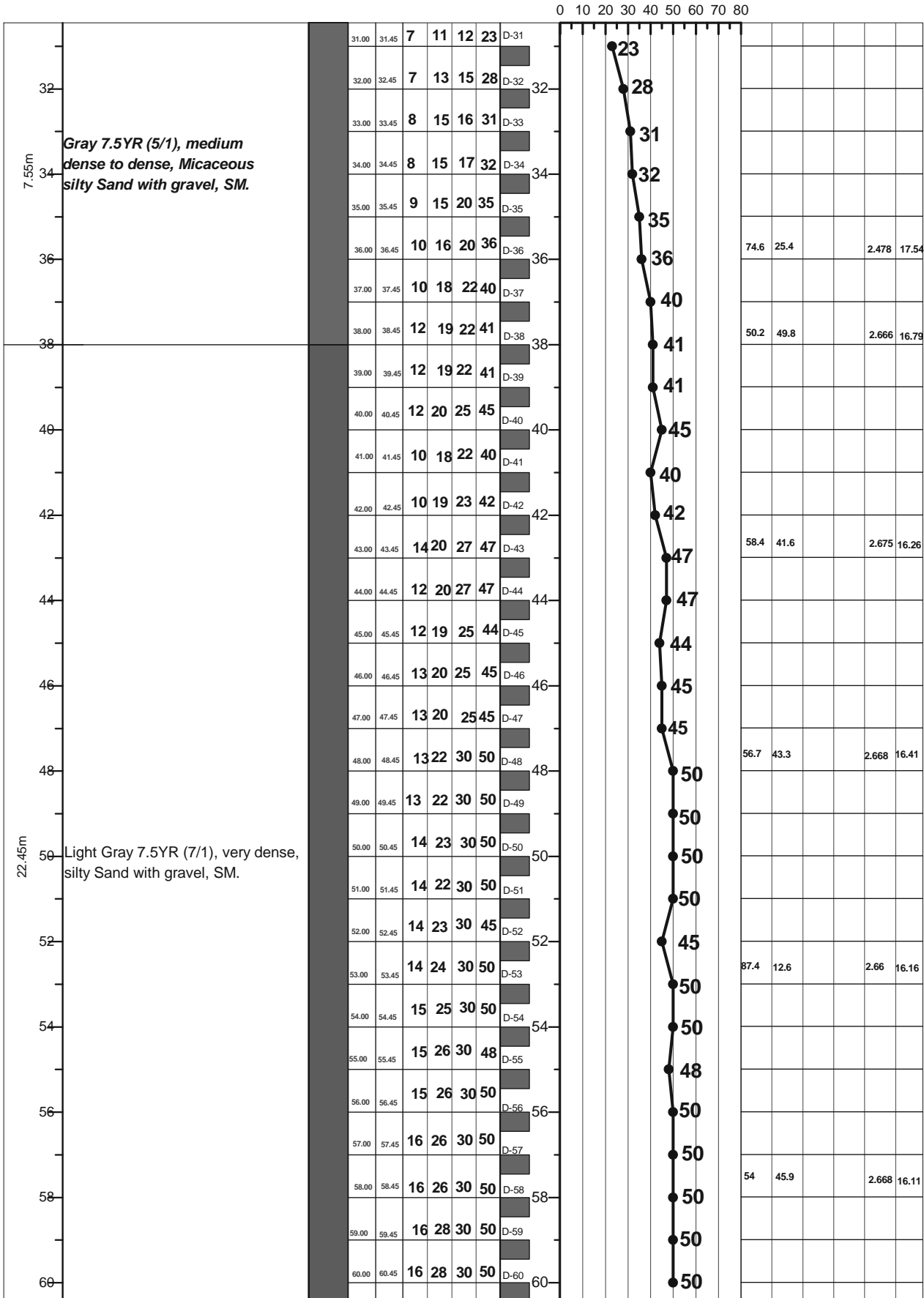


**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

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



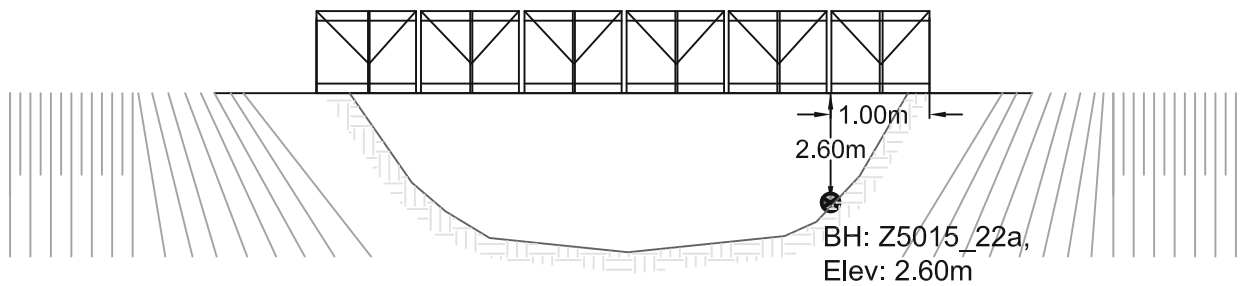
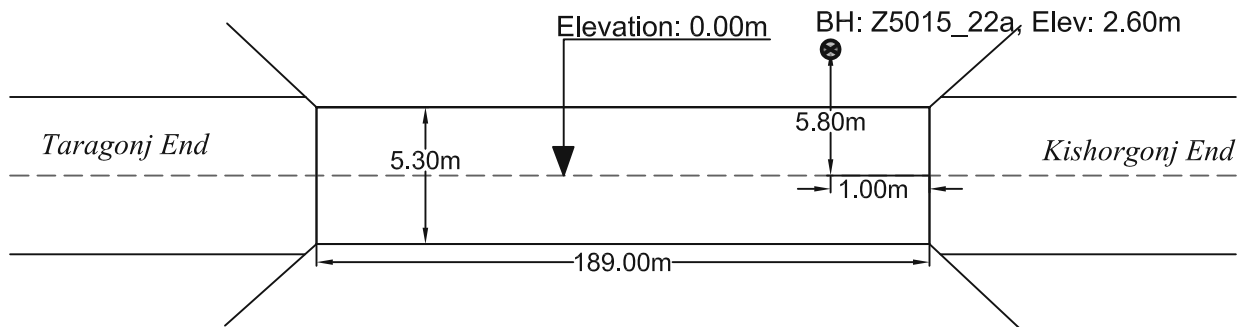
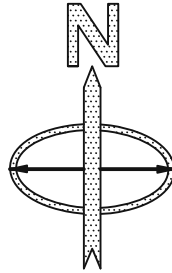
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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

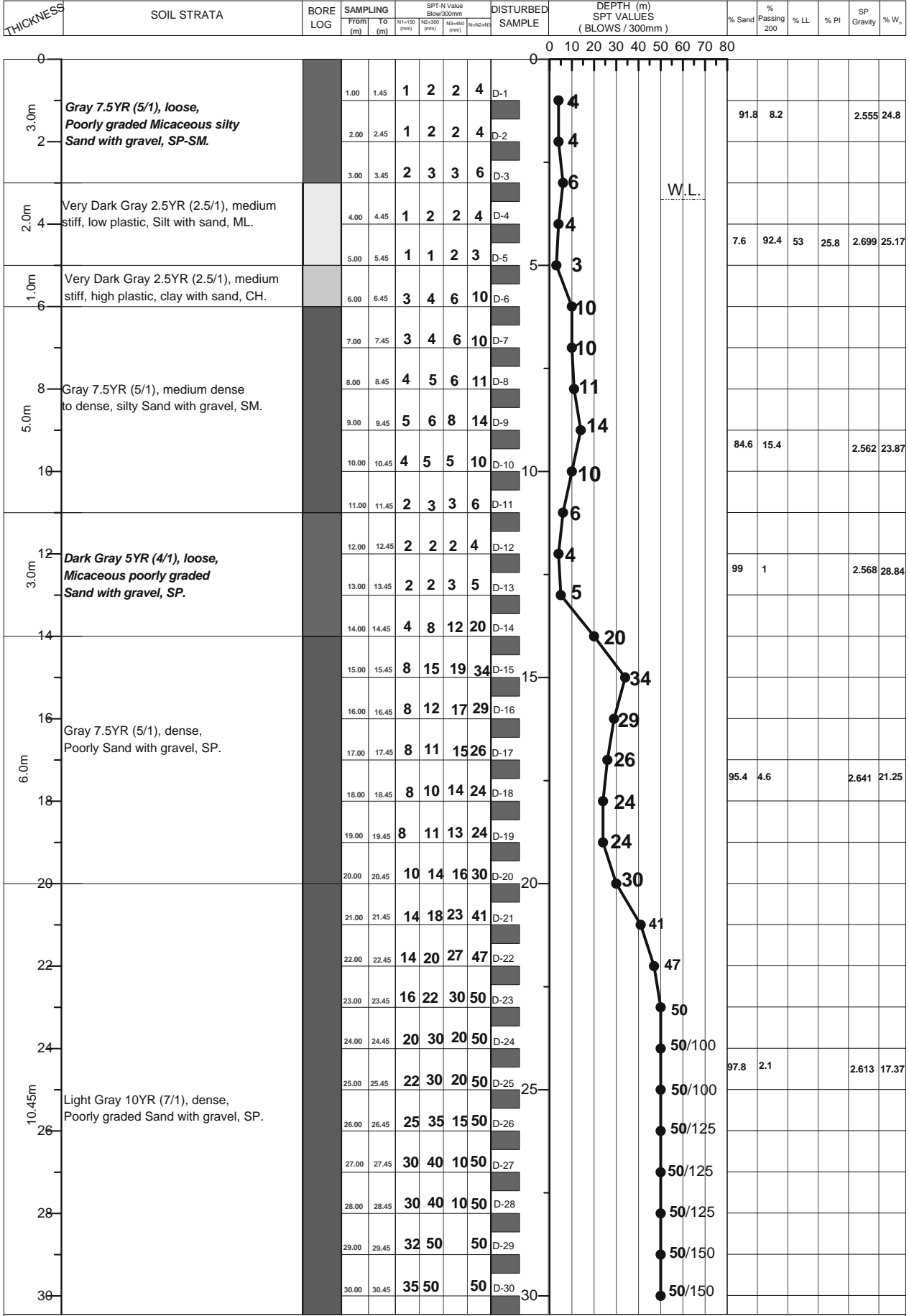
MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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

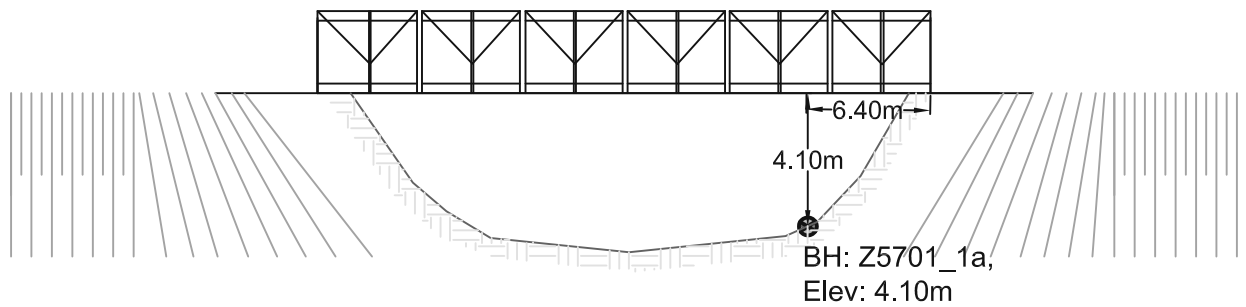
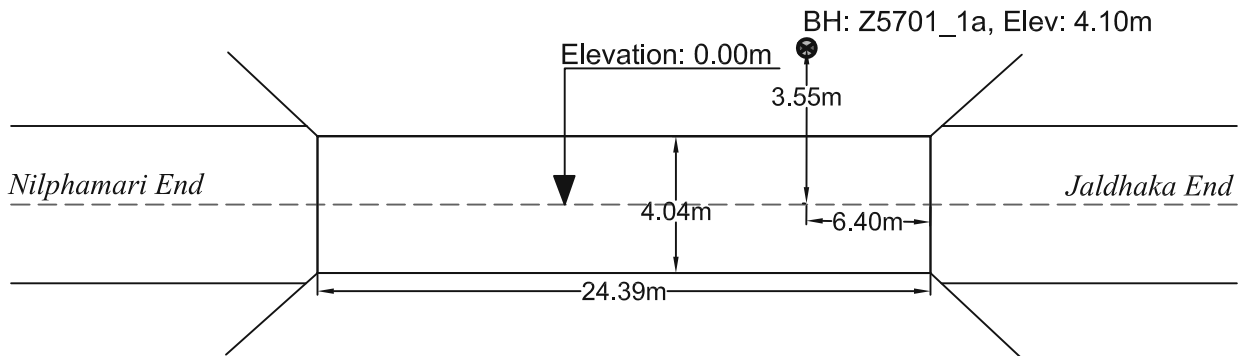
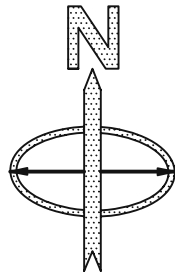


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> 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

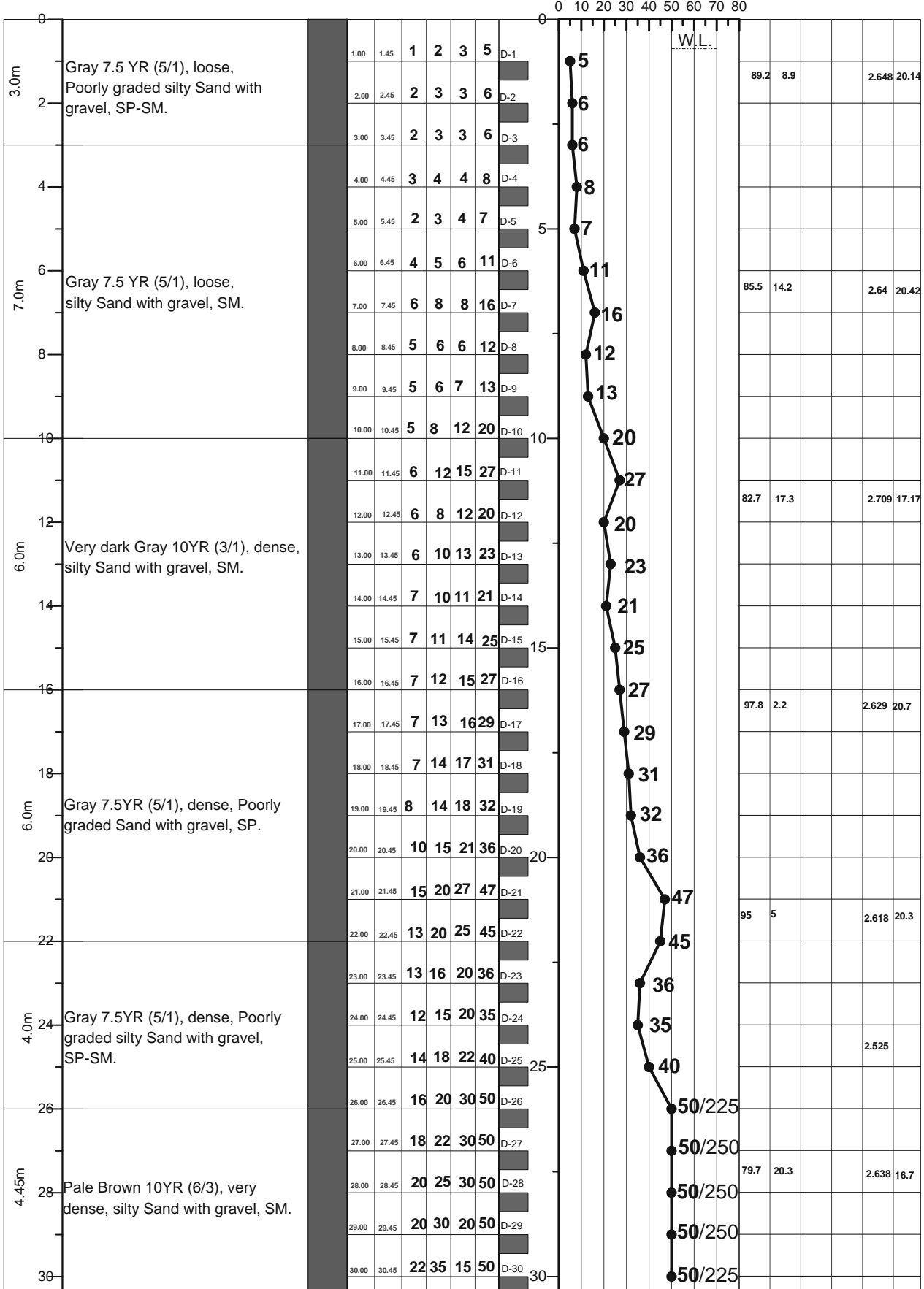


PROSOIL FOUNDATION CONSULTANT



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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

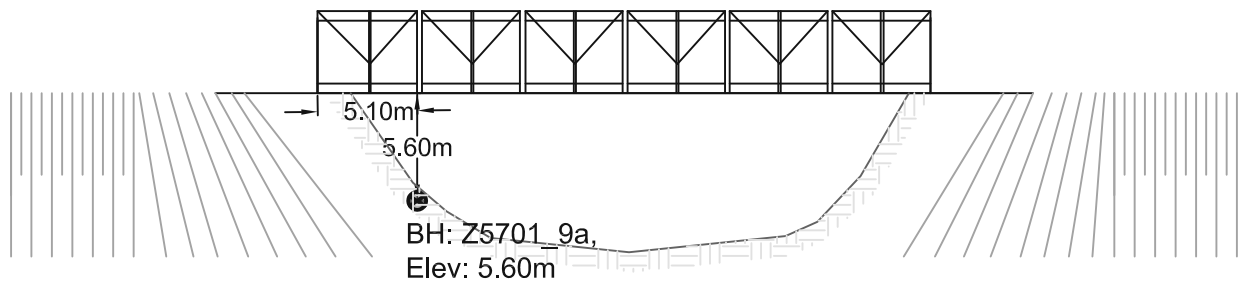
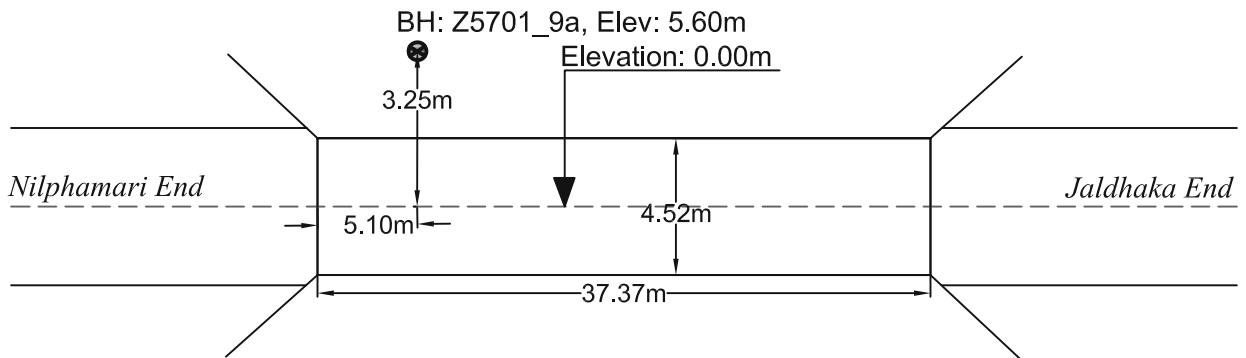
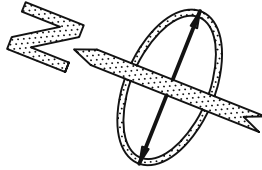
CLIENT: Oriental Consultants Company Limited.

RANK: 61

BRIDGE ID: Z5701\_9a

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

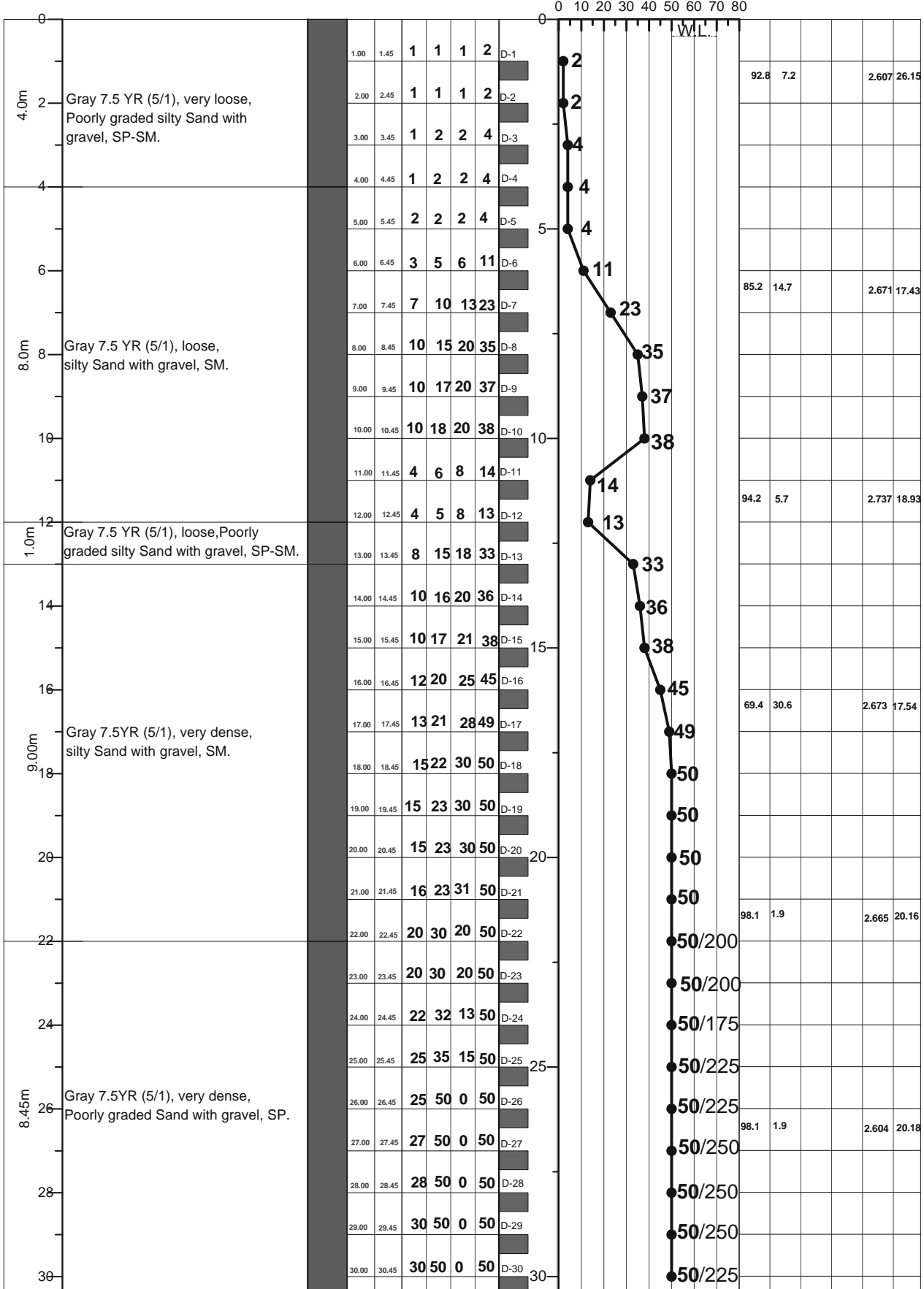
CHAINAGE: 7.362



PROSOIL FOUNDATION CONSULTANT

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

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

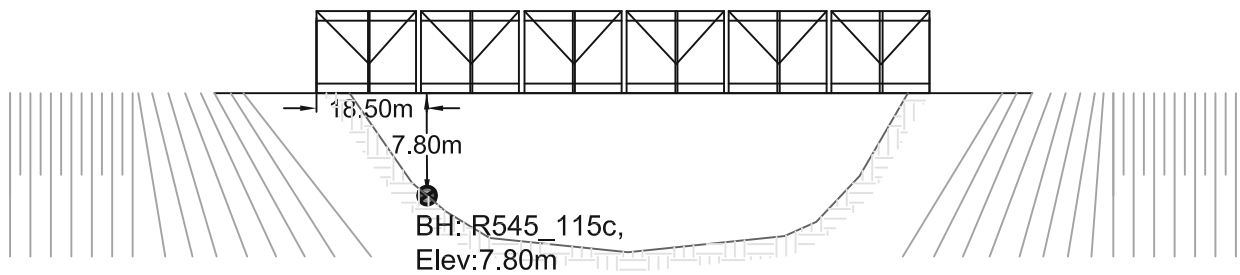
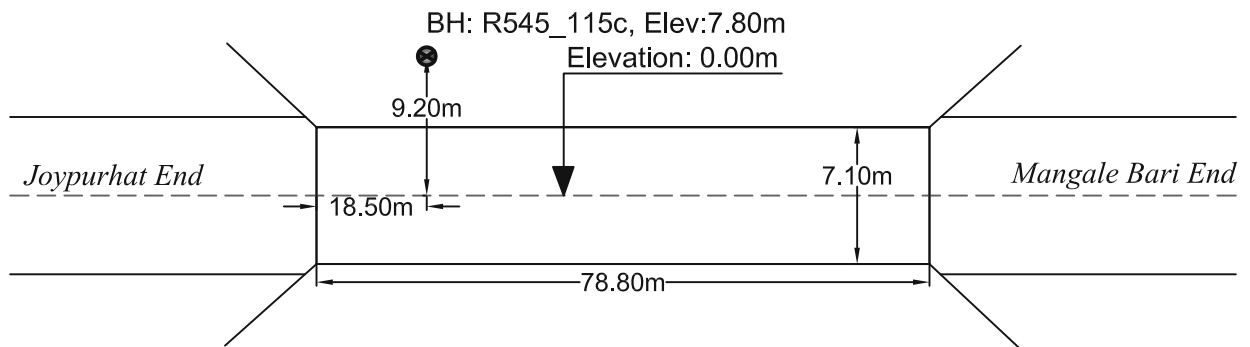
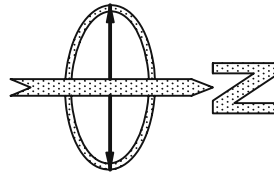


**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED    50/X = BLOWS 50, "X" MM PENETRATION

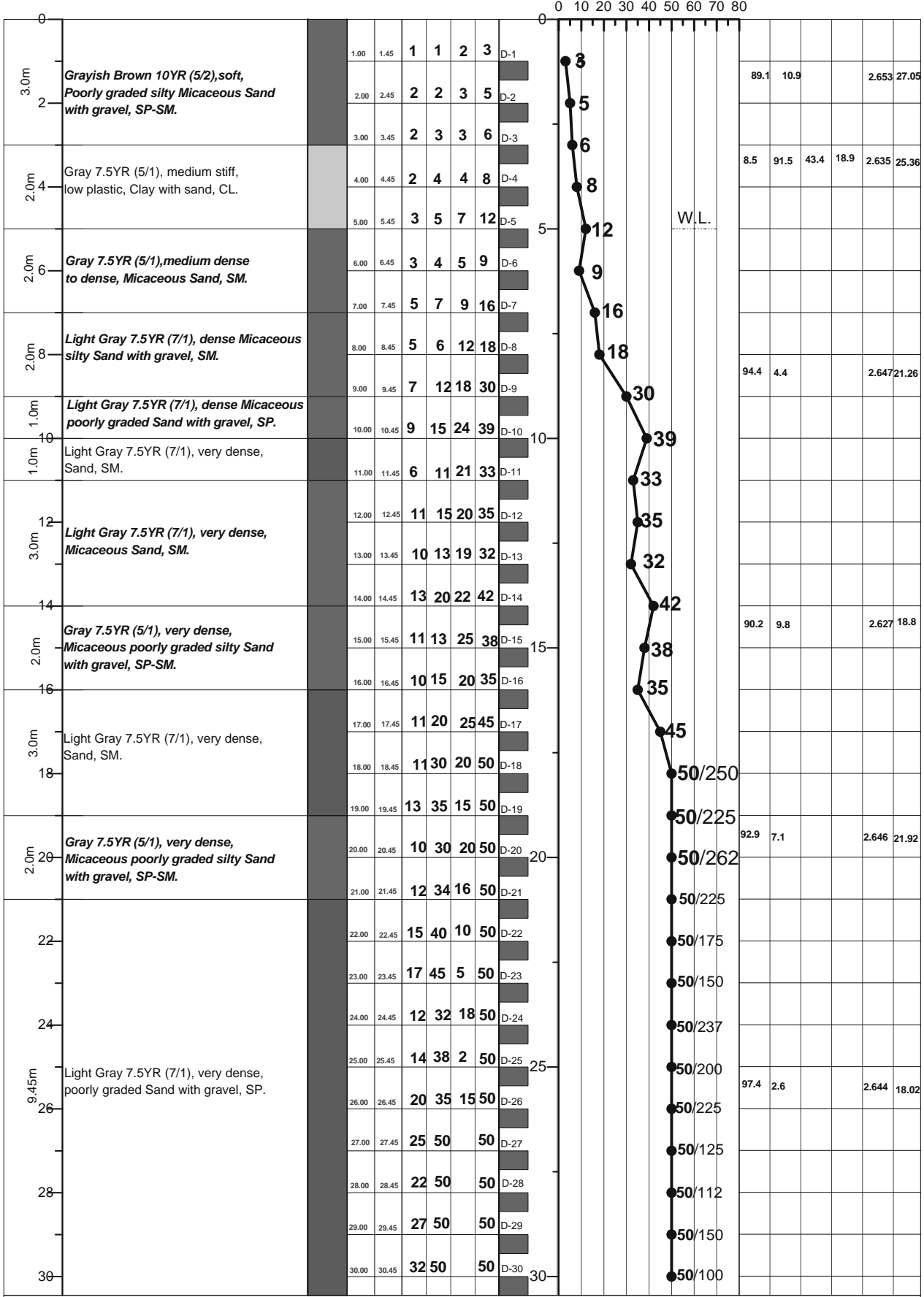
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 62  
BRIDGE ID: R545\_115c  
LATITUDE: 25°6'41" LONGITUDE: 88°52'17"  
CHAINAGE: 116.535



PROSOIL FOUNDATION CONSULTANT

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

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

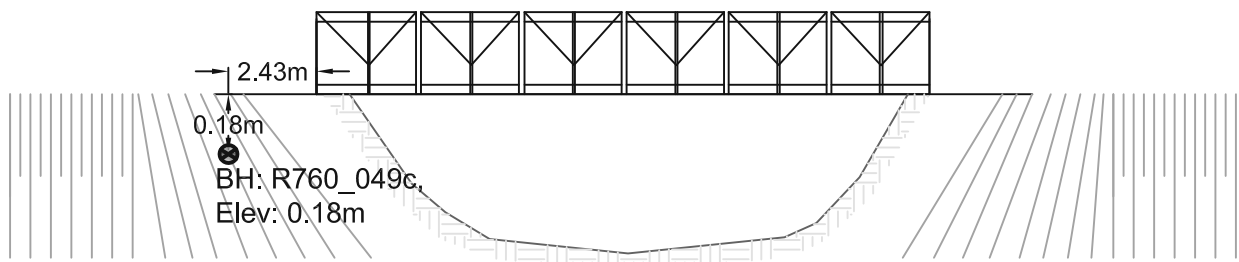
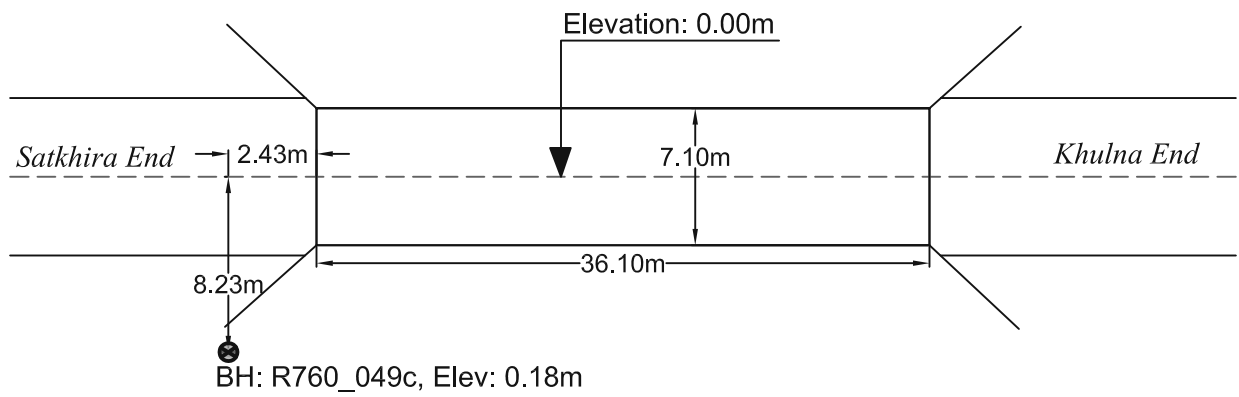
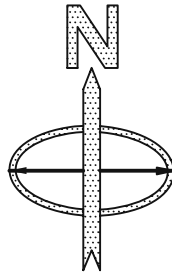


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> 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 <sub>v</sub>	
			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	<b>Gray 10YR (7/1), medium dense to dense, Micaceous silty Sand with gravel, SM.</b>		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	<b>Gray 10YR (7/1), dense, Micaceous silty Sand with gravel, SM.</b>		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	<b>Gray 10YR (7/1), dense, Poorly graded Micaceous silty Sand with gravel, SP-SM.</b>		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	<b>Gray 10YR (7/1), dense, Poorly graded Micaceous silty Sand with gravel, SP-SM.</b>		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')

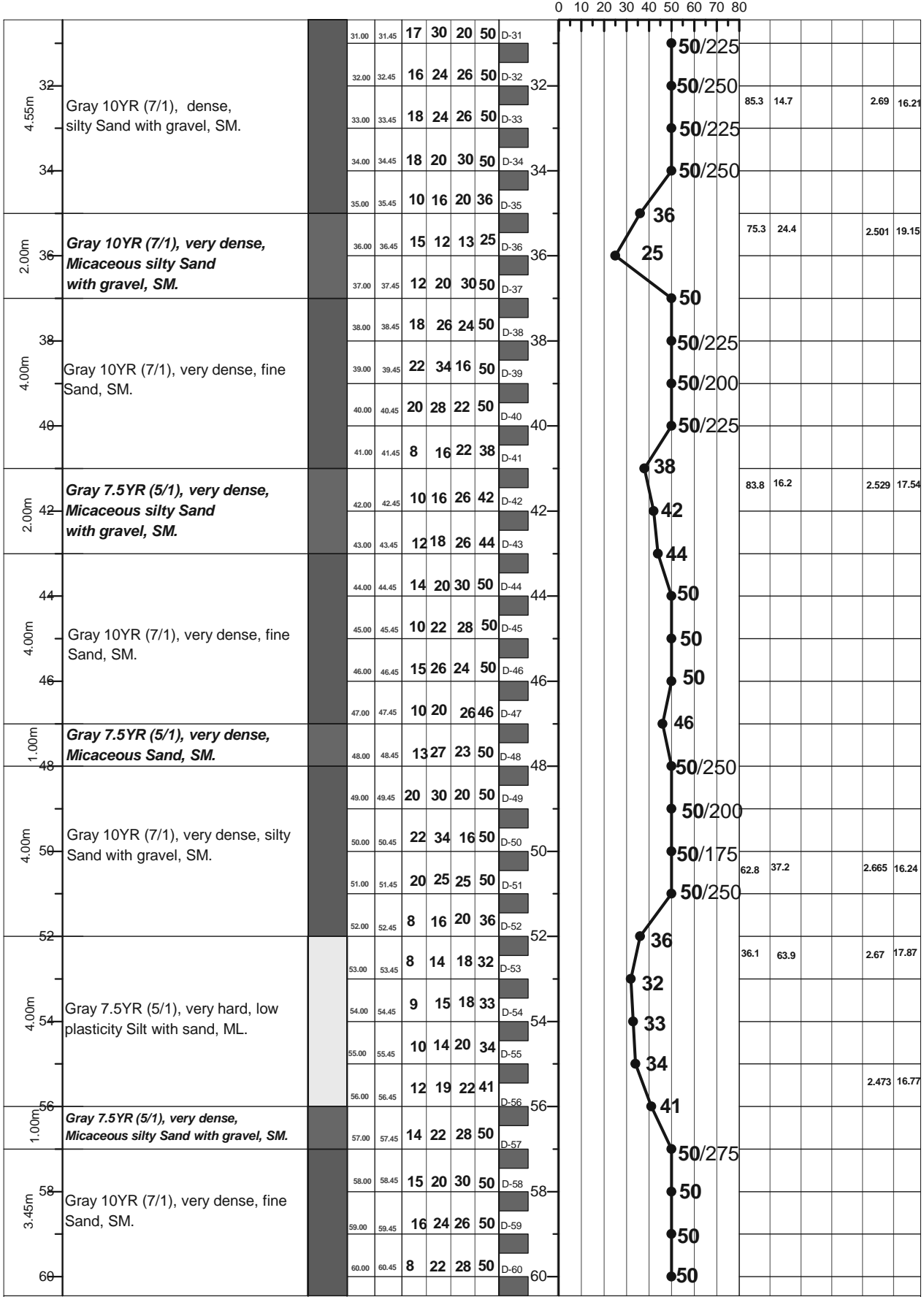
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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')

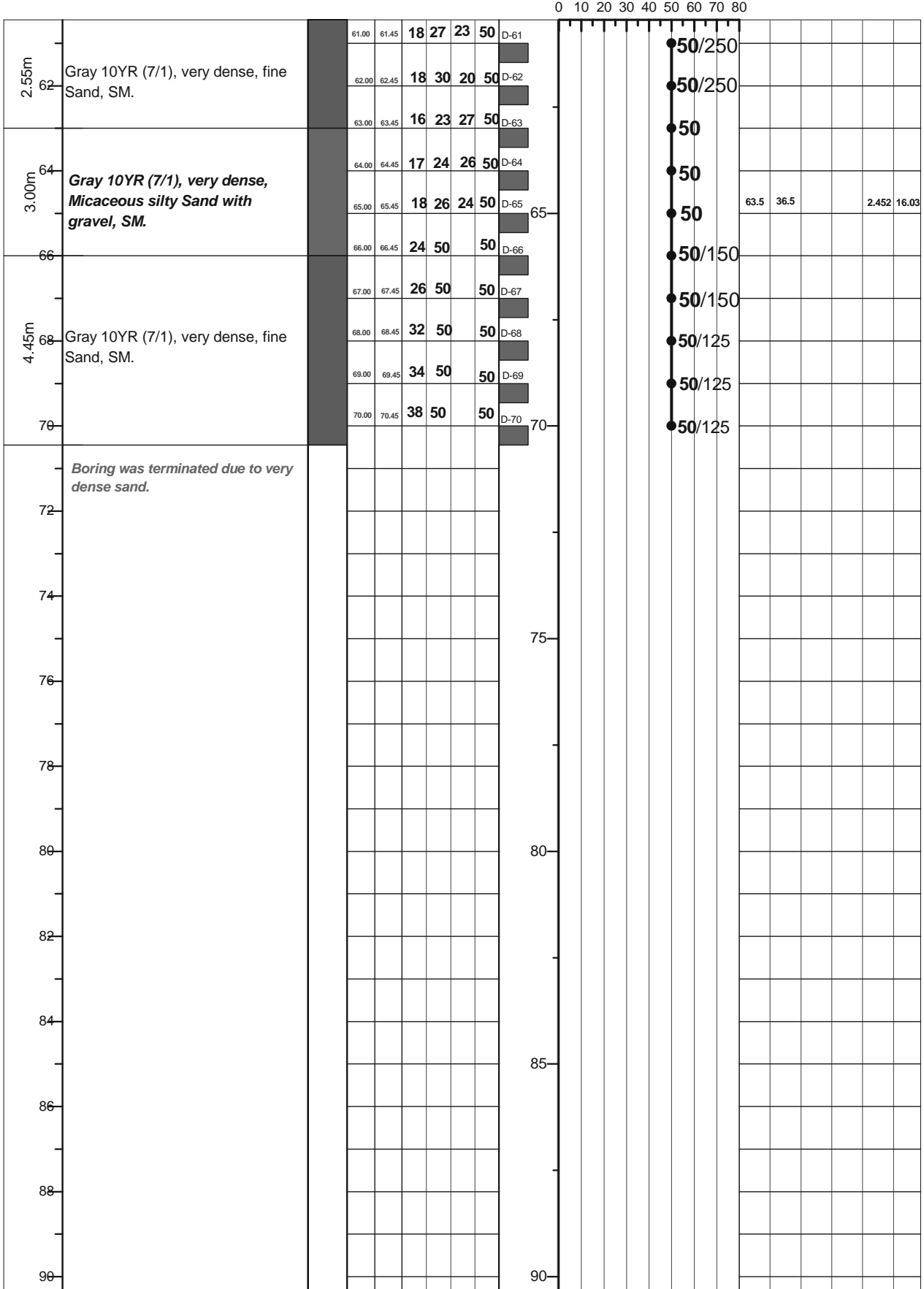
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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



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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

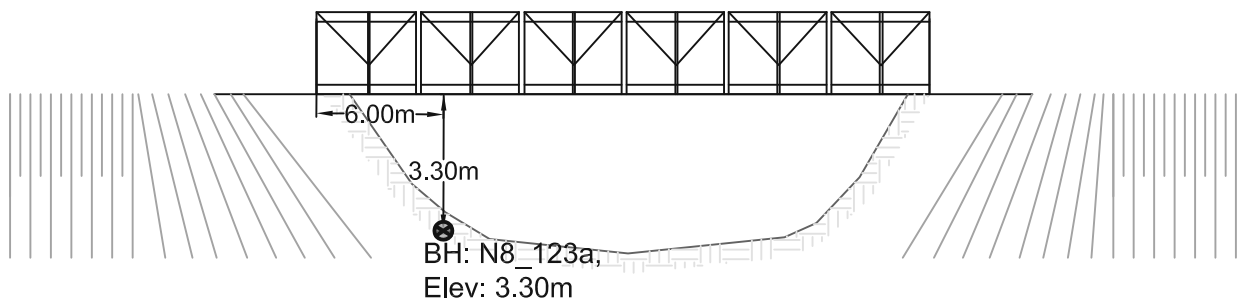
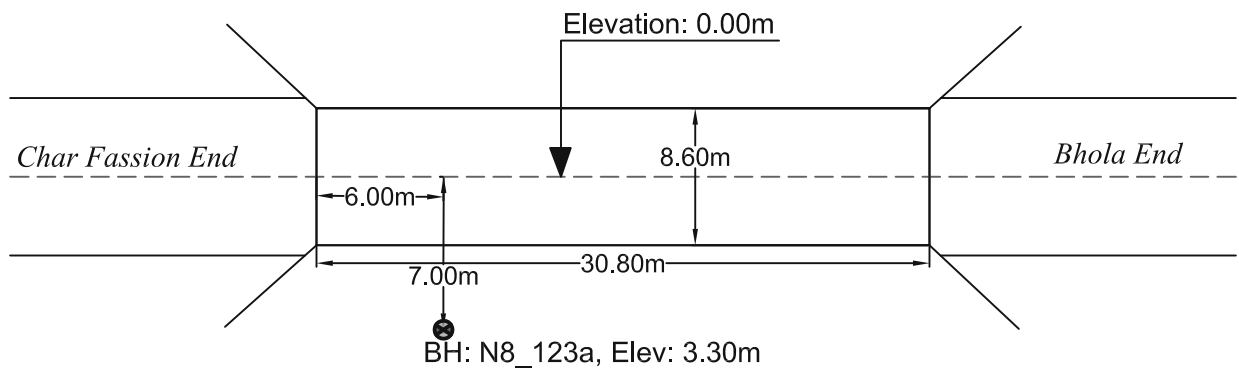
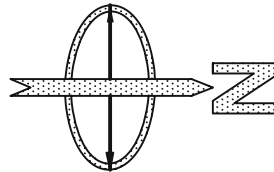
CLIENT: Oriental Consultants Company Limited.

RANK: 64

BRIDGE ID: N8\_123a

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

CHAINAGE: 121.734



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 64</b>	<b>BOREHOLE NO: N8_123a</b>	<b>Longitude: N 90°12'56.636"</b>	<b>Latitude: E 23°0'53.976"</b>										
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			<b>Brigde ID: N8_123a</b>	Road Name: Dhaka(Jatrabari)MawaBangaBarisal Patuakhali.											
Type of Drill Rig: Manual Rotary			<b>Borehole Depth: 60.0m</b>	<b>Chainage: 121.734, RL: -3.3m</b>											
CLIENT : Oriental Consultants Company Limited.			<b>Commencement Date: 25-03-2014</b>	<b>Completed Date: 31-03-2014</b>	<b>G. W. T : -2.3m.</b>										
THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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					
			23.00	23.45	3	4	5	9	D-23	9					
9.45m	Gray 7.5YR (5/1), stiff, low plastic, Clay with sand, CL.		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

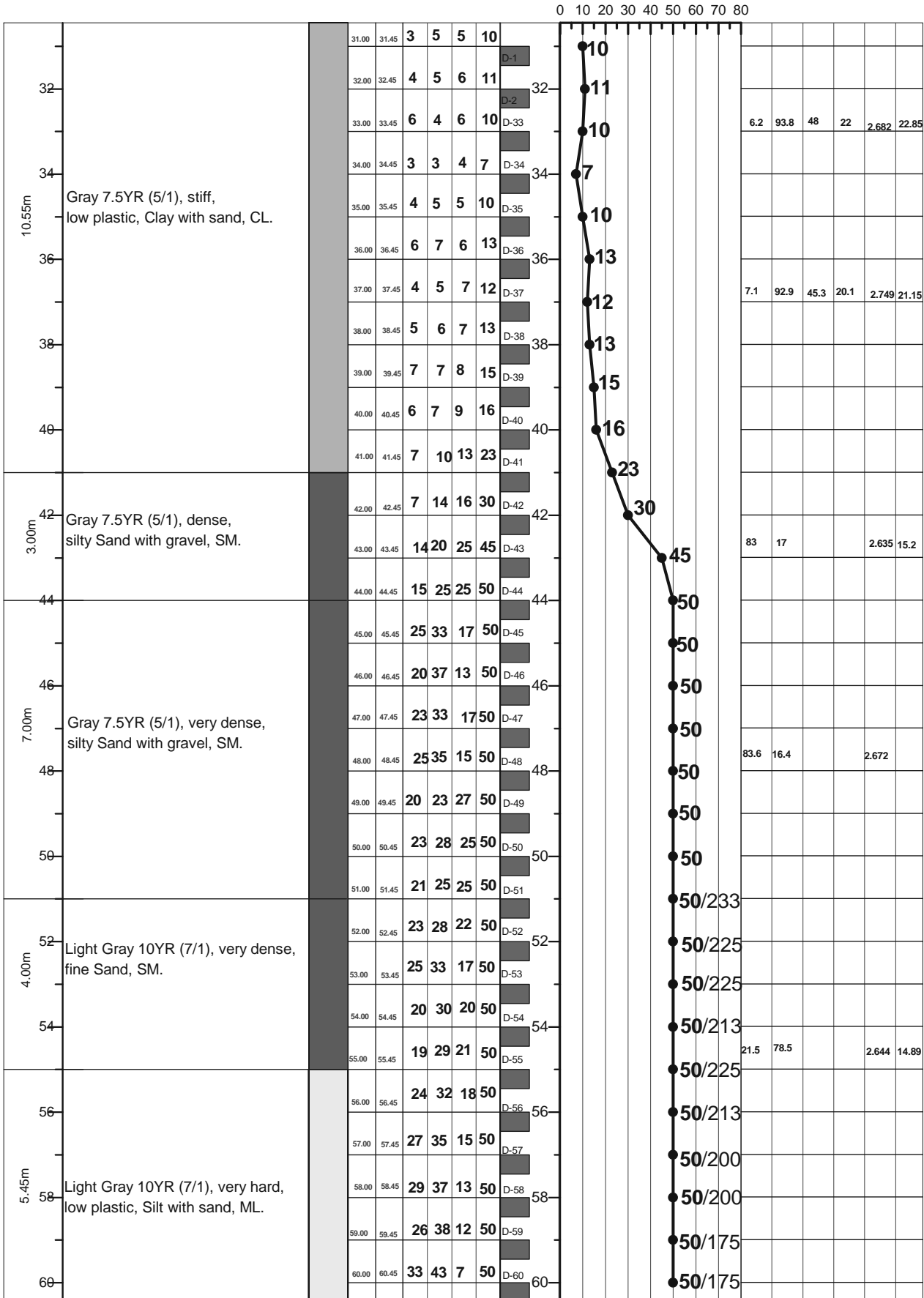
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX<sup>m</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

A1: Location of Borehole

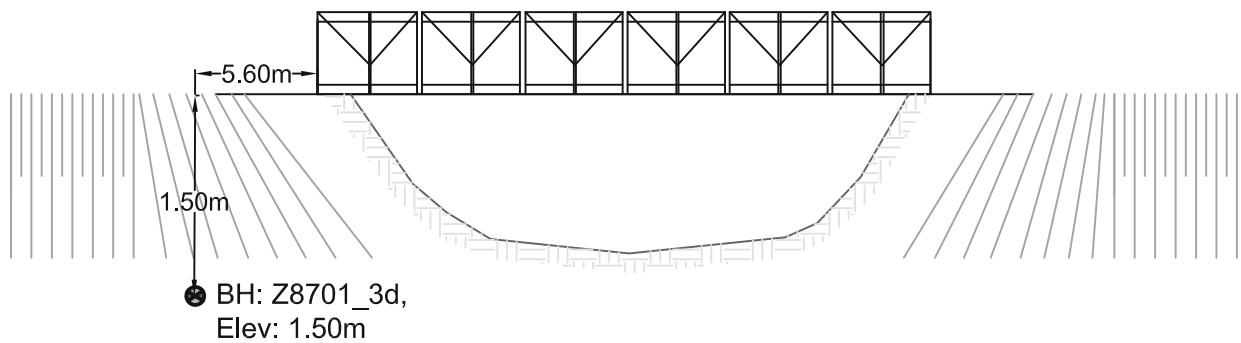
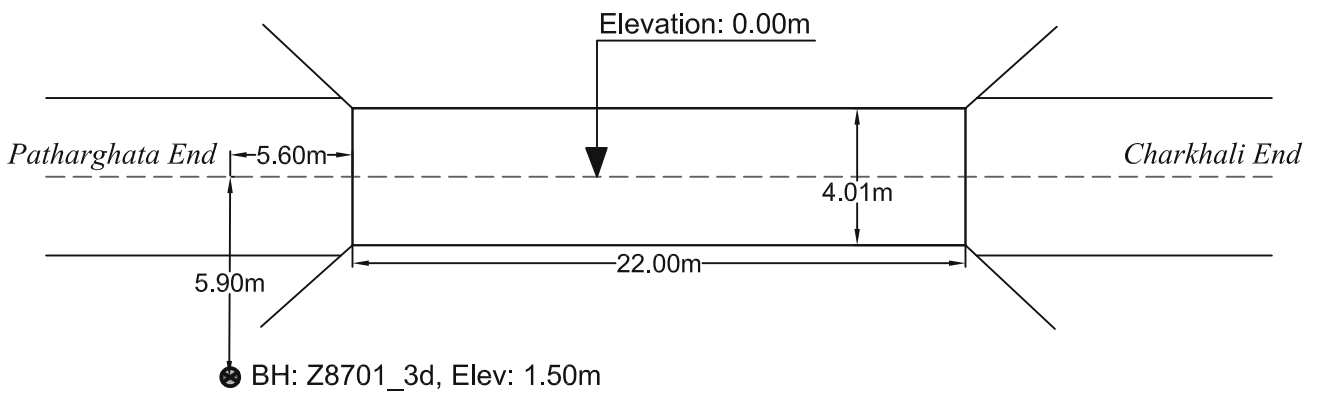
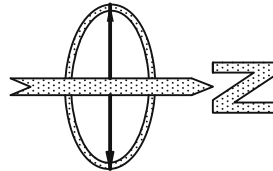
CLIENT: Oriental Consultants Company Limited.

RANK: 65

BRIDGE ID: Z8701\_3d

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

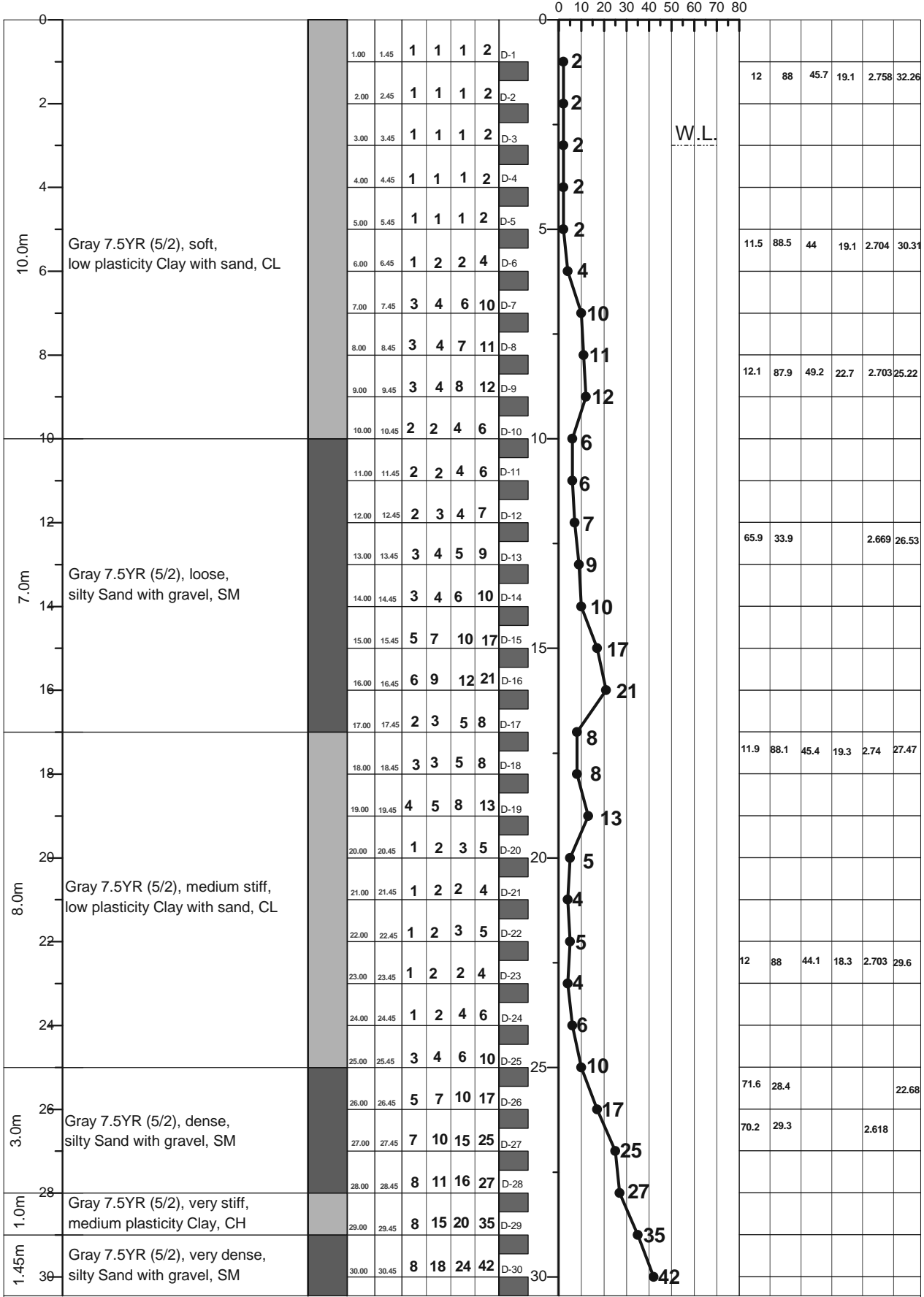
CHAINAGE: 3.806



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>c</sub>	
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)										N=ND/NZ
0.55m	Gray 7.5YR (5/2), dense, Sand, SM		31.00	31.45	7	10	15	25	D-31	25							
6.0m	Gray 7.5YR (5/2), very stiff, low plasticity Clay with sand, CL		32.00	32.45	4	7	10	17	D-32	17							
			33.00	33.45	3	6	8	14	D-33	14							
			34.00	34.45	4	6	10	16	D-34	16	12.1	87.9	48.7	21.7	2.702	23.34	
			35.00	35.45	6	13	15	28	D-35	28							
			36.00	36.45	10	15	20	35	D-36	35							
			37.00	37.45	16	25	25	50	D-37	50							
4.0m	Gray 7.5YR (5/2), very dense, silty Sand with gravel, SM		38.00	38.45	17	24	26	50	D-38	50							
			39.00	39.45	19	20	30	50	D-39	50							
			40.00	40.45	20	22	28	50	D-40	50							
			41.00	41.45	21	23	27	50	D-41	50	74.6	25.4			2.63	20.11	
4.0m	White 10YR (8/1), very dense, silty Sand with gravel, SM		42.00	42.45	22	27	23	50	D-42	50							
			43.00	43.45	22	30	20	50	D-43	50							
			44.00	44.45	22	28	22	50	D-44	50							
			45.00	45.45	23	33	17	50	D-45	50							
5.45m	Gray 7.5YR (5/2), very dense, silty Sand with gravel, SM		46.00	46.45	24	35	15	50	D-46	50							
			47.00	47.45	24	32	18	50	D-47	50							
			48.00	48.45	25	36	14	50	D-48	50					2.617	19.01	
			49.00	49.45	25	50	0	50	D-49	50	80.7	19.3					
			50.00	50.45	26	50	0	50	D-50	50							
	<i>Boring was terminated due to very dense sand.</i>																

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

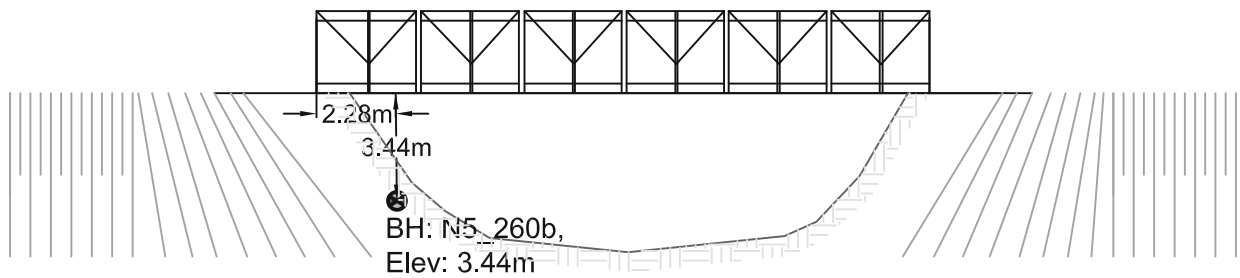
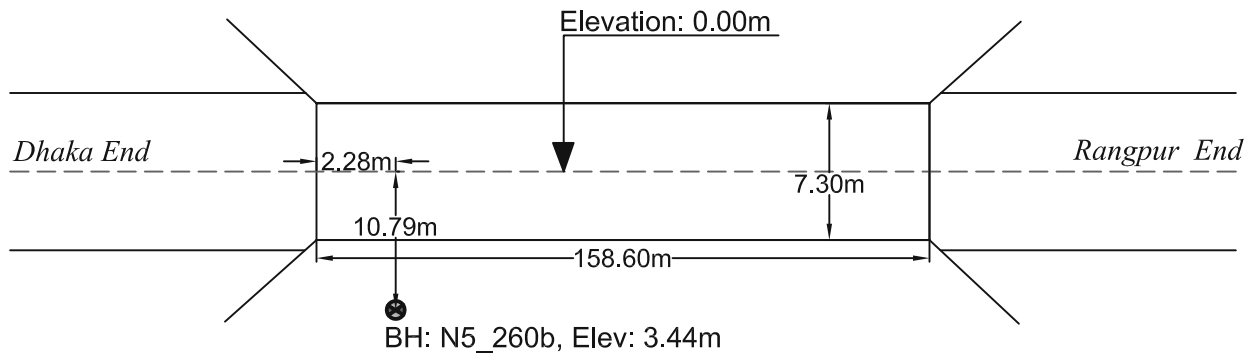
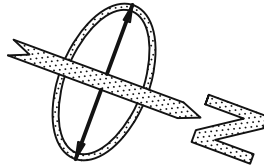
CLIENT: Oriental Consultants Company Limited.

RANK: 66

BRIDGE ID: N5\_260b

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

CHAINAGE: 258.224



PROSOIL FOUNDATION CONSULTANT



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

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 <sub>c</sub>
			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	6						
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	7	89.9	10.1			2.611	26.14
4-4.0m	7.5YR (5/6), medium dense to dense, silty Sand with gravel, SM.		4.00	4.45	2	3	4	7		D-4	7						
4-5.0m	5YR (5/4), medium dense to dense, silty Sand with gravel, SM.		5.00	5.45	2	3	5	8		D-5	8						
5-6.0m	5YR (5/3), medium dense to dense, silty Sand with gravel, SM.		6.00	6.45	3	4	5	9		D-6	9						
6-7.0m	5YR (4/3), medium dense to dense, silty Sand with gravel, SM.		7.00	7.45	3	4	6	10		D-7	10						
7-8.0m	2.5YR (4/3), medium dense to dense, silty Sand with gravel, SM		8.00	8.45	3	4	6	10		D-8	10						
8-9.0m	7.5YR (5/1), dense, fine Sand, SM.		9.00	9.45	5	6	7	13		D-9	13	81.5	18.5			2.605	20.69
9-10.0m	7.5YR (5/4), very dense, very fine Sand, SM.		10.00	10.45	4	6	10	16		D-10	16						
10-11.0m	7.5YR (5/2), very dense, poorly graded silty Sand with gravel, SP-SM		11.00	11.45	5	8	12	20		D-11	20						
11-12.0m	10YR (6/2), very dense, silty Sand with gravel, SM.		12.00	12.45	6	10	16	26		D-12	26						
12-13.0m	5YR (5/2), very dense, silty Sand with gravel, SM.		13.00	13.45	14	19	24	43		D-13	43						
13-14.0m	7.5YR (5/2), very dense, silty Sand with gravel, SM.		14.00	14.45	12	19	23	42		D-14	42	91.3	8.7			2.682	21.82
14-15.0m	7.5YR (5/2), very dense, silty Sand with gravel, SM.		15.00	15.45	12	20	25	45		D-15	45						
15-16.0m	10YR (6/1), dense, poorly graded silty Sand with gravel, SP-SM		16.00	16.45	10	18	23	41		D-16	41						
16-17.0m	7.5YR (5/2), very dense, silty Sand with gravel, SM.		17.00	17.45	10	15	18	33		D-17	33						
17-18.0m	7.5YR (5/2), very dense, silty Sand with gravel, SM.		18.00	18.45	7	12	16	28		D-18	28						
18-19.0m	10YR (6/1), dense, poorly graded silty Sand with gravel, SP-SM		19.00	19.45	7	10	15	25		D-19	25						
19-20.0m	10YR (6/1), dense, poorly graded silty Sand with gravel, SP-SM		20.00	20.45	8	12	18	30		D-20	30	89	11			2.6	19.32
20-21.0m	7.5YR (6/1), very dense, silty Sand with gravel, SM.		21.00	21.45	8	17	21	38		D-21	38						
21-22.0m	Gray 10YR (5/2), very dense, silty Sand with gravel, SM.		22.00	22.45	9	18	24	42		D-22	42						
22-23.0m	Gray 2.5YR (4/2), very stiff, low plasticity Clay with sand, CL		23.00	23.45	9	20	25	45		D-23	45						
23-24.0m	Gray 2.5YR (4/2), dense, silty Sand with gravel, SM		24.00	24.45	10	20	26	46		D-24	46						
24-25.0m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		25.00	25.45	11	21	27	48		D-25	48						
25-26.0m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		26.00	26.45	7	12	14	26		D-26	26	36.2	63.8	43.9	23.1	2.642	20.09
26-27.0m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		27.00	27.45	8	13	14	27		D-27	27	83.5	16.5			2.613	24.33
27-28.0m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		28.00	28.45	14	25	25	50		D-28	50						
28-29.0m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		29.00	29.45	20	26	24	50		D-29	50						
29-30.0m	Light Gray 10YR (5/1), very dense, silty Sand with gravel, SM.		30.00	30.45	23	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

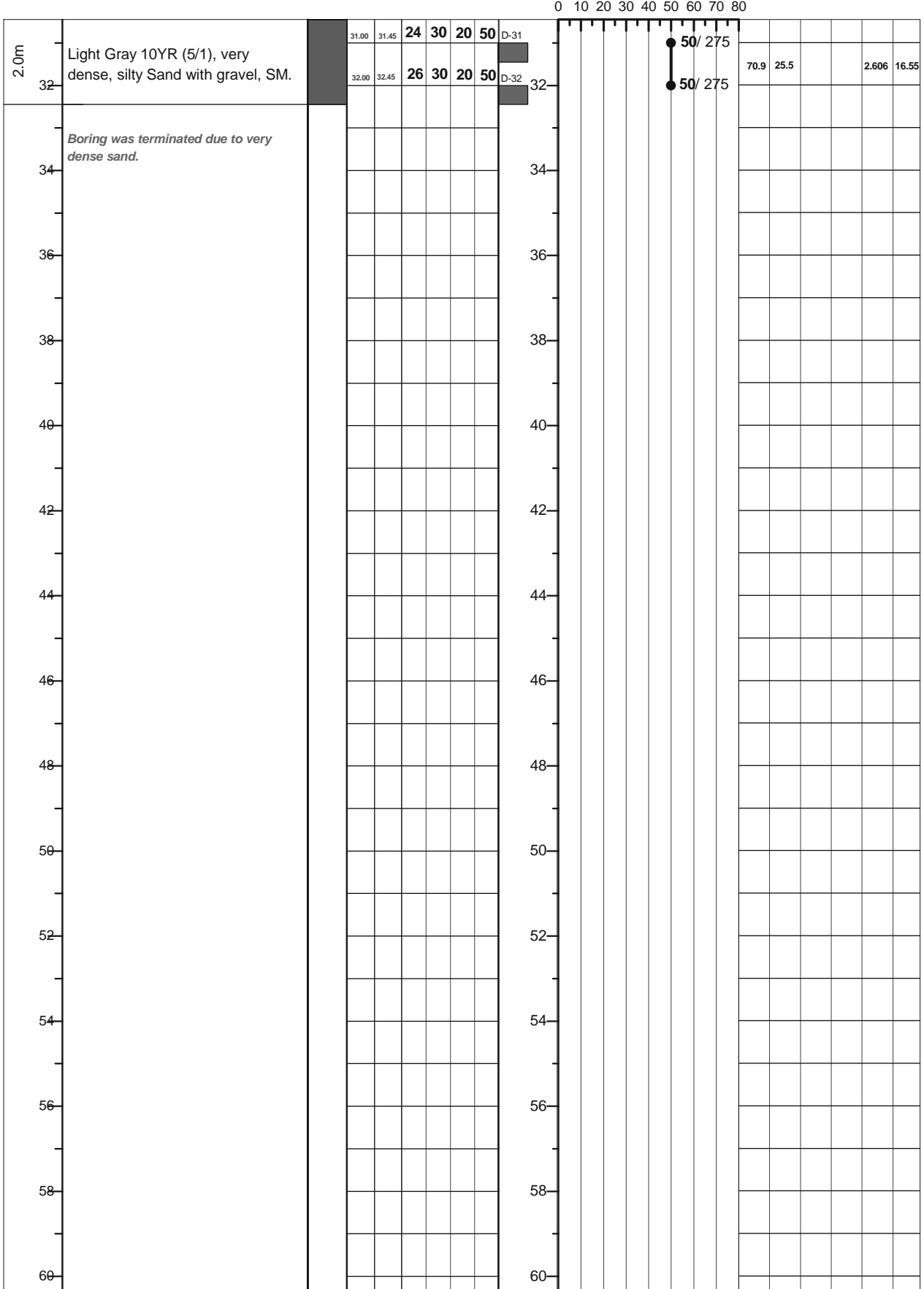
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

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

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 <sub>c</sub>
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)	N4=600 (mm)								

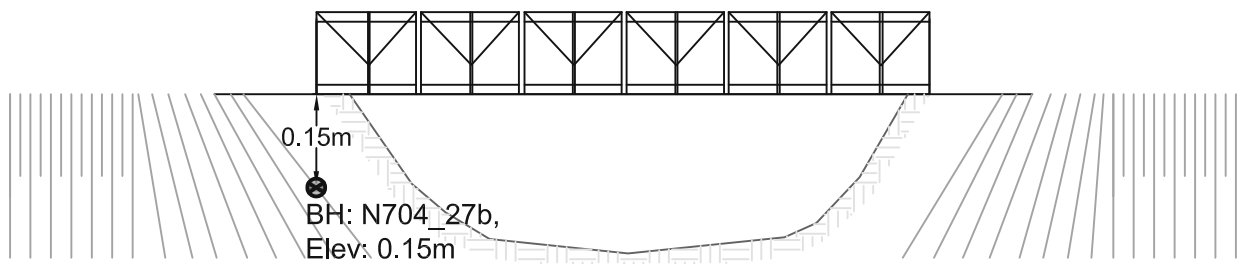
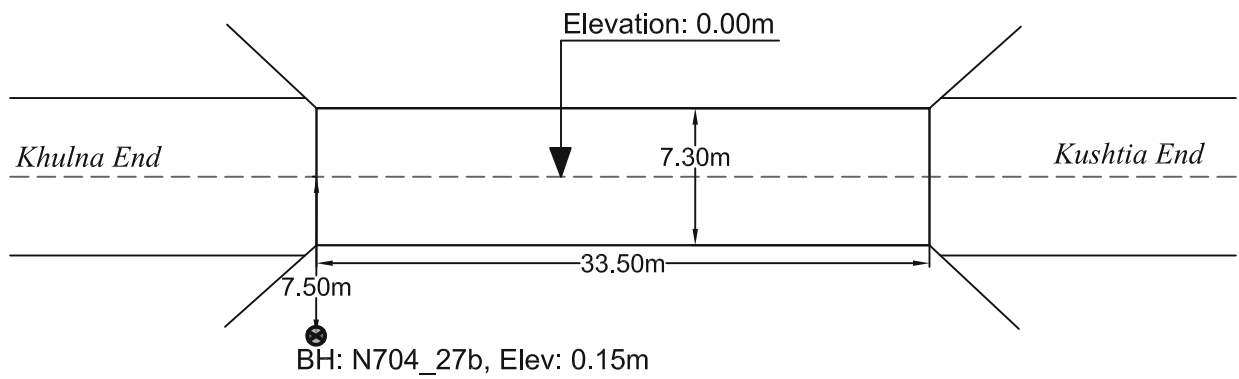
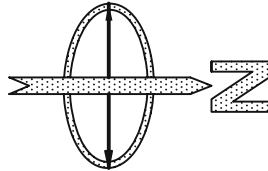


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

[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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

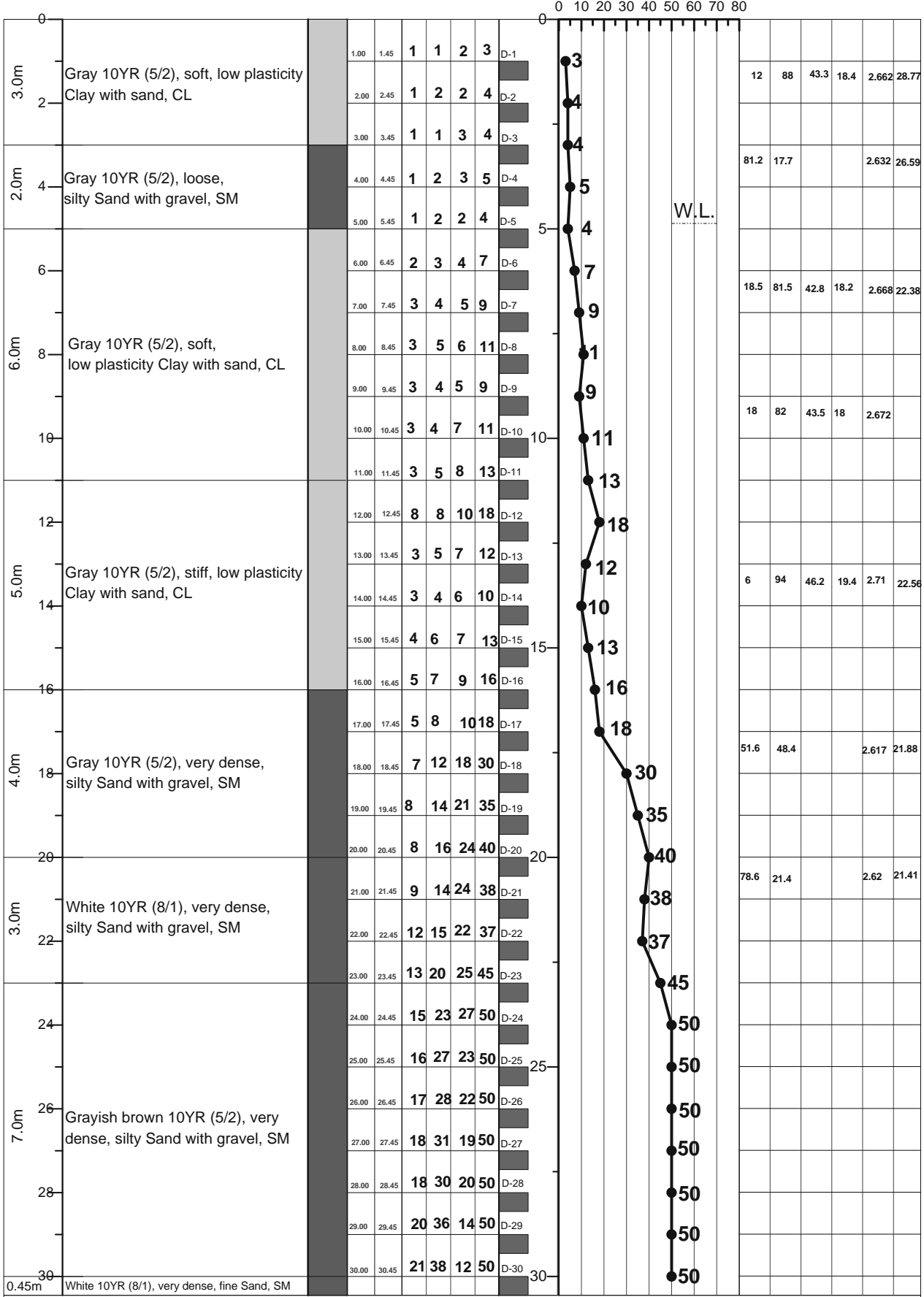
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 67  
BRIDGE ID: N704\_27b  
LATITUDE: 23°45'47.388" LONGITUDE: 89°7'9.677"  
CHAINAGE: 28.708



PROSOIL FOUNDATION CONSULTANT

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

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



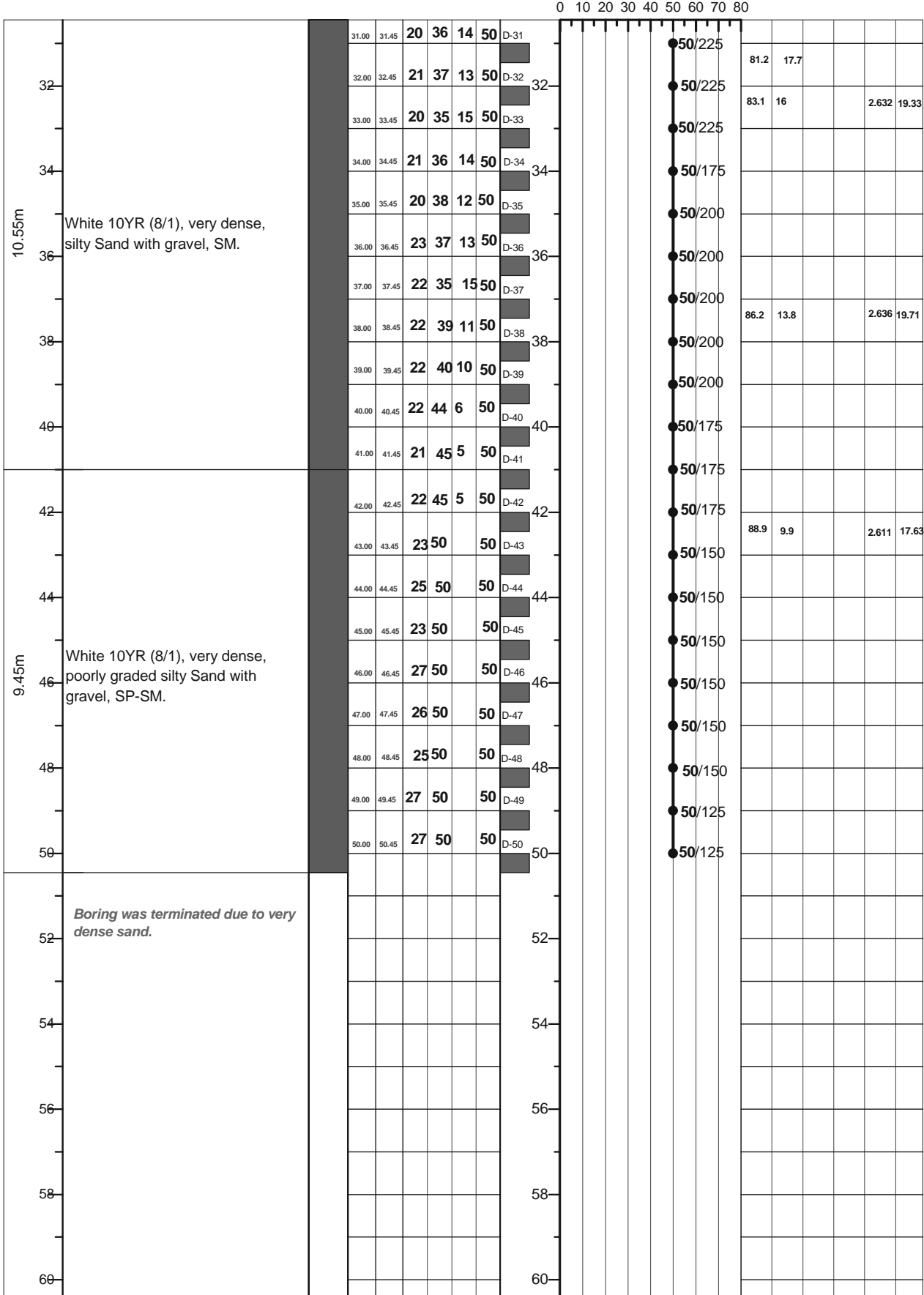
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED  
 50/X = BLOWS 50, "X" MM PENETRATION

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

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

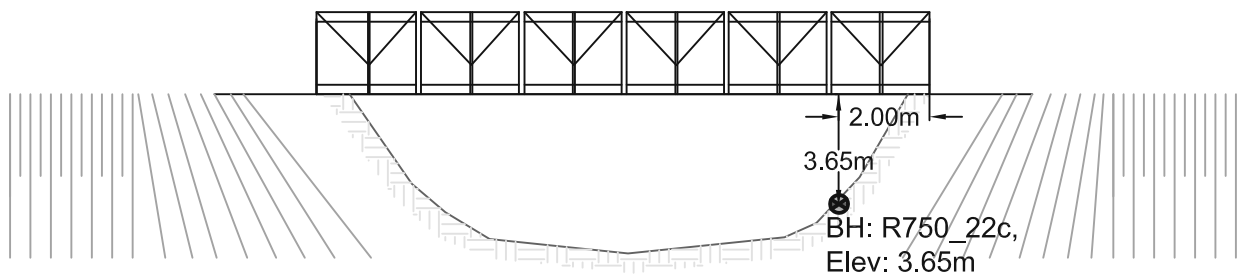
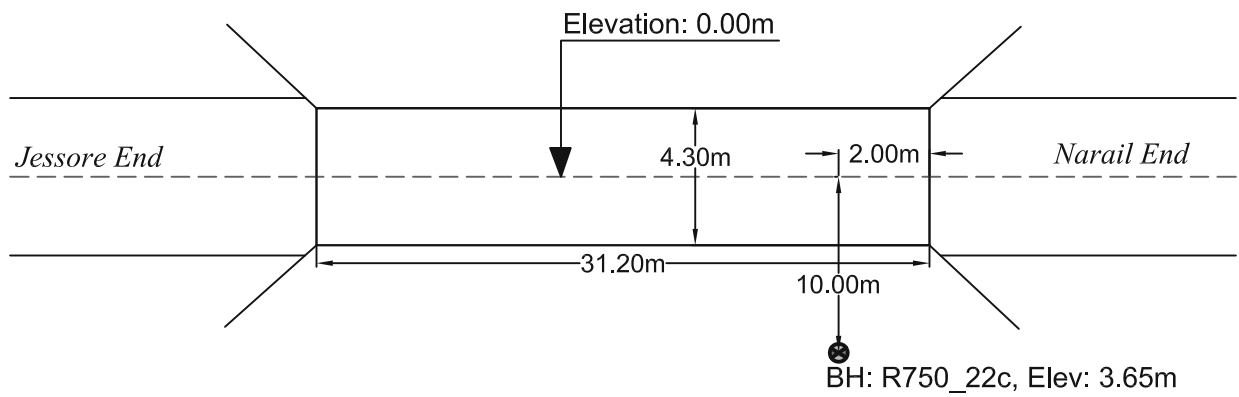
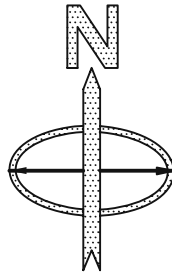


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> 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

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			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	2	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')

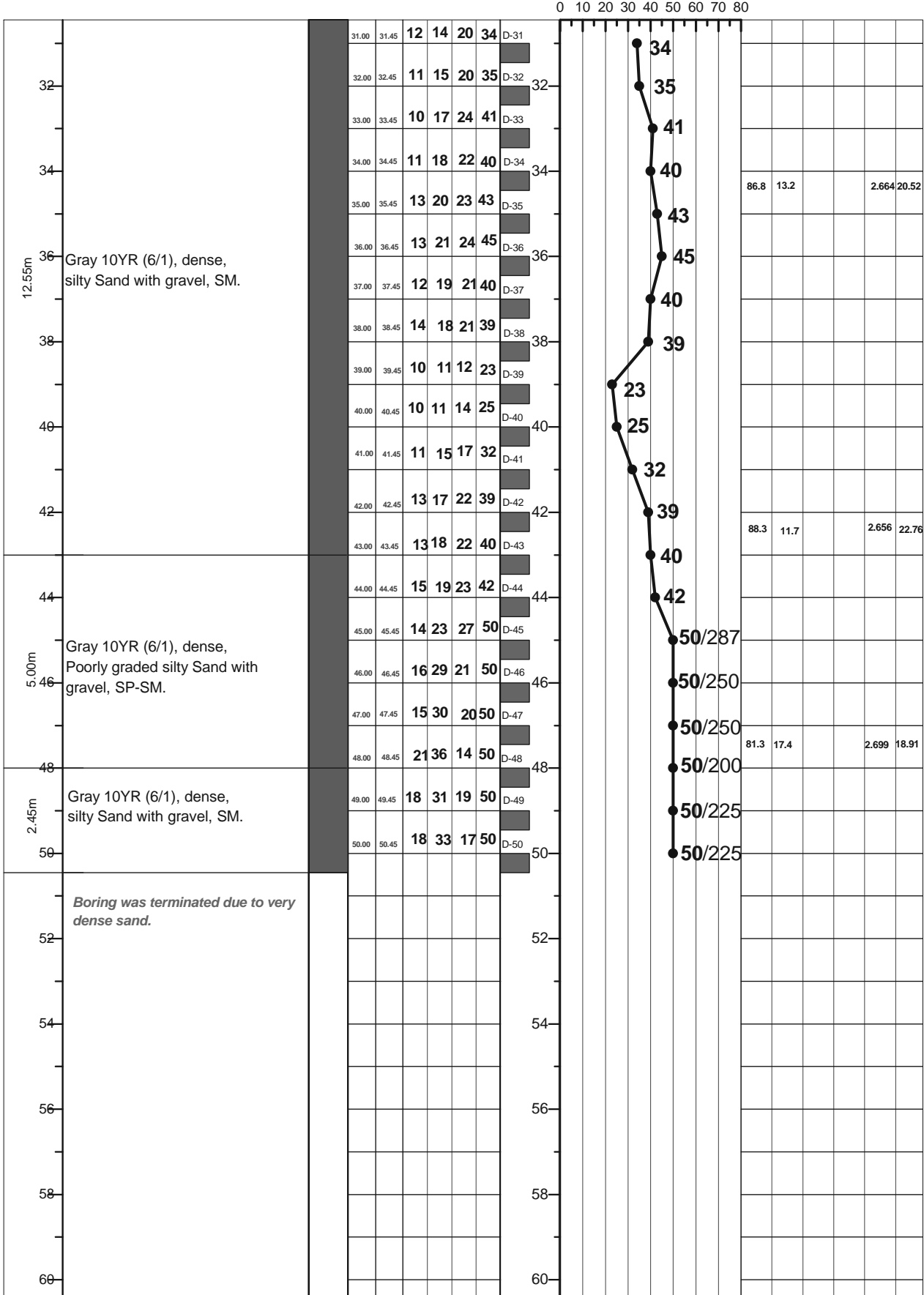
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



A1: Location of Borehole

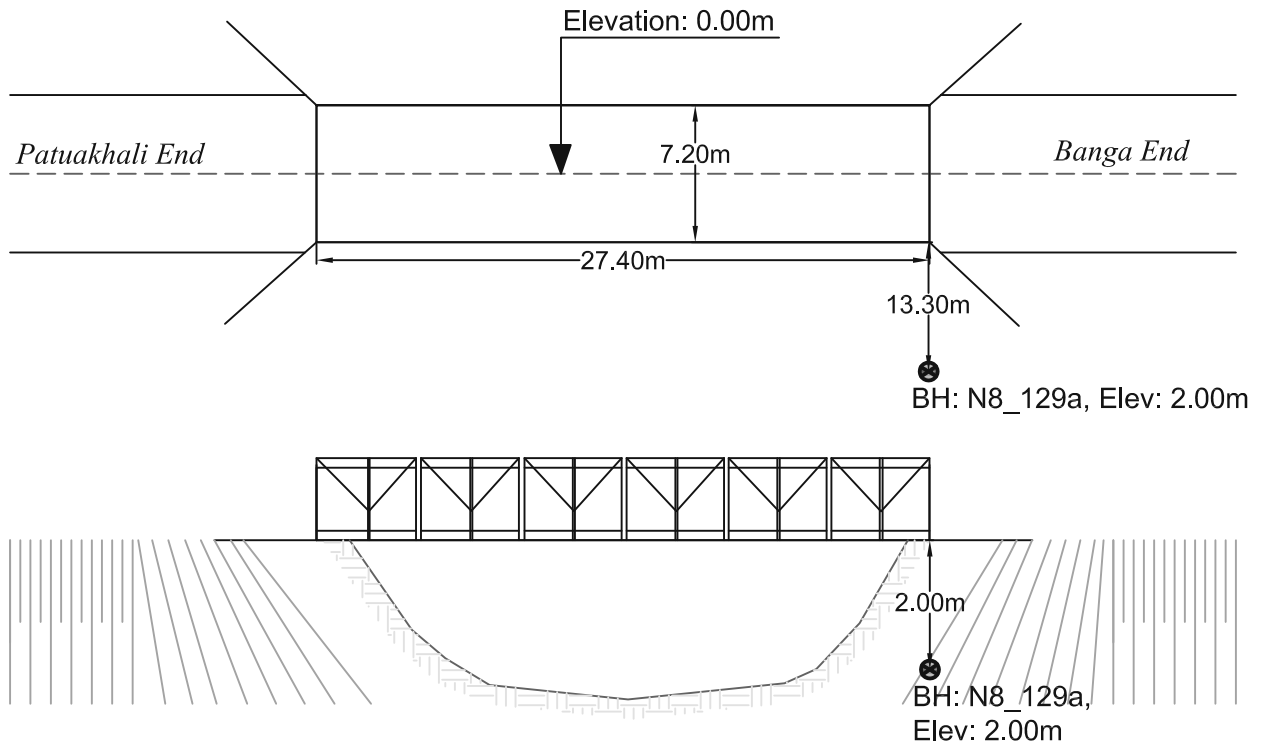
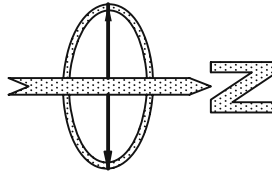
CLIENT: Oriental Consultants Company Limited.

RANK: 69

BRIDGE ID: N8\_129a

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

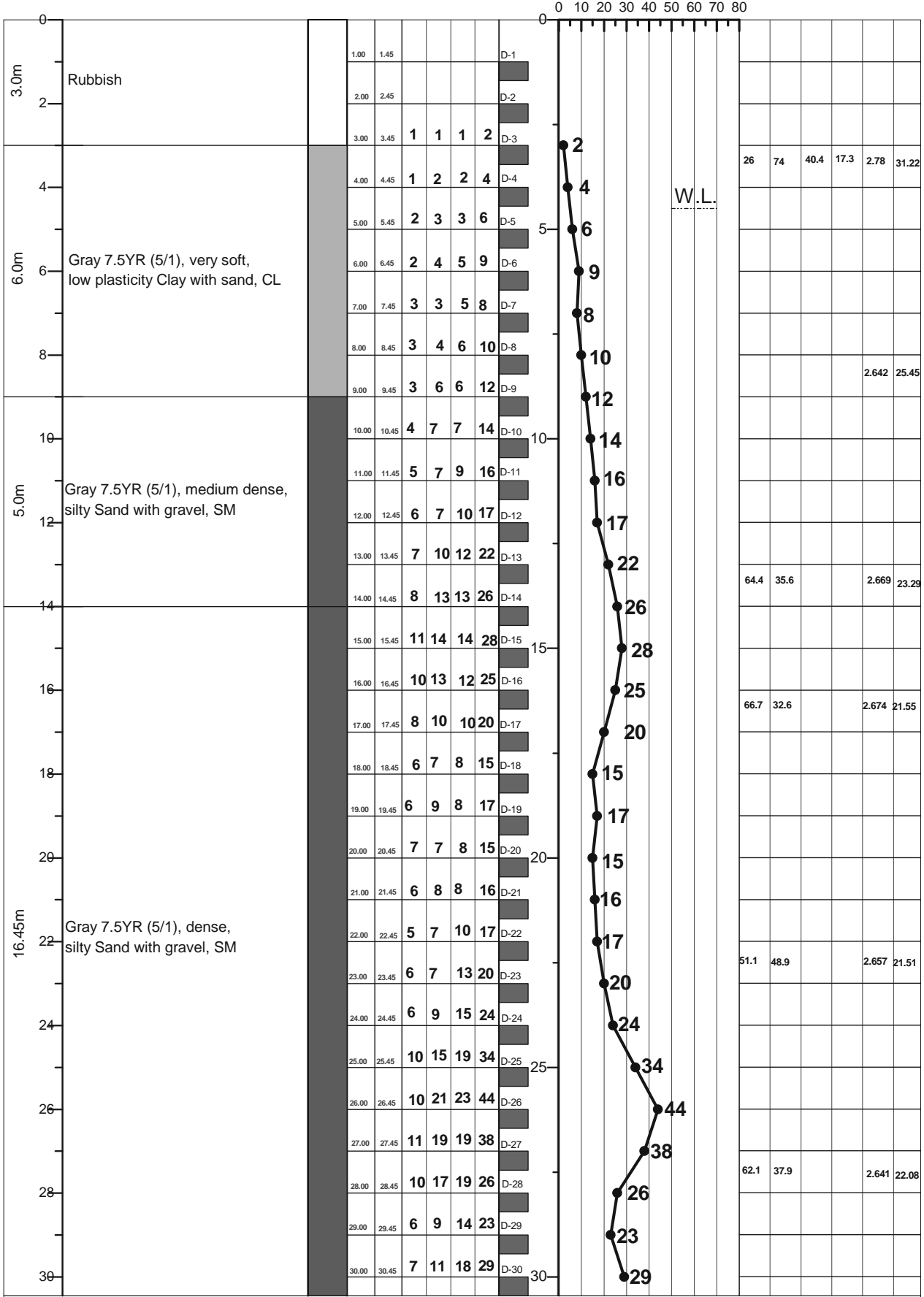
CHAINAGE: 127.737



PROSOIL FOUNDATION CONSULTANT

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

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



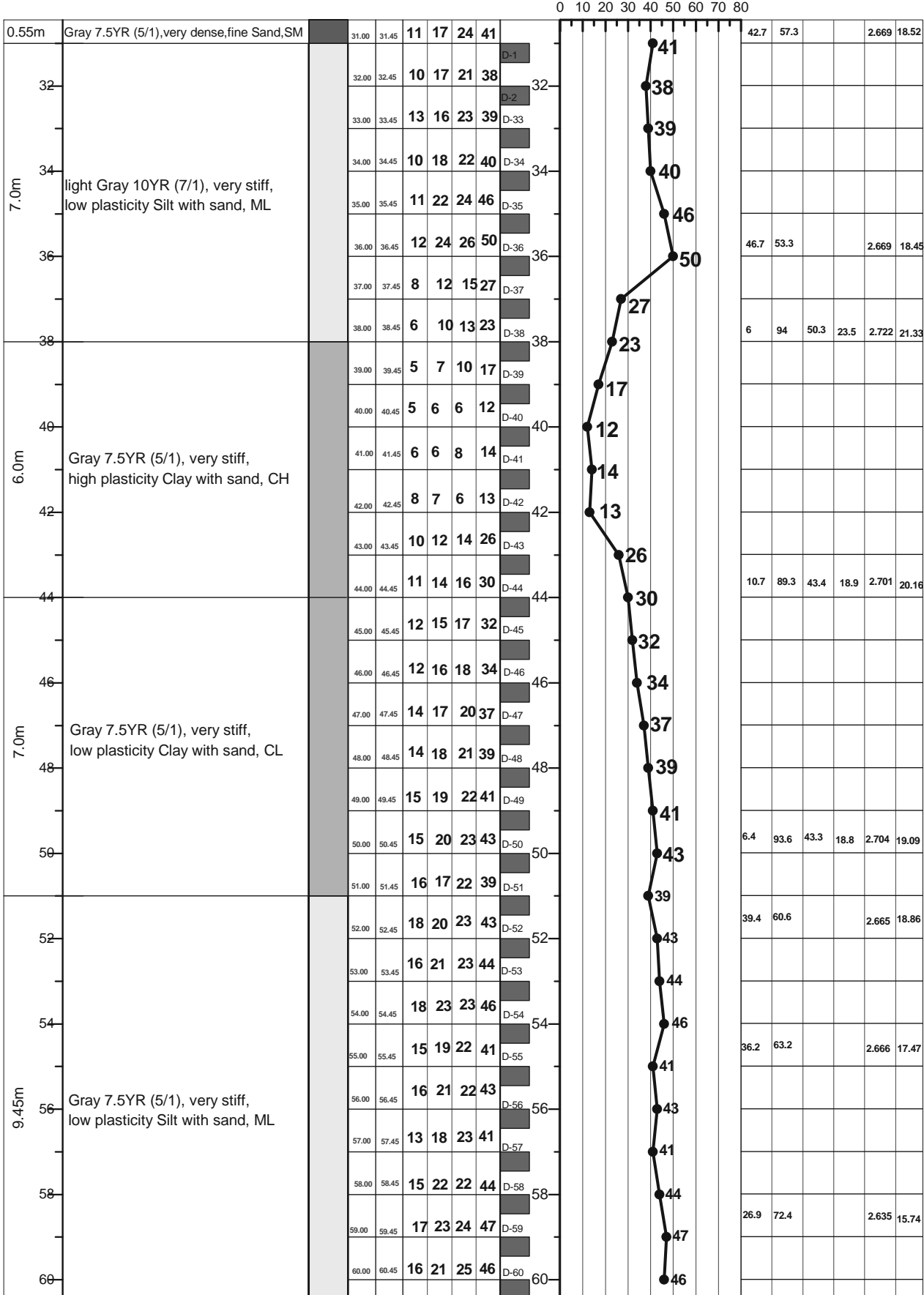
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>c</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)	N4-600 (mm)	N5-750 (mm)								



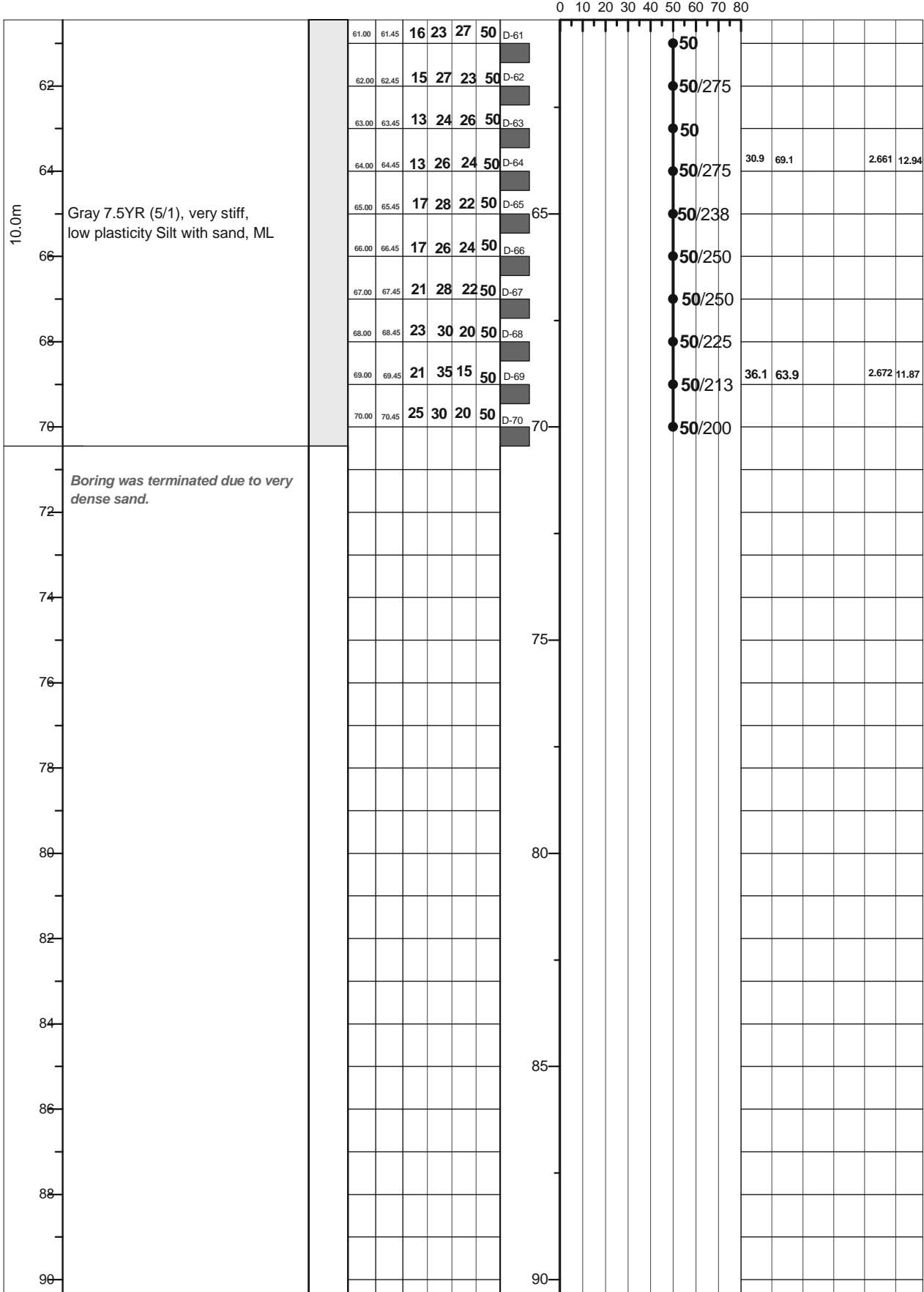
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>c</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

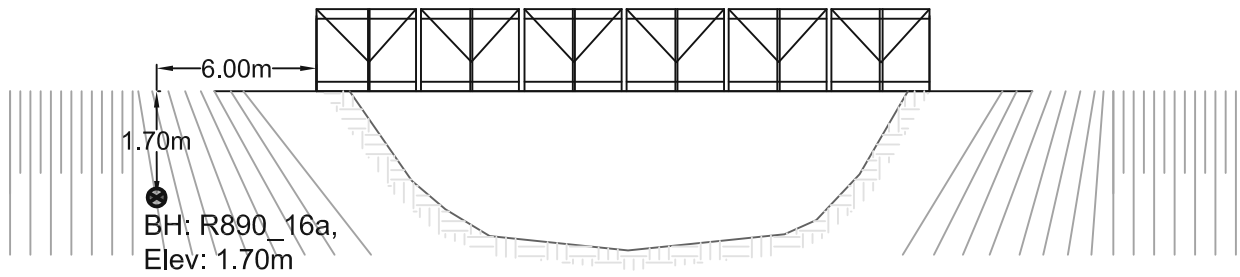
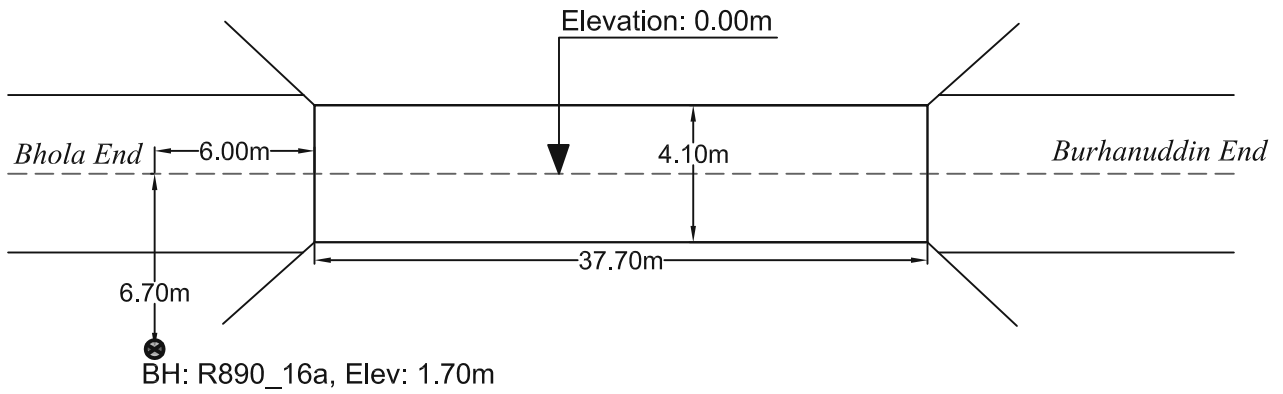
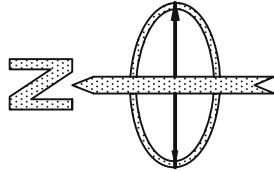
CLIENT: Oriental Consultants Company Limited.

RANK: 70

BRIDGE ID: R890\_16a

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

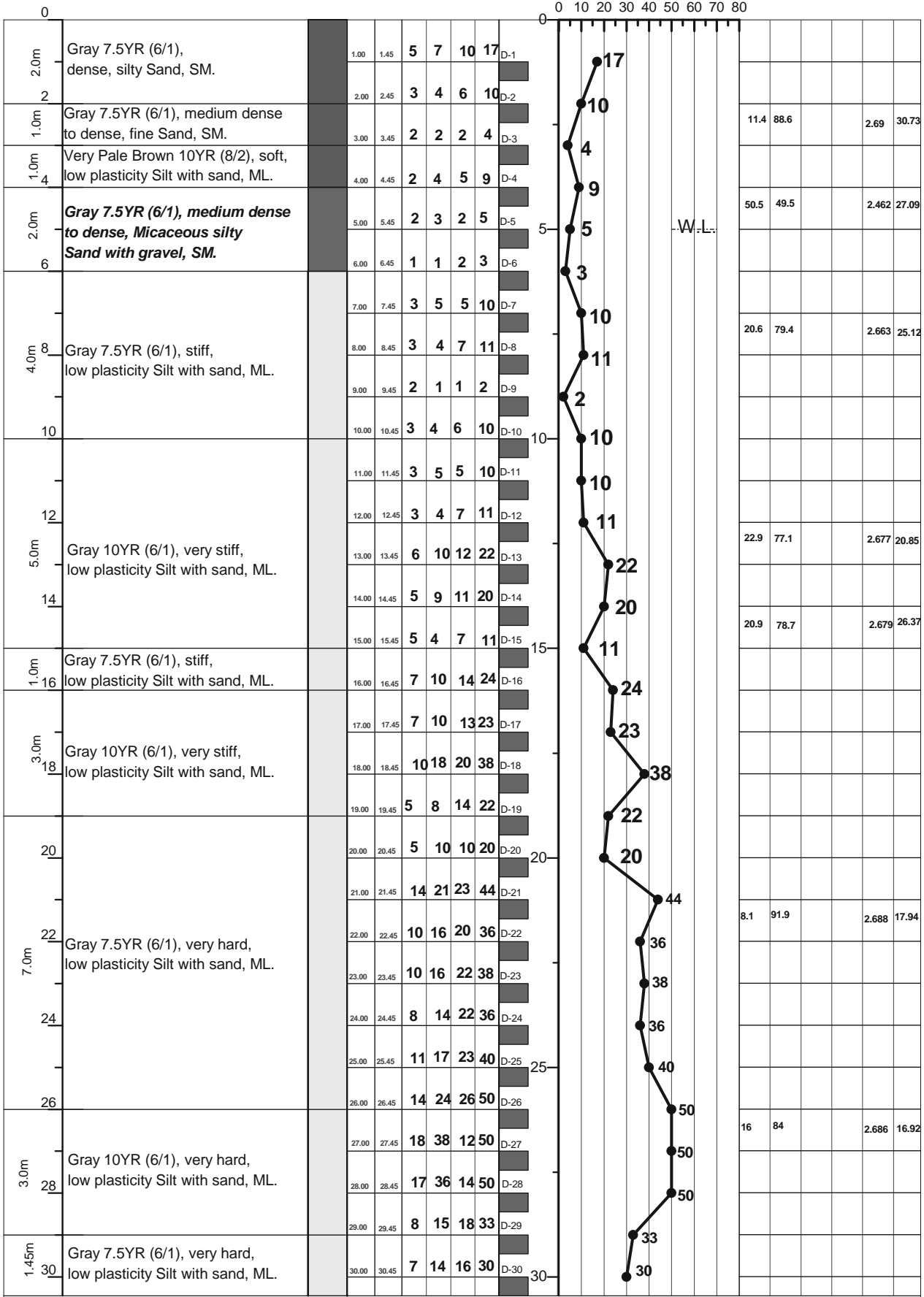
CHAINAGE: 16.347



PROSOIL FOUNDATION CONSULTANT

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

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



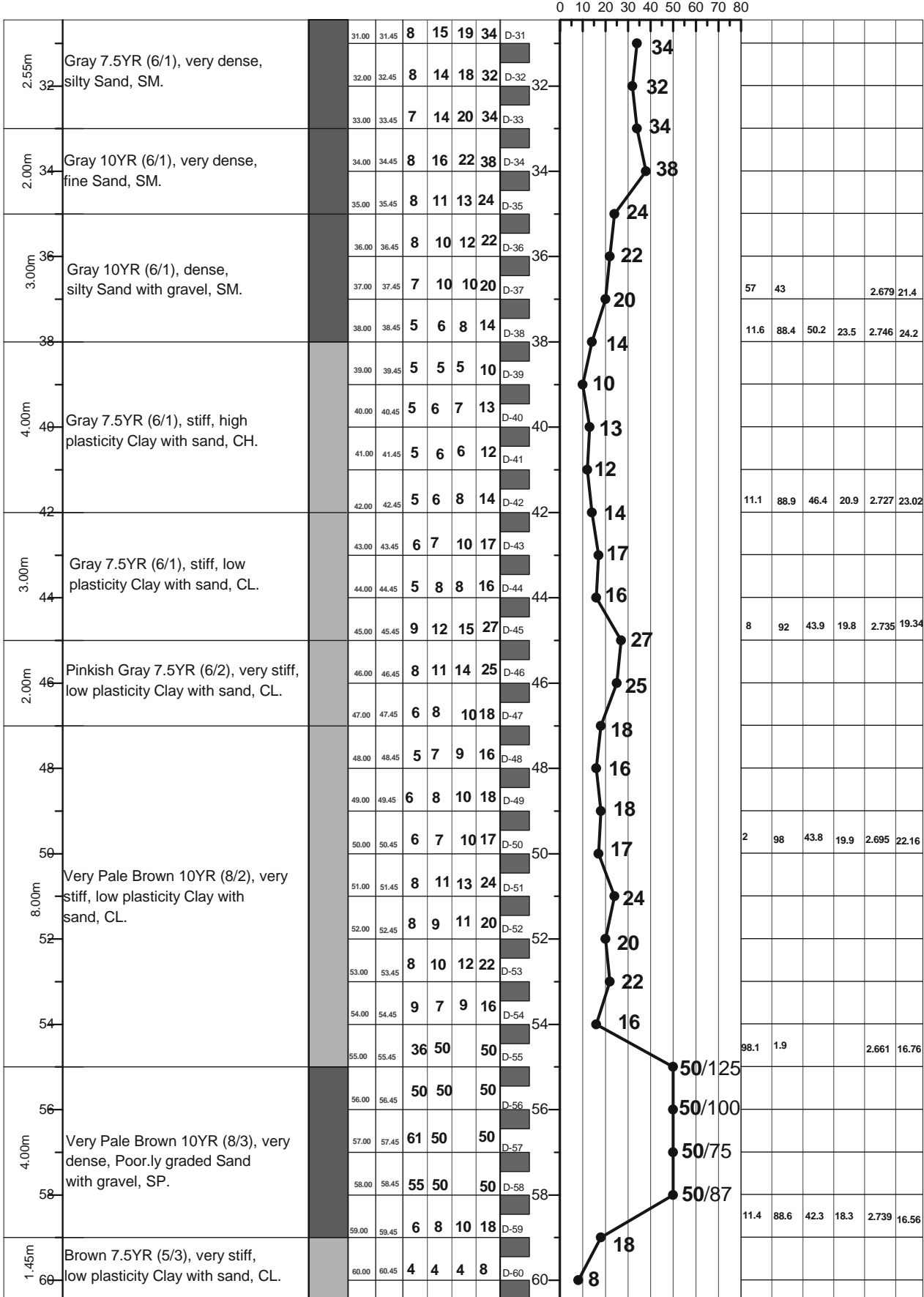
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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



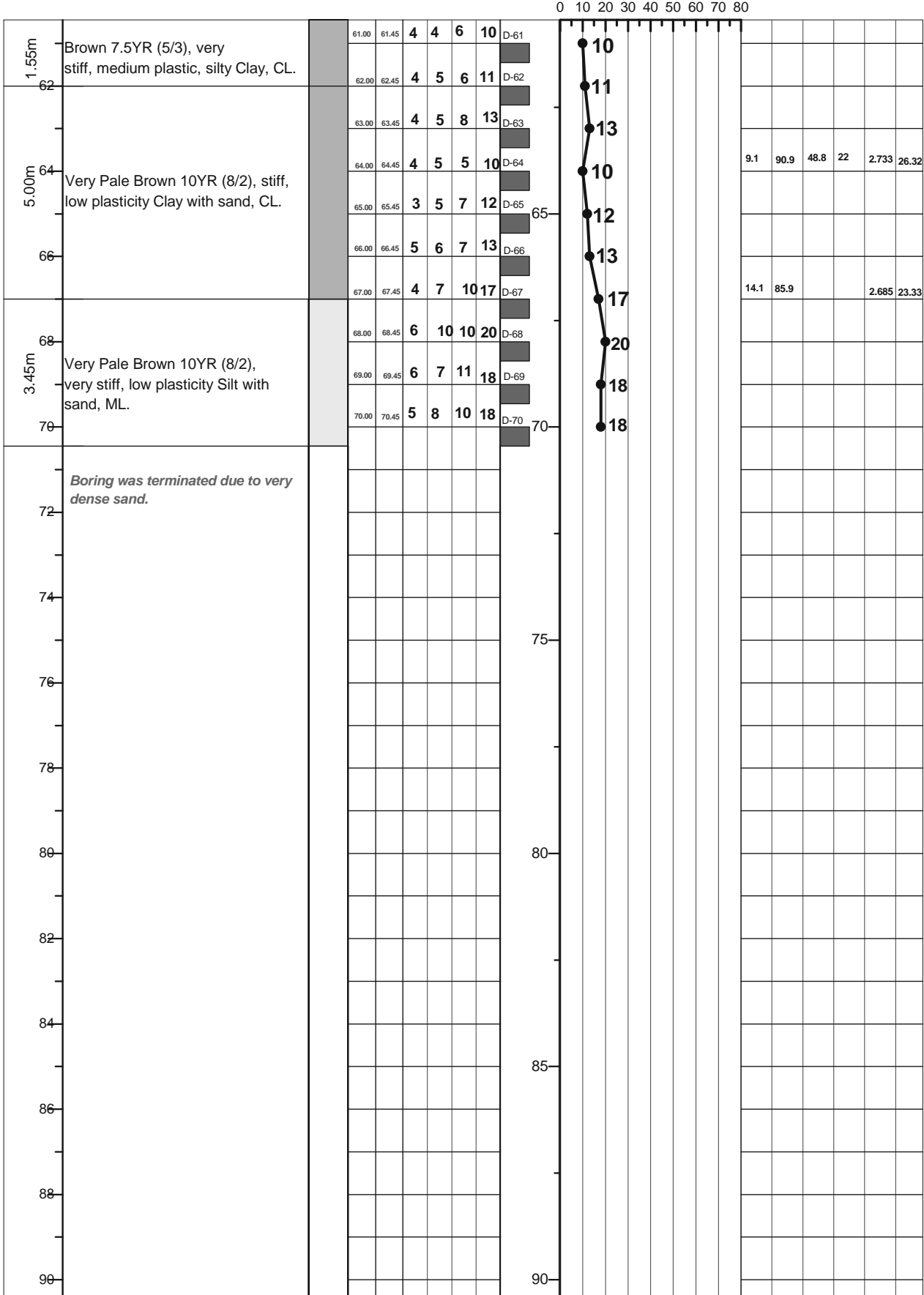
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>c</sub>
			From (m)	To (m)	N <sub>1-150</sub> (mm)	N <sub>2-300</sub> (mm)									



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

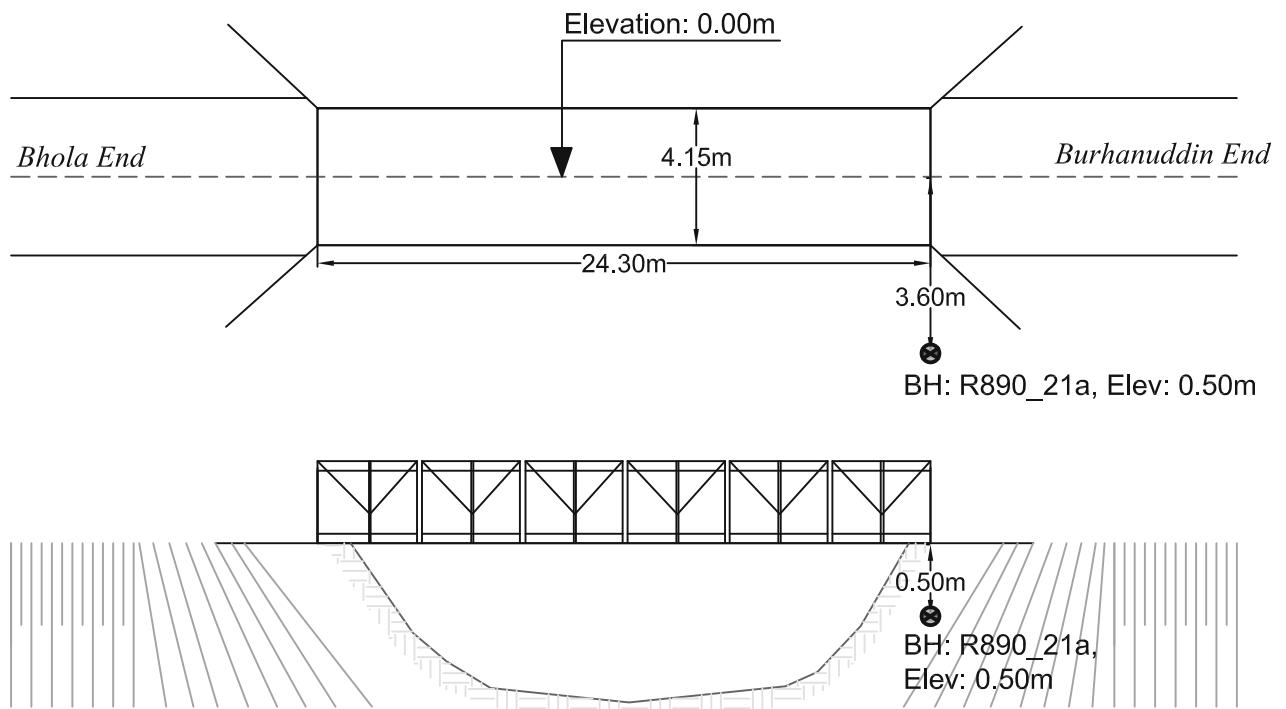
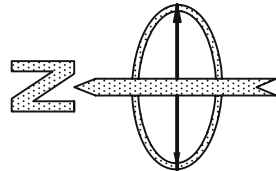
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>TM</sup> 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

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)								
0								0							
0-2	Very Pale Brown 10YR (8/2), loose, silty Sand with gravel, SM.		1.00	1.45	2	2	4	6	D-1	6					
2-3			2.00	2.45	2	3	4	7	D-2	7	79.4	20.6		2.671	30.65
3-4			3.00	3.45	3	3	4	7	D-3	7					
4-5			4.00	4.45	1	1	2	3	D-4	3					
5-6	Gray 7.5YR (6/1), loose, silty Sand, SM.		5.00	5.45	1	2	2	4	D-5	4					
6-7			6.00	6.45	2	3	5	8	D-6	8					
7-8	Gray 10YR (6/1), stiff, low plastic, Silt with sand, ML.		7.00	7.45	5	5	6	11	D-7	11	8	92		2.674	26.81
8-9			8.00	8.45	5	6	6	12	D-8	12					
9-10			9.00	9.45	5	8	10	18	D-9	18					
10-11			10.00	10.45	5	7	8	15	D-10	15	82.4	17.6		2.475	23.42
11-12	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					
12-13			12.00	12.45	4	6	7	13	D-12	13					
13-14			13.00	13.45	4	5	5	10	D-13	10					
14-15			14.00	14.45	5	5	7	12	D-14	12					
15-16	Gray 10YR (6/1), dense, silty Sand with gravel, SM.		15.00	15.45	8	11	14	25	D-15	25	71.1	28.9		2.682	19.71
16-17			16.00	16.45	8	12	16	28	D-16	28					
17-18		17.00	17.45	8	11	15	26	D-17	26						
18-19	Gray 7.5YR (6/1), medium dense to dense, Micaceous silty Sand, SM.		18.00	18.45	4	6	7	13	D-18	13	57.4	42.6		2.515	23.95
19-20			19.00	19.45	7	10	12	22	D-19	22					
20-21	Gray 10YR (6/1), dense, fine Sand, SM.		20.00	20.45	7	11	14	25	D-20	25					
21-22			21.00	21.45	7	10	15	25	D-21	25					
22-23			22.00	22.45	8	10	13	23	D-22	23					
23-24			23.00	23.45	8	11	13	24	D-23	24	56.9	42.5		2.495	18.94
24-25	Gray 7.5YR (6/1), dense, Micaceous silty Sand, SM.		24.00	24.45	8	10	12	22	D-24	22					
25-26			25.00	25.45	7	9	11	20	D-25	20					
26-27		26.00	26.45	7	10	10	20	D-26	20	81.6	18.4		2.701	21.18	
27-28	Gray 10YR (6/1), dense, silty Sand with gravel, SM.		27.00	27.45	6	11	10	21	D-27	21					
28-29			28.00	28.45	6	10	12	22	D-28	22					
29-30			29.00	29.45	7	11	14	25	D-29	25					
30-31			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

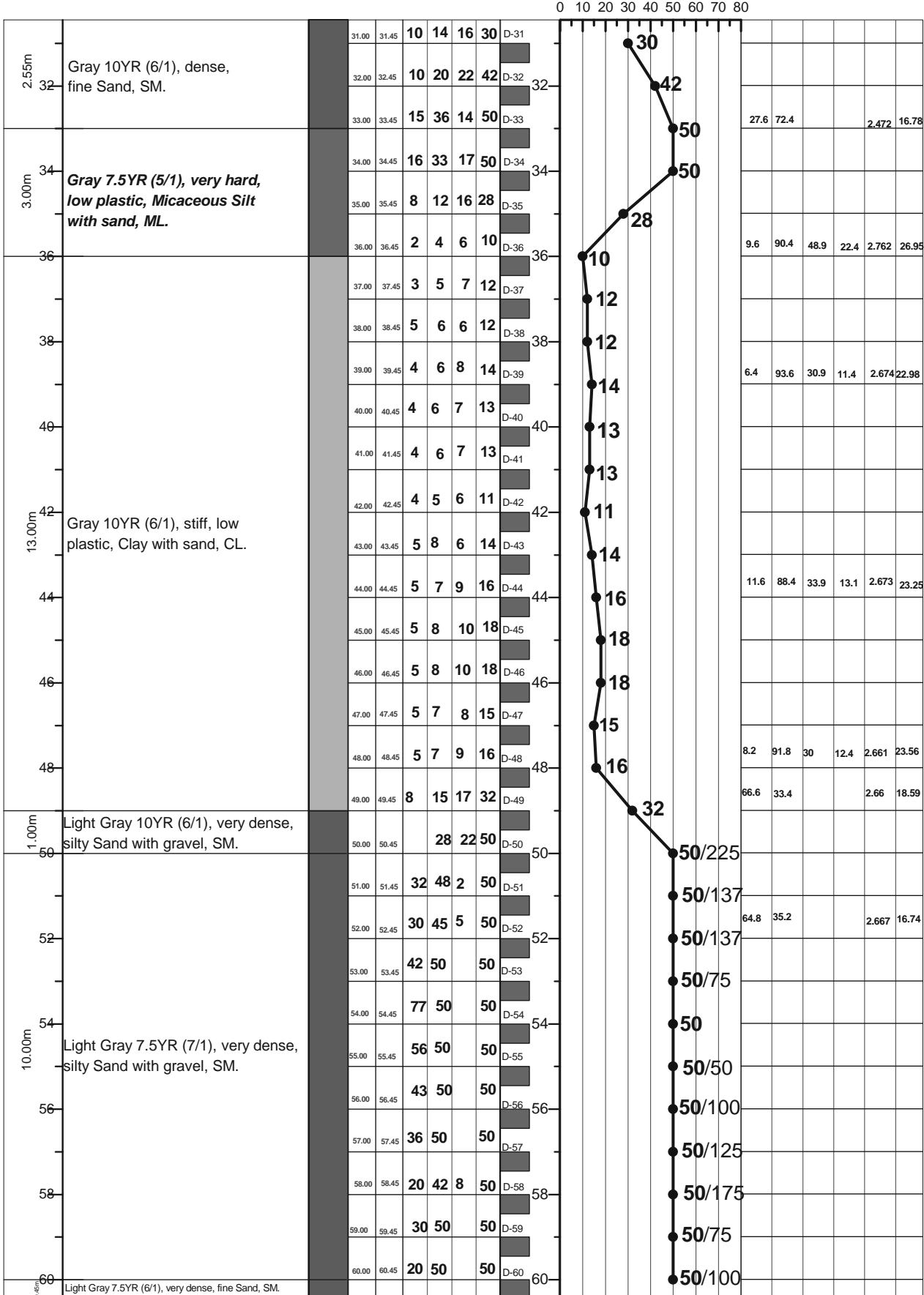
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

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

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



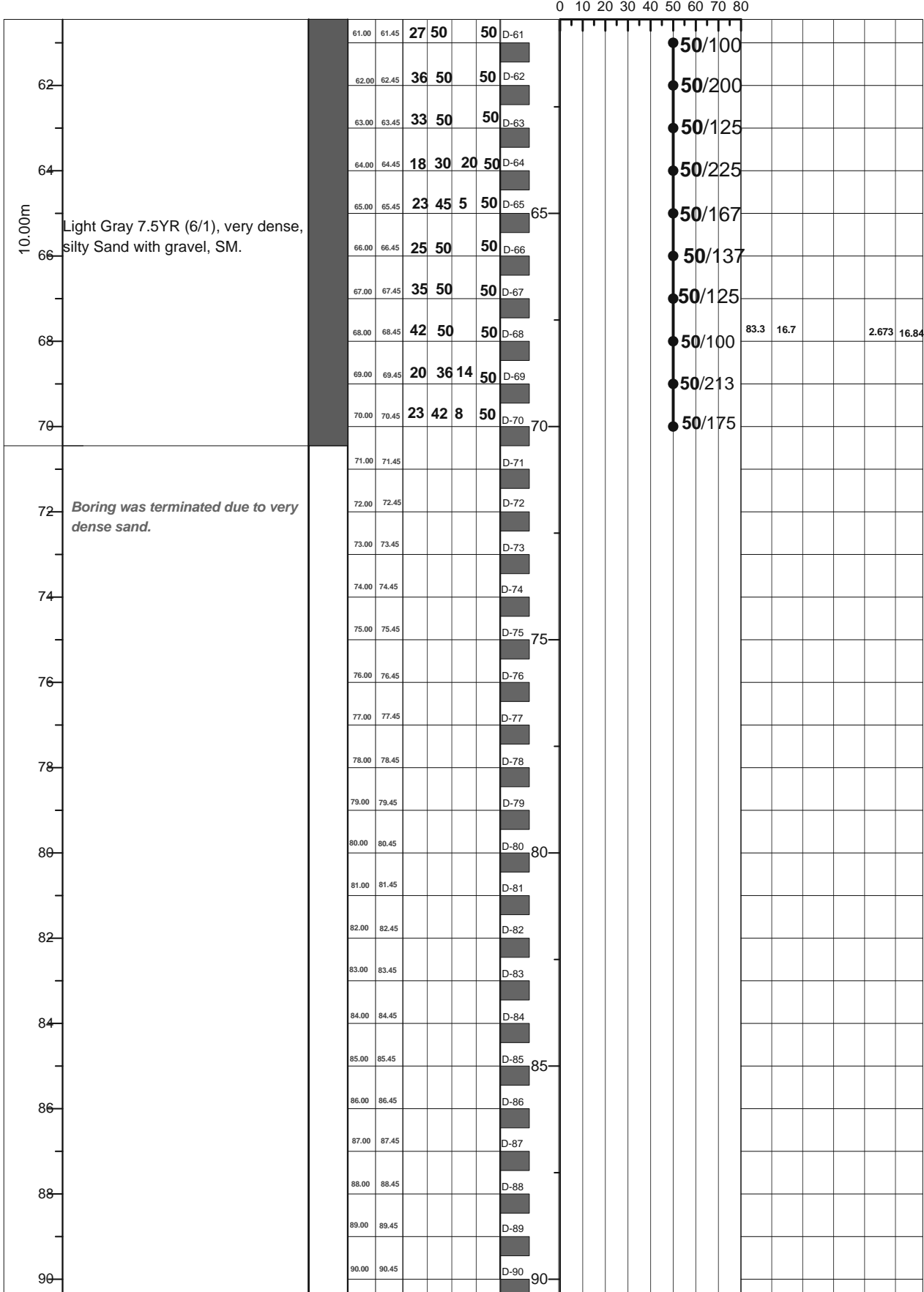
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>m</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

**A1: Location of Borehole**

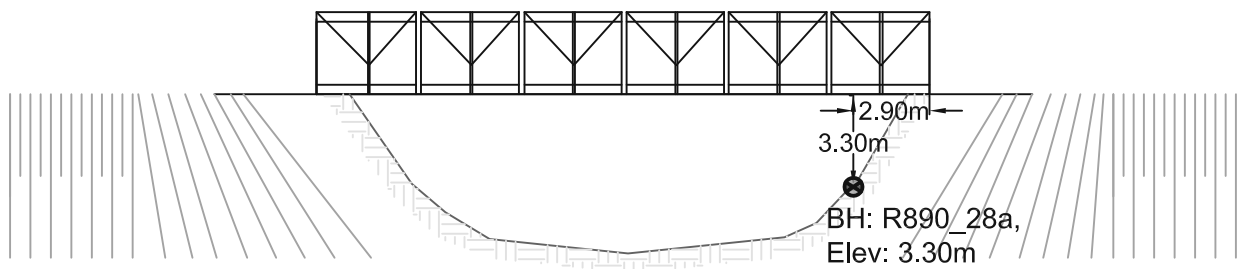
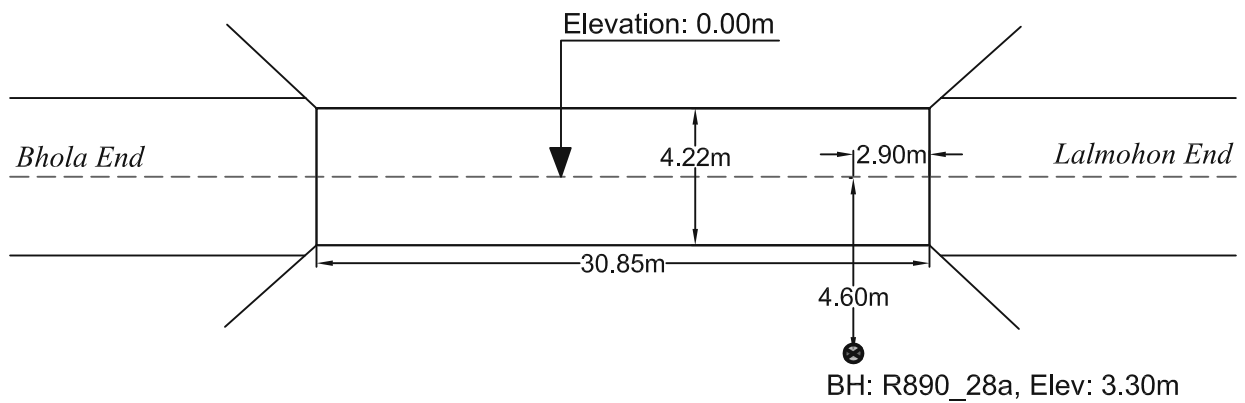
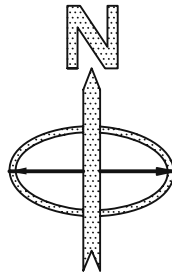
CLIENT: Oriental Consultants Company Limited.

RANK: 72

BRIDGE ID: R890\_28a

LATITUDE: 22°30'9.483" LONGITUDE: 90°43'5.012"

CHAINAGE: 28.699



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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					
1.0m	Gray 7.5YR (6/1), loose, silty Sand with gravel, SM.		3.00	3.45	1	1	1	2	D-3	2	79.6	20.4			2.663 28.38
4			4.00	4.45	1	1	2	3	D-4	3					
4.0m	Gray 7.5YR (6/1), very soft, low plastic, Clay with sand, CL.		5.00	5.45	1	1	2	3	D-5	3					
			6.00	6.45	1	1	2	3	D-6	3					
6			7.00	7.45	1	2	2	4	D-7	4					
8			8.00	8.45	2	2	2	4	D-8	4					
3.0m	Gray 7.5YR (6/1), loose, silty Sand with gravel, SM.		9.00	9.45	2	3	3	6	D-9	6					
10			10.00	10.45	2	4	4	8	D-10	8					
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					
			12.00	12.45	2	4	7	11	D-12	11					
2.0m	<b>Gray 7.5YR (6/1), stiff, low plastic, Micaceous Silt with sand and, ML.</b>		13.00	13.45	3	5	6	11	D-13	11					
			14.00	14.45	3	4	5	9	D-14	9					
15			15.00	15.45	2	3	4	7	D-15	7					
			16.00	16.45	3	5	5	10	D-16	10					
4.0m	Gray 7.5YR (6/1), medium stiff, low plastic, Clay with sand, CL.		17.00	17.45	4	6	7	13	D-17	13					
			18.00	18.45	8	10	12	22	D-18	22					
18			19.00	19.45	9	12	16	28	D-19	28					
			20.00	20.45	10	16	18	34	D-20	34					
4.0m	Gray 10YR (6/1), very hard, low plastic, Silt with sand, ML.		21.00	21.45	20	29	21	50	D-21	50/237					
			22.00	22.45	6	7	9	16	D-22	16					
22			23.00	23.45	4	6	8	14	D-23	14					
			24.00	24.45	5	6	8	14	D-24	14					
4.0m	Gray 10YR (6/1), stiff, high plastic, Clay with sand, CH.		25.00	25.45	5	7	8	15	D-25	15					
			26.00	26.45	4	6	9	15	D-26	15					
26			27.00	27.45	4	6	11	17	D-27	17					
			28.00	28.45	5	9	11	20	D-28	20					
4.45m	Gray 10YR (6/1), medium dense to dense, silty Sand with gravel, SM.		29.00	29.45	5	10	13	23	D-29	23					
			30.00	30.45	10	12	15	27	D-30	27					
30															

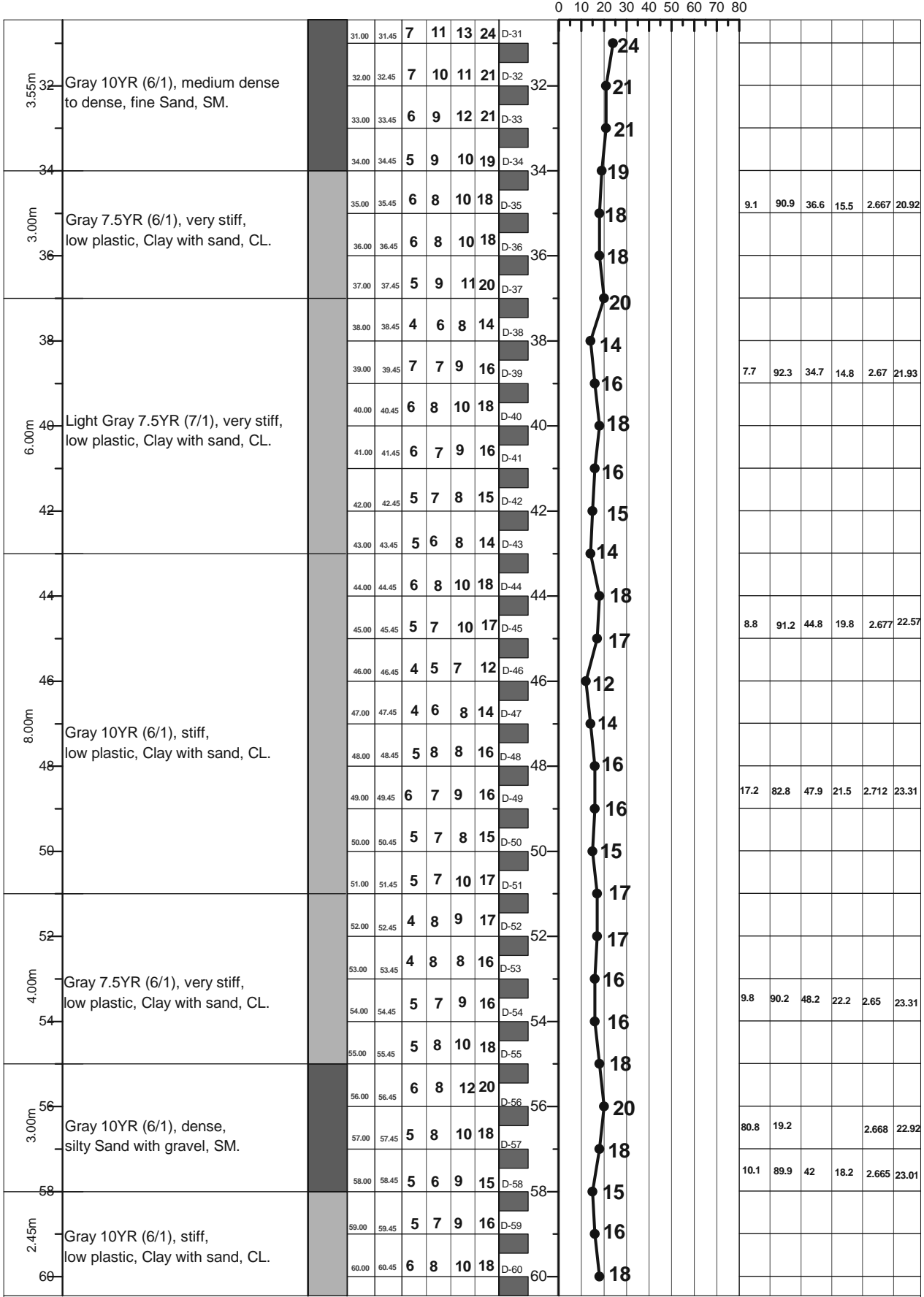
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



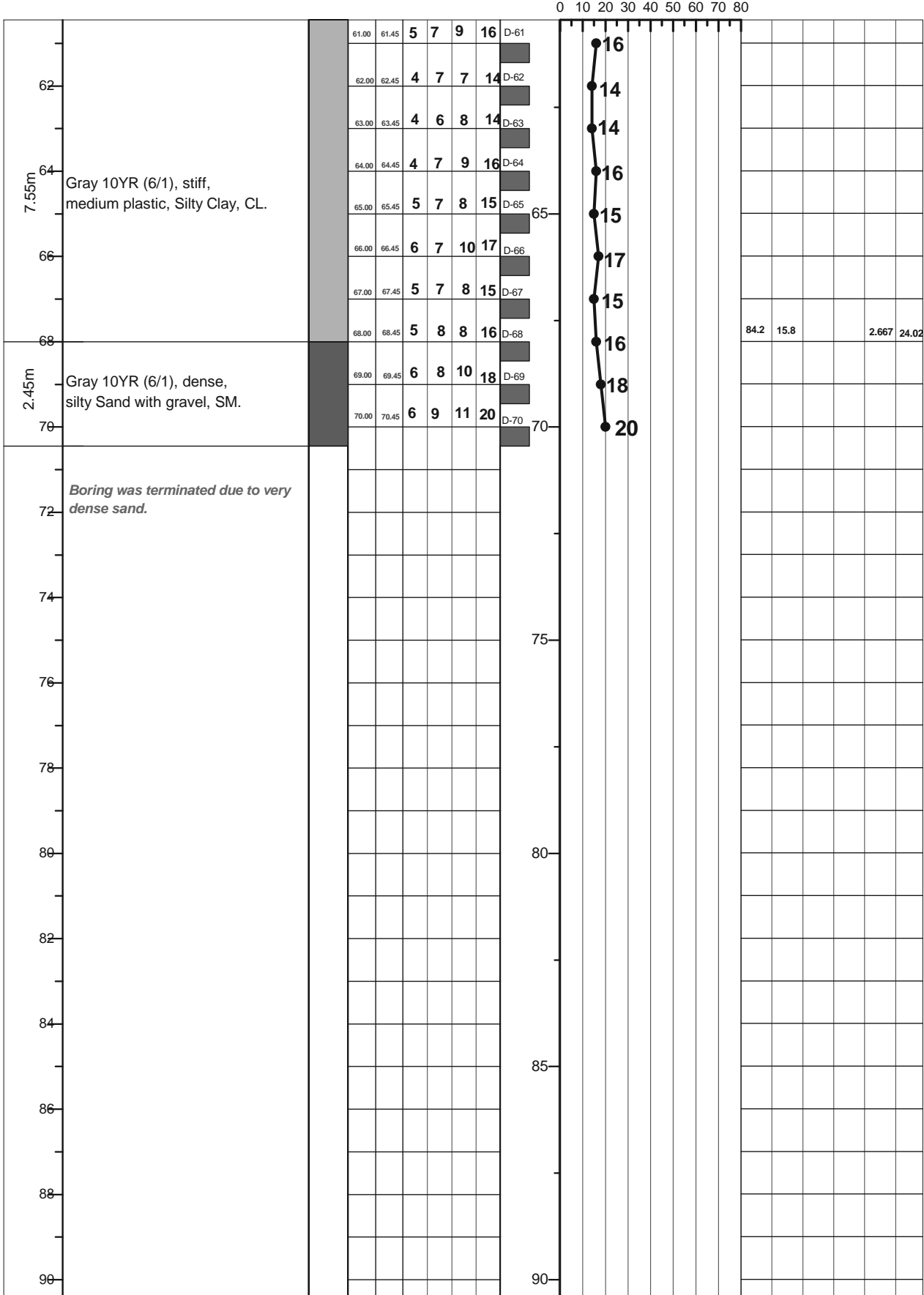
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



A1: Location of Borehole

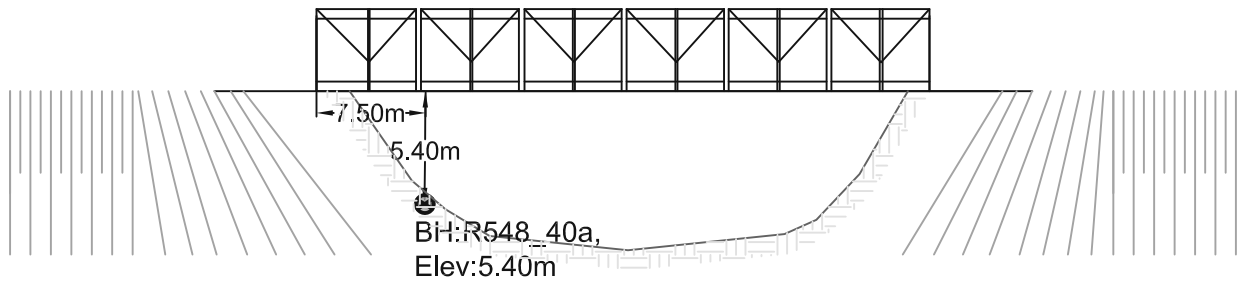
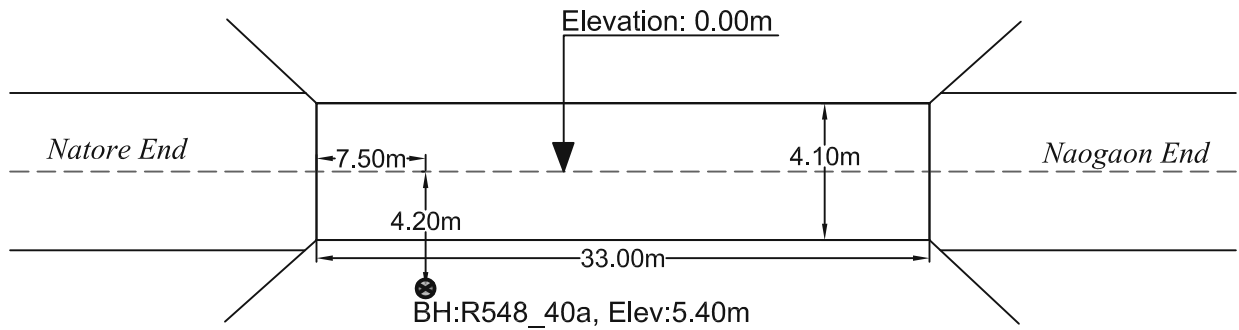
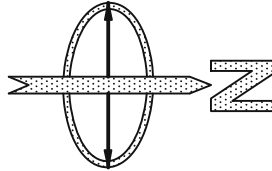
CLIENT: Oriental Consultants Company Limited.

RANK: 73

BRIDGE ID: R548\_40a

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

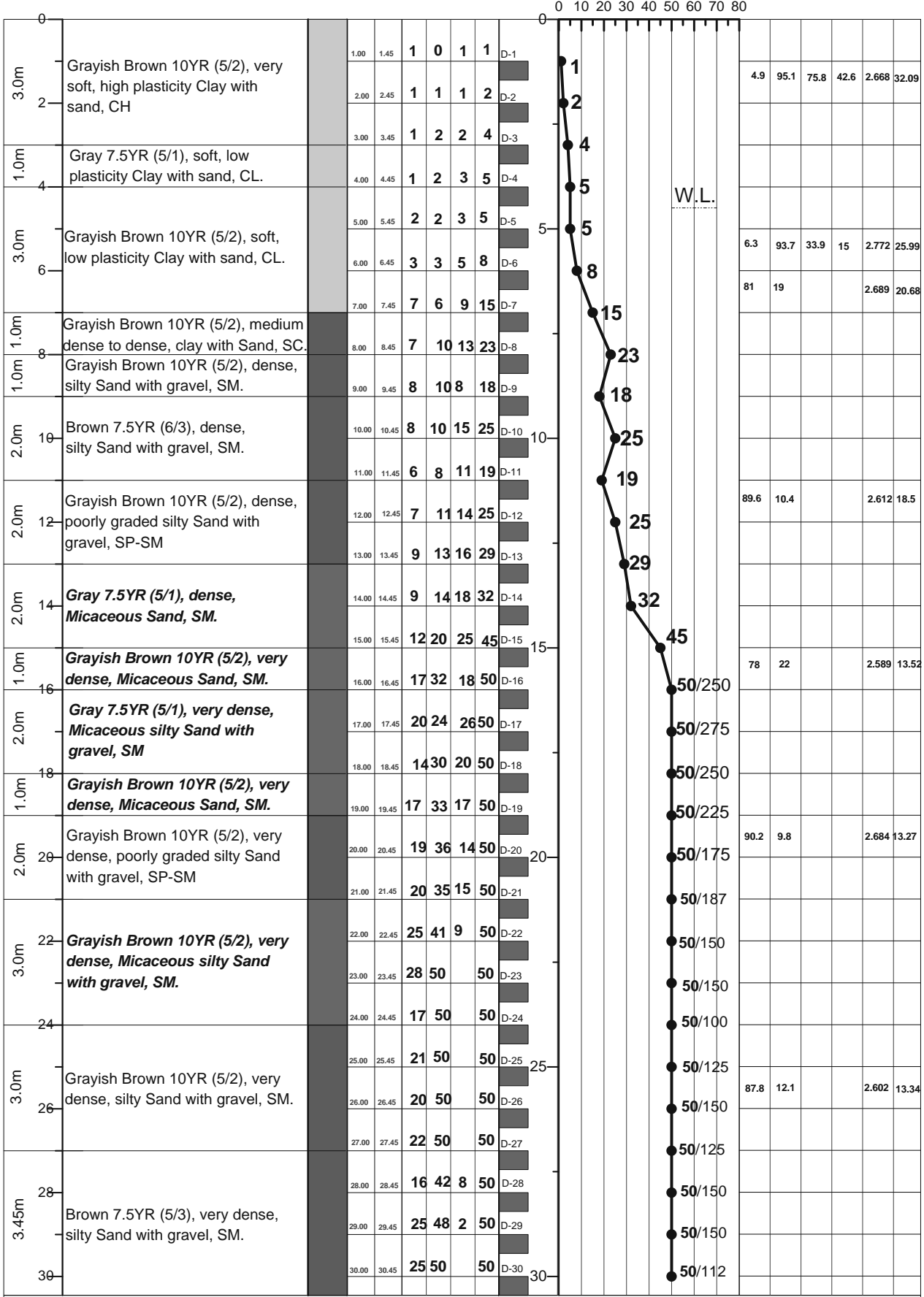
CHAINAGE: 0



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

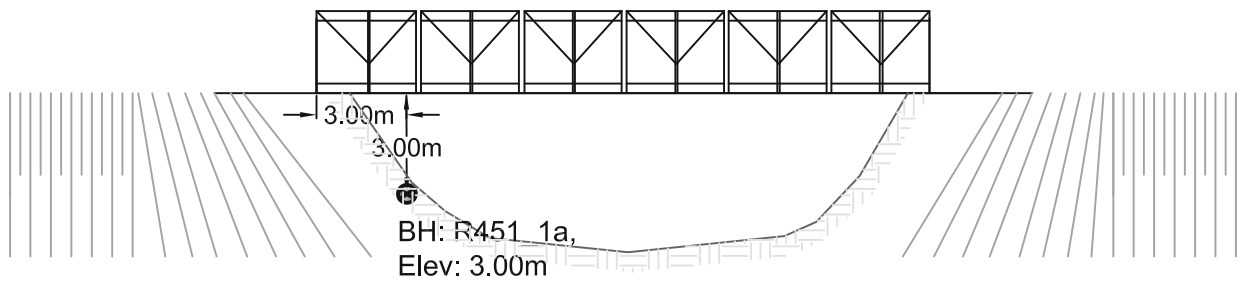
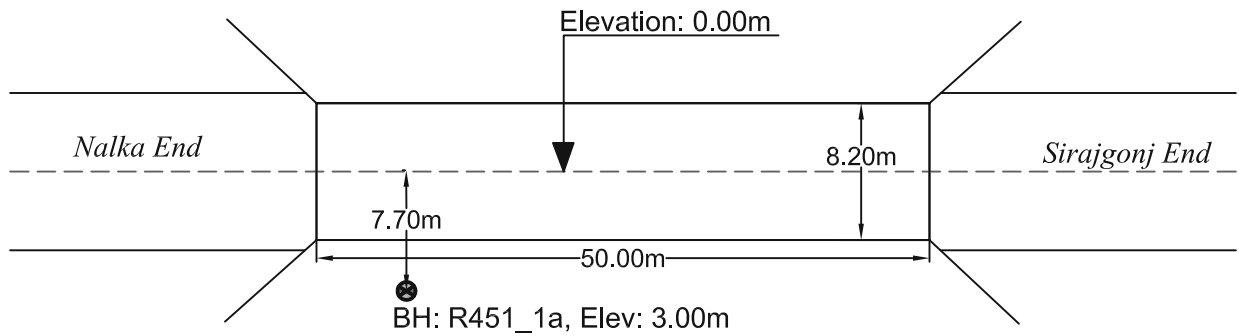
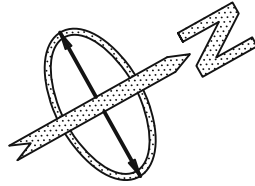
CLIENT: Oriental Consultants Company Limited.

RANK: 74

BRIDGE ID: R451\_1a

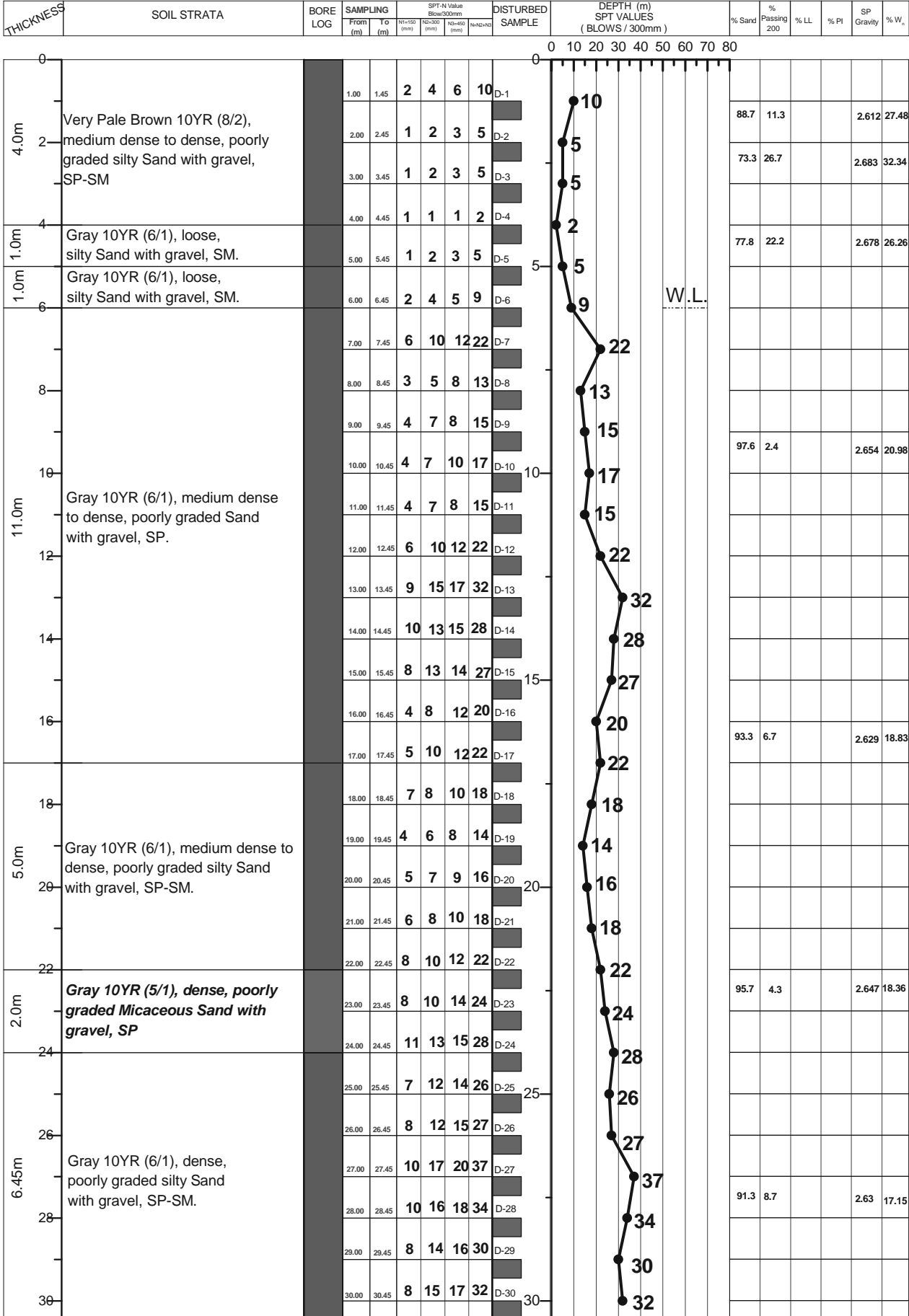
LATITUDE: 24d25'47.69" LONGITUDE: 89d36'05.153"

CHAINAGE: 0.907



PROSOIL FOUNDATION CONSULTANT

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



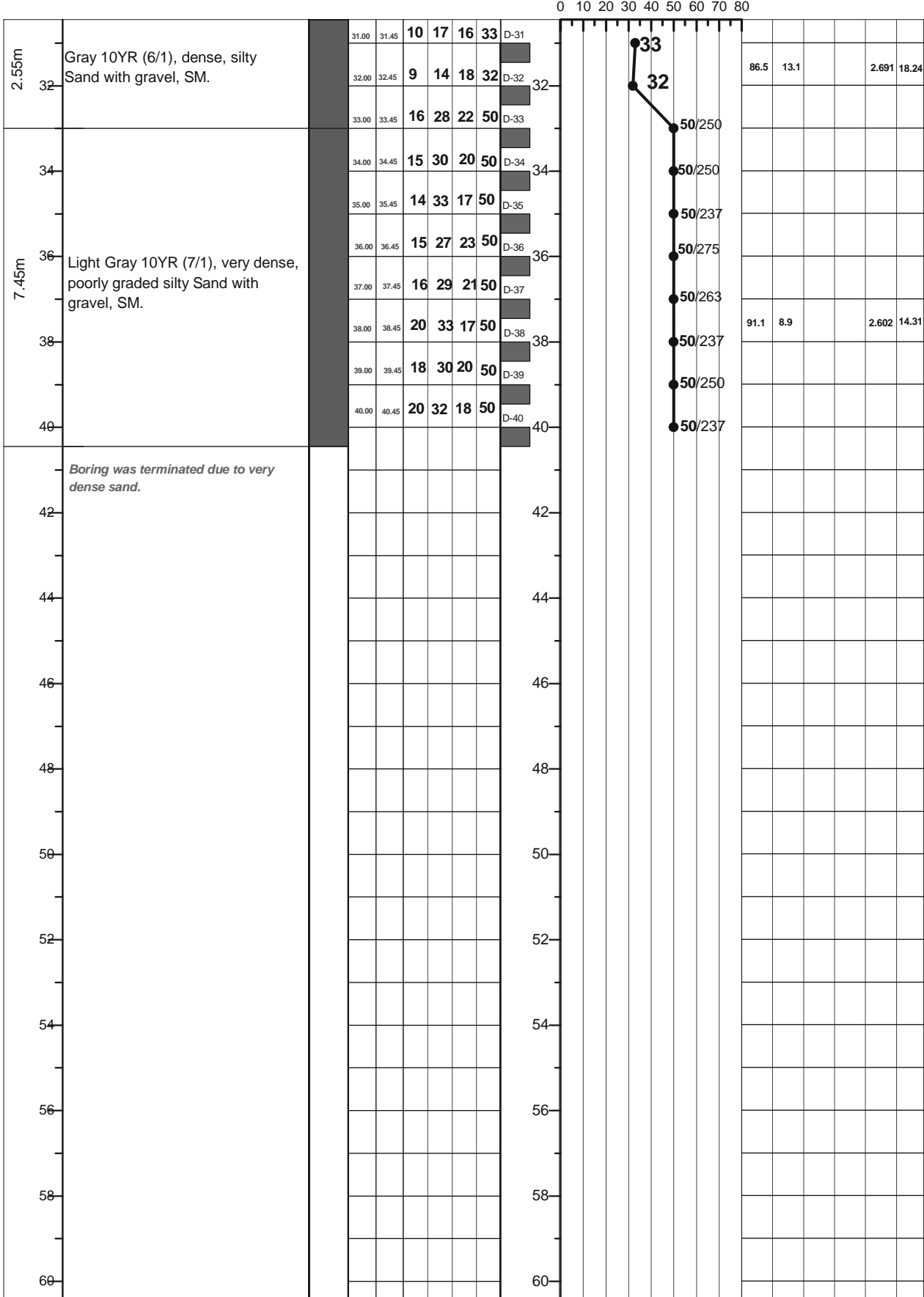
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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 <sub>v</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

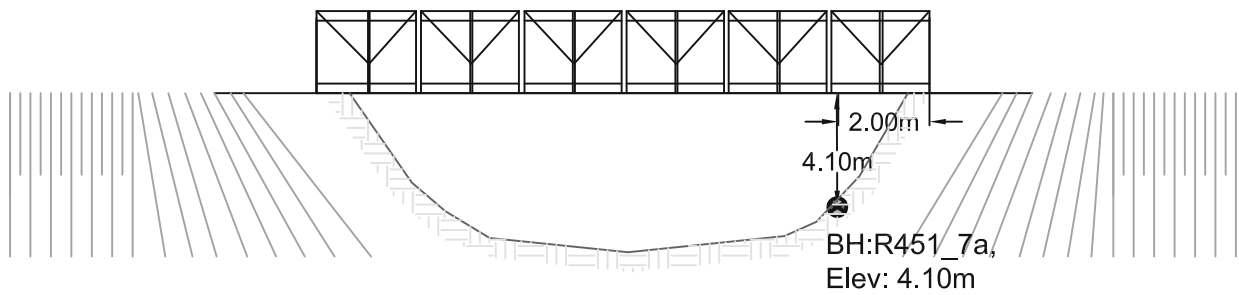
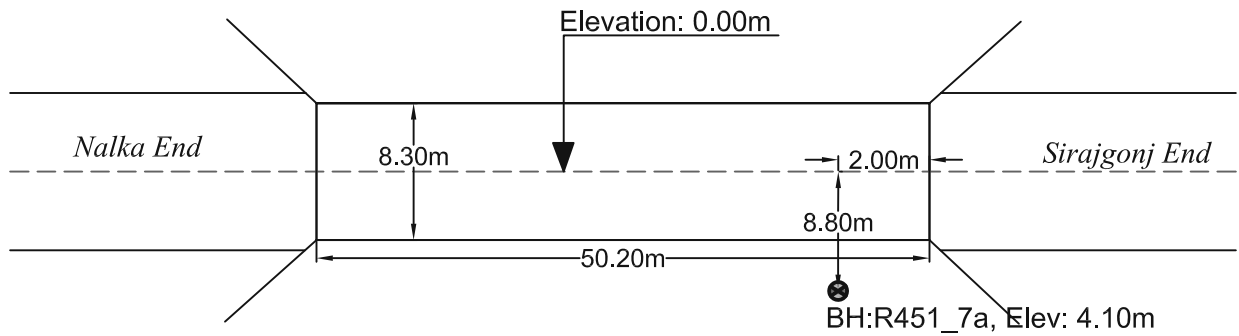
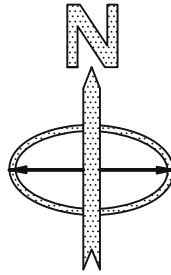
CLIENT: Oriental Consultants Company Limited.

RANK: 75

BRIDGE ID: R451\_7a

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

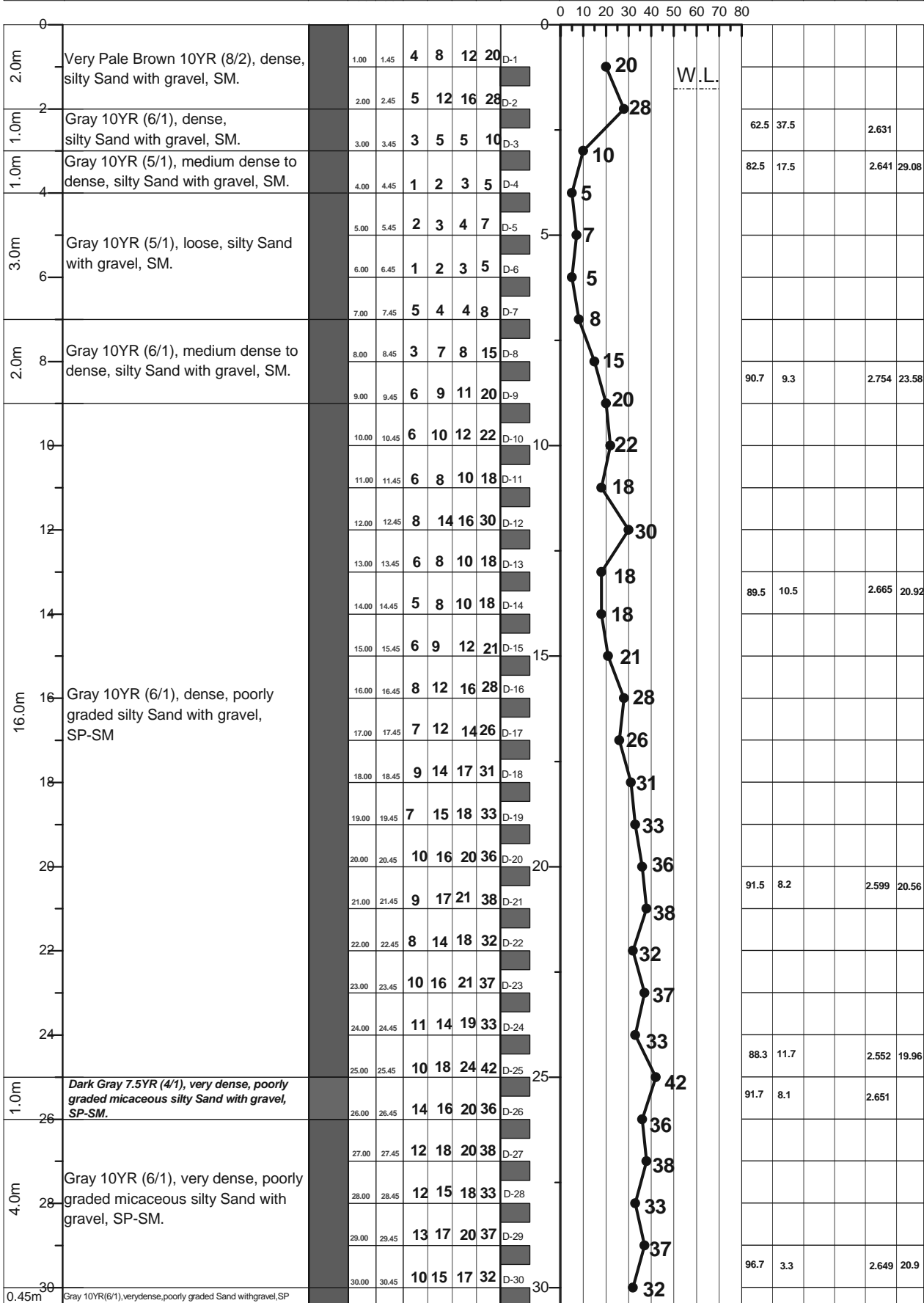
CHAINAGE: 6.561



PROSOIL FOUNDATION CONSULTANT

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

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



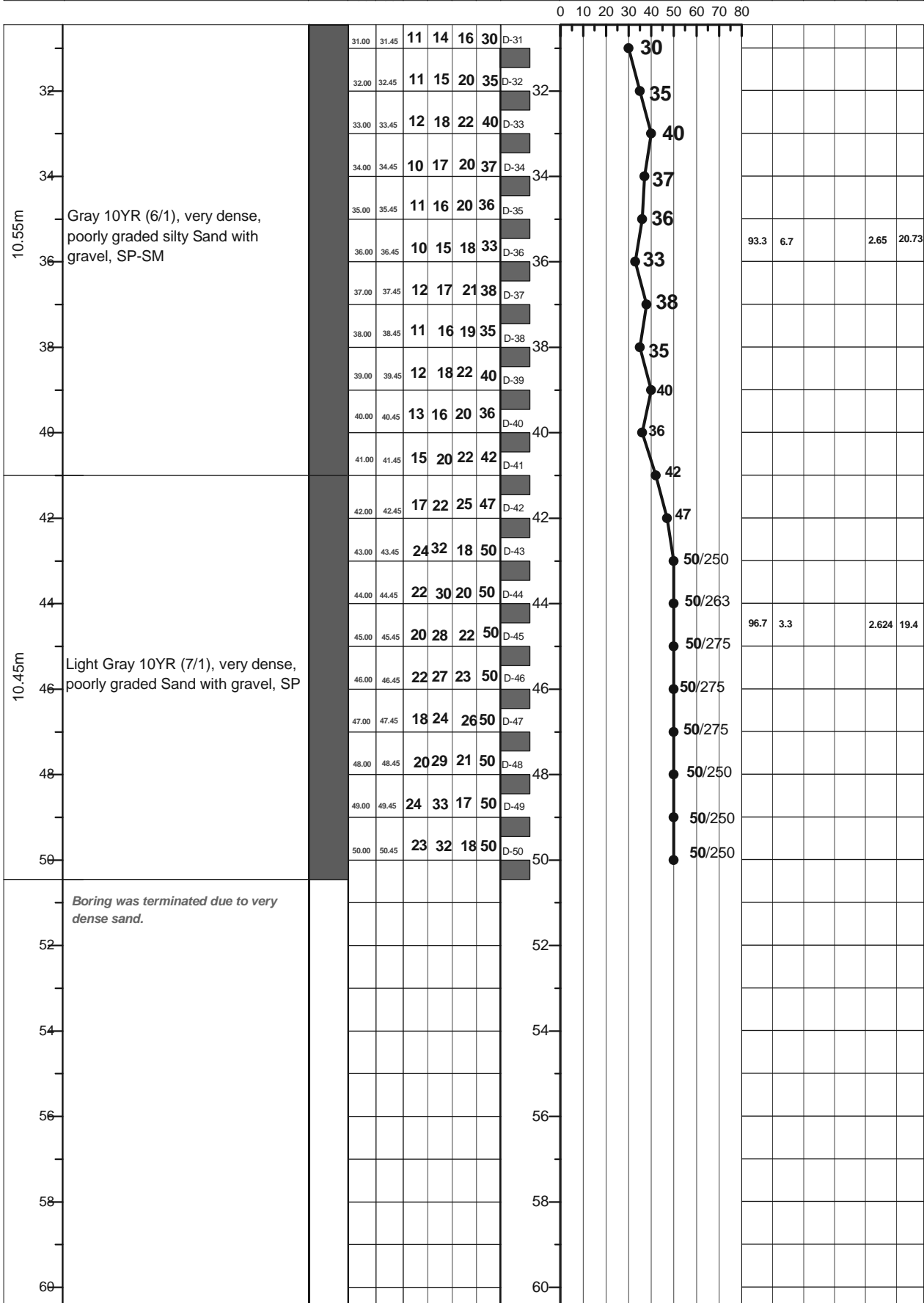
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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



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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



**A1: Location of Borehole**

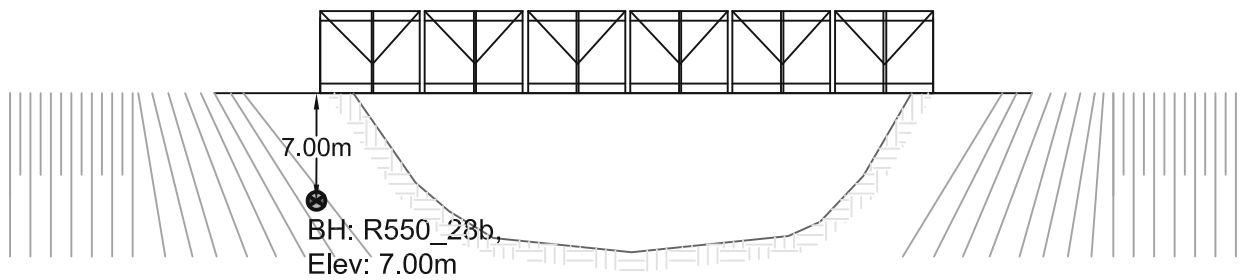
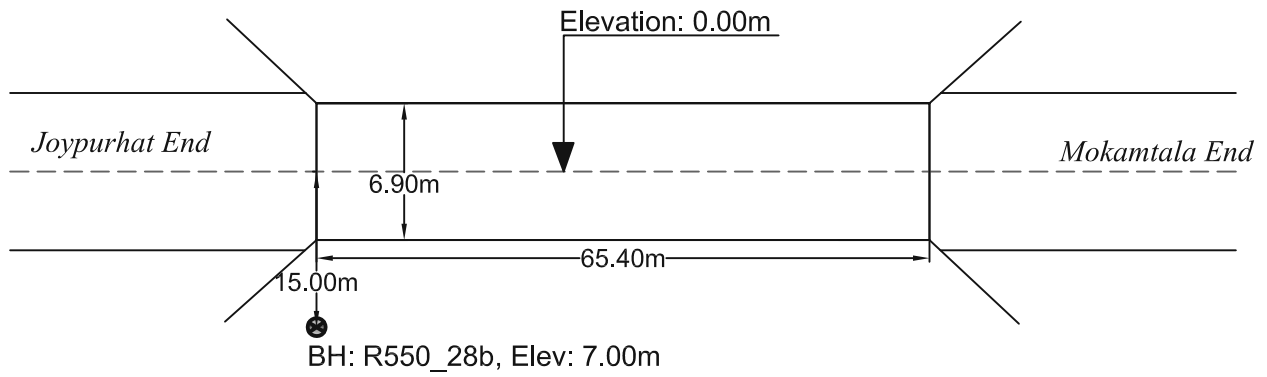
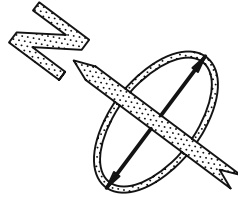
CLIENT: Oriental Consultants Company Limited.

RANK: 76

BRIDGE ID: R550\_28b

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

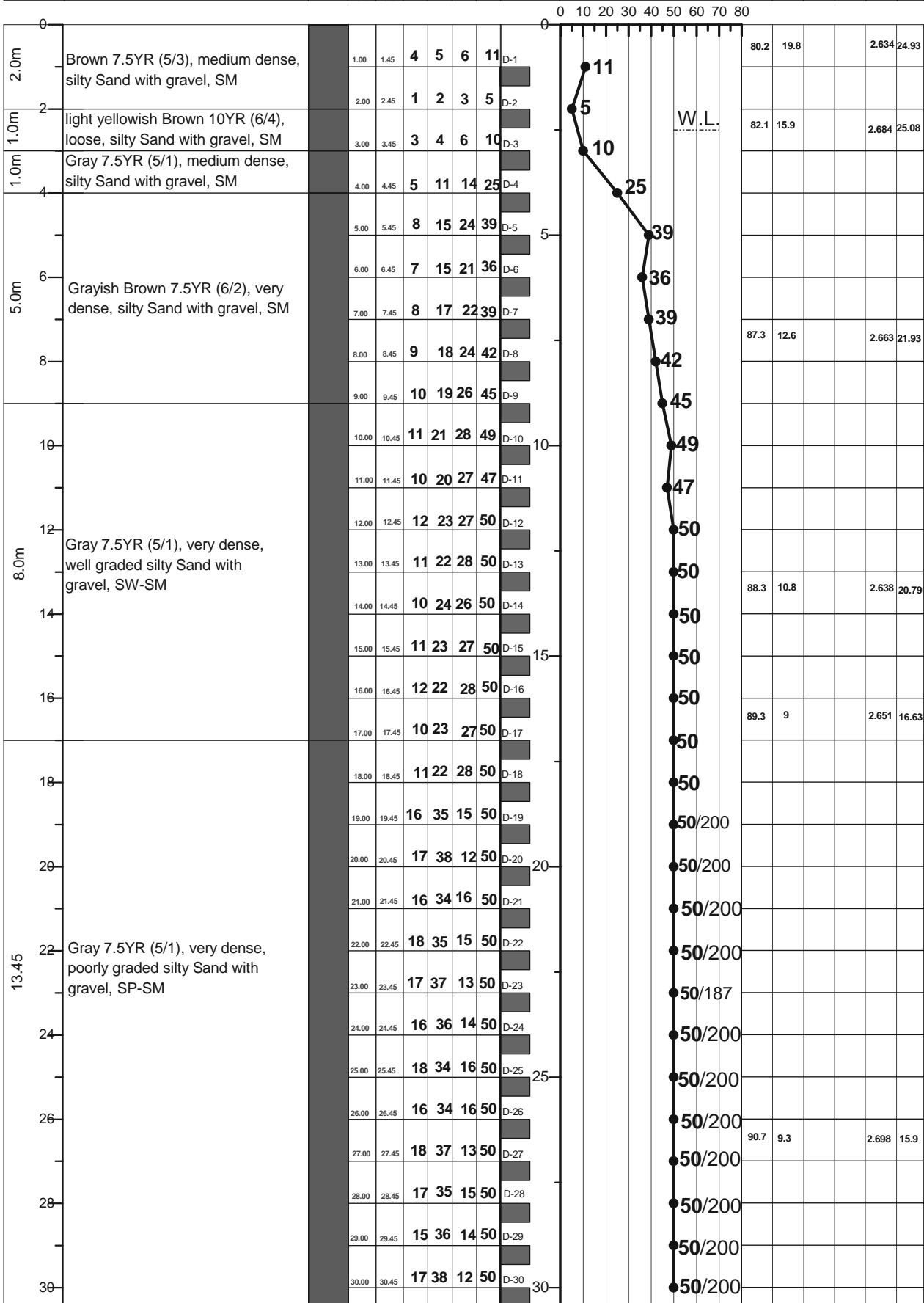
CHAINAGE: 28.826



PROSOIL FOUNDATION CONSULTANT

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

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

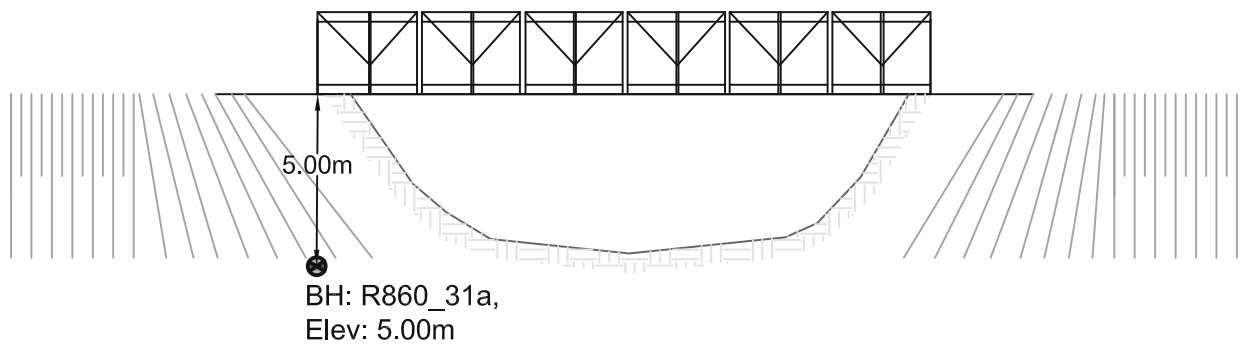
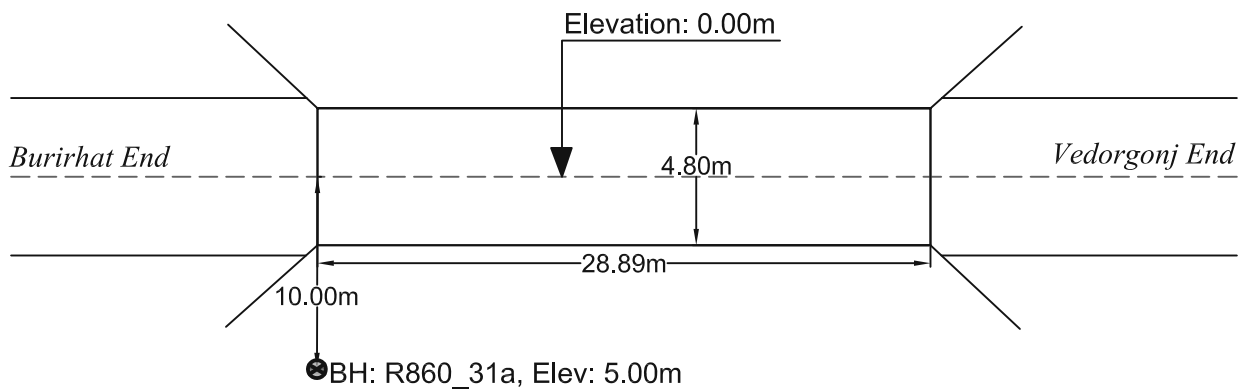
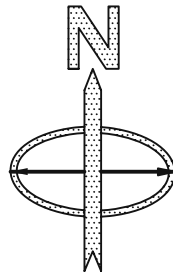


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> 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

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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')

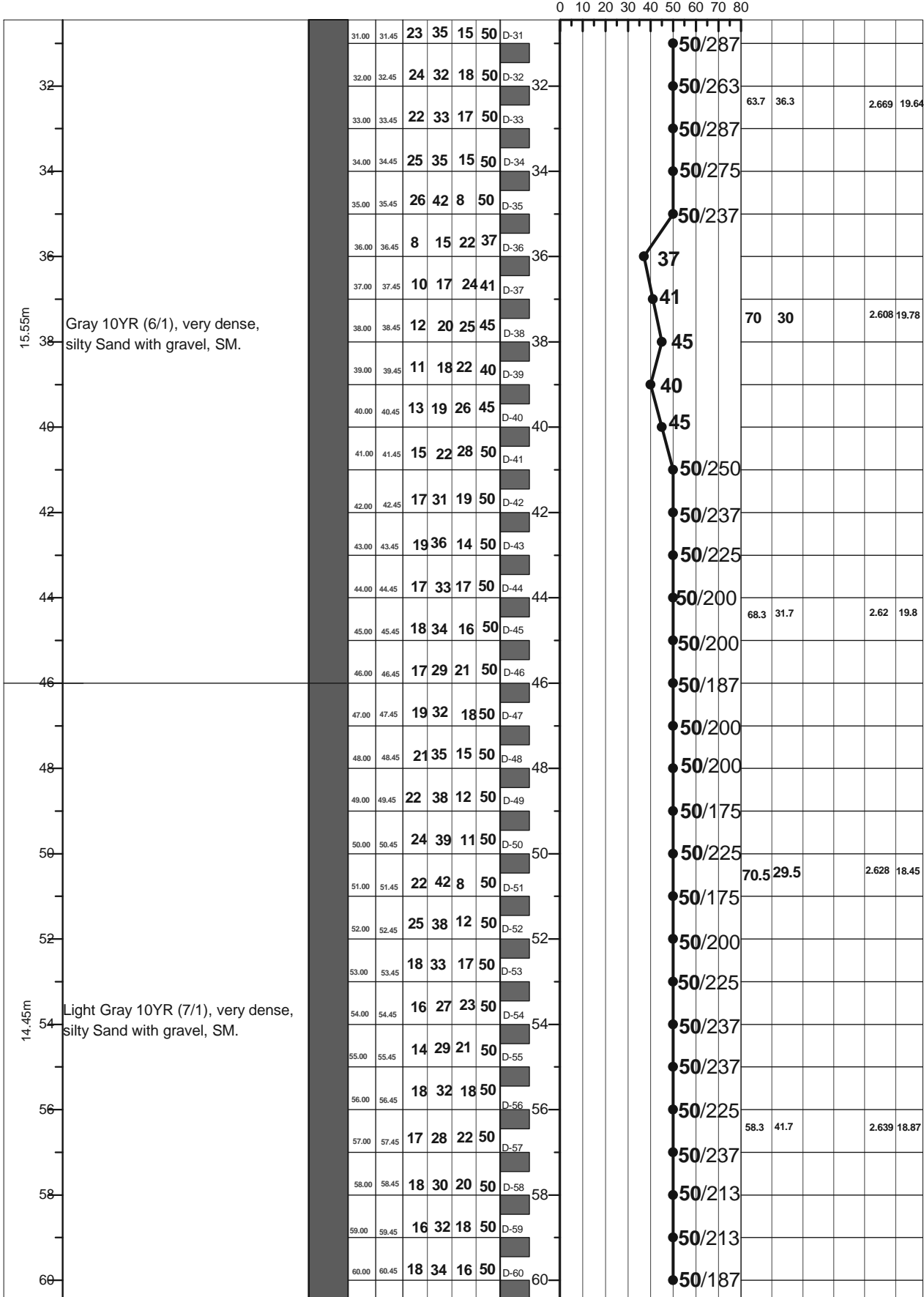
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

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



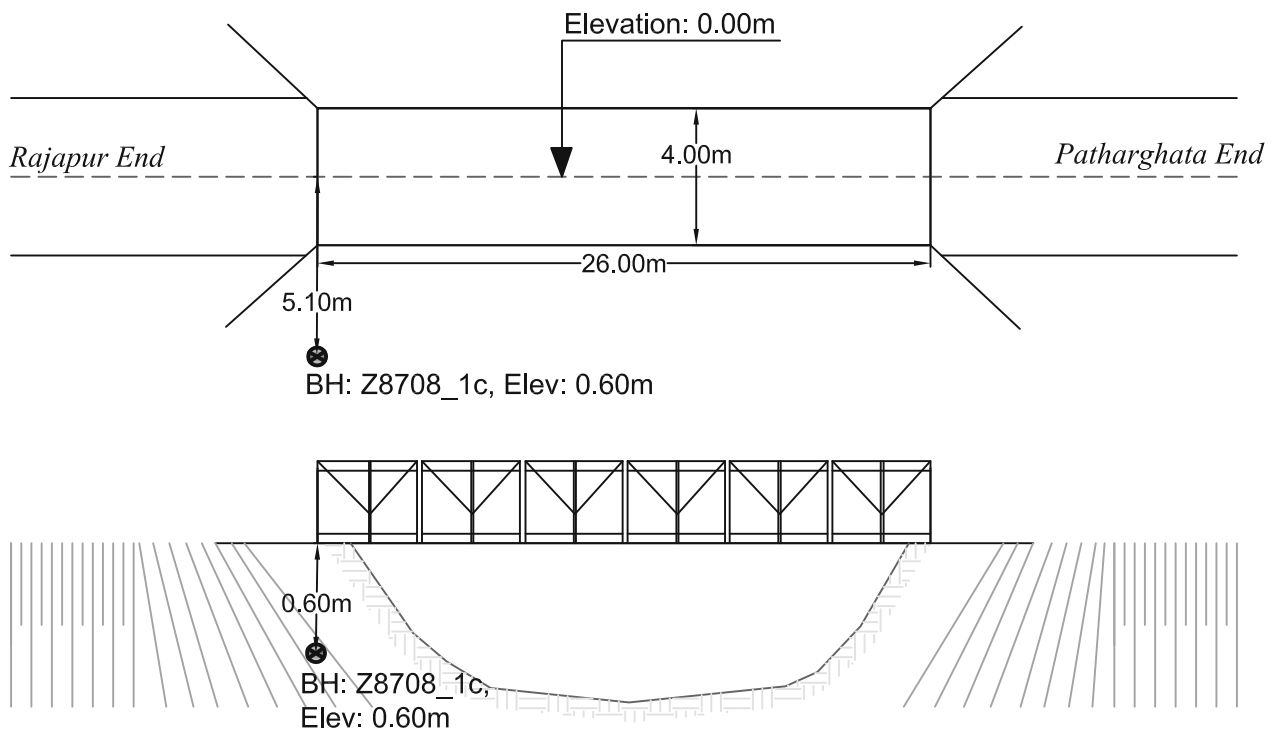
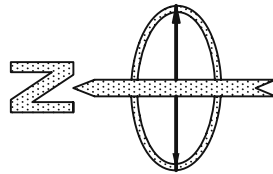
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

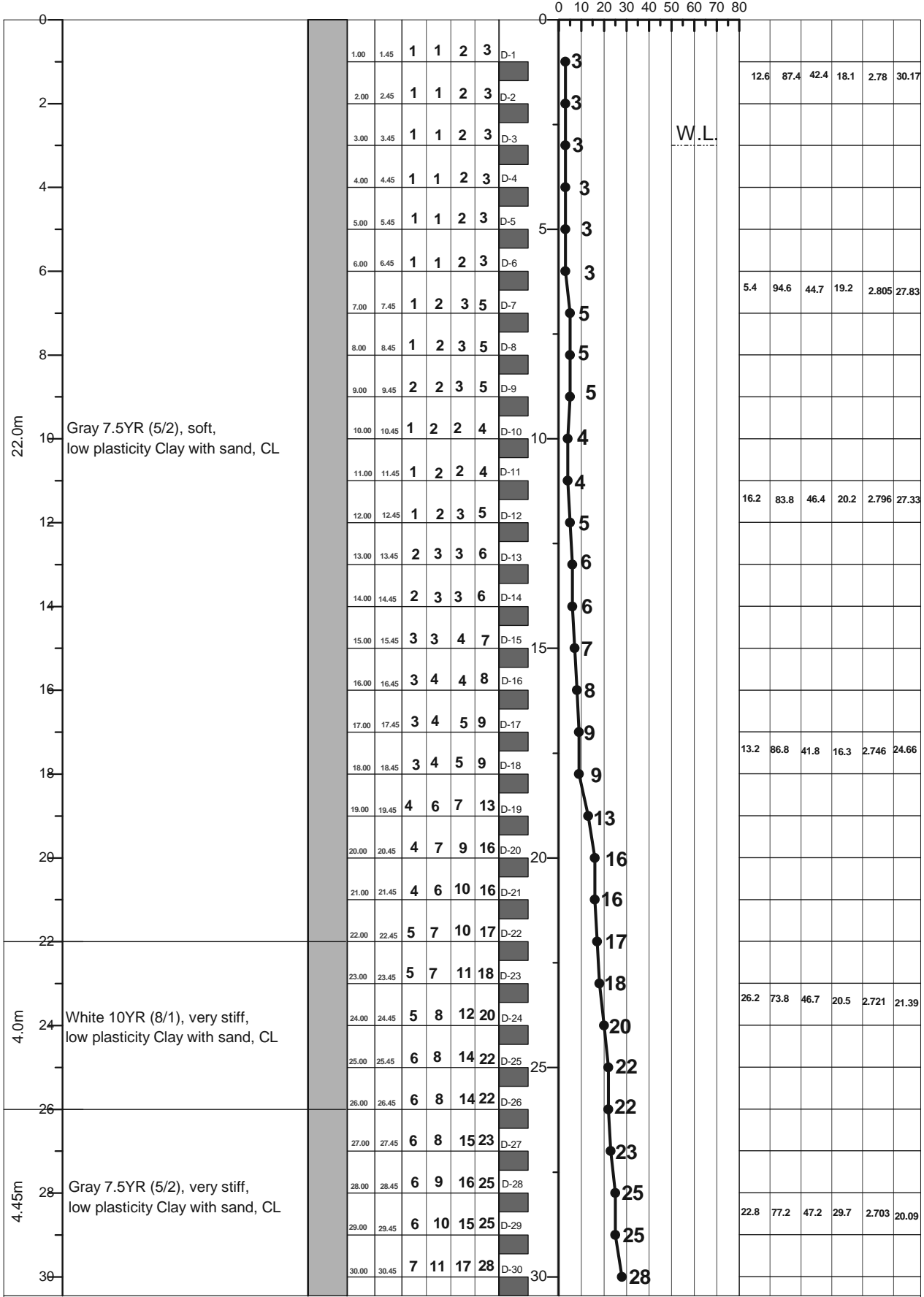
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 78  
BRIDGE ID: Z8708\_1c  
LATITUDE: 22°33'06.212" LONGITUDE: 90°08'41.207"  
CHAINAGE: 1.807



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			From (m)	To (m)	N <sub>1-150</sub> (blows)	N <sub>2-300</sub> (blows)	N <sub>3-450</sub> (blows)								

0 10 20 30 40 50 60 70 80

0.55m	Gray 7.5YR (5/2), very stiff, silty Clay, CH		31.00	31.45	7	11	18	29	D-31						
2.0m	White 10YR (8/1), hard, low plasticity Clay with sand, CL		32.00	32.45	7	12	17	29	D-32						
			33.00	33.45	7	15	20	35	D-33						
			34.00	34.45	9	18	22	40	D-34						
4.0m	Gray 7.5YR (5/2), very dense, silty Sand with gravel, SM		35.00	35.45	10	21	24	45	D-35		56.8	43.2		2.623	19.68
			36.00	36.45	10	23	24	47	D-36						
			37.00	37.45	14	20	30	50	D-37						
			38.00	38.45	15	22	28	50	D-38						
			39.00	39.45	17	23	27	50	D-39						
5.0m	White 10YR (8/1), very dense, silty Sand with gravel, SM		40.00	40.45	18	24	26	50	D-40		86.3	13.7		2.672	19.54
			41.00	41.45	20	28	22	50	D-41						
			42.00	42.45	20	30	20	50	D-42						
			43.00	43.45	20	29	21	50	D-43						
			44.00	44.45	22	32	18	50	D-44						
8.45m	Gray 7.5YR (5/2), very dense, silty Sand with gravel, SM		45.00	45.45	22	35	15	50	D-45						
			46.00	46.45	24	37	13	50	D-46		64.5	35.5		2.687	19.72
			47.00	47.45	24	39	11	50	D-47						
			48.00	48.45	25	42	8	50	D-48						
			49.00	49.45	25	50	0	50	D-49						
			50.00	50.45	26	50	0	50	D-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')

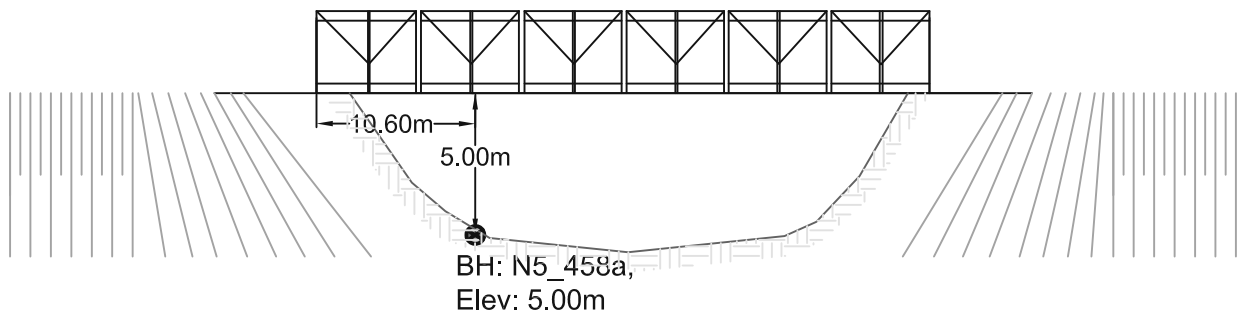
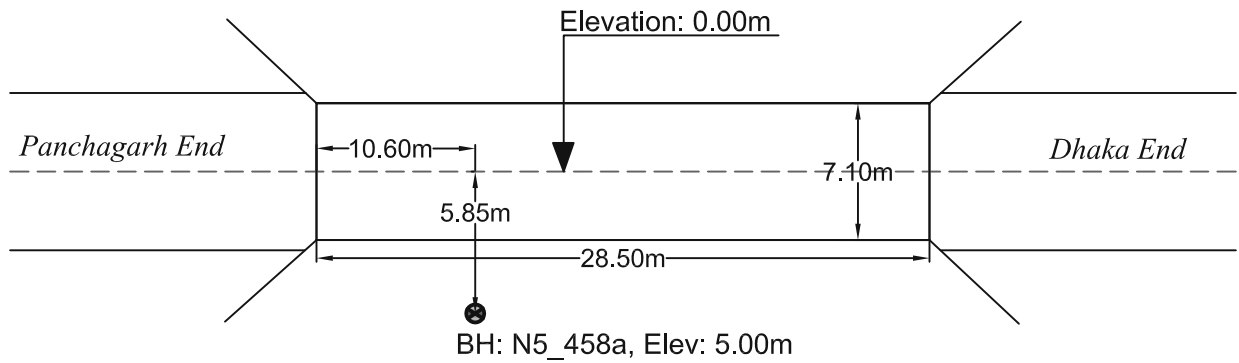
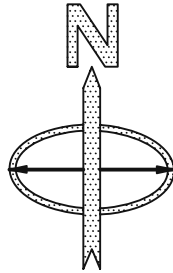
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



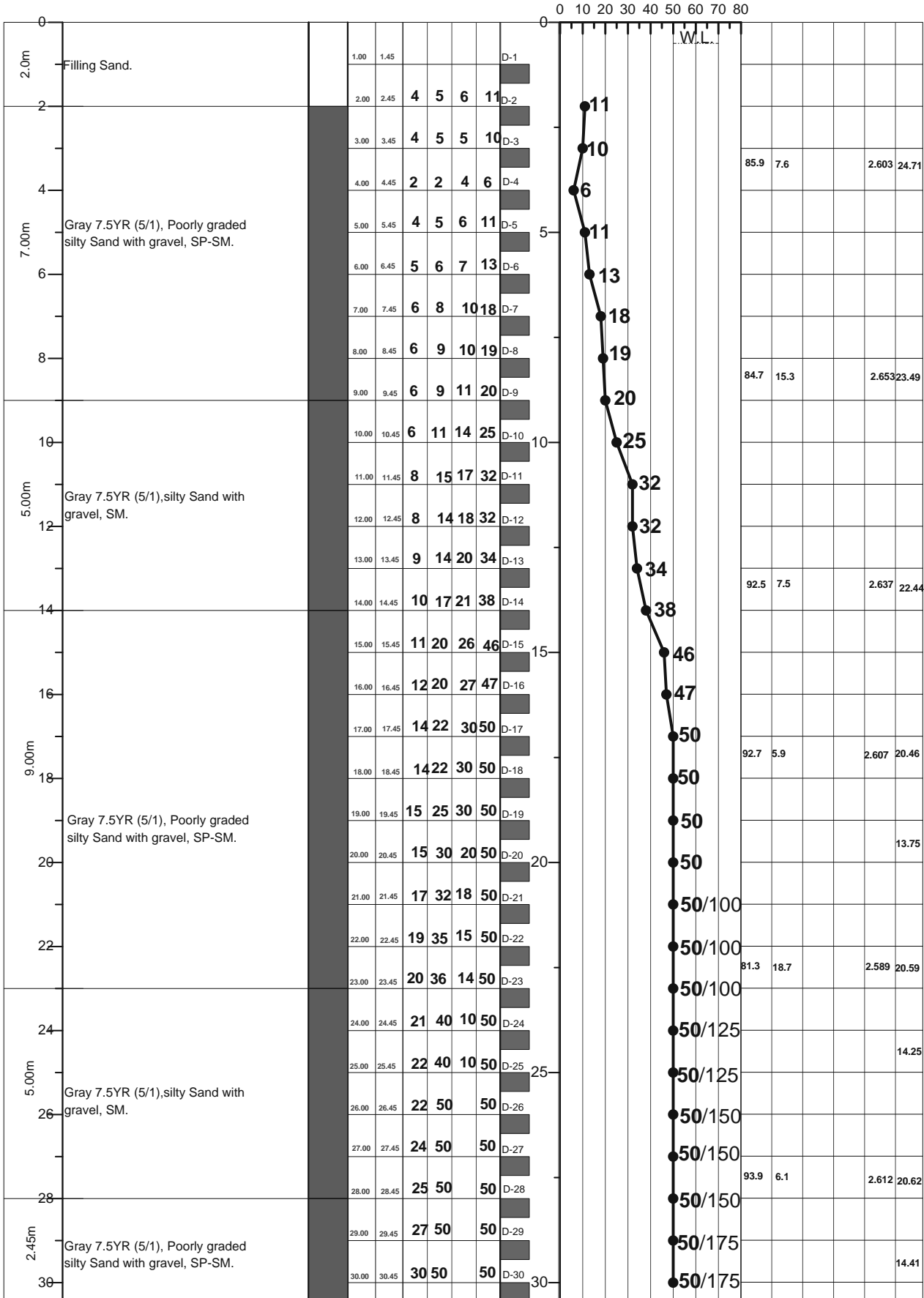
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 79  
BRIDGE ID: N5\_458a  
LATITUDE: 26°11'51" LONGITUDE: 88°33'12"  
CHAINAGE: 454.302



PROSOIL FOUNDATION CONSULTANT

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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

**A1: Location of Borehole**

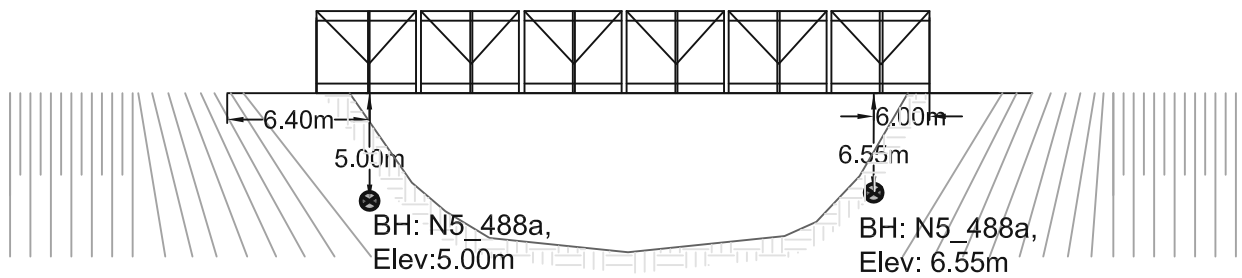
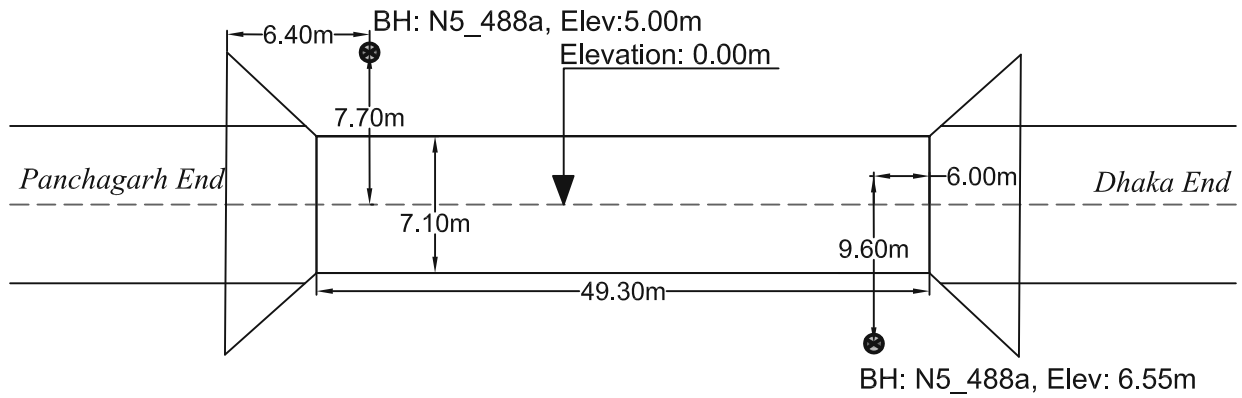
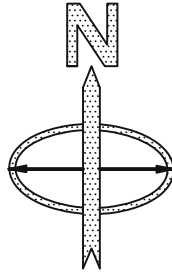
**CLIENT: Oriental Consultants Company Limited.**

**RANK: 80**

**BRIDGE ID: N5\_488a**

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

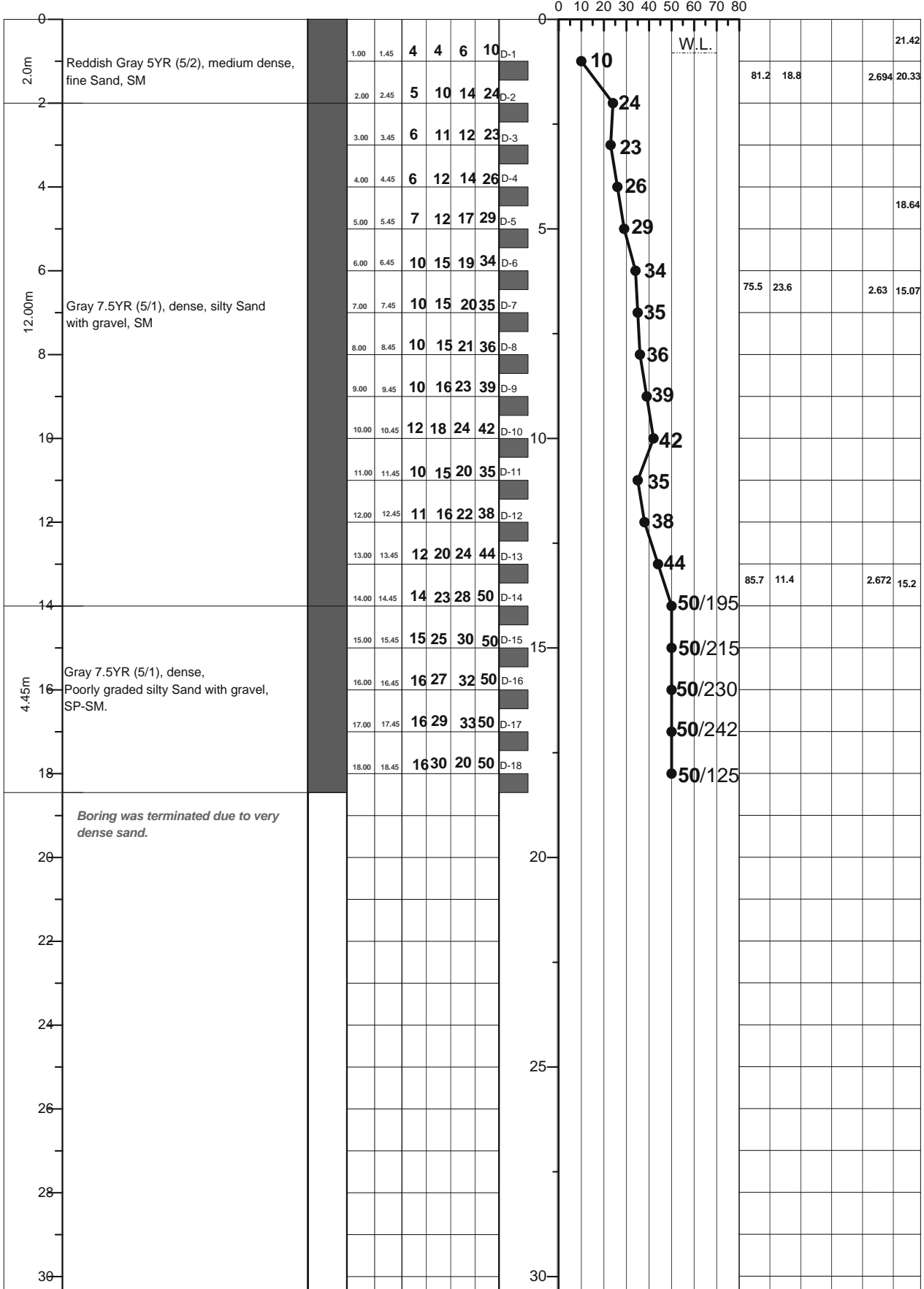
**CHAINAGE: 483.864**



**PROSOIL FOUNDATION CONSULTANT**

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

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



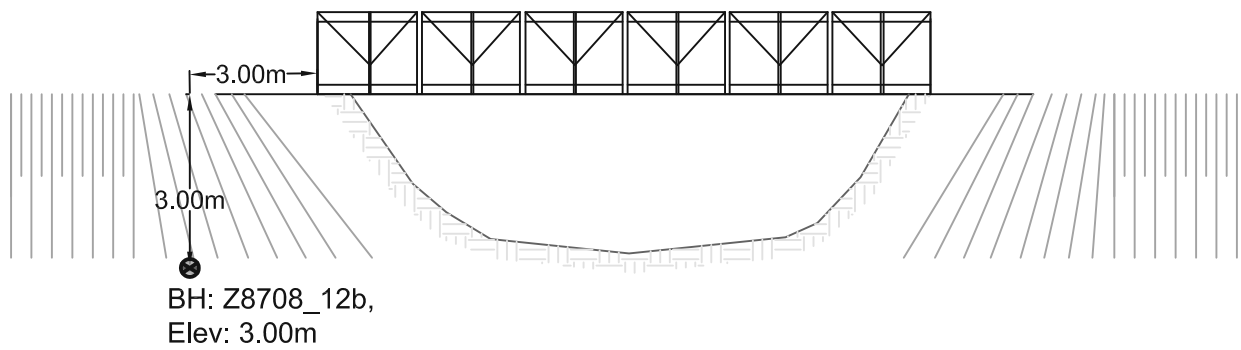
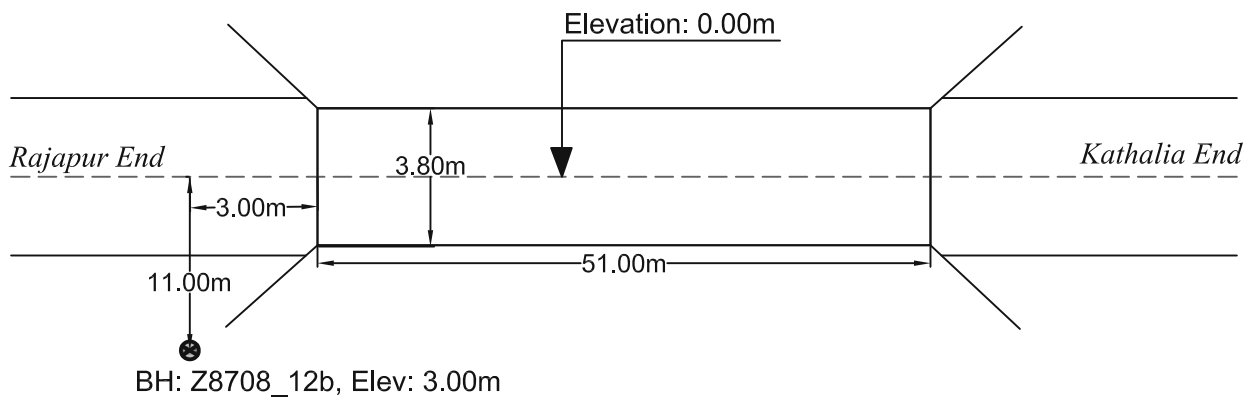
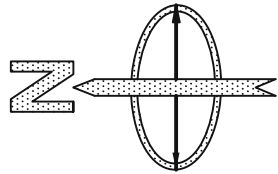
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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

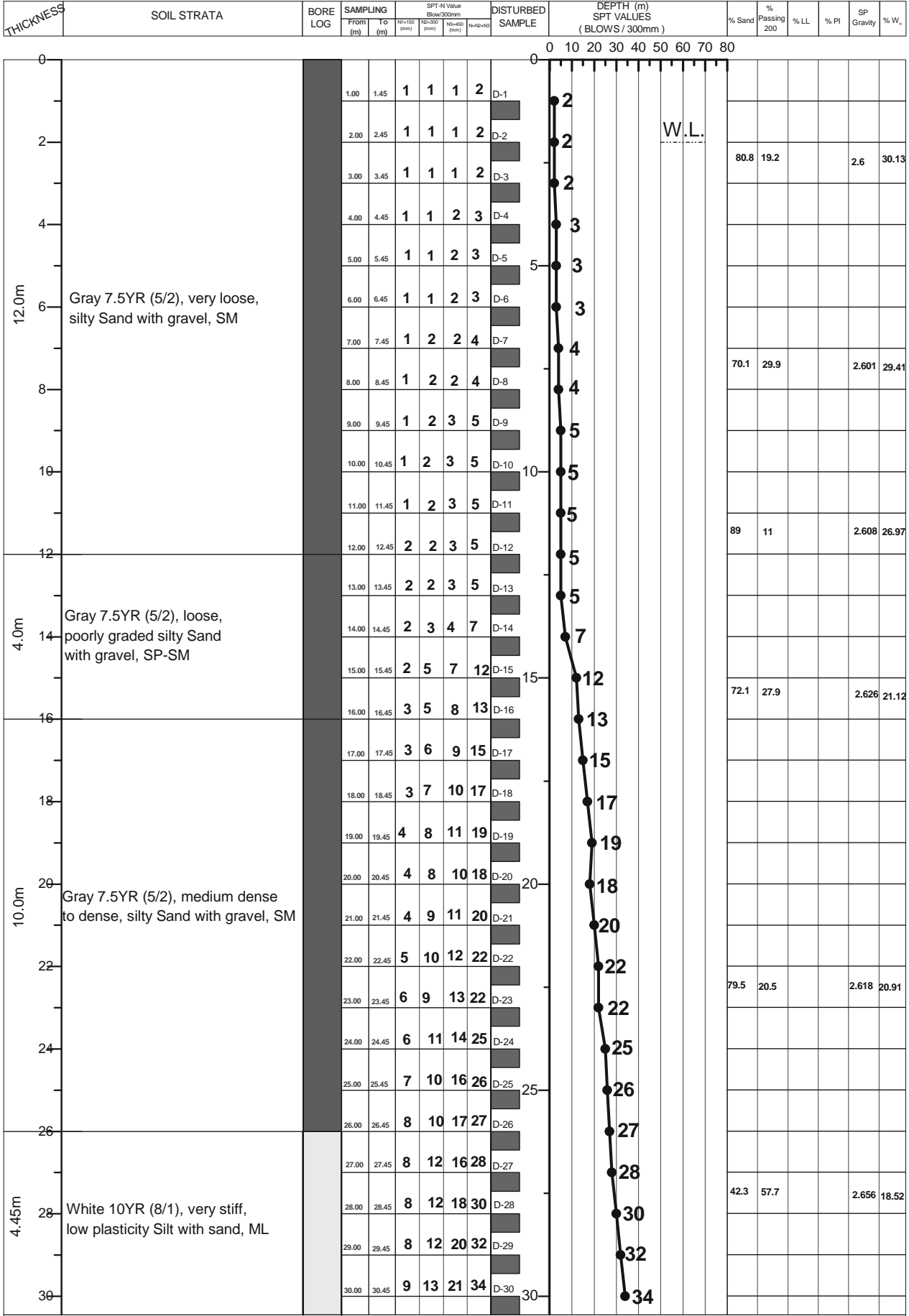
MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 81</b>	<b>BOREHOLE NO: Z8708_12b</b>	<b>Longitude: N 90°09'21.9"</b>	<b>Latitude: E 22°28'51.337"</b>
			<b>Brigde ID: Z8708_12b</b>	<b>Road Name: Rajapur-Kathalia-Amua-Bamna-Patharghata.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>Chainage: 12.174, RL: 3.0m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 21-03-2014</b>	<b>Completed Date: 26-03-2014</b>	<b>G. W. T : -2.0m.</b>



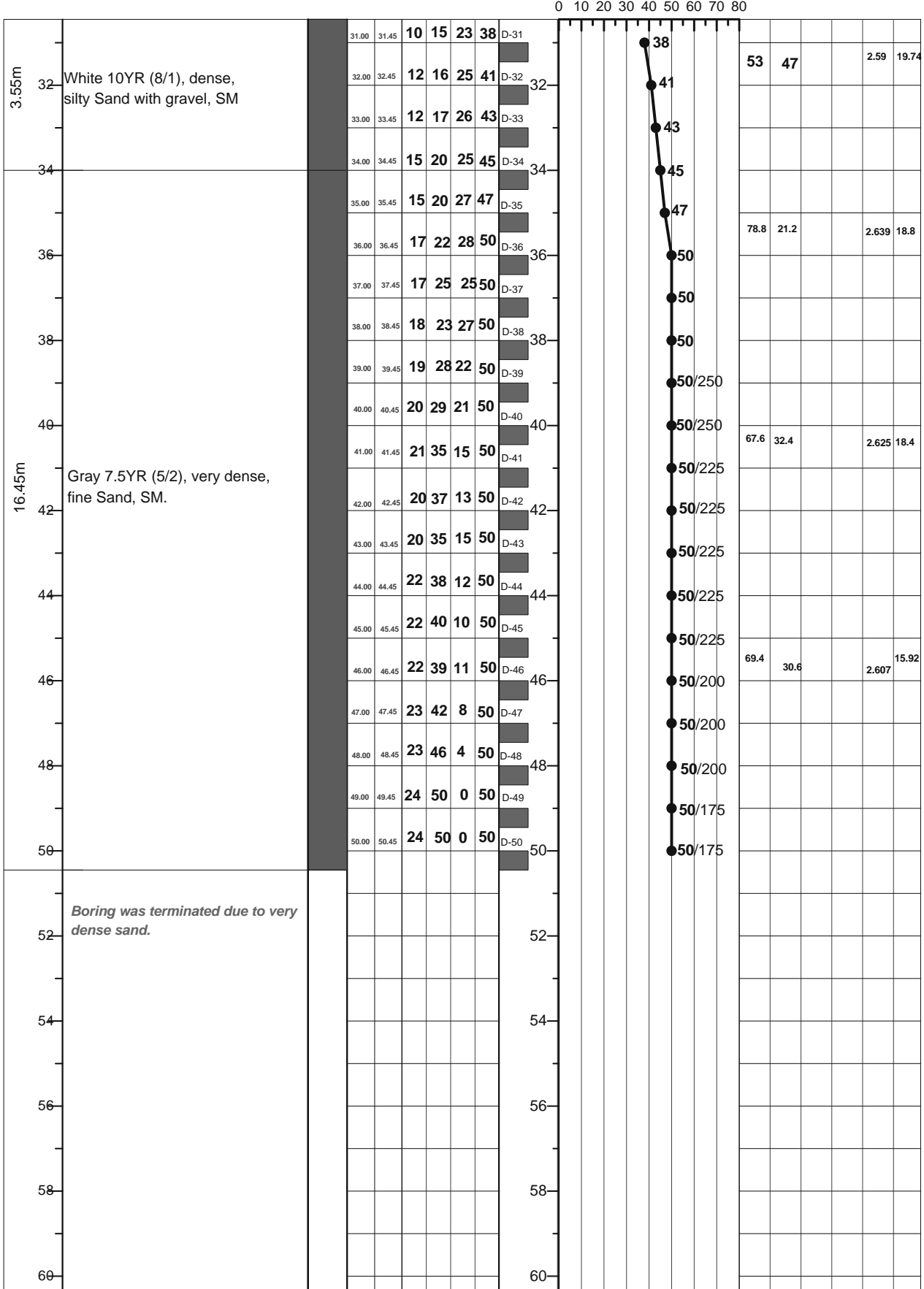
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 81</b>	<b>BOREHOLE NO: Z8708_12b</b>	<b>Longitude: N 90°09'21.9"</b>	<b>Latitude: E 22°28'51.337"</b>
			<b>Brigde ID: Z8708_12b</b>	<b>Road Name: Rajapur-Kathalia-Amua-Bamna-Patharghata</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>Chainage: 12.174, RL: 3.0m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 21-03-2014</b>	<b>Completed Date: 26-03-2014</b>	<b>G. W. T : -2.0m</b>

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 <sub>s</sub>
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									

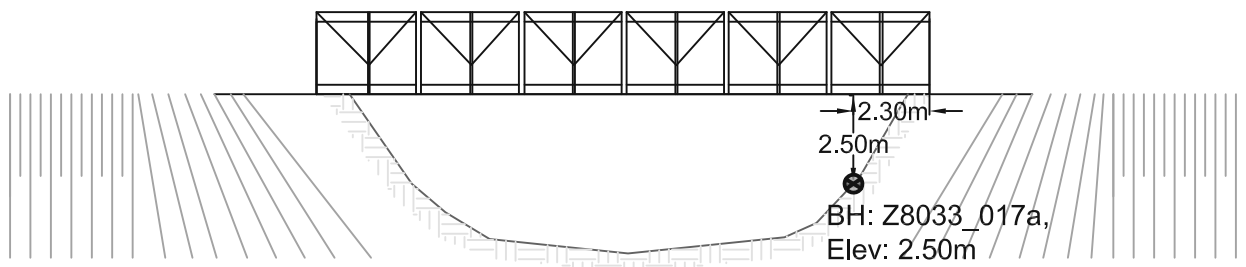
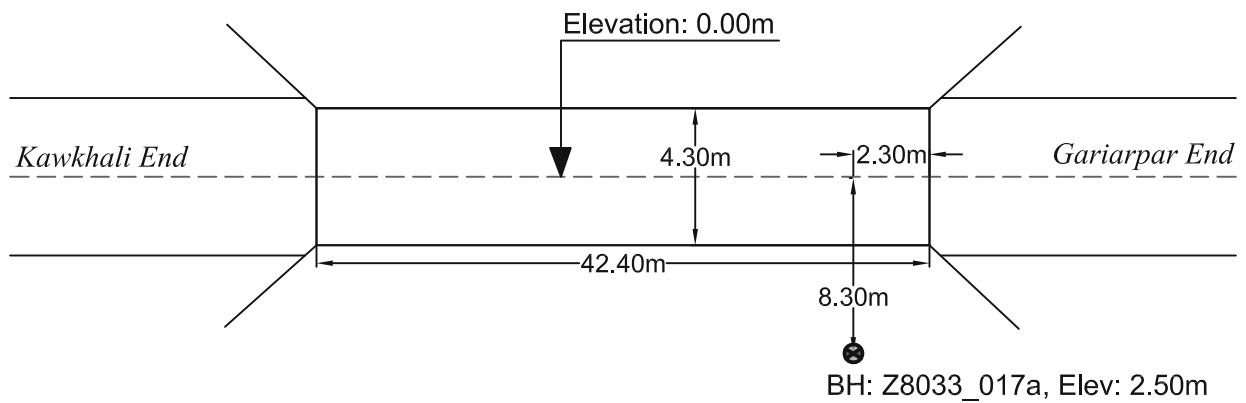
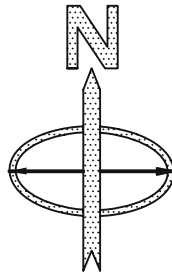


**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>TH</sup> 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

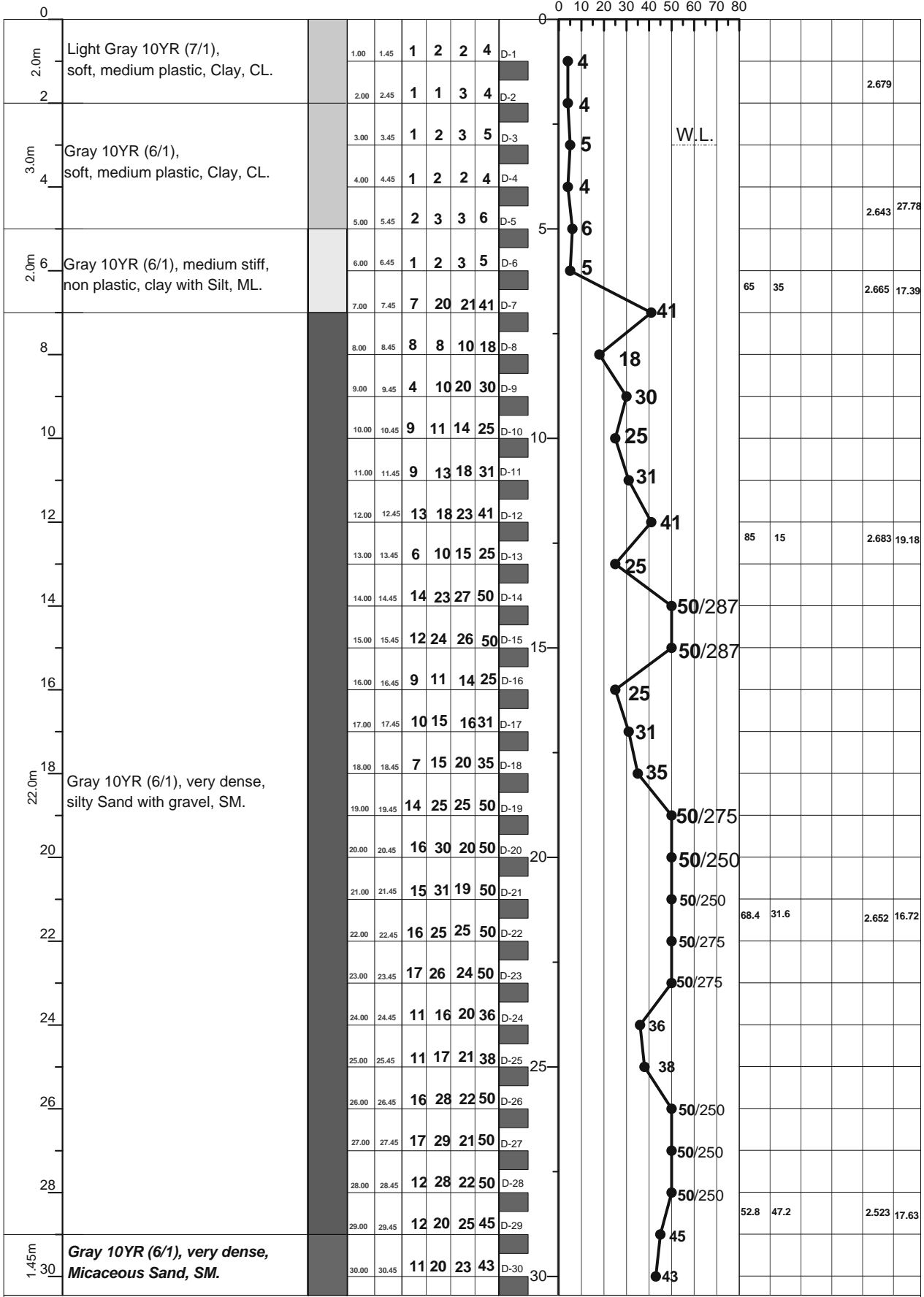


PROSOIL FOUNDATION CONSULTANT



<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 82</b>	<b>BOREHOLE NO: Z8033_017a</b>		<b>Longitude: N 90°10'5"</b>	<b>Latitude: E 22°46'41"</b>	
			<b>Brigde ID: Z8033_017a</b>		<b>Road Name: Gariarpar-Banaripara-Sawrupkati-Kawkhali-Naikati.</b>		
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>		<b>Borehole Depth: 60.0m</b>		<b>Chainage: 17.477, RL: -2.5m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 12-04-2014</b>		<b>Completed Date: 17-04-2014</b>		<b>G. W. T : -3.0m.</b>

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



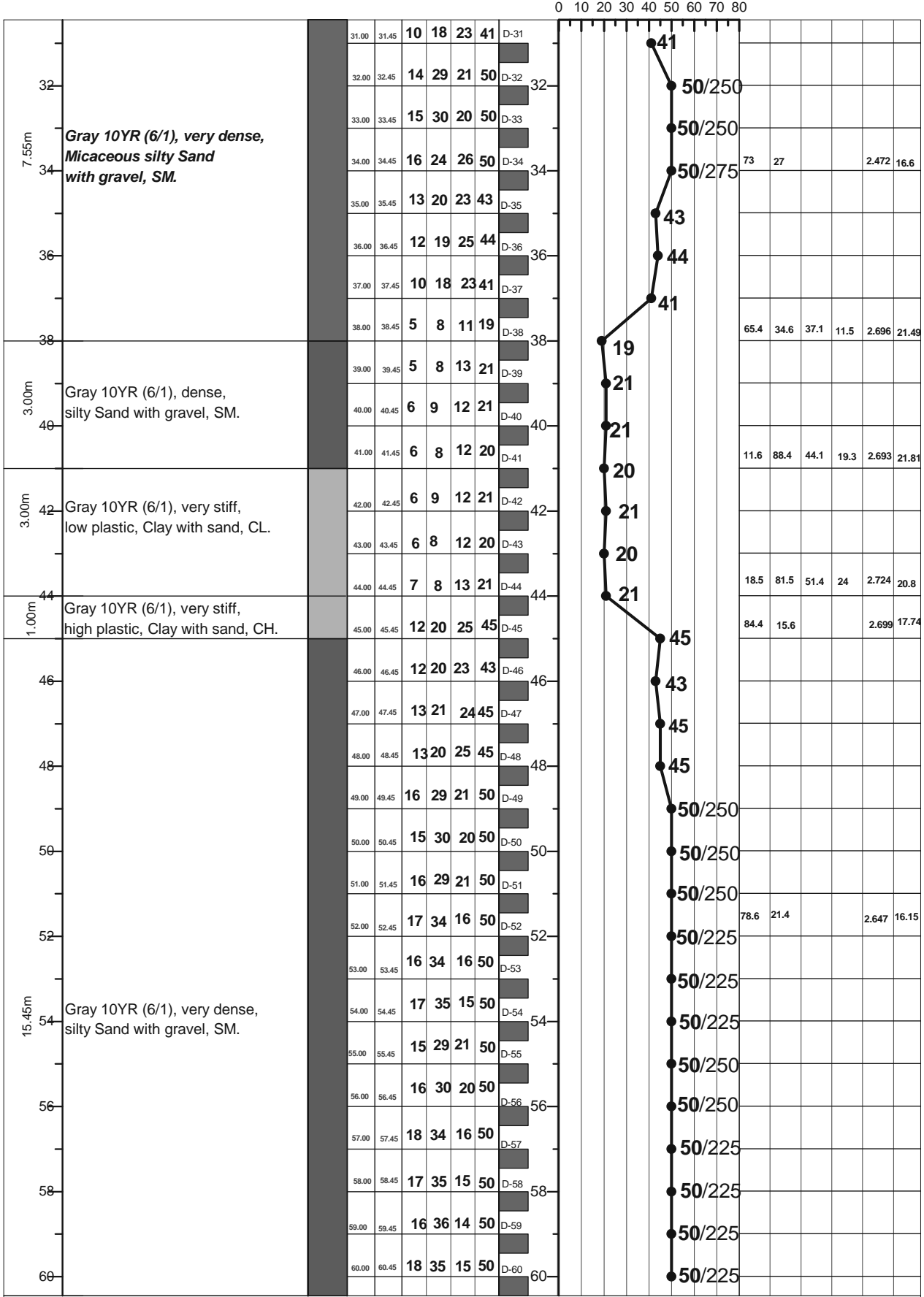
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>m</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED  
 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 82</b>	<b>BOREHOLE NO: Z8033_017a</b>	<b>Longitude: N 90°10'5"</b>	<b>Latitude: E 22°46'41"</b>
			<b>Brigde ID: Z8033_017a</b>	<b>Road Name: Gariarpar-Banaripara-Sawrupkati-Kawkhali-Naikati.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 60.0m</b>	<b>Chainage: 17.477, RL: -2.5m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 12-04-2014</b>	<b>Completed Date: 17-04-2014</b>	<b>G. W. T : -3.0m.</b>

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

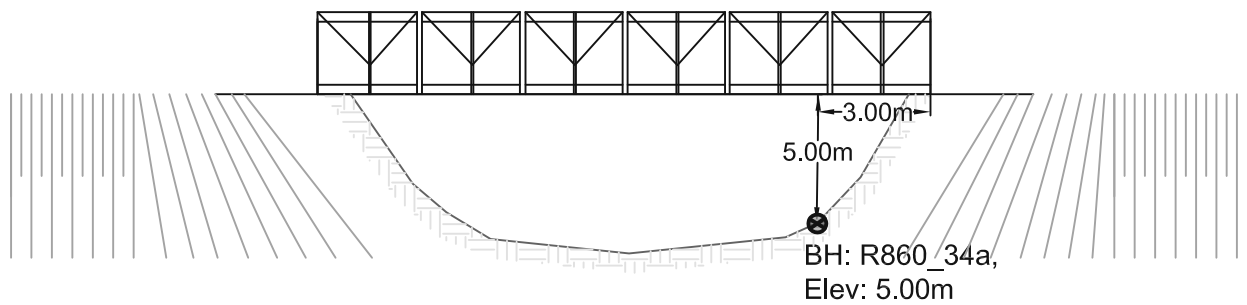
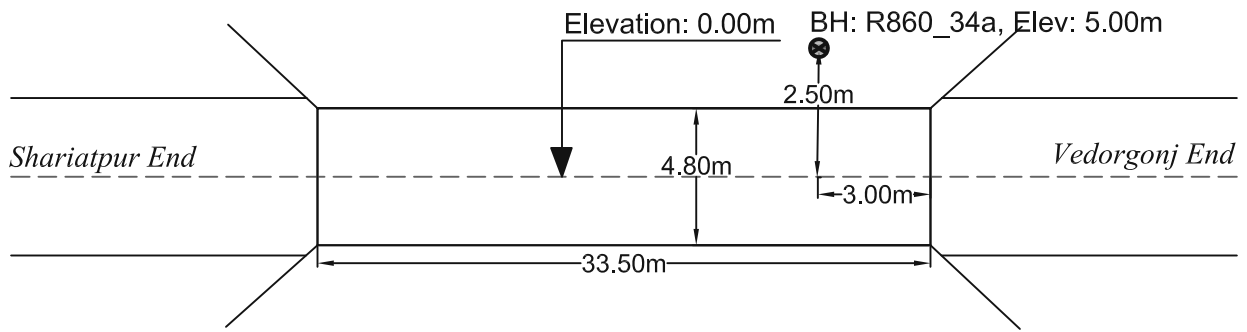
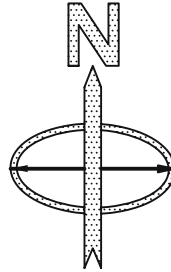


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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

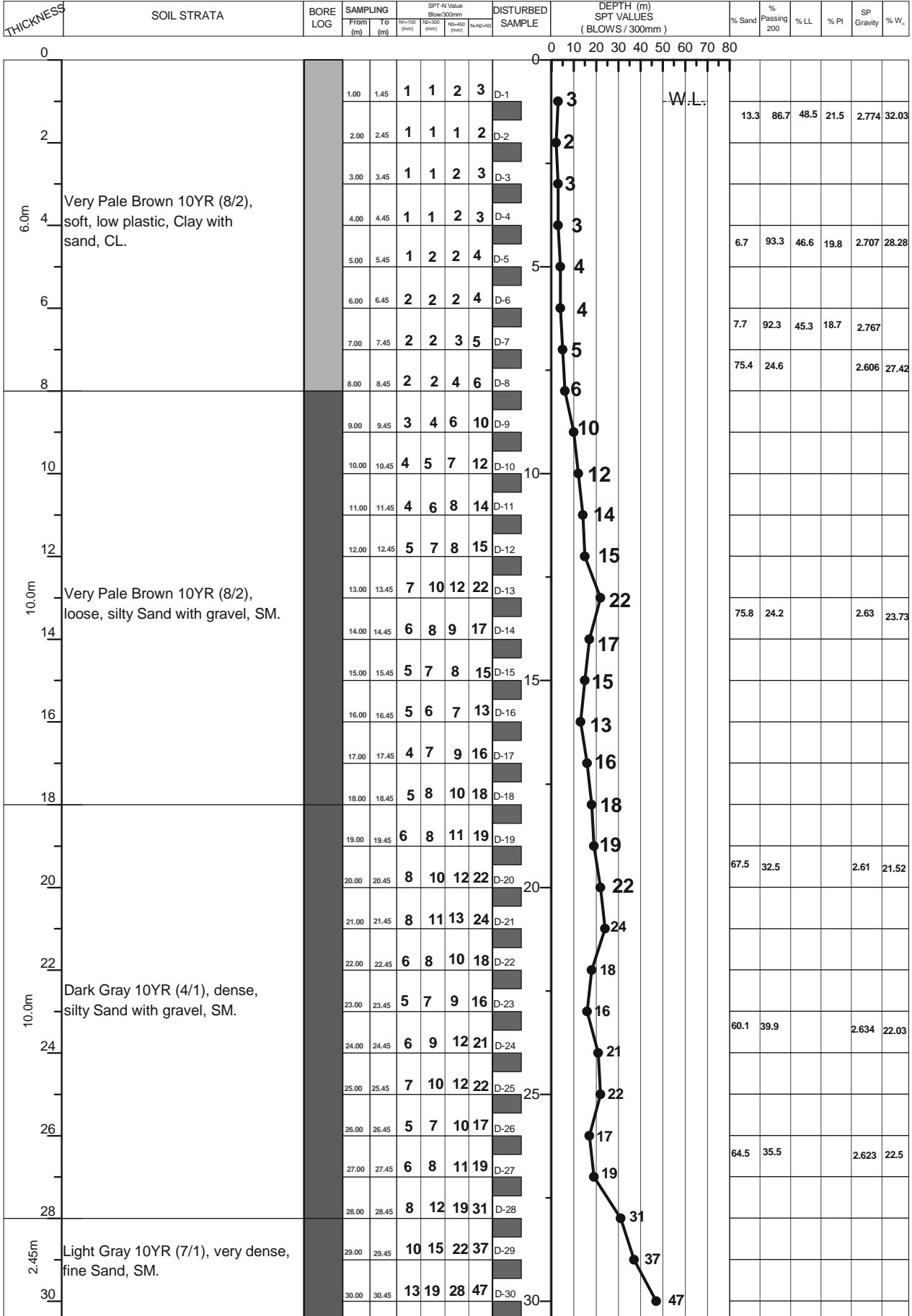
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES  
 MAX<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 83</b>	<b>BOREHOLE NO: R860_34a</b>	<b>Longitude: N 90°25'19.71"</b>	<b>Latitude: E 23°11'30.22"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			<b>Brigde ID: R860_34a</b>	Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.	
Type of Drill Rig: Manual Rotary			<b>Borehole Depth: 50.0m</b>	<b>Chainage: 32.943, RL: -5.0m</b>	
CLIENT : Oriental Consultants Company Limited.			<b>Commencement Date: 22-03-2014</b>	<b>Completed Date: 25-03-2014</b>	<b>G. W. T : -2.0m.</b>



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

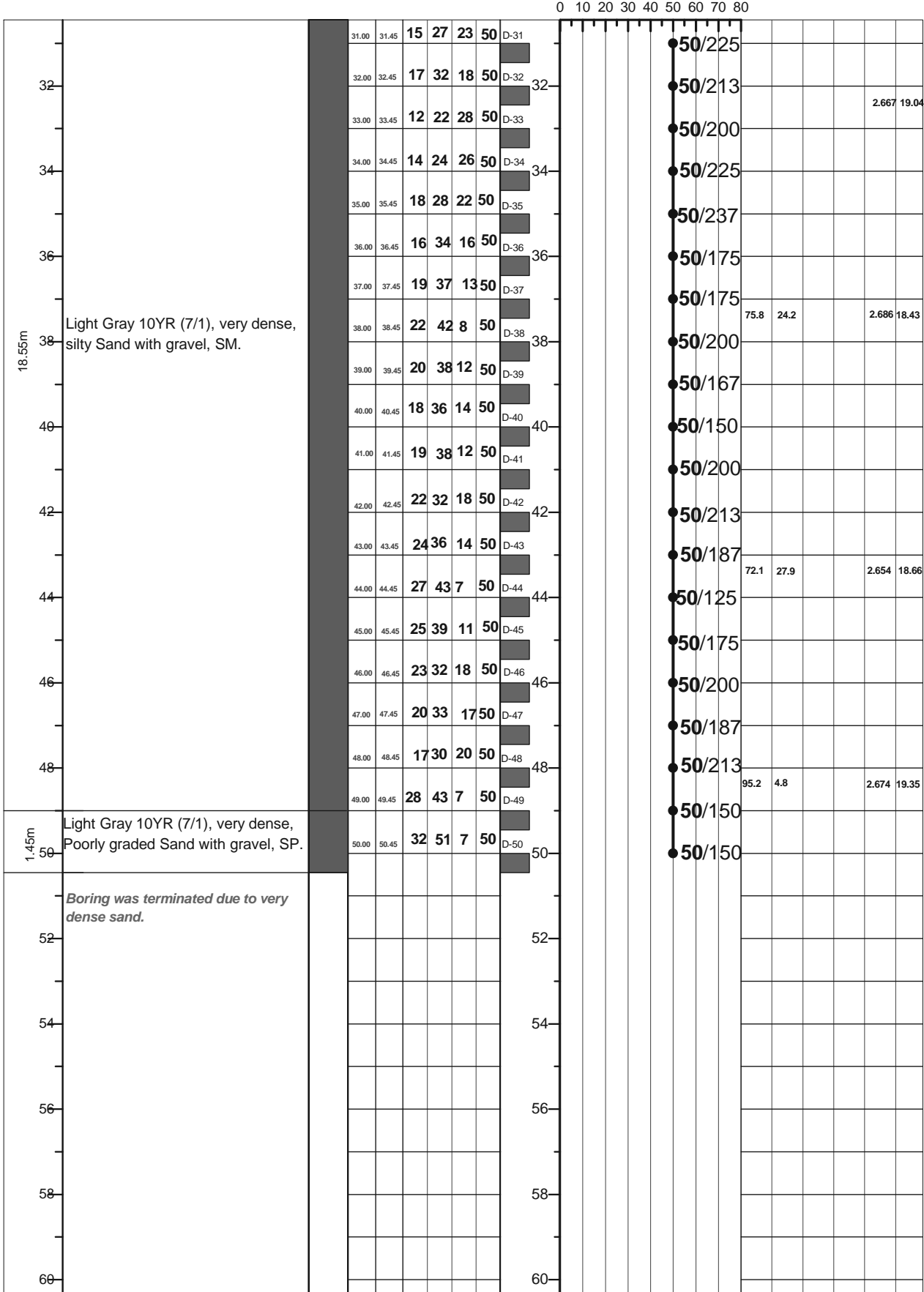
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 83</b>	<b>BOREHOLE NO: R860_34a</b>	<b>Longitude: N 90°25'19.71"</b>	<b>Latitude: E 23°11'30.22"</b>
			<b>Brigde ID: R860_34a</b>	<b>Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>Chainage: 32.943, RL: -5.0m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 22-03-2014</b>	<b>Completed Date: 25-03-2014</b>	<b>G. W. T : -2.0m.</b>

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 <sub>c</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

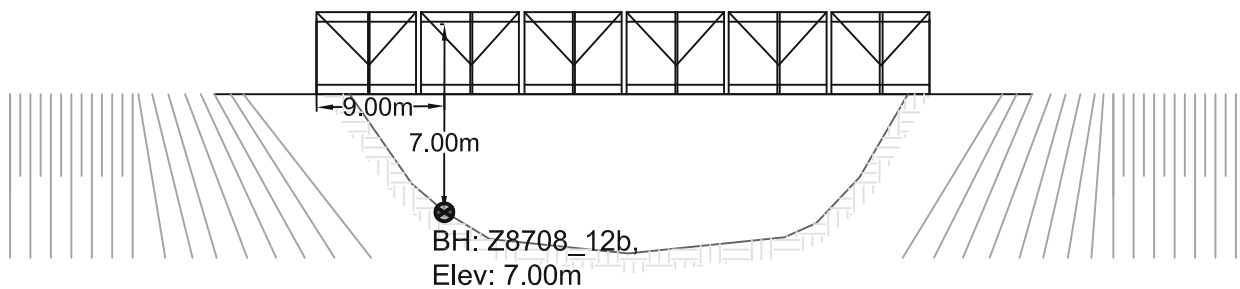
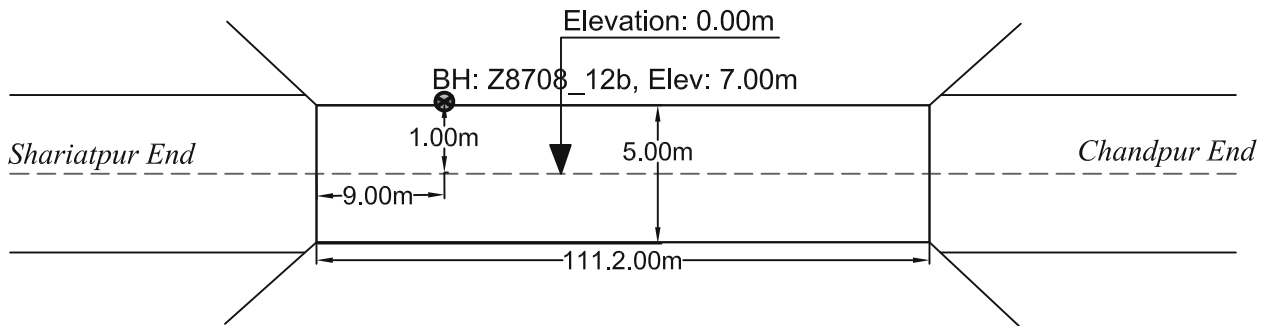
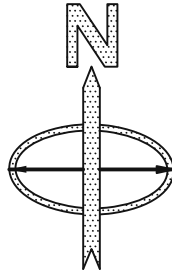
CLIENT: Oriental Consultants Company Limited.

RANK: 84

BRIDGE ID: R860\_44c

LATITUDE: 23°10'11.055" LONGITUDE: 90°29'18.658"

CHAINAGE: 43.024



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 84</b>	<b>BOREHOLE NO: R860_44c</b>	<b>Longitude: N 90°29'18.65"</b>	<b>Latitude: E 23°10'11.05"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>		<b>Borehole Depth: 60.0m</b>	
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 30-03-2014</b>		<b>Completed Date: 03-04-2014</b>	
				<b>Chainage: 43.024, RL: -7.0m</b>	
				<b>G. W. T : -3.0m.</b>	

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					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	SP Gravity	% W <sub>v</sub>		
0								0										
2.0m	Yellow 10YR (7/6), loose, silty Sand, SM.		1.00	1.45	1	2	2	4	D-1	4								
			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								
			4.00	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								
			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								
			9.00	9.45	6	8	12	20	D-9	20								
10.0m			10.00	10.45	9	12	14	26	D-10	26								
			11.00	11.45	7	10	15	25	D-11	25	85.6	14.4					2.632	20.32
12.0m			12.00	12.45	8	12	16	28	D-12	28								
			13.00	13.45	4	6	8	14	D-13	14								
14.0m			14.00	14.45	5	7	8	15	D-14	15								
			15.00	15.45	5	6	7	13	D-15	13								
13.0m	Gray 10YR (6/1), dense, silty Sand with gravel, SM.		16.00	16.45	7	10	12	22	D-16	22								
			17.00	17.45	10	13	15	28	D-17	28								
18.0m			18.00	18.45	7	10	14	24	D-18	24								
			19.00	19.45	8	12	17	29	D-19	29								
20.0m			20.00	20.45	10	14	16	30	D-20	30	60.9	39.1					2.617	19.71
			21.00	21.45	12	15	17	32	D-21	32								
22.0m			22.00	22.45	10	12	14	26	D-22	26								
			23.00	23.45	8	10	12	22	D-23	22								
7.45m	Gray 10YR (6/1), dense, Micaceous silty Sand with gravel, SM.		24.00	24.45	7	9	10	19	D-24	19								
			25.00	25.45	5	7	9	16	D-25	16								
26.0m			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								
28.0m			28.00	28.45	6	8	10	18	D-28	18								
			29.00	29.45	5	7	10	17	D-29	17								
30.0m			30.00	30.45	6	8	11	19	D-30	19								

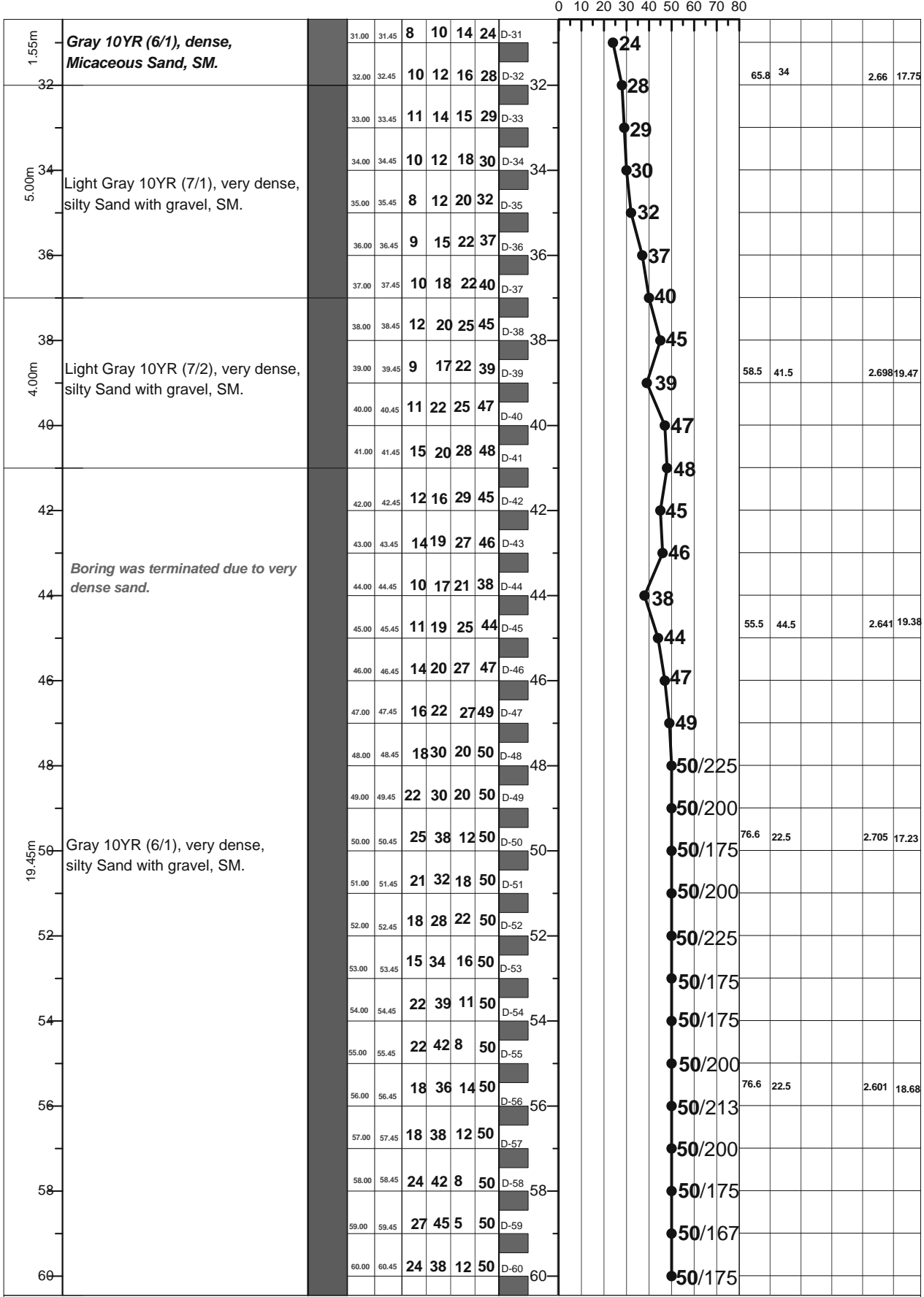
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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  
 MAX<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 84</b>	<b>BOREHOLE NO: R860_44c</b>	<b>Longitude: N 90°29'18.65"</b>	<b>Latitude: E 23°10'11.05"</b>
			<b>Brigde ID: R860_44c</b>	<b>Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 60.0m</b>	<b>Chainage: 43.024, RL: -7.0m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 30-03-2014</b>	<b>Completed Date: 03-04-2014</b>	<b>G. W. T : -3.0m.</b>

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 <sub>v</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED    50/X = BLOWS 50, "X" MM PENETRATION



A1: Location of Borehole

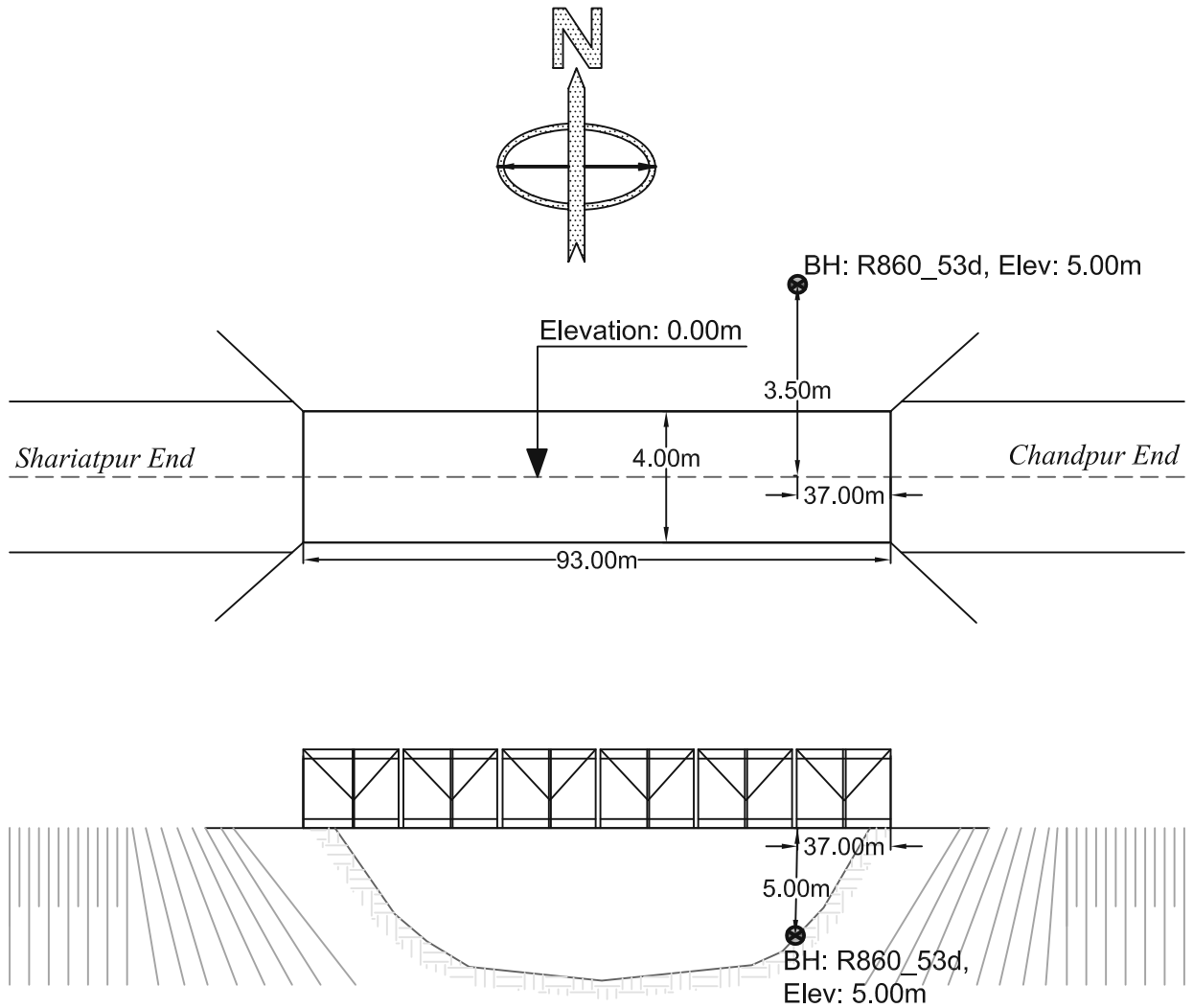
CLIENT: Oriental Consultants Company Limited.

RANK: 85

BRIDGE ID: R860\_53d

LATITUDE: 23°11'30.522" LONGITUDE: 90°32'55.558"

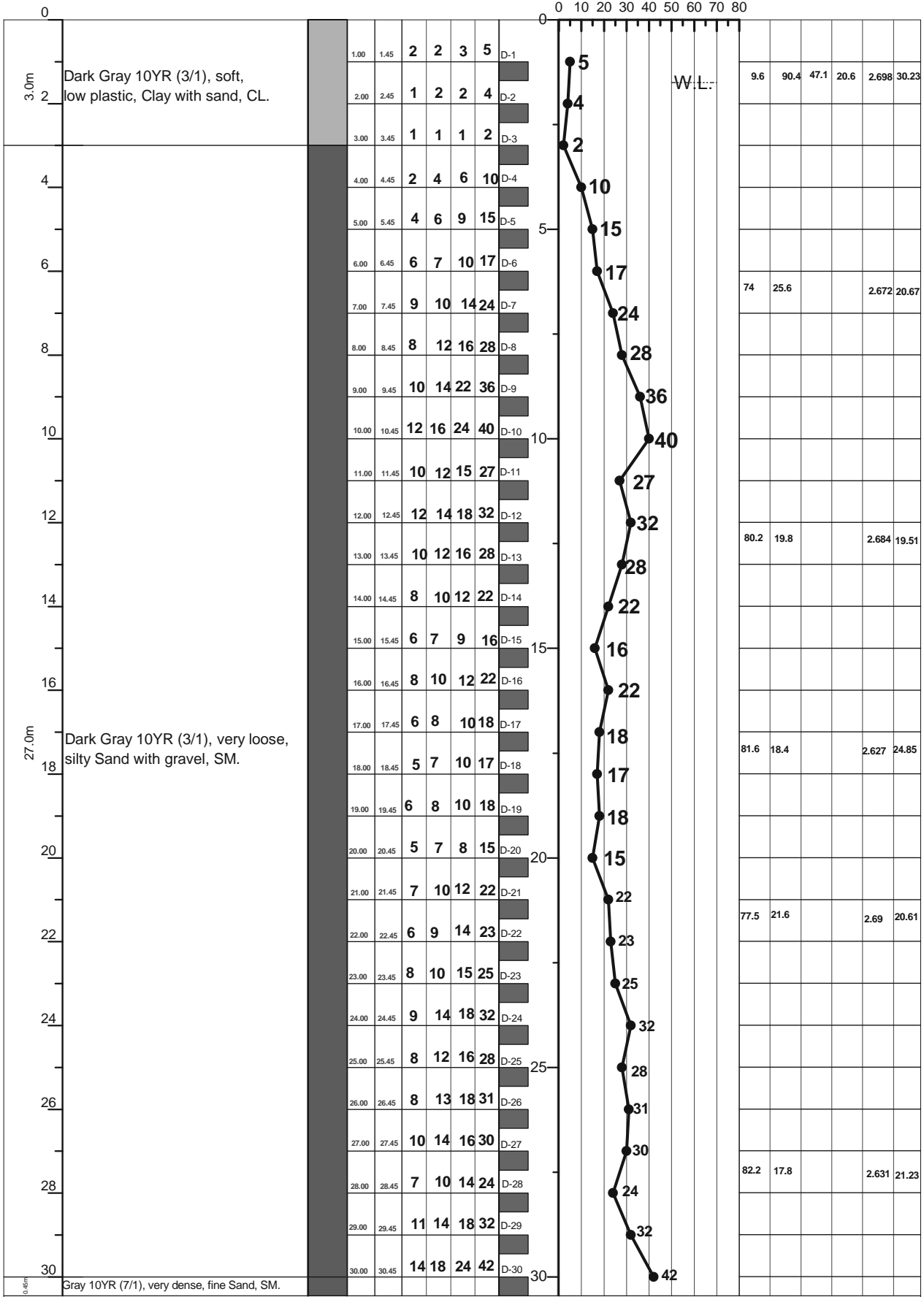
CHAINAGE: 52.069



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 85</b>	<b>BOREHOLE NO: R860_53d</b> <b>Brigde ID: R860_53d</b>	<b>Longitude: N 90°23'34"</b>	<b>Latitude: E 23°11'30.522"</b>
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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									



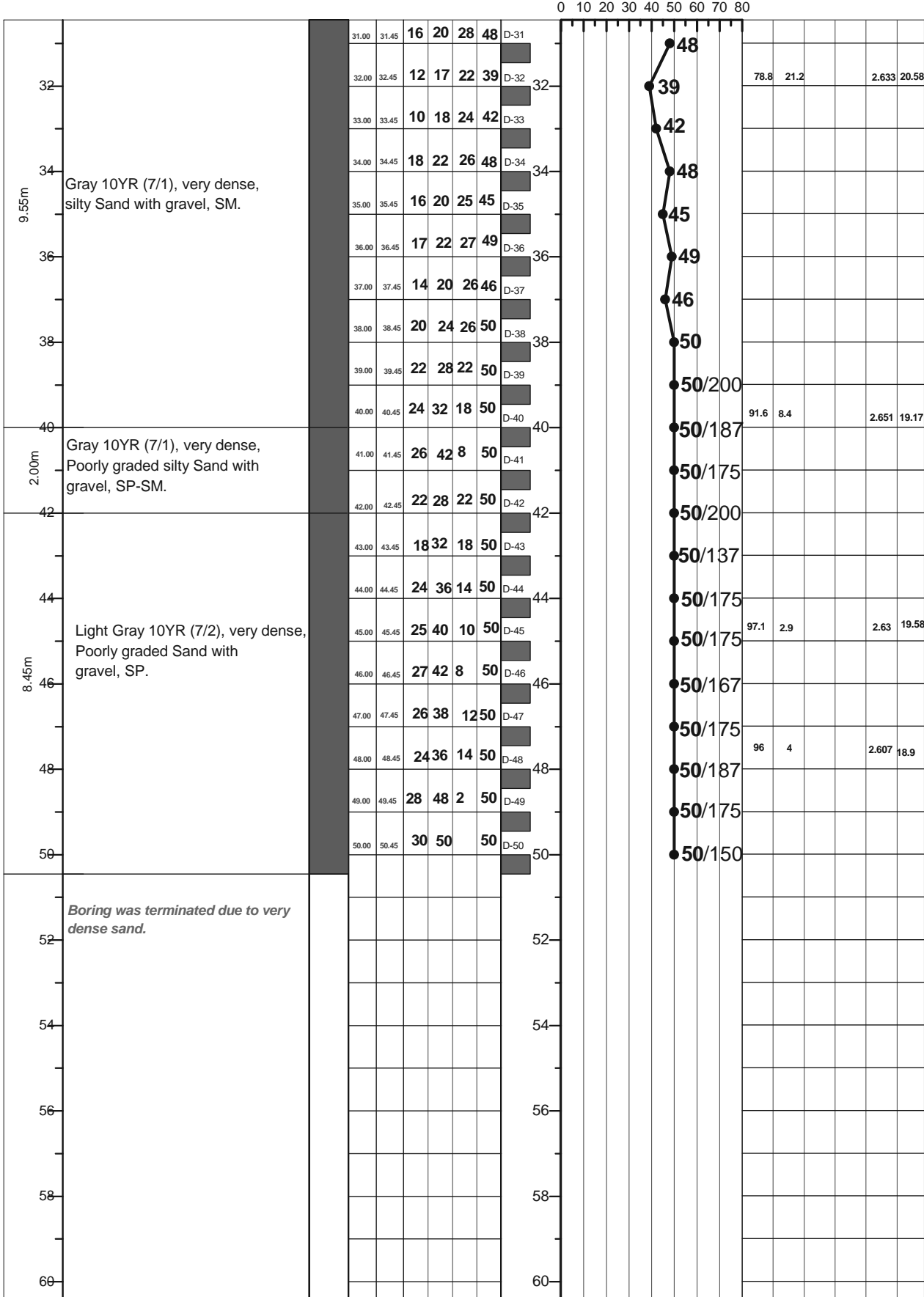
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 85</b>	<b>BOREHOLE NO: R860_53d</b>	<b>Longitude: N 90°23'34"</b>	<b>Latitude: E 23°11'30.522"</b>
			<b>Brigde ID: R860_53d</b>	Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>Chainage: 52.069, RL: -5.0m</b>
CLIENT : Oriental Consultants Company Limited.			<b>Commencement Date: 04-04-2014</b>	<b>Completed Date: 07-04-2014</b>	<b>G. W. T : -1.5m.</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

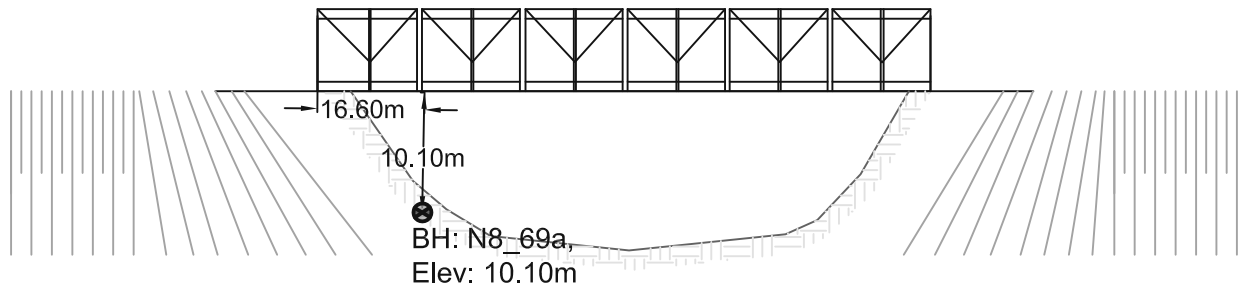
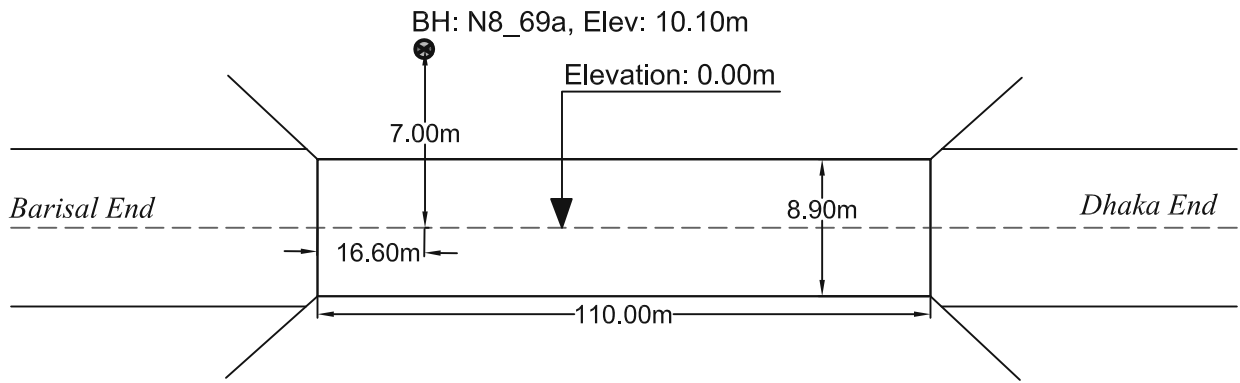
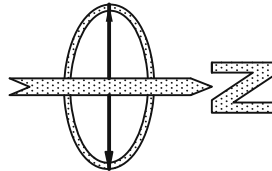
**CLIENT: Oriental Consultants Company Limited.**

**RANK: 86**

**BRIDGE ID: N8\_69a**

**LATITUDE: 23°23'10.281" LONGITUDE: 89°59'00"**

**CHAINAGE: 68.726**



**PROSOIL FOUNDATION CONSULTANT**

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 86</b>	<b>BOREHOLE NO: N8_69a</b> <b>Brigde ID: N8_69a</b>	<b>Longitude: N 089°58'59"</b> Road Name: Dhaka (Jatrabari)-Mawa-Bhanga-Barisal-Patuakhali.	<b>Latitude: E 23°23'09.2"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 60.0m</b>	<b>Chainage: 68.726, RL: -10.10m</b>
CLIENT : Oriental Consultants Company Limited.			<b>Commencement Date: 18-03-2014</b>	<b>Completed Date: 22-03-2014</b>	<b>G. W. T : -2.3m.</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>		
			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	
2.0 - 2.5m			2.00	2.45	1	2	2	4	D-2	4							
2.5 - 3.0m			3.00	3.45	1	0	1	1	D-3	1							
3.0 - 4.0m	Grayish Brown 10YR (5/2), soft, low plastic, Clay with sand, CL.		4.00	4.45	1	1	2	3	D-4	3	14.3	85.7	49.4	22.4	2.711	31.61	
4.0 - 5.0m			5.00	5.45	1	3	6	9	D-5	9							
5.0 - 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
6.0 - 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						
7.0 - 8.0m	Gray 7.5YR (6/1), medium dense to dense, silty Sand, SM.		8.00	8.45	4	7	8	15	D-8	15							
8.0 - 9.0m			9.00	9.45	3	5	6	11	D-9	11							
9.0 - 10.0m			10.00	10.45	3	9	18	27	D-10	27							
10.0 - 11.0m			11.00	11.45	11	18	19	37	D-11	37	80.1	19.9			2.676	23.03	
11.0 - 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							
12.0 - 13.0m			13.00	13.45	6	8	10	18	D-13	18							
13.0 - 14.0m			14.00	14.45	11	16	12	28	D-14	28							
14.0 - 15.0m			15.00	15.45	6	6	8	14	D-15	14	88.8	11.2			2.697	22.91	
15.0 - 16.0m			16.00	16.45	9	9	11	20	D-16	20							
16.0 - 17.0m	Light Gray 7.5YR (5/1), dense, Poorly graded silty Sand with gravel, SP-SM.		17.00	17.45	9	11	16	27	D-17	27							
17.0 - 18.0m			18.00	18.45	10	12	15	27	D-18	27							
18.0 - 19.0m			19.00	19.45	9	13	17	30	D-19	30							
19.0 - 20.0m			20.00	20.45	10	15	16	31	D-20	31							
20.0 - 21.0m			21.00	21.45	17	10	10	20	D-21	20	80.5	19.5			2.62	21.34	
21.0 - 22.0m	Light Gray 7.5YR (5/1), dense, silty Sand with gravel, SM.		22.00	22.45	14	19	22	41	D-22	41							
22.0 - 23.0m			23.00	23.45	13	19	20	39	D-23	39							
23.0 - 24.0m			24.00	24.45	16	23	27	50	D-24	50							
24.0 - 25.0m			25.00	25.45	11	21	21	42	D-25	42							
25.0 - 26.0m			26.00	26.45	12	14	16	30	D-26	30							
26.0 - 27.0m	Light Gray 7.5YR (5/1), dense, silty Sand with gravel, SM.		27.00	27.45	11	13	15	28	D-27	28							
27.0 - 28.0m			28.00	28.45	21	44	6	50	D-28	50/175	87	13			2.619	18.11	
28.0 - 29.0m			29.00	29.45	16	22	18	40	D-29	40							
29.0 - 30.0m			30.00	30.45	13	20	23	43	D-30	43							

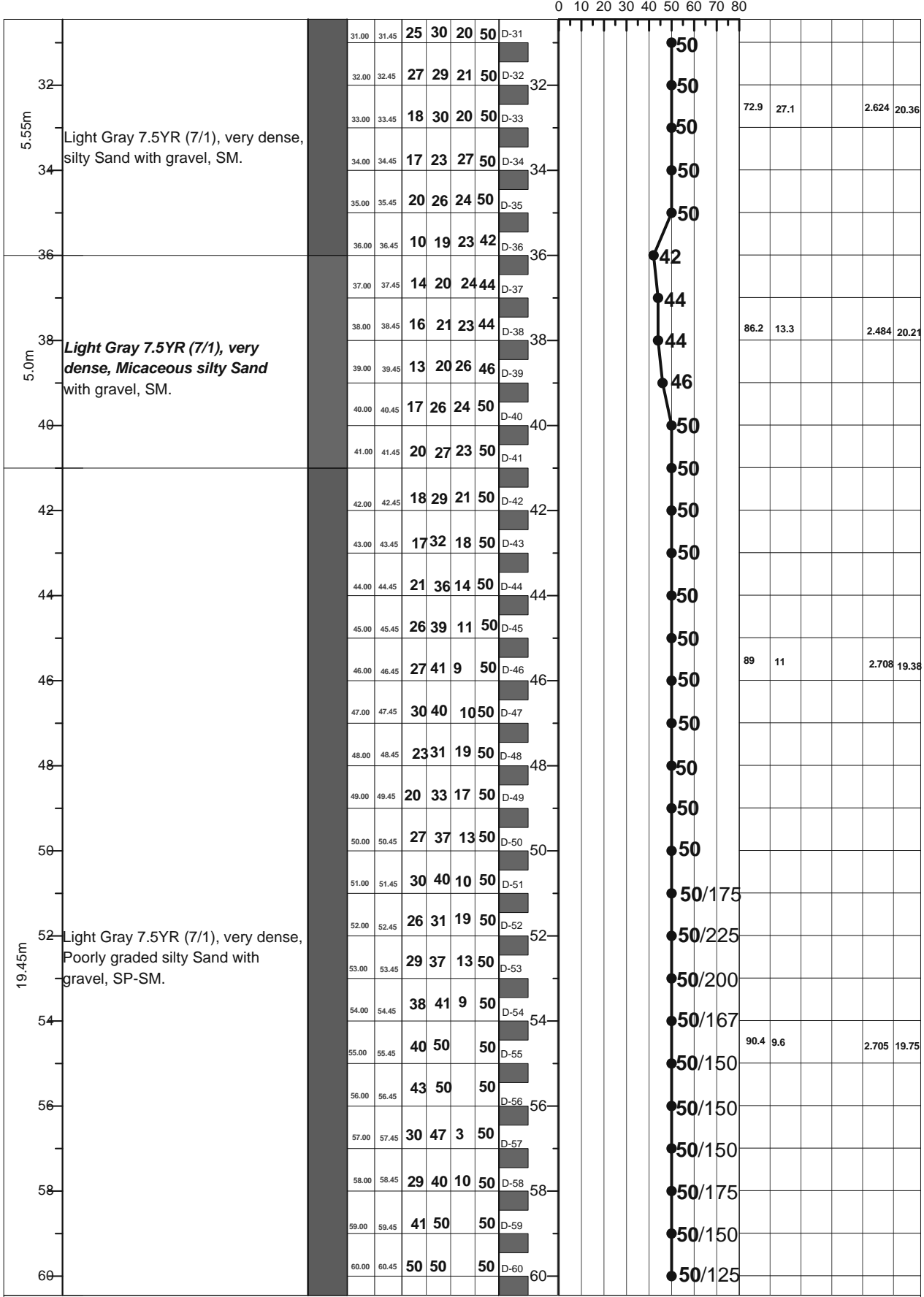
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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  
 MAX<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 86</b>	<b>BOREHOLE NO: N8_69a</b>	<b>Longitude: N 089°58'59"</b>	<b>Latitude: E 23°23'09.2"</b>
			<b>Brigde ID: N8_69a</b>	<b>Road Name: Dhaka (Jatrabari)-Mawa-Bhanga-Barisal-Patuaakhali.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 60.0m</b>	<b>Chainage: 68.726, RL: -10.10m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 18-03-2014</b>	<b>Completed Date: 22-03-2014</b>	<b>G. W. T : -2.3m.</b>

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 <sub>c</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

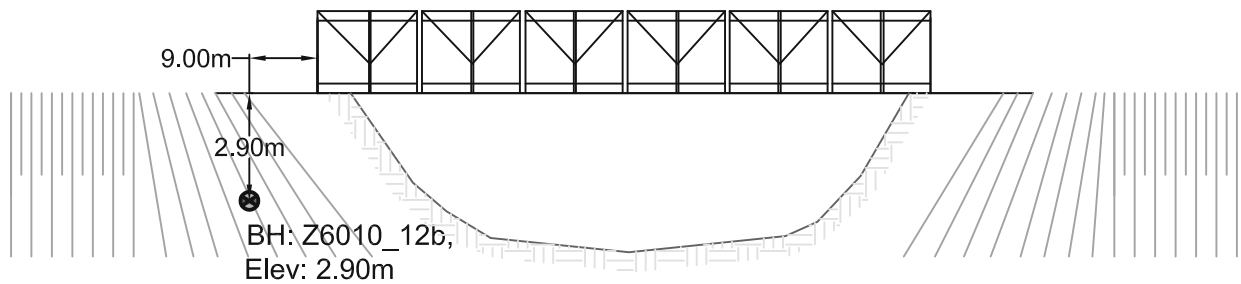
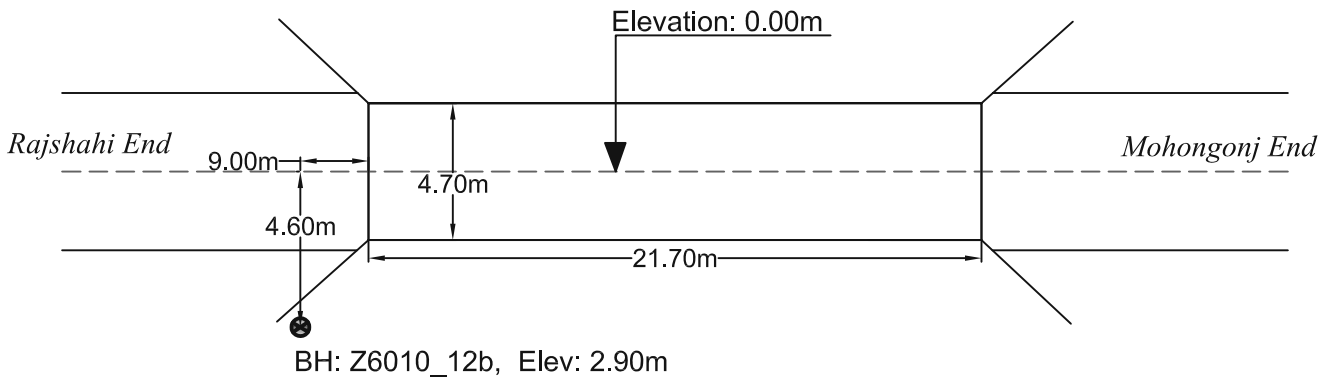
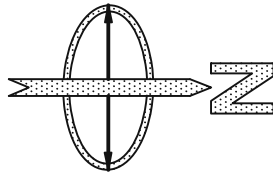


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

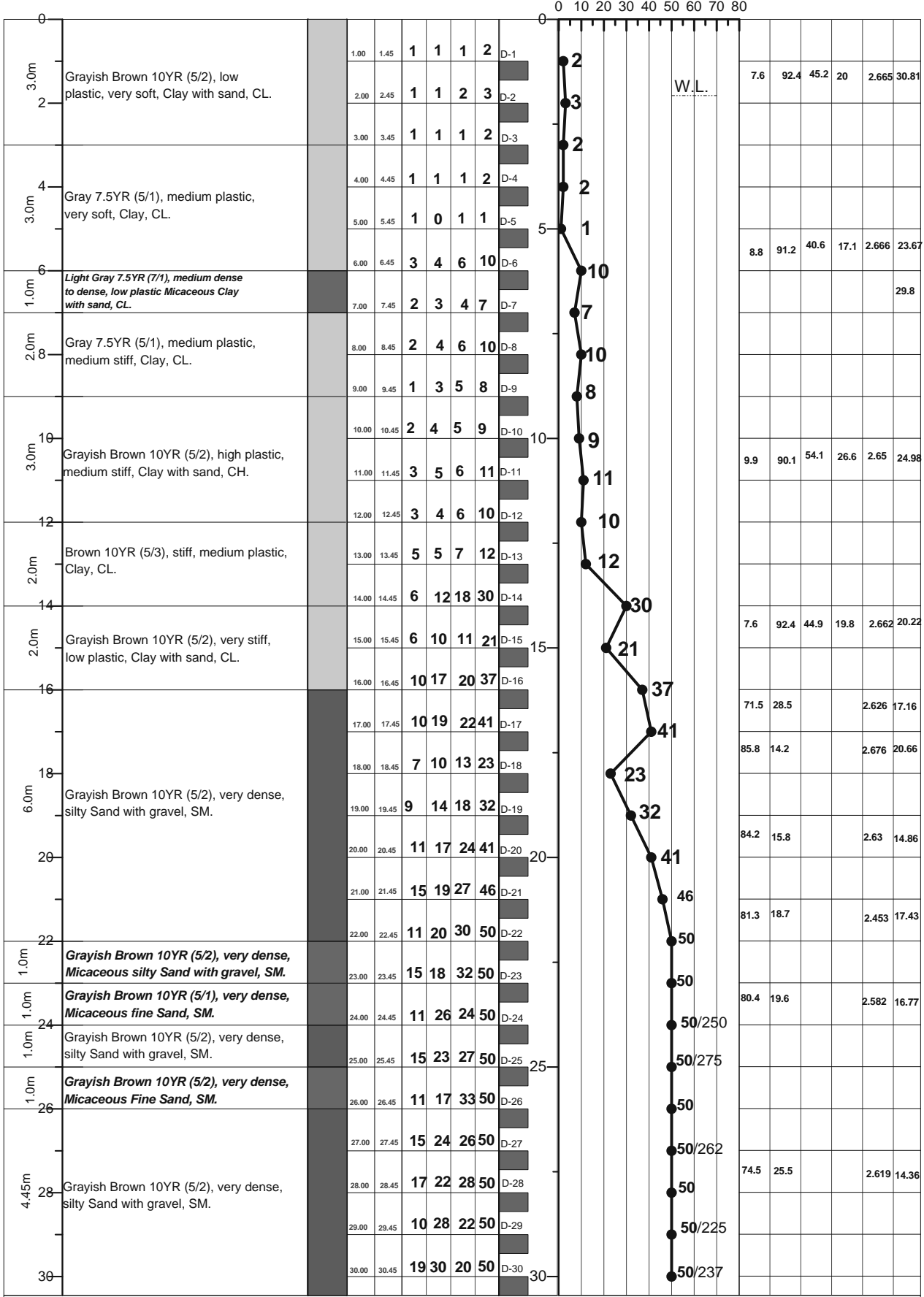
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 87  
BRIDGE ID: Z6010\_12b  
LATITUDE: 24°26'39.871" LONGITUDE: 88d41'38.816"  
CHAINAGE: 12.34



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 87</b>	<b>BOREHOLE NO: Z6010_12b</b>	<b>Longitude: N 088° 41' 38"</b>	<b>Latitude: E 24° 26' 39"</b>
			<b>Brigde ID: Z6010_12b</b>	<b>Road Name: Rajshahi-Hatgodagari-Faliarbil-Mohonganj.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 30.0m</b>	<b>Chainage: 12.34, RL: -2.9m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 21-03-2014</b>	<b>Completed Date: 23-03-2014</b>	<b>G. W. T : -1.82m.</b>

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



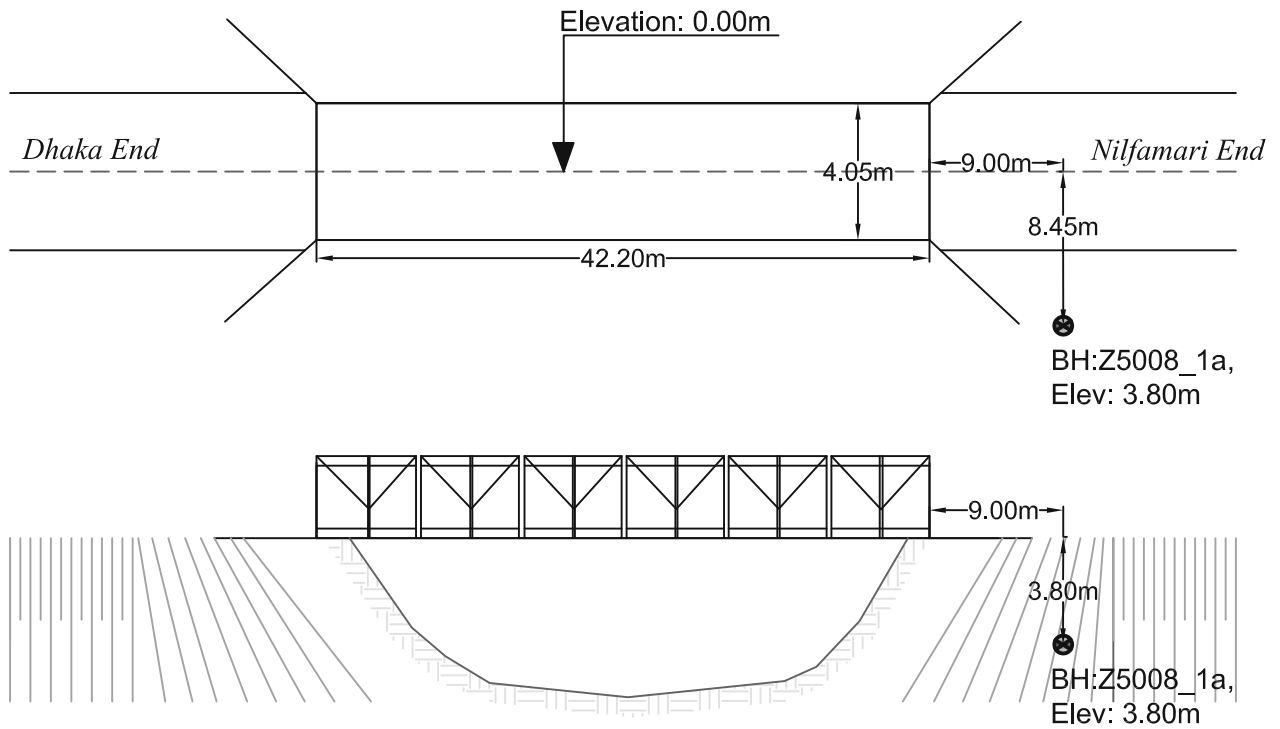
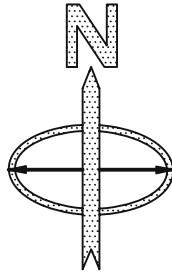
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



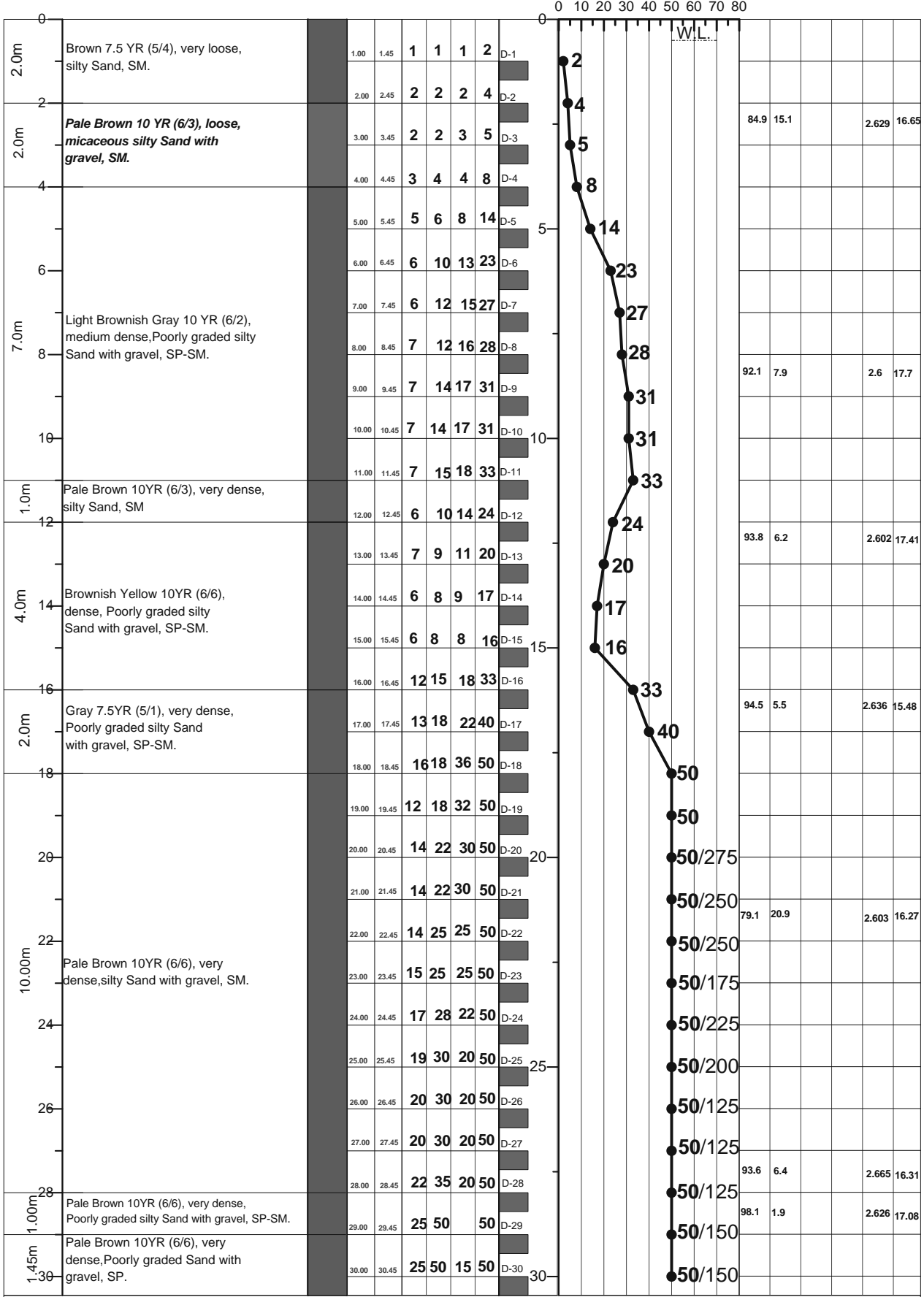
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 88  
BRIDGE ID: Z5008\_1a  
LATITUDE: 25°52'5.621" LONGITUDE: 88°39'45.866"  
CHAINAGE: 1.13



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 88</b>	<b>BOREHOLE NO: Z5008_1a</b>	<b>Longitude: N 88°50'8.5"</b>	<b>Latitude: E 25°52'5.621"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			<b>Brigde ID: Z5008_1a</b>	<b>Road Name: Birganj-Khansama-Darwani.</b>	
Type of Drill Rig: Manual Rotary			<b>Borehole Depth: 30.0m</b>	<b>Chainage: 1.130, RL: -3.80</b>	
CLIENT : Oriental Consultants Company Limited.			<b>Commencement Date: 27-02-2014</b>	<b>Completed Date: 28-02-2014</b>	<b>G. W. T : -.50m.</b>

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

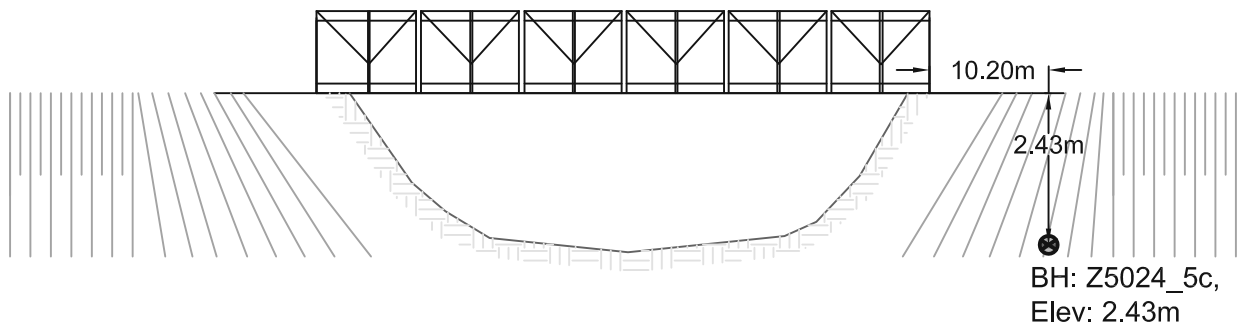
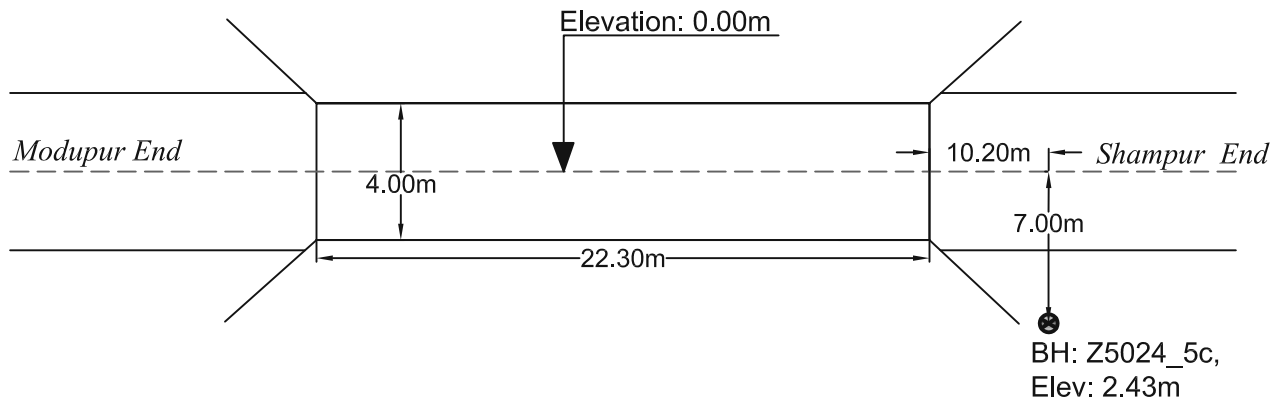
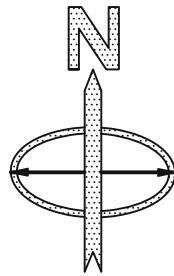


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> 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

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 89</b>	<b>BOREHOLE NO: Z5024-5c</b>	<b>Longitude: N 89°01'9.875"</b>	<b>Latitude: E 25°41'45.973"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>		<b>Borehole Depth: 30.0m</b>	
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 27-02-2014</b>		<b>Completed Date: 28-02-2014</b>	
			<b>Road Name: Modhupur-Shampur</b>		<b>Chainage: 5.67, RL: -2.43m</b>
			<b>G. W. T : -2.0m.</b>		

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-750 (mm)
0 - 2.0m	Gray 10YR (5/2), very loose, silty Sand with gravel, SM.		1.00	1.45	1	1	1	2	D-1	2	84.2	15.5	52.9	20.6	2.628	30.52
2.0 - 3.0m			2.00	2.45	1	1	2	3	D-2	3						
3.0 - 4.0m			3.00	3.45	1	1	2	3	D-3	3						
4.0 - 5.0m	Gray 10YR (6/1), loose, micaceous silty Sand with gravel, SM.		4.00	4.45	1	1	1	2	D-4	2						
5.0 - 6.0m			5.00	5.45	1	1	1	2	D-5	2						
6.0 - 7.0m			6.00	6.45	1	1	1	2	D-6	2						
7.0 - 8.0m	Gray 10YR (6/1), loose, clayey Sand with gravel, SC		7.00	7.45	1	1	2	3	D-7	3	14	86	35.5	28.3	2.552	29.33
8.0 - 9.0m	Gray 10YR (6/1), very loose, poorly graded silty Sand with gravel, SP-SM.		8.00	8.45	1	1	1	2	D-8	2	93	7			2.506	27.83
9.0 - 10.0m			9.00	9.45	3	4	5	9	D-9	9						
10.0 - 11.0m	Gray 7.5YR (6/1), medium dense, silty Sand with gravel, SM		10.00	10.45	3	4	6	10	D-10	10	70.4	29.6	46.8	19.2	2.678	23.29
11.0 - 12.0m			11.00	11.45	3	6	9	15	D-11	15						
12.0 - 13.0m			12.00	12.45	5	8	9	17	D-12	17	95.6	4.2			2.68	19.82
13.0 - 14.0m	Gray 7.5YR (6/1), medium dense, poorly graded Sand with gravel, SP		13.00	13.45	7	11	15	26	D-13	26						
14.0 - 15.0m			14.00	14.45	9	16	20	36	D-14	36						14.93
15.0 - 16.0m	light Gray 10YR (6/1), medium dense, silty Sand with gravel, SM		15.00	15.45	3	5	5	10	D-15	10						
16.0 - 17.0m			16.00	16.45	2	4	5	9	D-16	9						
17.0 - 18.0m	Gray 5YR (4/1), medium dense, silty Sand with gravel, SM		17.00	17.45	2	3	4	7	D-17	7						
18.0 - 19.0m			18.00	18.45	2	3	4	7	D-18	7	66.1	33.7	52.9	23.3	2.62	21.22
19.0 - 20.0m			19.00	19.45	3	5	7	12	D-19	12						
20.0 - 21.0m	light Gray 7.5YR (5/2), medium dense, silty Sand with gravel, SM		20.00	20.45	4	6	12	18	D-20	18					2.635	
21.0 - 22.0m			21.00	21.45	5	10	13	23	D-21	23						
22.0 - 23.0m			22.00	22.45	6	11	15	26	D-22	26						
23.0 - 24.0m			23.00	23.45	9	15	20	35	D-23	35						
24.0 - 25.0m	light Gray 7.5YR (5/1), very dense, silty Sand with gravel, SM		24.00	24.45	12	16	21	37	D-24	37	76.4	23.5			2.661	20.11
25.0 - 26.0m			25.00	25.45	20	30	20	50	D-25	50						12.82
26.0 - 27.0m			26.00	26.45	23	29	21	50	D-26	50						
27.0 - 28.0m	light Gray 7.5YR (6/1), very dense, poorly graded silty Sand with gravel, SP-SM		27.00	27.45	23	31	19	50	D-27	50						
28.0 - 29.0m			28.00	28.45	22	30	20	50	D-28	50						
29.0 - 30.0m			29.00	29.45	24	32	18	50	D-29	50	92.7	6.9			2.662	13.3
30.0 - 30.45m			30.00	30.45	23	31	19	50	D-30	50						

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

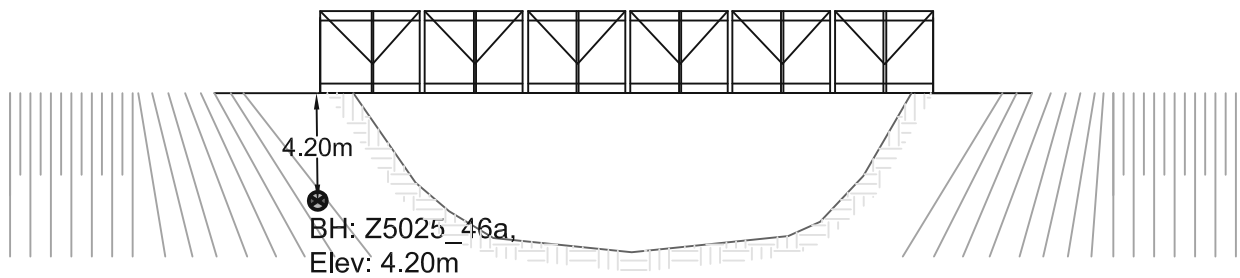
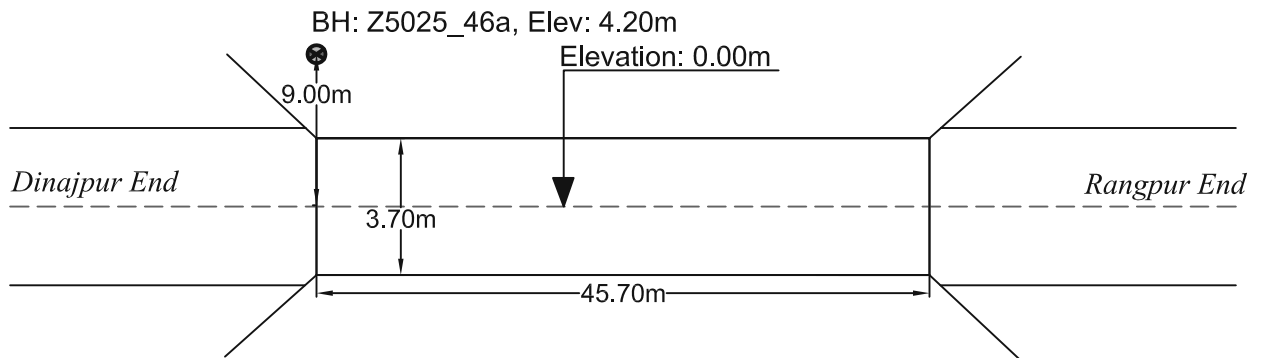
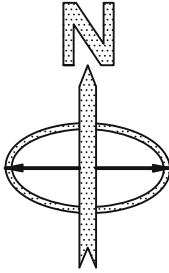
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

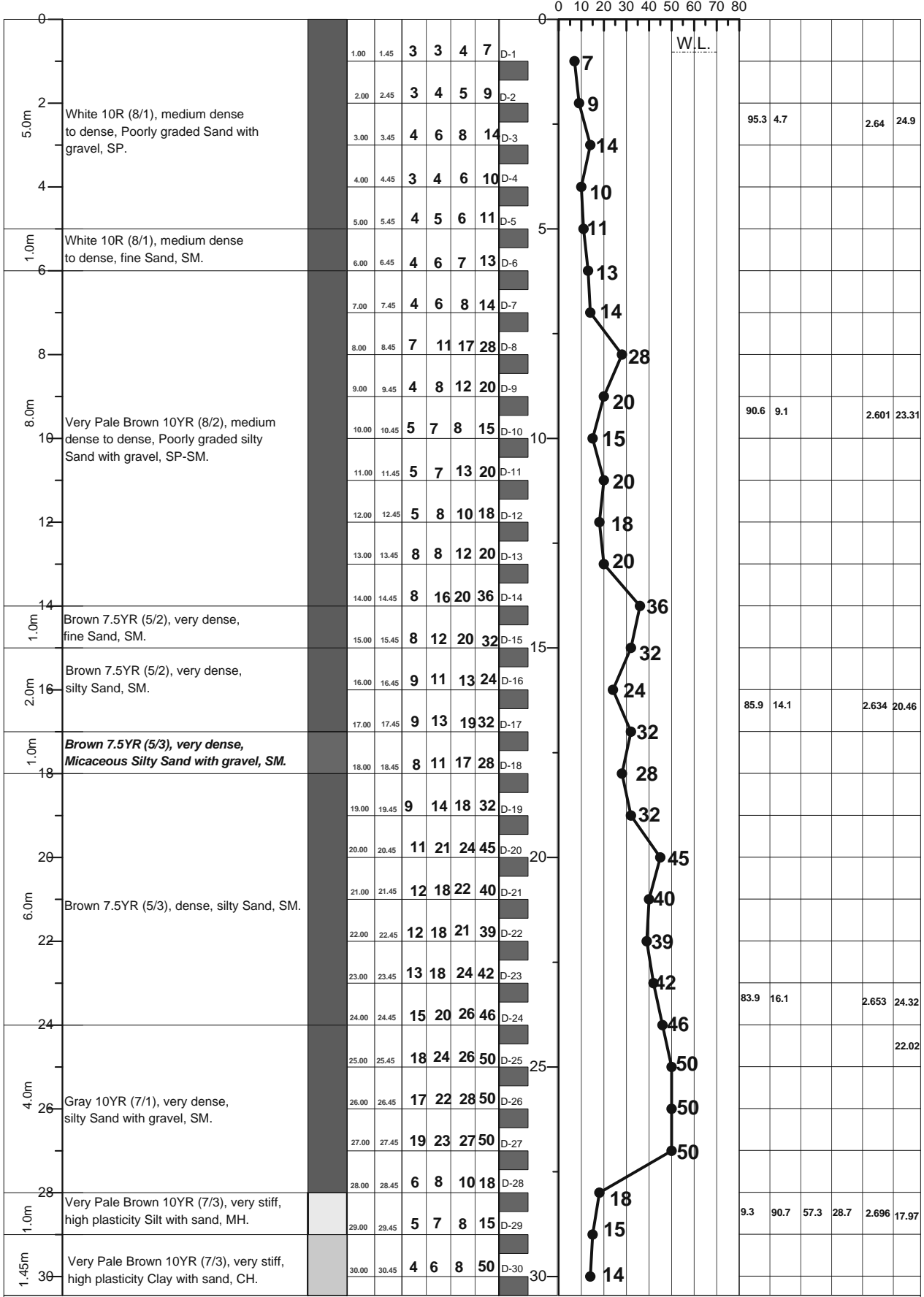
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 90  
BRIDGE ID: Z5025\_46a  
LATITUDE: 25°39'37.292" LONGITUDE: 88°50'34.034"  
CHAINAGE: 45.643



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 90</b>	<b>BOREHOLE NO: Z5025_46a</b>	<b>Longitude: N 088°50.543'</b>	<b>Latitude: E 25°39.629'</b>
			<b>Brigde ID: Z5025_46a</b>	<b>Road Name: Rangpur-Badarganj-Parbatipur-Dinajpur.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 38.0m</b>	<b>Chainage: 45.643, RL: -4.20m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 18-02-2014</b>	<b>Completed Date: 21-02-2014</b>	<b>G. W. T : -0.78m.</b>

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



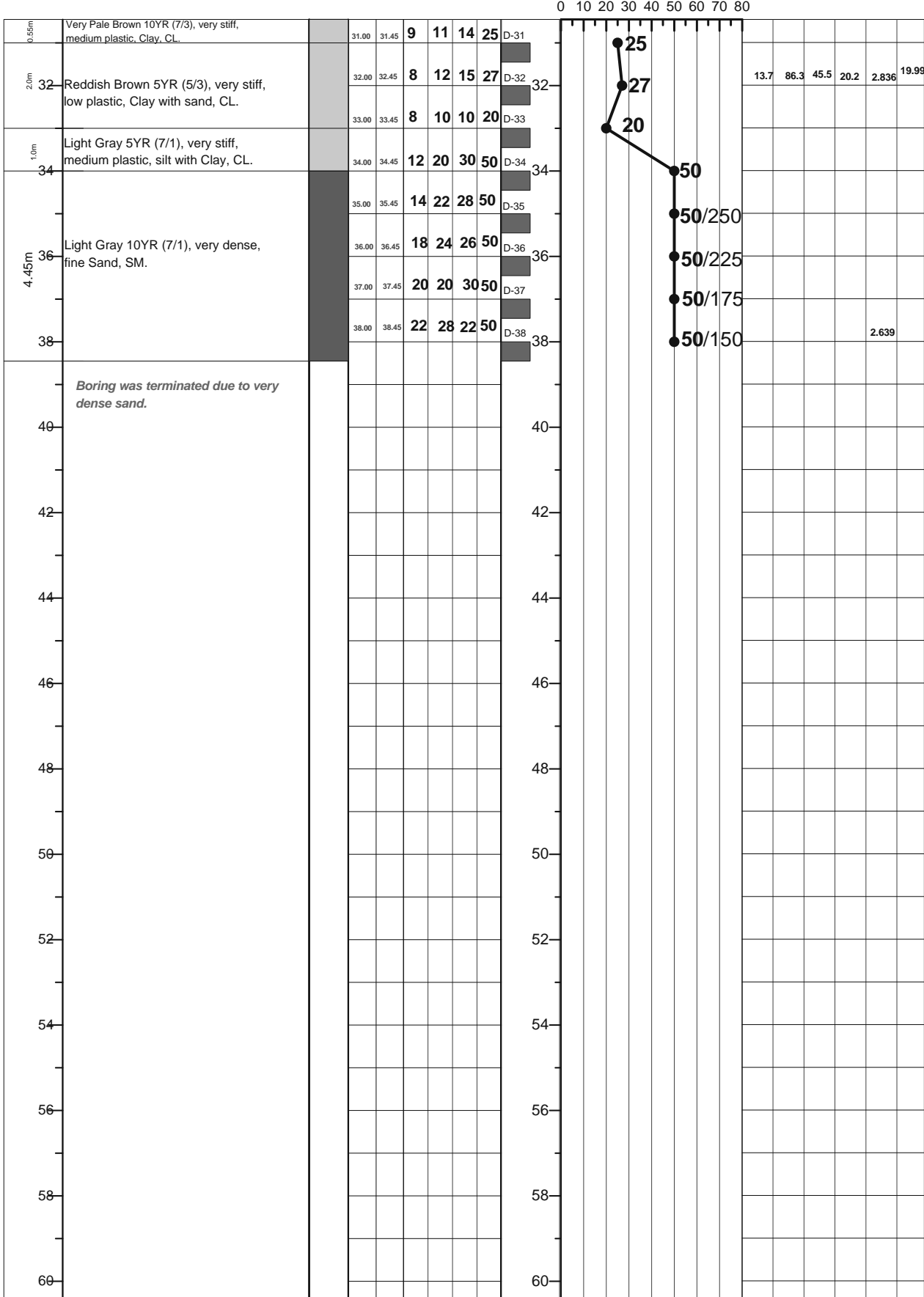
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 90</b>	<b>BOREHOLE NO: Z5025_46a</b>	<b>Longitude: N 088°50.543'</b>	<b>Latitude: E 25°39.629'</b>
			<b>Brigde ID: Z5025_46a</b>	<b>Road Name: Rangpur-Badarganj-Parbatipur-Dinajpur.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 38.0m</b>	<b>Chainage: 45.643, RL: -4.20m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 18-02-2014</b>	<b>Completed Date: 21-02-2014</b>	<b>G. W. T : -0.78m.</b>

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 <sub>c</sub>
			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<sup>m</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

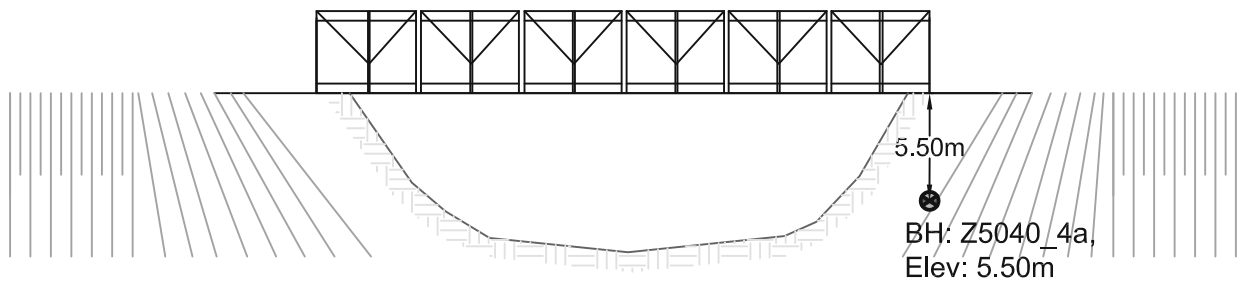
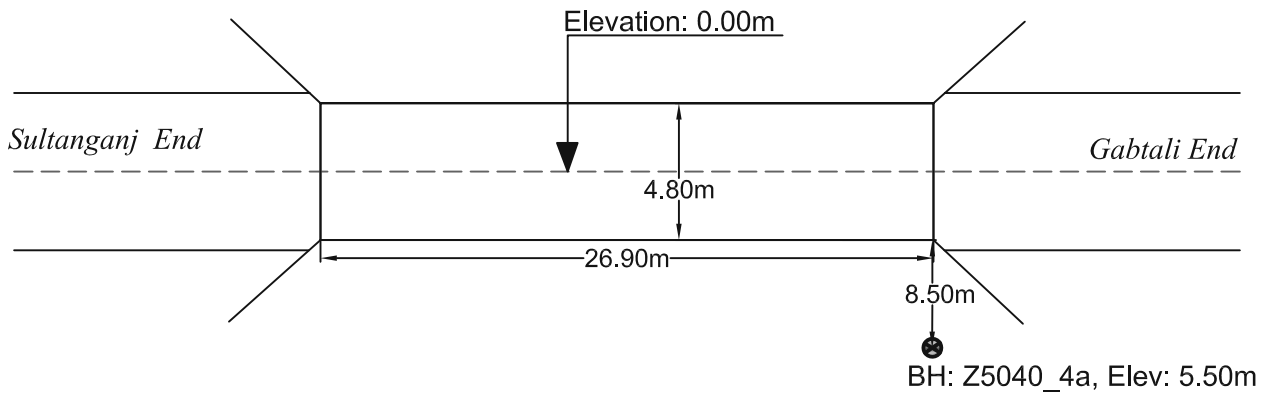
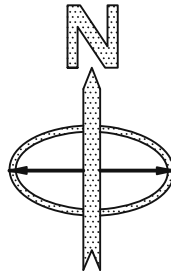
CLIENT: Oriental Consultants Company Limited.

RANK: 91

BRIDGE ID: Z5040\_4a

LATITUDE: 24°47'49.824" LONGITUDE: 89°25'37.83"

CHAINAGE: 3.9



PROSOIL FOUNDATION CONSULTANT



<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 91</b>	<b>BOREHOLE NO: Z5040_4a</b>	<b>Longitude: N 89°25'37.3"</b>	<b>Latitude: E 24°47'52.0"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			<b>Brigde ID: Z5040_4a</b>	Road Name: Suitanganj (Lichutala)-Madla-Bagbari-Gabtal (Pachmie).	
Type of Drill Rig: Manual Rotary			<b>Borehole Depth: 30.0m</b>	<b>Chainage: 3.9, RL: -5.5m</b>	
CLIENT : Oriental Consultants Company Limited.			<b>Commencement Date: 20-02-2014</b>	<b>Completed Date: 23-02-2014</b>	<b>G. W. T : -4.0m.</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			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

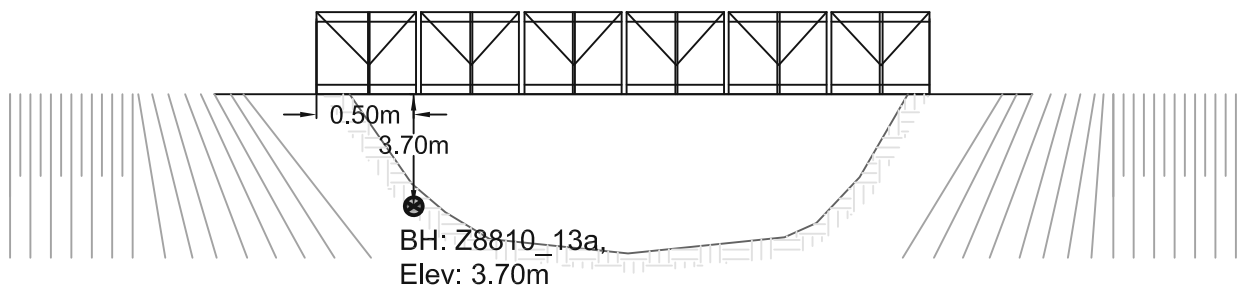
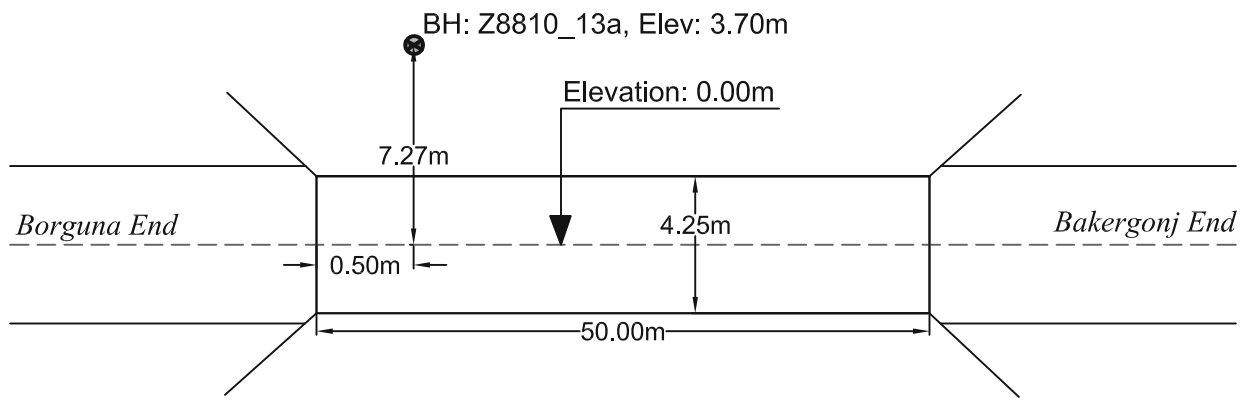
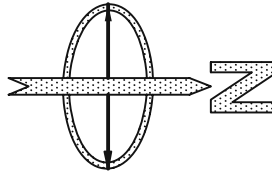
W.L.

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<sup>m</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

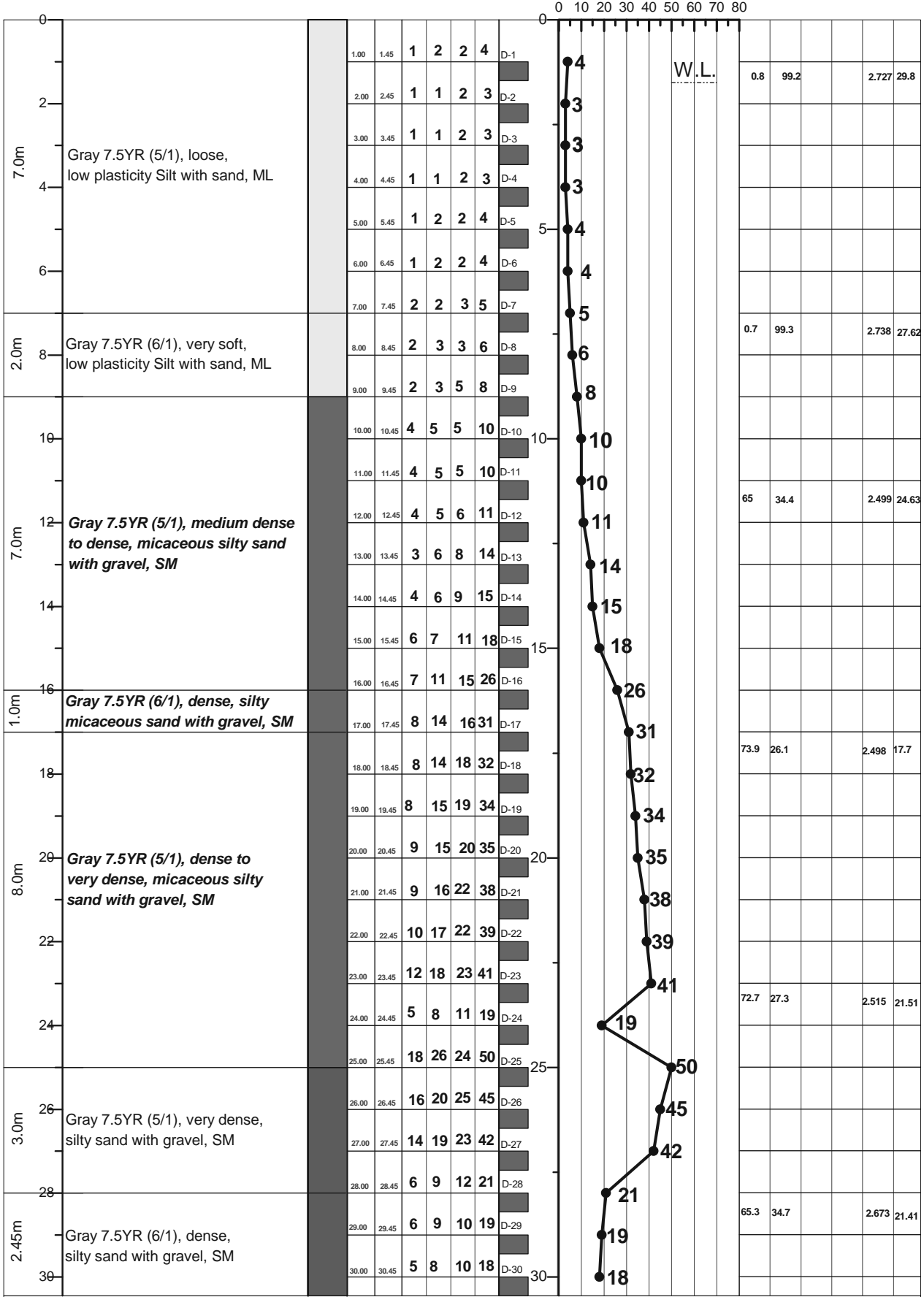
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 92  
BRIDGE ID: Z8810\_13a  
LATITUDE: 22°27'35" LONGITUDE: 90°16'38"  
CHAINAGE: 13.913



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 92</b>	<b>BOREHOLE NO: Z8810_13a</b>	<b>Longitude: N 90°16'38"</b>	<b>Latitude: E 22°27'35"</b>
			<b>Brigde ID: Z8810_13a</b>	<b>Road Name: Bakerganj-Padrishibpur-Kathaltali-Subidkhali-Barguna.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>Chainage: 13.913, RL: -3.70m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 26-03-2014</b>	<b>Completed Date: 5-04-2014</b>	<b>G. W. T : -1.5m.</b>

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



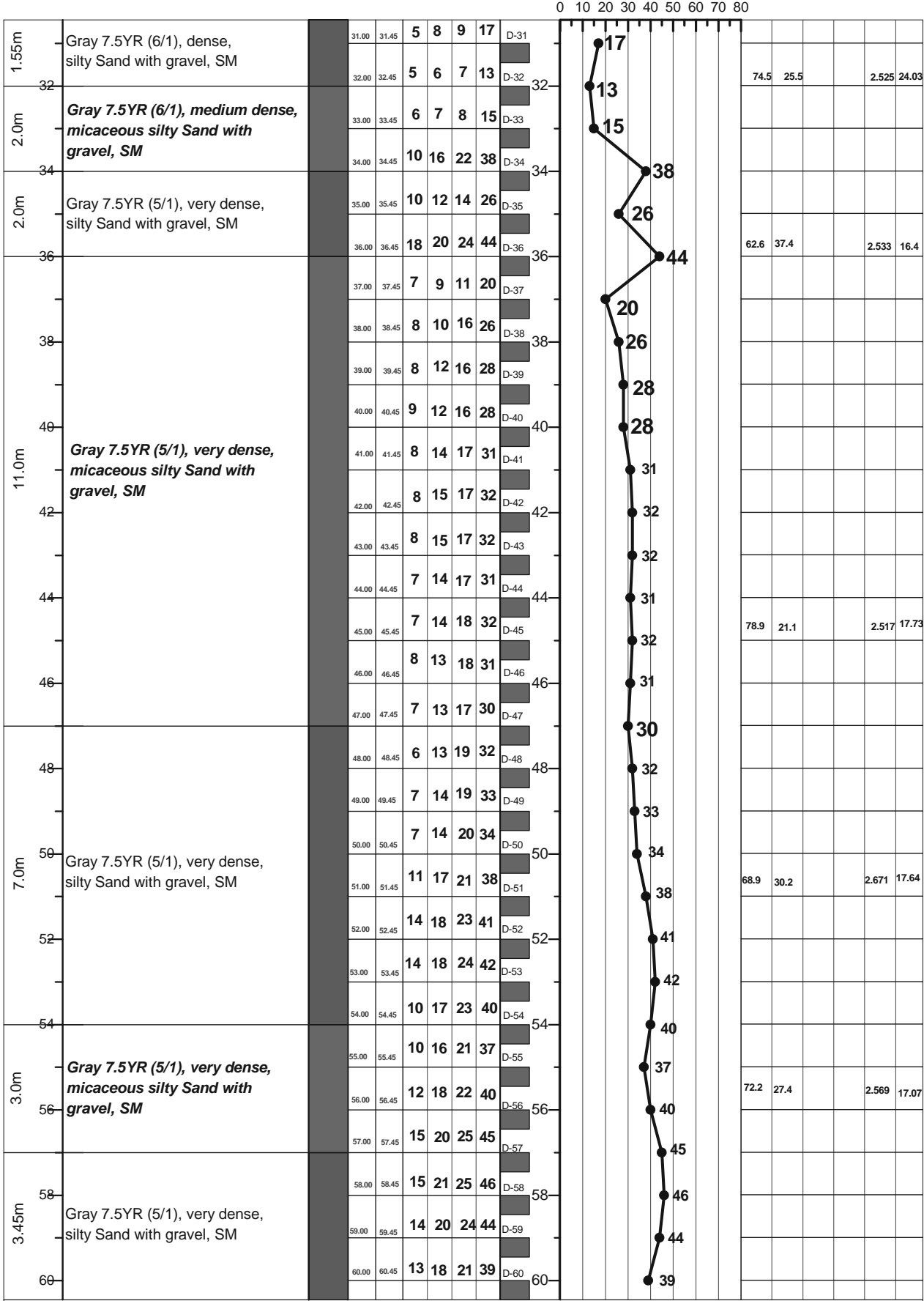
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 92</b>	<b>BOREHOLE NO: Z8810_13a</b>	<b>Longitude: N 90°16'38"</b>	<b>Latitude: E 22°27'35"</b>
			<b>Brigde ID: Z8810_13a</b>	<b>Road Name: Bakerganj-Padrishibpur-Kathaltali-Subidkhal-Barguna</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>Chainage: 13.913, RL: -3.7m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 26-03-2014</b>	<b>Completed Date: 5-04-2014</b>	<b>G. W. T : -1.5m</b>

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 <sub>c</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



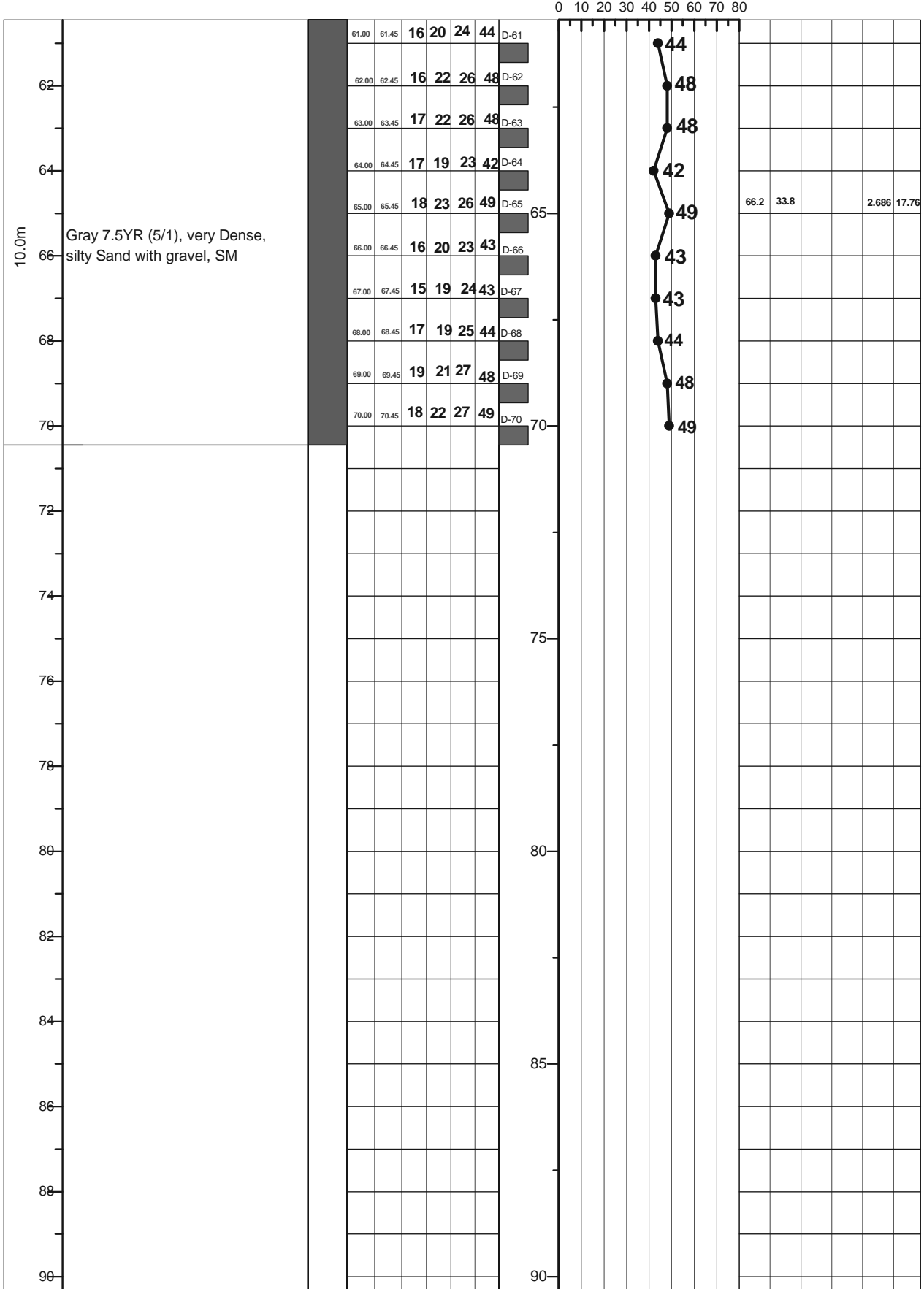
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 92</b>	<b>BOREHOLE NO: Z8810_13a</b>	<b>Longitude: N 90°16'38"</b>	<b>Latitude: E 22°27'35"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			<b>Brigde ID: Z8810_13a</b>	<b>Road Name: Bakerganj-Padrishibpur-Kathaltali-Subidkhali-Barguna.</b>	
CLIENT : Oriental Consultants Company Limited.			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>Chainage: 13.913, RL: -3.7m</b>
			<b>Commencement Date: 26-03-2014</b>	<b>Completed Date: 5-04-2014</b>	<b>G. W. T : -1.5m.</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m)	SPT VALUES (BLOWS / 300mm)					% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

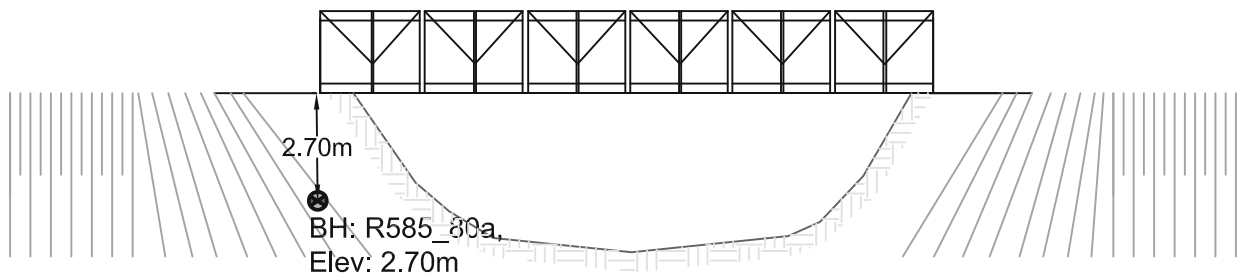
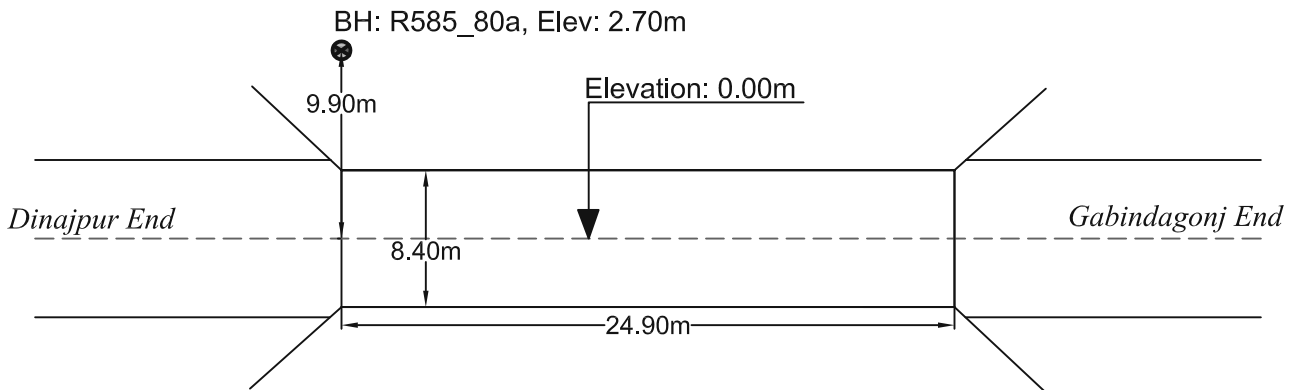
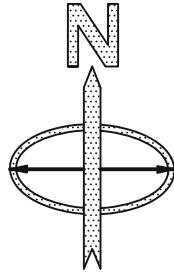
CLIENT: Oriental Consultants Company Limited.

RANK: 93

BRIDGE ID: R585\_80a

LATITUDE: 25°32'34.9" LONGITUDE: 88°50'8.5"

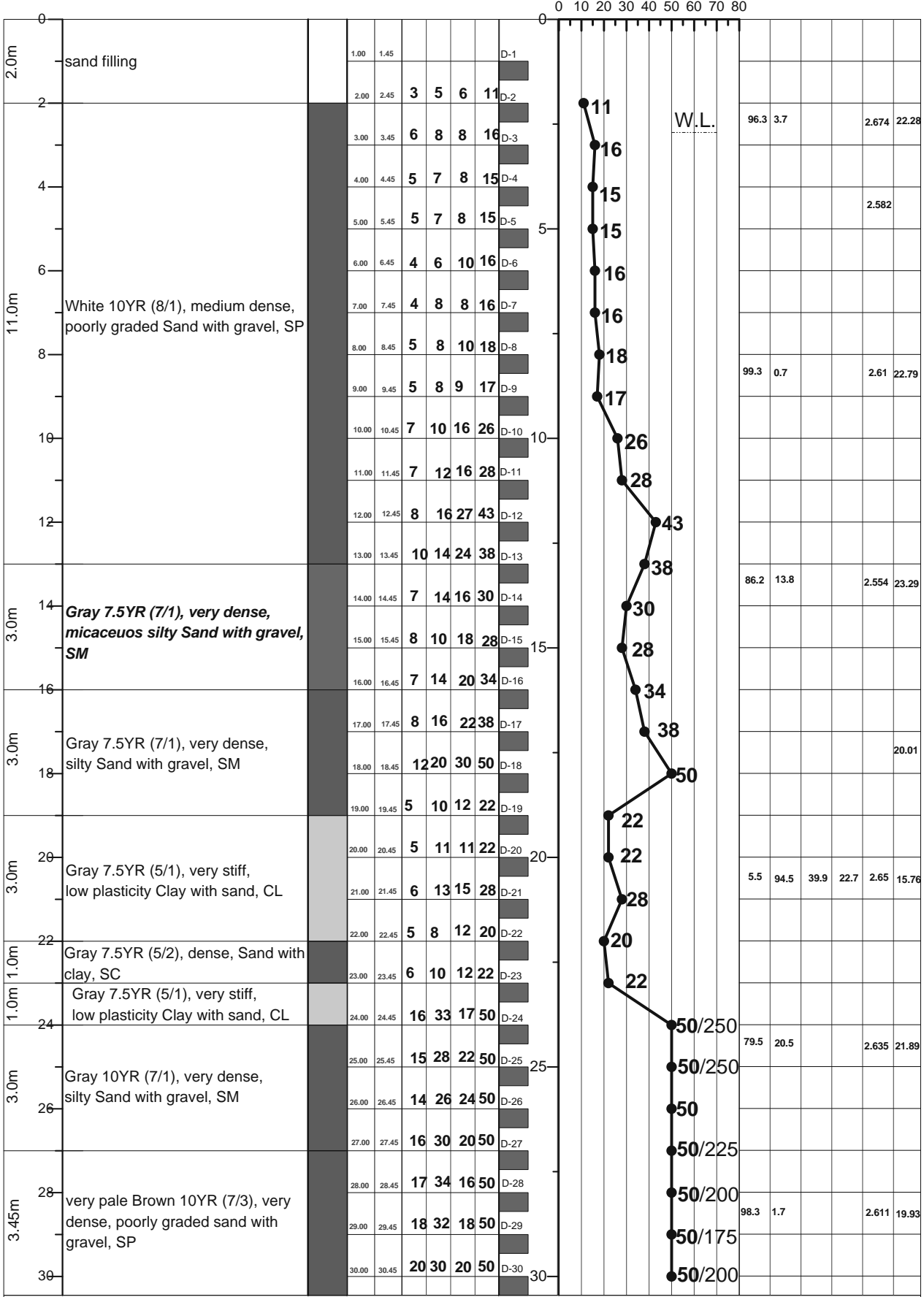
CHAINAGE: 80.501



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 93</b>	<b>BOREHOLE NO: R585-80a</b>	<b>Longitude: N 88°50'8.5"</b>	<b>Latitude: E 25°32'34.9"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			<b>Brigde ID: R585-80a</b>	Road Name: Gobindagnj-Goraghat-Birampur-Fulbari-Dinajpur.	
Type of Drill Rig: Manual Rotary			<b>Borehole Depth: 30.0m</b>	<b>Chainage: 80.501, RL: -2.7m</b>	
CLIENT : Oriental Consultants Company Limited.			<b>Commencement Date: 28-02-2014</b>	<b>Completed Date: 2-03-2014</b>	<b>G. W. T : -2.7m.</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

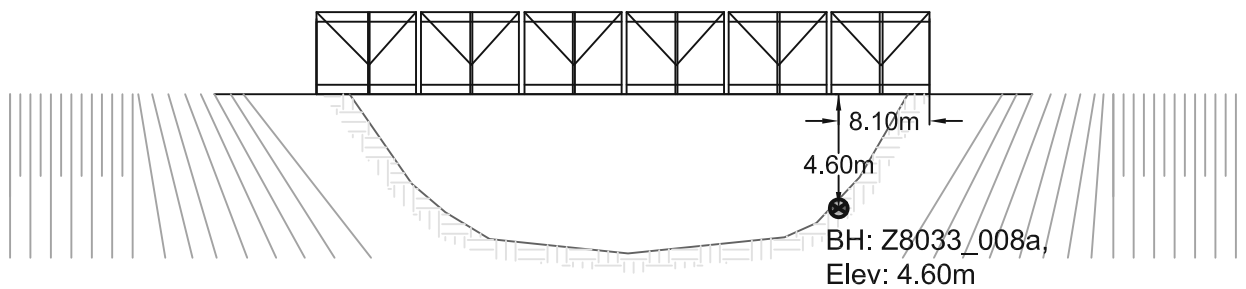
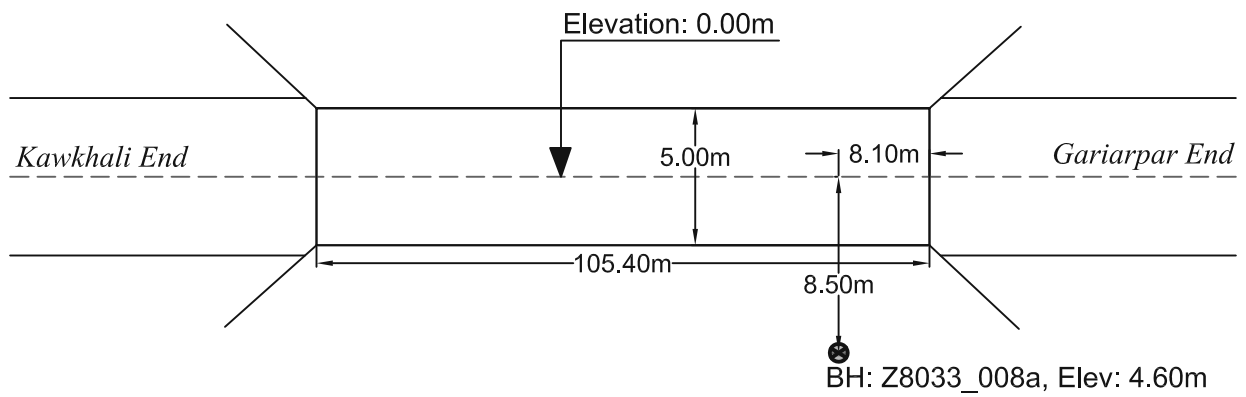
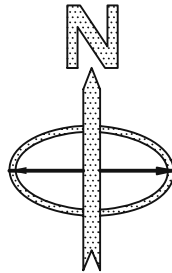
CLIENT: Oriental Consultants Company Limited.

RANK: 94

BRIDGE ID: Z8033\_008a

LATITUDE: 22°46'51.94" LONGITUDE: 90°15'14"

CHAINAGE: 0

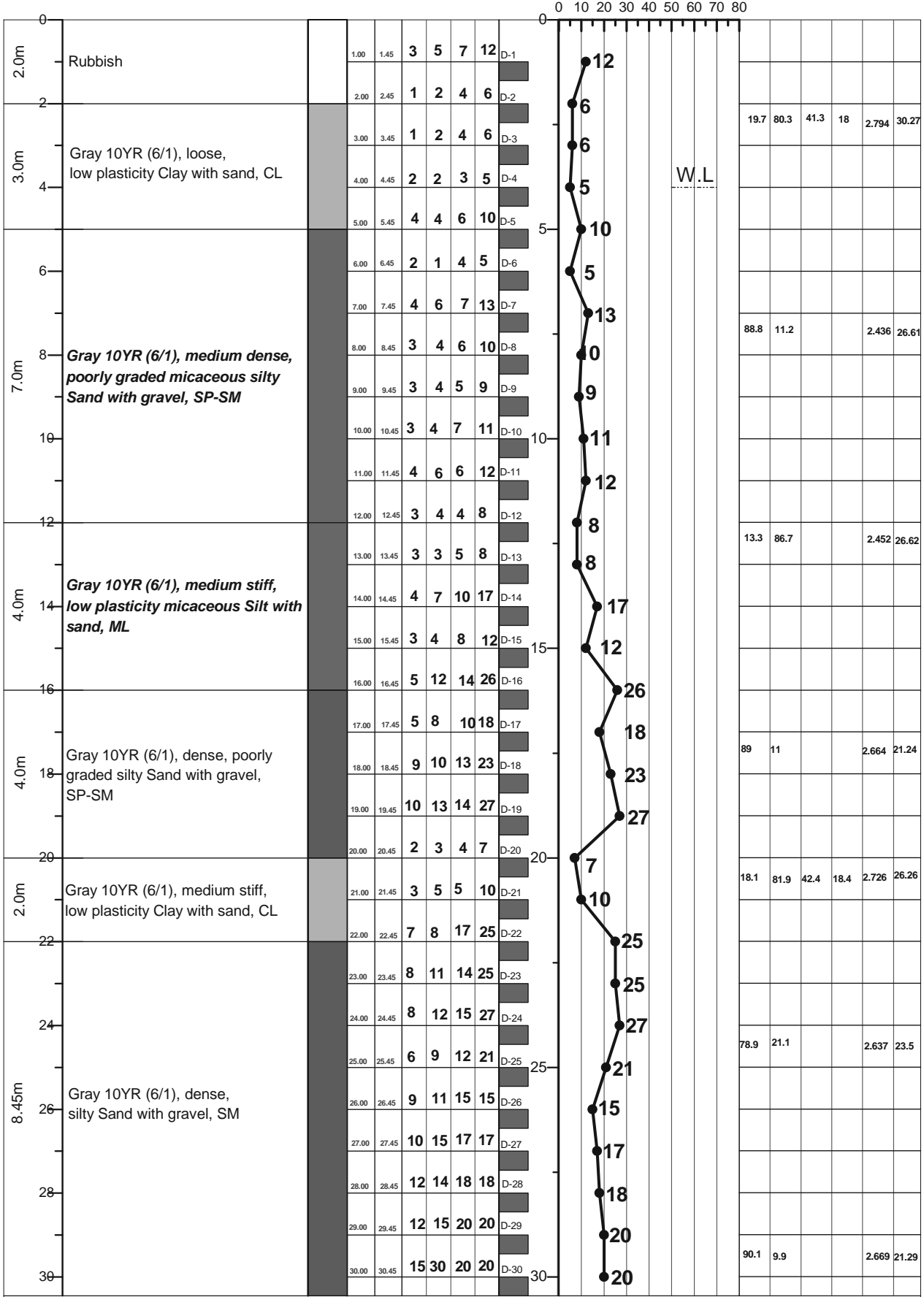


PROSOIL FOUNDATION CONSULTANT



<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 94</b>	<b>BOREHOLE NO: Z8033_008a</b>	<b>Longitude: N 90°15'14"</b>	<b>Latitude: E 22°46'51.94"</b>
			<b>Brigide ID: Z8033_008a</b>	<b>Road Name: Gariarpar-Banaripara-Sawrupkati-Kawkhali-Naikati.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 60.0m</b>	<b>Chainage: 0, RL: -4.6m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 6-04-2014</b>	<b>Completed Date: 11-04-2014</b>	<b>G. W. T : -4.0m.</b>

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



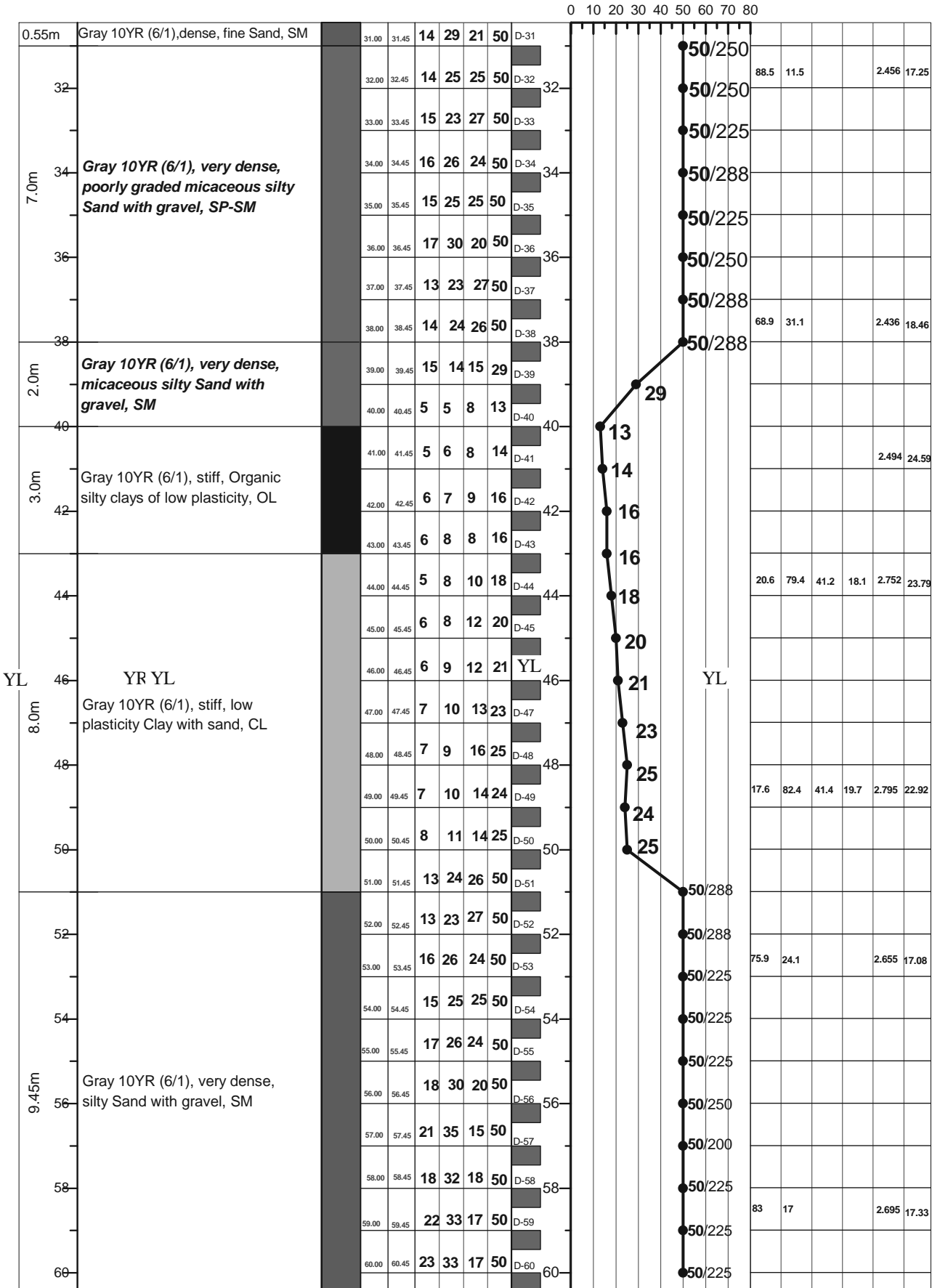
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 94</b>	<b>BOREHOLE NO: Z8033_008a</b>	<b>Longitude: N 90°15'14"</b>	<b>Latitude: E 22°46'51.94"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			<b>Brigde ID: Z8033_008a</b>	<b>Road Name: Gariarpar-Banaripara-Sawrupkati-Kawkhali-Naikati</b>	
Type of Drill Rig: Manual Rotary			<b>Borehole Depth: 60.0m</b>	<b>Chainage: 0, RL: -4.6m</b>	
CLIENT : Oriental Consultants Company Limited.			<b>Commencement Date: 6-04-2014</b>	<b>Completed Date: 11-04-2014</b>	<b>G. W. T : -4.0m</b>

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

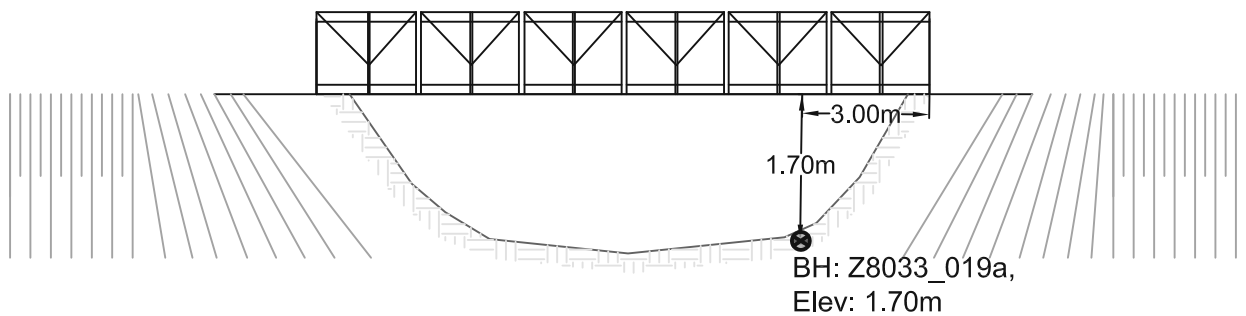
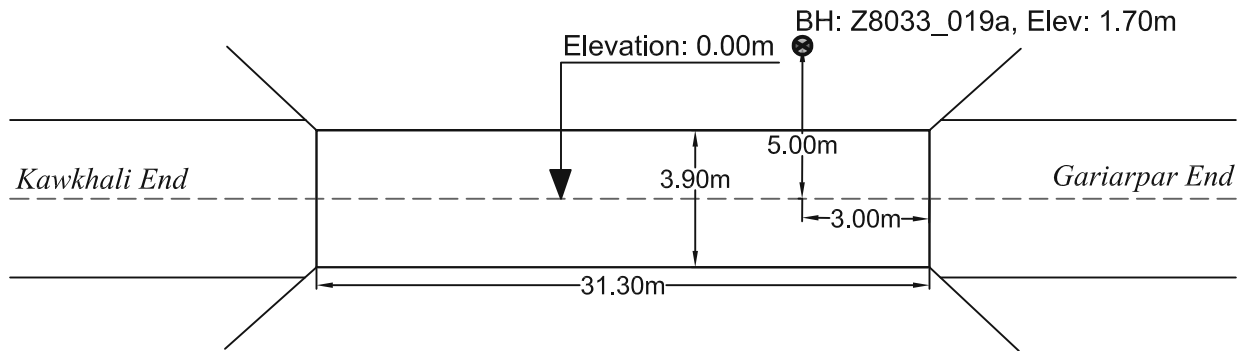
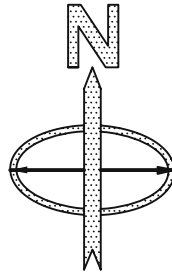


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

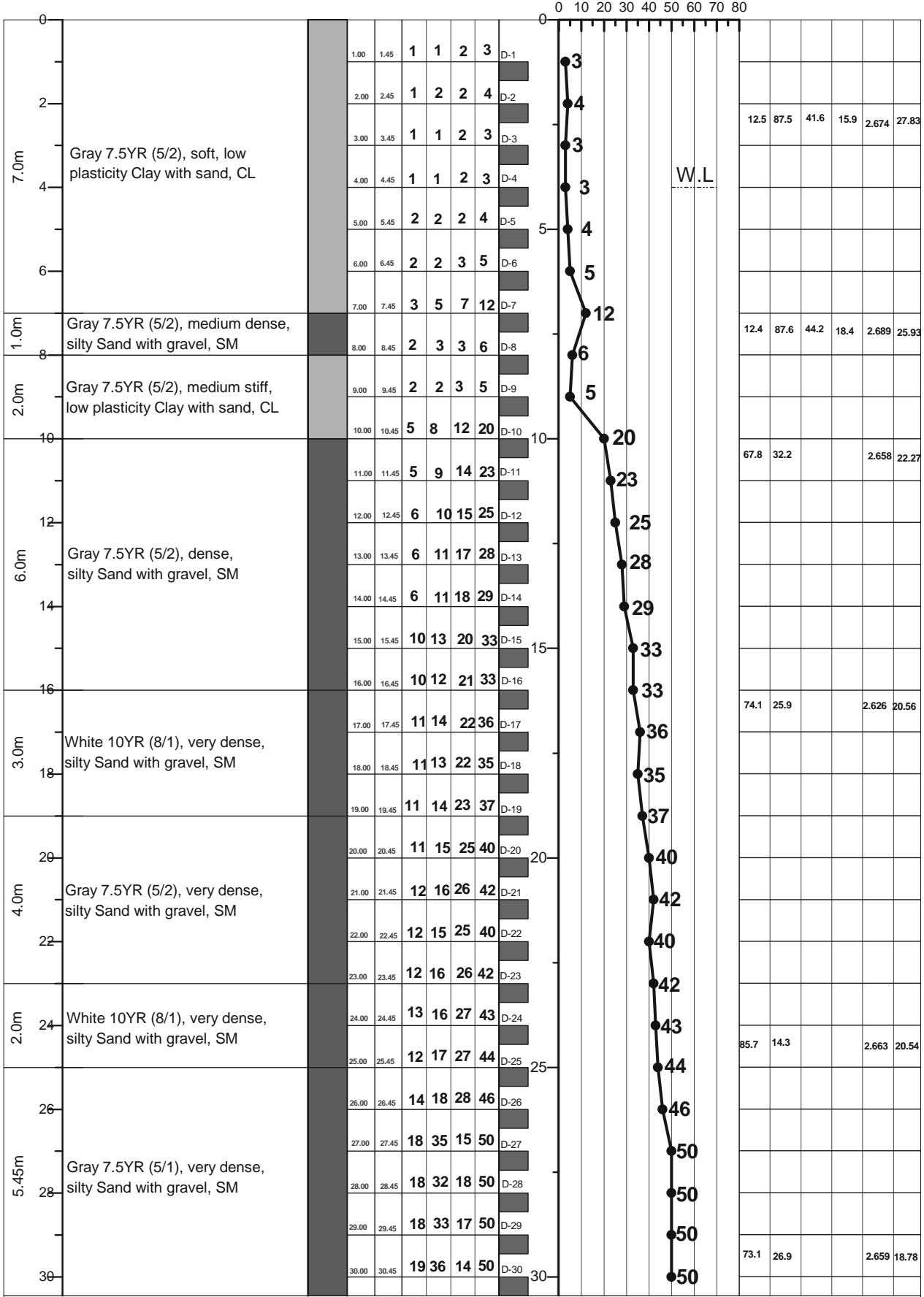
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 95  
BRIDGE ID: Z8033\_019a  
LATITUDE: 22°46'26.488" LONGITUDE: 90°9'17.638"  
CHAINAGE: 19.103



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 95</b>	<b>BOREHOLE NO: Z8033_019a</b>	<b>Longitude: N 90° 9' 17.638"</b>	<b>Latitude: E 22° 46' 26.488"</b>
			<b>Brigde ID: Z8033_019a</b>	<b>Road Name: Gariarpar-Banaripara-Sawrupkati-Kawkhali-Naikati.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>Chainage: 19.103, RL: -1.7m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 2-04-2014</b>	<b>Completed Date: 10-04-2014</b>	<b>G. W. T : -4.0m.</b>

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



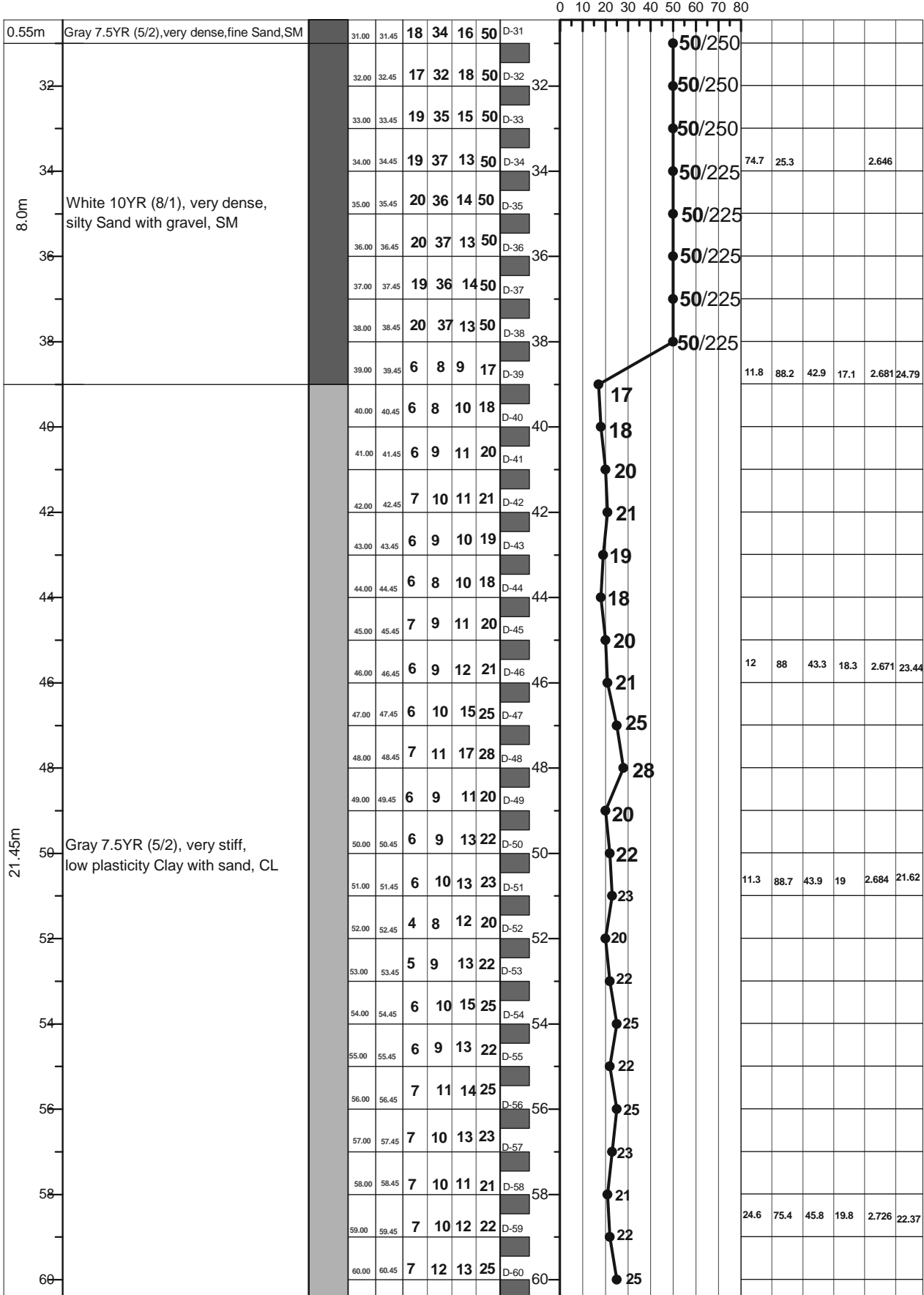
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 95</b>	<b>BOREHOLE NO: Z8033_019a</b>	<b>Longitude: N 90° 9' 17.638"</b>	<b>Latitude: E 22° 46' 26.488"</b>
			<b>Brigde ID: Z8033_019a</b>	<b>Road Name: Gariarpar-Banaripara-Sawrupkati-Kawkhali-Naikati</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>Chainage: 19.103, RL: -1.7m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 2-04-2014</b>	<b>Completed Date: 10-04-2014</b>	<b>G. W. T : -4.0m</b>

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



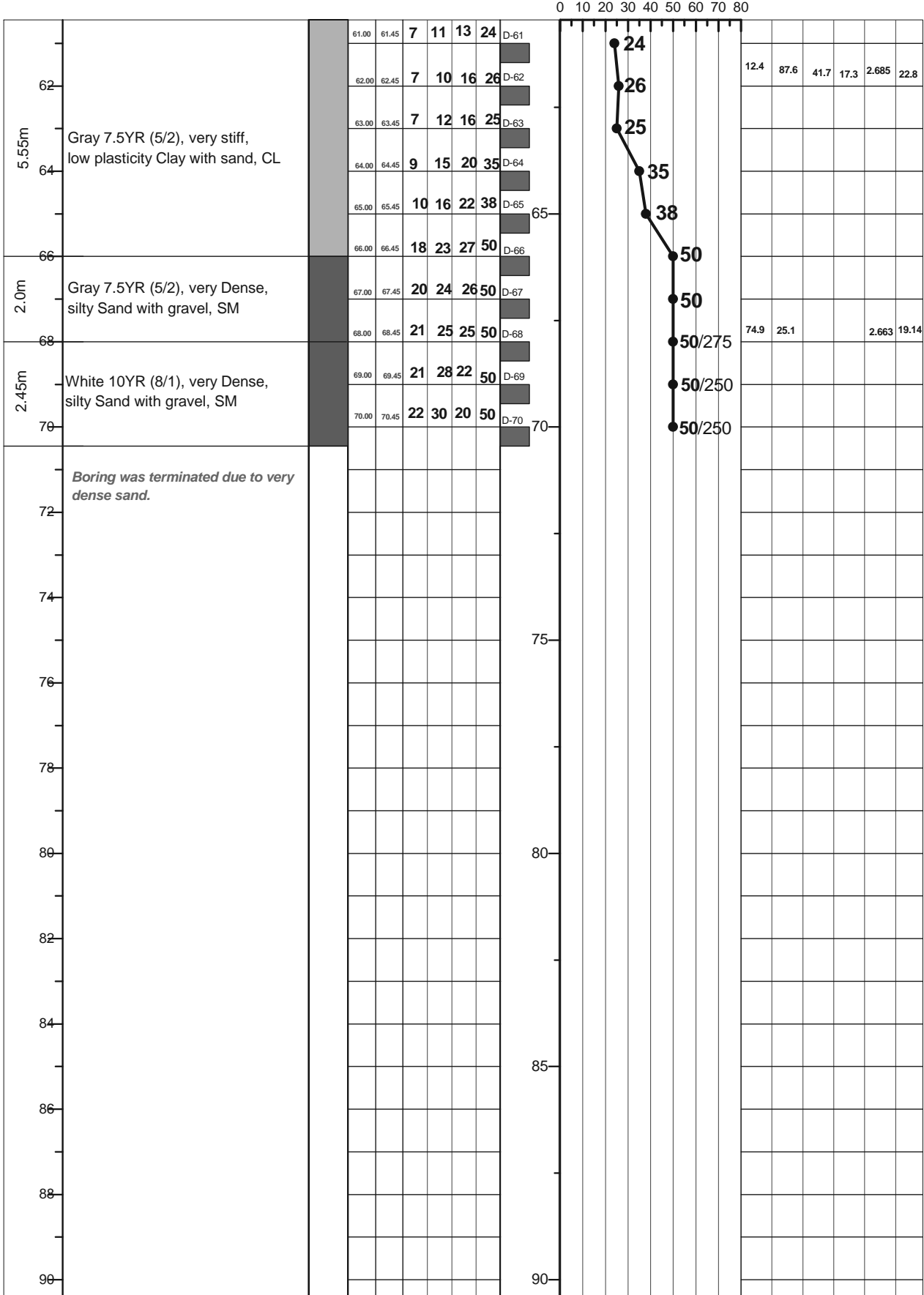
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 95</b>	<b>BOREHOLE NO: Z8033_019a</b>	<b>Longitude: N 90° 9' 17.638"</b>	<b>Latitude: E 22° 46' 26.488"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>		<b>Borehole Depth: 70.0m</b>	<b>Chainage: 19.103, RL: -1.7m</b>
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 2-04-2014</b>		<b>Completed Date: 10-04-2014</b>	<b>G. W. T : -4.0m.</b>

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 <sub>c</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)									

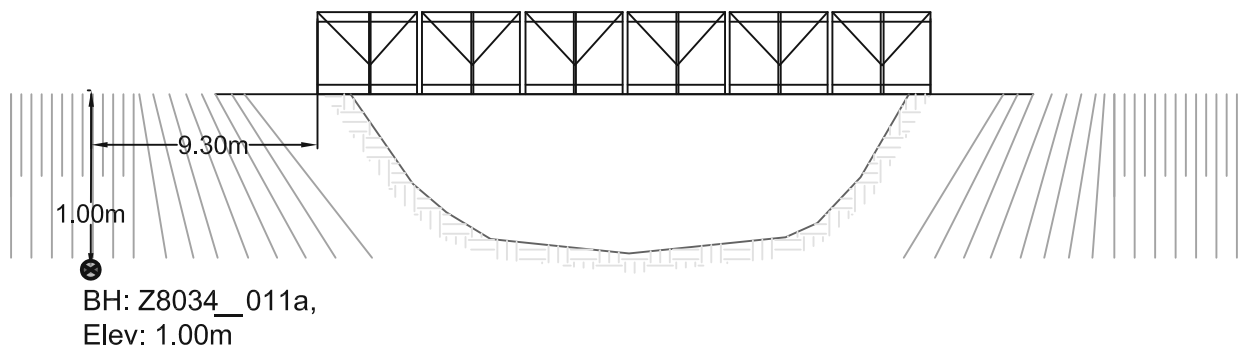
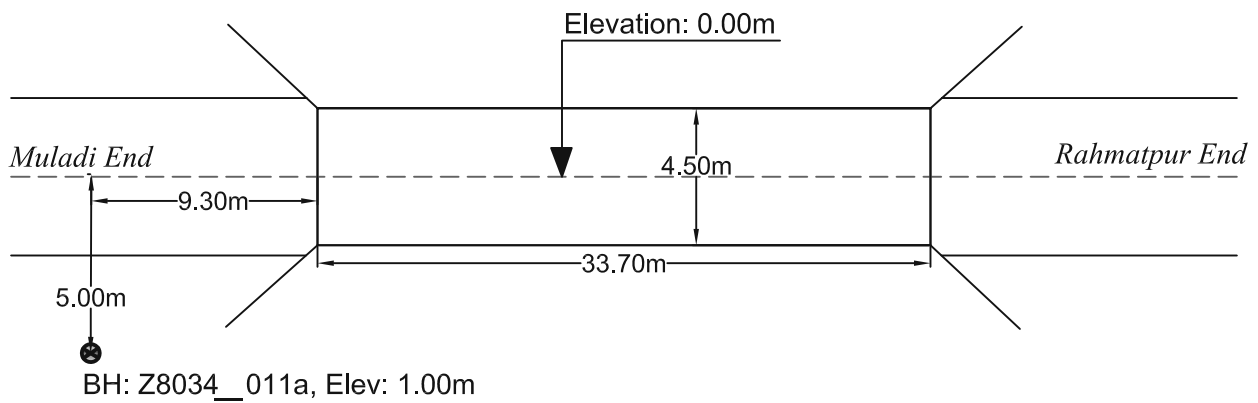
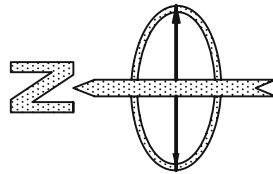


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> 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

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 96</b>	<b>BOREHOLE NO: Z8034_011a</b>	<b>Longitude: N 90°9'17.638"</b>	<b>Latitude: E 22°50'15.485"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			<b>Brigde ID: Z8034_011a</b>	Road Name: Rahamatpur-Babuganj-MuladiHizla.	
Type of Drill Rig: Manual Rotary			<b>Borehole Depth: 60.0m</b>	<b>Chainage: 12.418, RL: -1.0m</b>	
CLIENT : Oriental Consultants Company Limited.			<b>Commencement Date: 30-03-2014</b>	<b>Completed Date: 03-04-2014</b>	<b>G. W. T : -9.0m.</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			From (m)	To (m)	N <sub>1-150</sub> (mm)	N <sub>2-300</sub> (mm)	N <sub>4-450</sub> (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						
6			6.00	6.45	1	1	1	2	D-6		7.2	92.8	41.4	17.8	2.781
1.0m	Gray 10YR (6/1), very soft, low plasticity Clay with sand, CL.		7.00	7.45	2	2	2	4	D-7		98.3	1.7		2.698	26.73
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')

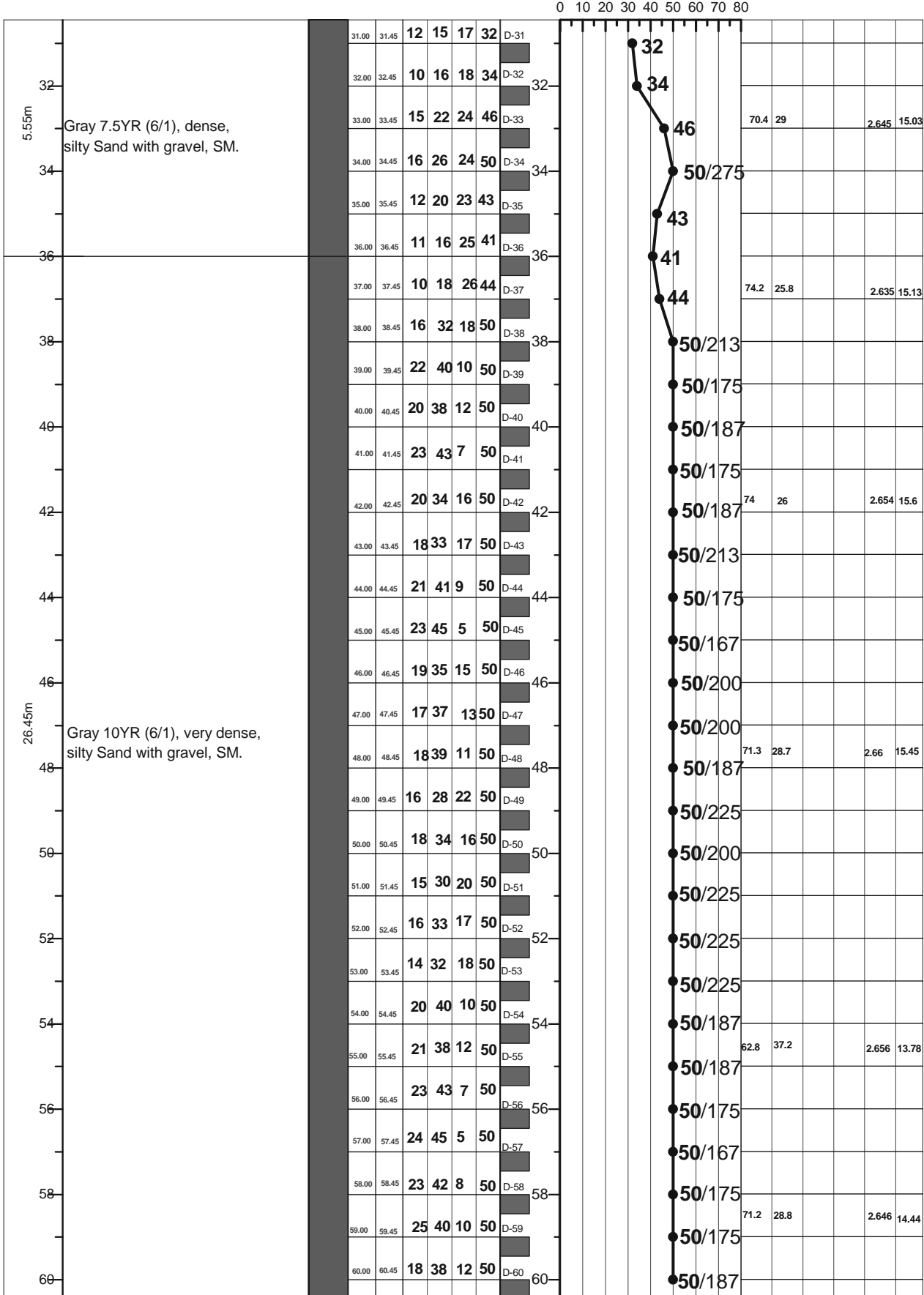
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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



<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 96</b>	<b>BOREHOLE NO: Z8034_011a</b>	<b>Longitude: N 90°9'17.638"</b>	<b>Latitude: E 22°50'15.485"</b>
			<b>Brigde ID: Z8034_011a</b>	<b>Road Name: Rahamatpur-Babuganj-MuladiHizia.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 60.0m</b>	<b>Chainage: 12.418, RL: -1.0m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 30-03-2014</b>	<b>Completed Date: 03-04-2014</b>	<b>G. W. T : -9.0m.</b>

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

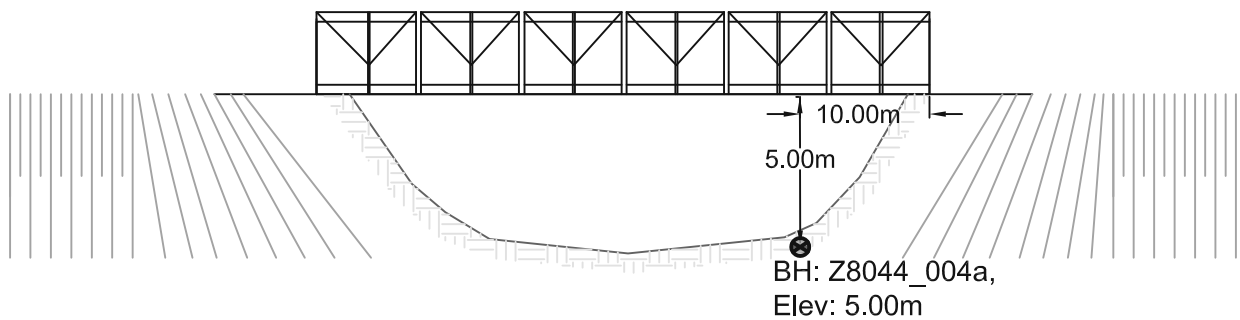
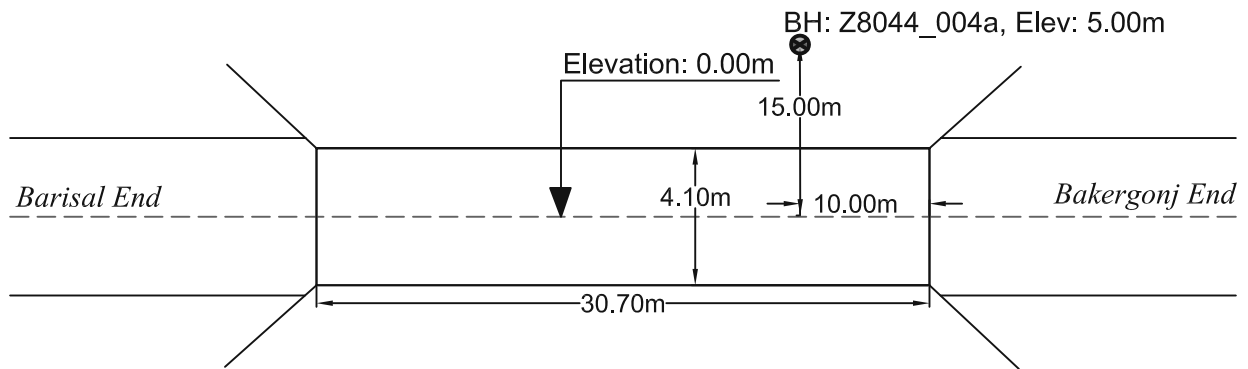
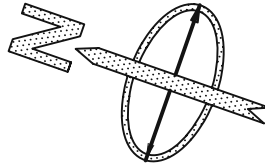


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> 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

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 97</b>	<b>BOREHOLE NO: Z8044_004a</b>	<b>Longitude: N 90°9'17.638"</b>	<b>Latitude: E 22°39'45.663"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>		<b>Borehole Depth: 60.0m</b>	
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 09-04-2014</b>		<b>Completed Date: 15-04-2014</b>	
			<b>Road Name: Barisal (Dinerpool)LaxmipashaDumki.</b>		<b>Chainage: 3.57, RL: -3m</b>
			<b>G. W. T : -1.0m.</b>		

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									N4-600 (mm)
0								0								
2.0m	Very Dark Grayish Brown 10YR (3/2), very soft, low plastic, Clay with sand, CL.		1.00	1.45	1	1	1	2	D-1	2	8.7	91.3	43.1	19	2.764	30.16
2			2.00	2.45	1	0	1	1	D-2	1						
4	Dark Gray 7.5YR (3/2), very soft, low plastic, Clay with sand, CL.		3.00	3.45	1	1	1	2	D-3	2						
4			4.00	4.45	1	1	1	2	D-4	2						
6			5.00	5.45	1	1	1	2	D-5	2	15.2	84.8	44.5	19.4	2.671	30.52
6			6.00	6.45	1	0	1	1	D-6	1						
8			7.00	7.45	1	1	2	3	D-7	3						
8			8.00	8.45	1	2	2	4	D-8	4						
10			9.00	9.45	2	2	3	5	D-9	5						
10			10.00	10.45	2	3	4	7	D-10	7	16.2	83.8	54.3	25.8	2.742	26.26
8.0m	Dark Gray 7.5YR (3/2), very soft, high plastic, Clay with sand, CH.		11.00	11.45	3	4	5	9	D-11	9	70.8	28.5			2.631	26.33
2.0m	Dark Gray 7.5YR (3/2), medium dense to dense, silty Sand with gravel, SM.		12.00	12.45	4	5	6	11	D-12	11						
12			13.00	13.45	3	6	8	14	D-13	14	91.6	8.4			2.467	24.75
14	Dark Gray 7.5YR (3/2), medium dense to dense, Poorly graded Micaceous silty Sand with gravel, SP-SM.		14.00	14.45	6	7	8	15	D-14	15						
14			15.00	15.45	5	7	12	19	D-15	19						
16			16.00	16.45	4	7	10	17	D-16	17						
16			17.00	17.45	6	8	14	22	D-17	22						
18			18.00	18.45	7	10	18	28	D-18	28					2.49	
18			19.00	19.45	6	8	12	20	D-19	20						
20			20.00	20.45	5	6	10	16	D-20	16						
20			21.00	21.45	4	7	12	19	D-21	19						
22			22.00	22.45	5	8	12	20	D-22	20						
22			23.00	23.45	7	10	14	24	D-23	24						
6.0m	Dark Gray 7.5YR (3/2), dense, silty Sand with gravel, SM.		24.00	24.45	8	12	16	28	D-24	28	79.9	20.1			2.681	18
24			25.00	25.45	7	10	15	25	D-25	25						
24			26.00	26.45	9	12	20	32	D-26	32						
26			27.00	27.45	10	14	22	36	D-27	36						
4.45m	Gray 10YR (6/1), very dense, fine Sand, SM.		28.00	28.45	11	15	24	39	D-28	39						
28			29.00	29.45	8	14	20	34	D-29	34						
30			30.00	30.45	10	16	22	38	D-30	38						

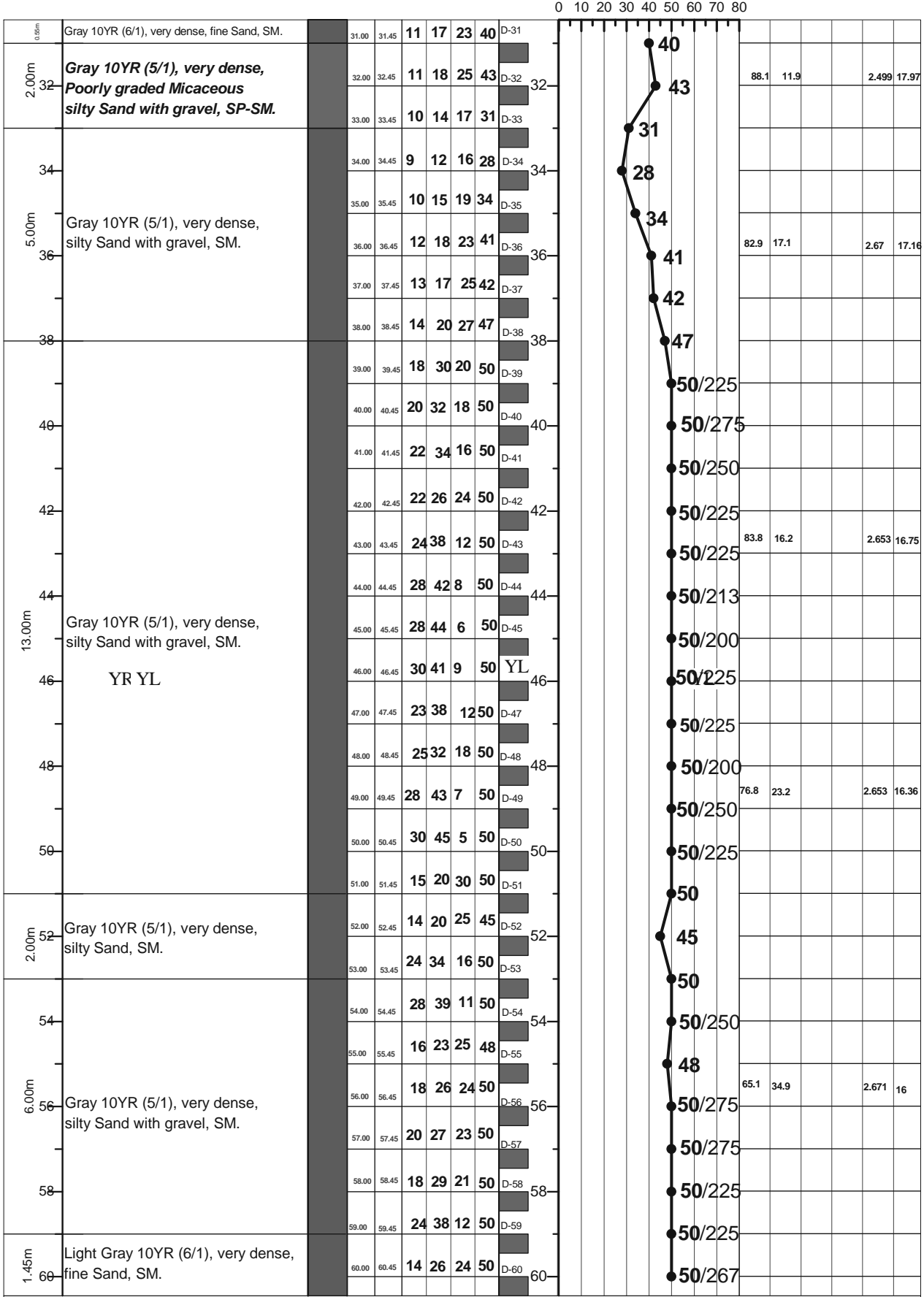
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 97</b>	<b>BOREHOLE NO: Z8044_004a</b>	<b>Longitude: N 90°9'17.638"</b>	<b>Latitude: E 22°39'45.663"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>		<b>Borehole Depth: 60.0m</b>	<b>Chainage: 3.57, RL: -3m</b>
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 09-04-2014</b>		<b>Completed Date: 15-04-2014</b>	<b>G. W. T : -1.0m.</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					SPT-N <sub>150</sub> / Blow/300mm	DISTURBED SAMPLE	DEPTH XT SPT VALL (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			From (m)	To (m)	N <sub>1-150</sub> (mm)	N <sub>2-300</sub> (mm)	N <sub>4-450</sub> (mm)									

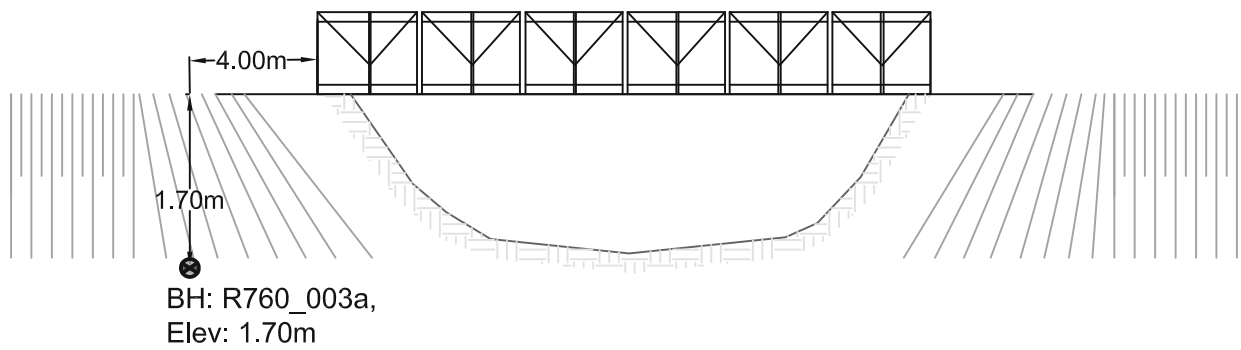
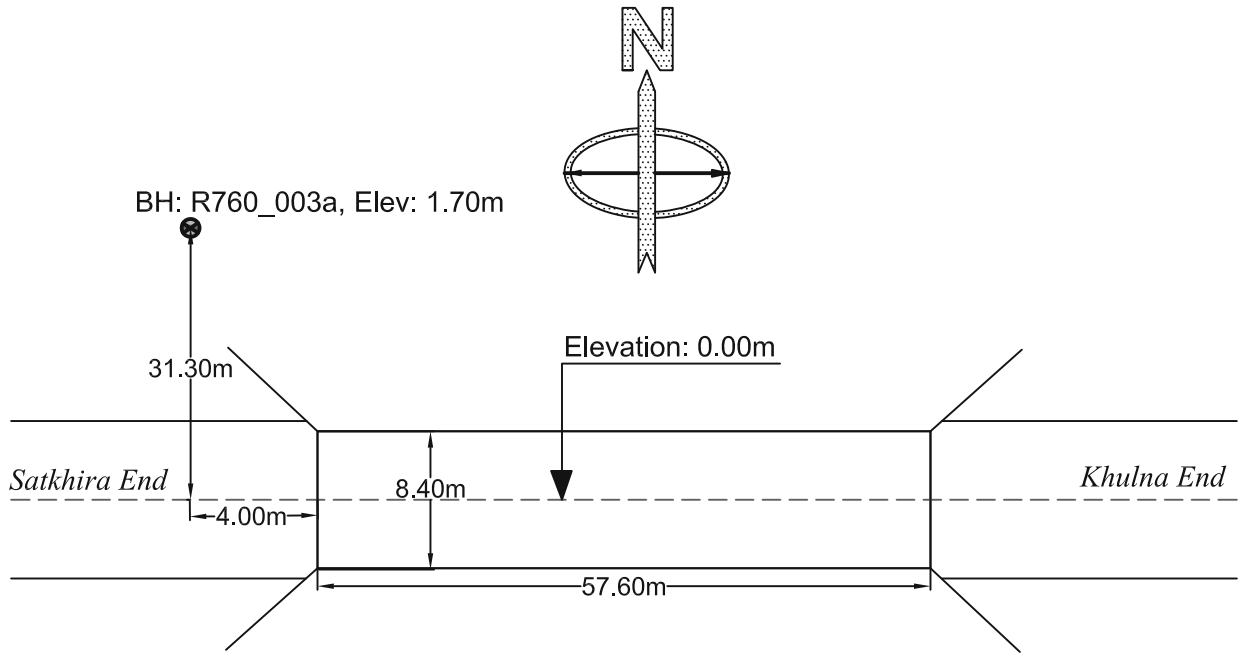


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

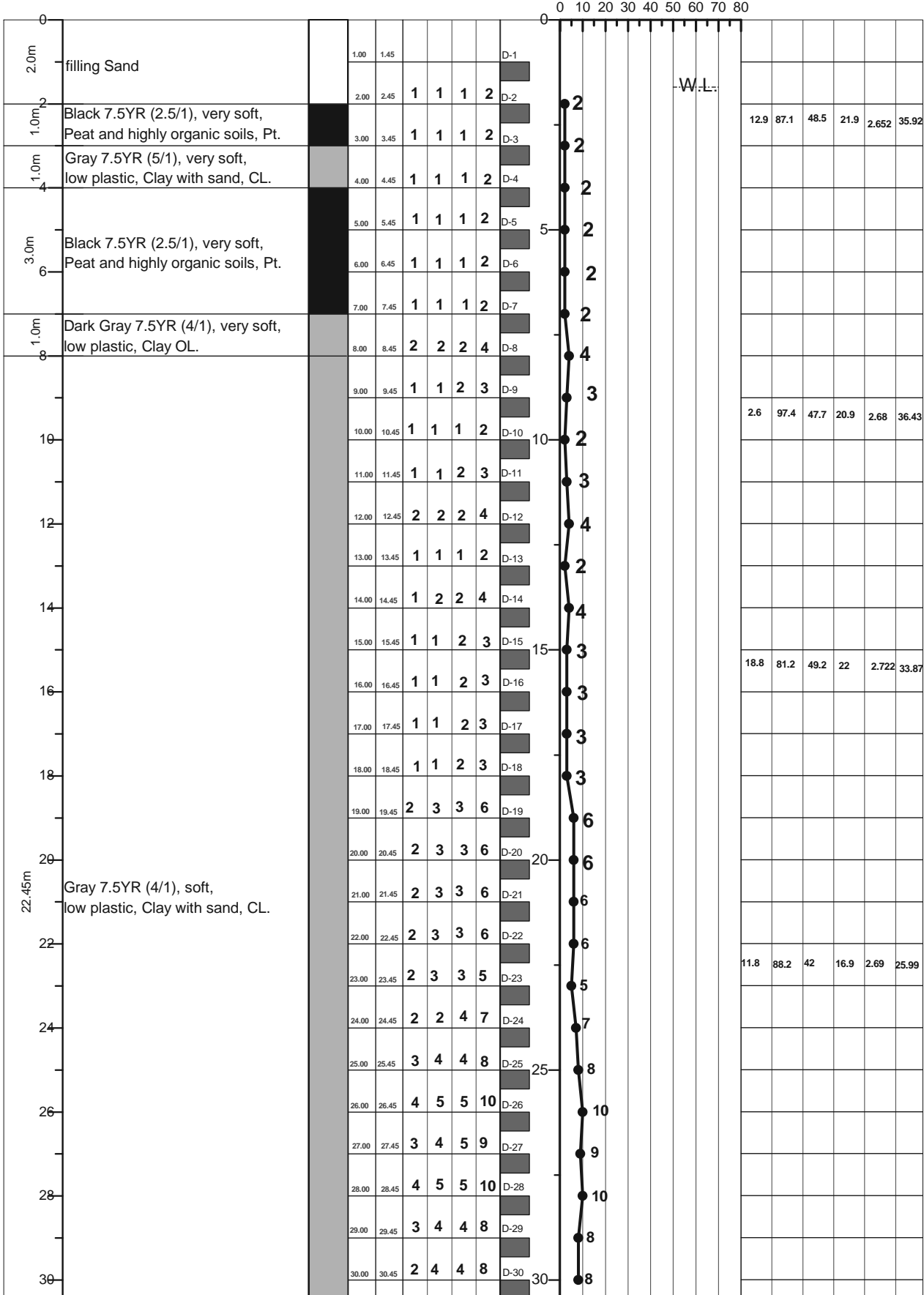
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 98  
BRIDGE ID: R760\_003a  
LATITUDE: 22°48'2.516" LONGITUDE: 89°32'21.517"  
CHAINAGE: 3.37



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 98</b>	<b>BOREHOLE NO: R760_003a</b>	<b>Longitude: N 089°33'52.7"</b>	<b>Latitude: E 22°48'55.1"</b>
			<b>Brigde ID: R760_003a</b>	<b>Road Name: Khulna - Chuknagar - Satkhira road.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 60.0m</b>	<b>Chainage: 3.37, RL: -1.7m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 22-03-2014</b>	<b>Completed Date: 27-03-2014</b>	<b>G. W. T : -1.6m.</b>

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



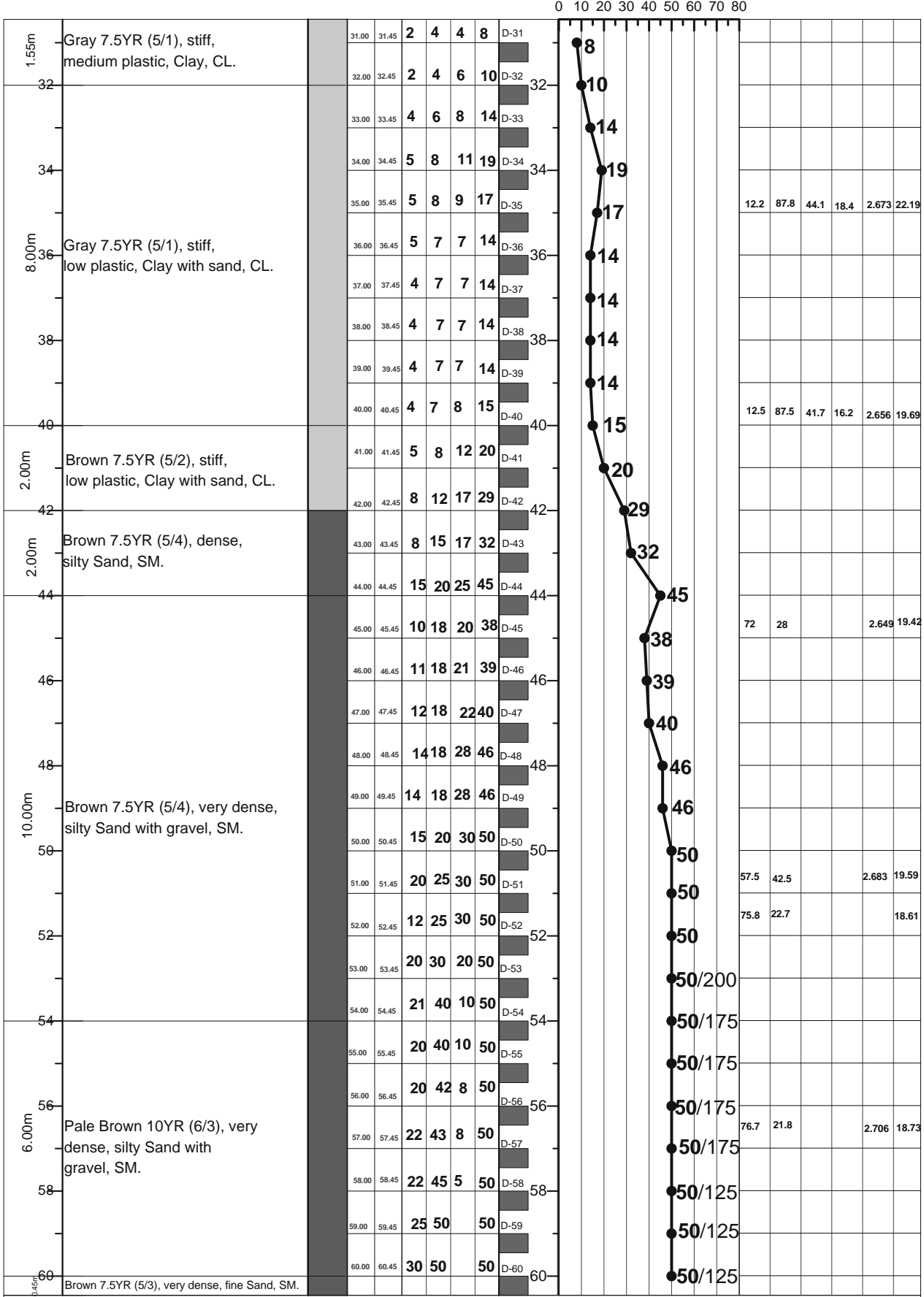
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 98</b>	<b>BOREHOLE NO: R760_003a</b>	<b>Longitude: N 089°33'52.7"</b>	<b>Latitude: E 22°48'55.1"</b>
			<b>Brigde ID: R760_003a</b>	<b>Road Name: Khulna - Chuknagar - Satkhira road.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 60.0m</b>	<b>Chainage: 3.37, RL: -1.7m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 22-03-2014</b>	<b>Completed Date: 27-03-2014</b>	<b>G. W. T : -1.6m.</b>

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

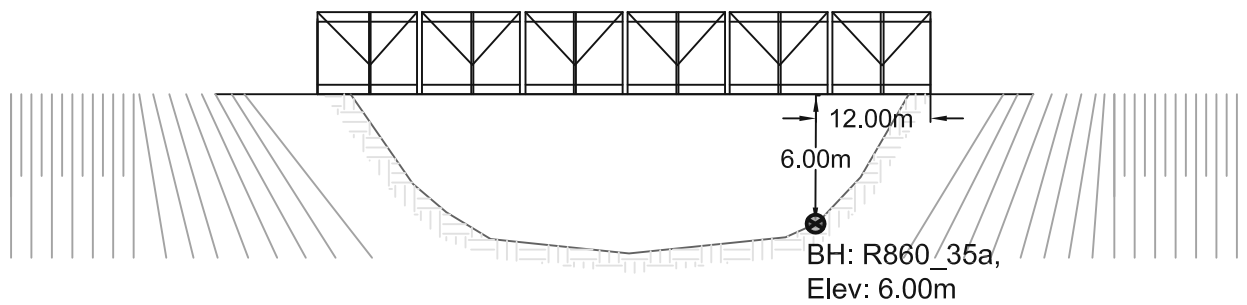
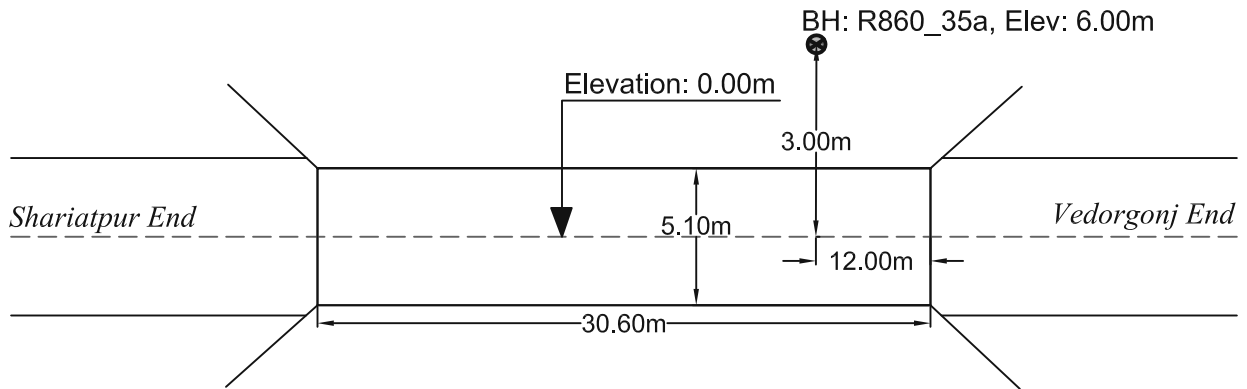
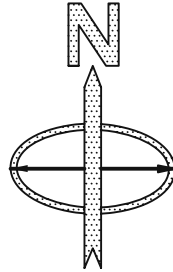


**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> 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



<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 99</b>	<b>BOREHOLE NO: R860_35a</b>	<b>Longitude: N 90°23'34"</b>	<b>Latitude: E 23°11'32.295"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>		<b>Borehole Depth: 50.0m</b>	<b>Chainage: 34.021, RL: -6.0m</b>
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 26-03-2014</b>		<b>Completed Date: 29-03-2014</b>	<b>G. W. T : -2.5m.</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>	
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (mm)									N6-600 (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	9.1	90.9	42.7	17.7	2.635	32.5
			2.00	2.45	1	1	2	3	D-2	3						
			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	7.8	92.2	47.9	21.3	2.711	30.52
			5.00	5.45	2	3	4	7	D-5	7						
			6.00	6.45	2	2	3	5	D-6	5						
			7.00	7.45	2	2	4	6	D-7	6	10.5	89.5	50	22.6	2.758	30.4
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	88.5	10.6			2.672	26.7
			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	82.8	17.2			2.631	22.96
			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	86.4	13			2.671	24.8
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						

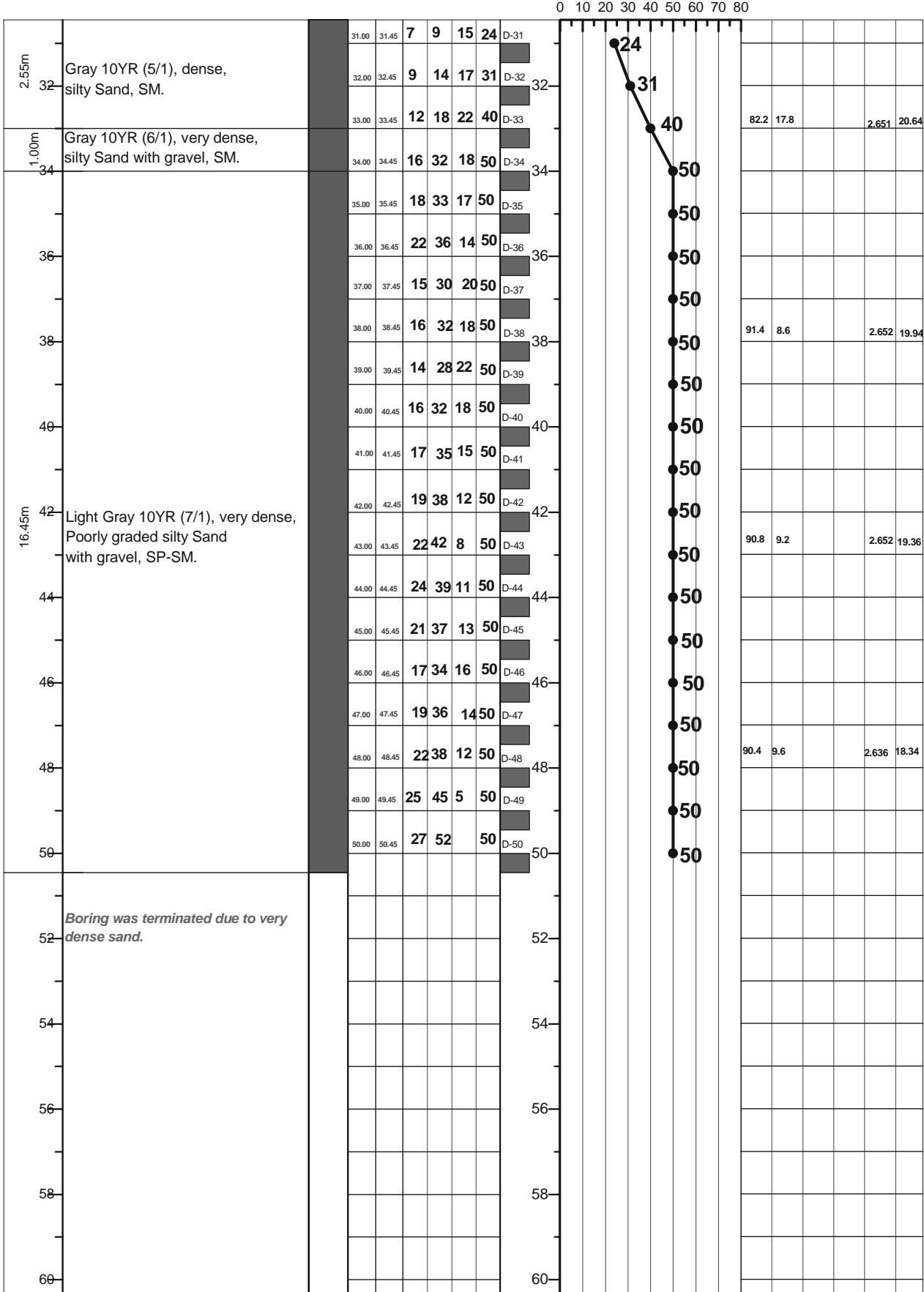
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>m</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 99</b>	<b>BOREHOLE NO: R860_35a</b>	<b>Longitude: N 90°23'34"</b>	<b>Latitude: E 23°11'32.295"</b>
			<b>Brigde ID: R860_35a</b>	Road Name: Mostafapur-Madaripur-Shariatpur-Ibrahimpur-Harina-Chandpur.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>Chainage: 34.021, RL: -6.0m</b>
CLIENT : Oriental Consultants Company Limited.			<b>Commencement Date: 26-03-2014</b>	<b>Completed Date: 29-03-2014</b>	<b>G. W. T : -2.5m.</b>

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 <sub>c</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



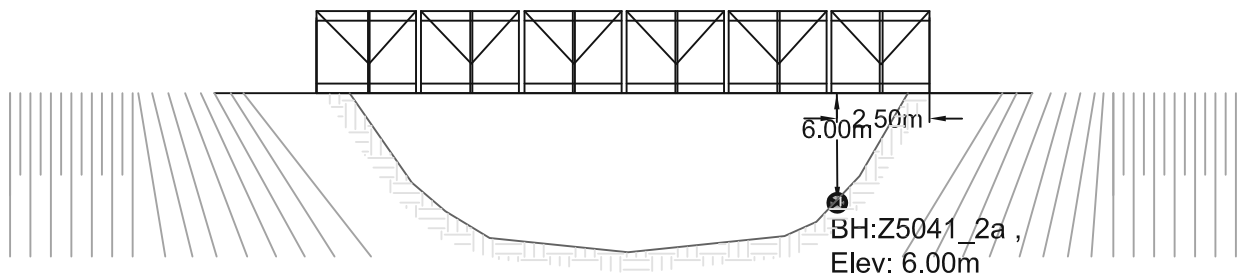
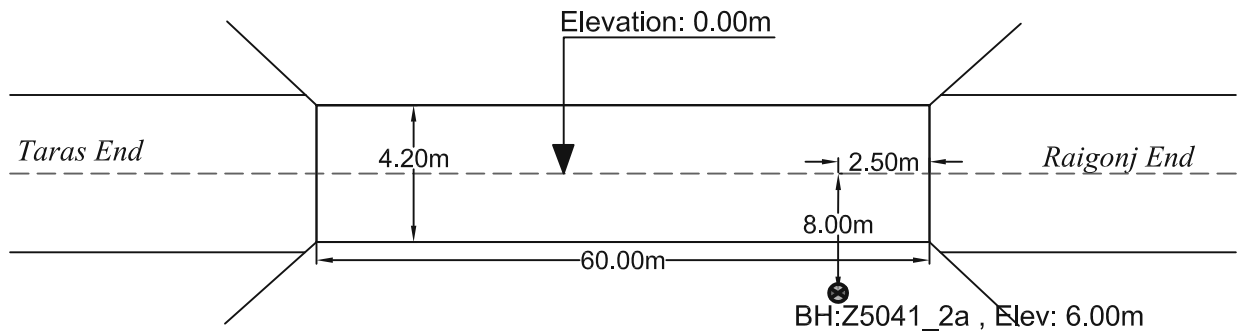
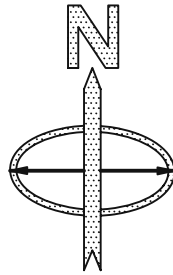
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

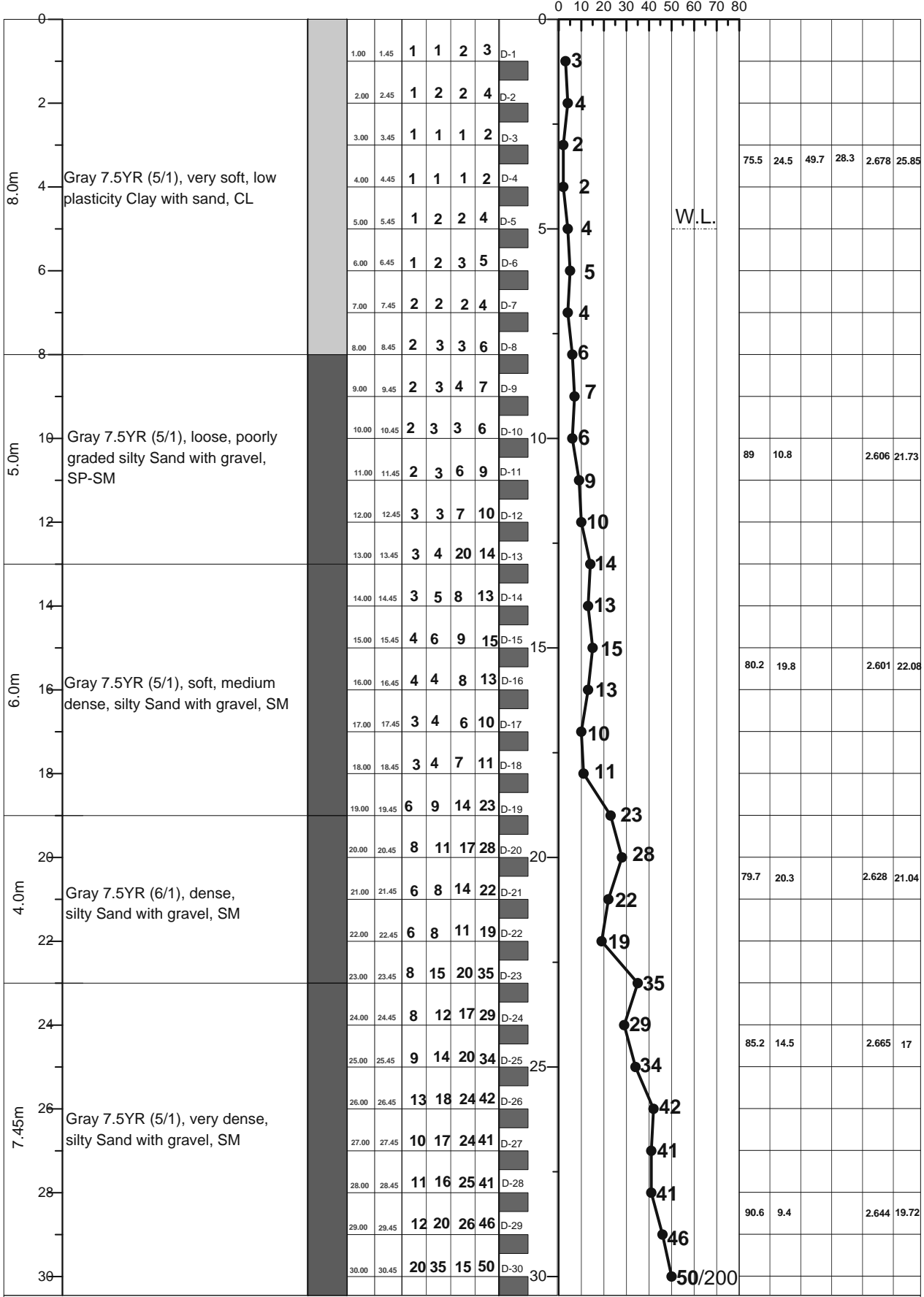
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: 100  
BRIDGE ID: Z5041\_2a  
LATITUDE: 24°29'15.602" LONGITUDE: 89°29'22.773"  
CHAINAGE: 1.8



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 100</b>	<b>BOREHOLE NO: Z5041-2a</b>	<b>Longitude: N 89°39'1.616"</b>	<b>Latitude: E 24°29'15.602"</b>
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>		<b>Borehole Depth: 40.0m</b>	
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 7-03-2014</b>		<b>Completed Date: 8-03-2014</b>	
				<b>Chainage: 1.8, RL: -6.0m</b>	
				<b>G. W. T : -5.0m.</b>	

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



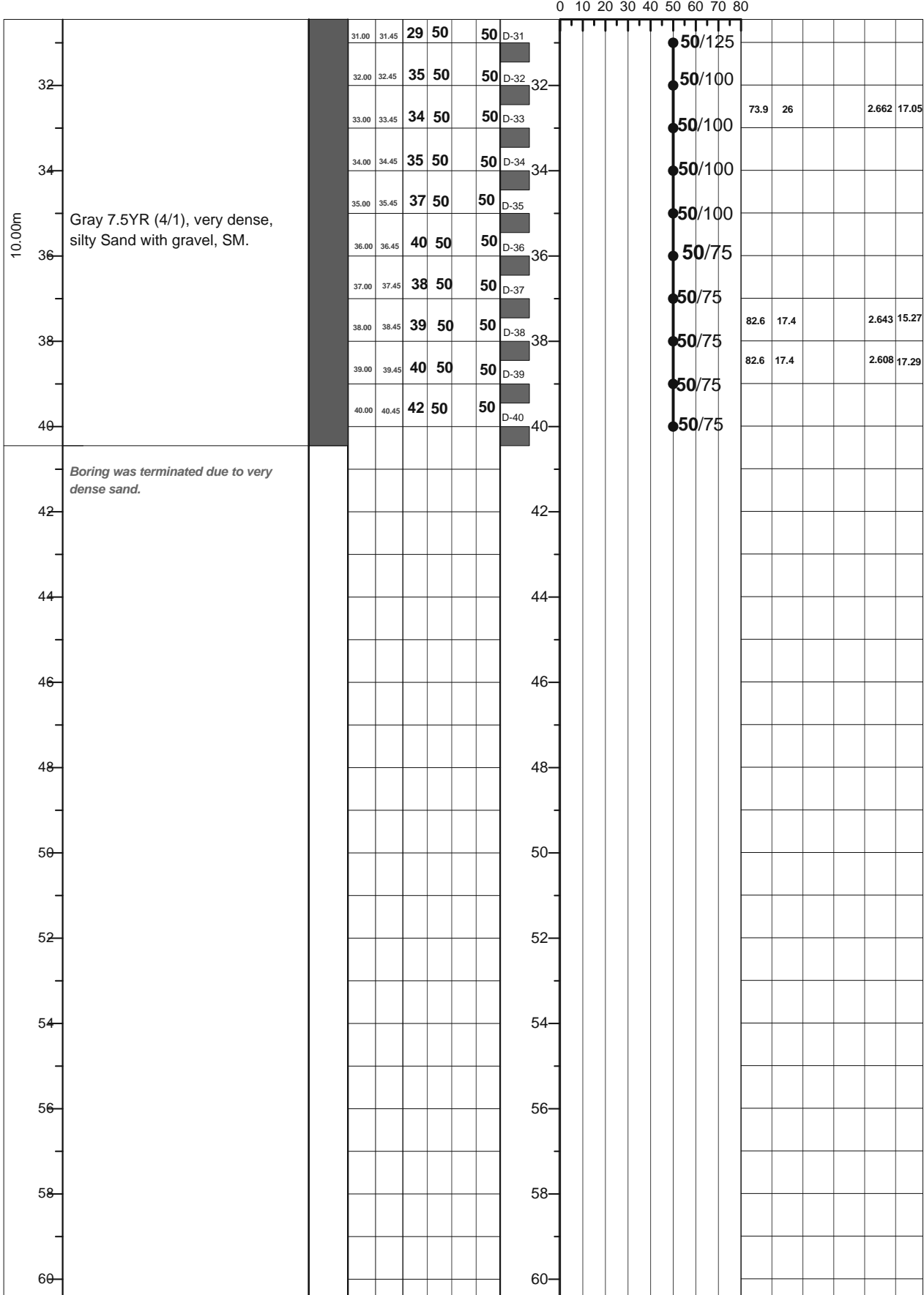
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: 100</b>	<b>BOREHOLE NO: Z5041-2a</b>	<b>Longitude: N 89°39'1.616"</b>	<b>Latitude: E 24°29'15.602"</b>
			<b>Brigde ID: Z5041-2a</b>	<b>Road Name: Raiganj (Bhuiyagati)-Nimgachhi-Taras Road</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 40.0m</b>	<b>Chainage: 1.8, RL: -6.0m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 7-03-2014</b>	<b>Completed Date: 8-03-2014</b>	<b>G. W. T : -5.0m</b>

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 <sub>v</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED    50/X = BLOWS 50, "X" MM PENETRATION

**A1: Location of Borehole**

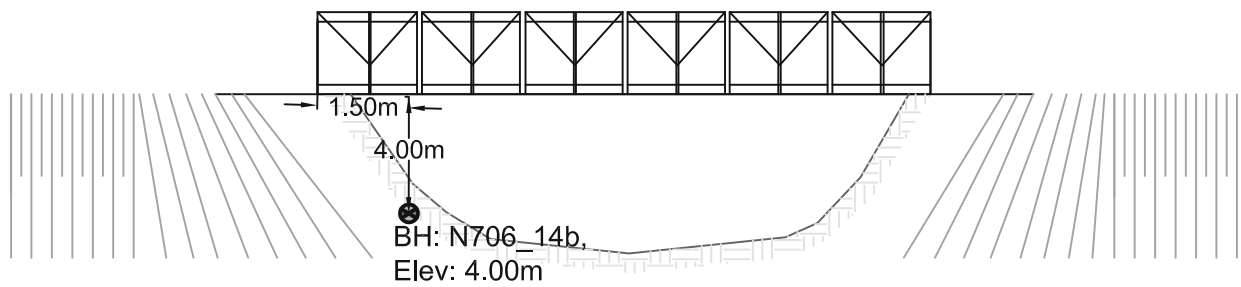
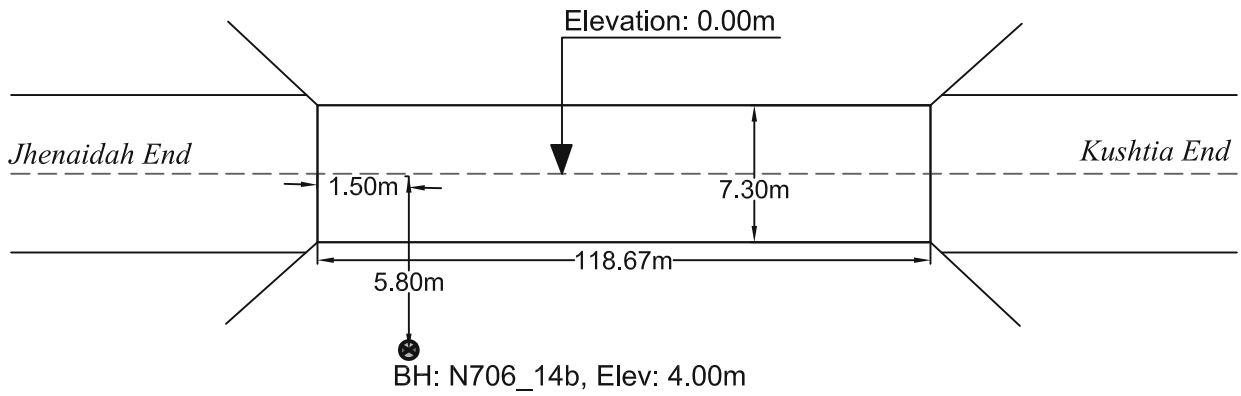
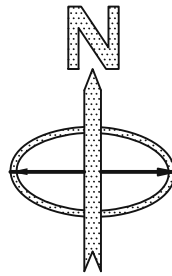
CLIENT: Oriental Consultants Company Limited.

RANK: I

BRIDGE ID: N706\_14b

LATITUDE: 23°6'0.078" LONGITUDE: 89°5'54.804"

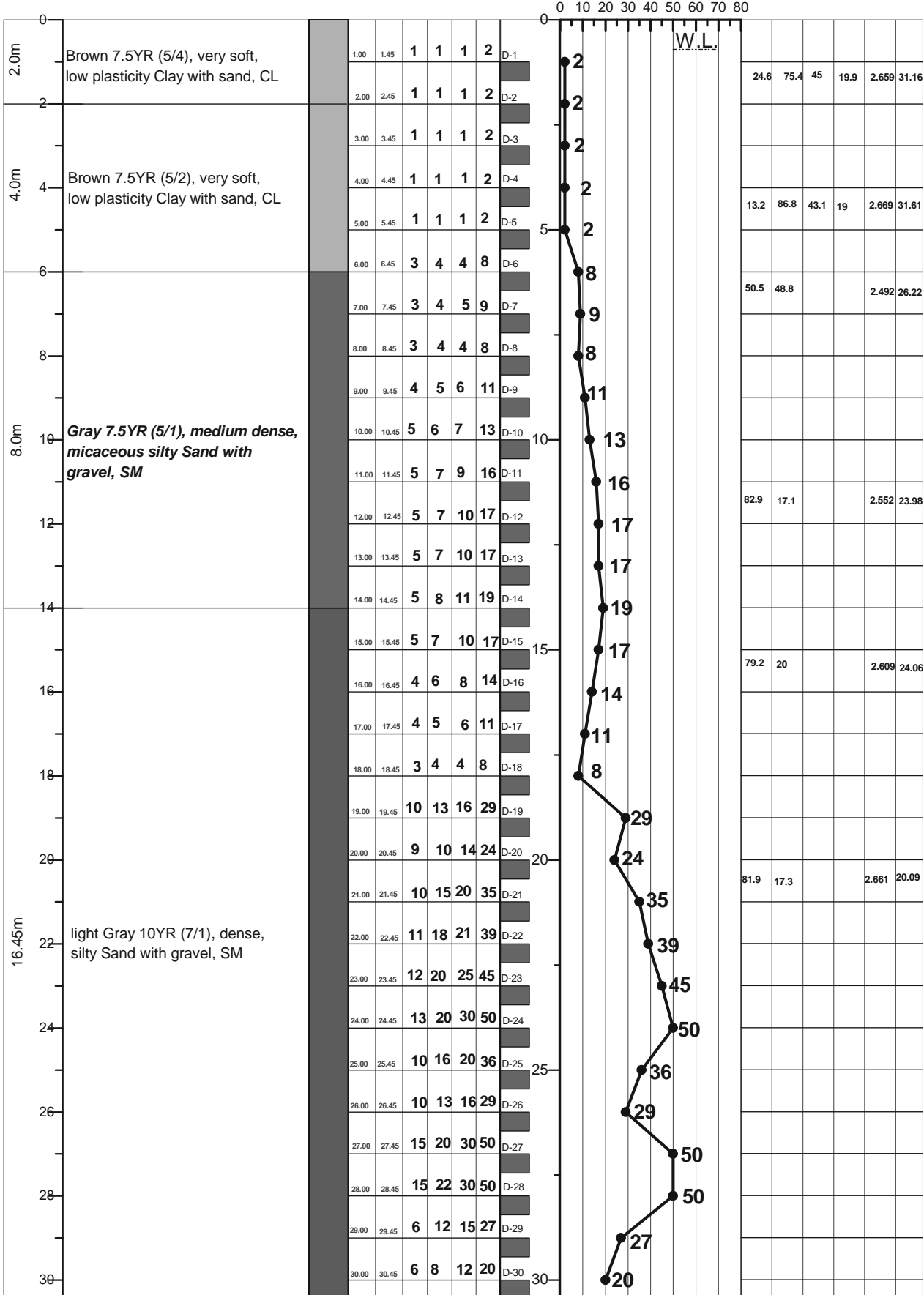
CHAINAGE: 14.349



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: I</b>	<b>BOREHOLE NO: N706_14b</b>	<b>Longitude: N 89°05'54.804"</b>	<b>Latitude: E 23°06'0.078"</b>
			<b>Brigde ID: N706_14b</b>	<b>Road Name: Jessore (Daratana More)-Benapole .</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>Chainage: 14.349, RL: -4.0m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 16-03-2014</b>	<b>Completed Date: 20-03-2014</b>	<b>G. W. T : -0.7m.</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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')

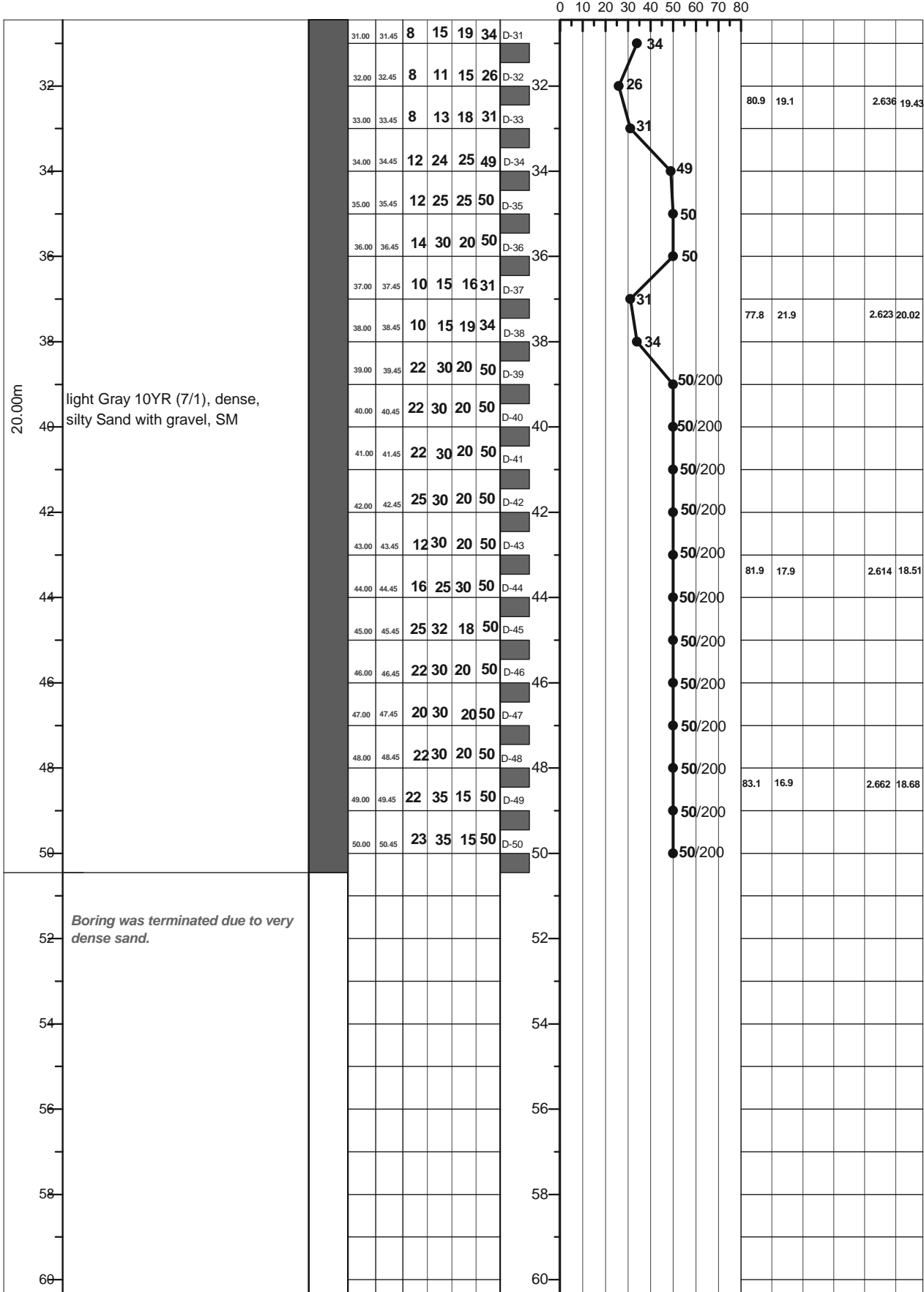
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: I</b>	<b>BOREHOLE NO: N706_14b</b>	<b>Longitude: N 89°05'54.804"</b>	<b>Latitude: E 23°06'0.078"</b>
			<b>Brigde ID: N706_14b</b>	<b>Road Name: Jessore (Daratana More)-Benapole</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>Chainage: 14.349, RL: -4.0m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 16-03-2014</b>	<b>Completed Date: 20-03-2014</b>	<b>G. W. T : -0.7m</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



**A1: Location of Borehole**

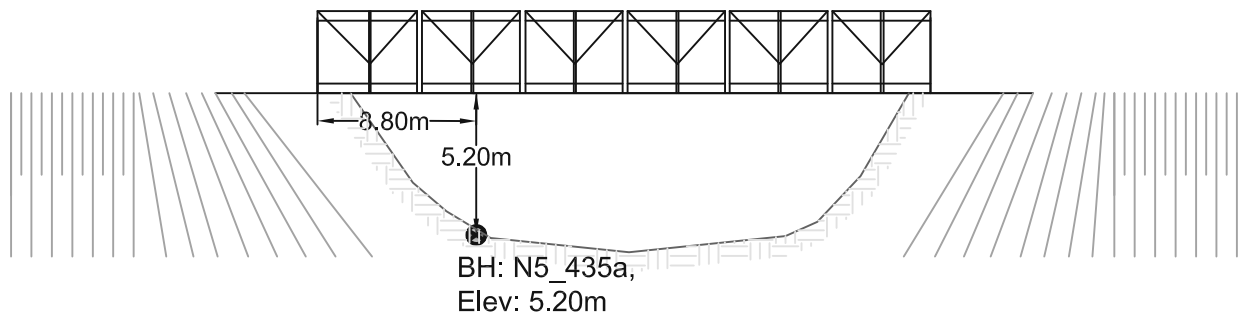
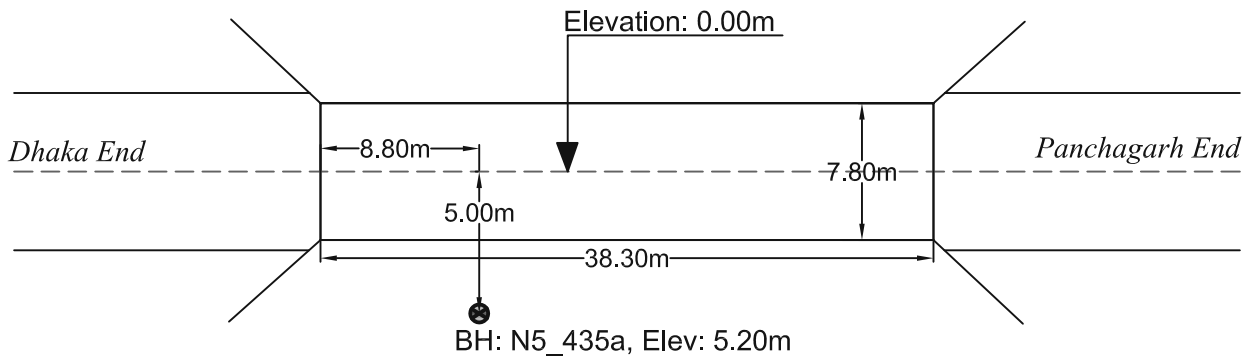
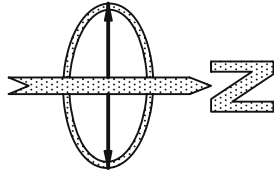
CLIENT: Oriental Consultants Company Limited.

RANK: II

BRIDGE ID: N5\_435a

LATITUDE: 26°1'11.002" LONGITUDE: 88°28'9.029"

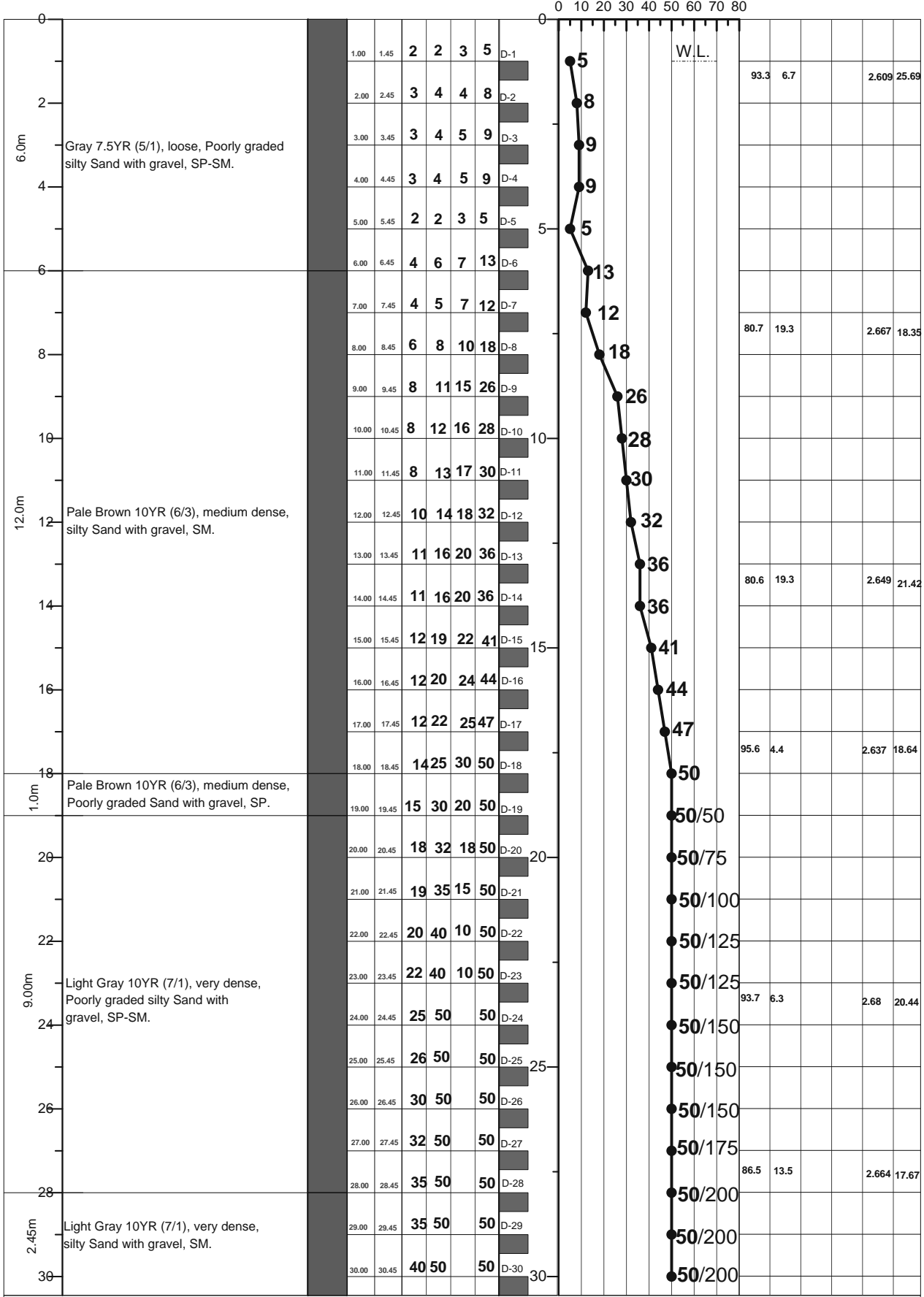
CHAINAGE: 432.44



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: II</b>	<b>BOREHOLE NO: N5_435a</b>	<b>Longitude: N 88°28'9.029"</b>	<b>Latitude: E 26°11'11.002"</b>
			<b>Brigde ID: N5_435a</b>	<b>Road Name: Dhaka (Mirpur)-Paturia-Natakhola-Bogra-Rangpur-Banglabandh</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 30.0m</b>	<b>Chainage: 14.349, RL: -5.2m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 25-02-2014</b>	<b>Completed Date: 26-02-2014</b>	<b>G. W. T : -1.0m.</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

A1: Location of Borehole

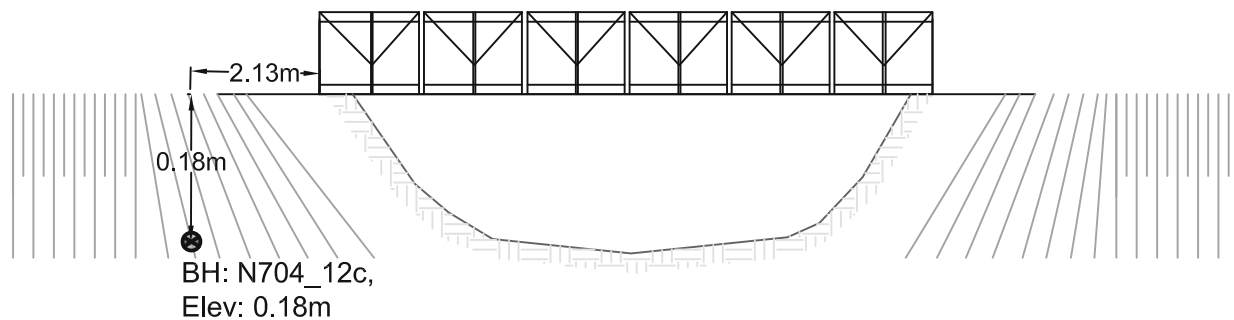
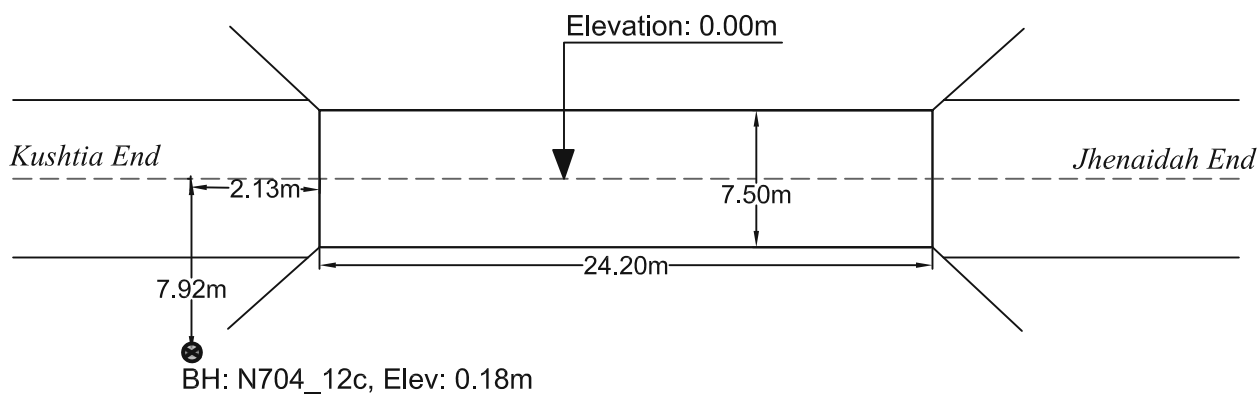
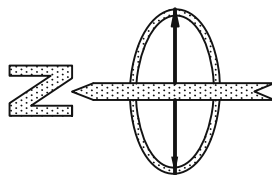
CLIENT: Oriental Consultants Company Limited.

RANK: III

BRIDGE ID: N704\_12c

LATITUDE: 23°39'20.143" LONGITUDE: 89°11'55.114"

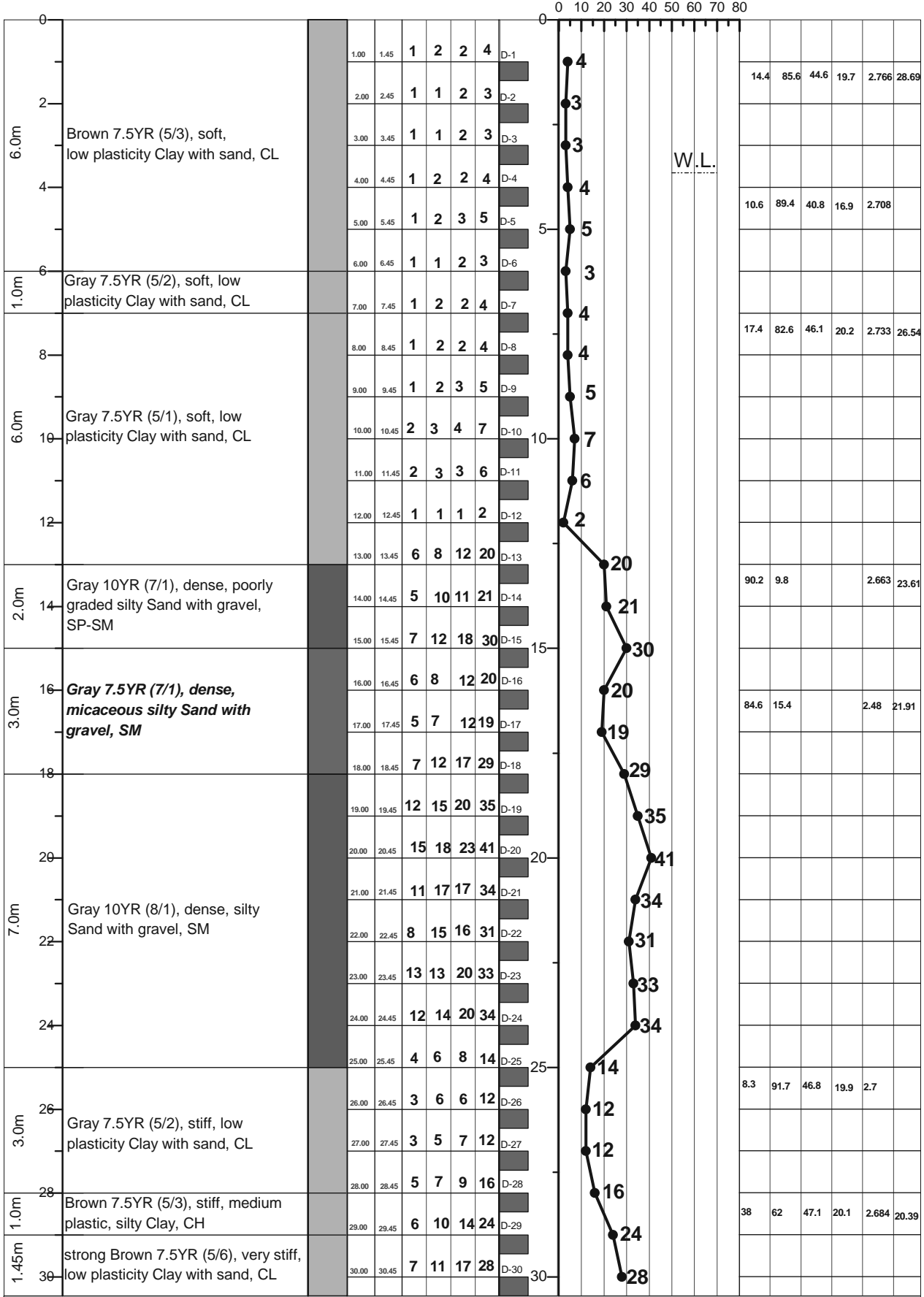
CHAINAGE: 13.855



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: III</b>	<b>BOREHOLE NO: N704_12c</b>	<b>Longitude: N 89°11'6.079"</b>	<b>Latitude: E 23°39'20.143"</b>
			<b>Brigde ID: N704_12c</b>	<b>Road Name: Jhenaidah-Kushtia-Paksey Ferry-Dasuria.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>Chainage: 13.855, RL: -0.18m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 20-03-2014</b>	<b>Completed Date: 26-03-2014</b>	<b>G. W. T : -3.65m.</b>

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



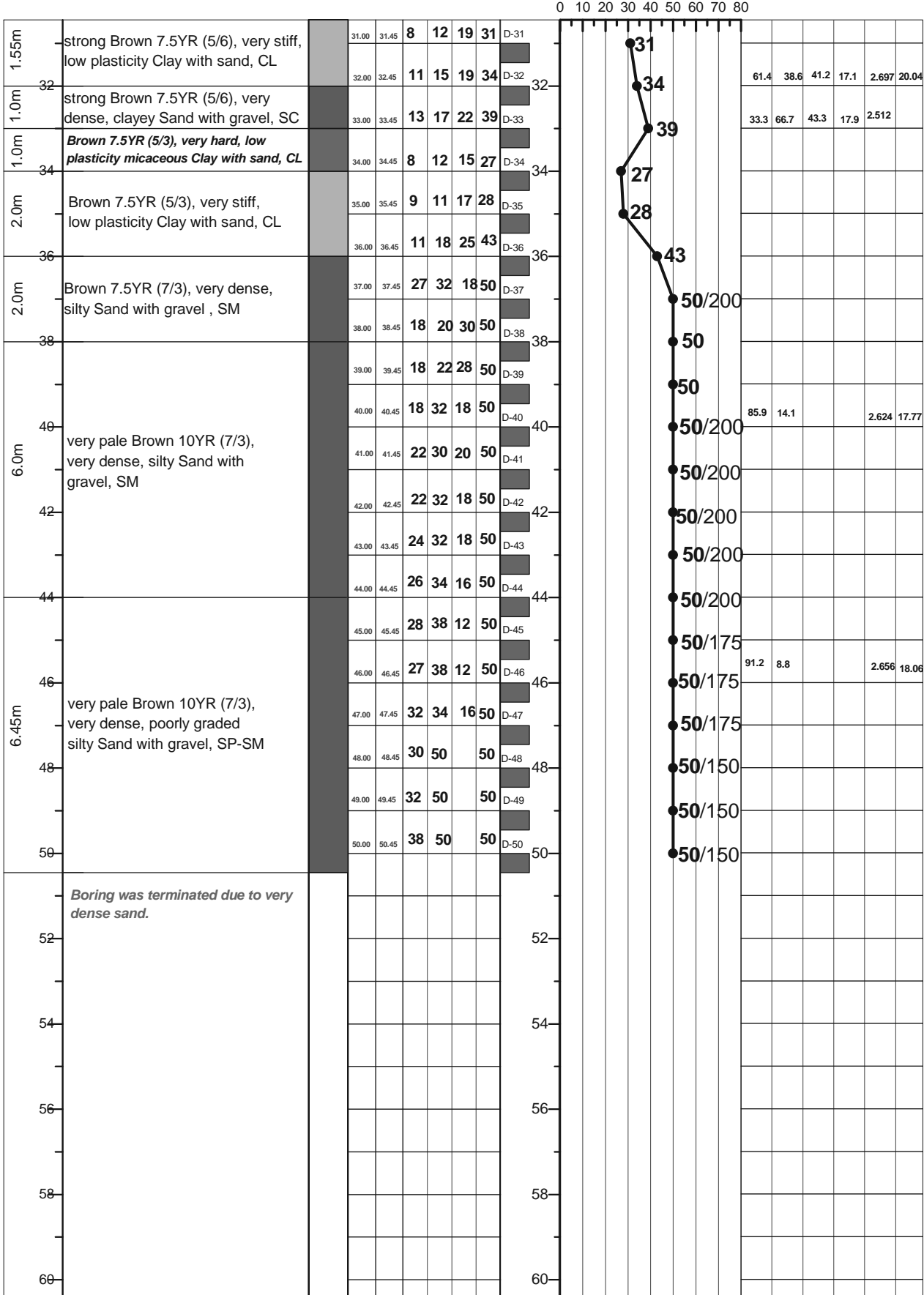
**LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')**

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: III</b>	<b>BOREHOLE NO: N704_12c</b>	<b>Longitude: N 89°11'6.079"</b>	<b>Latitude: E 23°39'20.143"</b>
			<b>Brigde ID: N704_12c</b>	<b>Road Name: Jhenaidah-Kushtia-Paksey Ferry-Dasuria</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>Chainage: 13.855, RL: -0.18m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 20-03-2014</b>	<b>Completed Date: 26-03-2014</b>	<b>G. W. T : -3.65m</b>

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

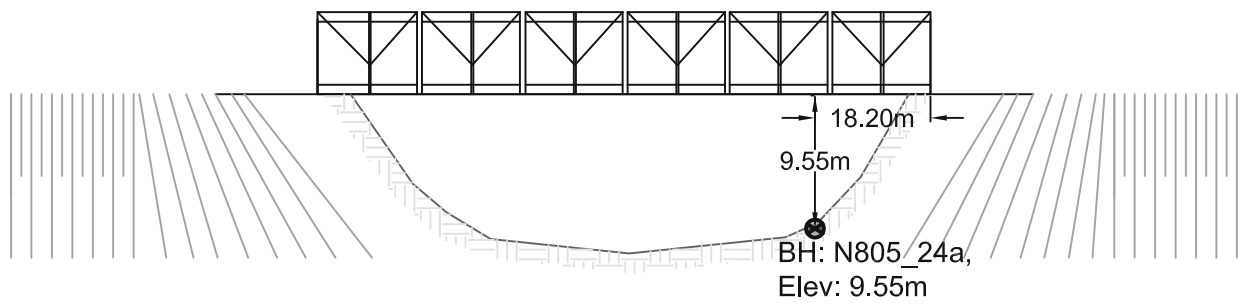
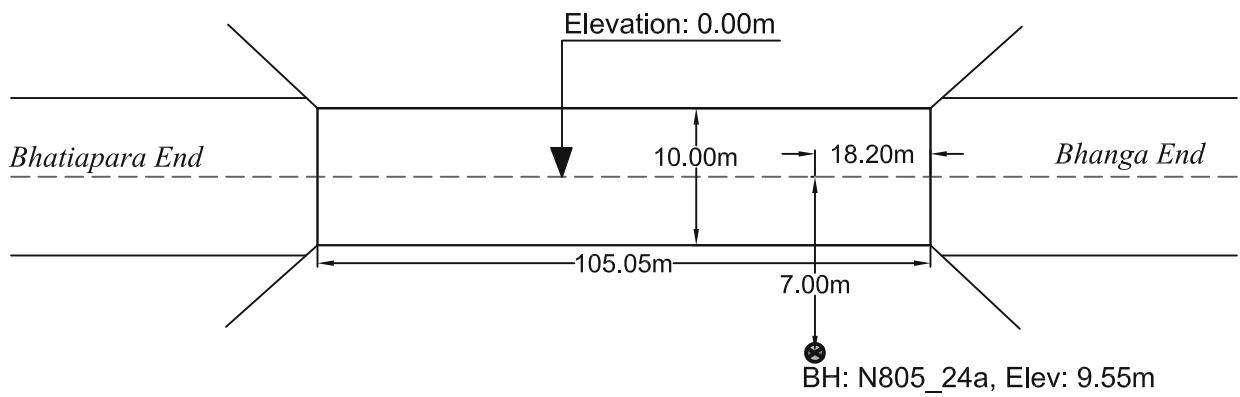
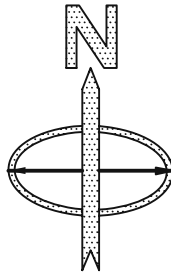


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)

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

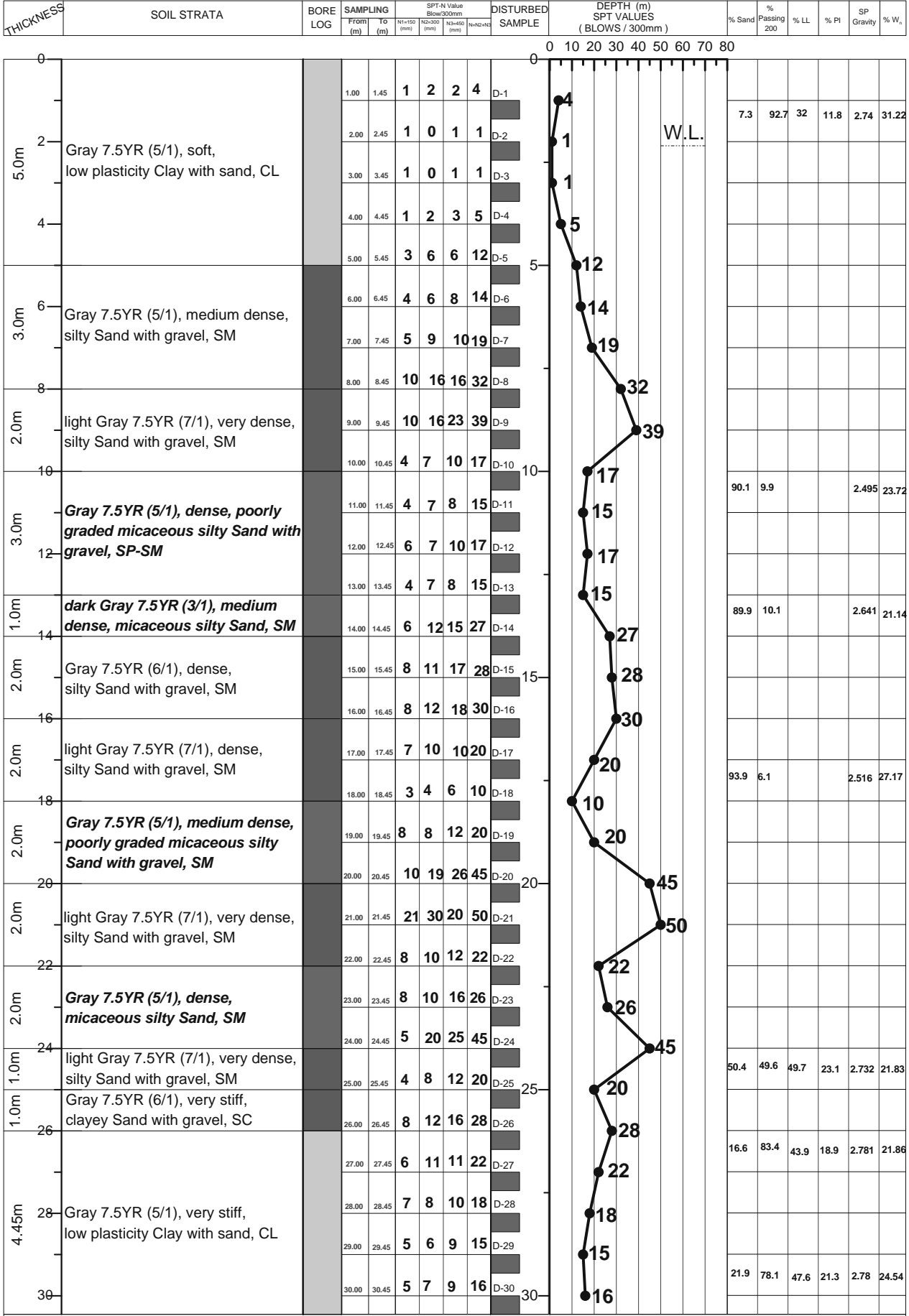
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES  
 MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

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

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: IV</b>	<b>BOREHOLE NO: N805_24a</b>	<b>Longitude: N 89°48'39"</b>	<b>Latitude: E 23°17'16"</b>
			<b>Brigde ID: N805_24a</b>	<b>Road Name: Bhanga-Bhatiapara-Mollahhat.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>Chainage: 24.19, RL: -9.55m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 7-04-2014</b>	<b>Completed Date: 10-04-2014</b>	<b>G. W. T : -2.1m.</b>



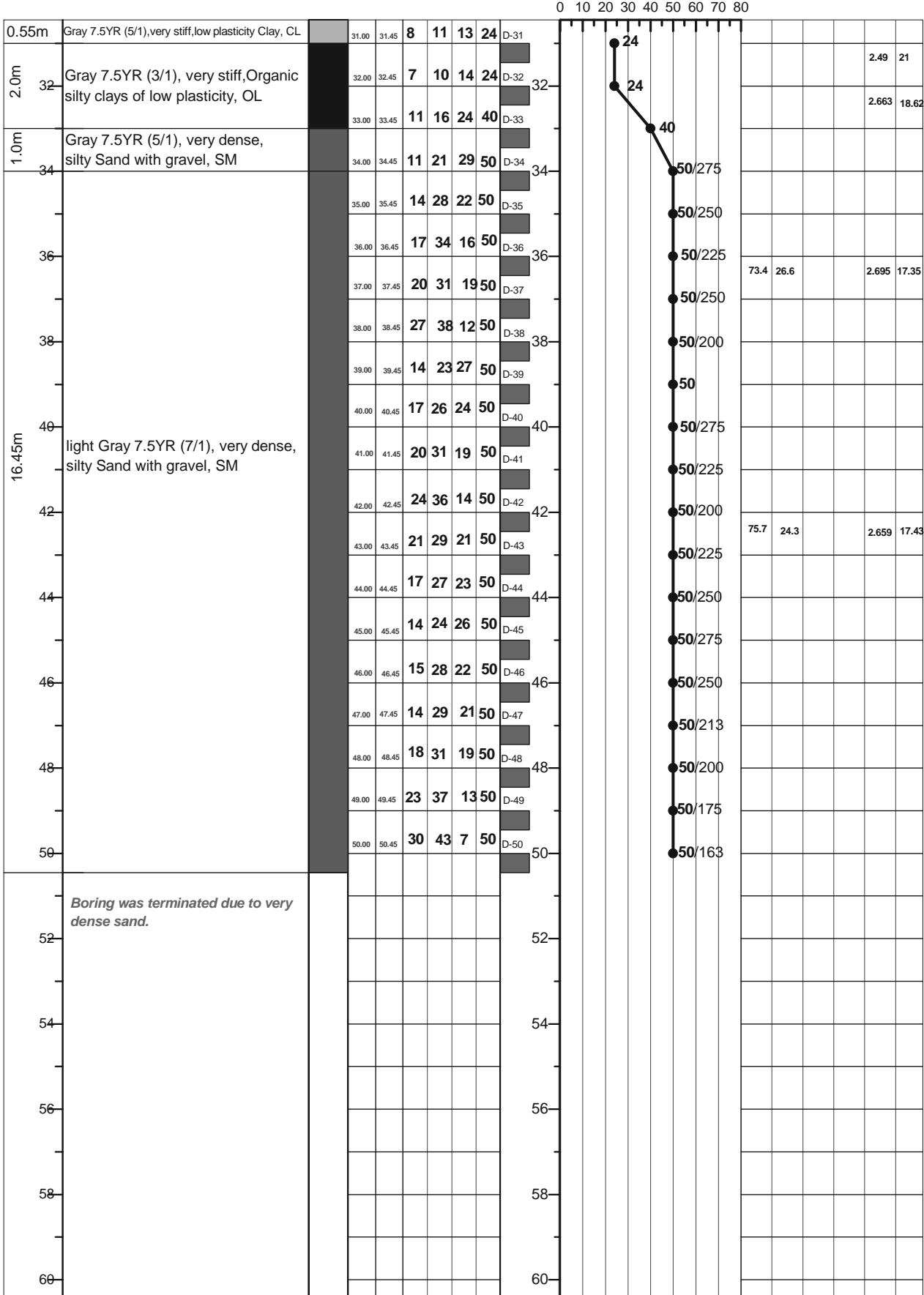
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: IV</b>	<b>BOREHOLE NO: N805_24a</b>	<b>Longitude: N 89° 48' 39"</b>	<b>Latitude: E 23° 17' 16"</b>
			<b>Brigde ID: N805_24a</b>	<b>Road Name: Bhanga-Bhatiapara-Mollahhat</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>Chainage: 24.19, RL: -9.5m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 7-04-2014</b>	<b>Completed Date: 10-04-2014</b>	<b>G. W. T : -2.1m</b>

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



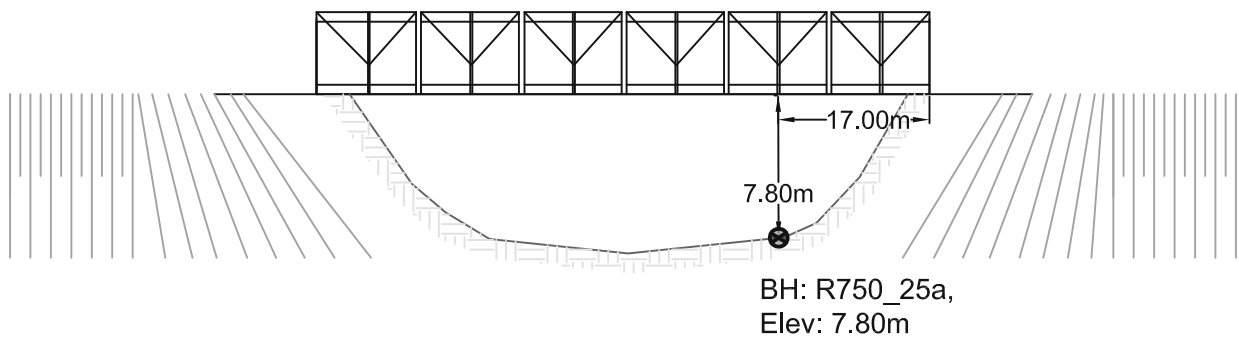
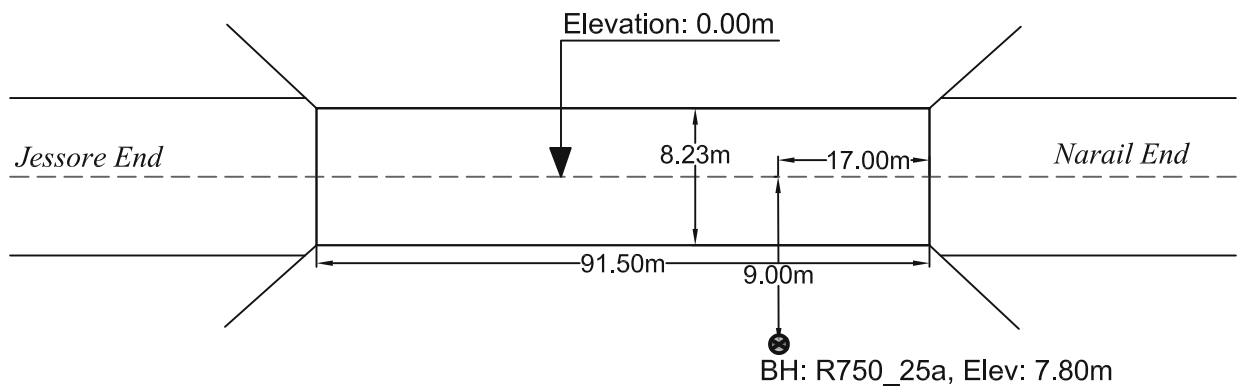
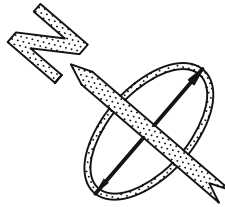
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> 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

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N4-450 (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					
2			2.00	2.45	1	1	1	2	D-2	2	9.8	90.2	35.7	14.4	2.718 29.18
			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	2	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	4	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	7					
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					
			17.00	17.45	10	15	16	31	D-17	31					
			18.00	18.45	8	10	13	23	D-18	23					
		20	Gray 10YR (6/1), medium dense to dense, silty Sand with gravel, SM.		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
	22.00			22.45	17	35	15	50	D-22	50/200					
	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					
	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					
5.45m	Gray 10YR (6/1), very dense, Micaceous silty Sand with gravel, SM.		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

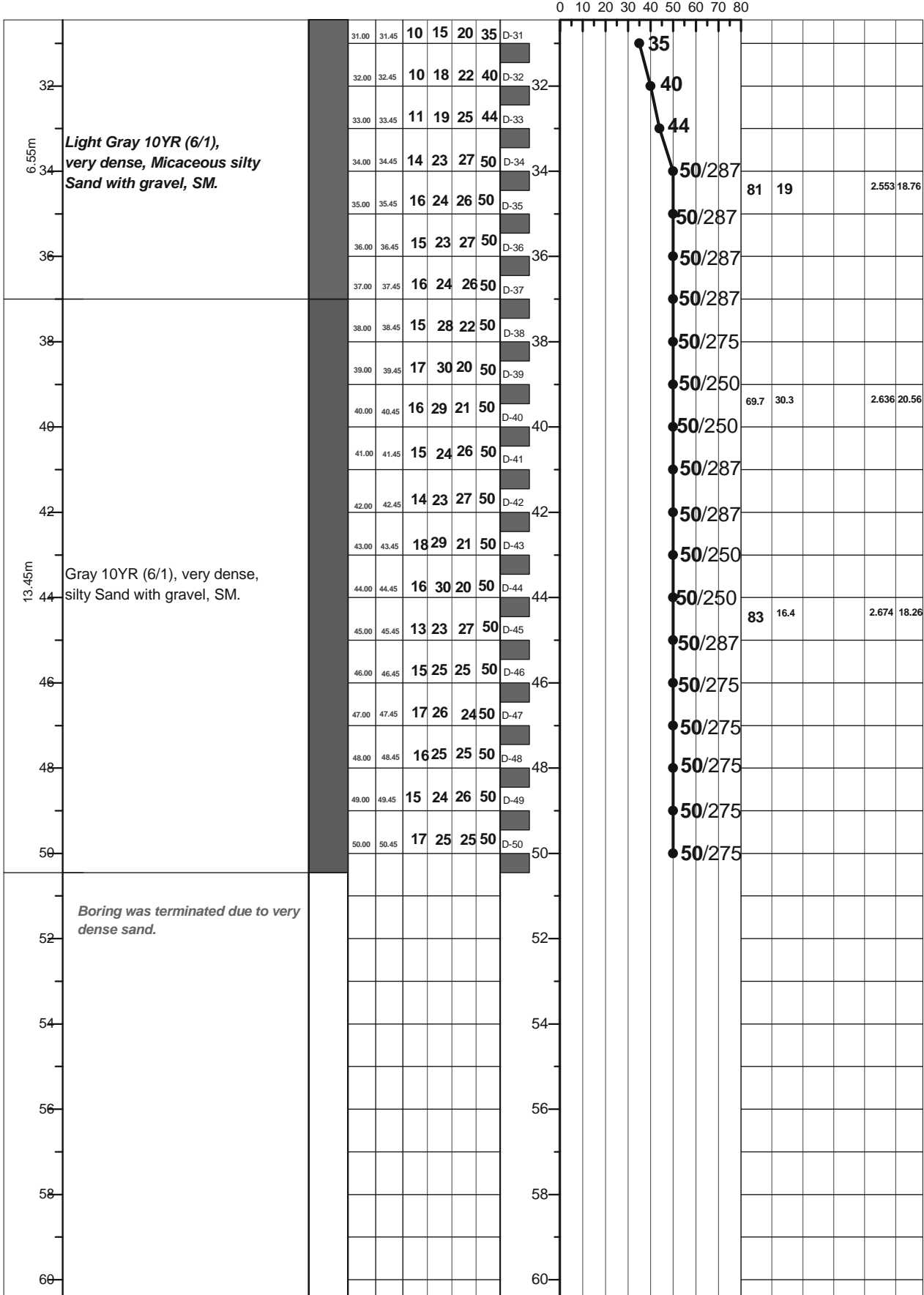
N- BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED

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

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: V</b>	<b>BOREHOLE NO: R750_25a</b>	<b>Longitude: N 89°26'32"</b>	<b>Latitude: E 23°10'03"</b>
			<b>Brigde ID: R750_25a</b>	<b>Road Name: Jessore-Narail.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>Chainage: 24.18, RL: -7.8m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 28-03-2014</b>	<b>Completed Date: 31-03-2014</b>	<b>G. W. T : -2.7m.</b>

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

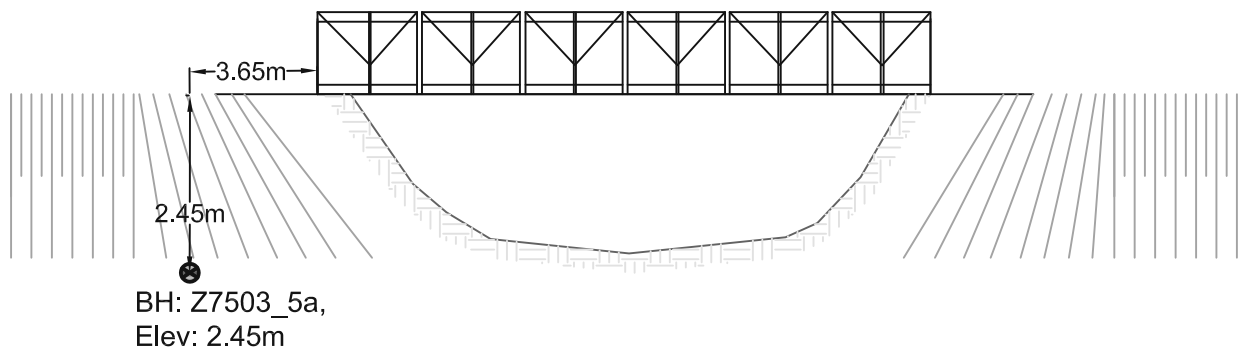
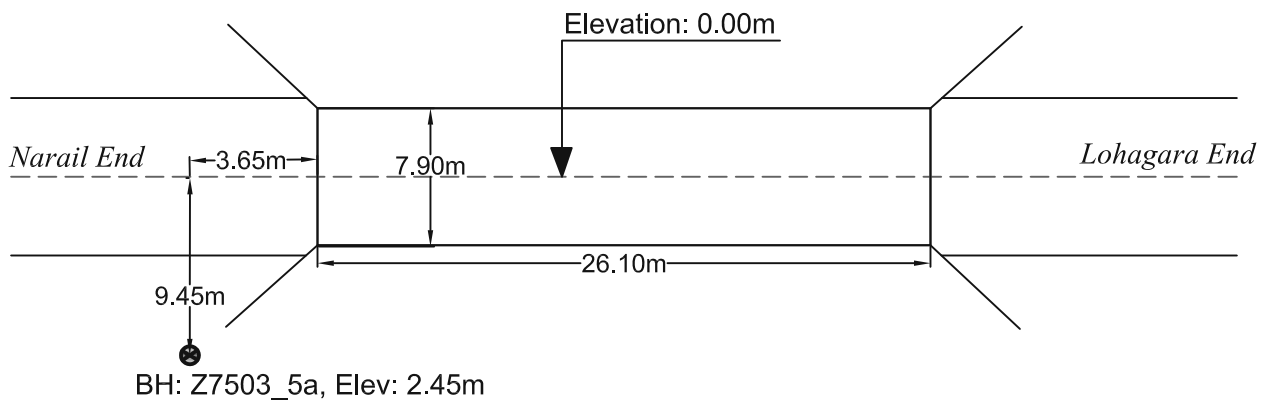
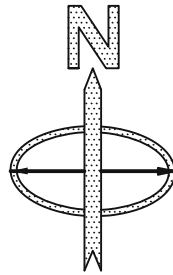


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON ASTM CLASSIFICATION D-2487)

[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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

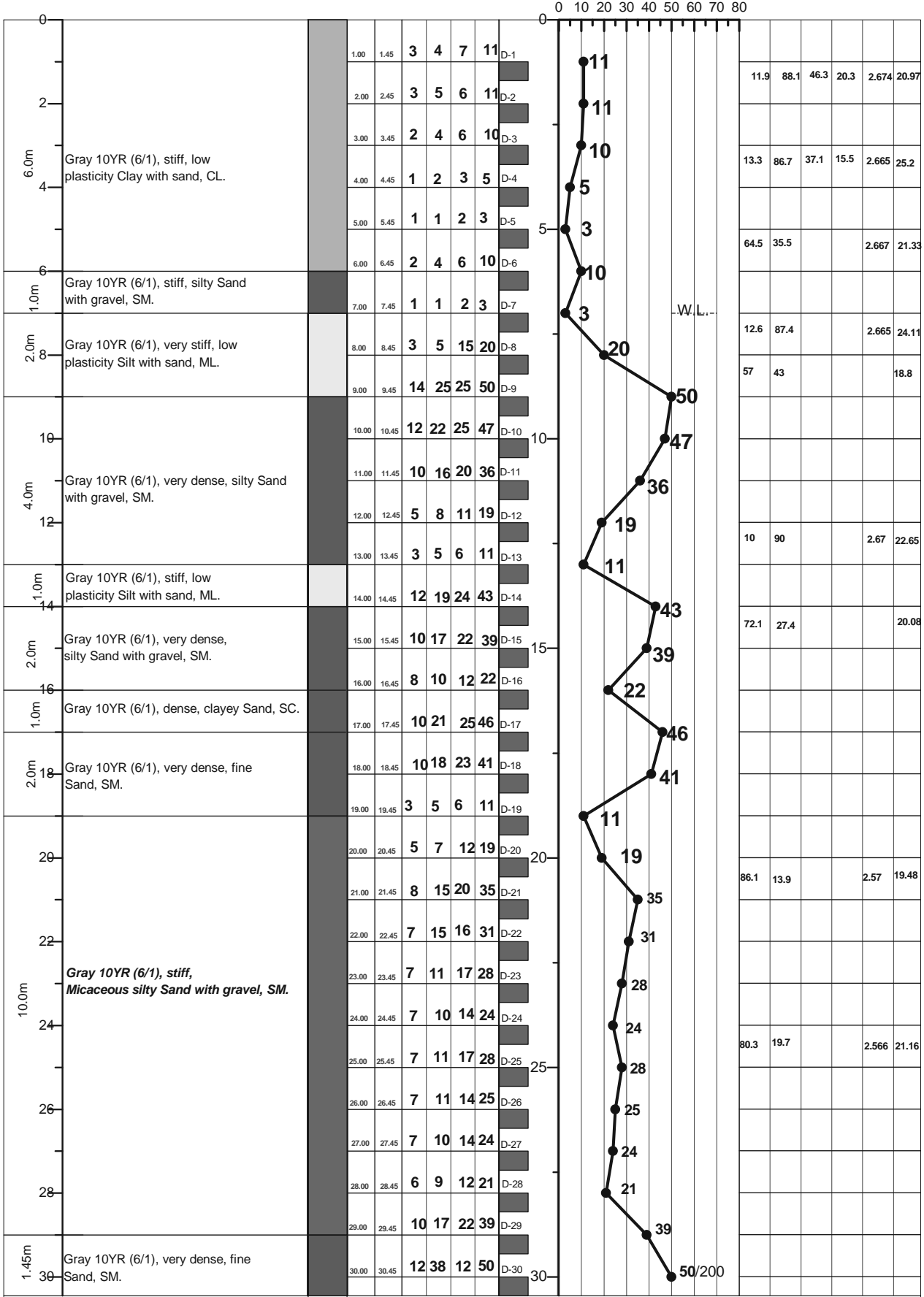
A1: Location of Borehole  
CLIENT: Oriental Consultants Company Limited.  
RANK: VI  
BRIDGE ID: Z7503\_5a  
LATITUDE: 23°10'48" LONGITUDE: 89°33'31"  
CHAINAGE: 5.213



PROSOIL FOUNDATION CONSULTANT

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: VI</b>	<b>BOREHOLE NO: Z7503_5a</b> <b>Brigde ID: Z7503_5a</b>	<b>Longitude: N 089°33'31"</b> Road Name: Narail-Lohagara Bazar-Naragati.	<b>Latitude: E 23°10'48"</b>
Name of Project: Preparatory Survey on Western Bangladesh BRIDGE Improvement Project.			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 60.0m</b>	<b>Chainage: 5.21, RL: -2.45m</b>
CLIENT : Oriental Consultants Company Limited.			<b>Commencement Date: 17-03-2014</b>	<b>Completed Date: 22-03-2014</b>	<b>G. W. T : -7.0m.</b>

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

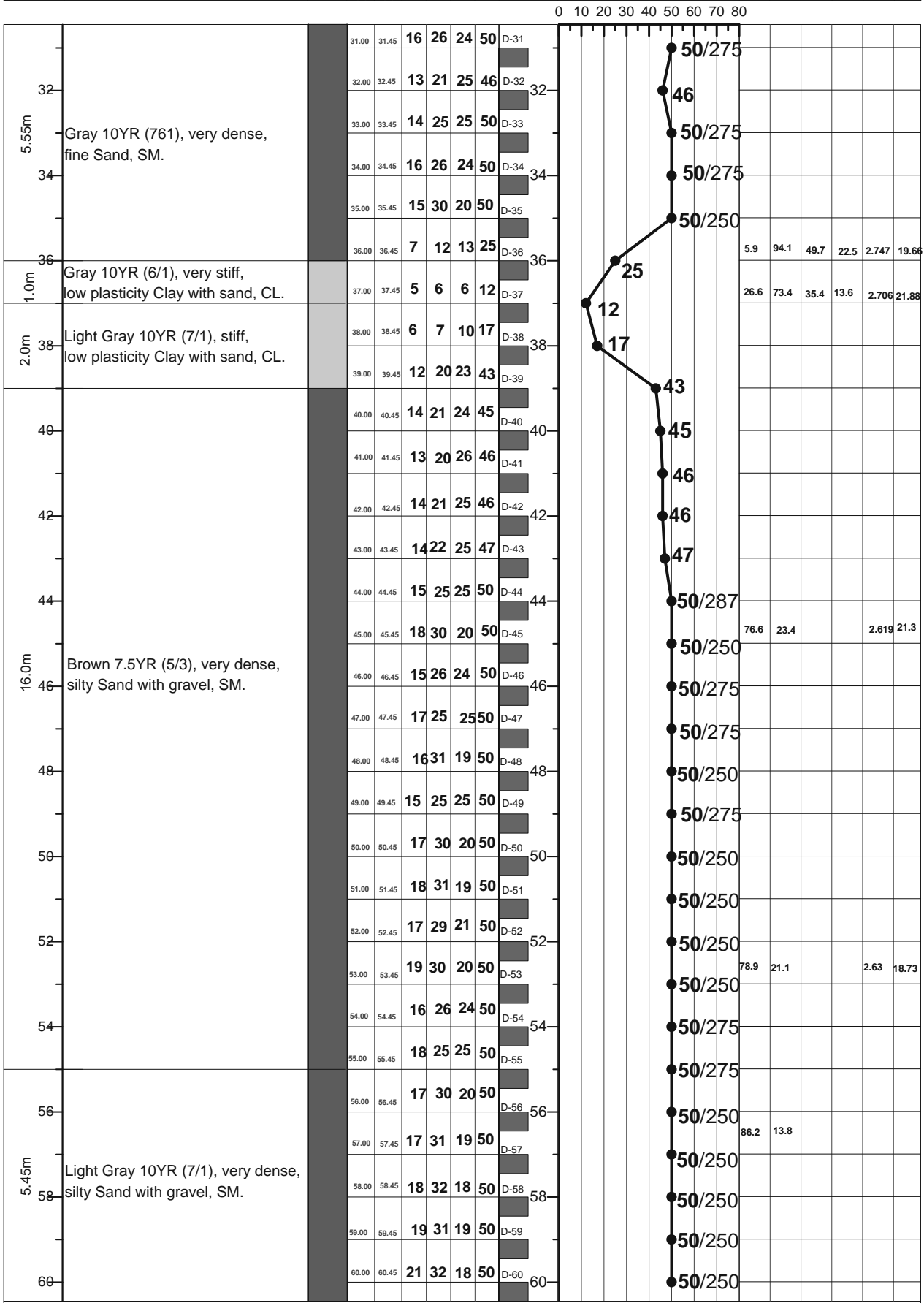


LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>RANK: VI</b>	<b>BOREHOLE NO: Z7503_5a</b>	<b>Longitude: N 089°33'31"</b>	<b>Latitude: E 23°10'48"</b>
			<b>Brigde ID: Z7503_5a</b>	<b>Road Name: Narail-Lohagara Bazar-Naragati.</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>			<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 60.0m</b>	<b>Chainage: 5.21, RL: -2.45m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>			<b>Commencement Date: 17-03-2014</b>	<b>Completed Date: 22-03-2014</b>	<b>G. W. T : -7.0m.</b>



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<sup>TM</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



R301

Google earth

Google earth

Darisom

R001

Location 1  
2348970.241  
9043716.481

Location 2  
2348471.131  
9043238.651

Location 3 (in the river)  
2348473.091  
9043346.221

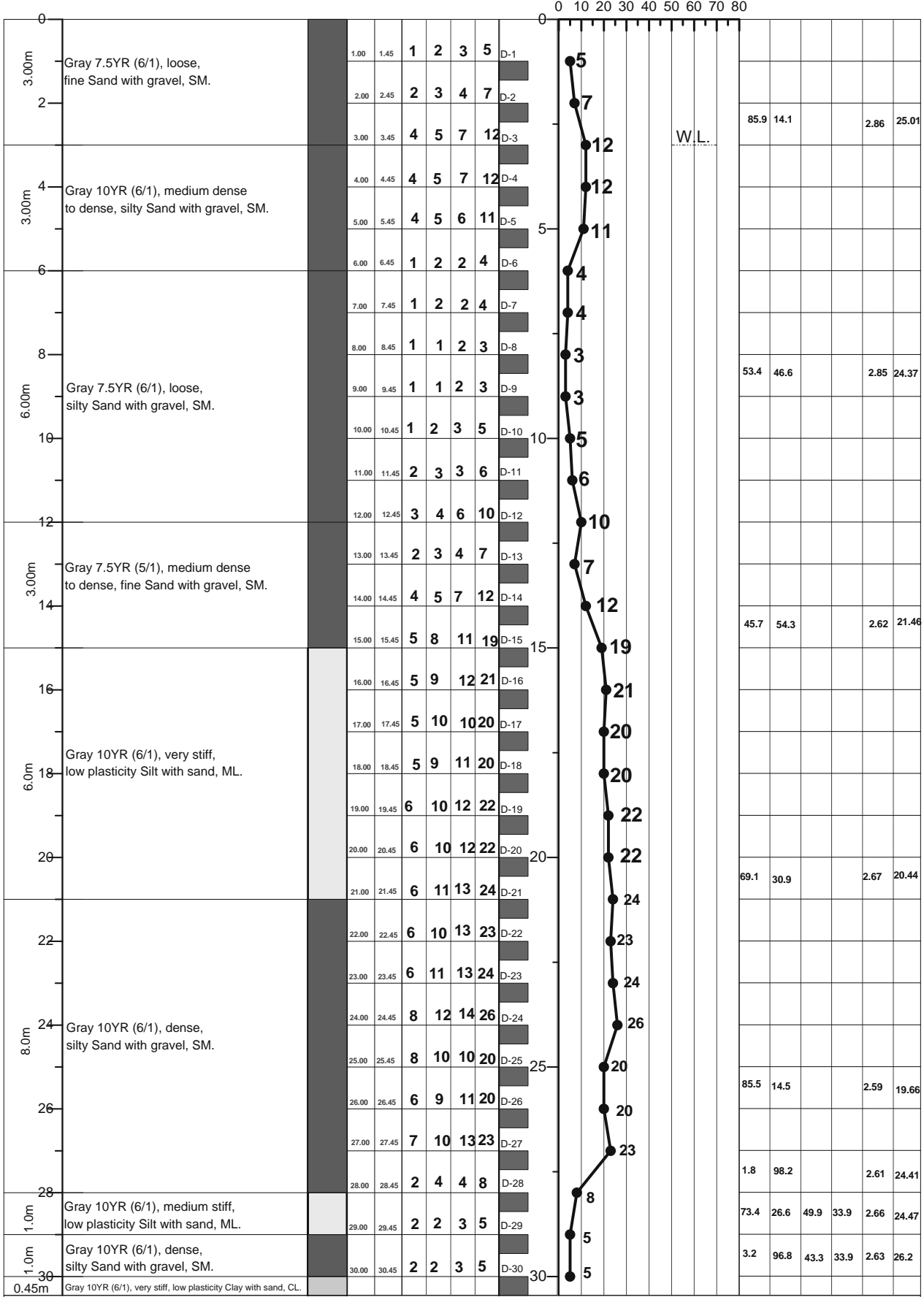
Location 4  
2348474.131  
9043344.651

Coordinate System: Bangladesh Transverse Mercator, Central Meridian 90 deg East  
Coordinate Code: B-BTM  
Setting by AutoCad CIVI3D

Google

<b>A2</b>	<b>PROSOIL</b>	<b>Location NO: 01</b>	<b>Longitude: N 90°33.814'</b>	<b>Latitude: N 23°54.246'</b>
		<b>Brigde ID: 01</b>	<b>Location: Narsingdi</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>		<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>RL: 3.0m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>		<b>Commencement Date: 07-06-2014</b>	<b>Completed Date: 09-06-2014</b>	<b>G. W. T : 3.0m</b>

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 <sub>v</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION



<b>A2</b>	<b>PROSOIL</b>	<b>Location NO: 01</b>	<b>Longitude: N 90°33.814'</b>	<b>Latitude: N 23°54.246'</b>
		<b>Brigde ID: 01</b>	Location: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>RL: 3.0m</b>
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 07-06-2014</b>	<b>Completed Date: 09-06-2014</b>	<b>G. W. T : 3.0m</b>

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

0 10 20 30 40 50 60 70 80																				
9.55m			31.00	31.45	2	3	3	6	D-31											
			32.00	32.45	2	2	3	5	D-32	32	10.7	89.3	47.8	35.4	2.65	26.11				
			33.00	33.45	2	2	3	5	D-33											
			34.00	34.45	2	3	3	6	D-34	34	36	64	43.6	20.9	2.61	26.21				
			35.00	35.45	2	3	3	6	D-35						2.73	26.47				
			36.00	36.45	2	4	5	11	D-36	36	8.1	91.9	46.2	33.8	2.77	25.23				
			37.00	37.45	3	5	5	10	D-37											
			38.00	38.45	3	5	6	11	D-38	38	9.1	90.9	41	17.5	2.66	25.39				
			39.00	39.45	3	4	6	10	D-39						17.3	82.7	48.9	35.5	2.67	24.89
			40.00	40.45	3	4	5	9	D-40	40	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		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	42	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		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	44	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											
			46.00	46.45	4	6	7	13	D-46	46	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		17.8	82.2			2.63	26.22				
			48.00	48.45	4	6	8	14	D-48	48	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											
			50.00	50.45	2	4	5	9	D-50	50	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											
			52.00	52.45	2	4	5	9	D-52	52	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		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	54	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											
			56.00	56.45	2	4	4	8	D-56	56	52.1	47.9			2.74	24.47				
			57.00	57.45	3	4	6	10	D-57		63.6	36.4			2.68	24.24				
			58.00	58.45	3	5	7	12	D-58	58	66.5	33.5			2.69	24.68				
			59.00	59.45	3	5	5	10	D-59		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	60	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

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>Location NO: 01</b>	<b>Longitude: N 90°33.814'</b>	<b>Longitude: N 23°54.246'</b>
		<b>Brigde ID: 01</b>	Location: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>RL: 3.0m</b>
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 07-06-2014</b>	<b>Completed Date: 09-06-2014</b>	<b>G. W. T : 3.0m</b>

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 <sub>c</sub>
			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), stiff, low plasticity Silt with sand, ML.	61.00	61.45	3	6	7	13	D-61							
62		62.00	62.45	3	5	6	11	D-62		54.7	45.3		2.56	25.4	
2.0m	Gray 10YR (6/1), medium dense to dense, silty Sand with gravel, SM.	63.00	63.45	4	6	8	14	D-63							
64		64.00	64.45	5	7	9	16	D-64		49.6	50.4		2.61	18.55	
1.0m	Gray 10YR (6/1), stiff, low plasticity Silt with sand, ML.	65.00	65.45	5	8	10	18	D-65							
66		66.00	66.45	5	7	10	17	D-66							
5.45m	Gray 10YR (6/1), dense, silty Sand with gravel, SM.	67.00	67.45	6	9	11	20	D-67							
		68	68.00	68.45	7	10	12	22	D-68						
		69	69.00	69.45	7	11	14	25	D-69		77.9	22.1		2.66	20.95
		70	70.00	70.45	8	12	16	28	D-70						
		72													
74															
76															
78															
80															
82															
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88															
90															

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

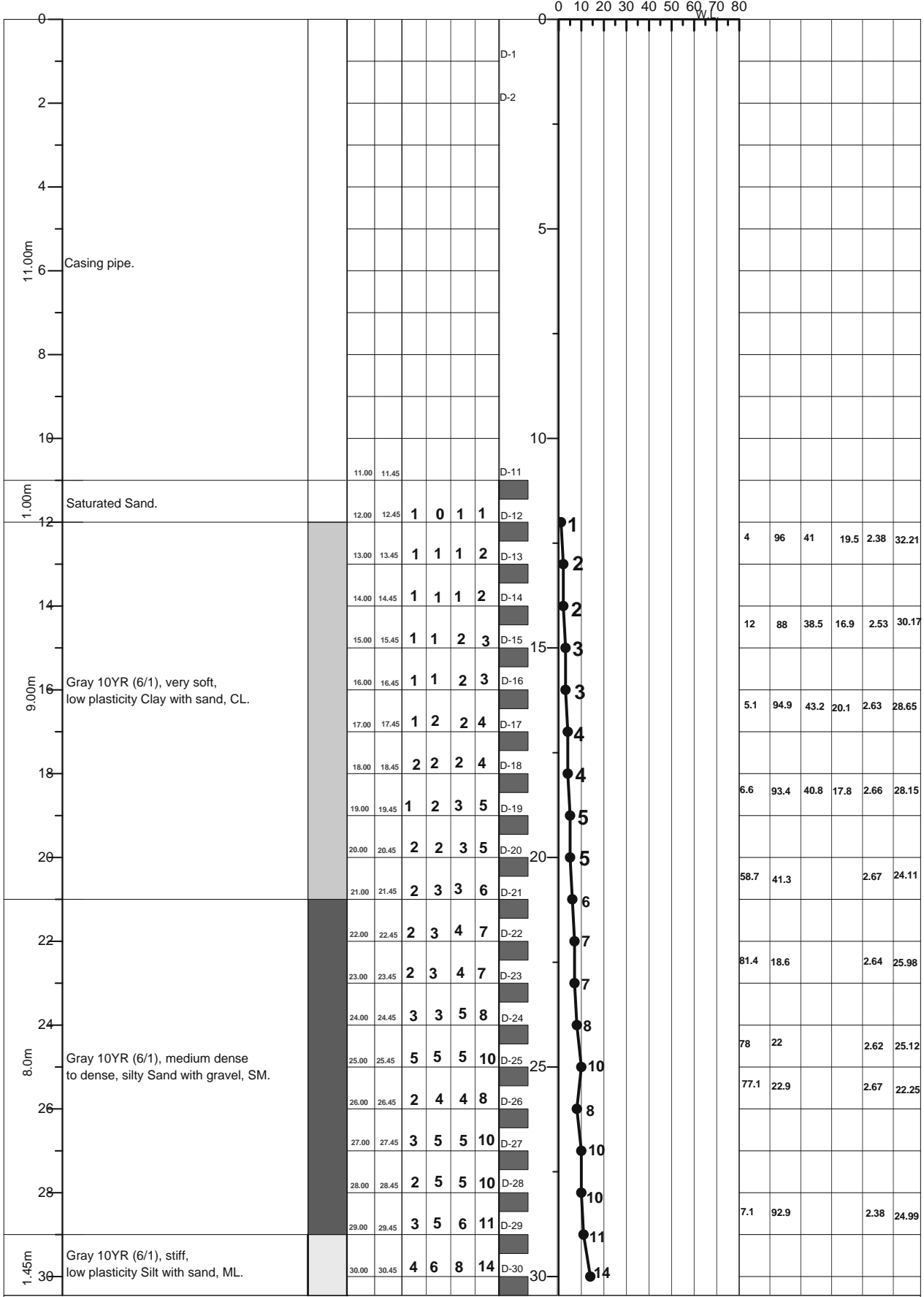
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>Location NO: 02</b>	<b>Longitude: N 90°33'39.12"</b>	<b>Latitude: E 23°54'23.41"</b>
		<b>Brigde ID: 02</b>	Location: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>RL: From water level</b>
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 11-06-2014</b>	<b>Completed Date: 13-06-14</b>	<b>G. W. T : 0.0m</b>

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 <sub>c</sub>
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



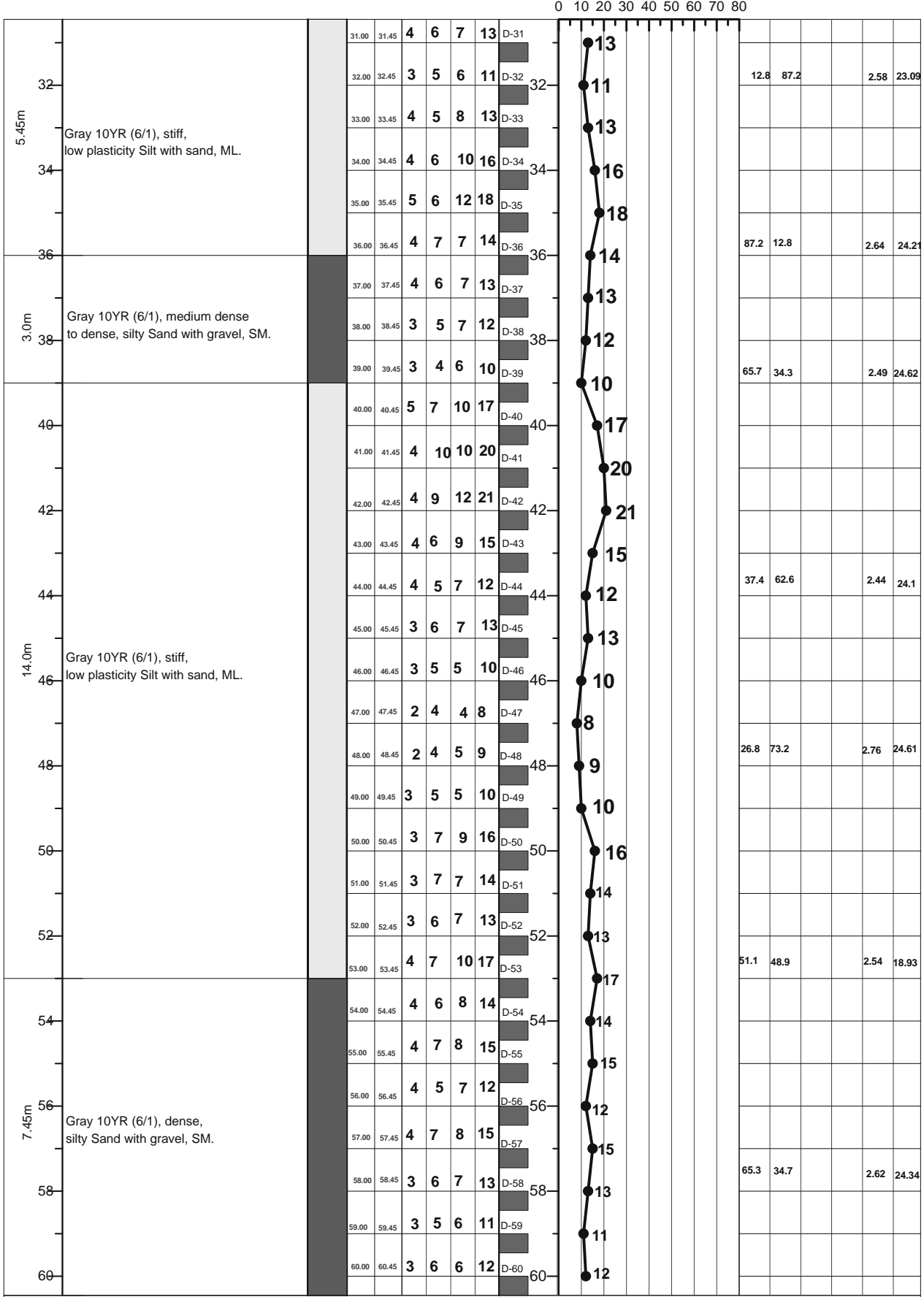
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>o</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED  
 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>Location NO: 02</b>	<b>Longitude: N 90°33'39.12"</b>	<b>Latitude: E 23°54'23.41"</b>
		<b>Brigde ID: 02</b>	Location: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>RL: From water level</b>
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 11-06-2014</b>	<b>Completed Date: 13-06-14</b>	<b>G. W. T : 10.0m</b>

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									



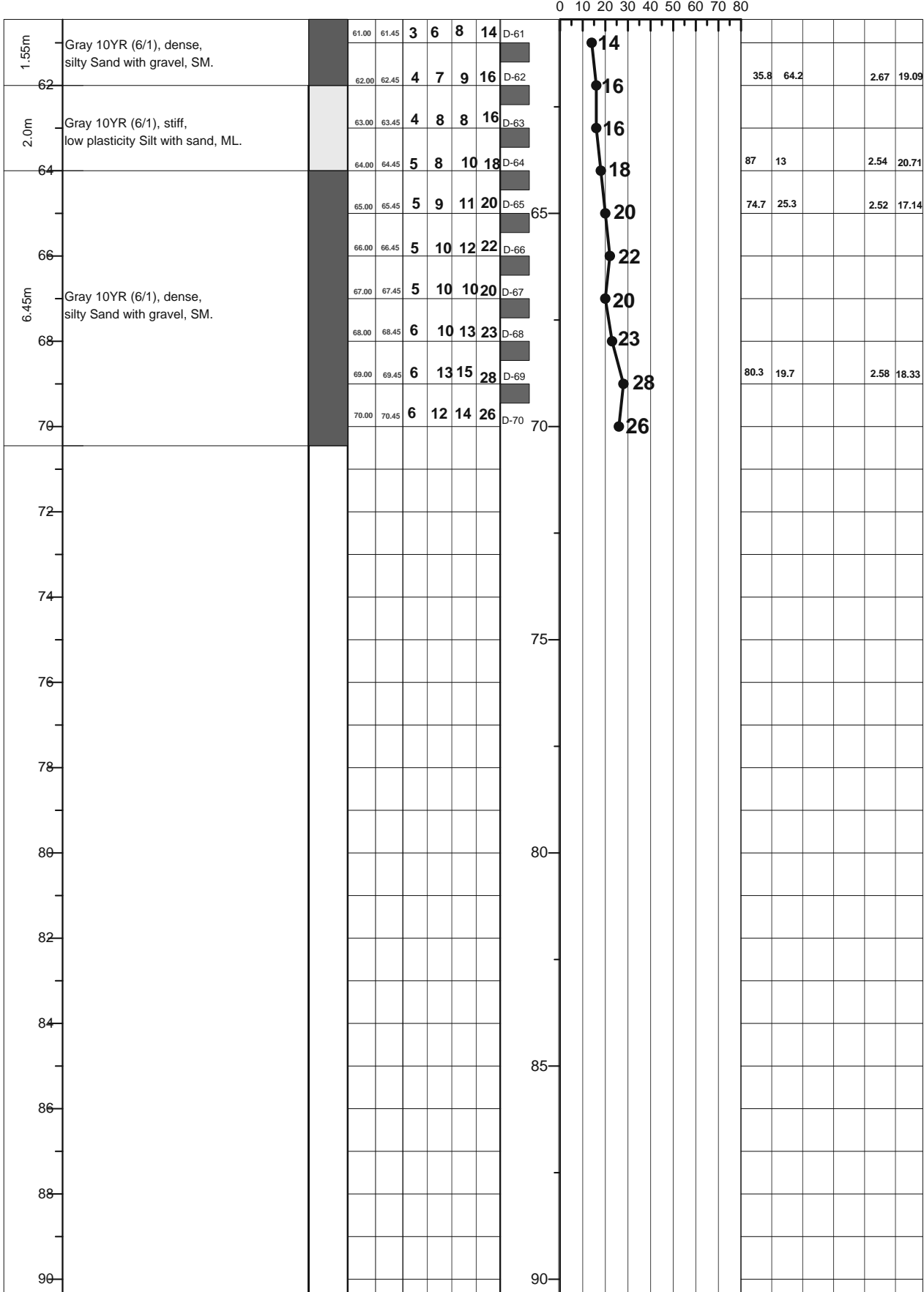
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>Location NO: 02</b>	<b>Longitude: N 90°33'39.12"</b>	<b>Latitude: E 23°54'23.41"</b>
		<b>Brigde ID: 02</b>	Location: Narsingdi	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>RL: From water level</b>
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 11-06-2014</b>	<b>Completed Date: 13-06-14</b>	<b>G. W. T : 10.0m</b>

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 <sub>c</sub>
			From (m)	To (m)	N1=150 (mm)	N2=300 (mm)	N3=450 (mm)									



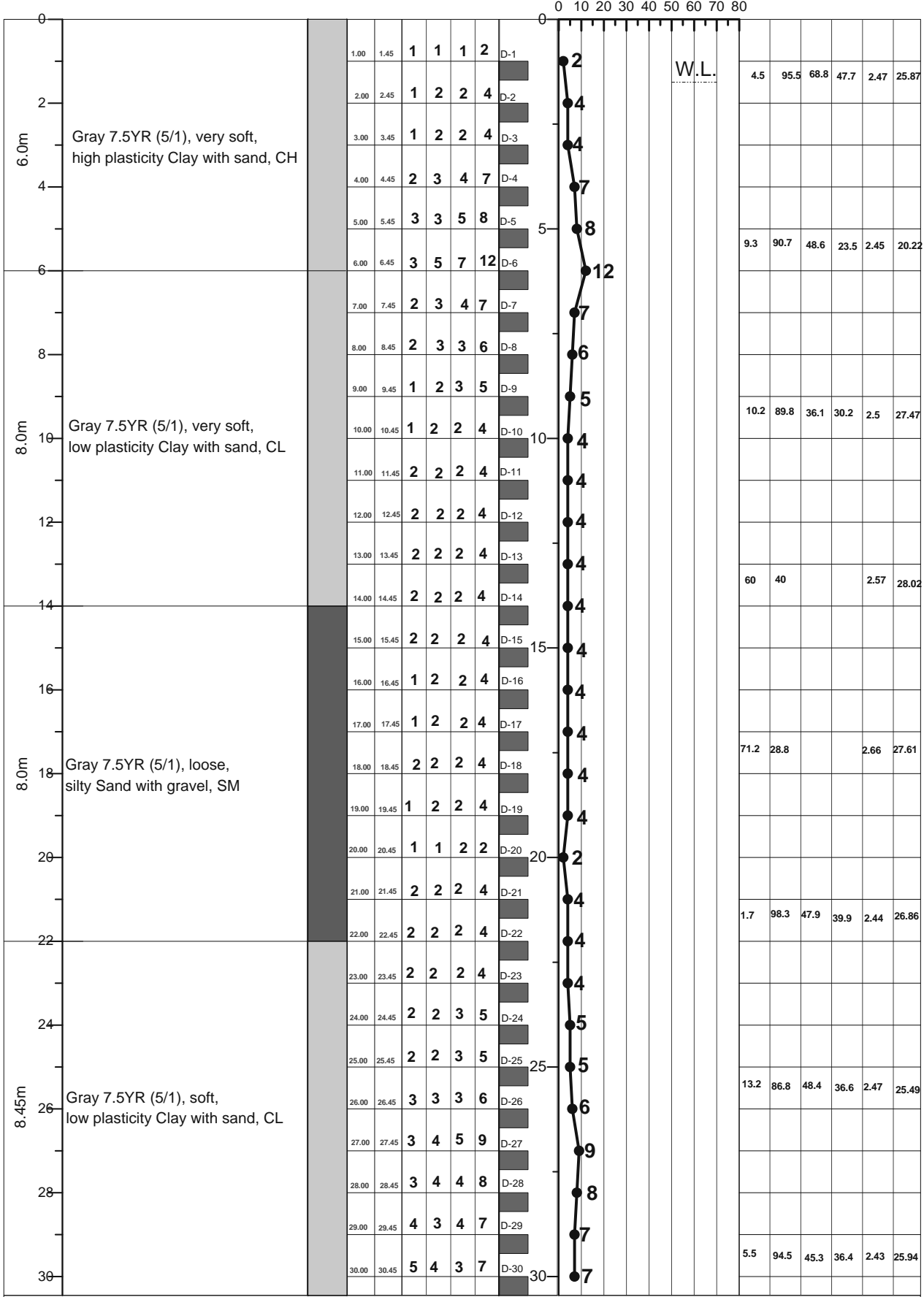
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED    50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>BOREHOLE NO: 3</b>	<b>Longitude: N 90°33.701'</b>	<b>Latitude: E 23°54.185'</b>
		<b>Brigde ID: 3</b>	<b>Road Name: Narsingdi</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>		<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>Chainage: ?, RL: -2.0m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>		<b>Commencement Date: 7-06-2014</b>	<b>Completed Date: 10-06-2014</b>	<b>G. W. T : -1.5m.</b>

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



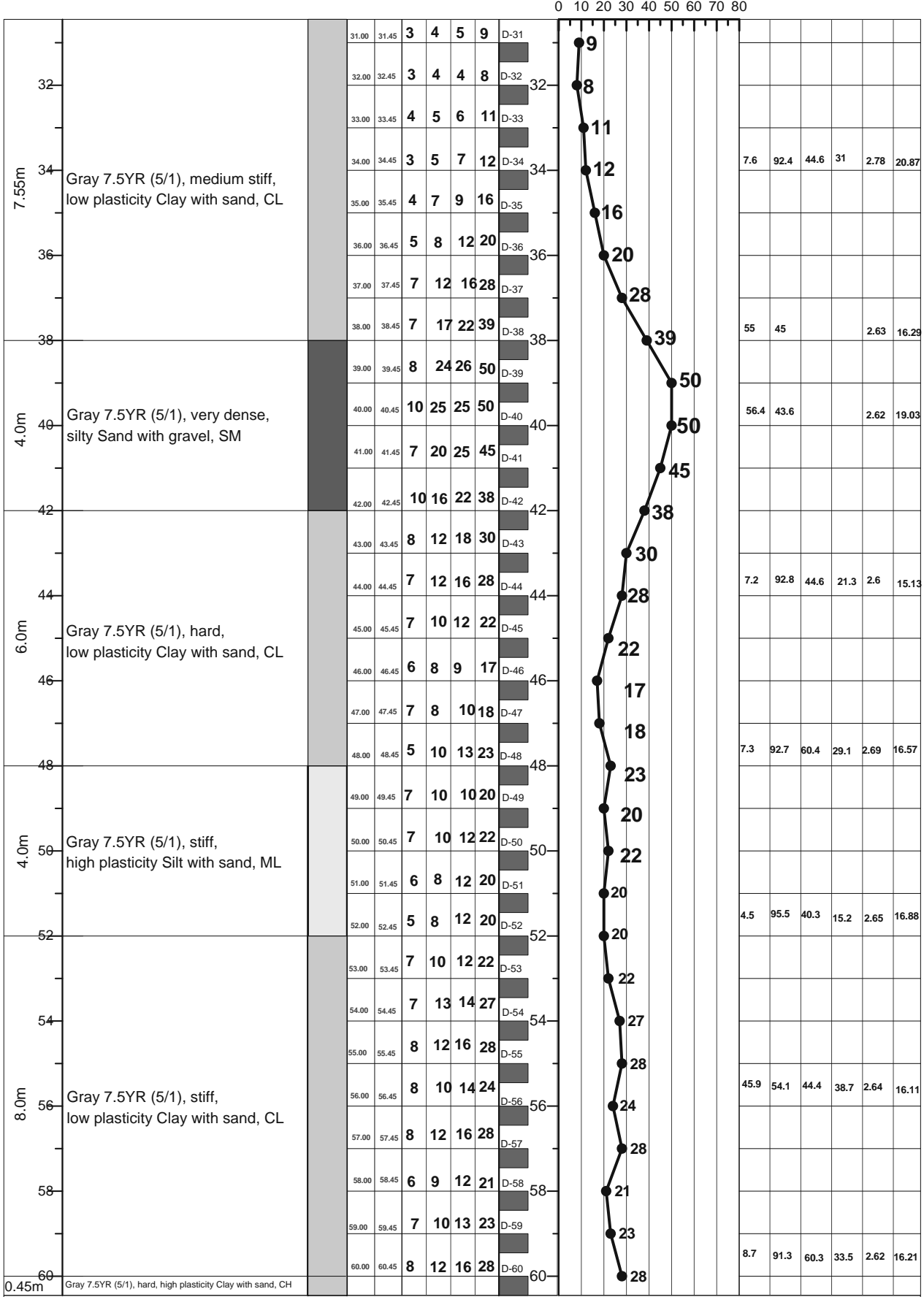
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>TH</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED      50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>BOREHOLE NO: 3</b>		<b>Longitude: N 90°33.701'</b>		<b>Latitude: E 23°54.185'</b>	
		<b>Brigde ID: 3</b>		<b>Road Name: Narsingdi</b>			
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>		<b>Borehole Depth: 70.0m</b>		<b>Chainage: ?, RL: -2.0m</b>	
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 7-06-2014</b>		<b>Completed Date: 10-06-2014</b>		<b>G. W. T : -1.5m</b>	

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>c</sub>
			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')

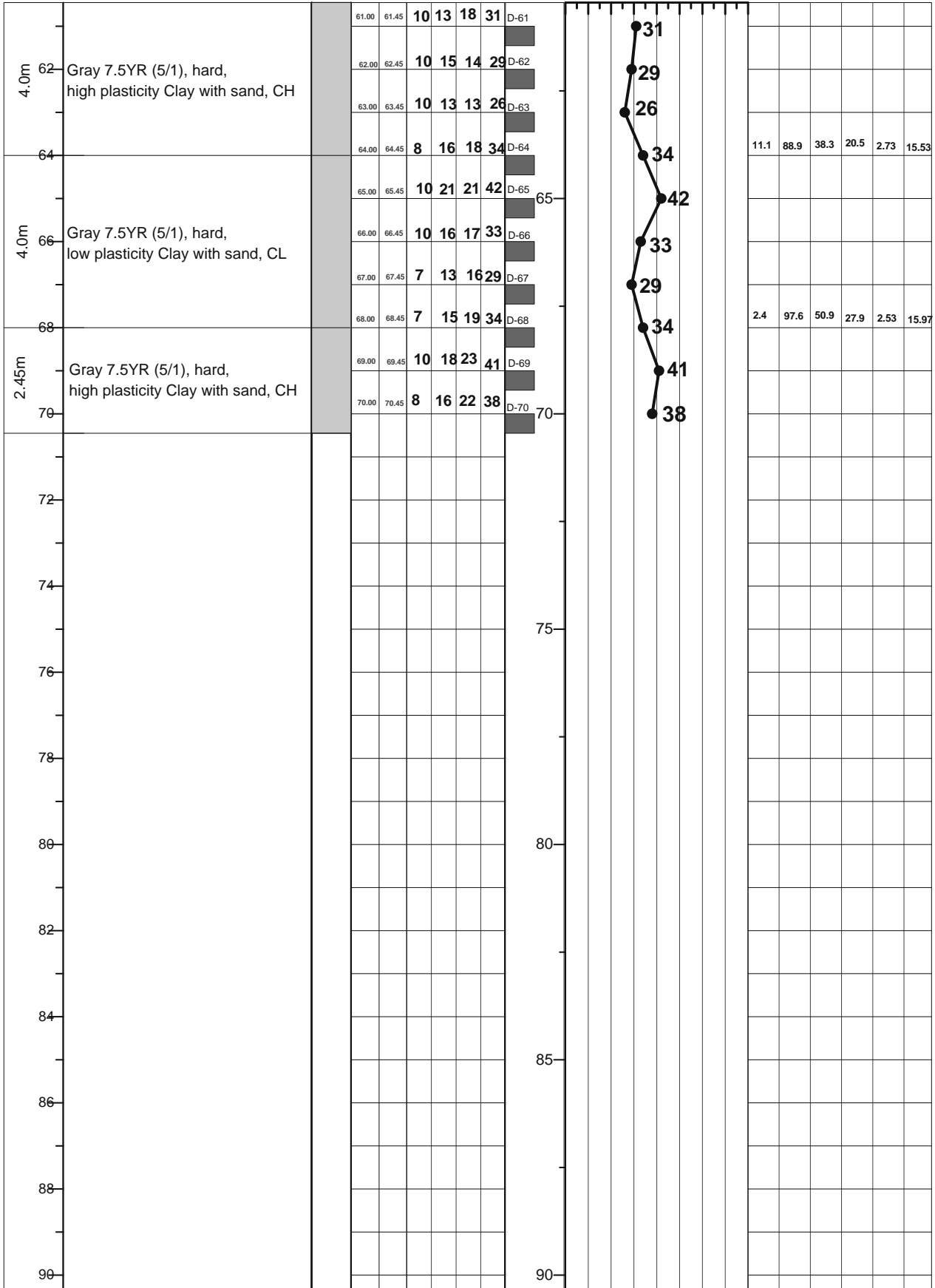
PLASTIC CLAY	SILT	PEAT/HIGHLY ORGANIC SOIL	UNDISTURBED SAMPLE
MICACEOUS FINE SAND/SILT	SAND	SHALE	DISTURBED SAMPLE

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

<b>A2</b>	<b>PROSOIL</b>	<b>BOREHOLE NO: 3</b>	<b>Longitude: N 90°33.701'</b>	<b>Latitude: E 23°54.185'</b>
		<b>Brigde ID: 3</b>	<b>Road Name: Narsingdi</b>	
<b>Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.</b>		<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 70.0m</b>	<b>Chainage: ??, RL: -2.0m</b>
<b>CLIENT : Oriental Consultants Company Limited.</b>		<b>Commencement Date: 7-06-2014</b>	<b>Completed Date: 10-06-2014</b>	<b>G. W. T : -1.5m.</b>

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 <sub>v</sub>
			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

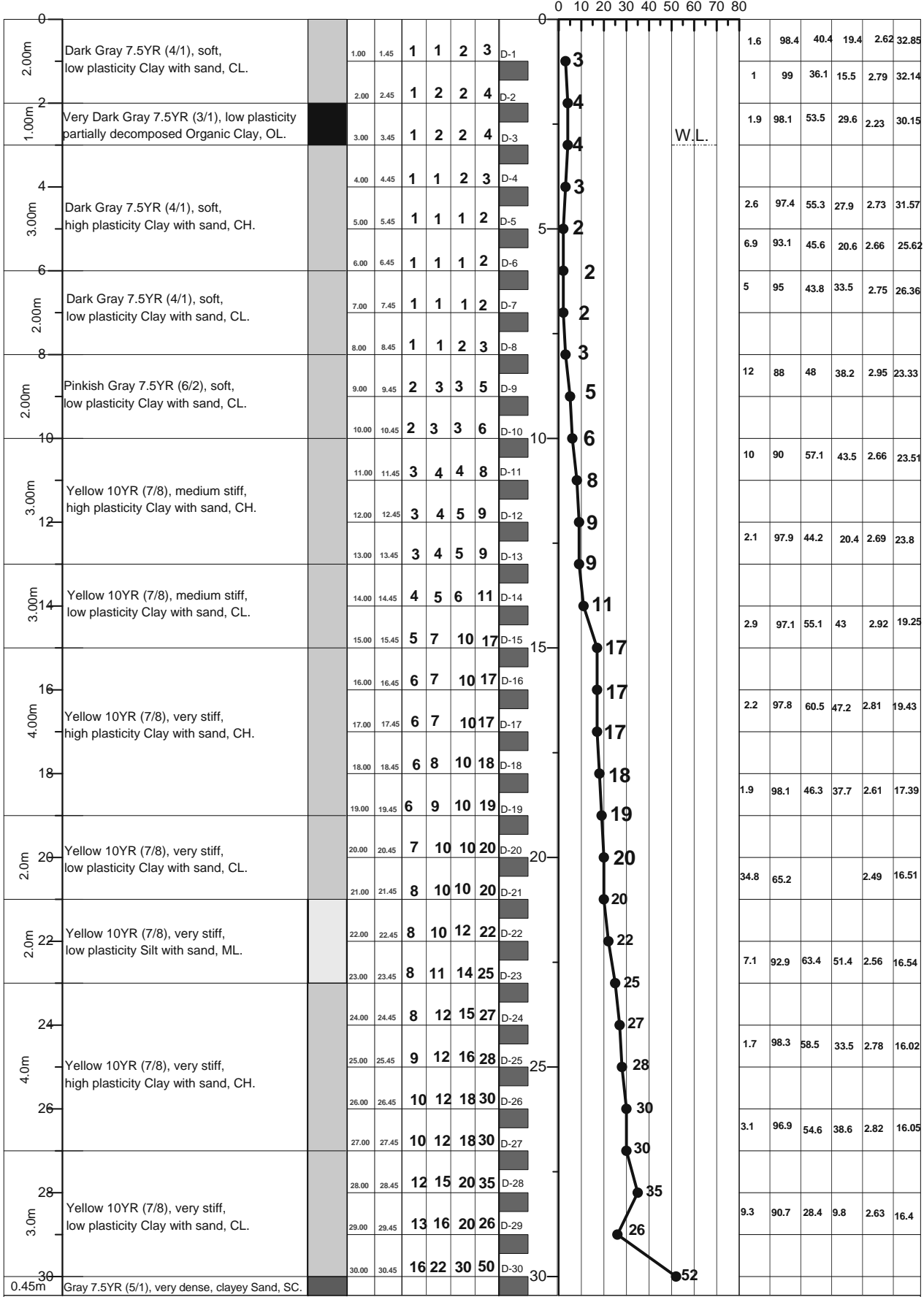
N= BLOWS DELIVERED PER FOOT BY A 140 LB HAMMER FALLING 30 INCHES

MAX<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION



<b>A2</b>	<b>PROSOIL</b>	<b>Location NO: 04</b>	<b>Longitude: N 90°32.383'</b>	<b>Latitude: N 23°54.4'</b>
		<b>Brigde ID: 04</b>	Location: Narsingdi.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>RL: -1.3m</b>
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 06-06-2014</b>	<b>Completed Date: 09-06-2014</b>	<b>G. W. T : -3.0m</b>

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



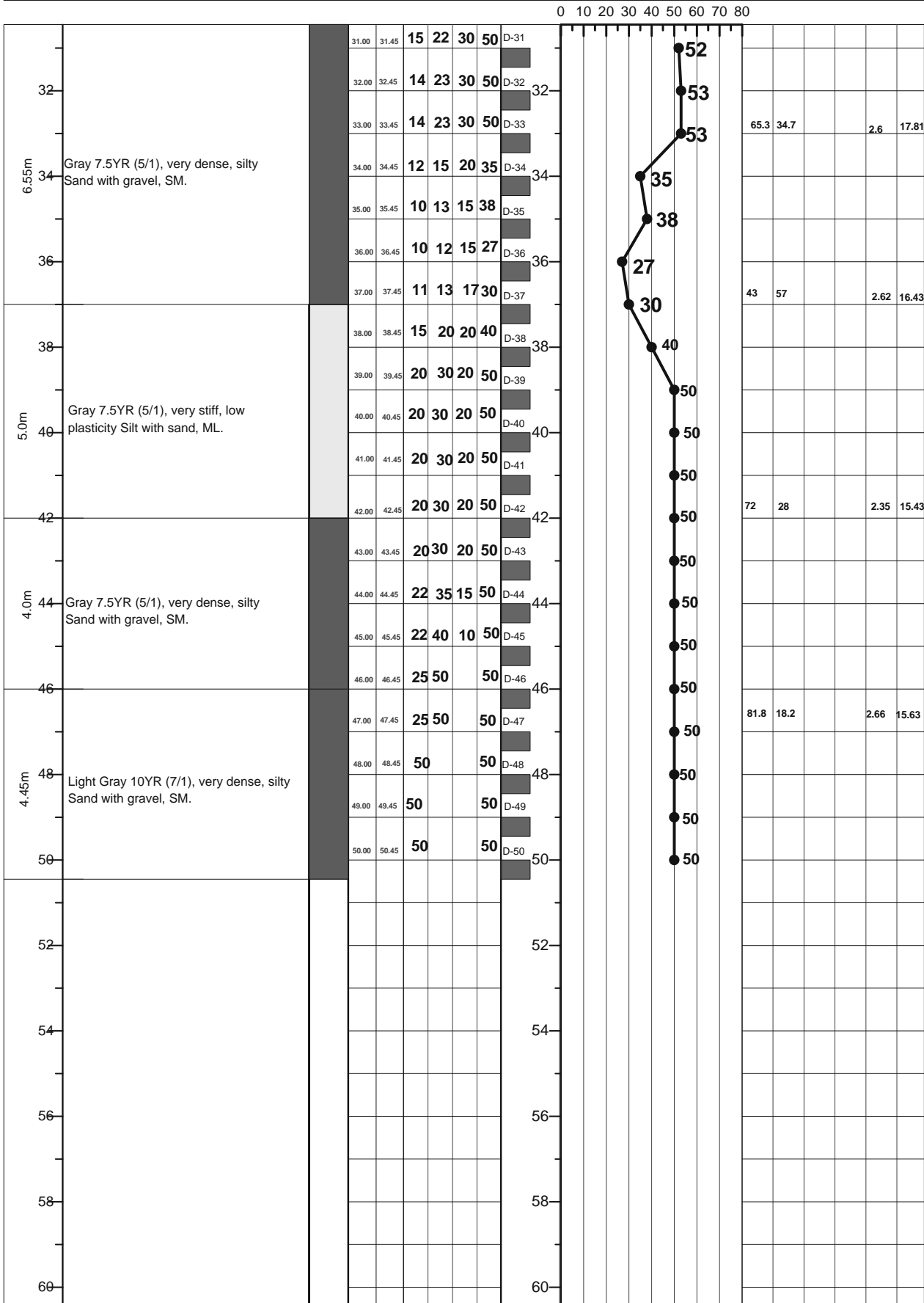
LEGEND FOR BORELOG AND GRAIN SIZE DISTRIBUTION (BASED ON 'ASTM CLASSIFICATION D-2487')

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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>Location NO: 04</b>	<b>Longitude: N 90°32.383'</b>	<b>Latitude: N 23°54.4'</b>
		<b>Brigde ID: 04</b>	Location: Narsingdi.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>RL: -1.3m</b>
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 06-06-2014</b>	<b>Completed Date: 09-06-2014</b>	<b>G. W. T : -3.0m</b>

THICKNESS	SOIL STRATA	BORE LOG	SAMPLING					DISTURBED SAMPLE	DEPTH (m) SPT VALUES (BLOWS / 300mm)	% Sand	% Passing 200	% LL	% PI	SP Gravity	% W <sub>v</sub>
			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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>Location NO: 05</b>	<b>Longitude: N 90°32'14"</b>	<b>Latitude: N 23°55'32.24"</b>
		<b>Brigde ID: 05</b>	Location: Narsingdi.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>RL: 0.3m</b>
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 06-06-2014</b>	<b>Completed Date: 09-06-2014</b>	<b>G. W. T : 4.30m</b>

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									

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 <sub>v</sub>
			From (m)	To (m)	N1-150 (mm)	N2-300 (mm)	N3-450 (mm)									
0									0							
4.00m	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			2.00	2.45	2	3	3	6	D-2	6						
			3.00	3.45	2	2	2	4	D-3	4						
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	Gray 7.5YR (5/1), soft, low plasticity Clay with sand, CL.		5.00	5.45	2	2	3	5	D-5	5						
6			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	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			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	Gray 7.5YR (5/1), soft, low plasticity Clay with sand, CL.		9.00	9.45	1	1	2	3	D-9	3						
10			10.00	10.45	1	1	1	2	D-10	10	0.6	99.4	40.5	18.4	2.61	33.31
			11.00	11.45	1	1	1	2	D-11	2						
12			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			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	15						
16			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						
18			18.00	18.45	1	1	1	2	D-18	2	1.9	98.1	37.6	11.6	2.7	25.49
4.0m	Gray 7.5YR (5/1), very soft, low plasticity Silt with sand, ML.		19.00	19.45	1	1	1	2	D-19	2						
20			20.00	20.45	1	2	1	3	D-20	20	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	Gray 7.5YR (5/1), very soft, low plasticity Clay with sand, CL.		22.00	22.45	1	2	1	3	D-22	2	50.9	49.1			2.62	26.22
22			23.00	23.45	1	1	1	2	D-23	2						
4.0m	Gray 7.5YR (5/1), very loose, silty Sand with gravel, SM.		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	25						
26			26.00	26.45	1	2	2	4	D-26	4	50.7	49.3			2.54	27.19
2.0m		Gray 7.5YR (6/1), loose, silty Sand with gravel, SM.		27.00	27.45	2	2	2	4	D-27	4					
28			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	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			30.00	30.45	2	2	2	4	D-30	30	47.5	52.5			2.56	23.92
0.45m	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<sup>™</sup> PENETRATION= 50 BLOWS. AFTER 50 BLOWS PENETRATION DEPTH WERE MEASURED 50/X = BLOWS 50, "X" MM PENETRATION

<b>A2</b>	<b>PROSOIL</b>	<b>Location NO: 05</b>	<b>Longitude: N 90°32'14"</b>	<b>Latitude: N 23°55'32.24"</b>
		<b>Brigde ID: 05</b>	Location: Narsingdi.	
Name of Project: Preparatory Survey on Western Bangladesh Bridge Improvement Project.		<b>Type of Drill Rig: Manual Rotary</b>	<b>Borehole Depth: 50.0m</b>	<b>RL: 0.3m</b>
CLIENT : Oriental Consultants Company Limited.		<b>Commencement Date: 06-06-2014</b>	<b>Completed Date: 09-06-2014</b>	<b>G. W. T : 4.30m</b>

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 <sub>L</sub>
			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	
			35.00	35.45	4	3	3	6	D-35	6							
3.0m	Light Gray 7.5YR (7/1), soft, low plasticity Silt with sand, ML.		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							
			38.00	38.45	8	10	17	27	D-38	27	35.2	64.8			2.61	15.54	
2.0m	Grayish Brown 10YR (5/2), very stiff, low plasticity Silt with sand, ML.		39.00	39.45	9	14	20	34	D-39	34							
			40.00	40.45	10	17	20	37	D-40	37							
11.45m	Pale Brown 10YR (6/3), very dense, silty Sand with gravel, SM.		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')

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

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**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 year<sup>1</sup> are shown in Table 1 and Table 2 respectively. The ratio of thickness and corrosion loss is shown in Figure1 and Figure 2.

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<sup>1</sup> 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	

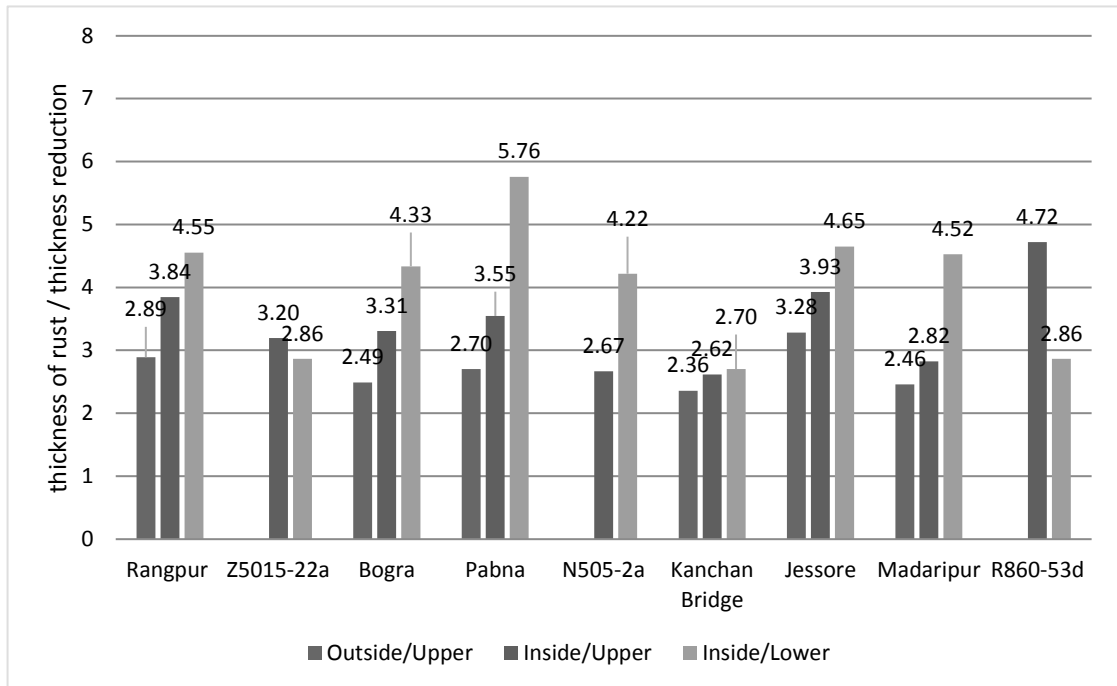
**Table 2 Thickness of Rust after One Year**

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		
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		
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 time<sup>2</sup> 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.

---

<sup>2</sup> 1 year = 365×24+24÷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 <sup>2</sup>		365	2856	365	3725	365	3408	365	3916	365	3532	365	4333

\*Some data is missing because data logger is stolen.

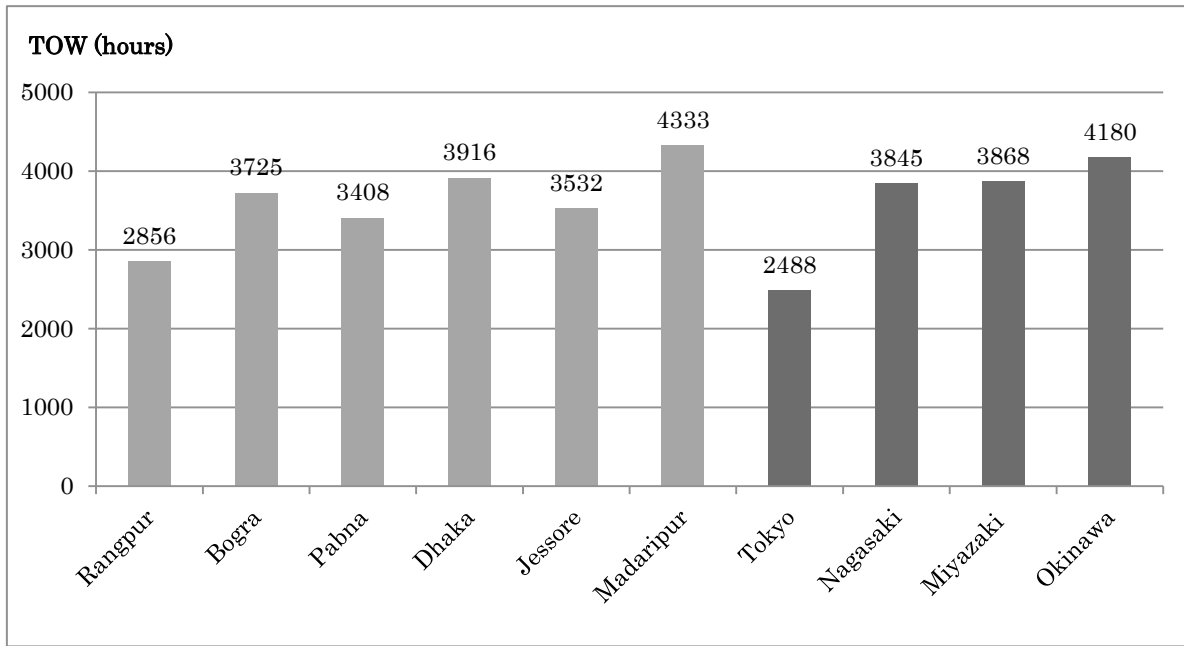
\* Interpolated Total = Observed total × 365 / Total of observational days

### 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 Bangladesh**

