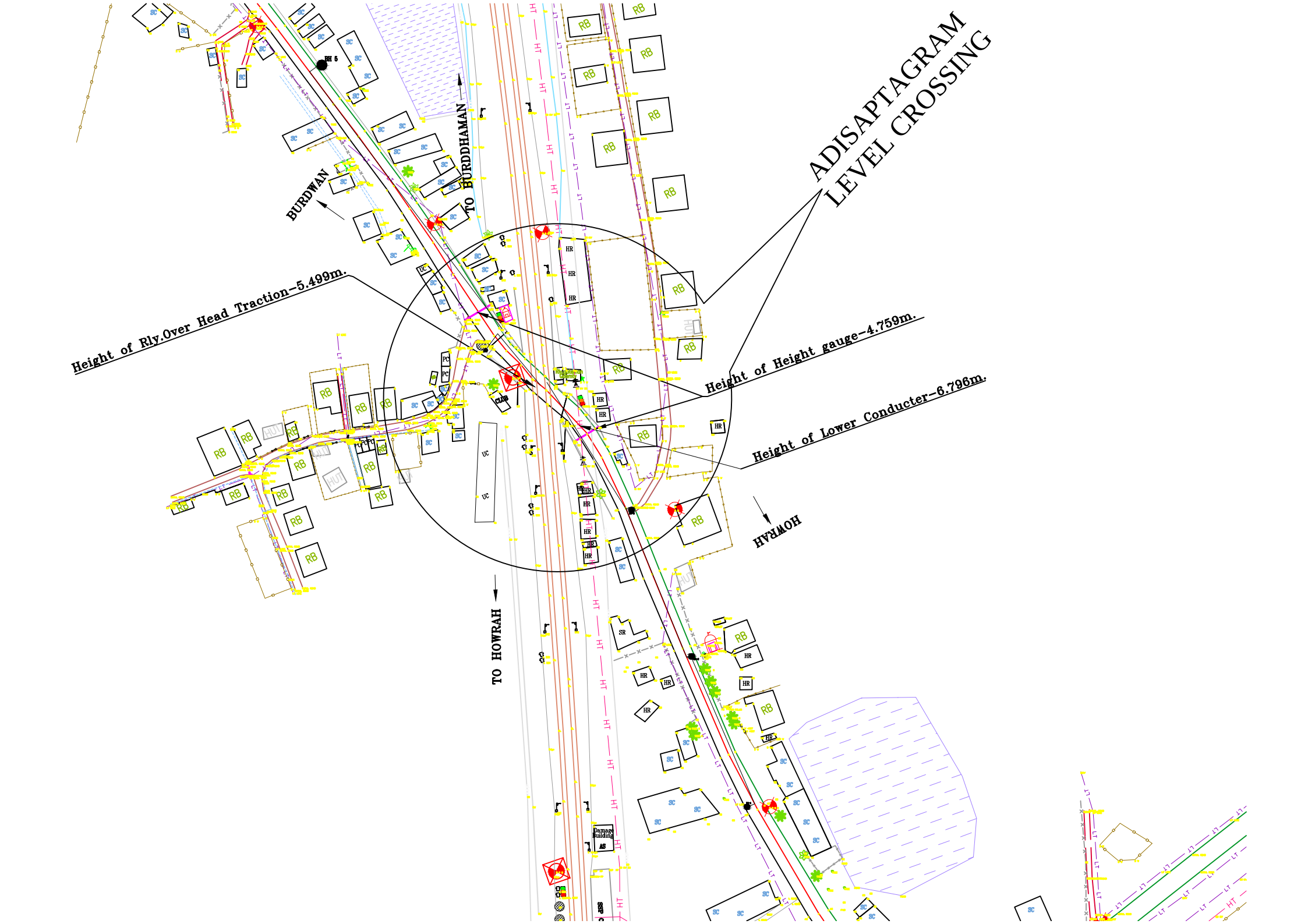
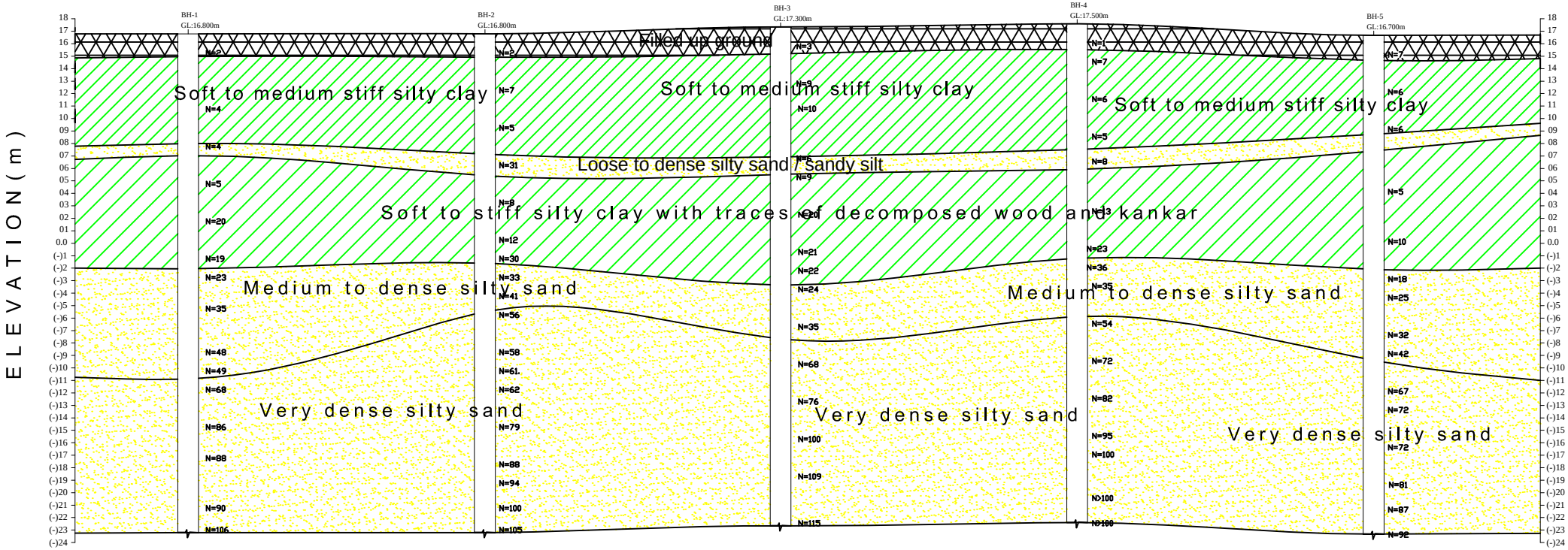

ADISAPTAGRAM
LEVEL CROSSING
Height of Rly.Over Head Traction-5.499m.
Height of Height gauge-4.759m.
Height of Lower Conducter-6.796m.
BURDWAN
TO BURDDHAMAN
HOWRAH
TO HOWRAH

Annexure-

Project:CONSTRUCTION OF ROAD OVER BRIDGE AT ADISAPTAGRAM ON GT ROAD IN HOOGLY DISTRICT



Generalised Sub-soil Profile at Adisaptagram

BOREHOLE LOG DATA SHEET

BORE HOLE NO 1(one)
CHAINAGE :
GROUND LEVEL(m) : 16.800
COMMENCED ON 15.10.14
COMPLETED ON 18.10.14

METHOD OF EXPLORATION :Shell & Auger,Rotary MudCirculation
SAMPLER HAMMER WT.FOR SPT :63.50 kg.
CASING TYPE : Sx
WATER TABLE :1.80 m below GL
DEPTH OF BORING/DRILLING : 40.0 m

DEPTH (m)	DESCRIPTION OF STRATA	Depth (m) From	Depth (m) To	Classification of Strata	Symbol	ROCK DRILLING RUN (m)	Core Recovery (%)	RQD (%)	WATER Loss (%)	WATER Colour of Return water	SOIL BORING COLLECTION OF SAMPLE Type	Depth (m)	SPT No of Blows for every 15 cm penetration 1	2	3	"N"
0.0 - 1.0	Filled up ground comprising local soil,sand etc.	0.00	2.00	Fill							DS	1.50	0	1	1	2
2.0 - 3.0	Soft,brownish grey silty clay / clayey silt with traces of fine sand.Occasional presence of semi decomposed wood.	2.00	9.00	CI/OI							DS	3.00	2	2	3	5
4.0 - 5.0											UDS	4.50				
											DS	5.00				
6.0											DS	6.00	1	2	2	4
7.0 - 8.0											UDS	7.50				
9.0	Very loose,dark grey sandy silt.	9.00	10.00	ML							DS	9.00	2	2	2	4
10.0 - 11.0	Soft to medium stiff,blackish grey silty clay with some fine to medium sand.Occasional presence of decomposed wood.	10.00	15.00	OH/CI							UDS	10.50				
12.0											DS	12.00	1	2	3	5
13.0 - 14.0											UDS	13.50				
15.0	Very stiff,blusih grey silty clay with little sand and calacreous nodules.	15.00	19.00	CI							DS	15.00	7	8	12	20
16.0 - 17.0											UDS	16.50				
18.0											DS	18.00	7	8	11	19
19.0 - 20.0	Medium to dense,yellowish brown silty fine to medium micaceous sand.	19.00	28.00	SM							DS	19.50	10	11	12	23

Abbreviations used : UDS :Undisturbed Sam RQD :Rock Quality Designation
DS :Disturbed Sample CRS :Rock core Sample

BOREHOLE LOG DATA SHEET

BORE HOLE NO 1(one)
CHAINAGE : 0
GROUND LEVEL(m) : 16.800
COMMENCED ON 15.10.14
COMPLETED ON 18.10.14

METHOD OF EXPLORATION :Shell & Auger,Rotary MudCirculation
SAMPLER HAMMER WT.FOR SPT :63.50 kg.
CASING TYPE : Sx
WATER TABLE :1.80 m below GL
DEPTH OF BORING/DRILLING : 40.0 m

DEPTH (m)	DESCRIPTION OF STRATA	DEPTH(m) From	DEPTH(m) To	Classification of Strata	Symbol	ROCK DRILLING RUN (m)	Core Recovery (%)	RQD (%)	WATER Loss (%)	WATER Colour of Return water	SOIL BORING COLLECTION OF SAMPLE Type	Depth (m)	SPT No of Blows for every 15 cm penetration 1	2	3	"N"
21.0											DS	21.00	10	13	12	25
22.0											DS	22.50	7	13	22	35
23.0																
24.0	-do-			SM							DS	24.00	10	14	25	39
25.0																37
26.0											DS	25.50	12	22	26	48
27.0											DS	27.00	80	21	28	49
28.0		28.00														
29.0											DS	28.50	15	28	40	68
30.0											DS	30.00	28	35	37	72
31.0																
32.0											DS	31.50	18	42	44	86
33.0											DS	33.00	32	45	48	93
34.0	Very dense,greyish brown silty fine to medium micaceous sand.Occasional presence of kankar.			SM / SP-SM							DS	34.50	23	44	44	88
35.0																
36.0											DS	36.00	31	35	54	89
37.0																
38.0											DS	38.00	26	40	50	90
39.0																
40.0			40.00								DS	40.00	25	48	58	106

Abbreviations used : UDS :Undisturbed Sam RQD :Rock Quality Designation
DS :Disturbed Sampl CRS :Rock core Sample

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BOREHOLE LOG DATA SHEET

BORE HOLE NO 2(Two)
CHAINAGE :
GROUND LEVEL(m) : 16.800
COMMENCED ON 18.10.14
COMPLETED ON 20.10.14

METHOD OF EXPLORATION :Shell & Auger,Rotary MudCirculatior
SAMPLER HAMMER WT.FOR SPT :63.50 kg.
CASING TYPE : Sx
WATER TABLE : 1.75 m below GL
DEPTH OF BORING/DRILLING : 40.0 m

DEPTH (m)	DESCRIPTION OF STRATA	Depth (m) From	Depth (m) To	Classification of Strata	Symbol	ROCK DRILLING RUN (m)	Core Recovery (%)	RQD (%)	WATER Loss (%)	WATER Colour of Return water	SOIL BORING COLLECTION OF SAMPLE Type	Depth (m)	SPT No of Blows for every 15 cm penetration 1	2	3	"N"
0.0	Loose filed up ground comprising yellowish sand / sandy silt	0.00	2.00	Fill							DS	1.50	0	1	1	2
2.0	Loose,brownish grey fine sandy silt.	2.00	4.00	ML							DS	3.50	2	3	4	7
4.0	Medium stiff,deep grey silty clay with little fine to medium sand.	4.00	10.00	CL/CI							DS	4.50	2	3	4	7
5.0											DS	5.00				
6.0											UDS	6.00				
7.0											DS	7.50	1	2	3	5
8.0																
9.0											UDS	9.00				
10.0	Dense,bluish grey silty medium to coarse sand.Lenses of mica observed.	10.00	11.50	SM							DS	10.50	2	12	19	31
11.0																
12.0	Stiff to very stiff,blussh grey silty clay with little sand and calacreous nodules.Occasional presence of decomposed wood.	11.50	19.00	OH/CI							UDS	12.00				
13.0											DS	13.50	2	3	5	8
14.0																
15.0											UDS	15.00				
16.0											DS	16.50	3	5	7	12
17.0																
18.0											DS	18.00	7	12	18	30
19.0	Medium to dense,yellowish brown silty fine to medium micaceous sand.	19.00	22.50	SM							DS	19.50	9	14	19	33
20.0																

Abbreviations used : UDS :Undisturbed Sam RQD :Rock Quality Designation
DS :Disturbed Sampl CRS :Rock core Sample

BOREHOLE LOG DATA SHEET

BORE HOLE NO 2(Two)
CHAINAGE : 0
GROUND LEVEL(m) : 16.8
COMMENCED ON 18.10.14
COMPLETED ON 20.10.14

METHOD OF EXPLORATION :Shell & Auger,Rotary MudCirculatior
SAMPLER HAMMER WT.FOR SPT :63.50 kg.
CASING TYPE : Sx
WATER TABLE : 1.75 m below GL
DEPTH OF BORING/DRILLING : 40.0 m

DEPTH (m)	DESCRIPTION OF STRATA	DEPTH(m) From	DEPTH(m) To	Classification of Strata	Symbol	ROCK DRILLING RUN (m)	Core Recovery (%)	RQD (%)	WATER Loss (%)	WATER Colour of Return water	SOIL BORING COLLECTION OF SAMPLE Type	Depth (m)	SPT No of Blows for every 15 cm penetration 1	2	3	"N"
21.0	-do-			SM							DS	21.00	9	18	23	41
22.0			22.50													
		22.50									DS	22.50	10	27	29	56
23.0																
24.0											DS	24.00	12	28	32	60
25.0																
26.0											DS	25.50	11	25	33	58
27.0											DS	27.00	11	27	34	61
28.0																
29.0											DS	28.50	17	29	33	62
30.0											DS	30.00	18	31	34	65
31.0	Very dense,greyish brown silty fine to medium micaceous sand.Occasional presence of kankar.			SM / SP-SM							DS	31.50	22	35	44	79
32.0																
33.0											DS	33.00	25	34	46	80
34.0																
35.0											DS	34.50	31	38	50	88
36.0											DS	36.00	25	40	54	94
37.0																
38.0											DS	38.00	35	48	52	100
39.0																
40.0			40.00								DS	40.00	30	50	55	105

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Abbreviations used : UDS :Undisturbed Sam RQD :Rock Quality Designation
DS :Disturbed Sampl CRS :Rock core Sample

RITES Highway Division,Kolkata	CONSTRUCTION OF ROAD OVER BRIDGE AT ADISAPTAGRAM ON GT ROAD IN HOOGLY DISTRICT	Geotechnical Investigation at Adisaptagram

BOREHOLE LOG DATA SHEET

BORE HOLE NO 3(Three)
CHAINAGE :
GROUND LEVEL(m) : 17.300
COMMENCED ON 13.10.14
COMPLETED ON 15.10.14

METHOD OF EXPLORATION :Shell & Auger,Rotary MudCirculatior
SAMPLER HAMMER WT.FOR SPT :63.50 kg.
CASING TYPE : Sx
WATER TABLE : 1.70 m below GL
DEPTH OF BORING/DRILLING : 40.0 m

DEPTH (m)	DESCRIPTION OF STRATA	Depth (m) From	Depth (m) To	Classification of Strata	Symbol	ROCK DRILLING RUN (m)	Core Recovery (%)	RQD (%)	WATER Loss (%)	WATER Colour of Return water	SOIL BORING COLLECTION OF SAMPLE Type	Depth (m)	SPT No of Blows for every 15 cm penetration 1	2	3	"N"
0.0	Loose filed up ground comprising yellowish sand / sandy silt	0.00	2.00	Fill							DS	1.50	1	1	2	3
2.0	Medium stiff,greyish brown clayey silt /silty clay with little fine to medium sand.	2.00	10.00	MI							UDS	3.00				
3.0											DS	4.00				
4.0											DS	4.50	2	4	5	9
5.0																
6.0											DS	6.50	2	5	5	10
7.0											DS	7.50	3	3	3	6
8.0																
9.0											UDS	9.00				
10.0	Loose,grey silty medium to coarse sand.Lenses of mica observed.	10.00	12.00	SM							DS	10.50	2	3	3	6
11.0																
12.0	Stiff to very stiff,bluish to brownish grey silty clay / clayey silt with some sand and calcareous nodules.Traces of decomposed wood observed at the upper reaches of the layer.	12.00	20.50	CI/CL							DS	12.00	3	4	5	9
13.0											UDS	13.50				
14.0																
15.0											DS	15.00	6	9	11	20
16.0											UDS	16.50				
17.0																
18.0											DS	18.00	8	9	12	21
19.0																
20.0											DS	19.50	8	10	12	22

Abbreviations used : UDS :Undisturbed Sam RQD :Rock Quality Designation
DS :Disturbed Sampl CRS :Rock core Sample

BOREHOLE LOG DATA SHEET

BORE HOLE NO 3(Three)
CHAINAGE : 0
GROUND LEVEL(m) : 17.3
COMMENCED ON 13.10.14
COMPLETED ON 15.10.14

METHOD OF EXPLORATION :Shell & Auger,Rotary MudCirculatior
SAMPLER HAMMER WT.FOR SPT :63.50 kg.
CASING TYPE : Sx
WATER TABLE : 1.70 m below GL
DEPTH OF BORING/DRILLING : 40.0 m

DEPTH (m)	DESCRIPTION OF STRATA	DEPTH(m) From	DEPTH(m) To	Classification of Strata	Symbol	ROCK DRILLING RUN (m)	ROCK DRILLING Core Recovery (%)	ROCK DRILLING RQD (%)	ROCK DRILLING WATER Loss (%)	ROCK DRILLING WATER Colour of Return water	SOIL BORING COLLECTION OF SAMPLE Type	Depth (m)	SPT No of Blows for every 15 cm penetration 1	2	3	"N"
	-do-			CI/CL												
21.0	Medium to dense,yellowish brown silty fine to medium micaceous sand.	20.50	25.50	SM / SP-SM							DS	21.00	10	11	13	24
22.0																
23.0											DS	22.50	10	14	15	29
24.0											DS	24.00	11	15	20	35
25.0																
26.0	Very dense,greyish brown silty fine to medium micaceous sand.Occasional presence of kankar.	25.50	40.00								DS	25.50	12	24	34	58
27.0											DS	27.00	14	23	45	68
28.0											DS	28.50	13	25	46	71
29.0																
30.0											DS	30.00	14	27	49	76
31.0																
32.0											DS	31.50	24	42	53	95
33.0											DS	33.00	25	45	55	100
34.0																
35.0											DS	34.50	28	47	61	108
36.0											DS	36.00	26	49	60	109
37.0																
38.0											DS	38.00	25	48	65	113
39.0																
40.0			40.00								DS	40.00	21	46	69	115

Abbreviations used : UDS :Undisturbed Sam RQD :Rock Quality Designation
DS :Disturbed Sampl CRS :Rock core Sample

RITES Highway Division,Kolkata	CONSTRUCTION OF ROAD OVER BRIDGE AT ADISAPTAGRAM ON GT ROAD IN HOOGLY DISTRICT	Geotechnical Investigation at Adisaptagram

BOREHOLE LOG DATA SHEET

BORE HOLE NO 4(Four)
CHAINAGE :
GROUND LEVEL(m) : 17.500
COMMENCED ON 28.10.14
COMPLETED ON 31.10.14

METHOD OF EXPLORATION :Shell & Auger,Rotary MudCirculation
SAMPLER HAMMER WT.FOR SPT :63.50 kg.
CASING TYPE : Sx
WATER TABLE :1.60 m below GL
DEPTH OF BORING/DRILLING : 40.0 m

DEPTH (m)	DESCRIPTION OF STRATA	Depth (m) From	Depth (m) To	Classification of Strata	Symbol	ROCK DRILLING RUN (m)	Core Recovery (%)	RQD (%)	WATER Loss (%)	WATER Colour of Return water	SOIL BORING COLLECTION OF SAMPLE Type	Depth (m)	SPT No of Blows for every 15 cm penetration 1	2	3	"N"
0.0	Very loose filled up ground comprising local soil,rubbish etc.	0.00	2.00	Fill							DS	1.50	0	0	1	1
2.0	Loose,brownish grey,sandy silt with kankar.	2.00	3.50	ML							DS	3.00	2	3	4	7
4.0	Softf,dark grey,silty clay / clayey silt with varrying percentage of decomposed wood.	3.50	10.00	OH/OI							UDS	4.50				
5.0											DS	5.00				
6.0											DS	6.00	2	3	3	6
7.0											UDS	7.50				
8.0																
9.0											DS	9.00	1	2	3	5
10.0	Loose,bluish grey silty medium to coarse sand.	10.00	11.50	SM							DS	11.00	2	3	5	8
12.0	Stiff to very stiff,bluish to brownish grey silty clay / clayey silt with some sand and calcareous nodules.	11.50	19.00	CI/CH							DS	12.00	1	3	4	7
13.0											UDS	13.50				
14.0																
15.0											DS	15.00	3	5	8	13
16.0																
17.0											UDS	16.50				
18.0											DS	18.00	6	10	13	23
19.0	Medium to dense,yellowish brown silty fine to medium micaceous sand.	19.00	24.00	SM / SP-SM							DS	19.50	10	14	22	36
20.0																

Abbreviations used :

UDS :Undisturbed Sam RQD :Rock Quality Designation
DS :Disturbed Sampl CRS :Rock core Sample

RITES Highway Division,Kolkata	CONSTRUCTION OF ROAD OVER BRIDGE AT ADISAPTAGRAM ON GT ROAD IN HOOGLY DISTRICT	Geotechnical Investigation at Adisaptagram

BOREHOLE LOG DATA SHEET

BORE HOLE NO 4(Four)
CHAINAGE : 0
GROUND LEVEL(m) : 17.5
COMMENCED ON 28.10.14
COMPLETED ON 31.10.14

METHOD OF EXPLORATION :Shell & Auger,Rotary MudCirculation
SAMPLER HAMMER WT.FOR SPT :63.50 kg.
CASING TYPE : Sx
WATER TABLE :1.60 m below GL
DEPTH OF BORING/DRILLING : 40.0 m

DEPTH (m)	DESCRIPTION OF STRATA	DEPTH(m) From	DEPTH(m) To	Classification of Strata	Symbol	ROCK DRILLING RUN (m)	ROCK DRILLING Core Recovery (%)	ROCK DRILLING RQD (%)	ROCK DRILLING WATER Loss (%)	ROCK DRILLING WATER Colour of Return water	SOIL BORING COLLECTION OF SAMPLE Type	Depth (m)	SPT No of Blows for every 15 cm penetration 1	2	3	"N"
21.0	-do-			SM /SP-SM							DS	21.00	11	15	20	35
22.0											DS	22.50	12	20	28	48
23.0																
24.0		24.00									DS	24.00	17	24	30	54
25.0																
26.0											DS	25.50	20	28	36	64
27.0											DS	27.00	17	32	40	72
28.0																
29.0											DS	28.50	23	38	40	78
30.0											DS	30.00	25	35	47	82
31.0																
32.0	Very dense,greyish brown silty fine to medium micaceous sand.Occasional presence of kankar.										DS	31.50	24	42	50	92
33.0											DS	33.00	28	45	50	95
34.0																
35.0											DS	34.50	32	48	57	105
36.0											DS	36.00	30	50	50 blows for 12cm	84 >100
37.0																
38.0											DS	38.00	32	54	50 blows for 10cm	>100
39.0																
40.0			40.00								DS	40.00	43	50 blows for 12cm		>100

Abbreviations used : UDS :Undisturbed Sam RQD :Rock Quality Designation
DS :Disturbed Sampl CRS :Rock core Sample

BOREHOLE LOG DATA SHEET

BORE HOLE NO 5(Five)
CHAINAGE :
GROUND LEVEL(m) :16.700
COMMENCED ON 21.10.14
COMPLETED ON 26.10.14

METHOD OF EXPLORATION :Shell & Auger,Rotary MudCirculation
SAMPLER HAMMER WT.FOR SPT :63.50 kg.
CASING TYPE : Sx
WATER TABLE :1.70 m below GL
DEPTH OF BORING/DRILLING :40.0 m

DEPTH (m)	DESCRIPTION OF STRATA	Depth (m) From	Depth (m) To	Classification of Strata	Symbol	ROCK DRILLING RUN (m)	Core Recovery (%)	RQD (%)	WATER Loss (%)	WATER Colour of Return water	SOIL BORING COLLECTION OF SAMPLE Type	Depth (m)	SPT No of Blows for every 15 cm penetration 1	2	3	"N"
0.0 - 1.0	Loose filed up ground comprising yellowish sand / sandy silt	0.00	2.00	Fill							DS	1.50	2	3	4	7
2.0 - 4.0	Medium stiff,greyish brown silty clay with traces of fine sand.	2.00	4.50	CI							UDS	3.00				
4.0 - 5.0	Loose,grey, sandy silt with lenses of mica.	4.50	6.00	ML							DS	4.50	2	3	3	6
											DS	5.00				
6.0	Stiff ,bluish to brownish grey silty clay / clayey silt with traces of sand and calcareous nodules.Occasional presence of decomposed wood in traces.	6.00	19.00	CI/MH							DS	7.50	2	3	3	6
9.0											UDS	9.00				
10.0											DS	10.50	2	3	4	7
12.0											DS	12.50	2	2	3	5
13.0											DS	13.50	2	3	4	7
15.0											UDS	15.00				
16.0											DS	16.50	4	5	5	10
18.0											UDS	18.00				
19.0 - 20.0	Medium dense to dense,greyish brown to yellowish brown silty micaceous fine to medium sand.	19.00	26.00	SM / SP-SM							DS	19.50	7	7	11	18

Abbreviations used : UDS :Undisturbed Sam RQD :Rock Quality Designation
DS :Disturbed Sampl CRS :Rock core Sample

BOREHOLE LOG DATA SHEET

BORE HOLE NO 5(Five)
CHAINAGE : 0
GROUND LEVEL(m) :16.7
COMMENCED ON 21.10.14
COMPLETED ON 26.10.14

METHOD OF EXPLORATION :Shell & Auger,Rotary MudCirculation
SAMPLER HAMMER WT.FOR SPT :63.50 kg.
CASING TYPE : Sx
WATER TABLE :1.70 m below GL
DEPTH OF BORING/DRILLING :40.0 m

DEPTH (m)	DESCRIPTION OF STRATA	DEPTH(m) From	DEPTH(m) To	Classification of Strata	Symbol	ROCK DRILLING RUN (m)	ROCK DRILLING Core Recovery (%)	ROCK DRILLING RQD (%)	WATER Loss (%)	WATER Colour of Return water	SOIL BORING COLLECTION OF SAMPLE Type	Depth (m)	SPT No of Blows for every 15 cm penetration 1	2	3	"N"
21.0											DS	21.00	7	10	15	25
22.0											DS	22.50	8	12	12	24
23.0	-do-															25
24.0											DS	24.00	8	15	17	32
25.0											DS	25.50	10	20	22	42
26.0		26.00														
27.0											DS	27.00	20	25	36	61
28.0											DS	28.50	21	27	40	67
29.0																
30.0											DS	30.00	18	30	42	72
31.0											DS	31.50	20	35	45	80
32.0																
33.0	Very dense,greyish brown silty fine to medium micaceous sand.Occasional presence of kankar.			SM / SP-SM							DS	33.00	15	30	42	72
34.0																
35.0											DS	34.50	18	25	48	73
36.0											DS	36.00	19	30	51	81
37.0																
38.0											DS	38.00	25	40	47	87
39.0																
40.0			40.00								DS	40.00	30	45	47	92

Abbreviations used : UDS :Undisturbed Sam RQD :Rock Quality Designation
DS :Disturbed Sampl CRS :Rock core Sample

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