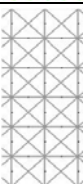

Package -2

Sl. No.	Land Slide Zone No.	Raod Marking (KM)	Design Chainage (KM)	Number of Bore-holes
1	A28	73+500	73+900	1
2	A29	75+200	75+860	1
3	A33	75+500	76+350	1
4	A30	88+000	88+425	1
5	A31	88+100	88+470	1
6	B01	104+500	106+375	1

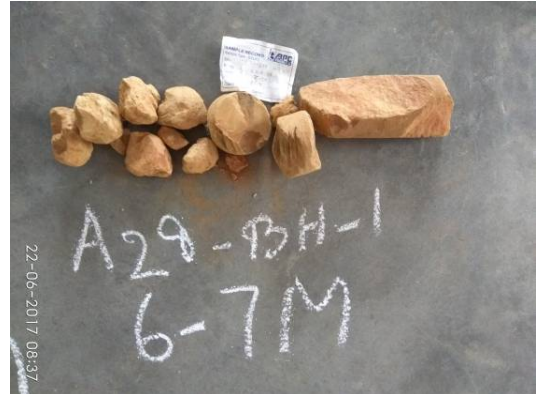
Bore Log and Core Sample Photographs LS-A28

Project Name :		Consultancy Services for additional Topographical, Geotechnical Survey for widening and upgradation of NH-54 from km 8.00 to km 380.00 in the State of Mizoram.				BPC Consultant INDIA (P) Ltd.														
Client Name :		M/s National Highways and Infrastructure Development Corporation Limited. (NHIDCL), Delhi.				 2 nd Floor, NATARAJ BHAWAN, Haripal, Hooghly, 712405. (WB) www.bpci.com														
Work Order No. :		NHIDCL/NH-54/DPR-Add. Survey/2016/168 dated on 16.12.2016																		
BORE / CORE LOG DATA SHEET																				
Job Code - P160																				
Chainage (km)		73+500		Sliding Zone		LS_A28		No. of Core (C)				6								
Borehole No.		1		Commencement Date		01.05.2017		No. of SP Test (S)				10								
Ground Elevation (m)		1022.1630		Completion Date		05.05.2017		No. of Undisturbed (U)				0								
Method of Boring		Rotary Drilling		Standing Water Level		12.20 M BELOW G.L.		No. of Disturbed (D)				11 (D - 1 & S - 10)								
Borehole Diameter		150 mm & 75 mm		Termination Depth		15.06 M BELOW G.L.		No. of Water Sample (W)				1								
Description of Soil Stratum & Rock Methology		Stratum Elevation As per R.L (m)		Hatching Pattern		Elevation As per R.L (m)		Run Length (m)	Type of Sample	SPT Values (Blows for every 15 cm penetration)			N Values (S-2131)	Corrected N*	Total Core Length (cm)	TCR (%)	ROD (%)	Colours of return Water	Water Loss	Angle of Fracture
		From	To			From	To			15cm	15cm	15cm								
Stiff to Very Stiff to Hard, Reddish / Brownish, Silty Clay with traces of gravels. (CI) 0.00 m to 5.00 m		1022.1630	1017.1630		1021.6630		-	D	-	-	-	-	-	-	-	-	Brownish	-	-	
		1021.1630			-	S	3	5	7	12	-	-	-	-	-	-				
		1020.1630			-	S	4	6	10	16	-	-	-	-	-	-				
		1019.1630			-	S	6	9	13	22	-	-	-	-	-	-				
		1018.1630			-	S	8	15	21	36	-	-	-	-	-	-				
Highly Weathered, Brownish / Reddish, Fine grained Sandstone. 5.00 m to 9.00 m		1017.1630	1013.1630		1017.1630		-	S	12cm / 56B	Re	Re	>100	70	-	-	-	Brownish	-	-	
		1017.0430			-	S	-	-	-	-	-	25	25	NIL	-	-				
		1016.1630			1.00	R1	-	-	-	-	-	-	32	32	NIL	-		-		
		1015.1630			1.00	R2	-	-	-	-	-	-	13	13	13	-		-		
		1014.1630			1.00	R3	-	-	-	-	-	-	24	24	NIL	-		-		
Hard / Compacted, Light Brownish grey, Silty Clay with traces of sand. (CI) 9.00 m to 13.00 m		1013.1630	1009.1630		1013.1630		1.00	R4	-	-	-	-	-	24	24	NIL	Light Brownish	Partial	Measurement not possible due to heavy broken small pieces	
		1012.1630			1.00	R5	-	-	-	-	-	NIL	NIL	NIL						
		1012.1630			-	S	18	35	43	78	-	-	-	-	-					
		1011.1630			1.00	R6	-	-	-	-	-	-	NIL	NIL	NIL					
		1011.1630			-	S	24	42	55	97	-	-	-	-	-					
		1010.1630			1.00	R7	-	-	-	-	-	-	NIL	NIL	NIL					
		1010.1630			-	S	33	10cm / 63B	Re	>100	55	-	-	-	-					
Highly Weathered, Light Brownish / Yellowish, Fine grained Very Poor Shale with thinly bedded laminated Sandstone. 13.00 m to 15.06 m		1009.1630	1003.1630		1009.1630		1.00	R8	-	-	-	-	-	NIL	NIL	NIL	Light Brownish	Partial	Measurement not possible due to heavy broken small pieces	
		1009.0130			-	S	15cm / 58B	Re	Re	>100	54	-	-	-						
		1008.1630			1.00	R9	-	-	-	-	-	-	20	20	NIL					
		1007.1630			1.00	R10	-	-	-	-	-	-	18	18	NIL					
					1007.1030		-	S	6cm / 66B	Re	Re	>100	52	-	-	-				
Re: Refusal R : Run RQD : Rock Quality Designation TCR : Total Core Recovery U* : UDS Could not been Collected (Slipped)																				
Slip Plane - 13 m.																				

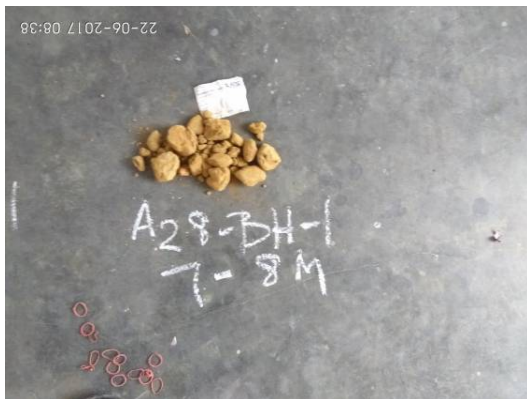
➤ **LS- A28 (BH-1) at CHAINAGE(km)- 73+500**



PICTURE 292: BH-1 (Depth-5.00 to 6.00m)



PICTURE 293: BH-2 (Depth-6.00 to 7.00m)



PICTURE 294: BH-3 (Depth-7.00 to 8.00m)



PICTURE 295: BH-4 (Depth-8.00 to 9.00m)



PICTURE 296: BH-5 (Depth-13.00 to 14.00m)

Bore Log and Core Sample Photographs LS-A29

Project Name		Consultancy Services for additional Topographical, Geotechnical Survey for widening and upgradation of NH-54 from km 8.00 to km 380.00 in the State of Mizoram.				BPC Consultant INDIA (P) Ltd.													
Client Name		M/s National Highways and Infrastructure Development Corporation Limited. (NHIDCL), Delhi.				 2 nd Floor, NATARAJ BHAWAN, Haripal, Hooghly, 712405. (WB) www.bpci.pl.com													
Work Order No.		NHIDCL/NH-54/DPR-Add. Survey/2016/168 dated on 16.12.2016																	
BORE / CORE LOG DATA SHEET																			
Job Code - P160																			
Chainage (km)		75+200		Sliding Zone		LS_A29		No. of Core (C)				7							
Borehole No.		1		Commencement Date		04.05.2017		No. of SP Test (S)				13							
Ground Elevation (m)		1067.7430		Completion Date		08.05.2017		No. of Undisturbed (U)				0							
Method of Boring		Rotary Drilling		Standing Water Level		8.70 M BELOW G.L.		No. of Disturbed (D)				14 (D - 1 & S - 13)							
Borehole Diameter		150 mm & 75 mm		Termination Depth		20.00 M BELOW G.L.		No. of Water Sample (W)				1							
Description of Soil Stratum & Rock Methology	Stratum Elevation As per R.L (m)		Hatching Pattern	Elevation As per R.L (m)		Run Length (m)	Type of Sample	SPT Values (Blows for every 15 cm penetration)			N Values (S-2131)	Corrected N*	Total Core Length (cm)	TCR (%)	RQD (%)	Colours of return Water	Water Loss	Angle of Fracture	
	From	To		From	To			15cm	15cm	15cm									
Stiff to Very Stiff, Brownish Grey, Silty Clay / Clayey Silt with traces of broken Siltstone & sand. (CI) 0.00 m to 5.00 m	1067.7430			1067.2430		-	D	-	-	-	-	-	-	-	-	-	-	-	
				1066.7430	1066.2930	-	S	5	5	6	11	-	-	-	-	-	-	-	
				1066.2430	1065.7930	-	U*	-	-	-	-	-	-	-	-	-	-	-	
				1065.7430	1065.2930	-	S	7	8	12	20	-	-	-	-	-	-	-	
				1064.7430	1064.2930	-	S	6	9	13	22	-	-	-	-	-	-	-	
				1063.7430	1063.2930	-	S	8	11	16	27	-	-	-	-	-	-	-	
Hard, Brownish / Yellowish Grey, Silty Clay / Clayey Silt with little broken Claystone mixed. (CI) 5.00 m to 13.00 m	1062.7430			1062.7430		-	S	10	13	23	36	-	-	-	-	-	-	-	
				1061.7430	1061.2930	-	S	11	12	21	33	-	-	-	-	-	-	-	
				1060.7430	1060.2930	-	S	12	15	20	35	-	-	-	-	-	-	-	
				1059.7430	1059.2930	-	S	13	17	27	44	-	-	-	-	-	-	-	
				1058.7430	1058.2930	-	S	12	15	26	41	-	-	-	-	-	-	-	
				1057.7430	1057.2930	-	S	14	19	31	50	-	-	-	-	-	-	-	
				1056.7430	1056.2930	-	S	11	20	33	53	-	-	-	-	-	-	-	
				1055.7430	1055.2930	-	S	15	22	35	57	-	-	-	-	-	-	-	
				1054.7430	1054.2930	-	S	15	22	35	57	-	-	-	-	-	-	-	
Highly Weathered, Brownish / Yellowish Grey, Fine grained highly fracture Poor Sandstone. 13.00 m to 20.00 m	1054.7430			1054.7430		-	S	42	10cm / 71B	Re	>100	54	-	-	-	-	-	-	
				1054.7430	1053.7430	1.00	R1	-	-	-	-	-	29	29	NIL	Brownish	Partial	**	
				1053.7430	1052.7430	1.00	R2	-	-	-	-	-	19	19	NIL				
				1052.7430	1051.7430	1.00	R3	-	-	-	-	-	22	22	NIL				
				1051.7430	1050.7430	1.00	R4	-	-	-	-	-	25	25	NIL			**	
				1050.7430	1049.7430	1.00	R5	-	-	-	-	-	18	18	NIL				
				1049.7430	1048.7430	1.00	R6	-	-	-	-	-	32	32	NIL				
				1048.7430	1047.7430	1.00	R7	-	-	-	-	-	56	56	NIL				
				1047.7430	1047.7430														
Re: Refusal R : Run RQD : Rock Quality Designation TCR : Total Core Recovery U* : UDS Could not been Collected (Slipped)																			
Slip Plane - 4m																			
** Measurement not possible due to heavy broken small pieces.																			

➤ LS- A29 (BH-1) at CHAINAGE(km)- 75+200



PICTURE 297: BH-1 (Depth-13.00 to 14.00m)



PICTURE 298: BH-1 (Depth-14.00 to 15.00m)



PICTURE 299: BH-1 (Depth-15.00 to 16.00m)



PICTURE 300: BH-1 (Depth-16.00 to 17.00m)



PICTURE 301: BH-1 (Depth-17.00 to 18.00m)



PICTURE 302: BH-1 (Depth-18.00 to 19.00m)

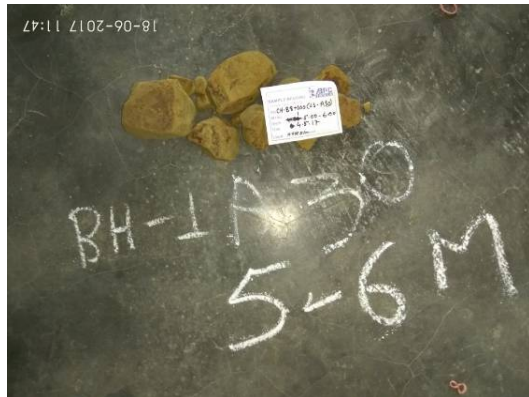


PICTURE 303: BH-1 (Depth-19.00 to 20.00m)

Bore Log and Core Sample Photographs LS-A30

Project Name :	Consultancy Services for additional Topographical, Geotechnical Survey for widening and upgradation of NH-54 from km 8.00 to km 380.00 in the State of Mizoram.				BPC Consultant INDIA (P) Ltd.  2 nd Floor, NATARAJ BHAWAN, Haripal, Hooghly, 712405. (WB) www.bpcipl.com																		
Client Name :	M/s National Highways and Infrastructure Development Corporation Limited. (NHIDCL), Delhi.																						
Work Order No. :	NHIDCL/NH-54/DPR-Add. Survey/2016/168 dated on 16.12.2016																						
BORE / CORE LOG DATA SHEET																							
Job Code - P160																							
Chainage (km)	88+000		Sliding Zone		LS_A30		No. of Core (C)		10														
Borehole No.	1		Commencement Date		04.05.2017		No. of SP Test (S)		5														
Ground Elevation (m)	930.5126		Completion Date		06.05.2017		No. of Undisturbed (U)		0														
Method of Boring	Rotary Drilling		Standing Water Level		9.60 M BELOW G.L.		No. of Disturbed (D)		6 (D - 1 & S - 6)														
Borehole Diameter	150 mm & 75 mm		Termination Depth		15.00 M BELOW G.L.		No. of Water Sample (W)		1														
Description of Soil Stratum & Rock Methology	Stratum Elevation As per R.L (m)		Hatching Pattern	Elevation As per R.L (m)		Run Length (m)	Type of Sample	SPT Values (Blows for every 15 cm penetration)			N Values IS-2131	Corrected N"	Total Core Length (cm)	TCR (%)	RQD (%)	Colours of return Water	Water Loss	Angle of Fracture					
	From	To		From	To			15cm	15cm	15cm													
Hard, Light Brownish, Clayey Silt with some % of sandstone pieces. (CL) 0.00 m to 4.00 m	930.5126	926.5126		930.0126	-	D	-	-	-	-	-	-	-	-	-	-	-	-					
	929.5126			929.0626	-	S	19	20	20	40	-	-	-	-	-	-	-	-					
	928.5126			928.0626	-	S	21	22	24	46	-	-	-	-	-	-	-	-					
	927.5126			927.0626	-	S	26	29	33	62	-	-	-	-	-	-	-	-					
Moderately Weathered, Light Greyish, Fine grained highly fracture Sandstone with thinly bedded Shale observed with infilling silt & clay. 4.00 m to 15.00 m	926.5126	915.5126		926.5126	-	S	10Cm / 60B	Re	Re	>100	74	-	-	-	-	-	-	-					
	926.5126			925.5126	1.00	R1	-	-	-	-	-	NIL	NIL	NIL	Greyish Partial	Partial	-						
	925.5126			925.4526	-	S	6Cm / 48B	Re	Re	>100	70	-	-	-			-						
	925.5126			924.5126	1.00	R2	-	-	-	-	-	17	17	NIL			-						
	924.5126			923.5126	1.00	R3	-	-	-	-	-	17	17	NIL			50°						
	923.5126			922.5126	1.00	R4	-	-	-	-	-	22	22	NIL			*						
	922.5126			921.5126	1.00	R5	-	-	-	-	-	16	16	NIL									
	921.5126			920.5126	1.00	R6	-	-	-	-	-	16	16	NIL									
	920.5126			919.5126	1.00	R7	-	-	-	-	-	18	18	NIL			60°						
	919.5126			918.5126	1.00	R8	-	-	-	-	-	13	13	NIL			*						
	918.5126			917.5126	1.00	R9	-	-	-	-	-	15	15	NIL									
	917.5126			916.5126	1.00	R10	-	-	-	-	-	20	20	NIL									
	916.5126			915.5126	1.00	R11	-	-	-	-	-	16	16	NIL			66°						
	Re: Refusal R : Run RQD : Rock Quality Designation TCR : Total Core Recovery U* : UDS Could not been Collected (Slipped)																						
	Slip Plane - Did Not Recognise .																						
** Measurement not possible due to heavy broken small pieces																							

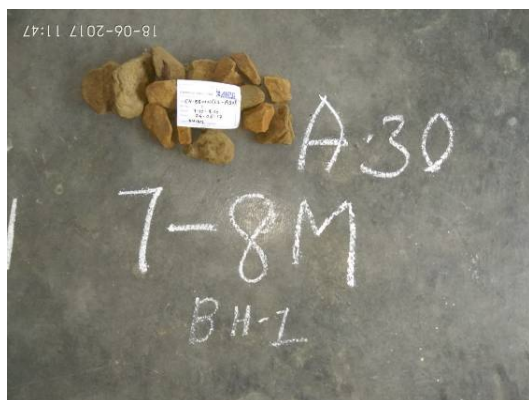
➤ **LS- A30 (BH-1) at CHAINAGE(km)- 88+000**



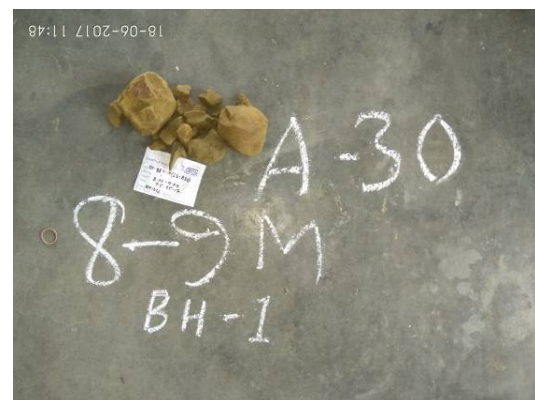
PICTURE 310: BH-1 (Depth-5.00 to 6.00m)



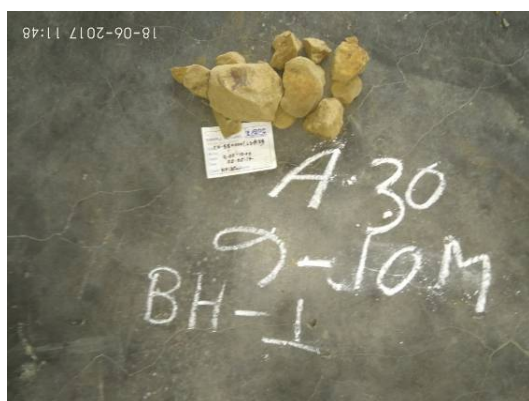
PICTURE 311: BH-1 (Depth-6.00 to 7.00m)



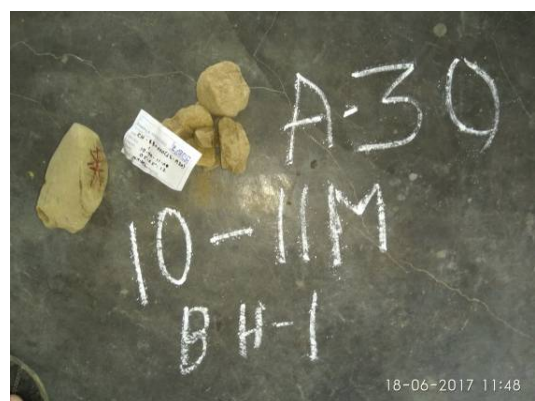
PICTURE 312: BH-1 (Depth-7.00 to 8.00m)



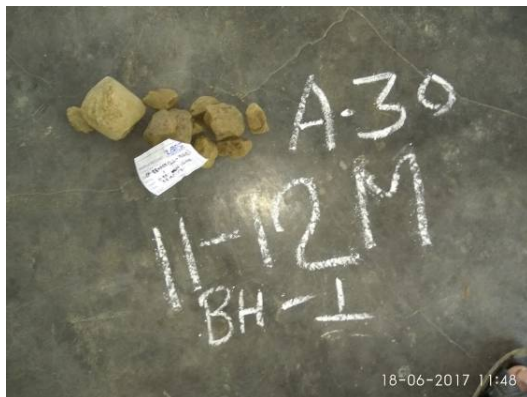
PICTURE 313: BH-1 (Depth-8.00 to 9.00m)



PICTURE 314: BH-1 (Depth-9.00 to 10.00m)



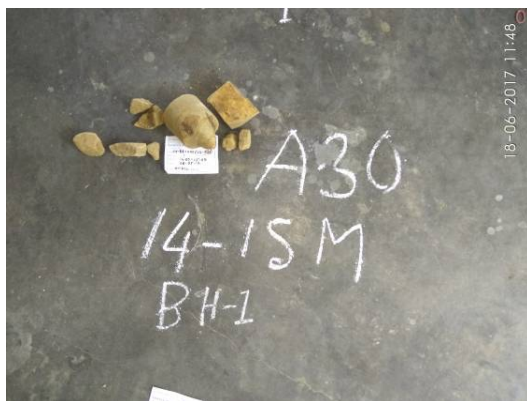
PICTURE 315: BH-1 (Depth-10.00 to 11.00m)



PICTURE 316: BH-1 (Depth-11.00 to 12.00m)



PICTURE 317: BH-1 (Depth-12.00 to 13.00m)



PICTURE 318: BH-1 (Depth-14.00 to 15.00m)

Bore Log and Core Sample Photographs LS-A31

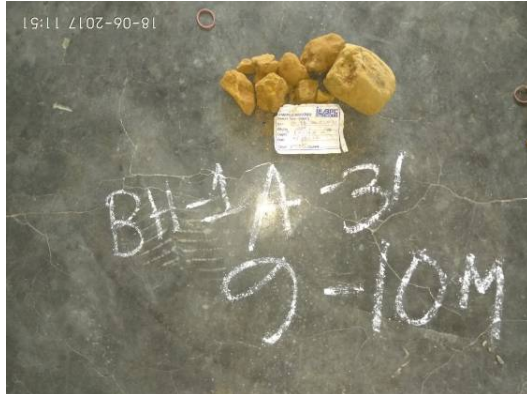
Project Name		Consultancy Services for additional Topographical, Geotechnical Survey for widening and upgradation of NH-54 from km 8.00 to km 380.00 in the State of Mizoram.					BPC Consultant INDIA (P) Ltd.											
Client Name		M/s National Highways and Infrastructure Development Corporation Limited. (NHIDCL), Delhi.					 2 nd Floor, NATARAJ BHAWAN, Haripal, Hooghly, 712405. (WB) www.bpcipl.com											
Work Order No.		NHIDCL/NH-54/DPR-Add. Survey/2016/168 dated on 16.12.2016																
BORE / CORE LOG DATA SHEET																		
Job Code - P160																		
Chainage (km)		88+100		Sliding Zone		LS_A31		No. of Core (C)				6						
Borehole No.		1		Commencement Date		04.05.2017		No. of SP Test (S)				9						
Ground Elevation (m)		931.1485		Completion Date		05.05.2017		No. of Undisturbed (U)				0						
Method of Boring		Rotary Drilling		Standing Water Level		7.55 M BELOW G.L.		No. of Disturbed (D)				10 (D - 1 & S - 9)						
Borehole Diameter		150 mm & 75 mm		Termination Depth		15.00 M BELOW G.L.		No. of Water Sample (W)				1						
Description of Soil Stratum & Rock Methology	Stratum Elevation As per R.L (m)		Hatching Pattern	Elevation As per R.L (m)		Run Length (m)	Type of Sample	SPT Values (Blows for every 15 cm penetration)			N Values (S-2131)	Corrected N*	Total Core Length (cm)	TCR (%)	RQD (%)	Colours of return Water	Water Loss	Angle of Fracture
	From	To		From	To			15cm	15cm	15cm								
Very Stiff, Reddish / Yellowish, Silty Clay with traces of stone dust / sand. (CI) 0.00 m to 6.00 m	931.1485			930.6485		-	D	-	-	-	-	-	-	-	-	-	-	-
	930.1485			-	S	4	7	11	18	-	-	-	-	-	-	-	-	
	929.6485			929.6985	-	U*	-	-	-	-	-	-	-	-	-	-	-	-
	929.1485			929.1985	-	S	5	10	15	25	-	-	-	-	-	-	-	-
	928.1485			928.6985	-	S	7	12	16	28	-	-	-	-	-	-	-	-
	927.1485			927.6985	-	S	8	11	18	29	-	-	-	-	-	-	-	-
	926.1485			926.6985	-	S	10	10	16	26	-	-	-	-	-	-	-	-
	925.1485			925.6985	-	S	10	10	16	26	-	-	-	-	-	-	-	-
Hard, Brownish / Yellowish, Clayey Silt with some % of broken sandstone / stone dust & sand mixed. (CL) 6.00 m to 9.00 m	925.1485			925.1485		-	S	13	21	24	45	-	-	-	-	-	-	-
	924.1485			924.6985	-	S	12	22	23	45	-	-	-	-	-	-	-	
	923.1485			923.6985	-	S	14	23	24	47	-	-	-	-	-	-	-	
	922.1485			922.6985	-	S	12cm / 59B	Re	Re	>100	60	-	-	-	-	-	-	
Highly Weathered, Brownish / Yellowish, Fine grained Weak Sandstone. 9.00 m to 15.00 m	922.1485			922.1485		-	S	12cm / 59B	Re	Re	>100	60	-	-	-	-	-	-
	922.0285			-	S	12cm / 59B	Re	Re	>100	60	-	-	-	-	-	-	-	
	921.1485			1.00	R1	-	-	-	-	-	10	10	NIL	Brownish	Partial	**		
	920.1485			1.00	R2	-	-	-	-	-	9	9	NIL					
	919.1485			1.00	R3	-	-	-	-	-	8	8	NIL					
	918.1485			1.00	R4	-	-	-	-	-	10	10	NIL					
	917.1485			1.00	R5	-	-	-	-	-	11	11	NIL					
	916.1485			1.00	R6	-	-	-	-	-	12	12	NIL					

Re: Refusal R : Run RQD : Rock Quality Designation TCR : Total Core Recovery U* : UDS Could not be Collected (Slipped)

Slip Plane - 9.00 m

** Measurement not possible due to heavy broken small pieces

➤ **LS- A31 (BH-1) at CHAINAGE(km)- 88+100**



PICTURE 319: BH-1 (Depth-9.00 to 10.00m)



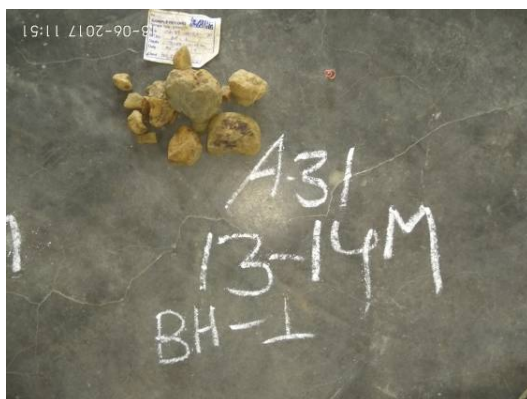
PICTURE 320: BH-1 (Depth-10.00 to 11.00m)



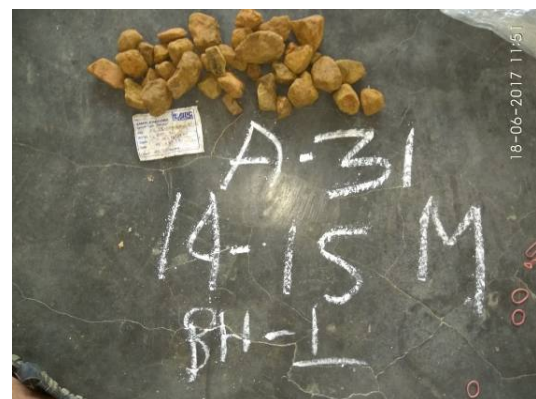
PICTURE 321: BH-1 (Depth-11.00 to 12.00m)



PICTURE 322: BH-1 (Depth-12.00 to 13.00m)

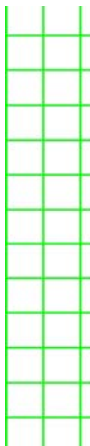
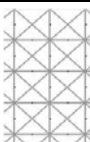


PICTURE 323: BH-1 (Depth-13.00 to 14.00m)



PICTURE 324: BH-1 (Depth-14.00 to 15.00m)

Bore Log and Core Sample Photographs LS-A33

Project Name		Consultancy Services for additional Topographical, Geotechnical Survey for widening and upgradation of NH-54 from km 8.00 to km 380.00 in the State of Mizoram.										BPC Consultant INDIA (P) Ltd.																		
Client Name		M/s National Highways and Infrastructure Development Corporation Limited. (NHIDCL), Delhi.										 2 nd Floor, NATARAJ BHAWAN, Haripal, Hooghly, 712405. (WB) www.bpci.com																		
Work Order No.		NHIDCL/NH-54/DPR-Add. Survey/2016/168 dated on 16.12.2016																												
BORE / CORE LOG DATA SHEET																														
Job Code - P160																														
Chainage (km)		75+500		Sliding Zone		LS_A33		No. of Core (C)				6																		
Borehole No.		1		Commencement Date		10.05.2017		No. of SP Test (S)				9																		
Ground Elevation (m)		1045.8970		Completion Date		13.05.2017		No. of Undisturbed (U)				0																		
Method of Boring		Rotary Drilling		Standing Water Level		8.95 M BELOW G.L.		No. of Disturbed (D)				10 (D - 1 & S - 9)																		
Borehole Diameter		150 mm & 75 mm		Termination Depth		15.00 M BELOW G.L.		No. of Water Sample (W)				1																		
Description of Soil Stratum & Rock Methology		Stratum Elevation As per R.L (m)		Hatching Pattern		Elevation As per R.L (m)		Run Length (m)		Type of Sample		SPT Values (Blows for every 15 cm penetration)			N Values IS-2131		Corrected N"		Total Core Length (cm)		TCR (%)		RQD (%)		Colours of return Water		Water Loss		Angle of Fracture	
		From	To			From	To					15cm	15cm	15cm																
Hard / Compacted, Brownish Grey, Silty Clay / Clayey Silt with some % of broken Siltstone & stone dust mixed. (CL) 0.00 m to 9.00 m		1045.8970			1045.3970		-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					1044.8970	1044.4470	-	S	15	18	23	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					1043.8970	1043.4470	-	S	14	19	25	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					1042.8970	1042.4470	-	S	10	13	21	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					1041.8970	1041.4470	-	S	12	16	23	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					1040.8970	1040.4470	-	S	15	19	26	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					1039.8970	1039.6970	-	S	42	5Cm / 57B	Re	>100	67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					1038.8970	1038.6870	-	S	49	6Cm / 59B	Re	>100	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					1037.8970	1037.4470	-	S	19	23	27	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Greyish, Fine grained moderately strong Sandstone. 9.00 m to 14.00 m		1036.8970			1036.8970		-	S	48	10Cm / 52B	Re	>100	60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
					1036.6470	1.00	R1	-	-	-	-	-	31	31	NIL	Greyish	Partial	* Vertical 80° -90° Vertical 80° -90° 70° 68°												
					1035.8970	1.00	R2	-	-	-	-	-	26	26	NIL															
					1034.8970	1.00	R3	-	-	-	-	-	19	19	NIL															
					1033.8970	1.00	R4	-	-	-	-	-	34	34	NIL															
					1032.8970	1.00	R5	-	-	-	-	-	42	42	NIL															
Greyish, Fine grained Soft Sandy Shale. 14.00 m to 15.00 m		1031.8970			1031.8970		1.00	R6	-	-	-	-	-	56	56				NIL											
					1030.8970																									
Re: Refusal R : Run RQD : Rock Quality Designation TCR : Total Core Recovery U* : UDS Could not been Collected (Slipped)																														
Slip Plane - 9.00 m.																														
** Measurement not possible due to heavy broken small pieces.																														

➤ **LS- A33 (BH-1) at CHAINAGE(km)- 75+500**



PICTURE 304: BH-1 (Depth-9.00 to 10.00m)



PICTURE 305: BH-1 (Depth-10.00 to 11.00m)



PICTURE 306: BH-1 (Depth-11.00 to 12.00m)



PICTURE 307: BH-1 (Depth-12.00 to 13.00m)

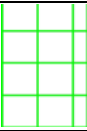
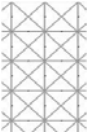
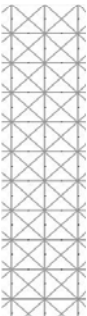
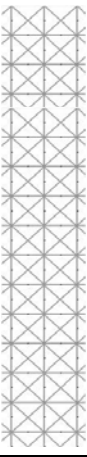


PICTURE 308: BH-1 (Depth-13.00 to 14.00m)



PICTURE 309: BH-1 (Depth-14.00 to 15.00m)

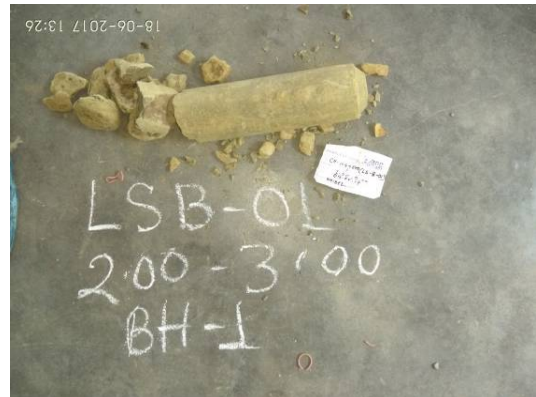
Bore Log and Core Sample Photographs LS-B01

Project Name		Consultancy Services for additional Topographical, Geotechnical Survey for widening and upgradation of NH-54 from km 8.00 to km 380.00 in the State of Mizoram.					BPC Consultant INDIA (P) Ltd.											
Client Name		M/s National Highways and Infrastructure Development Corporation Limited. (NHIDCL), Delhi.					 2 nd Floor, NATARAJ BHAWAN, Haripal, Hooghly, 712405. (WB) www.bpci.pl.com											
Work Order No.		NHIDCL/NH-54/DPR-Add. Survey/2016/168 dated on 16.12.2016																
BORE / CORE LOG DATA SHEET																		
Job Code - P160																		
Chainage (km)		104+500		Sliding Zone		LS_B01		No. of Core (C)				19						
Borehole No.		1		Commencement Date		09.05.2017		No. of SP Test (S)				1						
Ground Elevation (m)		898.2688		Completion Date		13.05.2017		No. of Undisturbed (U)				0						
Method of Boring		Rotary Drilling		Standing Water Level		8.50 M BELOW G.L.		No. of Disturbed (D)				1						
Borehole Diameter		150 mm & 75 mm		Termination Depth		20.00 M BELOW G.L.		No. of Water Sample (W)				1						
Description of Soil Stratum & Rock Methology	Stratum Elevation As per R.L (m)		Hatching Pattern	Elevation As per R.L (m)		Run Length (m)	Type of Sample	SPT Values (Blows for every 15 cm penetration)			N Values IS-2131	Corrected N"	Total Core Length (cm)	TCR (%)	ROD (%)	Colours of return Water	Water Loss	Angle of Fracture
	From	To		From	To			15cm	15cm	15cm								
Brownish, Clayey Silt with little fine sand & stone bats mixed. (CL) 0.00 m to 1.00 m	898.2688			897.7688		-	D	-	-	-	-	-	-	-	-	-	-	-
Highly Weathered, Grey, Highly fracture Soft Shale. 1.00 m to 3.00 m	897.2688			897.2688		-	S	3cm / 48B	Re	Re	>100	97	-	-	-	-	-	-
				897.2688	897.2388	1.00	R1	-	-	-	-	-	42	42	NIL			-
				896.2688		1.00	R2	-	-	-	-	-	28	28	NIL			78°
				895.2688		1.00	R3	-	-	-	-	-	62	62	NIL			90°
Moderately Weathered, Dark greyish, Fine grained moderately fracture Strong Sandy Shale. 3.00 m to 10.00 m	895.2688			895.2688		1.00	R4	-	-	-	-	-	72	72	NIL			80°-90°
				894.2688		1.00	R5	-	-	-	-	-	75	75	NIL			80°-90°
				893.2688		1.00	R6	-	-	-	-	-	56	56	NIL			75°-80°
				892.2688		1.00	R7	-	-	-	-	-	57	57	NIL			80°
				891.2688		1.00	R8	-	-	-	-	-	77	77	NIL			60°-70°
				890.2688		1.00	R9	-	-	-	-	-	70	70	NIL			70°-80°
				889.2688		1.00	R10	-	-	-	-	-	72	72	15			66°
				888.2688		1.00	R11	-	-	-	-	-	73	73	38			78°, 77°
				887.2688		1.00	R12	-	-	-	-	-	72	72	32			72°, 75°, 68°
				886.2688		1.00	R13	-	-	-	-	-	74	74	27			68°
Dark greyish / Greyish, Fine grained slightly fracture Strong Shale with laminated Sandstone observed of some layer. 10.00 m to 20.00 m	886.2688			885.2688		1.00	R14	-	-	-	-	-	63	63	35			45°
				884.2688		1.00	R15	-	-	-	-	-	72	72	10			70°-80°
				883.2688		1.00	R16	-	-	-	-	-	76	76	35			-
				882.2688		1.00	R17	-	-	-	-	-	56	56	NIL			75°, 73°
				881.2688		1.00	R18	-	-	-	-	-	70	70	19			70°
				880.2688		1.00	R19	-	-	-	-	-	72	72	27			75°-80°
				879.2688		1.00												
				878.2688		1.00												
Re: Refusal R : Run RQD : Rock Quality Designation TCR : Total Core Recovery U* : UDS Could not been Collected (Slipped)																		
Slip Plane - 10.00 m																		

➤ **LS- B01 (BH-1) at CHAINAGE(km)- 104+500**



PICTURE 325: BH-1 (Depth-1.00 to 2.00m)



PICTURE 326: BH-1 (Depth-2.00 to 3.00m)



PICTURE 327: BH-1 (Depth-3.00 to 4.00m)



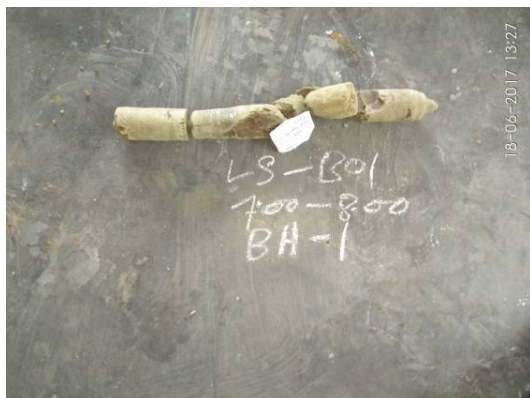
PICTURE 328: BH-1 (Depth-4.00 to 5.00m)



PICTURE 329: BH-1 (Depth-5.00 to 6.00m)



PICTURE 330: BH-1 (Depth-6.00 to 7.00m)



PICTURE 331: BH-1 (Depth-7.00 to 8.00m)



PICTURE 332: BH-1 (Depth-8.00 to 9.00m)



PICTURE 333: BH-1 (Depth-9.00 to 10.00m)



PICTURE 334: BH-1 (Depth-10.00 to 11.00m)



PICTURE 335: BH-1 (Depth-11.00 to 12.00m)



PICTURE 336: BH-1 (Depth-12.00 to 13.00m)



PICTURE 337: BH-1 (Depth-13.00 to 14.00m)



PICTURE 338: BH-1 (Depth-14.00 to 15.00m)



PICTURE 339: BH-1 (Depth-15.00 to 16.00m)



PICTURE 340: BH-1 (Depth-16.00 to 17.00m)



PICTURE 341: BH-1 (Depth-17.00 to 18.00m)



PICTURE 342: BH-1 (Depth-18.00 to 19.00m)



PICTURE 343: BH-1 (Depth-13.00 to 14.00m)