

BORE LOGS

CLIENT : HLL LIFECARE LIMITED

PROJECT: Geotechnical Investigation work for proposed "Hadron Beam Structure" at Kharghar, Navi Mumbai.

BORE HOLE NO. : BH-1

SHEET NO. : 1

LOCATION : Actrec, TATA Memorial Center,
Kharghar, Navi Mumbai.

DATE : 10/05/2016 TO 12/05/2016

GROUND R. L. : 0.00M

METHOD : ROTARY DRILLING

GROUND W. T. : 4.50 MBGL

CASING : 0.80 MTR BGL

JOB NO. : 1993

DEPTH (m)	DIA. OF BORE HOLE	LOG.	STRATA DESCRIPTION	SAMPLE		BLOWS/15cm				SPT N	C R %	RQD %	OTHER TESTS		
				DEPTH (m)	TYPE	15	30	45	60						
0.00	100MM		Filling Clay With Boulders	0.00											
0.80			DS-1												
1.50	NX		Yellowish Brown Completely Weathered Rock	1.50							NIL	NIL			
1.75				SPT-1	18	28	X	X	R						
2.80															
2.85				SPT-2	38	X	X	X	R	85	NIL				
3.00			Yellowish Brown Highly Weathered Rock	3.00							19	NIL			
4.50															
5.00			Light Gray Basalt Rock	4.50							67	48			
6.00															
7.50												80	79		
8.00															
8.50												83	82		
9.00															
9.50															
9.80													87	80	

SPT N = STANDARD PENETRATION TEST VALUE
CR = CORE RECOVERY

RQD = ROCK QUALITY DESIGNATION
DS = DISTURBED SOIL SAMPLE

UDS = UNDISTURBED SOIL SAMPLE
VST = VANE SHEAR TEST

REMARKS : NEXT PAGE

PERFECT GEOTECHNICS PVT. LTD. NAVI MUMBAI

NOT TO SCALE

CLIENT : HLL LIFECARE LIMITED

PROJECT: Geotechnical Investigation work for proposed "Hadron Beam Structure" at Kharghar, Navi Mumbai.

BORE HOLE NO. : BH-1

SHEET NO. : 2

LOCATION : Actrec, TATA Memorial Center,
Khargahr, Navi Mumbai.

DATE : 10/05/2016 TO 12/05/2016

METHOD : ROTARY DRILLING

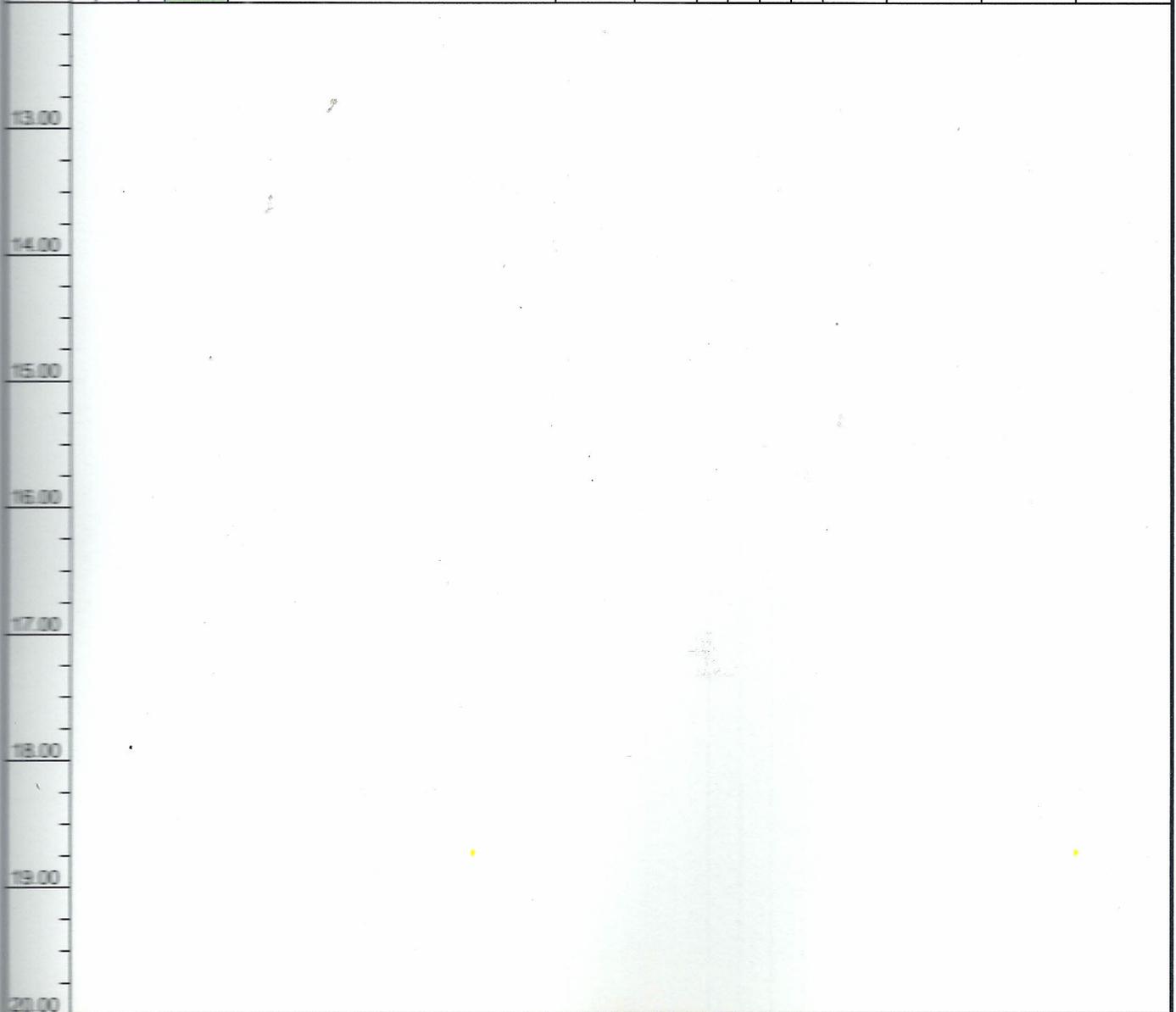
GROUND R. L. : 0.00M

CASING : 0.80 MTR BGL

GROUND W. T. : 4.50 MBGL

JOB NO. : 1993

DEPTH (m.)	DIA. OF BORE HOLE	LOG.	STRATA DESCRIPTION	SAMPLE		BLOWS/15cm				SPT N	C R %	RQD %	OTHER TESTS	
				DEPTH (m)	TYPE	15	30	45	60					
10.00	NX	+	Light Gray Basalt Rock	10.00										
		+		10.50										
		+												
11.00		+												
		+										87	73	
		+												
12.00		+		12.00										



SPT N = STANDARD PENETRATION TEST VALUE
CR = CORE RECOVERY

RQD = ROCK QUALITY DESIGNATION
DS = DISTURBED SOIL SAMPLE

UDS = UNDISTURBED SOIL SAMPLE
VST = VANE SHEAR TEST

REMARKS : BOREHOLE TERMINATED AT 12.00M BGL.

PERFECT GEOTECHNICS PVT. LTD. NAVI MUMBAI

NOT TO SCALE

CLIENT : HLL LIFECARE LIMITED

PROJECT: Geotechnical Investigation work for proposed "Hadron Beam Structure" at Kharghar, Navi Mumbai.

BORE HOLE NO. : BH-2

SHEET NO. : 1

LOCATION : Actrec, TATA Memorial Center,
Khargahr, Navi Mumbai.

DATE : 10/05/2016 TO 11/05/2016

METHOD : ROTARY DRILLING

GROUND R. L. : 0.00M

CASING : 0.80 MTR BGL

GROUND W. T. : 4.50 MBGL

JOB NO. : 1993

DEPTH (m)	DIA. OF BORE HOLE	LOG.	STRATA DESCRIPTION	SAMPLE		BLOWS/15cm				SPT N	CR %	RQD %	OTHER TESTS				
				DEPTH (m)	TYPE	15	30	45	60								
EGL	100MM		Filling Clay With Boulders	0.00	DS-1												
1.00			Yellowish Brown Completely Weathered Rock	0.80							NIL	NIL					
2.00				Yellowish Brown Highly Weathered Rock		2.50						17	NIL				
3.00						4.00						13	NIL				
4.00						5.50						20	NIL				
5.00						7.00						17	NIL				
6.00							Light Gray Fractured Basalt Rock	8.50						83	17		
7.00								Light Gray Basalt Rock	9.00						97	90	
8.00						NX		Light Gray Basalt Rock	10.00								
9.00									10.00								

SPT N = STANDARD PENETRATION TEST VALUE
CR = CORE RECOVERY

RQD = ROCK QUALITY DESIGNATION
DS = DISTURBED SOIL SAMPLE

UDS = UNDISTURBED SOIL SAMPLE
VST = VANE SHEAR TEST

REMARKS : BOREHOLE TERMINATED AT 10.00M BGL.

PERFECT GEOTECHNICS PVT. LTD. NAVI MUMBAI

NOT TO SCALE

CLIENT : HLL LIFECARE LIMITED

PROJECT: Geotechnical Investigation work for proposed "Hadron Beam Structure" at Kharghar, Navi Mumbai.

BORE HOLE NO. : BH-3

SHEET NO. : 1

LOCATION : Actrec, TATA Memorial Center,
Kharghar, Navi Mumbai.

DATE : 13/05/2016 TO 15/05/2016

METHOD : ROTARY DRILLING

GROUND R. L. : 0.00M

CASING : 1.40 MTR BGL

GROUND W. T. : 4.50 MBGL

JOB NO. : 1993

DEPTH (m)	DIA. OF BORE HOLE	LOG.	STRATA DESCRIPTION	SAMPLE		BLOWS/15cm				SPT N	C R %	RQD %	OTHER TESTS		
				DEPTH (m)	TYPE	15	30	45	60						
ESL	100MM		Filling Clay With Boulders	0.00											
1.00				1.40	DS-1							NIL	NIL		
2.00	NX		Yellowish Brown Completely Weathered Rock	1.50											
3.00				1.70	SPT-1	18	27	X	X	R					
4.00				3.00								NIL	NIL		
5.00	NX		Yellowish Brown Highly Weathered Rock	3.05	SPT-2	38	X	X	X	R		13	NIL		
6.00				4.50								20	07		
7.00				6.00									67	60	
8.00				7.50										80	73
9.00	NX		Light Gray Basalt Rock	9.00								90	87		
10.00															

SPT N = STANDARD PENETRATION TEST VALUE
CR = CORE RECOVERY

RQD = ROCK QUALITY DESIGNATION
DS = DISTURBED SOIL SAMPLE

UDS = UNDISTURBED SOIL SAMPLE
VST = VANE SHEAR TEST

REMARKS : NEXT PAGE

PERFECT GEOTECHNICS PVT. LTD. NAVI MUMBAI

NOT TO SCALE

CLIENT : HLL LIFECARE LIMITED

PROJECT: Geotechnical Investigation work for proposed "Hadron Beam Structure" at Kharghar, Navi Mumbai.

BORE HOLE NO. : BH-3	SHEET NO. : 2
LOCATION : Actrec, TATA Memorial Center, Khargahr, Navi Mumbai.	DATE : 13/05/2016 TO 15/05/2016
GROUND R. L. : 0.00M	METHOD : ROTARY DRILLING
GROUND W. T. : 4.50 MBGL	CASING : 1.40 MTR BGL
	JOB NO. : 1993

DEPTH (m)	DIA. OF BORE HOLE	LOG.	STRATA DESCRIPTION	SAMPLE		BLOWS/15cm				SPT N	C R %	RQD %	OTHER TESTS
				DEPTH (m)	TYPE	15	30	45	60				
10.00	NX	+	Light Gray Basalt Rock	10.00							93	87	
		+		10.50									
		+											
11.00		+											
		+											
		+											
12.00		+				12.00							

13.00
14.00
15.00
16.00
17.00
18.00
19.00
20.00

SPT N = STANDARD PENETRATION TEST VALUE RQD = ROCK QUALITY DESIGNATION UDS = UNDISTURBED SOIL SAMPLE
 CR = CORE RECOVERY DS = DISTURBED SOIL SAMPLE VST = VANE SHEAR TEST

REMARKS : BOREHOLE TERMINATED AT 12.00M BGL.
PERFECT GEOTECHNICS PVT. LTD. NAVI MUMBAI NOT TO SCALE

CLIENT : HLL LIFECARE LIMITED

PROJECT : Geotechnical Investigation work for proposed "Hadron Beam Structure" at Kharghar, Navi Mumbai.

BORE HOLE NO. : BH-4	SHEET NO. : 1
LOCATION : Actrec, TATA Memorial Center, Khargahr, Navi Mumbai.	DATE : 15/05/2016 TO 16/05/2016
GROUND R. L. : 0.00M	METHOD : ROTARY DRILLING
GROUND W. T. : 4.60 MBGL	CASING : 1.00 MTR BGL
	JOB NO. : 1993

DEPTH (m.)	DIA. OF BORE HOLE	LOG.	STRATA DESCRIPTION	SAMPLE		BLOWS/15cm				SPT N	C R %	RQD %	OTHER TESTS		
				DEPTH (m)	TYPE	15	30	45	60						
EGL	100MM		Filling Clay With Boulders	0.00											
1.00			1.00	DS-1											
	NX		Yellowish Brown Completely Weathered Rock	1.50							NIL	NIL			
			1.55	SPT-1	32	X	X	X		R					
2.00											23	NIL			
3.00															
4.00					Yellowish Brown Highly Weathered Rock							27	NIL		
5.00															
6.00												13	NIL		
7.00															
8.00															
9.00					Light Gray Basalt Rock								83	53	
10.00											87	72			

SPT N = STANDARD PENETRATION TEST VALUE
CR = CORE RECOVERY

RQD = ROCK QUALITY DESIGNATION
DS = DISTURBED SOIL SAMPLE

UDS = UNDISTURBED SOIL SAMPLE
VST = VANE SHEAR TEST

REMARKS : NEXT PAGE

PERFECT GEOTECHNICS PVT. LTD. NAVI MUMBAI

NOT TO SCALE

CLIENT : HLL LIFECARE LIMITED

PROJECT: Geotechnical Investigation work for proposed "Hadron Beam Structure" at Kharghar, Navi Mumbai.

BORE HOLE NO. : BH-4

SHEET NO. : 2

LOCATION : Actrec, TATA Memorial Center,
Kharghar, Navi Mumbai.

DATE : 15/05/2016 TO 16/05/2016

METHOD : ROTARY DRILLING

GROUND R. L. : 0.00M

CASING : 1.00 MTR BGL

GROUND W. T. : 4.60 MBGL

JOB NO. : 1993

DEPTH (m.)	DIA. OF BORE HOLE	LOG.	STRATA DESCRIPTION	SAMPLE		BLOWS/15cm				SPT N	C R %	RQD %	OTHER TESTS	
				DEPTH (m)	TYPE	15	30	45	60					
10.00	NX	+	Light Gray Basalt Rock	10.00										
		+												
		+												
		+												
11.00		+												
		+												
		+												
		+												
		+												
12.00		+				12.00								



SPT N = STANDARD PENETRATION TEST VALUE

RQD = ROCK QUALITY DESIGNATION

UDS = UNDISTURBED SOIL SAMPLE

CR = CORE RECOVERY

DS = DISTURBED SOIL SAMPLE

VST = VANE SHEAR TEST

REMARKS : BOREHOLE TERMINATED AT 12.00M BGL.

PERFECT GEOTECHNICS PVT. LTD. NAVI MUMBAI

NOT TO SCALE

CLIENT : HLL LIFECARE LIMITED

PROJECT: Geotechnical Investigation work for proposed "Hadron Beam Structure" at Kharghar, Navi Mumbai.

BORE HOLE NO. : BH-5

SHEET NO. : 1

LOCATION : Actrec, TATA Memorial Center,
Khargahr, Navi Mumbai.

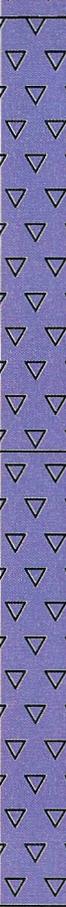
DATE : 12/05/2016 TO 14/05/2016

GROUND R. L. : 0.00M

METHOD : ROTARY DRILLING

GROUND W. T. : 4.70 MBGL

JOB NO. : 1993

DEPTH (m)	DIA. OF BORE HOLE	LOG.	STRATA DESCRIPTION	SAMPLE		BLOWS/15cm				SPT N	C R %	RQD %	OTHER TESTS
				DEPTH (m)	TYPE	15	30	45	60				
ESL				0.00									
1.00	100MM		Filling Clay With Boulders										
			Completely Weathered Rock	1.50									
2.00				1.70	SPT-1	19	39	X	X	R			
			Light Gray Fractured Boulders	3.00							27	NIL	
4.00				4.50							33	NIL	
5.00			Yellowish Red Brown Highly Weathered Rock	6.00							20	NIL	
6.00				7.50							33	NIL	
8.00	NX		Light Gray Fractured Basalt Rock	9.00							60	08	
9.00			Light Gray Basalt Rock								80	72	
10.00													

SPT N = STANDARD PENETRATION TEST VALUE
CR = CORE RECOVERY

RQD = ROCK QUALITY DESIGNATION
DS = DISTURBED SOIL SAMPLE

UDS = UNDISTURBED SOIL SAMPLE
VST = VANE SHEAR TEST

REMARKS : **NEXT PAGE**

PERFECT GEOTECHNICS PVT. LTD. NAVI MUMBAI

NOT TO SCALE

CLIENT : HLL LIFECARE LIMITED

PROJECT: Geotechnical Investigation work for proposed "Hadron Beam Structure" at Kharghar, Navi Mumbai.

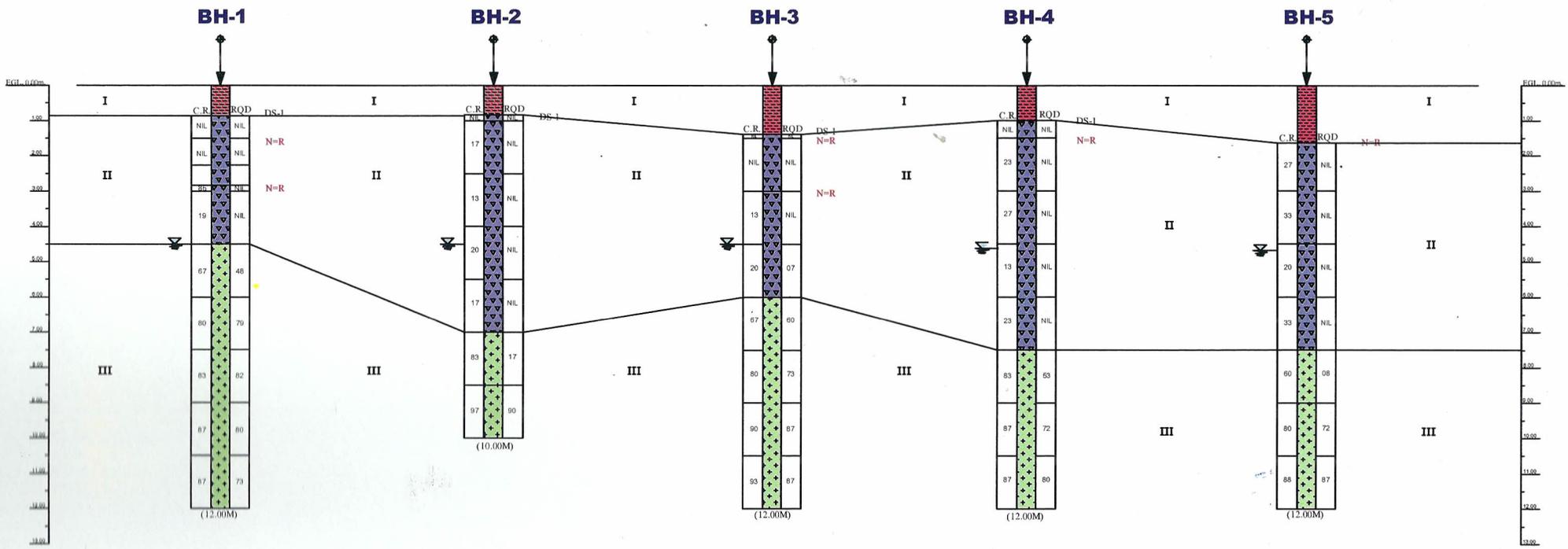
BORE HOLE NO. : BH-5	SHEET NO. : 2
LOCATION : Actrec, TATA Memorial Center, Khargahr, Navi Mumbai.	DATE : 12/05/2016 TO 14/05/2016
GROUND R. L. : 0.00M	METHOD : ROTARY DRILLING
GROUND W. T. : 4.70 MBGL	CASING : 1.50 MTR BGL
	JOB NO. : 1993

DEPTH (m.)	DIA. OF BORE HOLE	LOG.	STRATA DESCRIPTION	SAMPLE		BLOWS/15cm				SPT N	C R %	RQD %	OTHER TESTS	
				DEPTH (m)	TYPE	15	30	45	60					
10.00	NX	+	Light Gray Basalt Rock	10.00										
		+												
		+												
11.00		+												
		+												
		+												
		+												
12.00		+				12.00								
13.00														
14.00														
15.00														
16.00														
17.00														
18.00														
19.00														
20.00														

SPT N = STANDARD PENETRATION TEST VALUE RQD = ROCK QUALITY DESIGNATION UDS = UNDISTURBED SOIL SAMPLE
 CR = CORE RECOVERY DS = DISTURBED SOIL SAMPLE VST = VANE SHEAR TEST

REMARKS : BOREHOLE TERMINATED AT 12.00M BGL

PERFECT GEOTECHNICS PVT. LTD. NAVI MUMBAI NOT TO SCALE



LEGEND LAYERS :

- = GROUNDWATER LEVEL
- I = FELLING
- II = COMPLETELY WEATHERED ROCK
- III = BASALT BEDROCK

HLL LIFECARE LIMITED	
SUB-SURFACE PROFILE THROUGH BORE HOLES FOR PROPOSED HADRON BEAM STRUCTURE KHARGHAR, NAVIMUMBAL	
Drawn By : Komal	Date : May 2016
Appr. by : Mr. Manoj Kumar	Scale : Not To Scale