TENDER SPECIFICATION

BHEL: PSSR: SCT: 1496

FOR

Construction of General civil works in Main Plant and other allied structures including architectural works for unit -2 of 2 x 600 MW sets

at

Shree Singaji TPP (Malwa), Mundi Village, Sub PO: Sindhkhal, Khandwa Dist, MP

CORRIGENDUM-I

BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
Power Sector – Southern Region
690, Anna Salai, Nandanam, Chennai – 600 035.

BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
Power Sector, Southern Region
690, Anna Salai, Nandanam, Chennai – 35

Tender Specification No. BHEL: PSSR: SCT: 1496

for

Construction of General civil works in Main Plant and other allied structures including architectural works for unit -2 of 2 x 600 MW sets at Shree Singaji TPP (Malwa), Mundi Village, Sub PO: Sindhkhal, Khandwa Dist, MP

CORRIGENDUM-I
Issued to
M/s

Refer NIT for Last date of submission

Please note this tender document is not transferable

For and on behalf of
BHARAT HEAVY ELECTRICALS LIMITED

ADDL GENERAL MANAGER / CONTRACTS

Place: Chennai -35
Date:

1.DUE DATE EXTENDED AS BELOW:-

TENDER SALE CLOSES ON	: 14/5/2012
DUE DATE & TIME FOR TENDER SUBMISSION	: 15/5/2012, 15.00 HRS.
DUE DATE & TIME FOR OPENING OF TECHNICAL BIDS	: 15/5/2012, 15.30 HRS

Please visit www.bhel.com to view corrigendum

ALL OTHER CONDITIONS REMAIN UNCHANGED.

2.CLARIFICATIONS ENCLOSED

CORRIGENDUM-1,DATE: 4/5/12

CORRIGENDUM -1 TO Tender Notice No: BHEL PSSR SCT 1496 Construction of General civil works in Main Plant and other allied structures including architectural works for unit -2 of 2 x 600 MW sets at Shree Singaji TPP (Malwa), Mundi Village, Sub PO: Sindhkhal, Khandwa Dist, MP

Some of the bidders sought clarifications vide letters/during pre bid discussion held on 30/4/2012 at PSSR in Tender Specification BHEL PSSR SCT 1496 and clarifications are furnished below for your information

S.No.	Document	Volume /Book	Clause	Existing Provision	Bidder's Query	BHEL's Reply
1	SCC	Vol 1 Book 2	Chapter 7, Clause no 7.1	The detailed drawings, specifications available with BHEL engineers will be made available to the contractor during execution of work at site. The contractor will also ensure availability of all drawings / documents at work place.	Plot plan and preliminary drawings are required for estimation. Please provide.	Plot plan enclosed and applicable Drawings will be issued during execution of work
2	BoQ	Volume 2, Rate schedule	As per BoQ item no - 107 under earthwork	Nil	We understand that there is no Micro Grading works to be done. Please clarify.	Shall quote as per BOQ specification.
3	BoQ	Volume 2, Rate schedule	General	No soil investigation report available.	Please provide soil investigation report.	Bore hole log details enclosed
4	BoQ	Volume 2, Rate schedule	As per BoQ item no - 102 under earthwork	Quantity is mentioned in cum in BoQ,	Area, water table depth is also required to estimate the quantity of dewatering of ground water by well point method. Please provide the details.	Bore hole log details enclosed
5	TCC	Vol 1A, Part 1 Chapter VI	Clause no- 1.6.4	Guarantee period of 12 months shall commence from the date of completion of the whole of the work certified by the Engineer.	Is this same as Defect liability period? Is guarantee period will be applicable structure wise as per the construction schedule and as per the handing over date of that particular structure to client or on completion of whole work?	Defect liability period is same as guarantee period and which will commence from the date of completion of the whole of the work certified by the Engineer.
6	TCC	Vol 1A, Part 1 Chapter VI	Clause no- 1.5.6	Construction Schedule		Defect liability period is same as guarantee period and which will commence from the date of completion of the whole of the work certified by the Engineer.

S.No.	Document	Volume /Book	Clause	Existing Provision	Bidder's Query	BHEL's Reply
7	TCC	Vol I NIT	PQR	(A) The bidder should have executed in the preceding seven years reckoned as on date of bid opening, civil works including foundation, structural steel & concrete works and power plant building works, road works, rail track laying, drainage and sewage system in at least one (01) unit of coal fired power station having unit rating of minimum 200MWcapacity. AND The bidder should have executed at least 10600 CuM of Concrete in the above said work in a single year.	We request you to consider the following .Since the specification for road work ,track laying,drainage & sewerage works are common to any industry,we request to consider the experience in the other Industrial works also for Qualification.	As per tender conditions only
8	BOQ A909			Automatic sliding sensor mechanism	Pl mention the door size in order to decide mechanism based on weight of door.	Item may be considered as **deleted**
9	BOQ 913 (C)		Rolling shutter	Electrically operated rolling shutter	Pl confirm whether our price includes cost of motor. If so whether indian make or foreign make to be provided.	Rolling shutter shall be supplied with all electrical & mechanical equipment required for operation of shutter. Manufacturer of motor shall comply with IS specification.
10	BOQ 915 (i)	15	Glazing	6mm thick laminated glass	Normally 6mm thick laminated glass is not available in the market. Pl reconfirm the specification	Item may be considered as **deleted**
11	BOQ 920		Roof sky light		We presume that supporting structure/grid shall be measured and paid saperately.	Item may be considered as **deleted**
12	BOQ 1003		Brick partition		We presume that laying of reinforcment steel shall be measured and paid saperately vide itm no 402 and material will be issued free by BHEL	Supply of MS bar is under bidder's scope.
13	BOQ 1205		Plastering	12mm thick plaster walls …. With trowel etc.,	Grade of CM is not given	item shall be read as "Providing 12mm thick plaster of Cement mortar 1:6 in walls, drains/culverts with a paste of neat cement @ 1kg/sqm and rubbed smooth with trowel etc. all complete."

S.No.	Document	Volume /Book	Clause	Existing Provision	Bidder's Query	BHEL's Reply
14	BOQ 1206		Plastering	Decorative plaster	Grade of CM is not given	item shall be read as "Providing and making decorative plaster of all types and design on walls with CM 1:4, ceilings, arcs, columns with various thickness upto 18 mm including finishing all complete. "
15	BOQ 2307		Electroforged hot dipped galvanised gratings	Supplying, fabrication ..... bolting (supply of permanent grade `C' mild steel bolts and nuts to be paid separately under ST NO. 2309 (i), ……	ST NO. 2309 (i) doesnot exist in the BOQ	item shall be read as "Supplying, fabrication , transportation, erection and alignment of factory made electroforged hot dip galvanised gratings of steel (having minimum galvanisation of 610 g/sqm as per IS:209) conforming to IS:2062 at all elevations including preparation of design drawings and fabrication drawings in flooring, platforms, drain and trench covers, walk-ways, passages, staircases with edge binding strips and anti-skid nosing in treads, fixing clamps etc. complete with other fittings and fixtures including all taxes, duties, transportation, packing, grinding, drilling, bolting (including supply and fixing in position of permanent grade `C' mild steel bolts and nuts as per IS:1367), all welding, edge preparation, cleaning of steel surfaces to near white metal surface (ST2/ST3) by power tools followed by two coats of red lead primer red oxide zinc-chromate primer and two coats of approved colour, enamel finish paint, testing, complete as per specifications, drawings and instructions of the Engineer. Weight of Grating, bolts, nut & washer shall be considered for payment."
16	TCC	Chapter III	Facility	Establishment	Space for Batching plant is not mentioned and do confirm for water and power for this	Space will be provided free of charges. Water and power will be provided as per 1.3.11&1.3.12 in the TCC
17	TCC	Chapter III	Electricity	Duties and deposits including statuatory clearances if applicable	We understand normally this will be scope of client.Please do confirm	As per tender conditions only
18	GCC	2.8.13	workout side of the scope of work	In case the contractor is required to undertake any work outside the scope of this contract, the rates payable shall be those mutualy agreed upon if the item rates are not mentiioned in existing contract	For work out side scope of this contract,the rate shall be considered after mutual agreement only .Since the rate will depends on the complexity of nature of work,time approach etc and should be applicable for all the work outside the scope of work	As per tender conditions only

S.No.	Document	Volume /Book	Clause	Existing Provision	Bidder's Query	BHEL's Reply
19	GCC	2.12.3	ORC	The amount of increase payable per month due to rate revision is subject to a minimum of Rs 100000/- per month and a maximum of Rs 1000000/- per month.	We request you not to put any limit for ORC considering that our security is locked up for longer duration(extended period) over site establishment cost(OH).	As per tender conditions only
20	GCC	2.22.2	Retention	Refund of retention amount shall be as follows 1.50% of retention amount along with final bill 2.Balance 50% of retention amount shall be retained towards performance guarantee for workmanship and shall become refundable after expiry of guarantee period	Where as CL 1.6.3.1(5) specifies that the balance 5% shall be released after completion of work.please clarify.	Refer 1.6.3 for the payments Refer 1.6.3.1 for interim payments and for retention amount refer CL 2.22 of GCC.
21	General		Due date extension		We request you to kindly extend the date of submission of subject tender for a further period of atleast 3 weeks from the date of reply of pre bid queries to enable us to submit our most competitive offer	**The revised due date for tender submission is as below:** **Date &time of tender sale closes:14/5/2012,15.00hrs** **Date & time of tender submission :15/5/2012,15.00hrs** **Date and time of Technical bid opening:15/5/2012,15.30hrs**

Please visit www.bhel.com to view corrigendum

ALL OTHER CONDITIONS REMAIN UNCHANGED.

AGM/Contracts

FIELD BORE LOG CHART

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-01	Existing Ground Level (R.L) in m	282.929		
Co-ordinates	: N1676,E1583	Depth of Ground Water Table below EGL (m)	1.45		
Type of Boring	Rotary	Date of commencement	13.08.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	14.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	17

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Highly Weathered Rock		1.00	DS-1										
1.00	1.03	0.03	Grey Fine Grained Basalt		1.03	SPT rebounded at 100 blows for 3cm penetration				REFUSAL						
1.03	2.00	0.97			2.00	CORE-1					12	5	-	12	-	
2.00	3.00	1.00			3.00	CORE-2					17	8	-	17	-	
3.00	4.00	1.00			4.00	CORE-3					23	9	-	23	-	
4.00	5.00	1.00			5.00	CORE-4					27	10	-	27	-	
5.00	6.00	1.00			6.00	CORE-5					31	9	-	31	-	
6.00	7.00	1.00			7.00	CORE-6					36	8	10	36	10	
7.00	8.00	1.00			8.00	CORE-7					44	9	12	44	12	
8.00	9.00	1.00	Dark Grey Coarse Grained Basalt		9.00	CORE-8					51	11	25	51	25	
9.00	10.00	1.00			10.00	CORE-9					55	9	36	55	36	
10.00	11.00	1.00			11.00	CORE-10					59	8	39	59	39	
11.00	12.00	1.00			12.00	CORE-11					62	8	45	62	45	
12.00	13.00	1.00			13.00	CORE-12					67	7	48	67	48	
13.00	14.00	1.00			14.00	CORE-13					72	9	52	72	52	
14.00	15.00	1.00			15.00	CORE-14					77	9	56	77	56	
15.00	16.00	1.00			16.00	CORE-15					83	8	66	83	66	
16.00	17.00	1.00			17.00	CORE-16					88	8	72	88	72	
17.00	18.00	1.00			18.00	CORE-17					94	7	75	94	75	

Bore hole terminated at depth 18.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-02	Existing Ground Level (R.L) in m	278.573		
Co-ordinates	: N1733,E1602	Depth of Ground Water Table below EGL (m)	1.20		
Type of Boring	Rotary	Date of commencement	17.08.09	No of DS sample collected	2
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	18.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	1
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	15

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Lateritic Moorum		1.00	DS-1										
1.00	1.50	0.50			1.50	SPT-1	10	17	27	44	15					
1.50	2.00	0.50			2.00	DS-2										
2.00	2.02	0.02	Grey Fine Grained Basalt		2.02	SPT rebounded at 100 blows for 2cm penetration				REFUSAL						
2.02	3.00	0.98			3.00	CORE-1					30	11	-	30	-	
3.00	4.00	1.00			4.00	CORE-2					35	11	-	35	-	
4.00	5.00	1.00			5.00	CORE-3					39	12	-	39	-	
5.00	6.00	1.00			6.00	CORE-4					46	11	-	46	-	
6.00	7.00	1.00			7.00	CORE-5					52	9	-	52	-	
7.00	8.00	1.00			8.00	CORE-6					54	9	-	54	-	
8.00	9.00	1.00			9.00	CORE-7					58	101	10	58	10	
9.00	10.00	1.00	Dark Grey Coarse Grained Basalt		10.00	CORE-8					59	9	11	59	11	
10.00	11.00	1.00			11.00	CORE-9					65	8	25	65	25	
11.00	12.00	1.00			12.00	CORE-10					72	8	47	72	47	
12.00	13.00	1.00			13.00	CORE-11					79	8	52	79	52	
13.00	14.00	1.00			14.00	CORE-12					81	8	57	81	57	
14.00	15.00	1.00			15.00	CORE-13					82	9	54	82	54	
15.00	16.00	1.00			16.00	CORE-14					81	8	59	81	59	
16.00	17.00	1.00			17.00	CORE-15					90	9	68	90	68	

Bore hole terminated at depth 17.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-03	Existing Ground Level (R.L) in m	279.731		
Co-ordinates	: N1807,E1583	Depth of Ground Water Table below EGL (m)	0.75		
Type of Boring	Rotary	Date of commencement	01.10.09	No of DS sample collected	2
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	03.10.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B R Pattnayak	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	10

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Clay		1.00	DS-1										
1.00	1.08	0.08	Highly Weathered Rock		1.08	SPT rebounded at 100 blows for 8cm penetration				REFUSAL						
1.08	2.00	0.92			2.00	DS-2										
2.00	2.04	0.04	Grey Fine Grained Basalt		2.04	SPT rebounded at 100 blows for 4cm penetration				REFUSAL						
2.04	3.00	0.96			3.00	CORE-1					42	11	-	42	-	
3.00	4.00	1.00			4.00	CORE-2					51	9	-	51	-	
4.00	5.00	1.00			5.00	CORE-3					50	7	-	50	-	
5.00	6.00	1.00			6.00	CORE-4					57	7	10	57	10	
6.00	7.00	1.00			7.00	CORE-5					60	8	21	60	21	
7.00	8.00	1.00	Dark Grey Coarse Grained Basalt		8.00	CORE-6					70	6	59	70	59	
8.00	9.00	1.00			9.00	CORE-7					83	6	63	83	63	
9.00	10.00	1.00			10.00	CORE-8					90	7	78	90	78	
10.00	11.00	1.00			11.00	CORE-9					93	8	74	93	74	
11.00	12.00	1.00			12.00	CORE-10					97	7	76	97	76	

Bore hole terminated at depth 12.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-04	Existing Ground Level (R.L) in m	281.263m		
Co-ordinates	: N1610,E1645	Depth of Ground Water Table below EGL (m)	1.55		
Type of Boring	Rotary	Date of commencement	11.08.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	12.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	15

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Highly Weathered Rock		1.00	DS-1										
1.00	1.02	0.02	Grey Fine Grained Basalt		1.02	SPT rebounded at 100 blows for 2cm penetration				REFUSAL						
1.02	2.00	0.98			2.00	CORE-1					16	6	-	16	-	
2.00	3.00	1.00			3.00	CORE-2					21	9	-	21	-	
3.00	4.00	1.00			4.00	CORE-3					29	11	-	29	-	
4.00	5.00	1.00			5.00	CORE-4					36	9	12	36	12	
5.00	6.00	1.00			6.00	CORE-5					43	12	21	43	21	
6.00	7.00	1.00	Dark Grey Coarse Grained Basalt		7.00	CORE-6					48	10	15	48	15	
7.00	8.00	1.00			8.00	CORE-7					55	11	25	55	25	
8.00	9.00	1.00			9.00	CORE-8					59	9	31	59	31	
9.00	10.00	1.00			10.00	CORE-9					62	9	38	62	38	
10.00	11.00	1.00			11.00	CORE-10					68	8	42	68	42	
11.00	12.00	1.00			12.00	CORE-11					66	8	54	66	54	
12.00	13.00	1.00			13.00	CORE-12					70	7	61	70	61	
13.00	14.00	1.00			14.00	CORE-13					76	9	55	76	55	
14.00	15.00	1.00			15.00	CORE-14					86	7	62	86	62	
15.00	16.00	1.00			16.00	CORE-15					93	8	64	93	64	

Bore hole terminated at depth 16.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-05	Existing Ground Level (R.L) in m	278.089		
Co-ordinates	: N1703,E1650	Depth of Ground Water Table below EGL (m)	0.65		
Type of Boring	Rotary	Date of commencement	15.08.09	No of DS sample collected	3
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	16.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	2
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	20

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Clay		1.00	DS-1										
1.00	1.50	0.50	Lateritic Moorum		1.50	SPT-1	5	9	11	20						
1.50	2.00	0.50			2.00	DS-2										
2.00	2.40	0.40			2.40	UDS FAILED										
2.40	2.90	0.50			2.90	SPT-2	15	21	34	55						
2.90	3.00	0.10			3.00	DS-3										
3.00	3.03	0.03	Grey Fine Grained Basalt		3.03	SPT rebounded at 100 blows for 3cm penetration				REFUSAL						
3.03	4.00	0.97			4.00	CORE-1					17	4	-	18	-	
4.00	5.00	1.00			5.00	CORE-2					23	6	-	23	-	
5.00	6.00	1.00			6.00	CORE-3					30	7	-	30	-	
6.00	7.00	1.00			7.00	CORE-4					39	9	-	39	-	
7.00	8.00	1.00			8.00	CORE-5					47	7	12	47	12	
8.00	9.00	1.00			9.00	CORE-6					53	10	29	53	29	
9.00	10.00	1.00			10.00	CORE-7					64	9	40	64	40	
10.00	11.00	1.00			11.00	CORE-8					77	10	50	77	50	
11.00	12.00	1.00	Dark Grey Coarse Grained Basalt		12.00	CORE-9					82	10	57	82	57	
12.00	13.00	1.00			13.00	CORE-10					80	8	61	80	61	
13.00	14.00	1.00			14.00	CORE-11					79	9	49	79	49	
14.00	15.00	1.00			15.00	CORE-12					80	10	44	80	49	
15.00	16.00	1.00			16.00	CORE-13					74	9	37	74	37	
16.00	17.00	1.00			17.00	CORE-14					70	10	46	70	46	
17.00	18.00	1.00			18.00	CORE-15					68	9	49	68	49	
18.00	19.00	1.00			19.00	CORE-16					70	8	53	70	53	
19.00	20.00	1.00			20.00	CORE-17					81	9	59	81	59	
20.00	21.00	1.00			21.00	CORE-18					86	10	64	86	64	
21.00	22.00	1.00			22.00	CORE-19					91	8	72	91	72	
22.00	23.00	1.00			23.00	CORE-20					94	8	76	94	76	

Bore hole terminated at depth 23.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-06	Existing Ground Level (R.L) in m	278.411		
Co-ordinates	: N1757,E1632	Depth of Ground Water Table below EGL (m)	0.65		
Type of Boring	Rotary	Date of commencement	19.08.09	No of DS sample collected	2
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	21.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	1
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	18

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Clay		1.00	DS-1										
1.00	1.50	0.50	Lateritic Moorum		1.50	SPT-1	5	9	15	24	21					
1.50	2.00	0.50			2.00	DS-2										
2.00	2.05	0.05	Grey Fine Grained Basalt		2.05	SPT rebounded at 100 blows for 5cm penetration				REFUSAL						
2.00	3.00	1.00			3.00	CORE-1					12	5	-	12	-	
3.00	4.00	1.00			4.00	CORE-2					16	7	-	16	-	
4.00	5.00	1.00			5.00	CORE-3					19	8	-	19	-	
5.00	6.00	1.00			6.00	CORE-4					25	10	-	25	-	
6.00	7.00	1.00			7.00	CORE-5					32	12	-	32	-	
7.00	8.00	1.00			8.00	CORE-6					38	9	11	38	11	
8.00	9.00	1.00			9.00	CORE-7					45	13	14	45	14	
9.00	10.00	1.00	Dark Grey Coarse Grained Basalt		10.00	CORE-8					48	10	21	48	21	
10.00	11.00	1.00			11.00	CORE-9					52	11	29	52	29	
11.00	12.00	1.00			12.00	CORE-10					60	12	33	60	33	
12.00	13.00	1.00			13.00	CORE-11					66	10	45	66	45	
13.00	14.00	1.00			14.00	CORE-12					69	9	48	69	48	
14.00	15.00	1.00			15.00	CORE-13					72	8	49	72	49	
15.00	16.00	1.00			16.00	CORE-14					79	8	53	79	53	
16.00	17.00	1.00			17.00	CORE-15					80	7	57	80	57	
17.00	18.00	1.00			18.00	CORE-16					89	6	62	89	62	
18.00	19.00	1.00			19.00	CORE-17					91	7	64	91	64	
19.00	20.00	1.00			20.00	CORE-18					93	8	69	93	69	

Bore hole terminated at depth 20.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-07	Existing Ground Level (R.L) in m	278.701		
Co-ordinates	: N1827,E1650	Depth of Ground Water Table below EGL (m)	0.60		
Type of Boring	Rotary	Date of commencement	16.08.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	17.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	17

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Lateritic Moorum		1.00	DS-1										
1.00	1.04	0.04	Grey Fine Grained Basalt		1.04	SPT rebounded at 100 blows for 4cm penetration				REFUSAL						
1.04	2.00	0.96			2.00	CORE-1					15	4	-	15	-	
2.00	3.00	1.00			3.00	CORE-2					12	3	-	12	-	
3.00	4.00	1.00			4.00	CORE-3					18	5	-	18	-	
4.00	5.00	1.00			5.00	CORE-4					22	7	-	22	-	
5.00	6.00	1.00			6.00	CORE-5					29	9	-	29	-	
6.00	7.00	1.00			7.00	CORE-6					36	11	-	36	-	
7.00	8.00	1.00	Dark Grey Coarse Grained Basalt		8.00	CORE-7					39	7	15	39	15	
8.00	9.00	1.00			9.00	CORE-8					43	10	26	43	26	
9.00	10.00	1.00			10.00	CORE-9					48	9	30	48	30	
10.00	11.00	1.00			11.00	CORE-10					56	9	39	56	39	
11.00	12.00	1.00			12.00	CORE-11					60	7	44	60	44	
12.00	13.00	1.00			13.00	CORE-12					67	6	48	67	48	
13.00	14.00	1.00			14.00	CORE-13					71	8	53	71	53	
14.00	15.00	1.00			15.00	CORE-14					77	10	58	77	58	
15.00	16.00	1.00			16.00	CORE-15					83	9	62	83	62	
16.00	17.00	1.00			17.00	CORE-16					89	10	68	89	68	
17.00	18.00	1.00			18.00	CORE-17					94	9	73	94	73	

Bore hole terminated at depth 18.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-08	Existing Ground Level (R.L) in m	276.867		
Co-ordinates	: N1657,E1667	Depth of Ground Water Table below EGL (m)	0.65		
Type of Boring	Rotary	Date of commencement	09.08.09	No of DS sample collected	2
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	10.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	2
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	11

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Lateritic Moorum		1.00	DS-1										
1.00	1.50	0.50	Highly Weathered Rock		1.50	SPT-1	5	7	11	18						
1.50	2.00	0.50			2.00	DS-2										
2.00	2.40	0.40			2.40	UDS FAIL										
2.40	3.00	0.60			3.00	SPT-2	25	37	49	86						
3.00	3.04	0.04	Grey Fine Grained Basalt		3.04	SPT rebounded at 100 blows for 4cm penetration				REFUSAL						
3.04	4.00	0.96			4.00	CORE-1					29	10	-	30	-	
4.00	5.00	1.00			5.00	CORE-2					37	12	-	37	-	
5.00	6.00	1.00			6.00	CORE-3					46	15	-	46	-	
6.00	7.00	1.00			7.00	CORE-4					58	10	13	58	13	
7.00	8.00	1.00	Dark Grey Coarse Grained Basalt		8.00	CORE-5					63	10	23	63	23	
8.00	9.00	1.00			9.00	CORE-6					66	9	43	66	43	
9.00	10.00	1.00			10.00	CORE-7					70	8	60	70	60	
10.00	11.00	1.00			11.00	CORE-8					74	8	62	74	62	
11.00	12.00	1.00			12.00	CORE-9					88	7	70	88	70	
12.00	13.00	1.00			13.00	CORE-10					93	7	79	93	79	
13.00	14.00	1.00			14.00	CORE-11					95	8	80	95	80	

Bore hole terminated at depth 14.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-09	Existing Ground Level (R.L) in m	277.836		
Co-ordinates	: N1799,E1668	Depth of Ground Water Table below EGL (m)	0.90		
Type of Boring	Rotary	Date of commencement	14.08.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	15.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	17

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Highly Weathered Rock		1.00	DS-1										
1.00	1.03	0.03	Grey Fine Grained Basalt		1.03	SPT rebounded at 100 blows for 3cm penetration				REFUSAL						
1.03	2.00	0.97			2.00	CORE-1					10	9	-	10	-	
2.00	3.00	1.00			3.00	CORE-2					14	6	-	14	-	
3.00	4.00	1.00			4.00	CORE-3					19	8	-	19	-	
4.00	5.00	1.00			5.00	CORE-4					25	5	-	25	-	
5.00	6.00	1.00			6.00	CORE-5					36	9	-	36	-	
6.00	7.00	1.00			7.00	CORE-6					39	11	-	39	-	
7.00	8.00	1.00	Dark Grey Coarse Grained Basalt		8.00	CORE-7					44	10	10	44	10	
8.00	9.00	1.00			9.00	CORE-8					50	9	21	50	21	
9.00	10.00	1.00			10.00	CORE-9					52	9	27	52	27	
10.00	11.00	1.00			11.00	CORE-10					57	10	32	57	32	
11.00	12.00	1.00			12.00	CORE-11					63	8	46	63	46	
12.00	13.00	1.00			13.00	CORE-12					65	7	48	65	48	
13.00	14.00	1.00			14.00	CORE-13					69	8	55	69	55	
14.00	15.00	1.00			15.00	CORE-14					71	9	59	71	59	
15.00	16.00	1.00			16.00	CORE-15					79	9	63	79	63	
16.00	17.00	1.00			17.00	CORE-16					88	10	69	88	69	
17.00	18.00	1.00			18.00	CORE-17					93	8	77	93	77	

Bore hole terminated at depth 18.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-10	Existing Ground Level (R.L) in m	279.071		
Co-ordinates	: N1726,E1693	Depth of Ground Water Table below EGL (m)	1.65		
Type of Boring	Rotary	Date of commencement	12.08.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	13.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	16

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Highly Weathered Rock		1.00	DS-1										
1.00	1.04	0.04	Grey Fine Grained Basalt		1.04	SPT rebounded at 100 blows for 3cm penetration				REFUSAL						
1.04	2.00	0.96			2.00	CORE-1					12	5	-	13	-	
2.00	3.00	1.00			3.00	CORE-2					17	7	-	17	-	
3.00	4.00	1.00			4.00	CORE-3					21	9	-	21	-	
4.00	5.00	1.00			5.00	CORE-4					27	11	-	27	-	
5.00	6.00	1.00			6.00	CORE-5					30	7	10	30	10	
6.00	7.00	1.00			7.00	CORE-6					39	9	14	39	14	
7.00	8.00	1.00	Dark Grey Coarse Grained Basalt		8.00	CORE-7					47	9	20	47	20	
8.00	9.00	1.00			9.00	CORE-8					56	10	25	56	25	
9.00	10.00	1.00			10.00	CORE-9					59	10	36	59	36	
10.00	11.00	1.00			11.00	CORE-10					52	9	45	52	45	
11.00	12.00	1.00			12.00	CORE-11					60	10	49	60	49	
12.00	13.00	1.00			13.00	CORE-12					67	9	54	67	54	
13.00	14.00	1.00			14.00	CORE-13					72	8	60	72	60	
14.00	15.00	1.00			15.00	CORE-14					77	7	65	77	65	
15.00	16.00	1.00			16.00	CORE-15					85	8	68	85	68	
16.00	17.00	1.00			17.00	CORE-16					92	6	72	92	72	

Bore hole terminated at depth 17.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-11	Existing Ground Level (R.L) in m	281.684		
Co-ordinates	: N1693,E1704	Depth of Ground Water Table below EGL (m)	1.65		
Type of Boring	Rotary	Date of commencement	10.08.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	11.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	16

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Highly Weathered Rock		1.00	DS-1										
1.00	1.02	0.02	Grey Fine Grained Basalt		1.02	SPT rebounded at 100 blows for 2cm penetration				REFUSAL						
1.02	2.00	0.98			2.00	CORE-1					26	6	-	27	-	
2.00	3.00	1.00			3.00	CORE-2					35	9	-	35	-	
3.00	4.00	1.00			4.00	CORE-3					42	10	-	42	-	
4.00	5.00	1.00			5.00	CORE-4					46	9	10	46	10	
5.00	6.00	1.00			6.00	CORE-5					56	11	-	56	-	
6.00	7.00	1.00			7.00	CORE-6					53	9	12	53	12	
7.00	8.00	1.00			8.00	CORE-7					64	10	11	64	11	
8.00	9.00	1.00	Dark Grey Coarse Grained Basalt		9.00	CORE-8					69	9	47	69	47	
9.00	10.00	1.00			10.00	CORE-9					72	8	56	72	56	
10.00	11.00	1.00			11.00	CORE-10					78	9	52	78	52	
11.00	12.00	1.00			12.00	CORE-11					69	12	42	69	42	
12.00	13.00	1.00			13.00	CORE-12					74	10	53	74	53	
13.00	14.00	1.00			14.00	CORE-13					79	9	59	79	59	
14.00	15.00	1.00			15.00	CORE-14					82	8	61	82	61	
15.00	16.00	1.00			16.00	CORE-15					87	7	66	87	66	
16.00	17.00	1.00			17.00	CORE-16					93	7	72	93	72	

Bore hole terminated at depth 17.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-12	Existing Ground Level (R.L) in m	279.745		
Co-ordinates	: N1822, E1680	Depth of Ground Water Table below EGL (m)	0.75		
Type of Boring	Rotary	Date of commencement	15.09.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	18.09.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By		No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	15

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Highly Weathered Rock		1.00	DS-1										
1.00	1.04	0.04	Grey Fine Grained Basalt		1.04	SPT rebounded at 100 blows for 4cm penetration				REFUSAL						
1.04	2.00	0.96			2.00	CORE-1					19	10	-	19	-	
2.00	3.00	1.00			3.00	CORE-2					26	9	-	26	-	
3.00	4.00	1.00			4.00	CORE-3					29	9	-	29	-	
4.00	5.00	1.00			5.00	CORE-4					36	9	-	36	-	
5.00	6.00	1.00			6.00	CORE-5					46	8	-	46	11	
6.00	7.00	1.00			7.00	CORE-6					54	7	-	54	25	
7.00	8.00	1.00			8.00	CORE-7					59	8	-	59	32	
8.00	9.00	1.00	Dark Grey Coarse Grained Basalt		9.00	CORE-8					64	7	-	64	39	
9.00	10.00	1.00			10.00	CORE-9					69	6	-	69	45	
10.00	11.00	1.00			11.00	CORE-10					74	8	-	74	47	
11.00	12.00	1.00			12.00	CORE-11					70	9	-	70	53	
12.00	13.00	1.00			13.00	CORE-12					78	5	-	78	57	
13.00	14.00	1.00			14.00	CORE-13					87	6	-	87	61	
14.00	15.00	1.00			15.00	CORE-14					89	5	-	89	69	
15.00	16.00	1.00			16.00	CORE-15					93	4	-	95	74	

Bore hole terminated at depth 16.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-13	Existing Ground Level (R.L) in m	283.297		
Co-ordinates	: N1608,E1736	Depth of Ground Water Table below EGL (m)	1.45		
Type of Boring	Rotary	Date of commencement	03.08.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	06.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	13

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.0	1.0	Highly Weathered Rock		1.0	DS -1										
1.00	1.03	0.0	Grey Fine Grained Basalt		1.03	SPT rebounded at 100 blows for 3cm penetration				REFUSAL						
1.03	2.00	0.97			2.0	CORE-1					31	10	-	32.0	-	
2.00	3.00	1.0			3.0	CORE-2					30	9	-	30.0	-	
3.00	4.00	1.0			4.0	CORE-3					34	11	-	34.0	-	
4.00	5.00	1.0			5.0	CORE-4					39	12	-	39.0	-	
5.00	6.00	1.0			6.0	CORE-5					42	10	-	42.0	-	
6.00	7.00	1.0			7.0	CORE-6					36	6	-	36.0	-	
7.00	8.00	1.0	Dark Grey Coarse Grained Basalt		8.0	CORE-7					44	6	12	44.0	12.0	
8.00	9.00	1.0			9.0	CORE-8					60	6	11	60.0	11.0	
9.00	10.00	1.0			10.0	CORE-9					85	7	62	85.0	62.0	
10.00	11.00	1.0			11.0	CORE-10					87	8	56	87.0	56.0	
11.00	12.00	1.0			12.0	CORE-11					83	7	59	83.0	59.0	
12.00	13.00	1.0			13.0	CORE-12					85	7	68	85.0	68.0	
13.00	14.00	1.0			14.0	CORE-13					90	6	73	90.0	73.0	

Bore hole terminated at depth 14.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-14	Existing Ground Level (R.L) in m	280.156		
Co-ordinates	: N1659,E1736	Depth of Ground Water Table below EGL (m)	1.15		
Type of Boring	Rotary	Date of commencement	07.08.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	09.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	12

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.0	1.0	Highly Weathered Rock		1.0	DS -1										
1.00	1.03	0.0	Mafic to Ultramafic Igneous Rock (Volcanic)		1.03	SPT rebounded at 100 blows for 2cm penetration				REFUSAL						
1.03	2.00	0.97			2.0	CORE-1					27	12	-	28	-	
2.00	3.00	1.0			3.0	CORE-2					30	14	-	30	-	
3.00	4.00	1.0			4.0	CORE-3					42	12	-	42	-	
4.00	5.00	1.0			5.0	CORE-4					50	10	-	50	-	
5.00	6.00	1.0	Dark Grey Coarse Grained Basalt		6.0	CORE-5					56	9	12	56	12.0	
6.00	7.00	1.0			7.0	CORE-6					67	8	14	67	14.0	
7.00	8.00	1.0			8.0	CORE-7					72	10	26	72	26.0	
8.00	9.00	1.0			9.0	CORE-8					79	9	53	79	53.0	
9.00	10.00	1.0			10.0	CORE-9					82	8	59	82	59.0	
10.00	11.00	1.0			11.0	CORE-10					85	7	62	85	62.0	
11.00	12.00	1.0			12.0	CORE-11					89	8	67	89	67.0	
12.00	13.00	1.0			13.0	CORE-12					91	6	71	91	71.0	

Bore hole terminated at depth 13.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-15	Existing Ground Level (R.L) in m	279.717		
Co-ordinates	: N1787, E1734	Depth of Ground Water Table below EGL (m)	1.45		
Type of Boring	Rotary	Date of commencement	26.09.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	27.09.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B R Pattnayak	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	9

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.0	1.0	Lateritic Moorum		1.0	DS -1										
1.00	1.06	0.06	Highly Weathered Rock		1.06	SPT rebounded at 100 blows for 6cm penetration				REFUSAL						
1.06	2.00	0.94			2.0	SPT rebounded at 100 blows for 0cm penetration				REFUSAL					-	
2.00	3.00	1.0	Grey Fine Grained Basalt		3.0	CORE-1					40	8	-	40	-	
3.00	4.00	1.0			4.0	CORE-2					46	6	-	46	-	
4.00	5.00	1.0			5.0	CORE-3					57	6	-	57	-	
5.00	6.00	1.0			6.0	CORE-4					52	7	-	52	-	
6.00	7.00	1.0	Dark Grey Coarse Grained Basalt		7.0	CORE-5					68	5	66	68	66.0	
7.00	8.00	1.0			8.0	CORE-6					85	6	60	85	60.0	
8.00	9.00	1.0			9.0	CORE-7					85	6	65	85	65.0	
9.00	10.00	1.0			10.0	CORE-8					94	6	66	94	66.0	
10.00	11.00	1.0			11.0	CORE-9					93	7	80	93	80.0	

Bore hole terminated at depth 11.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-16	Existing Ground Level (R.L) in m	281.381		
Co-ordinates	: N1854, E1767	Depth of Ground Water Table below EGL (m)	2.10		
Type of Boring	Rotary	Date of commencement	24.09.09	No of DS sample collected	3
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	27.09.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B R Pattnayak	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	7

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.0	1.0	Lateritic Moorum		1.0	DS -1										
1.00	1.05	0.05	Highly Weathered Rock		1.03	SPT rebounded at 100 blows for 5cm penetration				REFUSAL						
1.05	2.00	0.95			2.0	DS -2										
2.00	2.04	0.0			2.0	SPT rebounded at 100 blows for 4cm penetration				REFUSAL						
2.04	3.50	1.5			3.5	DS-3										
3.50	3.50	0.0	Grey Fine Grained Basalt		3.5	SPT rebounded at 100 blows for 0cm penetration				REFUSAL						
3.50	4.50	1.0			4.5	CORE-1					38	15	-	38	-	
4.50	5.50	1.0			5.5	CORE-2					52	7	10	52	10.0	
5.50	6.50	1.0	Dark Grey Coarse Grained Basalt		6.5	CORE-3					73	6	63	73	63.0	
6.50	7.50	1.0			7.5	CORE-4					91	7	73	91	73.0	
7.50	8.50	1.0			8.5	CORE-5					94	6	72	94	72.0	
8.50	9.50	1.0			9.5	CORE-6					95	6	73	95	73.0	
9.50	10.50	1.0			10.5	CORE-7					93	4	77	93	77.0	

Bore hole terminated at depth 10.5mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-17	Existing Ground Level (R.L) in m	282.421		
Co-ordinates	:N1679,E1765	Depth of Ground Water Table below EGL (m)	1.10		
Type of Boring	Rotary	Date of commencement	30.07.09	No of DS sample collected	0
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	01.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	8

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	0.03	0.03	Grey Fine Grained Basalt		0.03	SPT rebounded at 100 blows for 3cm penetration				REFUSAL						
0.03	1.00	0.97			1.00	CORE-1					41	14	-	41	-	
1.00	2.00	1.00			2.00	CORE-2					39	18	-	39	-	
2.00	3.00	1.00			3.00	CORE-3					43	16	-	43	-	
3.00	4.00	1.00			4.00	CORE-4					74	8	53	74	53	
4.00	5.00	1.00			5.00	CORE-5					83	6	59	83	59.0	
5.00	6.00	1.00			6.00	CORE-6					81	7	59	81	59.0	
6.00	7.00	1.00			7.00	CORE-7					84	8	54	84	54.0	
7.00	8.00	1.00			8.00	CORE-8					89	4	85	89	85.0	

Bore hole terminated at depth 8.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-18	Existing Ground Level (R.L) in m	281.295		
Co-ordinates	: N1855, E1765	Depth of Ground Water Table below EGL (m)	1.40		
Type of Boring	Rotary	Date of commencement	28.09.09	No of DS sample collected	3
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	29.09.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B R Pattnayak	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	8

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.0	1.00	Lateritic Moorum		1.0	DS -1										
1.00	1.05	0.05			1.03	SPT rebounded at 100 blows for 5cm penetration				REFUSAL						
1.05	2.00	0.95			2.0	DS -2										
2.00	2.04	0.04			2.0	SPT rebounded at 100 blows for 4cm penetration				REFUSAL						
2.04	3.00	0.96	Highly Weathered Rock		3.0	DS -3										
3.00	3.00	0.0	Grey Fine Grained Basalt		3.0	SPT rebounded at 100 blows for 0cm penetration				REFUSAL						
3.00	4.00	1.0			4.0	CORE-1					40	10	-	40	-	
4.00	5.00	1.0			5.0	CORE-2					40	7	10	40	10.0	
5.00	6.00	1.0			6.0	CORE-3					52	7	-	52	-	
6.00	7.00	1.0	Dark Grey Coarse Grained Basalt		7.0	CORE-4					80	6	63	80	63.0	
7.00	8.00	1.0			8.0	CORE-5					85	7	65	85	65.0	
8.00	9.00	1.0			9.0	CORE-6					88	8	61	88	61.0	
9.00	10.00	1.0			10.0	CORE-7					90	8	62	90	62.0	
10.00	11.00	1.0			11.0	CORE-8					95	7	68	95	68.0	

Bore hole terminated at depth 11.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-19	Existing Ground Level (R.L) in m	283.599m		
Co-ordinates	:N1669,E1796	Depth of Ground Water Table below EGL (m)	1.00		
Type of Boring	Rotary	Date of commencement	25.07.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	28.07.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	6

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.0	1.0	1.0	Highly Weathered Rock		1.0	DS -1										
1.0	1.03	0.03			SPT rebounded at 100 blows for 3cm penetration				REFUSAL							
1.0	2.00	1.00			2.0	CORE-1					45	20	-	45	-	
2.0	3.00	1.00			3.0	CORE-2					82	8	57	82	57	
3.0	4.00	1.00	Dark Grey Coarse Grained Basalt		4.0	CORE-3					90	8	54	90	54	
4.0	5.00	1.00			5.0	CORE-4					93	7	55	93	55.0	
5.0	6.00	1.00			6.0	CORE-5					93	6	70	93	70.0	
6.0	7.00	1.00			7.0	CORE-6					96	5	74	96	74.0	

Bore hole terminated at depth 7.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-20	Existing Ground Level (R.L) in m	282.307		
Co-ordinates	:N1798,E1796	Depth of Ground Water Table below EGL (m)	1.25		
Type of Boring	Rotary	Date of commencement	08.08.09	No of DS sample collected	3
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	10.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	1
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	11

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Lateritic Moorum		1.00	DS-1										
1.00	1.50	0.50			1.50	SPT-1	12	19	23	42						
1.50	2.00	0.50	Highly Weathered Rock		2.00	DS-2										
2.00	2.40	0.40			2.40	UDS FAILE										
2.40	3.00	0.60			3.00	DS-3										
3.00	3.03	0.03	Grey Fine Grained Basalt		3.03	SPT rebounded at 100 blows for 3cm penetration				REFUSAL						
3.03	4.00	0.97			4.00	CORE-1					28	7	-	29	-	
4.00	5.00	1.00			5.00	CORE-2					38	13	-	38	-	
5.00	6.00	1.00			6.00	CORE-3					43	12	-	43	-	
6.00	7.00	1.00			7.00	CORE-4					50	14	-	50	-	
7.00	8.00	1.00			8.00	CORE-5					53	8	-	53	-	
8.00	9.00	1.00	Dark Grey Coarse Grained Basalt		9.00	CORE-6					57	7	12	57	12	
9.00	10.00	1.00			10.00	CORE-7					73	6	56	73	56	
10.00	11.00	1.00			11.00	CORE-8					80	7	63	80	63	
11.00	12.00	1.00			12.00	CORE-9					87	7	66	87	66	
12.00	13.00	1.00			13.00	CORE-10					91	8	62	91	62	
13.00	14.00	1.00			14.00	CORE-11					94	7	70	94	70	

Bore hole terminated at depth 14.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-21	Existing Ground Level (R.L) in m	283.207		
Co-ordinates	: N1757, E1905	Depth of Ground Water Table below EGL (m)	1.50		
Type of Boring	: Rotary	Date of commencement	03.10.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	05.10.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B R Pattnayak	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	7

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				**Details of Rock Core**					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	0.50	0.50	Lateritic Moorum		0.50	DS-1										
0.50	0.54	0.04	Grey Fine Grained Basalt		0.54	SPT rebounded at 100 blows for 4cm penetration				REFUSAL						
0.54	1.50	0.96			1.50	CORE-1					44	12	-	46		
1.50	2.50	1.00			2.50	CORE-2					55	10	10	55	10	
2.50	3.50	1.00	Dark Grey Coarse Grained Basalt		3.50	CORE-3					70	6	58	70	58	
3.50	4.50	1.00			4.50	CORE-4					85	7	65	85	65	
4.50	5.50	1.00			5.50	CORE-5					88	7	64	88	64	
5.50	6.50	1.00			6.50	CORE-6					94	7	67	94	67	
6.50	7.50	1.00			7.50	CORE-7					91	7	64	91	64	

Bore hole terminated at depth 7.5mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-22	Existing Ground Level (R.L) in m	285.328		
Co-ordinates	:N1682,E1853	Depth of Ground Water Table below EGL (m)	1.25		
Type of Boring	Rotary	Date of commencement	24.07.09	No of DS sample collected	0
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	30.07.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	14

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Highly Weathered Rock		1.00	SPT rebounded at 100 blows for 3cm penetration				REFUSAL						
1.00	1.03	0.03	Grey Fine Grained Basalt		1.03	CORE-1										
1.03	2.00	0.97			2.00	CORE-2					29	13	-	30	-	
2.00	3.00	1.00			3.00	CORE-3					33	14	-	33	-	
3.00	4.00	1.00			4.00	CORE-4					45	21	-	45	-	
4.00	5.00	1.00			5.00	CORE-5					40	10	-	40	-	
5.00	6.00	1.00			6.00	CORE-6					38	9	-	38	-	
6.00	7.00	1.00	Dark Grey Coarse Grained Basalt		7.00	CORE-7					43	8	-	43	-	
7.00	8.00	1.00			8.00	CORE-8					47	11	-	47	-	
8.00	9.00	1.00			9.00	CORE-9					41	7	-	41	-	
9.00	10.00	1.00			10.00	CORE-10					70	4	55	70	55	
10.00	11.00	1.00			11.00	CORE-11					80	7	58	80	58	
11.00	12.00	1.00			12.00	CORE-12					77	6	60	77	60	
12.00	13.00	1.00			13.00	CORE-13					81	4	70	81	70	
13.00	14.00	1.00			14.00	CORE-14					83	6	75	83	75	

Bore hole terminated at depth 14.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-23	Existing Ground Level (R.L) in m	284.931		
Co-ordinates	:N1788,E1845	Depth of Ground Water Table below EGL (m)	1.70		
Type of Boring	Rotary	Date of commencement	03.08.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	05.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	15

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Highly Weathered Rock		1.00	DS-1										
1.00	1.02	0.02	Grey Fine Grained Basalt		1.02	SPT rebounded at 100 blows for 3cm penetration				REFUSAL						
1.02	2.00	0.98			2.00	CORE-1					27	12	-	28	-	
2.00	3.00	1.00			3.00	CORE-2					35	14	-	35	-	
3.00	4.00	1.00			4.00	CORE-3					39	17	-	39	-	
4.00	5.00	1.00			5.00	CORE-4					45	11	-	45	-	
5.00	6.00	1.00			6.00	CORE-5					37	7	-	37	-	
6.00	7.00	1.00			7.00	CORE-6					41	9	-	41	-	
7.00	8.00	1.00	Dark Grey Coarse Grained Basalt		8.00	CORE-7					53	7	11	53	11	
8.00	9.00	1.00			9.00	CORE-8					58	9	13	58	13	
9.00	10.00	1.00			10.00	CORE-9					63	10	25	63	25	
10.00	11.00	1.00			11.00	CORE-10					65	13	29	65	29	
11.00	12.00	1.00			12.00	CORE-11					71	8	52	71	52	
12.00	13.00	1.00			13.00	CORE-12					79	9	61	79	61	
13.00	14.00	1.00			14.00	CORE-13					82	7	63	82	63	
14.00	15.00	1.00			15.00	CORE-14					89	10	70	89	70	
15.00	16.00	1.00			16.00	CORE-15					95	11	74	95	74	

Bore hole terminated at depth 16.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-24	Existing Ground Level (R.L) in m	285.940		
Co-ordinates	:N1821,E1875	Depth of Ground Water Table below EGL (m)	1.50		
Type of Boring	Rotary	Date of commencement	05.08.09	No of DS sample collected	2
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	07.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	1
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	12

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Lateritic Moorum		1.00	DS-1										
1.00	1.50	0.50			1.50	SPT-1	15	22	31	53						
1.50	2.00	0.50	Highly Weathered Rock		2.00	DS-2										
2.00	2.03	0.03	Grey Fine Grained Basalt		2.03	SPT rebounded at 100 blows for 3cm penetration				REFUSAL						
2.03	3.00	0.97			3.00	CORE-1					30	12	-	30	-	
3.00	4.00	1.00			4.00	CORE-2					26	11	-	26	-	
4.00	5.00	1.00			5.00	CORE-3					34	7	-	34	-	
5.00	6.00	1.00			6.00	CORE-4					36	7	-	36	-	
6.00	7.00	1.00			7.00	CORE-5					39	6	-	39	-	
7.00	8.00	1.00	Dark Grey Coarse Grained Basalt		8.00	CORE-6					70	11	12	70	12	
8.00	9.00	1.00			9.00	CORE-7					72	9	14	72	14	
9.00	10.00	1.00			10.00	CORE-8					79	7	57	79	57	
10.00	11.00	1.00			11.00	CORE-9					85	8	55	85	55	
11.00	12.00	1.00			12.00	CORE-10					87	8	62	87	62	
12.00	13.00	1.00			13.00	CORE-11					92	7	65	92	65	
13.00	14.00	1.00			14.00	CORE-12					95	7	71	95	71	

Bore hole terminated at depth 14.00mtr from existing ground level

FIELD BORELOG CHART

Bore hole Location	: MALWA / MPPGCL,BH-25	Existing Ground Level (R.L) in m	284.344		
Co-ordinates	:N1695,E1893	Depth of Ground Water Table below EGL (m)	1.20		
Type of Boring	Rotary	Date of commencement	31.07.09	No of DS sample collected	1
Dia of Bore	: 150mm in Soil, 75mm in Rock.	Date of Completion	02.08.09	No of UDS sample collected	0
Inclination of Borehole	Vertical	Conducted By	B.Bal	No of SPT sample collected	0
Type of Sampler used	UDS/Split spoon Sampler/Core barrel			No of core sample collected	12

Depth(m)		Length of Run	Description of Strata	Log of Bore	Sampling		SPT				Details of Rock Core					
From	To				Depth	Type	Blows Required for Penetration of depth			N value	Total Length (cm)	No of Pieces	Length of core greater than 10cm	% of Core Recovery	RQD Value %	Remarks
							0 - 15 cm	15 - 30 cm	30 - 45 cm							
0.00	1.00	1.00	Highly Weathered Rock		1.00	DS-1										
1.00	1.02	0.02	Grey Fine Grained Basalt		1.02	SPT rebounded at 100 blows for 3cm penetration				REFUSAL						
1.02	2.00	0.98			2.00	CORE-1					39	12	-	40	-	
2.00	3.00	1.00			3.00	CORE-2					37	11	-	37	-	
3.00	4.00	1.00			4.00	CORE-3					47	14	-	47	-	
4.00	5.00	1.00			5.00	CORE-4					49	15	-	49	-	
5.00	6.00	1.00	Dark Grey Coarse Grained Basalt		6.00	CORE-5					53	11	-	53	-	
6.00	7.00	1.00			7.00	CORE-6					50	16	-	50	-	
7.00	8.00	1.00			8.00	CORE-7					45	8	-	45	-	
8.00	9.00	1.00			9.00	CORE-8					77	7	50	77	50	
9.00	10.00	1.00			10.00	CORE-9					83	9	54	83	54	
10.00	11.00	1.00			11.00	CORE-10					90	8	59	90	59	
11.00	12.00	1.00			12.00	CORE-11					92	9	61	92	s	
12.00	13.00	1.00			13.00	CORE-12					89	8	56	89	56	

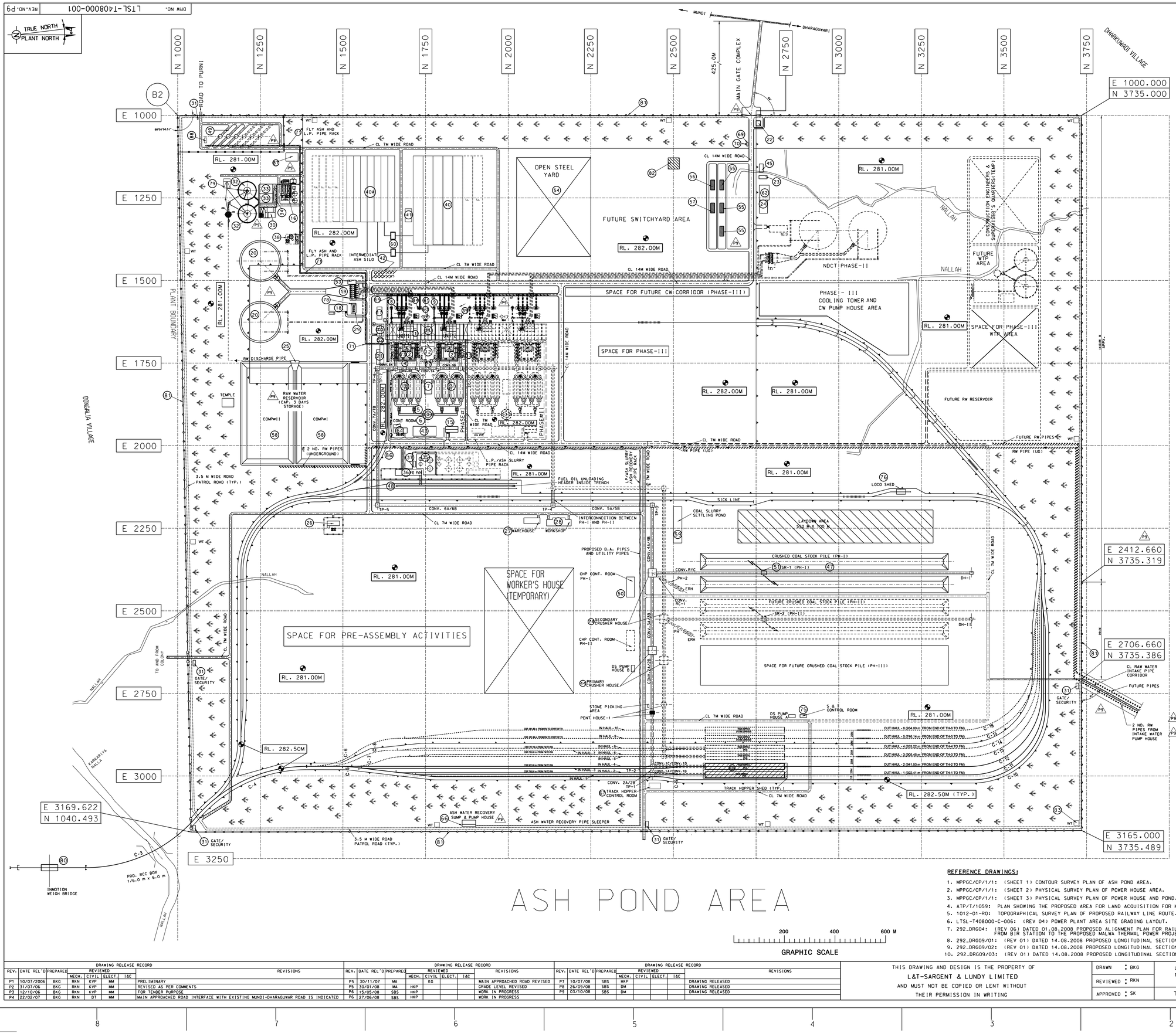
Bore hole terminated at depth 13.00mtr from existing ground level

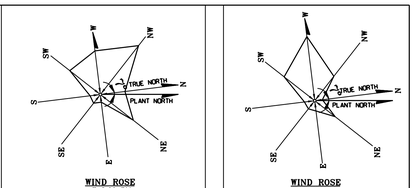
DRW NO. LTSL-T408000-001 REV.NO. P9

TRUE NORTH
PLANT NORTH

ASH POND AREA

GRAPHIC SCALE 200 400 600 M





WIND ROSE AT 9:30 PM

WIND ROSE AT 8:30 AM

LEGEND

SR. NO.	DESCRIPTION	SR. NO.	DESCRIPTION
1	POWER HOUSE BUILDING	40A	AREA FOR 220 KV SWITCHYARD
2	BOILER	41	SWITCHYARD CONTROL ROOM
3	ESP	42	INTERMEDIATE ASH SILO (6 NOS.)
4	PA & FD FAN AREA	43	SPACE FOR FGD PLANT
5	ID FAN AREA	44	PRIMARY CRUSHER HOUSE
6	CHIMNEY (MULTI FLUE)	45	FIRE STATION
7	ESP CONTROL ROOM	46	TRACK HOPPER
8	GENERATOR TRANSFORMER	47	CRUSHED COAL PILE
9	UNIT TRANSFORMER	48	FUEL OIL UNLOADING AREA
10	SERVICE / TECHNICAL BLDG.	49	FLY ASH SILO (3 NOS.)
		50	CHP CONTROL ROOM
11	ELECTRICAL ROOM	51	STACKER RECLAIMER
12	CONTROL ROOM	52	CPU REGENERATION UNIT
13	MILL & BUNKER BLDG.	53	CWPH CONTOL/SWITHGEAR ROOM
14	DELETED	54	OPEN STEELYARD(TEMP.)
15	ASH WATER SUMP & PUMP HOUSE	55	OFFICE FOR MPPGCL (TEMP.)
16	DM PLANT UNIT	56	STORAGE SHED (TEMP.)
17	D.G. AND COMPRESSOR BUILDING	57	DISPENSARY FOR STAFF (TEMP.)
18	CHLORINATION BUILDING	58	RAW WATER RESERVOIR
19	CW & ACW PUMP HOUSE & FOREBAY	59	COAL SLURRY SETTLING POND
20	ND COOLING TOWER	60	INTERCONNECTING AUTO TRANS.
21	AIR COMPRESSOR & VACUUM PUMP & CONTROL BLDG. (AHS) (COMMON)	61	STATION TRANSFORMER
		62	PARKING SPACE
22	MAIN SECURITY OFFICE	63	COND. STORAGE TANK & PUMP
23	CANTEEN	64	ASH SLURRY PUMP HOUSE
24	ADMINISTRATION BUILDING	65	TRANSFORMER BURNT OIL PIT
25	RAW WATER SUPPLY PUMP HOUSE	66	ASH WATER RECOVERY PUMP HOUSE
26	HYDROGEN GENERATION PLANT	67	TRACK HOPPER CONTOL ROOM
27	WAREHOUSE	68	DELETED
28	WORKSHOP	69	WEIGH BRIDGE
29	SIDE STREAM FILTRATION UNIT	70	CONTROL ROOM FOR WEIGH BRIDGE
30	CHEMICAL HOUSE	71	FLY ASH AND L. P. PIPE RACK
31	GATE & SECURITY ROOM	72	DELETED
32	CLARIFLOCULATOR	73	BOTTOM ASH BIN
33	CLARIFIED & FIRE WATER STOR. TANK	74	SECONDARY CRUSHER HOUSE
34	CLARIFIED & FIRE WATER PUMP HOUSE	75	SAT CONTROL ROOM
35	HFO & LDO STORAGE AREA AND DYKE	76	LOCO SHED
36	HFO & LDO UNLOADING & FORWARDING PUMP HOUSE	77	MILL REJECT SILO
		78	PIT FOR SIDE STREAM FILTER DRAIN
37	OILY WATER SEPARATOR	79	SLUDGE PIT AREA
38	SPACE FOR ETP	80	IN-MOTION WEIGH BRIDGE
39	AIR WASHER UNIT	81	BOUNDARY WALL/FENCING
40	AREA FOR 400 KV SWITCHYARD	82	11KV / 415V SUB STATION
		83	WATCH TOWER
		84	GENERATOR TRANSFORMER (SPARE)
		85	DELETED
		86	CLARIFIER FOR A.W RECOVERY SYSTEM
		87	SEWAGE TREATMENT PLANT
		88	FLY ASH SILO CONTROL ROOM

LEGEND:

1. ROAD
2. RAILWAY LINE
3. PATROL ROAD
4. PLANT BOUNDARY WALL
5. FUTURE FACILITIES
6. PROPOSED FACILITIES
7. CULVERT
8. GREEN BELT
9. PIPE RACK

NOTES:

1. ALL DIMENSIONS AND CO-ORDINATES ARE IN METRES UNLESS OTHERWISE SPECIFIED.
2. ALL ELEVATIONS ARE REFERRED TO FINISHED GROUND FLOOR LEVEL OF POWER HOUSE BUILDING AS EL.(±) 0.00M WHICH CORRESPONDS TO RL 282.50M.
3. FINISHED FLOOR LEVEL (FFL) FOR GROUND FLOOR OF ALL OTHER BUILDINGS SHALL BE 500 MM ABOVE ADJACENT FINISHED GRADE LEVEL (FGL)
4. TOP OF ROAD LEVEL (AT CROWN) SHALL BE 250 MM (MIN) ABOVE THE ADJACENT FINISHED GRADE LEVEL.
5. SIZES OF VARIOUS BUILDINGS/FACILITIES AS SHOWN HERE TENTATIVE.
6. PLANT NORTH IS 7° CLOCKWISE DIRECTION FROM TRUE NORTH.
7. RAILWAY TRACK FOR TRACK HOPPER SHOWN HERE ARE PROVISIONAL, EXACT LAYOUT OF THE SAME SHALL BE SUBJECT TO INDIAN RAILWAYS FINAL APPROVAL AND SHALL BE MODIFIED AS PER RAILWAY REQUIREMENT.
8. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE BID DOCUMENT INCLUDING TECHNICAL SPECIFICATION.
9. TOP OF RAIL LEVEL SHALL BE RL. 282.5 M THROUGH OUT THE PLANT AREA.
10. THE EMBANKMENT FOR THE RAILWAY TRACKS WILL BE EXECUTED BY THE AGENCY RESPONSIBLE FOR LAYING RAILWAY TRACKS.
11. N 1000 / E 1000 CO-ORDINATES CORRESPOND TO POINT "B2" OF SURVEY DRAWING OF M/S. ABM ENGG.

REFERENCE DRAWINGS:

1. MPPGC/CP/1/1: (SHEET 1) CONTOUR SURVEY PLAN OF ASH POND AREA.
2. MPPGC/CP/1/1: (SHEET 2) PHYSICAL SURVEY PLAN OF POWER HOUSE AREA.
3. MPPGC/CP/1/1: (SHEET 3) PHYSICAL SURVEY PLAN OF POWER HOUSE AND POND.
4. ATP/T/1059: PLAN SHOWING THE PROPOSED AREA FOR LAND ACQUISITION FOR MALWA TPS.
5. 1012-01-R0: TOPOGRAPHICAL SURVEY PLAN OF PROPOSED RAILWAY LINE ROUTE.
6. LTSL-T408000-C-006: (REV 04) POWER PLANT AREA SITE GRADING LAYOUT.
7. 292_DRG04: (REV 06) DATED 01.08.2009 PROPOSED ALIGNMENT PLAN FOR RAILWAY LINE FROM BIR STATION TO THE PROPOSED MALWA THERMAL POWER PROJECT.
8. 292_DRG09/01: (REV 01) DATED 14.08.2008 PROPOSED LONGITUDINAL SECTION.
9. 292_DRG09/02: (REV 01) DATED 14.08.2008 PROPOSED LONGITUDINAL SECTION.
10. 292_DRG09/03: (REV 01) DATED 14.08.2008 PROPOSED LONGITUDINAL SECTION.

REV.	DESCRIPTION	DATE	DRAWN	CHKD.	APPD.
P9	REVISED AS PER CUSTOMER COMMENTS	14/11/2008	SBS	DDC	DM
P8	HCSD PIPE CROSSING CULVERT NEAR PLANT ENTRY POINT RAILWAY LINE SHOWN, BOTTOM ASH PIPE RACK LAYOUT REVISED NEAR MARSHALLING YARD. ASH WATER RECOVERY PUMP HOUSE SHIFTED NEAR CO-ORDINATE N 1500/E 3250. CONVEYOR-10 IDENTIFICATION NO. CHANGED TO RYC (REVERSIBLE YARD CONVEYOR). PENT HOUSE-2 SHOWN IN ERH CONVEYOR. WATCH TOWER NEAR PLANT BOUNDARY INCOPORATED. ITEM 81 FOR FENCING / BOUNDARY WALL INCOPORATED. DRAWING GENERALLY REVISED AND BROUGHT UPDATED.	26/09/2008	SBS	DDC	DM
P7	CHP AREA MODIFIED IN LINE WITH "BALAJI" DRAWING (WORK IN PROGRESS). DISTANCE BETWEEN PH-I AND PH-II LIMIT HAS BEEN REDUCED TO COMBINE THE TG BUILDING, WTP,NDCT,CWPH AND DM PLANT ARE RELOCATED NEAR TO PH-I POWER HOUSE BUILDING.	10/07/2008	SBS	DDC	HKP
P6	WORK IN PROGRESS	27/06/2008	SBS	DDC	HKP
P5	WORK IN PROGRESS	15/05/2008	SBS	DDC	HKP
P4	GRADE LEVELS REVISED	30/01/2008	MK	DDC	HKP
P3	MAIN APPROACHED ROAD INTERFACE WITH EXISTING MUNDI-DHARAGUWAR ROAD IS INDICATED	22/02/07	BKG	RKN	SKK
P2	FOR TENDER PURPOSE	12/10/06	BKG	RKN	SKK
P1	REVISED AS PER COMMENTS	31/07/06	BKG	RKN	SK
P1	PRELIMINARY	10/07/2006	BKG	RKN	SK

PROJECT: MALWA THERMAL POWER PROJECT (2 x 500/600 MW)

CLIENT: MADHYA PRADESH POWER GENERATING CO. LTD, JABALPUR - INDIA

OWNER'S CONSULTANT: L&T - SARGENT & LUNDY LIMITED, BARODA

TITLE: PLOT PLAN

STATUS:

FILE NO. T408000-001-1.DGN

DRG.NO. LTSL-T408000-001

UNITS: SCALE:1:500

SHEET 1 OF 1 REV. P9

REVISE THIS DWG USING CAD SYSTEM ONLY

A0

DRAWN : BKG

REVIEWED : RKN

APPROVED : SK

L&T-S&L PROJECT NO. T408000

DRAWING RELEASE RECORD

REV.	DATE REL'D	PREPARED	REVIEWED				REVISIONS
			MECH.	CIVIL	ELECT.	I&C	
P1	10/07/2006	BKG	RKN	KVP	MM		PRELIMINARY
P2	31/07/06	BKG	RKN	KVP	MM		REVISED AS PER COMMENTS
P3	12/10/06	BKG	RKN	KVP	MM		FOR TENDER PURPOSE
P4	22/02/07	BKG	RKN	DT	MM		MAIN APPROACHED ROAD INTERFACE WITH EXISTING MUNDI-DHARAGUWAR ROAD IS INDICATED

DRAWING RELEASE RECORD

REV.	DATE REL'D	PREPARED	REVIEWED				REVISIONS
			MECH.	CIVIL	ELECT.	I&C	
P5	30/11/07	MA	KG				MAIN APPROACHED ROAD REVISED
P5	30/01/08	MA	HKP				GRADE LEVEL REVISED
P6	15/05/08	SBS	HKP				WORK IN PROGRESS
P6	27/06/08	SBS	HKP				WORK IN PROGRESS

DRAWING RELEASE RECORD

REV.	DATE REL'D	PREPARED	REVIEWED				REVISIONS
			MECH.	CIVIL	ELECT.	I&C	
P7	10/07/08	SBS	HKP				DRAWING RELEASED
P8	26/09/08	SBS	DM				DRAWING RELEASED
P9	03/10/08	SBS	DM				DRAWING RELEASED