DETAIL OF MUCK MANAGEMENT PLAN

SR NO	Name of the component where muck /debris is to be produced	Total quantity of muck/debris to be produced (In Cum)	Factor of increase in volume @40% for dumping. (In Cum)	Total quantity of muck /debris produced i/c factor of increase. (In Cum)	Qty of muck/ debris to be utilised (55 %). (In Cum)	Qty of muck debris to be dumped (In Cum)	Name of dumping place.	slope of dumping place.	location of dumping place/village /police station and nearby road.	Distance of dumping place from nearby river/nala with name of river (In km)	Area of dumping place with length & width(in mtr)			Area of dumping place as per plan & section (in hectare)	expected / volume capacity of muck dumping sites (in cum)
											L	B	H		
1	Trench weir	1950	780	2730	1502	1229	Muck Dumping at Weir site.	5- degree to 17 - degree	Gramang/ vill Gramang/ P.S Drang & Thaltukhod to Gramang link road.	2 mtr from Thaltukhod nala.	80	19.48	max- 6, min- 2	0.1600	1589
	Intake pipe & shingle excluder pipe	1270	508	1778	978	800									
	Feeder pipe	540	216	756	416	340									
	Desilting basin & collection pool	4390	1756	6146	3380	2766									
	Connecting pipe	1197	479	1676	922	754									
2	Head race tunnel	22605	9042	31647	17406	14241	Muck Dumping at Adit.	15 -degree to 46 - degree	Gramang/ P. S Drang & Thaltukhod link road.	120 mtr from thaltukhod nala.	37	46	max - 20, min - 12	0.1500	8902
	Adit	1160	464	1624	893	731									
3	Forebay. (A + B)	2970	1188	4158	2287	1871	Muck Dumping at Forebay.	Site B- 16 - degree to 26 - degree, site A- 20 to 39 degree.	Kharyan/ vill kharyan/ P.S Drang & Thaltukhod to Gramang link road.	222 mtr from thaltukhod nala	(A= 37.46, B= 35.44)	(A= 19.39, B= 16.57)	(A= max - 30, min 20), (B= max- 10, min - 4)	0.1380	14066

For Cliff Finvest Pvt. Ltd.
Authorised Signatory

Divisional Forest Officer
Joginder Nagar Forest Division
Joginder Nagar (H.P.)

4	Penstock.	11939	4776	16715	9193	7522	Muck Dumping at Power house.	4 to 10 degree	Kharyan/ vill Kharyan/ P.S Drang & Thaltukhod to Gramang link road.	2 mtr from Thaltukhod nala.	51.58	44.8	max - 12, min - 4.50	0.1637	7878
	Powerhouse	2618	1047	3665	2016	1649									
	Tail race channel	62	25	87	48	39									
	Switch yard	360	144	504	277	227									
	Energy dissipator	212	85	297	163	134									
Total		**51273**	**20509**	**71782**	**39480**	**32302**	____	____	____	____	____			**0.6117**	**32435**

NOTE	
1	**Total dumping capacity = 32435 Cum**
2	**Muck to be dumped = 32302 Cum**

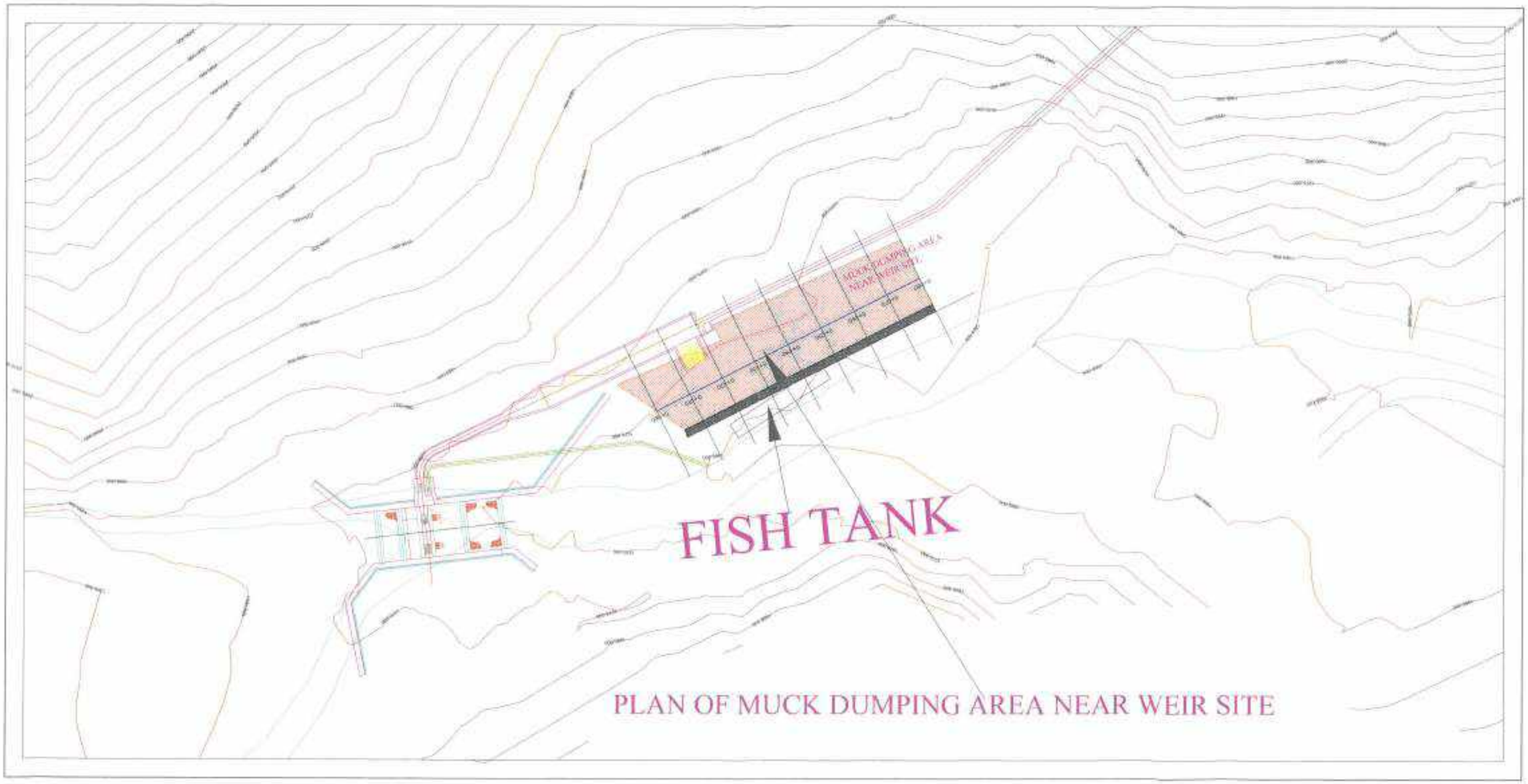
...vail Finvest Pvt. Ltd.
Authorised Signatory

O/c Divisional Forest Officer
Jogindar Nagar Forest Division
Jogindar Nagar (H.P.)

NOTE	
1	Filling behind retaning wall, Rock pieces which are dressable will be used for costruction of wire crates, retaning walls & breast wall = 25%
2	Collectecd pieces of rock from underground as well as open excavation will be carried to crusher site & crushed to different grades for use in lining of the HRT tunnel and other RCC structures where ever suitable = 20 %
3	Rest of the muck will be used in soling work in roads i.e approch road to power house, other components of the project & link roads near project area = 10 %

For Cliff Finvest Pvt. Ltd.
Authorised Signatory

Divisional Forest Officer
Jogindar Nagar Forest Division
Jogindar Nagar (H.P.)



For Cliff Finvest Pvt. Ltd.

Authorised Signatory

Divisional Forest Officer
Jogindar Nagar Forest Division
Jogindar Nagar (H.P.)

X-Section of MUCK DUMPING WEIR SITE

Muck Dumping Area Weir Site Thaltukhod Stage-I				
RD	Area in Sqm	AV/Area	Distance	Quantity in cum
0.000	20.637	0	0	0.000
10.000	42.456	31.54	10	315.400
20.000	32.557	37.5	10	375.000
30.000	49.578	41.06	10	410.600
40.000	53.736	51.65	10	516.500
50.000	20.027	36.88	10	368.800
60.000	11.341	15.68	10	156.800
70.000	8.598	9.96	10	99.600
80.000	10.288	9.44	10	94.400
			Total Area=	2337.100
	Considering Swell Factor		0.68	
	Total Dumping Capacity			1589.228

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0+080

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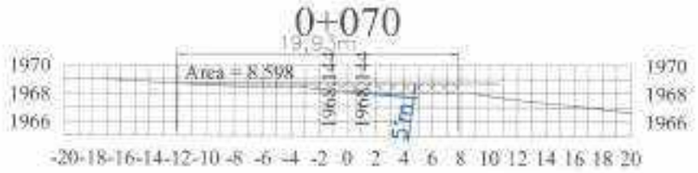

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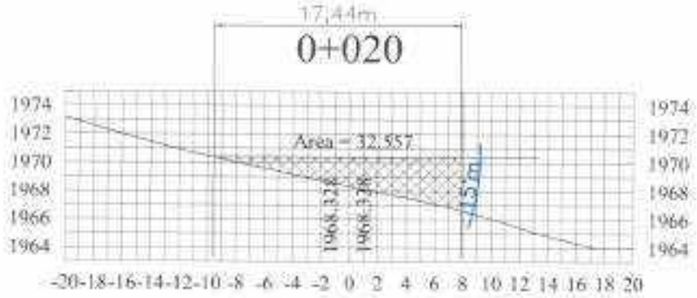

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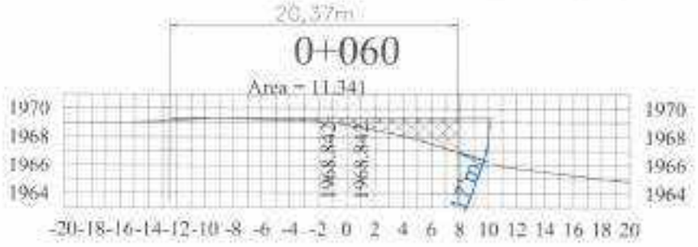

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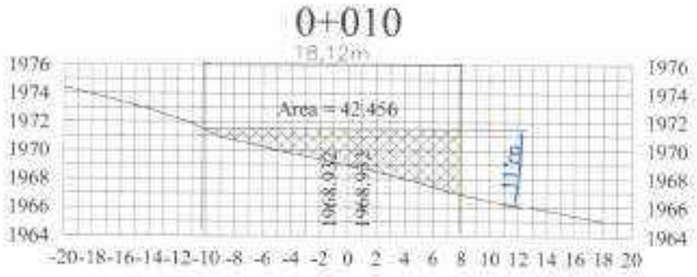

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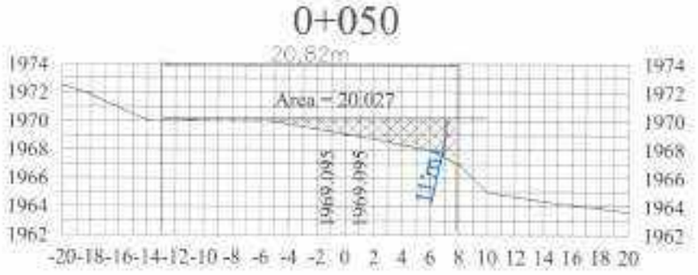

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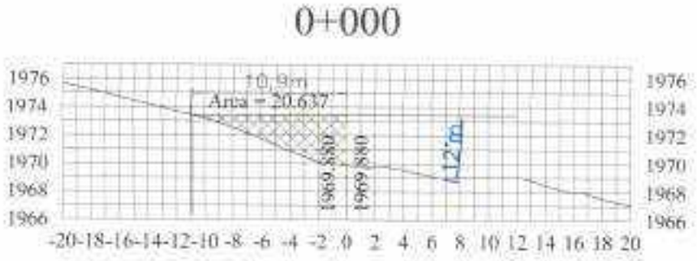

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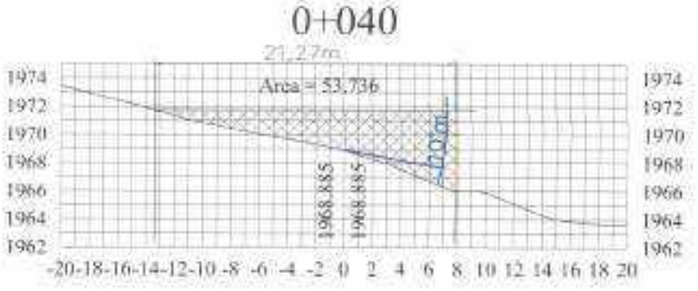

For Cliff Finvest Pvt. Ltd.

Authorised Signatory

Divisional Forest Off
Jogindar Nag
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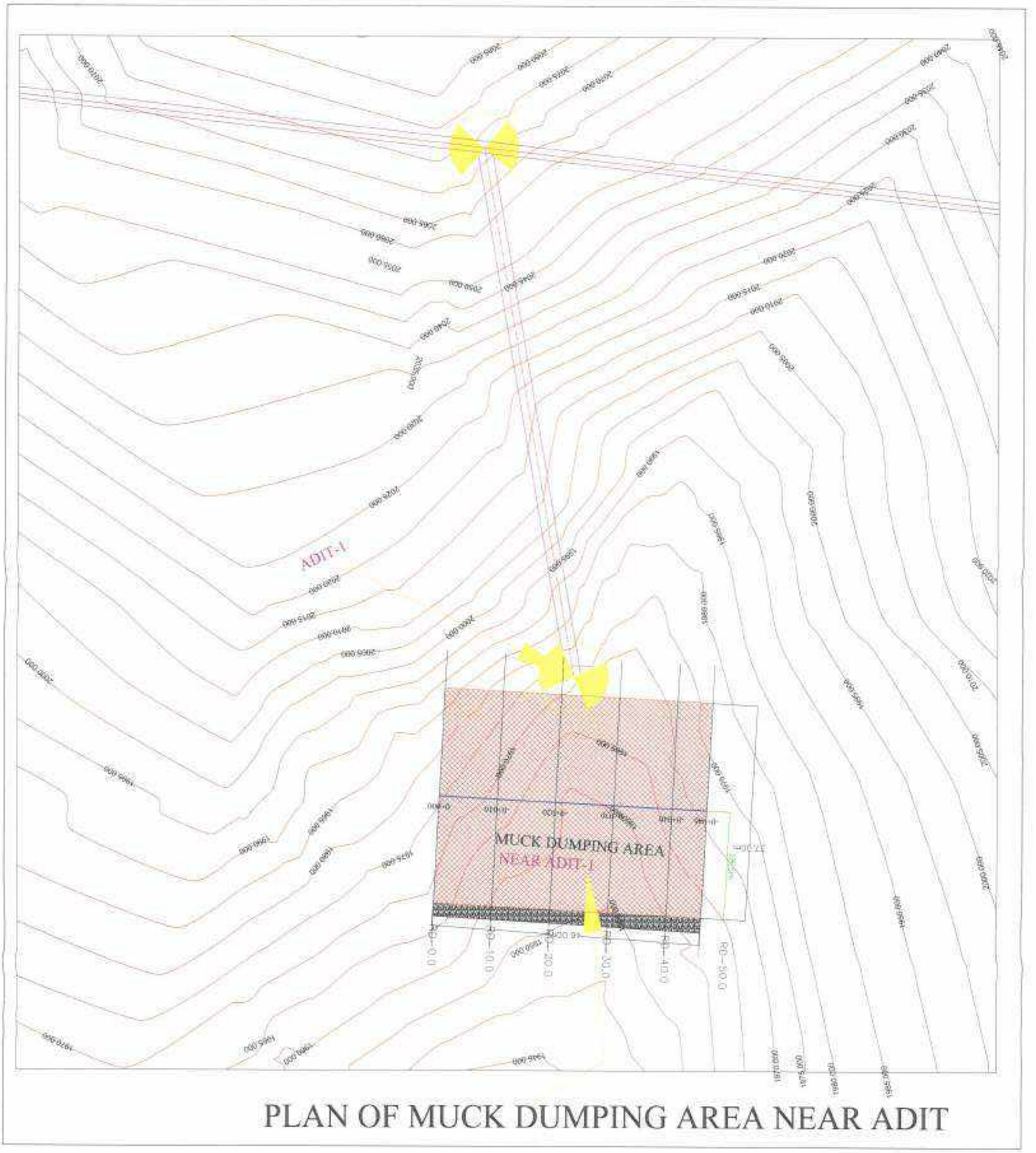


PLAN OF MUCK DUMPING AREA NEAR ADIT

For Cliff Finvest Pvt. Ltd.

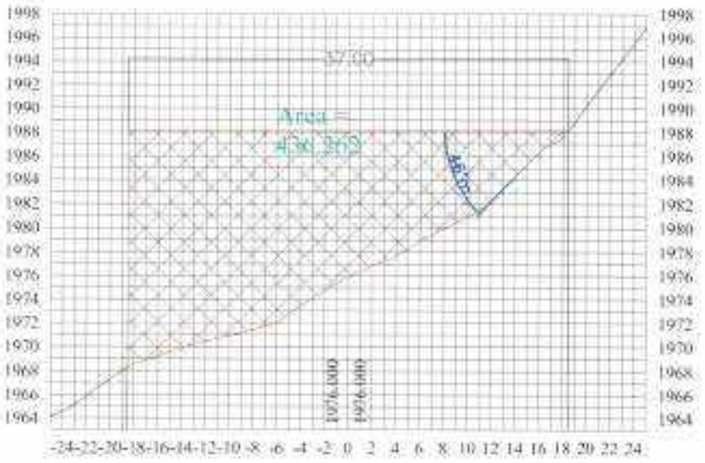
Authorised Signatory

Divisional Forest Officer
Jogindar Nagar Forest Division
Jogindar Nagar (H.P.)

X-SECTION OF MUCK DUMPING AREA NEAR ADIT

Muck Dumping Area Adit Portal Site Thaltukhod Stage-I				
RD	Area in Sqm	AV/Area	Distance	Quantity in cum
0.000	436.262	0.000	0	0.000
10.000	349.379	392.82	10	3928.200
20.000	301.532	325.455	10	3254.550
30.000	231.695	266.613	10	2666.130
40.000	178.056	204.875	10	2048.750
46.000	220.094	199.075	6	1194.450
			Total Area=	13092.080
	Considering Swell Factor		0.68	
	Total Dumping Capacity			8902.621

0+000



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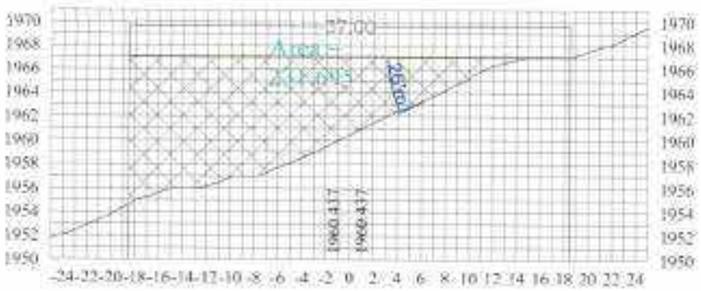

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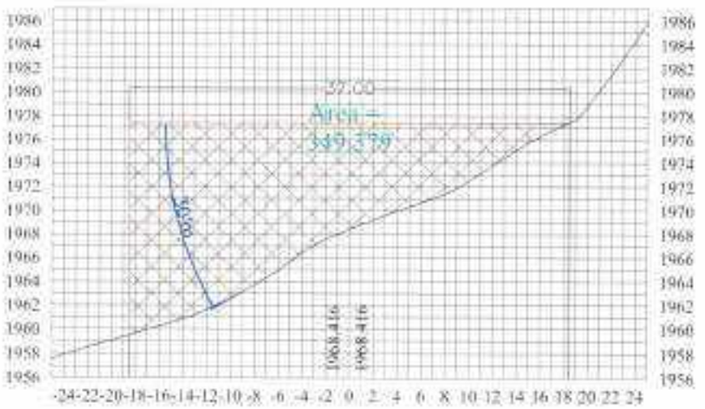

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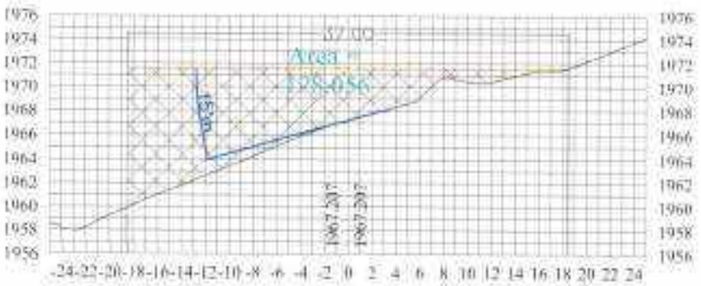

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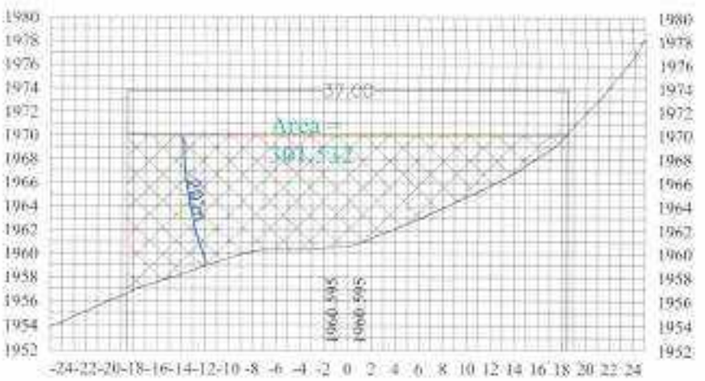

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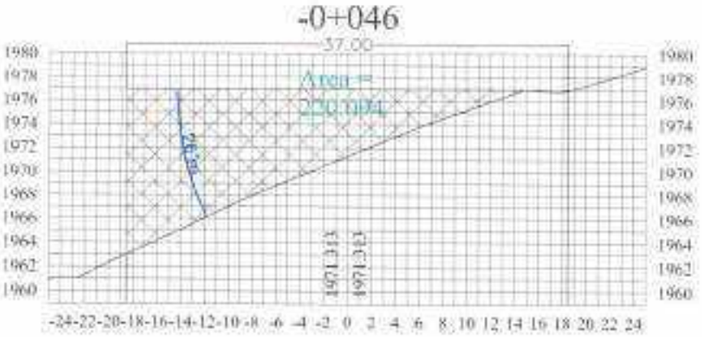
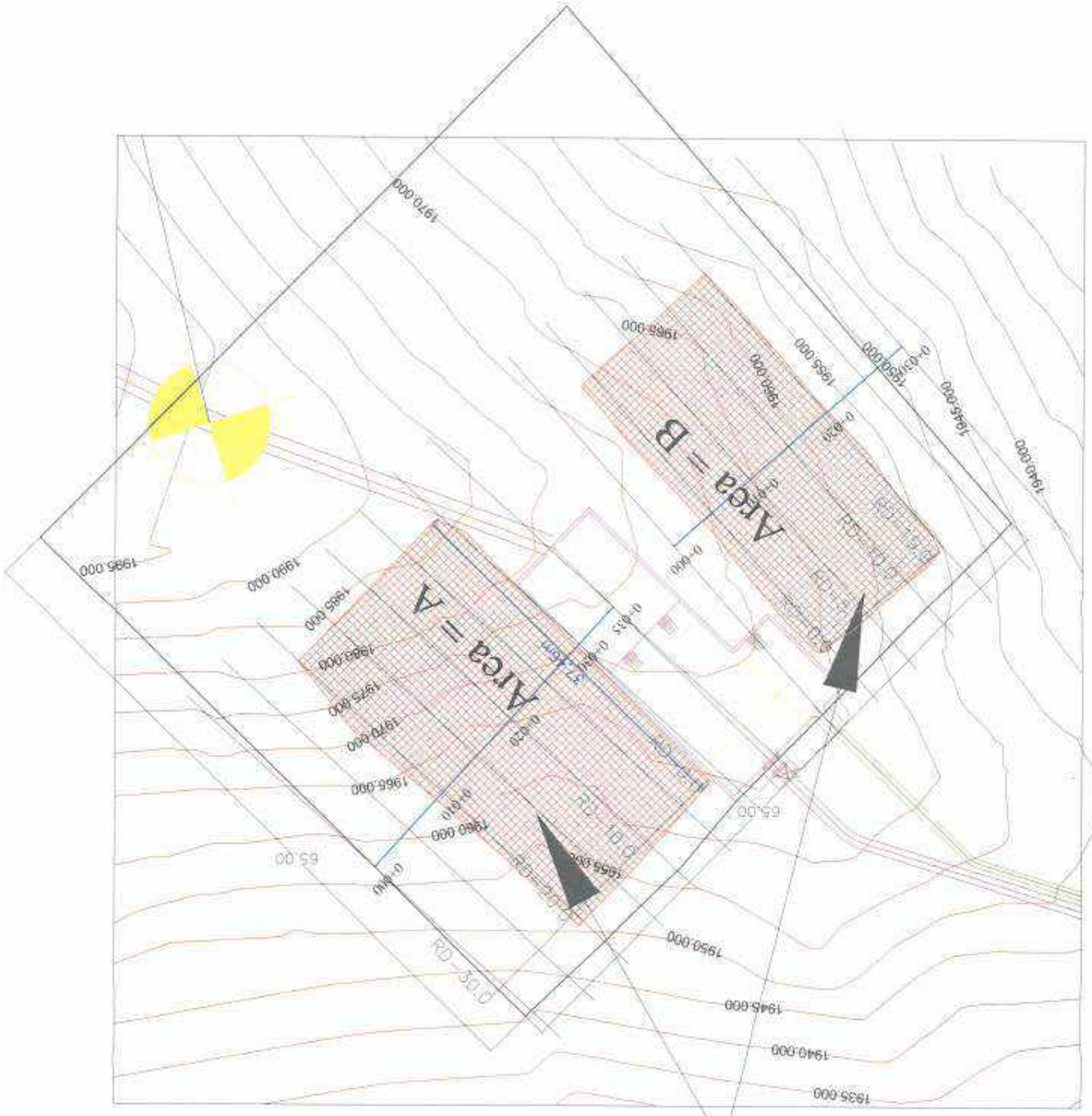


For Cliff Finvest Pvt. Ltd.
Authorised Signatory

Divisional Forest Officer
Joginder Nagar Forest Division
Joginder Nagar (H.P.)



PLAN OF MUCK DUMPING AREA NEAR FOREBAY

...ni Cliff Finvest Pvt. Ltd.
Authorised Signatory

Divisional Forest Officer
Joginder Nagar Forest Division
Joginder Nagar (H.P.)

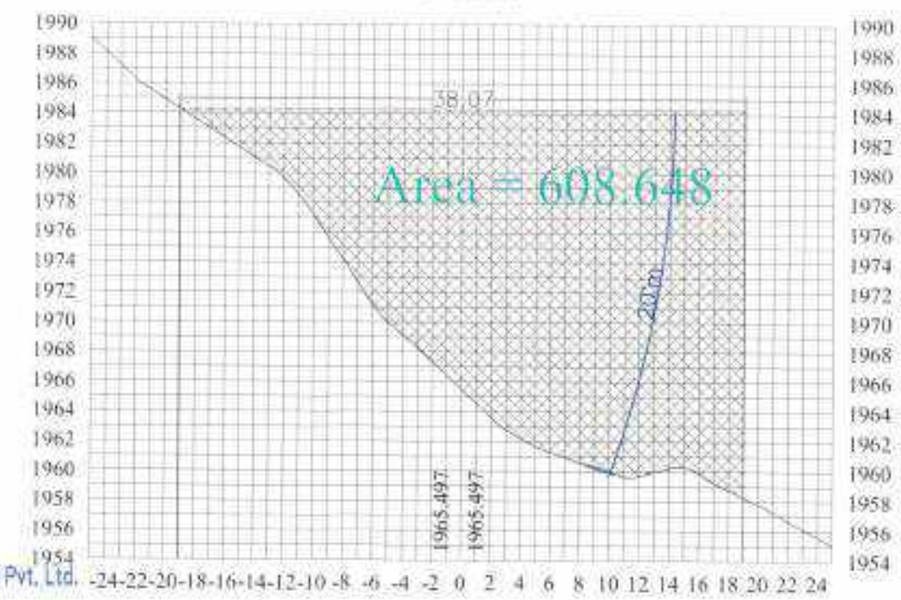
X-SECTION OF MUCK DUMPING AREA NEAR FOREBAY SITE

Area = A

0+010

Muck Dumping Area Near Forbay Site Thaltukhod Stage-I				
RD	Area in Sqm	AV/Area	Distance	Quantity in cum
AREA- A				
5.000	114.875	114.875	5.000	574.375
10.000	103.014	108.944	5.000	544.720
15.000	126.552	114.783	5.000	573.915
20.000	54.600	90.576	5.000	452.880
AREA- B				
10.000	670.619	670.619	10.000	6706.190
20.000	608.648	639.633	10.000	6396.330
30.000	478.797	543.722	10.000	5437.220
			Total Area=	20,685.630
	Considering Swell Factor		0.68	
	Total Dumping Capacity			14,066.228

0+020



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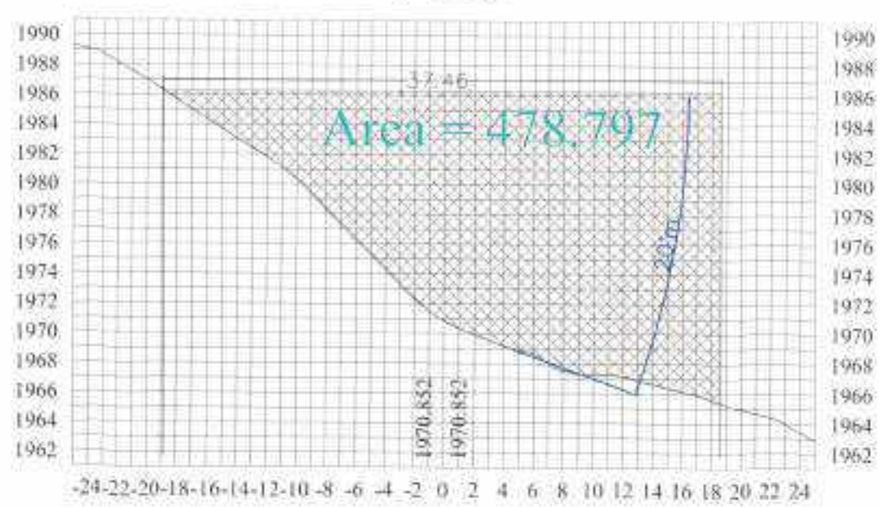

For Cliff Finvest Pvt. Ltd.
Authorised Signatory

Divisional Forest Officer
Jantinder Nagar Forest Division

X-SECTION OF MUCK DUMPING AREA NEAR FOREBAY SITE
Area = B

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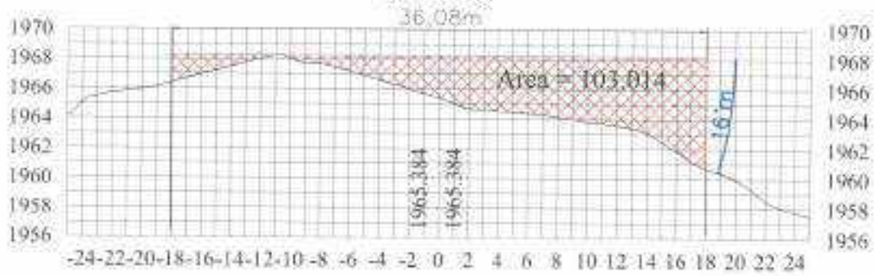

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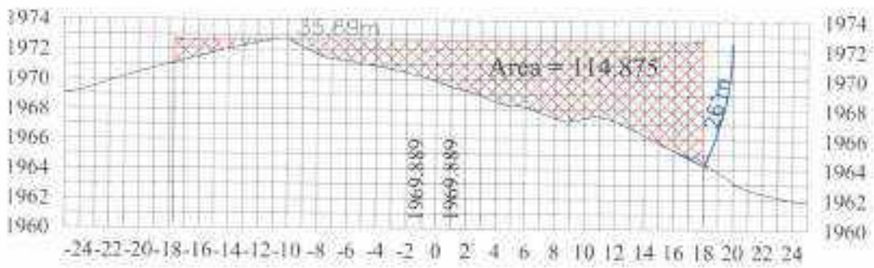

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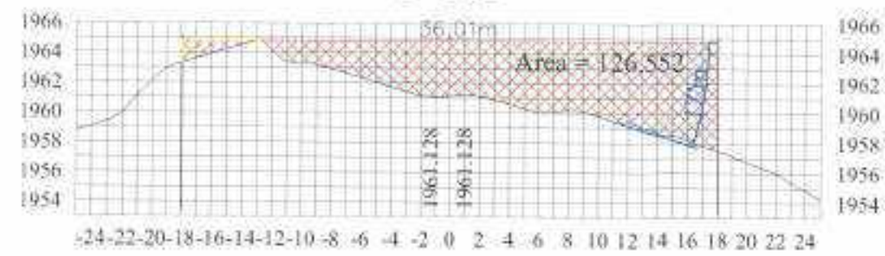
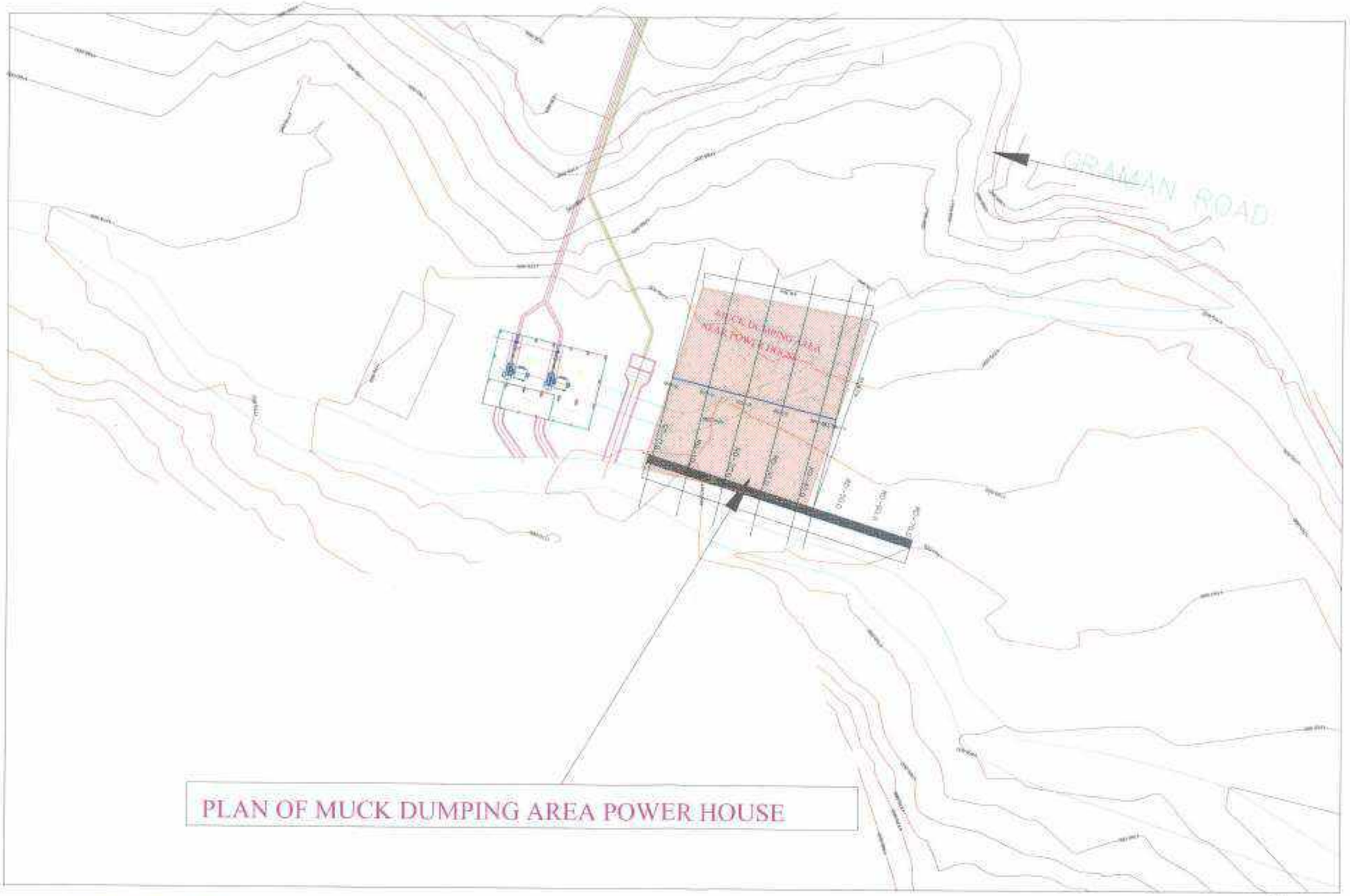


For Cliff Finvest Pvt. Ltd.
Authorised Signatory

Divisional Forest Officer
Joginder Nagar Forest Division
Joginder Nagar (H.P.)



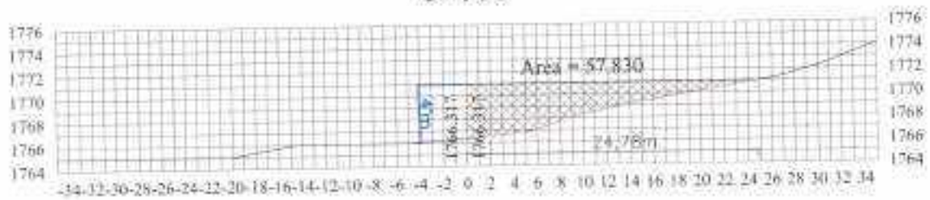
For Cliff Finvest Pvt. Ltd.
Authorised Signatory

Divisional Forest Officer
Joginder Nagar Forest Division
Joginder Nagar (H.P.)

X-SECTION OF MUCK DUMPING AREA POWER HOUSE

Muck Dumping Area Power House Site Thaltukhod Stage-I				
RD	Area in Sqm	AV/Area	Distance	Quantity in cum
0.000	57.830	0.000	0.000	0.000
10.000	269.544	163.687	10.000	1636.870
20.000	301.643	285.593	10.000	2855.930
30.000	307.990	304.816	10.000	3048.160
40.000	325.055	316.522	10.000	3165.220
44.339	80.547	202.801	4.339	879.954
			Total Area=	11586.134
	Considering Swell Factor		0.68	
	Total Dumping Capacity			7878.571

0+000



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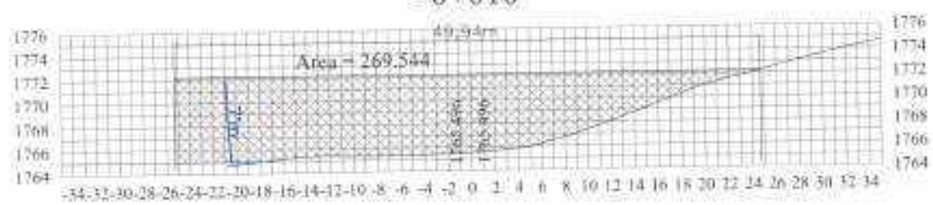

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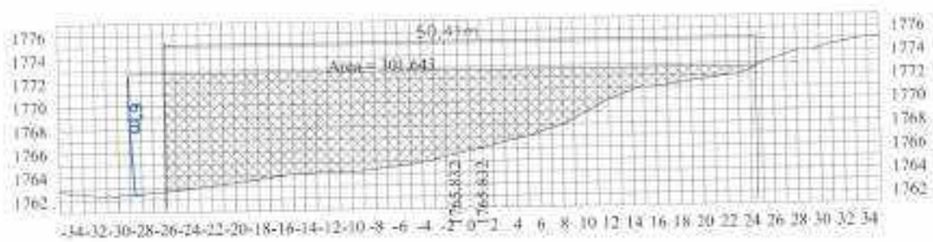

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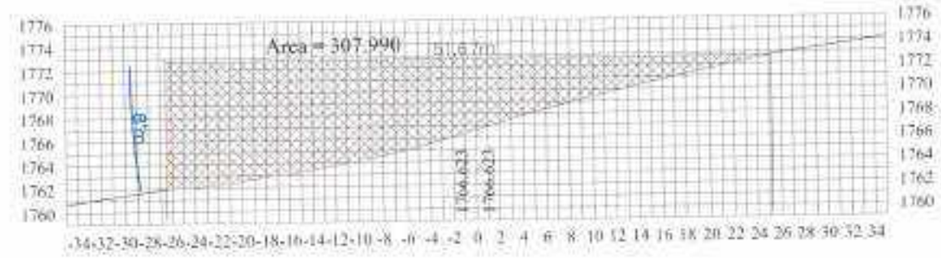

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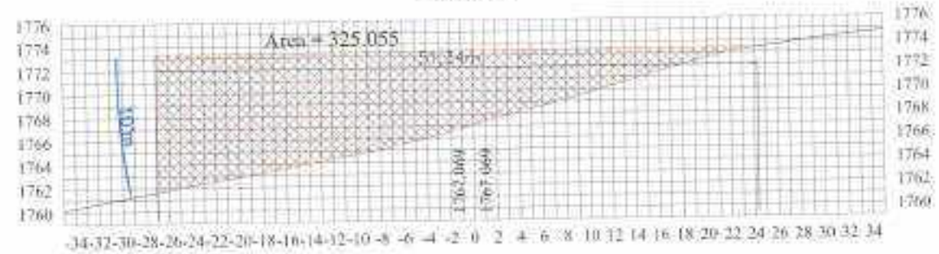

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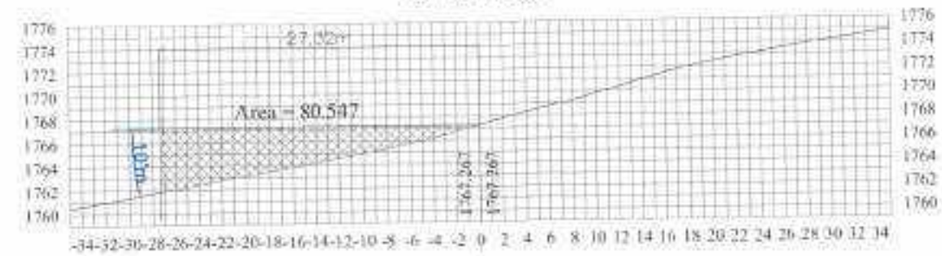


For Cliff Forest Pvt. Ltd.

Authorised Signatory

Divisional Forest Officer
Jogindar Nagar Forest Division
Jogindar Nagar (H.P.)

Full Title of the Project: Thaltukhod Stage-1 Hydro Electric Project 5.00 MW
File No.: SW/79579/2018
Date of Proposal: 20.09.2018

CHECK LIST SERIAL NUMBER- 32

Reclamation plan of muck generated in respect of Thaltukhorh HEP stage -1

Component wise details of actual muck generated from different works of the project as per DPR of the Thaltukhorh HEP stage I:-

i)	Trench weir (Common excavation and excavation in rock)	=	1950 cum.
ii)	Intake and Shingle excluder pipe	=	1270 cum.
iii)	Feeder Pipe	=	540 cum.
iv)	D-tank and collection pool	=	4390 cum.
v)	Connecting pipe	=	1197 cum
vi)	Tunnel	=	22605 cum
vii)	Adit to tunnel	=	1160 cum.
viii)	Forebay	=	2970 cum.
ix)	Penstock	=	11939 cum.
x)	Power House	=	2618 cum.
xi)	Energy Dissipator	=	212 cum.
xii)	Switch Yard	=	360 cum.
xiii)	Tail race	=	62 cum
Muck generated		=	**51273 cum**
Factor increase in volume for dumping 40%		=	**20509 cum**
		=	**51273 + 20509**
Total muck generated		=	**71782 cum**

Out of the muck generated of this will be used in:-

1) Filling behind retaining wall, Rock pieces/Boulders which are dressable will be used for construction of wire creates, retaining walls & breast wall = **25%.**
2) Collected pieces of rock from underground as well as open excavation will be carried to crusher site & crushed to different grades for use in lining of HRT tunnel and other RCC structures where ever suitable = **20%.**
3) Rest of the muck will be used in soling work in roads i.e. approach road to power house & other components of the project & link roads near project area = **10%.**

55% of this quantity is	=	0.55% X 71782 = 39480 cum.
Hence balance muck to be disposed off	=	71782 - 3948 = 32302 cum.

For Cliff Finvest Pvt. Ltd.
Authorised Signatory

Divisional Forest Officer
Joginder Nagar Forest Division
Joginder Nagar (H.P.)

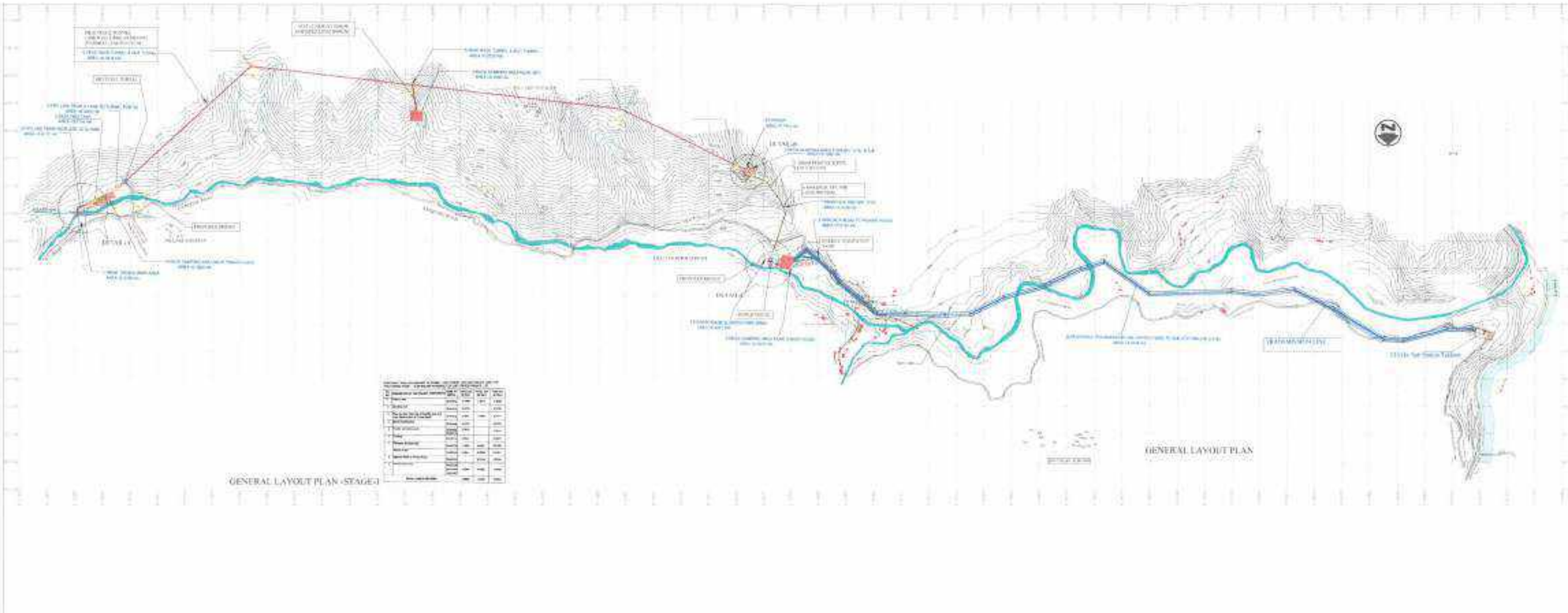
Abstract of total dumping capacity created for the execution of Thaltukhorh HEP stage I (Details as per annexure attached)

i)	Capacity of muck dumping area near the weir site	=	1589 Cum
ii)	Capacity of muck dumping area near Adit.	=	8902 Cum
iii)	Capacity of muck dumping area near Forebay	=	14066 Cum
iv)	Capacity of muck dumping area near Power House	=	7878 Cum
Total capacity of muck dumping yards.		=	**32435 Cum**

The dumping space created is very much sufficient, hence Okay.

For Cliff Finvest Pvt. Ltd.
Authorised Signatory

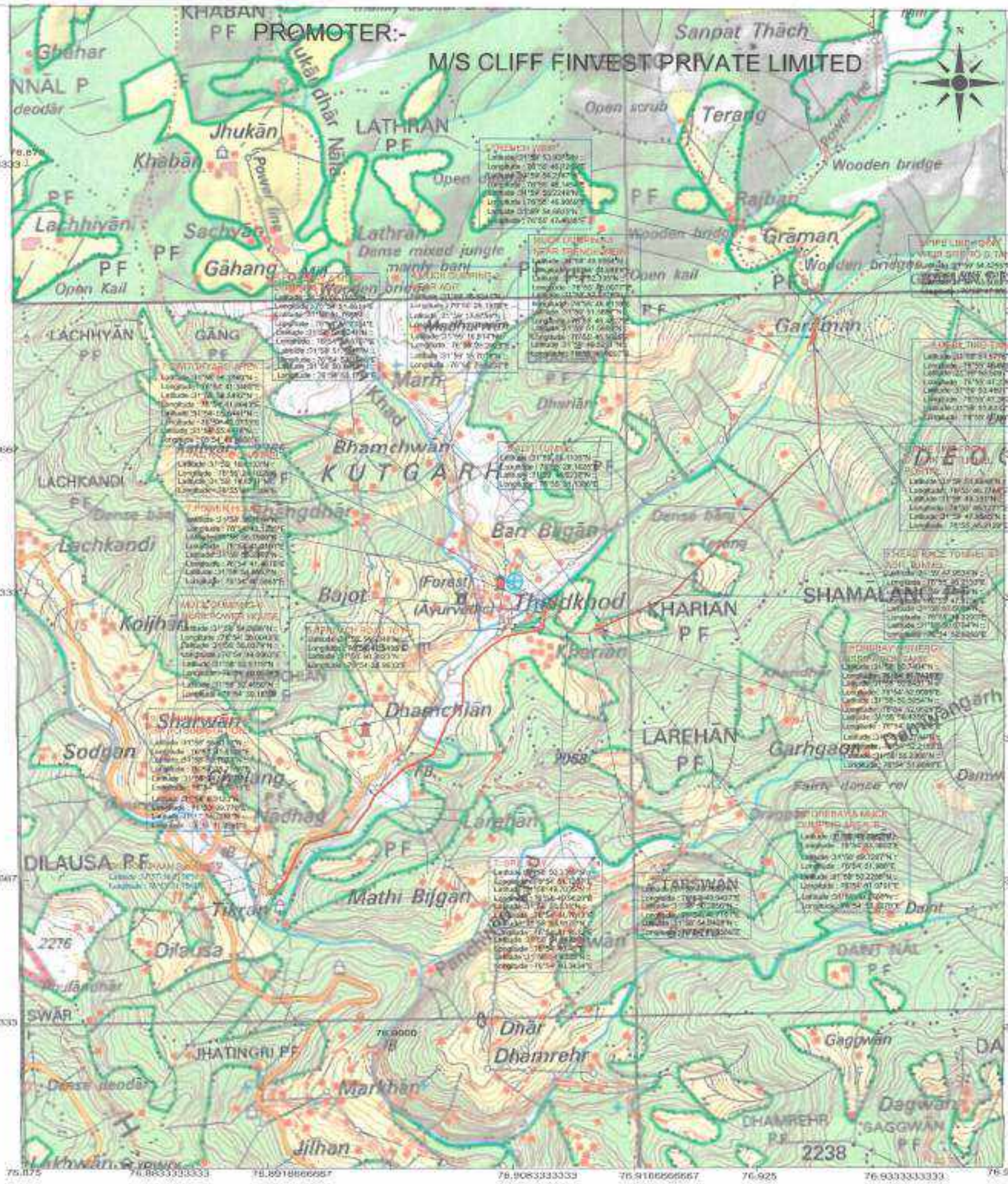
Divisional Forest Officer
Joginder Nagar Forest Division
Joginder Nagar (H.P.)



For Cliff Finvest Pvt. Ltd.
Authorised Signatory

...onal Forest Officer

Digital/Geo-Reference Map OF **Thaltukhorh-I HEP (5.00 MW)**
Village -Thaltukhorh, Tehil-Padhar Distt.-Mandi (Himachal Pradesh)



	1.Trench Weir
	3.Pipe line from Weir Site to Desilting Tank
	2.Desilting Tank
	3.Pipe Line from Desilting Tank to Tunnel Portal
	4.Muck Dumping Site
	5.Head Race Tunnel & Adit Tunnel
	6.Forebay
	7.Penstock Line
	7.Spilway
	7.Power House & Switchyard
	7.Tailrace
	8.Aproach Road to Power House
	9.Proposed Transmission Line

2cm to 1km

0 — 1Km

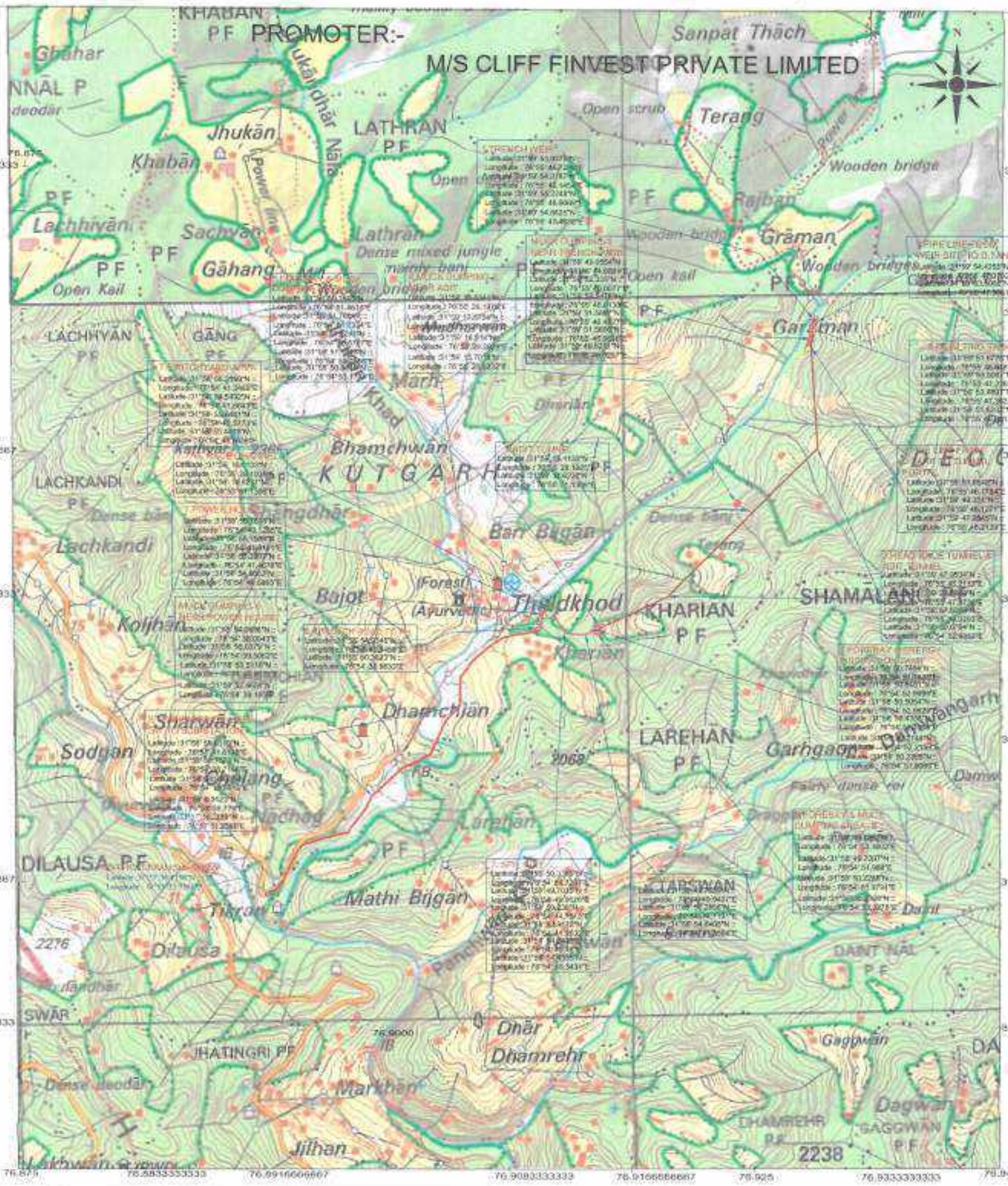
SOI Toposheet Scale 1:50,000
Sheet No.53 A/13(H43 E13)
52 D/16 (I43 W16)

For Cliff Finvest Pvt. Ltd.

Authorised Signatory

Divisional Forest Officer
Jogindar Nagar Forest Division

Digital/SOI Toposheet Map OF **Thaltukhorh-I HEP (5.00 MW)**
Village -Thaltukhorh, Tehil-Padhar Distt.-Mandi (Himachal Pradesh)



	1.Trench Weir
	3.Pipe line from Weir Site to Desilting Tank
	2.Desilting Tank
	3.Pipe Line from Desilting Tank to Tunnel Portal
	4.Muck Dumping Site
	5.Head Race Tunnel & Adit Tunnel
	6.Forebay
	7.Penstock Line
	7.Spilway
	7.Power House & Switchyard
	7.Tailrace
	8.Aproach Road to Power House
	9.Proposed Transmission Line

2cm to 1km

0 — 1Km

SOI Toposheet Scale 1:50,000
Sheet No.53 A/13(H43 E13)
52 D/16 (I43 W16)

For Cliff Finvest Pvt. Ltd.
Authorised Signatory

Divisional Forest Officer
Joginder Nagar Forest Division
Joginder Nagar (H.P.)

COMPONENT WISE REQUIREMENT OF FOREST / NON FOREST LAND AND PRIVATE LAND FOR THALTUKHOD STAGE - 1 (5.00 MW) HEP IN RESPECT OF CLIFF FINVEST PRIVATE LTD.

SR. NO.	DESCRIPTION OF THE PROJECT COMPONENTS	NAME OF MOHAL	Forest area (In Hec.)	Private area (In Hec.)	Total Area (In Hec.)
1	Trench Weir	Gramang	0.1565	0.2671	0.4236
2	Desilting tank	Gramang	0.0734	-	0.0734
3	Pipe line from Weir site to Desilting tank and from Desilting tank to Tunnel portal	Gramang	0.0627	0.2550	0.3177
4	Muck Dumping Site	Gramang	0.6122	-	0.6122
5	Tunnel and Adiit tunnel	Gramang KHARIYAN	0.7818	-	0.7818
6	Forebay	KHARIYAN	0.3343	-	0.3343
7	Penstock and Spill way	KHARIYAN	0.1635	0.0501	0.2136
8	Power House area	KHARIYAN	0.3841	0.0600	0.4441
9	Aproach Road to Power House	KHARIYAN		0.0154	0.0154
10	Transmission line	KHARIYAN DHAMCHYAN CHELING	2.3384	0.0162	2.3546
	TOTAL LAND IN HETARES		**4.9069**	**0.6638**	**5.5707**

For Cliff Finvest Pvt. Ltd.
Authorised Signatory

Divisional Forest Officer
Jr. [illegible] Nagar Forest Division
J [illegible]

COMPONENT WISE REQUIREMENT OF FOREST / NON FOREST LAND AND PRIVATE LAND FOR THALTUKHOD STAGE - 1 (5.00 MW) HEP IN RESPECT OF CLIFF FINVEST PRIVATE LTD.

SR. NO.	DESCRIPTION OF THE PROJECT COMPONENTS	NAME OF MOHAL	KHASRA NO.	FOREST/ GOVT. AREA (IN BIGHAS)	PRIVATE AREA (IN BIGHAS)	LEGAL STATS	AREA IN HECTARES
1	Trench Weir/ Weir Intake, Bed Load Excluder pipe, Pipe line to Desilting Tank, Desilting Tank, Pipe line to Tunnel Portal and Muck Dumping Site	Gramang / 450	981/1	-	00 - 11 - 09	BARANI SOYAM	0.0463
			2392/1	00 - 05 - 06	-	GAIR MUMKIN NALA	0.0486
			2325/1	00 - 04 - 03	-	CHARAGAH BILA DHARAKHTAAN	0.0053
			2300/1	00 - 07 - 18	-	GAIR MUMKIN NALA	0.0097
			2160/1	00 - 11 - 08	-	GAIR MUMKIN NALA	0.0040
			2159/1	02 - 05 - 11	-	GAIR MUMKIN NALA	0.0091
			1016/1	00 - 18 - 03	-	CHARAGAH BILA DHARAKHTAAN	0.0136
			1007	-	00 - 12 - 00	BARANI SOYAM	0.0486
			1008	-	00 - 01 - 06	BARANI SOYAM	0.0053
			1009	-	00 - 02 - 08	BARANI SOYAM	0.0097
			1010	-	00 - 01 - 00	BARANI SOYAM	0.0040
			1011	-	00 - 02 - 05	BARANI SOYAM	0.0091
			1012	-	00 - 03 - 07	BARANI SOYAM	0.0136
			1017	-	01 - 04 -16	BARANI SOYAM	0.1004
			1024	-	00 - 17 - 03	BARANI SOYAM	0.0693
			1026	00 -15 - 10	-	CHARAGAH DHARAKHTAAN	0.0627
			1027	-	00 - 05 - 12	BARANI SOYAM	0.0227
			1028/1	-	01 - 02 - 10	BARANI SOYAM	0.0910
			1029	-	00 - 08 - 12	BARANI SOYAM	0.0348
			1030	-	00 - 06 - 04	BARANI SOYAM	0.0251
			1031	-	00 - 03 - 00	BARANI SOYAM	0.0121
			2162	-	00 - 07 - 09	BARANI SOYAM	0.0301
2	Adit	Gramang / 450	549/3	00 - 05 - 02	-	UPF	0.0206
			549/1/1	00 - 05 - 11	-	CHARAGAH BILA DHARAKHTAAN	0.0224
3	Muck Dumping Site	Gramang / 450	549/1/2	02 - 04 - 11	-	CHARAGAH BILA DHARAKHTAAN	0.1802
4	Tunnel Portal, Tunnel, Muck dumping Site	Gramang / 450	549/1	03 - 15 - 03	-	UPF	0.3040
			862/1	00 - 18 - 18	-	CHARAGAH DHARAKHTAAN	0.0765
			727/1	00 - 10 - 04	-	CHARAGAH DHARAKHTAAN	0.0413
			764/1	00 - 00 - 13		CHARAGAH BILA DHARAKHTAAN	0.0026
			741/1	00 - 02 - 16	-	CHARAGAH BILA DHARAKHTAAN	0.0114
			714/1	00 - 01 - 16		UPF	0.0073
			637/1	00 - 01 - 17	-	CHARAGAH DHARAKHTAAN	0.0075
			637/3	00 - 01 - 02	-	CHARAGAH DHARAKHTAAN	0.0048

For Cliff Finvest Pvt. Ltd.

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Joginder Nagar Forest Division
Joginder Nagar (H.P.)

5	Tunnel	KHARIYAN / 457	497/1	00 - 10 - 10	-	UPF	0.0425
			598/1	00 - 00 - 06	-	GAIR MUMKIN RASTA	0.0012
			607/1	00 - 00 - 09	-	CHARAGAH CHARAKHTAAN	0.0018
			632/1	00 - 00 - 09	-	GAIR MUMKIN RASTA	0.0018
			559/1	00 - 00 - 09	-	GAIR MUMKIN RASTA	0.0018
			557/1	00 - 02 - 02	-	UPF	0.0085
			766/1	00 - 00 - 12	-	GAIR MUMKIN NALLA	0.0024
			766/1/1	00 - 06 - 02	-	UPF	0.0247
			766/1/2	00 - 01 - 04		UPF	0.0049
			1023/1	00 - 00 - 18	-	GAIR MUMKIN NALLA	0.0036
			1073/1	00 - 01 - 07	-	UPF	0.0055
			1073/2	00 - 07 - 00	-	UPF	0.0283
			1033/1	01 - 04 - 01	-	UPF	0.0973
			1072/1	00 - 14 - 12	-	UPF	0.0591
6	Tunnel outlet, Forebay and Muck dumping site	KHARIYAN / 457	4307/4295/1	02 - 09 - 04	-	UPF	0.1991
7	Forebay, a part of Penstock, a part of spill way and muck dumping site	KHARIYAN / 457	1999/1	03 - 09 - 00	-	CHARAGAH BLA CHARAKHTAAN	0.2792
			1072/2	01 - 04 - 01	-	UPF	0.0973
8	Penstock and Spill way	KHARIYAN / 457	1999/2	00 - 08 - 16	-	CHARAGAH BLA CHARAKHTAAN	0.0356
			1955/1	00 - 07 - 11	-	CHARAGAH BLA CHARAKHTAAN	0.0306
			1187/1	-	00 - 01 - 01	BARANI SOYAM	0.0042
			1238/1	-	00 - 02 - 12	BARANI SOYAM	0.0105
			1237/1	-	00 - 00 - 06	BARANI SOYAM	0.0012
			1253/1	-	00 - 00 - 04	BARANI SOYAM	0.0008
			1252/1	-	00 - 00 - 09	BARANI SOYAM	0.0018
			1251/1	-	00 - 00 - 08	BARANI SOYAM	0.0016
			1262/1	-	00 - 01 - 08	BARANI SOYAM	0.0057
			1261/1	-	00 - 01 - 08	BARANI SOYAM	0.0057
			1264/1	-	00 - 00 - 12	BARANI SOYAM	0.0024
			1260/1	-	00 - 00 - 01	BARANI SOYAM	0.0002
			1266/1	-	00 - 00 - 01	BARANI SOYAM	0.0002
			1267/1	-	00 - 00 - 09	BARANI SOYAM	0.0018
			1268/1	-	00 - 00 - 04	BARANI SOYAM	0.0008
			1270/1	-	00 - 01 - 02	BARANI SOYAM	0.0047
			1271/1	-	00 - 01 - 02	BARANI SOYAM	0.0045
			1272/1	-	00 - 00 - 12	BARANI SOYAM	0.0024
			1273/1	-	00 - 00 - 08	BARANI SOYAM	0.0016

For Cliff Finvest Pvt. Ltd.

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Joginder Nagar Forest Division
Joginder Nagar (H.P.)

9	Power House, Switchyard, Tailrace chanel and Muck dumping site	KHARIYAN / 457	4297/1323/1	00 - 07 - 12	-	CHARAGAH BILA CHARAKHTAAN	0.0308
			1326/1	-	00 - 00 - 07	GAIR MUMKIN KUHAL	0.0014
			1328	-	00 - 01 - 00	BARANI SOYAM	0.0040
			1329	-	00 - 00 - 12	GAIR MUMKIN GHARAT	0.0024
			1330	-	00 - 02 - 18	GAIR MUMKIN KUHAL	0.0118
			1335/1	-	00 - 03 - 09	GAIR MUMKIN KUHAL	0.0140
			1334/1	00 - 17 - 10	-	CHARAGAH BILA CHARAKHTAAN	0.0708
			1327/1	01 - 16 - 08	-	CHARAGAH BILA CHARAKHTAAN	0.1473
			4317/1333	-	00 - 01 - 05	BARANI SOYAM	0.0052
			4318/1333	-	00 - 00 - 05	BARANI SOYAM	0.0010
			4319/1333	03 - 09 - 00	-	UPF	0.2792
			1331	-	00 - 03 - 00	BARANI SOYAM	0.0121
			1332/1	-	00 - 02 - 00	BARANI SOYAM	0.0081
10	Aproach Road to Power House and a part of transmission line and Electric pole	KHARIYAN / 457	1326/2	-	00 - 00 - 09	GAIR MUMKIN KUHAL	0.0018
			1314/1	-	00 - 00 - 08	BARANI SOYAM	0.0016
			1313/1	-	00 - 00 - 09	BARANI SOYAM	0.0018
			1315/1	-	00 - 00 - 09	BARANI SOYAM	0.0018
			1316/1	-	00 - 00 - 04	BARANI SOYAM	0.0008
			1306/1	-	00 - 00 - 03	BARANI SOYAM	0.0006
			1309/1	-	00 - 00 - 10	BARANI SOYAM	0.0020
			1308/1	-	00 - 01 - 04	BARANI SOYAM	0.0050
			1954/1	00 - 04 - 02	-	CHARAGAH BILA CHARAKHTAAN	0.0166
			1918/1	04 - 01 - 05	-	CHARAGAH BILA CHARAKHTAAN	0.3288
11	Transmission line and Electric pole	KHARIYAN / 457	1479/1	04 - 16 - 09	-	UPF	0.3903
			1602/1	-	00 - 00 - 09	BARANI SOYAM	0.0018
			2237/1	00 - 19 - 12	-	GAIR MUMKIN NALLA	0.0793
			2421/1	-	00 - 00 - 09	BARANI DOYAM	0.0018
			2486/1	-	00 - 00 - 09	BARANI DOYAM	0.0018
			2871/1	-	00 - 00 - 09	BARANI DOYAM	0.0018
			4300/494/1	-	00 - 00 - 09	BARANI SOYAM	0.0018

For Cliff Finvest Pvt. Ltd.
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Jashinder Nagar Forest Division
Jashinder Nagar (U.P.)

12	Transmission line and Electric pole	DHAMDHAN / 428	2490/1	00 - 19 - 12	-	UPF	0.0793
			2661/1	-	00 - 00 - 09	BARANI DOYAM	0.0018
			2688/1	00 - 03 - 04	-	CHARAGAH BILA CHARANYTAN	0.0129
			2689/1	00 - 04 - 08	-	GAIR MUMKIN NALLA	0.0178
			3565/1	00 - 01 - 08	-	CHARAGAH BILA CHARANYTAN	0.0057
			3564/1	02 - 04 - 16	-	CHARAGAH BILA CHARANYTAN	0.1813
			3563/1	00 - 10 - 10	-	GAIR MUMKIN KHAD	0.0425
			2691/1	04 - 14 - 05	-	UPF	0.3814
			2853/1	00 - 01 - 10	-	CHARAGAH BILA CHARANYTAN	0.0061
			2906/1	00 - 05 - 05	-	CHARAGAH BILA CHARANYTAN	0.0212
			2934/1	00 - 18 - 16	-	CHARAGAH BILA CHARANYTAN	0.0761
			3680/3021/1	00 - 02 - 01	-	CHARAGAH BILA CHARANYTAN	0.0083
			3019/1	-	00 - 00 - 09	BARANI SOYAM	0.0018
			3667/3486/1	00 - 08 - 14	-	UPF	0.0352
			3506/1	-	00 - 00 - 09	BARANI DOYAM	0.0018
			3553/1	-	00 - 00 - 09	BARANI DOYAM	0.0018
			3659/3418/1	02 - 05 - 14	-	UPF	0.1849
			3420/1	04 - 18 - 04	-	UPF	0.3973
13	Transmission line, Electric pole and Switchyard	CHELING / 425	1907/268/1	00 - 18 - 03	-	UPF	0.0734
TOTAL LAND IN BIGHAS				**60 - 12 - 13**	**08- -04 - 01**	-	
TOTAL LAND IN HETARES				**4.9069**	**0.6638**	-	

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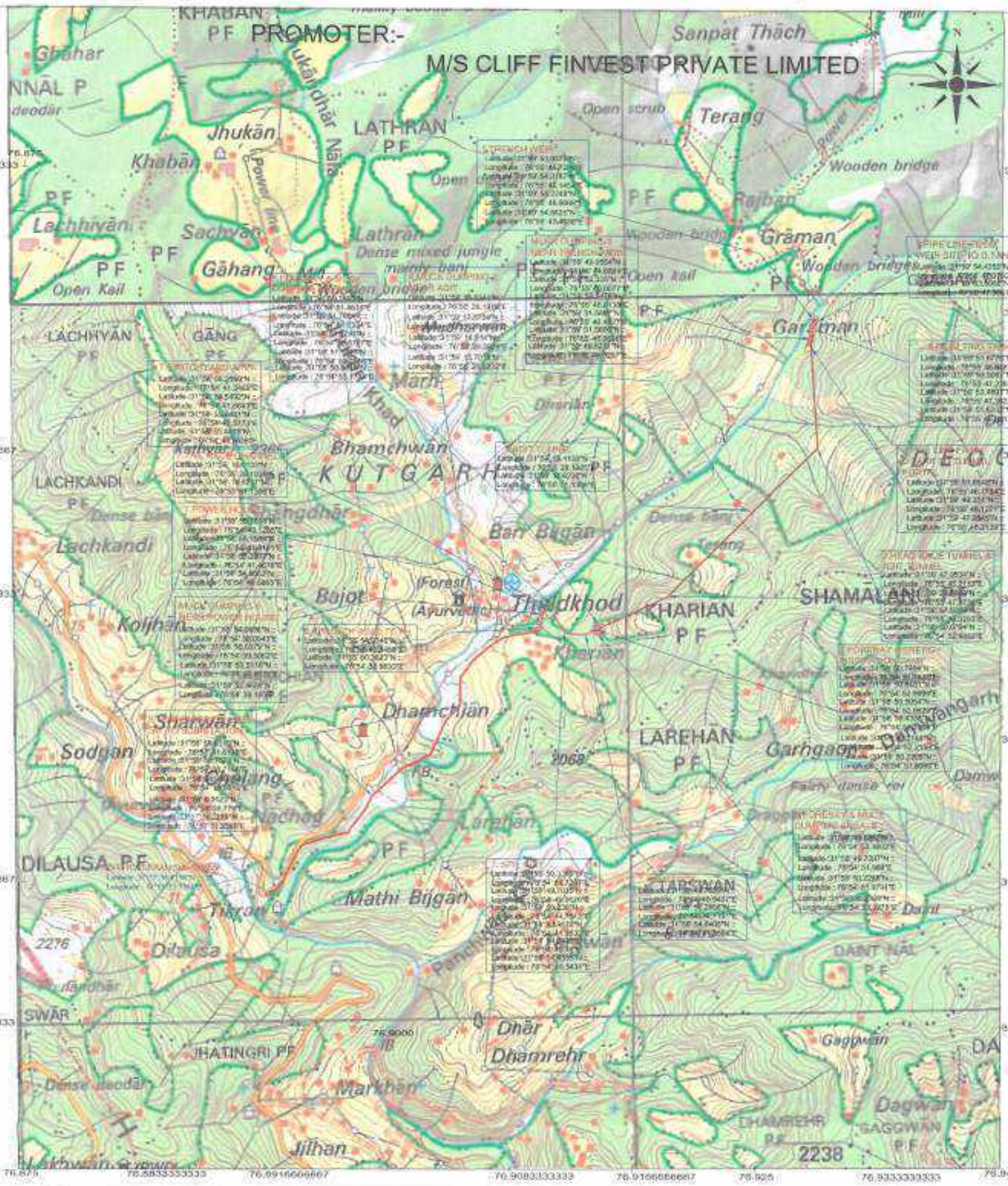
Joginder Nagar Forest Division
Joginder Nagar (H.P.)

Digital/SOI Toposheet Map OF **Thaltukhorh-I HEP (5.00 MW)**
Village -Thaltukhorh, Tehil-Padhar Distt.-Mandi (Himachal Pradesh)



	1.Trench Weir
	3.Pipe line from Weir Site to Desilting Tank
	2.Desilting Tank
	3.Pipe Line from Desilting Tank to Tunnel Portal
	4.Muck Dumping Site
	5.Head Race Tunnel & Adit Tunnel
	6.Forebay
	7.Penstock Line
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	9.Proposed Transmission Line

2cm to 1km

0 — 1Km

SOI Toposheet Scale 1:50,000
Sheet No.53 A/13(H43 E13)
52 D/16 (I43 W16)

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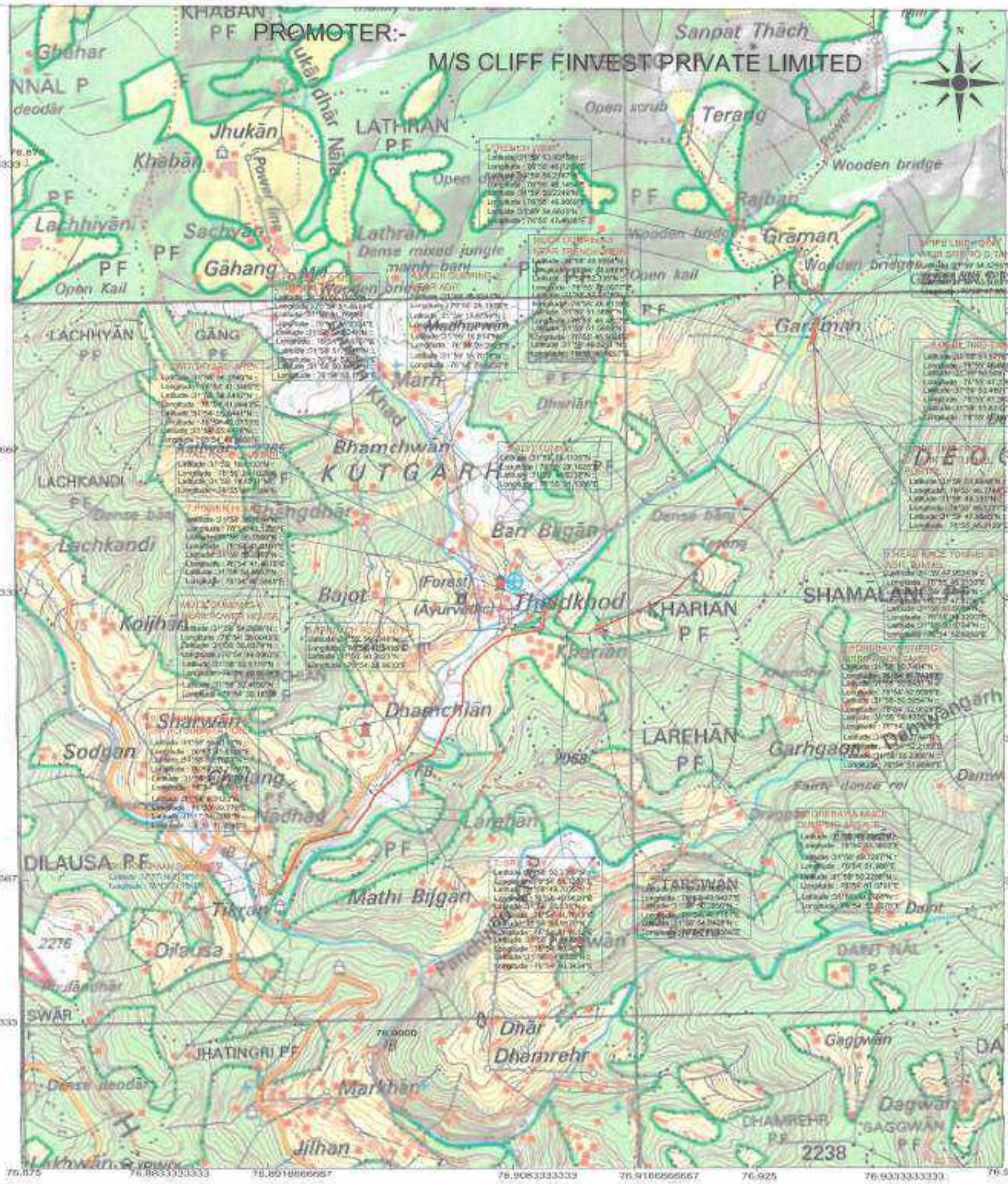
Divisional Forest Officer
Joginder Nagar Forest Division
Joginder Nagar (H.P.)

Digital/Geo-Reference Map OF **Thaltukhorh-I HEP (5.00 MW)**
Village -Thaltukhorh, Tehil-Padhar Distt.-Mandi (Himachal Pradesh)



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2cm to 1km

0 — 1Km

SOI Toposheet Scale 1:50,000
Sheet No.53 A/13(H43 E13)
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Jogindar Nagar Forest Division

GEO-REFERENCE LOCATION ON SOI TOPOSHEET MAP SCALE 1:50,000 OF **THALTUKHORH-I HEP (5.00 MW)**

VILLAGE -THALTUKHORH, TEHIL-PADHAR DISTT.-MANDI (HIMACHAL PRADESH)

PAJAUND NALA EXISTING & PROPOSED ALLOTTED PROJECTS UP-STREAM & DOWN-STREAM TOTAL GENERATION /CAPACITY OF STEAM/NALLAH (10.00MW)

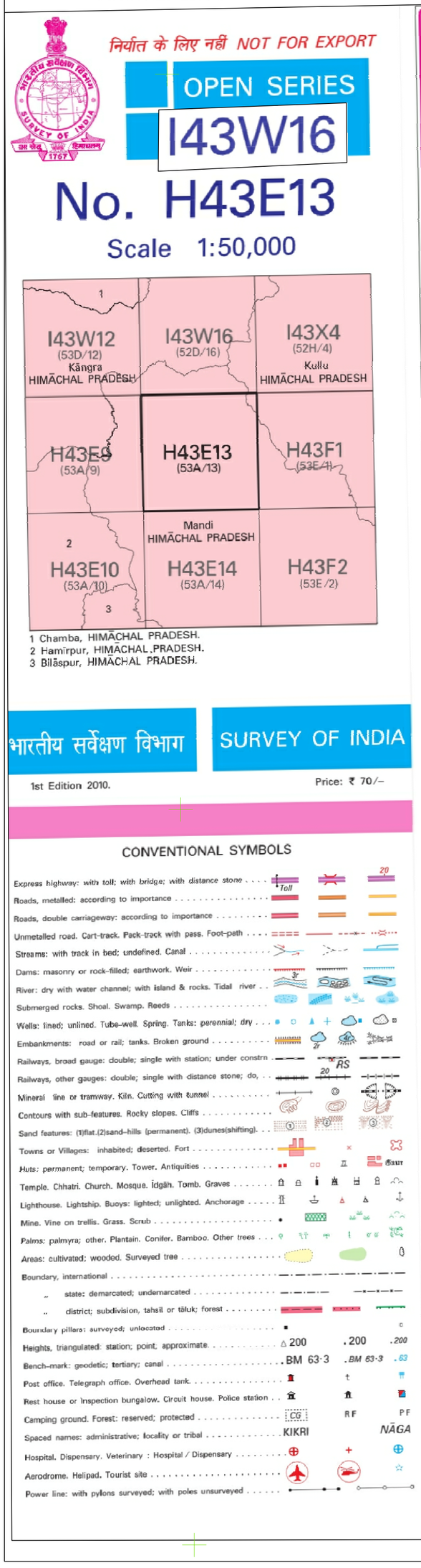
DIGITIZED LOCATION MAP FOR HEP IN THE AREA/LANDSCAPE OF **THALTUKHORH-I HEP (5.00 MW)**
M/S CLIFF FINVEST PRIVATE LIMITED

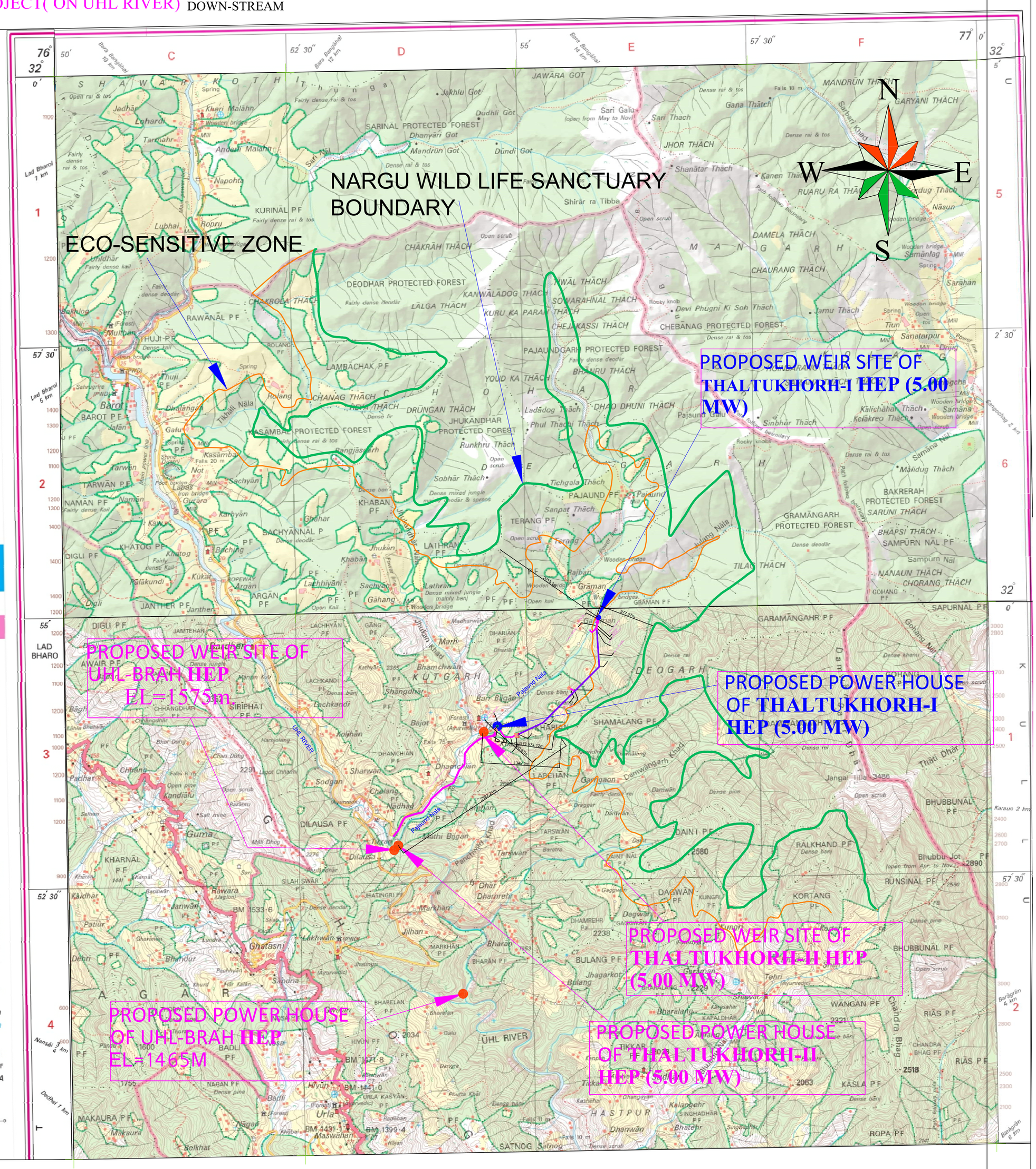
1. **THALTUKHORH-I HEP (5.00 MW)** WEIR TO ECO-SENSITIVE ZONE=0KM
M/S CLIFF FINVEST PRIVATE LIMITED POWER HOUSE TO ECO-SENSITIVE ZONE=0.86KM

1. **THALTUKHORH-II HEP (5.00 MW)** DOWN-STREAM
M/S CLIFF FINVEST PRIVATE LIMITED

1. **THALTUKHORH-I HEP (5.00 MW)** WEIR TO NARGU WILD LIFE SANCTUARY BOUNDARY= 0.94 KM
M/S CLIFF FINVEST PRIVATE LIMITED POWER HOUSE TO NARGU WILD LIFE SANCTUARY BOUNDARY=0.97KM

2.UHL-BRAH SMALL HYDRO PROJECT(ON UHL RIVER) DOWN-STREAM
M/s.J.S.ENERGY PRIVATE LTD.





For Cliff Finvest Pvt. Ltd.
Authorised Signatory

Divisional Forest Officer
Jogindar Nagar Forest Division

A list of approved /existing/ proposed project in the landscape showing evacuation /transmission plan, distance from nearest Pas and its ESZ alongwith their impacts.

Sr. No.	Approved Project	Existing Project	Proposed prosed	Distance of project from nearest PAs and its ESZ	Distance of transmission line from nearest PAs and its ESZ	Impaacts
1	Thaltukihod Stage-II HEP	Thaltukihod Stage- I HEP	Nil	3250 Mt.	3460 Mt.	Nil

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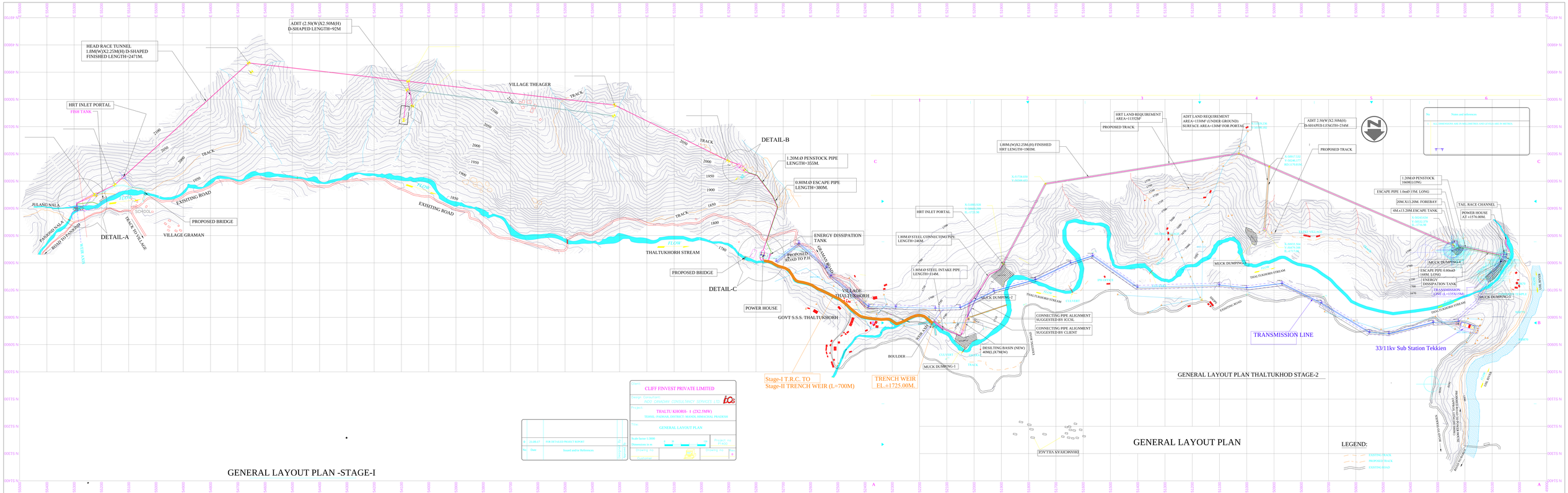

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