Geo-Reference Map on SOI Sheet 52-D-5 (1:5000) For 1.0188 Hect. of Forest Land to be Diverted for Construction of Banuala Baroond-I SHEP (2MW)

SCALE 1:5000

SCALE 1:50000

Sr. No.	Description	Latitude	Longitude
1	WEIR SITE	32°45'51.14"N	76°16'10.59"E
		32°45'50.94"N	76°16'09.83"E
		32°45'50.67"N	76°16'9.84"E
		32°45'50.86"N	76°16'10.62"E
2	CONVEYANCE CHANNEL	32°45'50.75"N	76°16'9.76"E
		32°45'50.58"N	76°16'09.45"E
		32°45'50.45"N	76°16'9.14"E
		32°45'50.24"N	76°16'8.82"E
3	DUMPING SITE-I	32°45'50.49"N	76°16'9.67"E
		32°45'50.21"N	76°16'9.80"E
		32°45'49.86"N	76°16'9.14"E
		32°45'50.20"N	76°16'9.01"E
4	D/TANK CUM FOREBAY	32°45'50.31"N	76°16'8.74"E
		32°45'49.63"N	76°16'7.99"E
		32°45'49.26"N	76°16'8.16"E
		32°45'49.85"N	76°16'8.89"E
5	PENSTOCK	32°45'49.34"N	76°16'8.89"E
		32°45'47.45"N	76°16'9.77"E
		32°45'45.65"N	76°16'10.31"E
		32°45'44.38"N	76°16'10.49"E
		32°45'4.94"N	76°16'9.98"E
		32°45'39.91"N	76°16'9.44"E
		32°45'33.27"N	76°16'6.42"E
		32°45'33.27"N	76°16'5.78"E

Sr. No.	Description	Latitude	Longitude
6	POWER HOUSE CUM SWITCH YARD	32°45'16.08"N	76°16'11.31"E
		32°45'15.31"N	76°16'11.64"E
		32°45'15.61"N	76°16'12.55"E
		32°45'16.15"N	76°16'12.44"E
7	DUMPING SITE-II	32°45'49.36"N	76°16'8.51"E
		32°45'48.96"N	76°16'8.06"E
		32°45'48.67"N	76°16'8.15"E
		32°45'49.11"N	76°16'8.61"E
8	TAIL RACE	32°45'15.85"N	76°16'12.59"E
		32°45'15.59"N	76°16'13.34"E
9	ROAD CUM TRANSMISSION	32°45'15.26"N	32°45'12.01"E
		32°45'14.46"N	76°16'12.09"E
		32°45'13.45"N	76°16'12.22"E
		32°45'12.55"N	76°16'12.37"E
		32°45'11.71"N	76°16'12.52"E
10	TRANSMISSION	32°45'10.55"N	76°16'12.79"E
		32°45'9.09"N	76°16'13.41"E
		32°45'8.31"N	76°16'13.76"E
		32°45'7.20"N	76°16'14.35"E
		32°45'5.84"N	76°16'14.78"E
11	DUMPING SITE-III	32°45'38.84"N	76°16'8.95"E
		32°45'38.24"N	76°16'8.47"E
12	DUMPING SITE-IV	32°45'22.28"N	76°16'10.23"E
		32°45'21.31"N	76°16'10.15"E
13	DUMPING SITE-V	32°45'16.65"N	76°16'12.38"E
		32°45'16.13"N	76°16'12.59"E
		32°45'16.24"N	76°16'12.80"E

GEO-REFERENCE MAP ON SOI SHEET 52-D-5 (1:5000)
FOR
1.0188 HECT. OF FOREST LAND TO BE DIVERTED
FOR
CONSTRUCTION OF BANUALA BAROOND-I SHEP(2MW)

PROJECT:-
BANUALA BAROOND-I SHEP(2MW)

NAME OF APPLICANT:-
GAYATRI HYDEL PROJECT PVT.LTD

NAME OF FOREST DIVISION
CHAMBA

SOI SHEET NO. 52-D/5

Gyatri Hydel Project (P) Ltd
Authorised Signatory

Divisional Forest Officer
Ch...

1

DIVERSION OF1.0188HA.OF FORESTLAND FOR CONSTRUCTION OF BANUALA BAROOND-I SMALL HYDRO PROJECT 2MW IN TEHSIL CHURAH DISTRICT CHAMBA (H.P)
FILE NO .. : **FP/HP/HYD/148103/2021**
DATE OF PROOSAL : 7/10/2021

RECLAMATION PLAN
BANUALA BAROOND-I HYDRO PROJECT(2MW) DISTRICT CHAMBA (H.P)

Dumping site for disposal of muck have been identify with due consideration of its distance and suitability of the area and topography point of view.
Accordingly the following sites have been identified

Sr.no	Description	Mohal	Khasra No.	Area in Sqm
1	Dumping site –I	Prabha	346/334/264/5	170.00
2	Dumping site –II	Prabha	346/334/264/6	142.00
3	Dumping site--III	Prabha	111/2	194.00
4	Dumping site-IV	Prabha	286/96/4	156.00
5	Dumping site-V	Prabha	286/96/5	170.00

Rehabilitation proposal
Since there is no displacement of any population due to the construction of the road there will be no rehabilitation problem

Afforestation
Compensatory Afforestation shall be carried out by the forest department for compensation shall be paid by the user agency. Area to be taken for Afforestation shall be twice the forest land required for the construction of project.

Retaining Walls
RR Masonry/GI wire crate filled with boulders/ stones reclaimed fro, excavation of road shall be used for construction of retaining walls for retaining the surplus excavated earth /muck as per standard design of HPPWD with due consideration to site condition.

Use of muck /debris
Most of the excavation muck/debris obtained from the project components shall be used for manufacture of aggregates for construction work, filling in wire crates, stone masonry work breast wall, switchyard, etc. the remaining muck/debris will be neatly stacked in dumping areas identified for the purpose.

Plantation
The dumping area and various sites be properly leveled after the completion of the project. The area will be landscaped the plantation carried out so to merge with the nature surroundings.

Location of dumping	Area in Sqm.	Slop of dumping place in degree	Qty. of muck generated (CU.MTR)	Qty. with Swell Factor(CU.MTR) @45%	Qty. muck to used(CUM.Mtr)	Qty.of muck deposited (Cu.mtr)	Height of dumping expected in mtr.
Dumping site –I	170.00	15	235	340.75	52.92	287.82	1.70
Dumping site –II	142.00	15	340	493	148	345	2.50
Dumping site—III	194.00	15	850	1232.50	369.75	477	2.50
Dumping site—IV	156.00	14				385	2.50
Dumping site—V	170.00	14	488	707.60	283.04	424.56	2.50
TOTAL	**832**		**1913**	**2773.85**	**853.71**	**1919.38**	**2.34(Standard)**

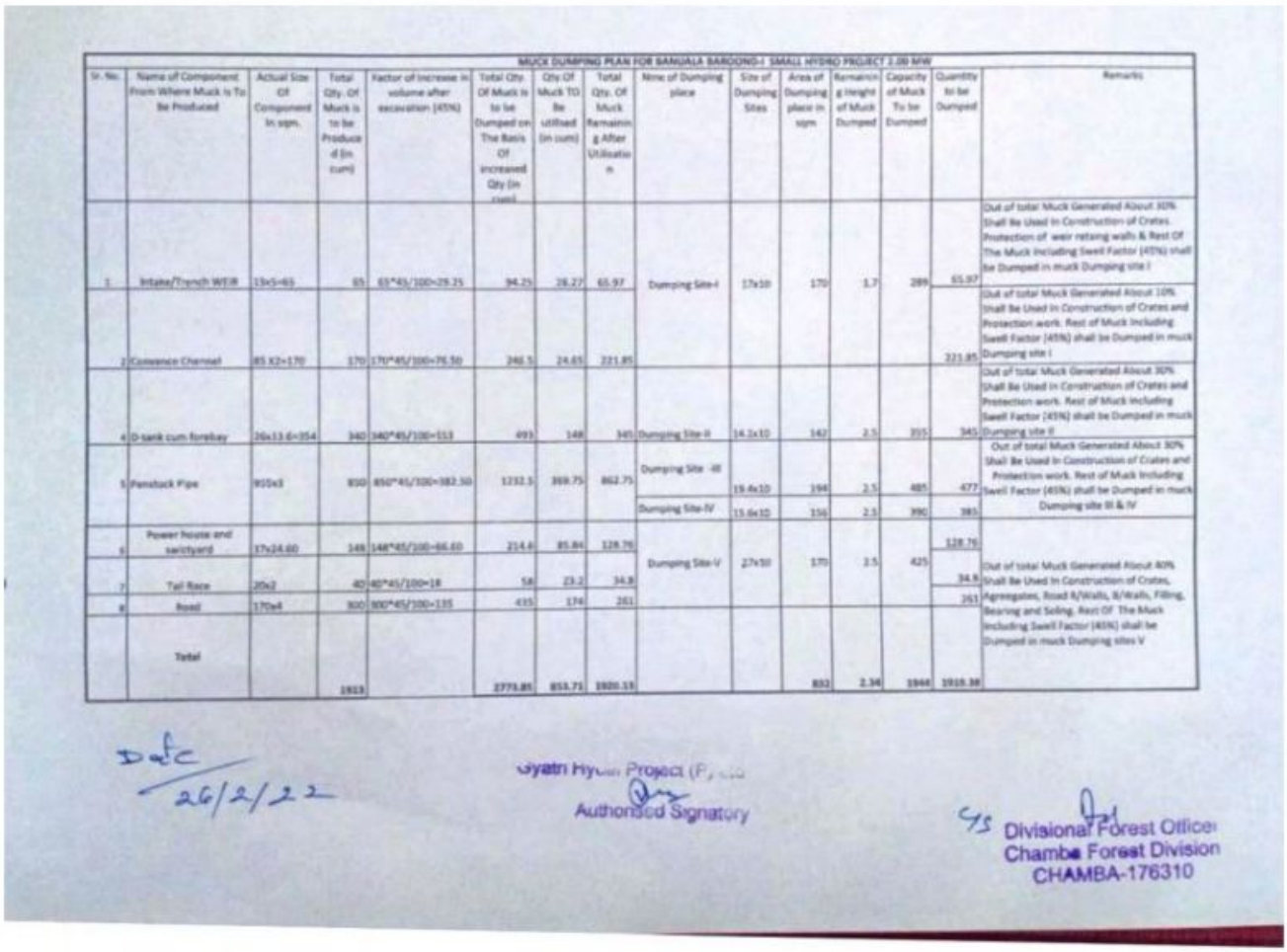
Gyatri Hydel Projects P
Authorised Signatory

1

Sr.no	Description	Mohal	Khasra No.	Area in Sqm	Height	Capacity of dumping site Qty.in cu. mtr
1	Dumping site –I	Prabha	346/334/264/5	170.00	1.70	289
2	Dumping site –II	Prabha	346/334/264/6	142.00	2.50	355
3	Dumping site--III	Prabha	111/2	194.00	2.50	485
4	Dumping site –IV	Prabha	286/96/4	156.00	2.50	390
5	Dumping site - V	Prabha	286/96/5	170.00	2.50	425

Place : Chamba
Dated : 7/10/21

For Gyatri Hydel Project P. Ltd.
Gyatri Hydel Projects P. Ltd.
Authorised Signatory



MUCK DUMPING PLAN FOR BANJALA BAROONG-I SMALL HYDRO PROJECT 2.00 MW

Sr. No.	Name of Component From Where Muck is To be Produced	Actual Size Of Component In sqm.	Total Qty. Of Muck is to be Produced (in cum)	Factor of Increase in volume after excavation (45%)	Total Qty. Of Muck to be Dumped on The Basis Of increased Qty (in cum)	Qty Of Muck TO Be utilised (in cum)	Total Qty. Of Muck Remaining After Utilisation	Nme of Dumping place	Size of Dumping Sites	Area of Dumping place in sqm	Remaining Height of Muck Dumped	Capacity of Muck To be Dumped	Quantity to be Dumped	Remarks
1	Intake/Trench WEIR	19x5=65	65	65*45/100=29.25	94.25	28.27	65.97	Dumping Site-I	17x10	170	1.7	289	65.97	Out of total Muck Generated About 30% Shall Be Used In Construction of Crates Protection of weir retaing walls & Rest Of The Muck including Swell Factor (45%) shall be Dumped in muck Dumping site I
2	Conveance Channel	85 X2=170	170	170*45/100=76.50	246.5	24.65	221.85						221.85	Out of total Muck Generated About 10% Shall Be Used In Construction of Crates and Protection work. Rest of Muck Including Swell Factor (45%) shall be Dumped in muck Dumping site I
4	D-sank cum forebay	26x13.6=354	340	340*45/100=153	493	148	345	Dumping Site-II	14.1x10	142	2.5	355	345	Out of total Muck Generated About 30% Shall Be Used In Construction of Crates and Protection work. Rest of Muck Including Swell Factor (45%) shall be Dumped in muck Dumping site II
5	Penstock Pipe	910x3	850	850*45/100=382.50	1232.5	369.75	862.75	Dumping Site -III	19.4x10	194	2.5	485	477	Out of total Muck Generated About 30% Shall Be Used In Construction of Crates and Protection work. Rest of Muck Including Swell Factor (45%) shall be Dumped in muck Dumping site III & IV
								Dumping Site-IV	15.6x10	156	2.5	390	385	
6	Power house and switchyard	17x24.60	148	148*45/100=66.60	214.6	85.84	128.76	Dumping Site-V	27x10	270	2.5	425	128.76	Out of total Muck Generated About 40% Shall Be Used In Construction of Crates, Agreegates, Road R/Walls, B/Walls, Filling, Bearing and Soling. Rest Of The Muck including Swell Factor (45%) shall be Dumped in muck Dumping sites V
7	Tail Race	20x2	40	40*45/100=18	58	23.2	34.8						34.8	
8	Road	170x4	800	800*45/100=135	435	174	261						251	
	Total		1913		2771.85	853.71	1920.13			833	2.34	1944	1919.38	

Date 26/2/22

Jyathi Hydro Project (P) Ltd.
Authorised Signatory

Divisional Forest Officer
Chamba Forest Division
CHAMBA-176310

COST ESTIMATION OF DUMPING SITES & PLANTATION
BANULA BAROOND - I (2MW) SHEP

SR. NO.	DESCRIPTION	UNIT	QTY.	RATE (IN Rs.)	AMOUNT (Rs.)
1	Cost of Surveying and Investigation	Lumsum	1	15000	15,000
2	Cost of Carrying of muck to the dumping site and properly stacking.	Cum	1932.38	50	96,619
3	Earth work for the excavation of Gabion wall i.e trenches of different sizes with proper depth, removal of bushes and stumps, shoring and bracing etc.	Cum	140	450	63,000
4	Cost of crate wire of 4mm dia with carriage upto site.	Kg	803	83	66,696
5	Providing RR Massionary and Stone Filled Gabion Wire Crates for protection Work.	Cum	225	750	1,68,750
6	Plantation of 380 plants @ Rs 25/- per plant.	Nos	380	25	9,500
7	Digging of pit for plantation.	Nos	380	50	19,000
8	Cost of Barbed wire Fencing for protection of Plants @ Rs. 45/- per plant with carriage and labour	kg	250	150	37,500
9	Salary for Gardener (1) for 4 years (48 Months) @ Rs.6800/- per month .	Months	48	6800	3,26,400
10	2 Nos. Beldar for protection of plantation for 2 years @ Rs 350/- per day.	Year	2	2,55,500	5,11,000
11	Reclamation and restoration.	Lumsum	1	1,50000	1,50,000
12	Landscaping and Beautification.	Lumsum	1	1,60000	1,60,000
13	Carriage of soil from road site	Cum	100	500	50,000
14	Collection of Grass seed	Kg	100	600	60,000
15	Broadcasting of grass seed plants	Nos.	100	400	40,000
				Total	**17,73,465**

Place : Chamba
Dated : 21/3/2022

For Givatri Hydel Project P. Ltd.
Givatri Hydel Project (P) Ltd.
Authorised Signatory

Authorised Signatory

Divisional Forest Officer
Chamba Forest Division
CHAMBA

" ABSTRACT OF COST"

Name of work :- Construction of Banuala Baroond-I SHEP (2MW) in Tehsil Churah Distt. Chamba being executing by M/s Gyatri Hydel Projects .

(Sub Head :- CONSTRUCTION OF WIRE CRATES TO THE DUMPING SITES)

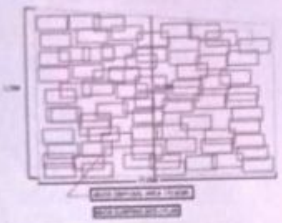
S.NO	Item	Qty.	Rate	Unit	Amount
1	Earthwork in excavation for structure as per drawing and technical specifications clause 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50m, dressing of sides and bottom and backfilling in trenches with excavation suitable materials ordinary soil upto standard depth.	140	450	Per cubic Metre	63,000
2	RR Massionery and laying of boulder apron laid in wire crates with 4 mm dia GI wire conforming to IS:280 and IS :4826 in 100 mm X 100 mm mesh (woven diagonally) including 10 per cent extra for laps and joint laid with stone boulders weighing not less than 25 Kg each as per drawing and technical specifications Clause 1301.	225	750	Per cubic Metre	1,68,750
3	Provoide the GI wire of dia 4mm with all costs at site including Transportation and other charges.	803	83	Kg	66,696
				Total	298446.00

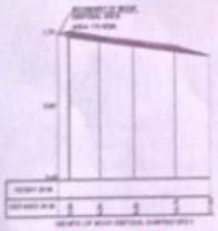
Er. Vijay Singh(Civil)

Naman Engineers and Consultants
Dharamshala HP

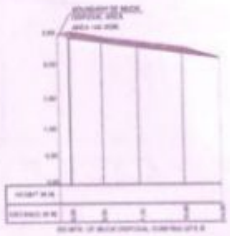
Gyatri Hydel Projects P. Ltd.
Authorised Signatory

MUCK DUMPING PLAN OF BANUALA BAROOND-I SHEP 2 MW





DS-I

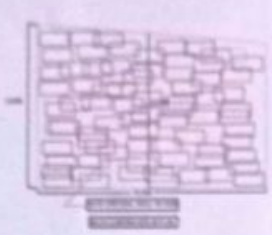


DS-II

Gyatri Hydel Projects P. Ltd

Authorised Signatory

MUCK DUMPING PLAN OF BANUALA BAROOND-I SHEP 2 MW

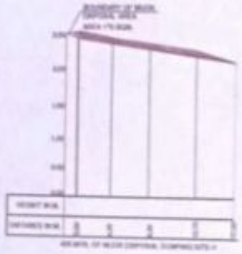


DS- III

DS- IV

Gyatri Hydel Projects P. Ltd.
Authorised Signatory

MUCK DUMPING PLAN OF BANUALA BAROOND-I SHEP 2 MW

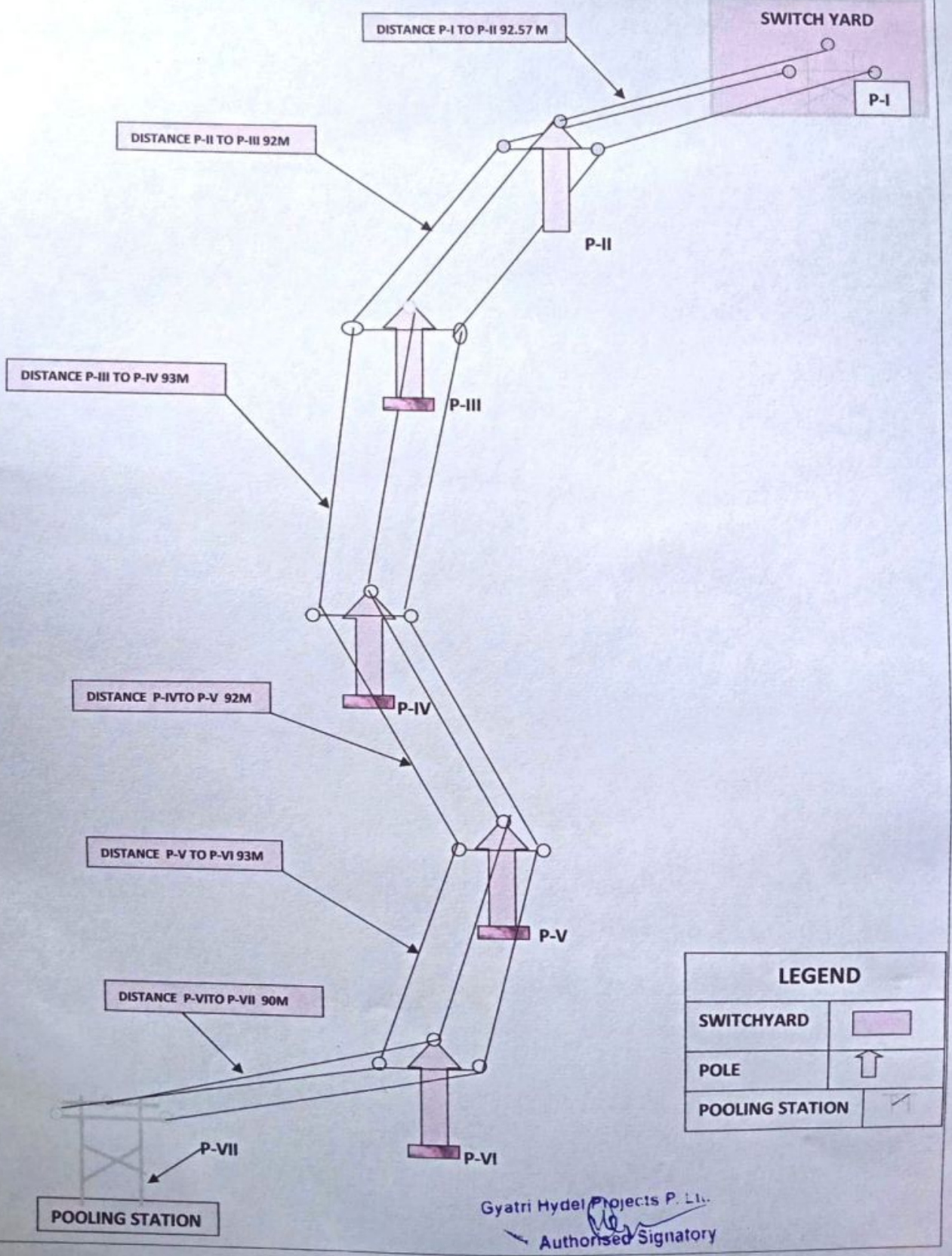


DS-5

Gyatri Hyde Projects P. Ltd.

Authorised Signatory

EVACUATION PLAN OF BANUALA BAROOND –I SHEP 2MW



Gyatri Hydel Projects P. Ltd.

Authorised Signatory

HIMACHAL PRADESH STATE ELECTRICITY BOARD LIMITED
(A State Govt. Undertaking)

Registered office: Vidyut Bhawan, HPSEBL, Shimla-171004(H.P)
Number (CIN): U40109HP2009SGC31255
GST No.: HPSEBL 02 AACH4894EHZB
Telephone No.: 01899-222429 (Office,Fax)
Website address: www.hpseb.com
Email: addlsechamba@gmail.com

No. 253481-A/2021-22

Dated: / 07 /2021

To

The Superintending Engineer,
Operation Circle,
HPSEBL, Dalhousie.

Subject: Transmission system for evacuation of Power from Banuala-I SHEP 2MW and Banuala-II 0.8 MW on 11 kV Ht Line.

Reference: **Your office endorsement no. OCD/AE(W)-3/2019-20-12457 dated 14.02.2020.**

Sir,

" Jai Hind",

Please refer to your office endst. No. vide which you have sought the feasibility of the transmission arrangement for Banual-I SHEP 2 MW. In this context, it is submitted that as per the intimation received from AE, ESD HPSEBL Tisa, the feasibility report for the said HEP is as follows:

1.The proposed project site is situated in electrical section Nakror under ESD Tisa. The whole area under this section is being fed by 11 kV Tikri feeder emanating from 33/11 kV s/stn Nakror. The total length of the feeder is 86 km including the spur lines. 62 Nos. DTRs of different capacity are installed on the feeder supplying electricity to as many as 3000 consumers. The HT and LT network under this section is scattered and far flung.

2. Being a lengthy distribution feeder, frequent breakdowns/trippings occur on the line. Moreover, routine maintainence works carried out from time to time along with erection of new lines may lead to loss of generation thus causing financial loss to the HEP. Hence, power evacuation through 11 kV feeder will not be feasible. However, power evacuation through 33 kV line is feasible with following submission:

- Power can be evacuated on 11 kV by erecting 11 kV independent feeder from 33/11 kV sub-station Nakror to the power house site at the cost of IPP. Power can alsio be evacuated through 33 kV by erecting 33 kV Line from power house site to 33/11 kV sub-station Nakror at the cost of IPP.
- For power to be evacuated through independent 33 kV or 11 kV feeder , extension of 33 kV Yard or 11 kV Yard will be required alongwith allied equipments which will be done at the cost of IPP. This is for your kind information and necessary action please.

Yours faithfully,

Sr. Executive Engineer,
Electrical Division, HPSEBL
Chamba.

Gyatri Hydel Projects P. Ltd.
Authorised Signatory

DIVERSION OF 1.0188HA.OF FORESTLAND FOR CONSTRUCTION OF BANUALA BAROOND–I SMALL HYDRO PROJECT 2MW IN TEHSIL CHURAH DISTRICT CHAMBA (H.P)
FILE NO .. :**FP/HP/HYD/148103/2021**
DATE OF PROOSAL :

FORM – 'A'

Form for seeking prior approval under section 2 of the proposals by the State Governments and other authorities
PART-I

(To be filled up by user agency)

1. Project details:	
(i) Short narrative of the proposal and project /scheme for which the forest land is required	Banula Baroond – I SHP 2MW is a run of the river scheme which has been envisaged to utilize the water of Churkhu Nala for power generation. The Project is bifurcated in two stages Banuala Baroond-I capacity 2 MW and Banuala Baroond II 0.80MW from allotted 5 MW in same elevations. The scheme involves construction of Weir structure at EL 1990 m on Churkhu Nala and Water conductor system of 37 m length on the hill on the right bank of the Nala. Forebay has been fixed at EL 1990.69m (Top Level), wherefrom water shall be dropped through 955 m long Penstock onto the Power House at EL 1767 m. Water from the Power House shall be released into the Nala on its right bank in Gram Panchayat Charda. Power generated from the Project shall be taken LILO with the nearest 11 KV line of HPSEBL in Nakrod feeder.
(ii) Map showing the required forest land, boundary of adjoining forest on a 1:50,000 scale map.	Layout Plan of the Project marked in red ink on the relevant part of the SOI Topo Sheet No. 52 D/5 is attached herewith - Scale 1: 50000
(iii) Cost of the project:	Rs. 2045 Lacs.

(iv) Justification for locating the project in forest area.	Hydro Power Projects are Site specific schemes. The Project is located in the remote area in the Lower reaches of Churkhu Nala. It is situated beyond the inhabited villages. Therefore all civil components have been conceived in the forest land.
(v) Cost-benefit analysis (to be enclosed).	Not Applicable as the area is less than 5 Ha.
(vi) Employment likely to be generated.	(a)7000 men days of employment will be generated in the execution of said scheme . (b) 12 persons will employed permanently after commissioning of Project.
2. Purpose-wise break-up of the total land required:	

SL .NO	MOHAL	COMPONENT / DESCRIPTION	AREA IN FOREST LAND (Sqm)	AREA IN PRIVATE LAND (Sqm)	TOTAL AREA REQUIRED (in Ha.)
1	PRABHA	WEIR SITE	65	-	0-00-65
2	PRABHA	CONVEYANCE CHANNEL	170	-	0-01-70
3	PRABHA	DUMPING SITE-I	170	-	0-01-70
4	PRABHA	D TANK CUM FOREBAY	354	-	0-03-54
5	PRABHA	PENSTOCK	3208	-	0-32-08
6	PRABHA	POWER HOUSE COMPLES AND SWITCH YARD	910	-	0-09-10
7	PRABHA	SILT FLUSHING	61		0-00-61
8	PRABHA	DUMPING SITE -II	142	-	0-01-42
9	PRABHA	TAIL RACE	40	-	0-00-40
10	PRABHA	ROAD	680	-	0-06-80
11	PRABHA	TRANSMISSION LINE	1906	-	0-19-06
12	PRABHA	DUMPING SITE-III	194	-	0-01-94
13	PRABHA	TRANSMISSION LINE	1962	-	0-19-62
14	PRABHA	DUMPING SITE-IV	156	-	0-01-56
15	PRABHA	DUMPING SITE-V	170	-	0-01-70
		TOTAL	**10188**	**-**	**01-0188 Ha.**

3. Details of displacement of people due to the project, if any: i. Number of families. ii. Number of Scheduled Castes/Scheduled Tribe families iii. Rehabilitation plan. (to be enclosed)	Nil.
4. Whether clearance under Environment (Protection) Act, 1986 required? (Yes/No).	No.
5. Undertaking to bear the cost of raising and maintenance of compensatory afforestation and / or penal compensatory afforestation as well as cost for protection and regeneration of Safety Zone, etc. as per the scheme prepared by the State Government (undertaking to be enclosed).	Enclosed at page no. 11
6. Details of Certificates/documents enclosed as required under the instructions. i) NOC of the Gram Panchayat – Charda ii) Details of land requirement. iii) Undertaking in respect of compensatory afforestation. iv) Geo Reference Map v) Revenue papers	 Attached at Page No. 91 Attached at Page No. 76-78 Attached at Page No. 11 Attached at Page No. 27 Attached at Page No. 95-117

Date- Chamba
Place- 7/10/21

Signature

Ved Vyas Thakur
Gyatri Hydel Projects P. Ltd.
Authorised Signatory
Authorised Signatory
M/s Gyatri Hydel Projects Pvt. Ltd.
Mohalla Charpat Tehsil
and Distt. Chamba HP

DIVERSION OF 1.0188 HA.OF FORESTLAND FOR CONSTRUCTION OF BANUALA BAROOND-I SMALL HYDRO PROJECT 2.00 MW IN TEHSIL CHURAH DISTRICT CHAMBA (H.P)
FILE NO .. : **FP/HP/HYD/148103/2021**
DATE OF PROOSAL :

ALTERNATE SITES CONSIDERED TO MINIMISE THE USE OF FOREST LAND FOR CONSTRUCTION OF BANUALA BAROOND-I-I– II (2MW) SMALL HYDRO ELECTRIC PROJECT

ALTERNATIVE-I

The proposed project is situated on the right bank of the Churkhu stream. The alternative involves construction of diversion structure at EL ± 1990 m on Churkhu Nala. The water conductor shall consist of surface Desilting tank and water Conductor System on the right bank of Churkhu Nala comprising of 37 m length. Penstock alignment runs through rocky slope. The gross head available for power generation shall be around 223 m. Surface powerhouse shall be located on the right bank of the Churkhu Nala. There are small bends in Penstock alignment . No part of the Channel or other components lies in inhabitant area thus it will not have any other adverse environmental impact and cutting of trees.

Feature considered:

- Alignment of the proposed project falls on right bank and along the stream. This has been deliberately designed for the reduction of land to be used, fewer amounts of trees to be cut and also based on the suitable strata for Channel . The proposal involves cutting of 28 trees in the all components alignment which are not to be cut.
- Forest land involved to the tune of 1.0188 Hectares.
- No disturbance to the stable slope & green cover.
- Limited number to trees to be cut off for execution of Water Conductor System.
- No Cultivated land and habitants.

ALTERNATIVE- II

This alternative involves construction of diversion structure on left Churkhu Nala at EL ± 1990 m and the water conductor system involving Open Channel of about 50 m length passing through a loose rock on the right bank of the Nala. Geologically this alternative is not appropriate for the safety of the Project components.

Feature Considered:

- Forest land involved to the tune of 1.0588 hectares and 57 trees are involved in this process.
- It is difficult for construction of open channel on the right side as the slope is very steep which may trigger landslide during and after construction and it also increases the number of trees to be cut.
- Gross head available also decreases, resulting in less power generation.
- A lot of trees to be cut resulting into decreasing forest cover in this area.
- Most of the alignment of Project components coming in cultivated land and habitant area.

ALTERNATIVE- III

This is mainly left bank alternative involves construction of diversion structure at EL ± 1990 m on the Churkhu Nala. Water of Churkhu Nala shall be diverted through a 55 m long Water Conductor System to the Forebay. There is open space available for location of Forebay. The penstock shall be over ground along with surface powerhouse on the left bank of the Churkhu Nala. The gross head shall be about 200 m. The length of the transmission line increases by 100 meters and the length of the road upto Power House shall

increase by 460 m which increases the involvement of more forest land. In this alternative the Water Conductor System would cross the agriculture land resulting in erosion of agricultural land.

Features Considered:

- Entire alignment falls on left bank of Churkhu Nala.
- Forest land involved to the tune of 1.0988 hectares and 62 trees are involved in this proposal.
- Length of water conductor system involved is more which increases the construction time.
- Total area involved is more which leads to cutting of more trees, Diversion of more forest land.
- Left bank of Churkhu Nala covering proposed Powerhouse and Penstock consist of loose strata which is vulnerable to landslides.
- Most of the alignment of Project components coming in cultivated land and habitant area.

Keeping in view all the above three alternative, the **alternative- I**, which is more suitable and environmental friendly, has been finally adopted.

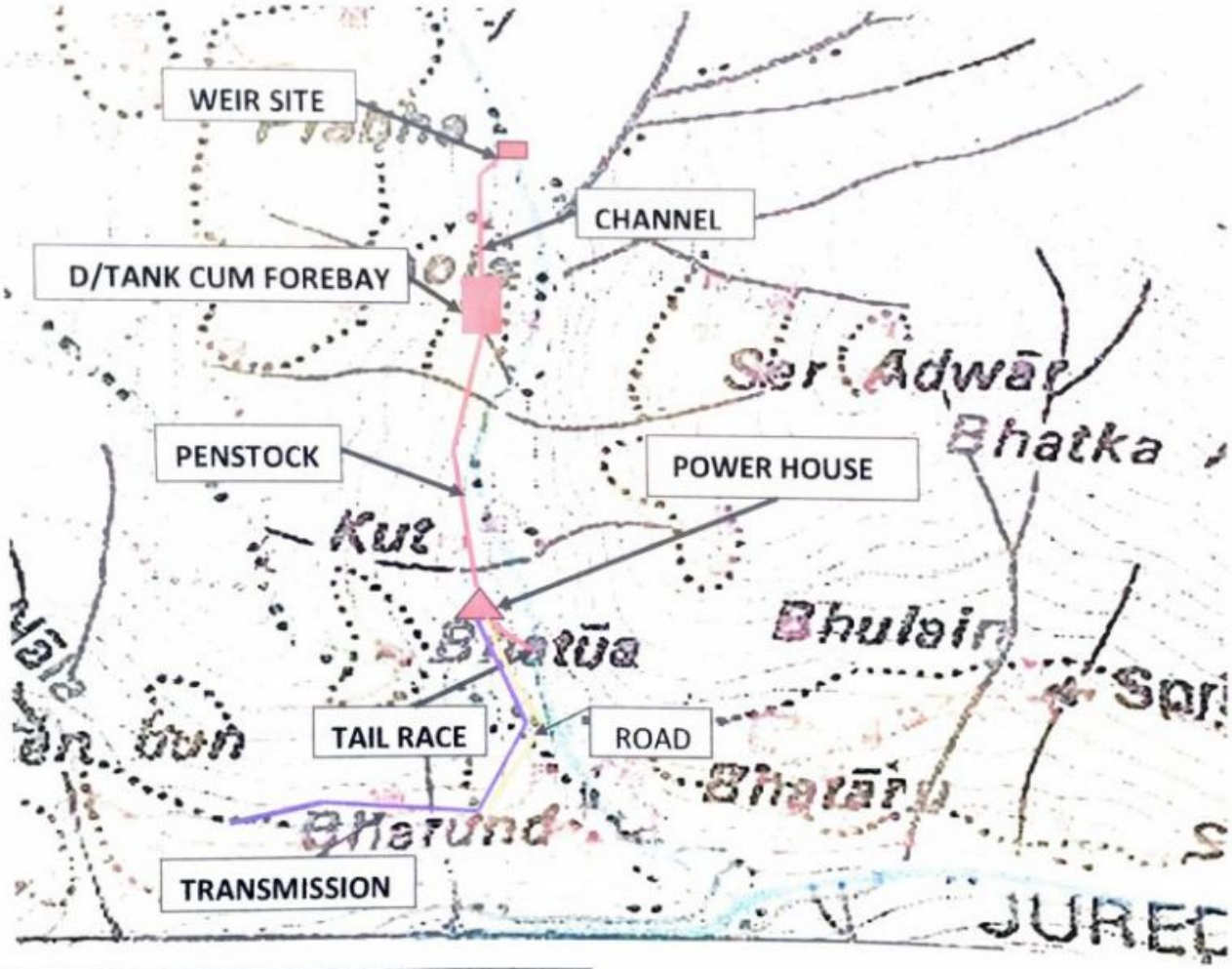
Place - Chamba.
Dated - 7/10/21

For Gyatri Hydel Project P ltd.
Gyatri Hydel Projects P. Ltd
Authorised Signatory
Authorised Signatory

BANUALA BAROND –I SMALL HYDRO PROJECT (2.00 MW)
TEHSIL CHURAH DISTRICT CHAMBA (H.P.)

ALTERNATIVE –I

SOI TOPO SHEET : 52D/5



FEATURES CONSIDERED	
AREA INVOLVED	1.0188 HA.
TREES INVOLVED	30 NO.

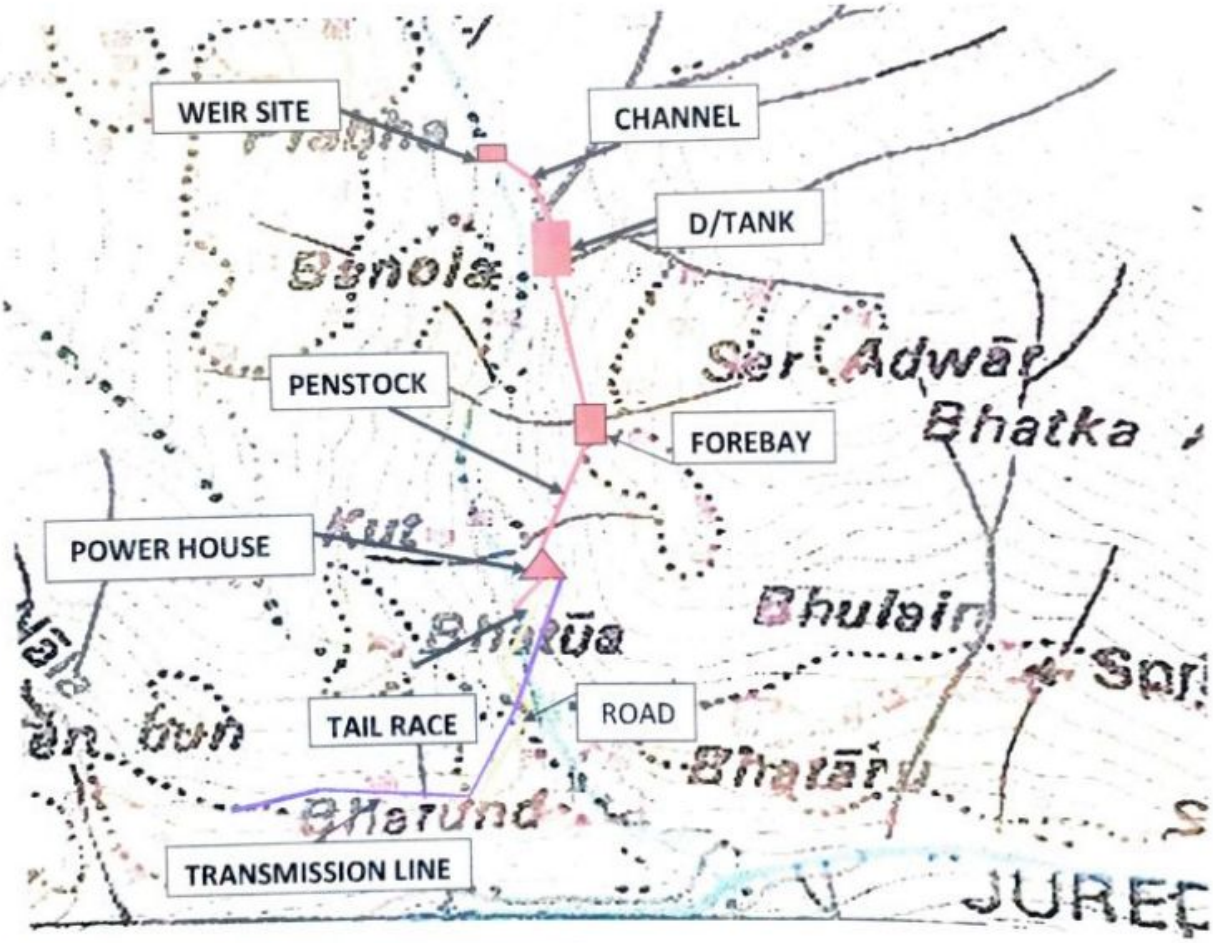
Gyath Hydel Project (P) Ltd
Authorised Signatory

Divisional Forest Officer
Chamba Forest Division
CHAMBA

BANUALA BAROOND –I SMALL HYDRO PROJECT (2.00 MW)
TEHSIL CHURAH DISTRICT CHAMBA (H.P.)

ALTERNATIVE –II

SOI TOPO SHEET : 52D/5



FEATURES CONSIDERED	
AREA INVOLVED	1.0588 HA.
TREES INVOLVED	57 NO.

Jyathi Hydel Project (P) Ltd.
Authorised Signatory

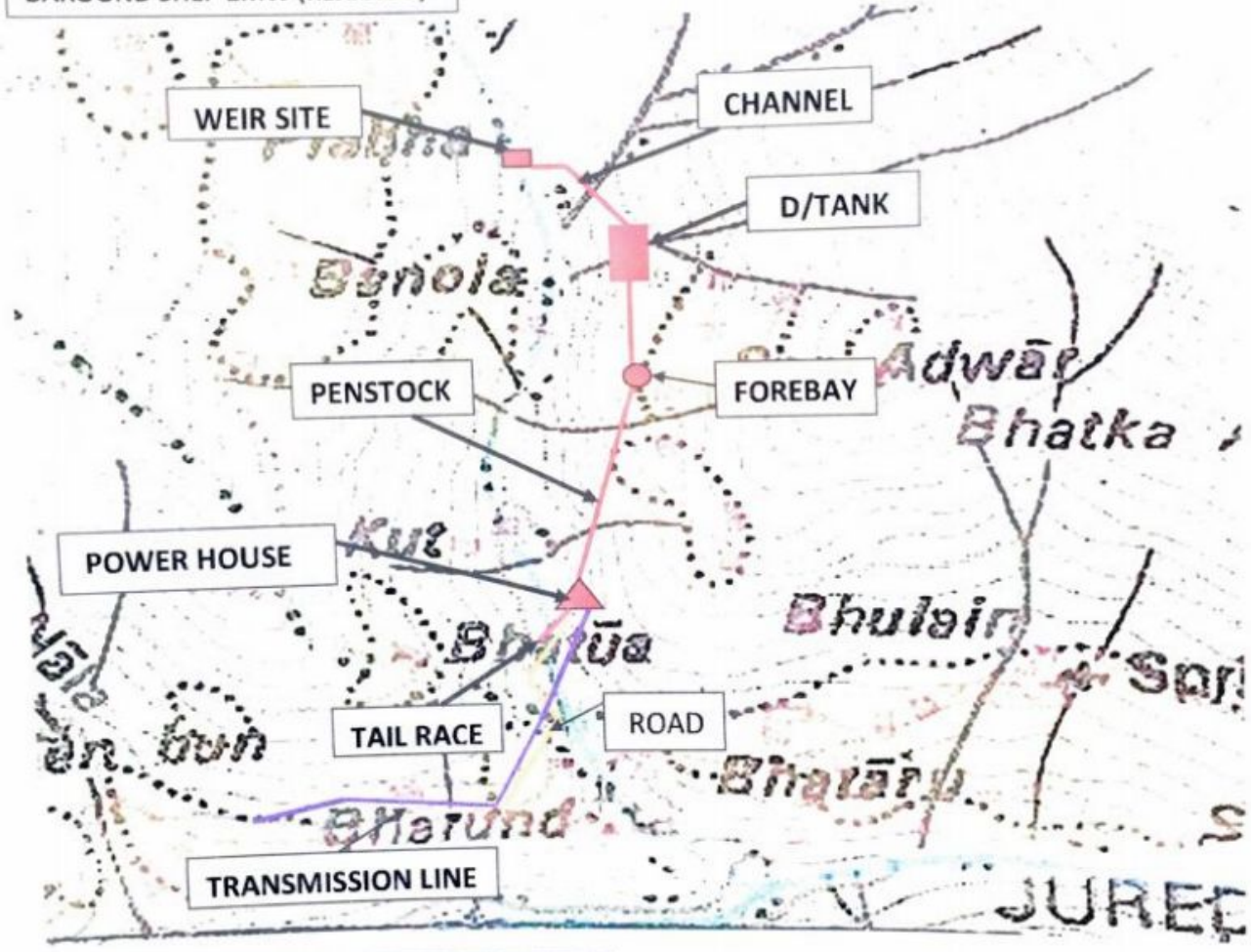
Divisional Forest Officer
Chamba Forest Division
CHAMBA

BANUALA BAROOND –I SMALL HYDRO PROJECT (2.00 MW)
TEHSIL CHURAH DISTRICT CHAMBA (H.P.)

ALTERNATIVE –III

ALTERNATIVE-III FOR BANUALA BAROOND SHEP 2MW (REJECTED)

SOI TOPO SHEET : 52D/5



FEATURES CONSIDERED	
AREA INVOLVED	1.0988 HA.
TREES INVOLVED	62 NO.

Authorised Signatory

C/S

Division Forest Office
Chamba Forest Division
CHAMBA