FILE NO.

: FP/HP/HYD/41533/2019

DATE OF PROPOSAL:

CHECK LIST SERIAL NUMBER - 10

CERTIFICATE FOR MINIMUM USE OF FOREST LAND

This is to certify that the forest area involved in the construction of Lower Iku – I Small Hydro Project (1 MW) in District Kangra is unavoidable and barest minimum forest area i.e. 0-51-51 ha is proposed for diversion.

For M/s Mongra Hydro Construction (P) Ltd.

. Mongra Hydro Construction

Pvt. Ltd.

For :-

Authorised sagh Signatory

Place: Shahpur

Dated:

Countersigned by:

Divisional Forest Officer Dharamshala Forest Division

FILE NO.

: FP/HP/HYD/41533/2019

DATE OF PROPOSAL:

ALTERNATE SITES CONSIDERED TO MINIMISE THE USE OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU – I SMALL HYDRO ELECTRIC PROJECT (1 MW)

ALTERNATIVE-I

The proposed project is situated on the left bank of the Iku Khad. The alternative involves construction of diversion structure at $EL \pm 1155$ m on Iku Khad. The water conductor shall consist of surface De-Silting Tank, Water Conducting System, Forebay Tank and surface Power House on the left bank of Iku Khad. The gross head available for power generation shall be around 65 m. Surface powerhouse shall be located on the left bank of the Iku Khad.

Feature considered:

- Forest land involved to the tune of 0.5151 hectares.
- Entire alignment of the Project falls on the left bank of the Iku Khad.
- Gross head is fully utilized, resulting in more power generation.
- Less felling of trees i.e. is involved in the proposal.

ALTERNATIVE- II

This alternative involves construction of diversion structure on Iku Khad at $EL \pm 1155$ m and the Water Conductor System involving of about 922 m length passing through a loose rock on the right bank of the khad. Geologically, this alternative is not appropriate for the safety of the Project components.

Feature Considered:

- Forest land involved to the tune of 0-62-00 hectares.
- It is difficult for construction of water conductor system on the right bank as it passes through loose rock.
- Gross head available also decreases, resulting in less power generation.
- The Project cost increases in this alternative.
- Felling of 62 number of trees is involved in the proposal.

ALTERNATIVE-III

This is mainly right bank alternative and involves construction of diversion structure at EL \pm 1155 m on the Iku Khad. Water of Iku Khad shall be diverted through 962 m long Pressurised Power Pipe from De-Silting cum Forebay Tank. The Power House shall be constructed on the right bank of Iku Khad near to the Iku Khad and thus it would not be safe. The net head available shall also be less. In this alternative the Power Channel shall be pressurized and the area in question is vulnerable to land slides.

Features Considered:

- Entire alignment falls on right bank of Iku Khad.
- Forest land involved to the tune of 0-65-00 hectares.
- The Power House and Power Channel shall not be safe
- More felling of trees i.e. 68 is involved in the proposal.

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

For M/s Mongra Hydro Construction (P) Ltd. Mongra Hydro Confidence (P) Ltd.

Pvt. Ltd.

For :-

Authorised \$Ignatory Authorised Signatory

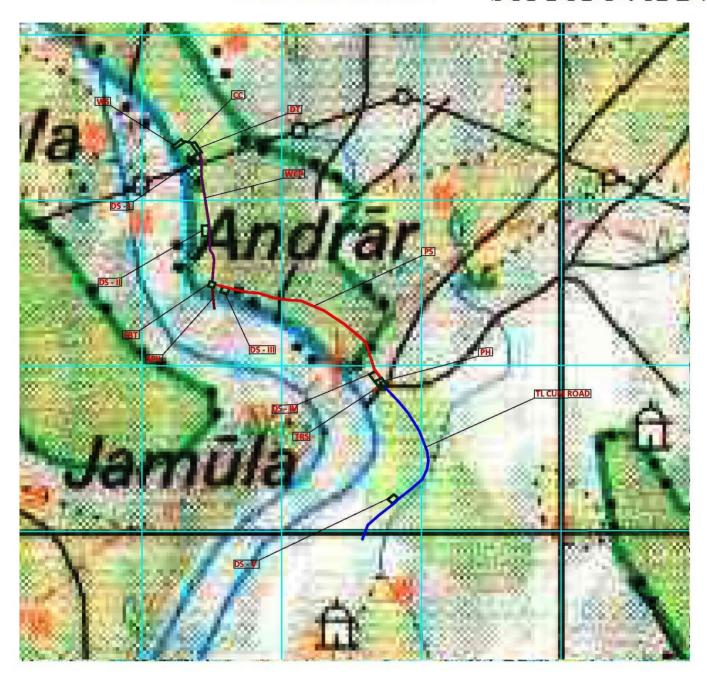
Place: Shahpur

Dated:

LOWER IKU-I SMALL HYDRO PROJECT (1 MW) TEHSIL DHARAMSHALA, DISTRICT KANGRA (H.P.)

TOPO MAP

SOI TOPO: 52 D/8



FEATURES CONSIDERED				
AREA INVOLVED				
TREES INVOLVED	16 No.			

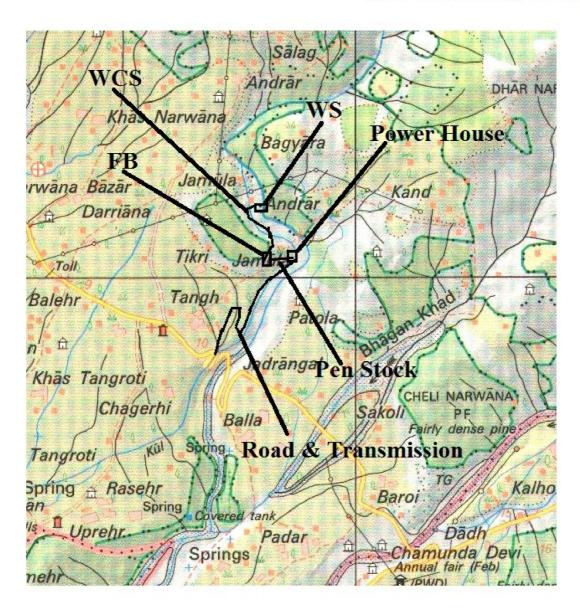
. Mongra Hydro Construction
Pvl. Ltd.
For :Authorisod Signatory

Divisional Forest Officer,
Oharamshala Forest Division.
OHARAMSHALA.

LOWER IKU-I SMALL HYDRO PROJECT (1 MW) TEHSIL DHARAMSHALA, DISTRICT KANGRA (H.P.)

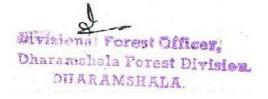
ALTERNATIVE - II

SOI TOPO: 52 D/8



FEATURES CONSIDERED				
AREA INVOLVED	0.62 ha			
TREES INVOLVED	62 No.			

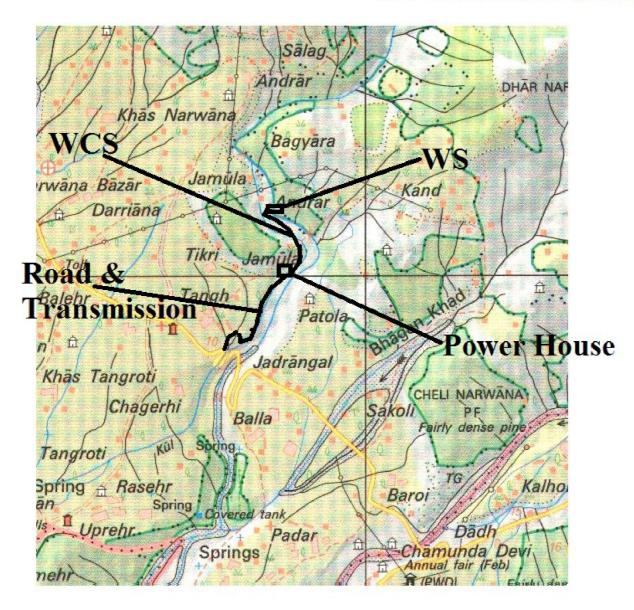
. Mongra Hydro Construction
Pvt. Ltd.
For :Authorisod Signatory



LOWER IKU-I SMALL HYDRO PROJECT (1 MW) TEHSIL DHARAMSHALA, DISTRICT KANGRA (H.P.)

ALTERNATIVE - III

SOI TOPO: 52 D/8



FEATURES CONSIDERED				
AREA INVOLVED	0.65 ha			
TREES INVOLVED	68 No.			

. Mongra Hydro Construction
Pvt. Ltd.
For :Authorised Signatory

Divisional Forest Cificer, Oharamshala Forest Division. DHARAMSHALA.

FILE NO.

: FP/HP/HYD/41533/2019

DATE OF PROPOSAL:

CHECK LIST SERIAL NUMBER - 11

UNDERTAKING FOR PAYMENT OF COST OF COMPENSATORY AFFORESTATION

It is to certify that I, Jagpravesh Mongra, Authorised Signatory for M/s Mongra Hydro Construction (P) Ltd. having its office at C/o Uttam Chand, Ward No. 3, Post Office Yol Jharer, Tehsil Shahpur, District Kangra – 176208, have applied for diversion of 0-51-51 ha. of forest area for the purpose of execution of Lower Iku - I Small Hydro Power Project 1 MW in District Kangra.

I, hereby undertake to pay the entire amount for compensatory afforestation in lieu of the forest area diverted for execution of Lower Iku Small Hydro Power Project 1 MW, as per prevailing wage rates at the time of plantation.

For M/s Mongra Hydro Construction (P) Ltd.

. Mongra Hydro Construction

Place: Shahpur

Dated:

Authorised Signatury Authorised Signatory

Countersigned by:

Divisional Forest Officer Dharamshala Forest Division Dharamshala

FILE NO.

: FP/HP/HYD/41533/2019

DATE OF PROPOSAL:

CHECK LIST SERIAL NUMBER - 12

UNDERTAKING FOR THE PAYMENT OF NET PRESENT VALUE OF FOREST AREA

It is to certify that I, Jagpravesh Mongra, Authorised Signatory for M/s Mongra Hydro Construction (P) Ltd. having its office at C/o Uttam Chand, Ward No. 3, Post Office Yol Jharer, Tehsil Shahpur, District Kangra – 176208, have applied for diversion of 0-51-51 ha. of forest area for the purpose of execution of Lower Iku - I Small Hydro Power Project 1 MW in District Kangra.

I hereby undertake to pay the revised Net Present Value (NPV) of the above forest land as per prevailing rates.

For M/s Mongra Hydro Construction (P) Ltd.

. Mongra, Hydro Construction

Pvt. Ltd.

For :-

Authorized Signatory

Dated:

Place: Shahpur

Countersigned by:

Divisional Forest Officer

Dharamshala Forest Division

FILE NO.

Place: Shahpur

Dated:

: FP/HP/HYD/41533/2019

DATE OF PROPOSAL:

CHECK LIST SERIAL NUMBER - 12

UNDERTAKING FOR THE PAYMENT OF ADDITIONAL NET PRESENT VALUE OF FOREST AREA

It is to certify that I, Jagpravesh Mongra, Authorised Signatory for M/s Mongra Hydro Construction (P) Ltd. having its office at C/o Uttam Chand, Ward No. 3, Post Office Yol Jharer, Tehsil Shahpur, District Kangra - 176208, have applied for diversion of 0-51-51 ha. of forest area for the purpose of execution of Lower Iku - I Small Hydro Power Project 1 MW in District Kangra.

I hereby undertake to pay the additional amount of NPV, if so determined as per decision of the Hon'ble Supreme Court.

For M/s Mongra Hydro Construction (P) Ltd.

. Mongra Hydro Construction

Authorised Signater Authorised Signatory

Countersigned by:

Divisional Forest Officer Dharamshala Forest Division

FILE NO.

: FP/HP/HYD/41533/2019

DATE OF PROPOSAL

CHECK LIST SR. NO. 13

UNDERTAKING TO SUBMIT FRA CERTIFICATE

It is to certify that I, Jagpravesh Mongra, Authorised Signatory for M/s Mongra Hydro Construction (P) Ltd. having its office at C/o Uttam Chand, Ward No. 3, Post Office Yol Jharer, Tehsil Shahpur, District Kangra – 176208, have applied for diversion of 0-51-51 ha. of forest area for the purpose of execution of Lower Iku - I Small Hydro Power Project 1 MW in District Kangra.

I, hereby undertake to submit the FRA Certificate complete in all respect before the final approval of the Forest Clearance case of the said Project.

For M/s Mongra Hydro Construction (P) Ltd.

Place: Shahpur
Dated: 17-02-2011

Authorised Signatory

. Mongra Hydro Construction

Pvt. Ltd. For :-

Authorised Signatory

Countersigned by :-

Divisional Forest Officer, 'Dharamshala Forest Division Dharamshala

JOINT INSPECTION REPORT

We the undersigned have jointly inspected the areas Proposed for Diversion in favor of **M/s Baldev Singh S/O Diwan Chand**, VPO. Sahoura, Tehsil and District Kangra, Himachal Pradesh, for setting up **1 MW Lower Iku-1 Small Hydro Power Project** on Iku Khad, a tributary of Banganga then Beas river downstream of Village Kand, Gram Panchayat Kand Kardiyana Tehsil Dharamshala, Distt. Kangra, Himachal Pradesh on 27.09.2017

The project requires a total area of 00-51-51 hectare, for different components viz., Intakes, Desilting Tank, Channel, Forebay, Water Conductor System, Powerhouse, Switchyard, Tail Race Channel, and Muck Dumping Sites, approach road to Powerhouse and Transmission Line from Power House to near HPSEB 11 KV line.

The details of Forest Land area as under:

SL .NO	COMPONENT / DESCRIPTION	MOHAL	KHASRA NO.	AREA		AREA IN FOREST	TOTAL AREA TO BE AQUIRED (in	CLASSIFICATION OF FOREST LAND
				LENGTH	BREADTH	LAND (Sqm)	Hectatre)	OF TOREST EARLY
		٠,						
1	INTAKE / TRENCH WEIR	BAGIARRA	1064/2.	25.00	8.00	200	0-02-00	Gair Mumkin Khad
2	CONVEYANCE CHANNEL	BAGIARRA	1062 / 1	9.00	2.00	18	0-00-18	Jungle Mehfooja Gair Mehduda
3	D-TANK	BAGIARRA	1062 / 2	21.00	6.00	126	0-01-26	Jungle Mehfooja Gair Mehduda
4	WATER CONDUCTOR SYSTEM -PIPE LINE	BAGIARRA	1062 / 4	560.00	2.00	1120	0-11-20	Jungle Mehfooja Gair Mehduda
5.	WATER CONDUCTOR SYSTEM -PIPE LINE	BAGIARRA	1066/1	252.00	2.00	504.00	0-05-04	Jungle Mehfooja Gair Mehduda
6	FOREBAY TANK	BAGIARRA	1066 / 3	12.00	10.00	120	0-01-20	Jungle Mehfooja Gair Mehduda
7	PENSTOCK PIPE	BAGIARRA	1066 / 4	70.00	2.00	140	0-01-40	Jungle Mehfooja Gair Mehduda
8	POWER HOSE COMPLEX AND SWITC YARD	BAGIARRA	1066/5	15.00	15.00	.225	0-02-25	Jungle Mehfooja Gair Mehduda
9	DUMPING SITE - VI	BAGIARRA	1066/6	10.00	10.00	100	0-01-00	Jungle Mehfooja Gair Mehduda
10	TAILRACE CHANNEL	BAGIARRA	1066 / 7	5.00	2.00	10	0-00-10	Jungle Mehfooja Gair Mehduda
11	ROAD / TRANSMISSION	BAGIARRA	1066 / 9	49.00	5.50	269.5	0-02-70	Jungle Mehfooja Gair Mehduda
12	ROAD / TRANSMISSION	BAGIARRA	1067 / 2	9.00	6.00	54	0-00-54	Gair Mumkin Nala
13	ROAD / TRANSMISSION	KAND 5	2/2	120.00	8.00	960	0-09-60	Jungle Mehfooja Mehduda

. Mongra Hydro-Construction Pvt. Ltd. For:-

Authorised Signatory

4

14	ROAD / TRANSMISSION	KAND	3/3	123.00	8.00	984	0-09-84	Gair Mumkin Nali
15	DUMPING SITE -II	BAGIARRA	1062/3	10.00	10.00	100	0-01-00	Jungle Mehfooja Gair Mehduda
16	DUMPING SITE - III	BAGIARRA	1066/2	10.00	10.00	100	0-01-00	Jungle Mehfooja Gair Mehduda
17	DUMPING SITE - IV	KAND	3/2	20.00	6.00	120	0-01-20	Jungle Mehfooja Gair Mehduda
	TOTAL					5151	0-51-51	Hactare

The width of the transmission line proposed to be acquired is 7 m and the height is 9 meter.

The Joint Inspection team has examined all the alternatives with a view to avoid / minimize the use of forest land and we have come to the conclusion that land of the above Khasra Nos. of forest land is the minimum required land for the construction of Lower Iku-I Small Hydro Project and so is absolutely essential.

It was also observed that the proposed approach road alignment is taking off from the Local PWD Road. The Transmission line shall be laid in the road alignment for most of the length.

D.F.O

Dharamshala

S.D.O (Civil)

Dharamshala'

Authorized Signatory

M/s Baldev Sing 8/0 Diwan Chand

. Mongra Hydro Construction

For:-

Authorised Signatory

FILE NO.

: FP/HP/HYD/41533/2019

DATE OF PROPOSAL

CHECK LIST SERIAL NUMBER - 19

CERTIFICATE FOR NON VIOLATION OF FCA 1860

It is to certify that I, Jagpravesh Mongra, Authorised Signatory for M/s Mongra Hydro Construction (P) Ltd. having its office at C/o Uttam Chand, Ward No. 3, Post Office Yol Jharer, Tehsil Shahpur, District Kangra – 176208, have applied for diversion of 0-51-51 ha. of forest area for the purpose of execution of Lower Iku - I Small Hydro Power Project (1 MW) in District Kangra.

I, hereby ensure that there is no violation of FCA, 1860 and no construction activity shall be started at the proposed site till the area is not diverted in the name of M/s Mongra Hydro Construction Private Limited.

For M/s Mongra Hydro Construction (P) Ltd. Mongra Hydro Construction

t. Lid.

uthorised Signatory

Authorised Signatory

Place: Shahpur

Dated:

Countersigned by:

Divisional corest Officer
Dharamshad Eprest Division