### DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)

HYDRO PROJECT 1 MW IN DISTRICT KA : FP/HP/HYD/41472/2019

DATE OF PROPOSAL

FILE NO.

### 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	or which	Lower Iku Small Hydro Project
the forest land is required		1 MW is a run of the river
· · · · · · · · · · · · · · · · · · ·	* * * * * * * * * * * * * * * * * * *	scheme which has been
	* 1	envisaged to utilize the water
*	7	of Iku Khad for power
	4° 4°	generation. The scheme
1	*	involves construction of Weir
	V	structure at EL 1225 m on Iku
		Khad. The various components
		i.e. Weir Site, Conveyance
		Channel & De-silting Tank,
		Water Conductor, Forebay,
		Penstock, Power House, Road,
		Transmission Line and
•		Dumping Sites have been
		proposed. Water from the
		Power House shall be released
* * •	8-1	into the Iku Khad on its left
	e	bank. Power generated from
	4.4	the Project shall be interfaced
		at 33 kV Line nearby by
		constructing 33 kV
	.0	Transmission Line in Tehsil
		Dharamshala in District
	**	Kangra.
(ii) Map showing the required forest land, boundary of	adjoining	Layout Plan of the Project
forest on a 1:50,000 scale map.		marked in red ink on the
2	**	relevant part of the SOI Topo
• *	¥	Sheet No. 52 D/7 is attached
	· ·	herewith - Scale 1: 50000.
		D- 924 29 Loos
(iii) Cost of the project:	6	Rs. 834.28 Lacs.
(iv) Justification for locating the project in forest area.		Hydro Power Projects are Site
()		specific schemes. The Project
- L	,	is located in the remote area of
		district Kangra. There is no
	<del>- 1'</del>	<u> </u>

Canjoov Hydra Projects Pvil Lid.

			•	area so a	land available in the all the components conceived on forest	
(v) (	Cost-benefit analys	sis (to be enclosed).	•		cable as the area is	
(vi)	Employment likely	y to be generated.	* ;	18200 ma		
				generated from construction of this project. 120 persons shall be employed during construction phase and persons shall be retained permanently till the life of the Project.		
		-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	Bagiarra	Intake / Trench Weir	160	-	00-01-60	
2	Bagiarra	Conveyancy Channel	40	-	00-00-40	
3	Bagiarra	De Silting Tank	160	-	00-01-60	
4	Bagiarra	Water Conductor System / Pipe Line	1258	-	00-12-58	
5	Bagiarra	Forebay Tank	100	-	00-01-00	
6	Bagiarra	Spillway	76	THE STATE OF THE S	00-00-76	
7	Bagiarra	Penstock Pipe	292	-	00-02-92	
8	Bagiarra	Power House Complex & Switchyard	300		00-03-00	
9	Bagiarra	Tail Race Channel	16	-	00-00-16	
10	Bagiarra / Andrar	Transmission Line	1050		00-10-50	
11	Bagiarra	Road	2613	-	00-26-13	
12	Bagiarra	Dumping Site – I	100	-	00-01-00	
13	Bagiarra	Dumping Site – II	100	-	00-01-00	
14	Bagiarra	Dumping Site – III	. 110	-	00-01-10	
15	Bagiarra	Dumping Site – IV	. 121	-	00-01-21	
16	Bagiarra	Dumping Site – V	100	-	00-01-00	
17 18	Bagiarra Bagiarra	Dumping Site – VI Dumping Site – VII	110	-	00-01-00	
10	Daylaria	TOTAL .	6806		00-68-06 Ha.	
<del>~~~~~~~</del>		TOTAL	0000	1	00-00-00 на.	
i i.	f any: Number of famil	nent of people due to the projecties. duled Castes/Scheduled Tribe	t, Ni	1.		
f	amilies	plan. (to be enclosed)				
	Thether clearance u	under Environment (Protection)	No.			

•



5. Undertaking to bear the cost of raising and	Enclosed at page no.
maintenance of compensatory afforestation and / or ;	
penal compensatory afforestation as well as cost for	450
protection and regeneration of Safety Zone, etc. as	
per the scheme prepared by the State Government.	
6. Details of Certificates/documents enclosed as	<i>k;</i>
required under the instructions.	
	. 4
i) NOC of the Gram Panchayat	Attached at Page No.
ii) Details of land requirement.	Attached at Page No.
iii) Undertaking in respect of compensatory	
afforestation.	Attached at Page No.
*	•
iv) Geo Reference Map	Attached at Page No.
	<u></u>
v) Revenue Papers.	Attached at Page No.

Sanjeev Kumar Authorised Signatory Sanjeev Hydro Projects (P) Ltd

V.P.O. Sauhora,

Tehsil Kangra, District Kangra

(H.P.) Pin - 176001

Email: loweriku@gmail.com

Mobile: 98570-92895

Date:-Place:- Kangra

### <u>DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL</u> <u>HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)</u>

FILE NO.

: FP/HP/HYD/41472/2019

DATE OF PROPOSAL

#### **CHECK LIST SERIAL NUMBER: - 3**

#### DETAIL NOTE ON THE PROJECT

The forest land is required for the construction of Lower Iku Small Hydro Electric Project (1 MW) near village Bagiarra in Tehsil Dharamshala, District Kangra (H.P). The scheme is proposed on the Iku Khad, a tributary of Baner Khad which is further a tributary of Beas River. Flow of the Iku Khad would be diverted through a weir to be constructed at EL 1225 m and conveyed through a 20 m long Conveyance Channel upto the De-silting Tank. Thereafter the water would be taken through 629 m long Water conducting system upto the proposed Forebay Tank from where the water shall be dropped off through 146 m long Penstock to a surface Power House at EL 1110 m on the left Bank of Iku Khad. Water from the Power House shall be released into the Iku Khad on its left bank. Power generated from the Project shall be interfaced to the existing 33 kV HPSEBL Transmission Line nearby by constructing 70 m long 33 kV Transmission Line in village Bagiara.

The access road of 653.25 m length shall be constructed upto the proposed Power House. The right of way for Transmission Line has been taken as 15 m. The construction of the above project involves 0-68-06 ha. of forest land and there is no Non Forest / Private Land available in the concerned area so all the civil components of the Project have been proposed in the forest land.

The Project was allotted in the name of M/s Vishavkarma Hydel Power (Partnership), VPO Gaggal, Tehsil & District Kangra (H.P.) which was transferred in the name of M/s Sanjeev Hydro Projects Private Limited, Village & Post Office Sauhora, Tehsil & District Kangra H.P. -176001.

The Project Comprises of the following civil works.

- ➤ Intake / Weir Site
- Conveyance Channel
- ➤ De- silting Tank
- ➤ Water Conducting System
- Forebay Tank
- > Spillway
- Muck Dumping Sites
- > Penstock
- Powerhouse
- Tail Race
- Road
- > Transmission Line

With the construction of the above project, economy of the local village Bagiarra, Andrar, Patolha, Salag and surrounding villages shall get a boost and better means of earning livelihood.

Presently, non- renewable sources like Kerosene, Diesel and Forest wood are being used as domestic fuel. Availability of reliable and qualitative electricity shall have positive impact in the living standard of the people of the area.

The people of this area are generally poor and they would get the chance to be part of the project by getting employment during construction period and some persons shall get permanent employment for



operation of the Project. The estimated cost of the project is Rs. 834.28 lakh and approx. 18200 man days of employment would be generated directly during construction of the project.

The adverse impact of the construction on the environment shall be taken care of. Cut & fill method shall be used for disposal of muck/debris and the rest would be used in filling the embankments of different structures, retaining walls and low lying areas. The dumping sites have been depicted in the enclosed map. No debris would be allowed to roll down the slopes towards the Khad. Trees along the Penstock Slopes, dumping areas and approach roads will be planted. Thus every care shall be taken to minimize the ill effect on the environment.

#### LOCATION OF THE PROJECT:

The Lower Iku Small Hydro Electric Project is being conceived as a run of the river development on Iku Khad, a tributary of Baner Khad which is further a tributary of Beas River. The Project is located near village Bagiarra, Tehsil Dharamshala, Distt. Kangra of Himachal Pradesh. Nearest broad gauge railway station is Pathankot, which is 90 kms from the powerhouse site.

#### JUSTIFICATION FOR LOCATION THE PROJECT IN FOREST AREA:

Iku Khad is a tributary of Baner Khad which is further a tributary of Beas river and joins it downstream of Shree Chamunda Temple at EL 907 m in District Kangra. It joins Baner Khad on its right bank The gradient of Khad is very steep in the upper reaches of the khad. Average stope varies from 1:6 to 1:10. The Hydro Power Sites are site specific and the area adjoining to the Iku Khad is Forest Land. So the forest land cannot be avoided.

No other viable alternative is available for the project so it has to be as such located in the forest land. Keeping in view of the technical requirements of the Project, alternative involving minimum forest land and trees have been adopted.

#### FINANCIAL AND SOCIAL BENEFITS:

#### Financial:

The project will generate about 6 million units which shall be sold to the HPSEB at Tariff fixed by the HPSERC.

#### Social:

- Provide reliable power supply to the rural area to stimulate economic activity social welfare among the local population.
- Save forests, which are being used for meeting rural energy needs
- ❖ Increase Productivity in agriculture, industry and commerce.
- Create employment during construction and maintenance and thus check migration of the villagers to cities.
- \* To reduce the use of fuel wood during winter for heating purposes, thus reducing deforestation.

#### Total Population Benefited:

The population of approx. 250 persons living in Bagiarra, Andrar, Salag and other villages surrounding the project area will be benefited.

#### **Employment Generated:**

Yearly employment during construction by categories (Approximately)

Sanjos (Hydr) Projects Fvt. Ltd.

Signatory

Year	Professional& Technical	Clerical Services	Skilled workmen	Unskilled workmen
1 <sup>st</sup> , Year	4	3	10	75 to 100
2 <sup>nd</sup> , Year	6	3	15	100 to 150

Personal to be retained after completion of project would be approximately 10 %, who shall get permanent job till the life of the Project or retirement thereof, whichever is earlier.

Approx. 18200 man-days of employment would be generated directly during the construction of this project.

#### Project objectives:

- Exploit the power potential as per the policy of the Government.
- Provide employment opportunities to the locals
- Development of the area by adding to the standard of living in village communities.
- Mitigate the power crisis in northern region.

The project would have lot of long term direct and indirect advantages. Hence the project is requested to be considered.

For M/s Sanjeev Hydro Projects (P) Ltd

Sanjoov of Atro Proposta Pvt. Ltd

Authorised Signatory

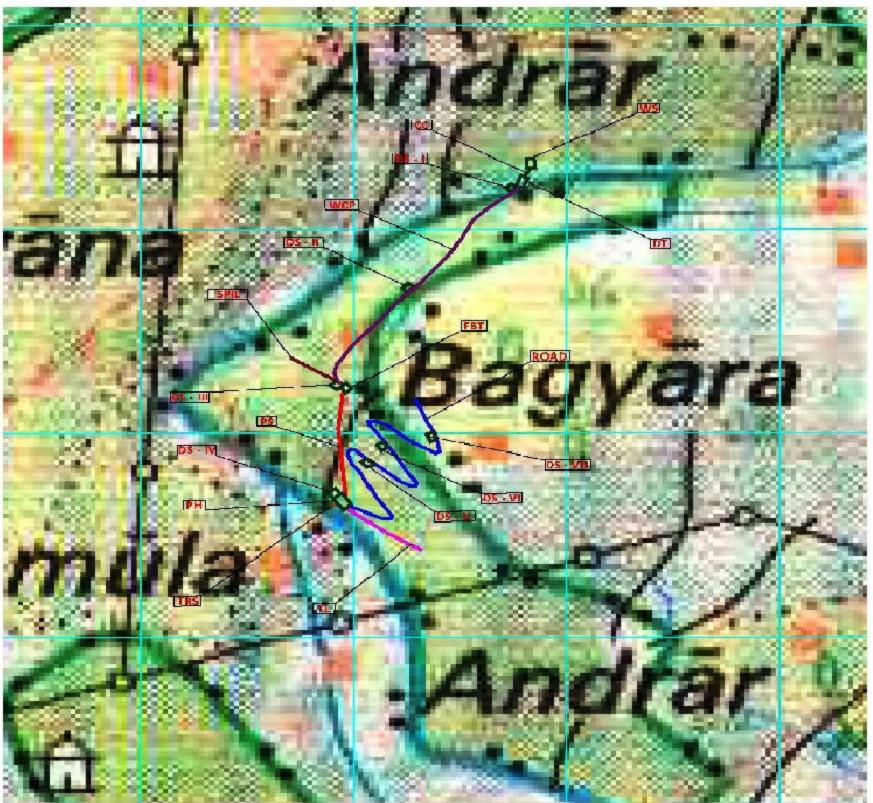
Place: Dharamshala

Dated:

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

## TOPO MAP

**SOI TOPO: 52 D/8** 



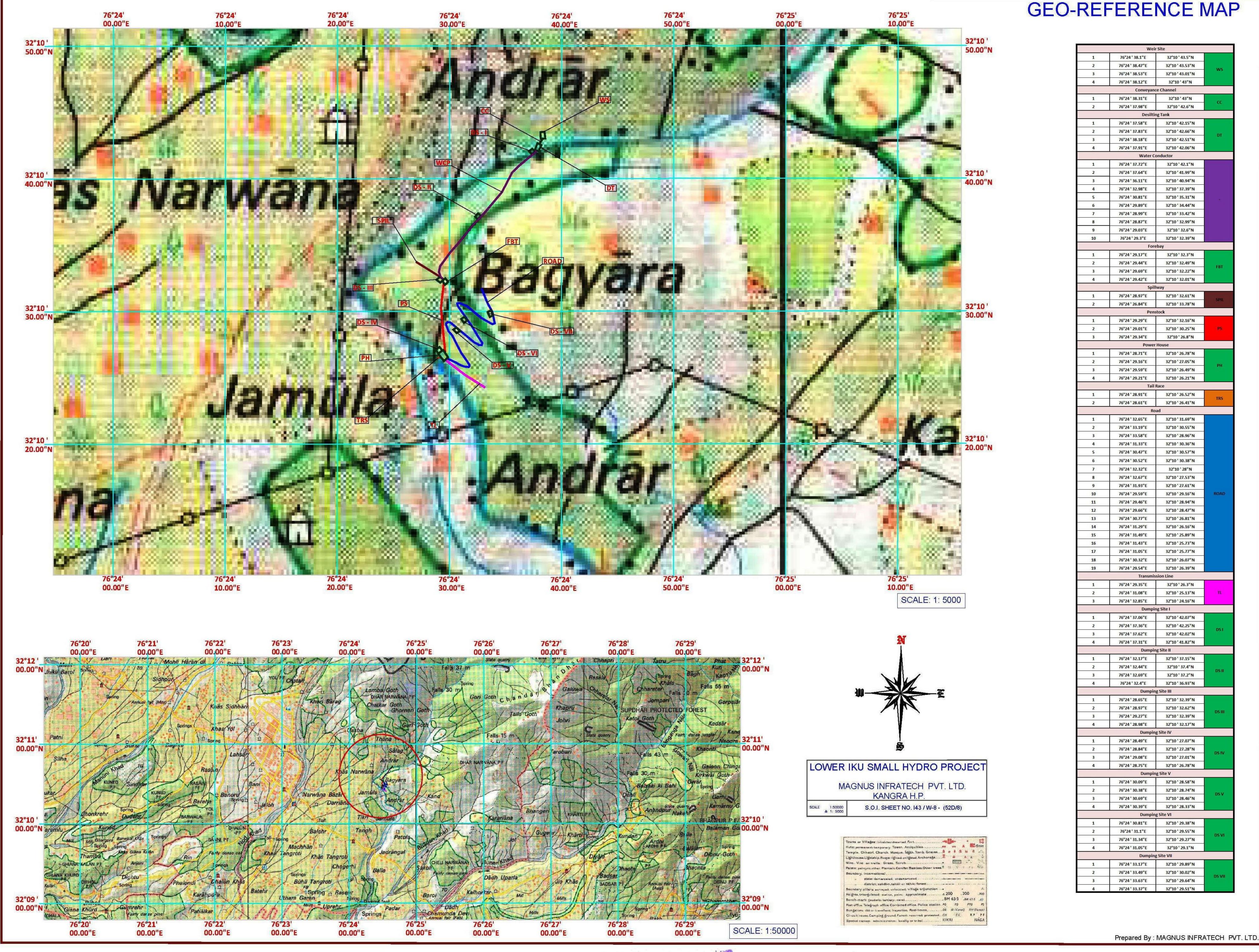
WS	Weir Site
CC	Conveyance Channel
DT	De-silting Tank
FBT	Forebay Tank
PS	Penstock
PH	Power House
Road	Road
TRC	Tail Race Channel
TL	Transmission Line
DS	Dumping Site I-VII
Spil	Spillway

Director And Compacts (B) List

Divisional Forest Officer.

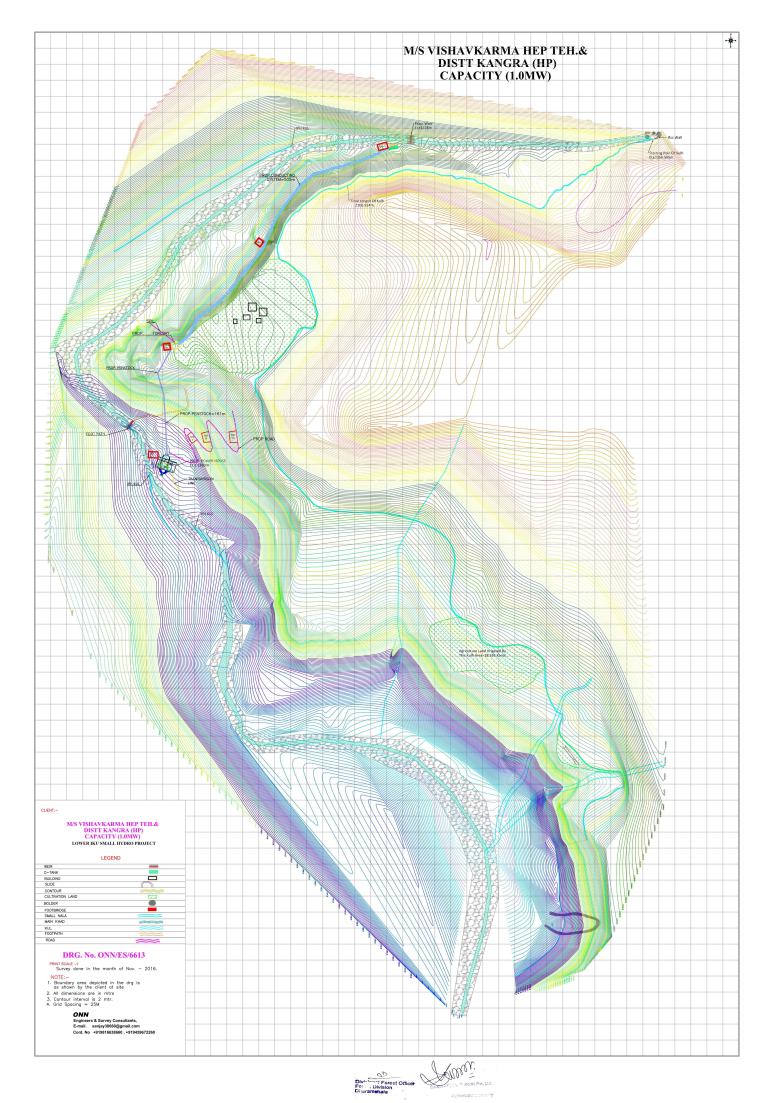
Dharamshala Forest Division.

DUARAMSHALA









### <u>DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMA.</u> <u>HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)</u>

FILE NO.

: FP/HP/HYD/41472/2019

DATE OF PROPOSAL:

CHECK LIST SERIAL NUMBER – 06

### STATEMENT SHOWING DETAILS OF FOREST AREA PROPOSED FOR DIVERSION

Sr.	District	Division	Description	Range /	Khasra	Forest Area	Classification of	Legal
No.	-			Tehsil/Village	Number / Survey or Compartment Number or Km Stone.	proposed for Diversion (HA)	Forest Land.	Status of Forest Land
1	Kangra	Dharamshala	Weir Site	Bagiarra	820 / 1	0-01-60	Gair Mumkin Khad	UCF
2	Kangra	Dharamshala	Conveyancy Channel	Bagiarra	819 / 1	0-00-40	Jungle Mehfuza Gair Mehduda	UPF
3	Kangra	Dharamshala	De-Silting Tank	Bagiarra	819 / 2	0-01-60	Jungle Mehfuza Gair Mehduda	UPF
4	Kangra	Dharamshala	Water Conductor System / Pipe Line	Bagiarra	819 / 3	0-04-90	Jungle Mehfuza Gair Mehduda	UPF
5	Kangra	Dharamshala	Water Conductor System / Pipe Line	Bagiarra	876 / 1	0-04-82	Charagah Darakhtan	,UPF ,
6	Kangra	Dharamshala	Water Conductor System / Pipe Line	Bagiarra	826 / 3	0-02-86	Charagah Bila Darakhtan	UPF
7	Kangra	Dharamshala	Forebay Tank	Bagiarra	826 / 2	0-01-00	Charagah Bila Darakhtan	UPF
8	Kangra	Dharamshala	Spillway	Bagiarra	826 / 5	0-00-76	Charagah Bila Darakhtan	UPF
9	Kangra	Dharamshala	Penstock	Bagiarra	826 / 1	0-02-34	Charagah Bila Darakhtan	UPF
10	Kangra	Dharamshala	Penstock	Bagiarra	858 / 1	0-00-06	Gair Mumkin Rasta	UCF
11	Kangra	Dharamshala	Penstock	Bagiarra	1063 / 4	0-00-52	Jungle Mehfuza Gair Mehduda	UPF
12	Kangra	Dharamshala	Power House	Bagiarra	1063 / 2	0-03-00	Jungle Mehfuza Gair Mehduda	UPF
13	Kangra	Dharamshala	Tail Race	Bagiarra	1063 / 3	0-00-16	Jungle Mehfuza Gair Mehduda	UPF
14	Kangra	Dharamshala	Road	Bagiarra	1063 / 1	0-26-13	Jungle Mehfuza Gair Mehduda	UPF
15	Kangra	Dharamshala	Transmission Line	Bagiarra	1063 / 6	0-10-50	Jungle Mehfuza Gair Mehduda	UPF
16	Kangra	Dharamshala	Dumping Site -	Bagiarra	819 / 4	0-01-00	Jungle Mehfuza Gair Mehduda	UPF
17	Kangra	Dharamshala	Dumping Site -	Bagiarra	876 / 2	0-01-00	Charagah Darakhtan	UPF
18	Kangra	Dharamshala	Dumping Site -	Bagiarra	826 / 4	0-01-10	Charagah Bila Darakhtan	UPF
19	Kangra	Dharamshala	Dumping Site -	Bagiarra	1063 / 5	0-01-21	Jungle Mehfuza Gair Mehduda	UPF

20	Kangra	Dharamshala	Dumping Site - V	Bagiarra	1063 / 9	0-01-00	Jungle Mehfuza Gair Mehduda	UPF
21	Kangra	Dharamshala	Dumping Site - VI	Bagiarra	1063 / 8	0-01-00	Jungle Mehfuza Gair Mehduda	UPF
22	Kangra	Dharamshala	Dumping Site - VII	Bagiarra	1063 / 7	0-01-10	Jungle Mehfuza Gair Mehduda	UPF
		T	otal Land Required			0-68-06	ha	

Place : Dharamshala Dated :

Divisional Porest Officer Dharamshala (ofe) in i Dharamshala

### <u>DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL</u> <u>HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)</u>

FILE NO.

: FP/HP/HYD/41472/2019

DATE OF PROPOSAL:

CHECK LIST SERIAL NUMBER - 07

### STATEMENT SHOWING DETAILS OF NON-FOREST AREA INVOLVED IN THE PROPOSAL

Sr. No.	District	Division	Description	Range / Tehsil/Village	Khasra Number / Survey or	Non Forest / Private Area	Classification of Non Forest Land.	Legal Status of	Remarks
					Compartment Number or Km	proposed for Diversion	22	Non Forest	
-					Stone.	(HA)	4	Land	
			V 10 0 7 4 4 4					***	
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		1		L	Total	0 Hectare	S		

For M/s Sanjeev Hydro Project (P) Ltd. Sanjeev Hydro Projects Pvt. Ltd.

AL AN

Authorised Signatory

Place: Dharamshala

Dated:

Countersigned by:

Divisional Horest Officer Dharamshala Horest Division

Dharamshala

CERTIFICATE OF NON AVAILABILITY OF NON FOREST LAND IN RESPECT OF M/S VISHAVKARMA HYDEL POWER FOR THE CONSTRUCTION OF 1 MW LOWER IQU SMALL HYDRO POWER PROJECT TEHSIL DHARAMSHALA OF DISTT KANGRA WITHIN JURISDICTION OF DHARAMSHALA FOREST DIVISION.

As per report of Sub Divisional Officer (Civil) Dharamshala vide letter no. 508/SDK dated 19-07-2017 and Joint inspection report, it is certified that there is no- other alternative land than the forest land in Mohal Bagiarra, Andrar Tehsil Dharamshala District Kangra for the construction of 1 MW Lower Iqu Small Hydro Power Project in Tehsil Dharamshala of Distt Kangra H.P.

No 4470 /DRA

Dated: 08/08/2018

Collector Kangra Distt. at Dharamshala

### DIVERSION OF 0.6806 HA. OF FOREST LAND FOR CONSTRUCTION OF LOWER IKU SMALL HYDRO PROJECT 1 MW IN DISTRICT KANGRA (H.P.)

FILE NO.

: FP/HP/HYD/41472/2019

DATE OF PROPOSAL :

#### CHECK LIST SERIAL NUMBER - 9

# JUSTIFICATION FOR LOCATING THE PROJECT / ROAD AND OTHER COMPONENTS ON THE FOREST LAND IN THE CONSTRUCTION OF LOWER IKU (1 MW) SMALL HYDRO PROJECT, DISTRICT KANGRA (H.P.)

Certified that, location of all the civil components of the Lower Iku SHEP 1 MW including Water Conducting System of 629 m length. Weir Site and Power House is feasible in the forest land only. There is no Non Forest / Private Land available in the vicinity of the Project area so all the components of the Project have been proposed in the forest land only. Moreover, the Hydro Power Projects are site specific and the Project area is surrounded with forest land from all sides near village Bagiarra and Village Andrar, Tehsil Dharamshala, District Kangra (H.P.).

For M/s Sanjeev Hydro Projects (P) Ltd

Place: Dharamshala

Dated:

Countersigned by:

Divisional Forest Officer Dharamshala Forest Division Dharamshala