

No.Ft.48-5308/2021 (FCA)

H.P. Forest Department.

From: Pr. Chief Conservator of Forests (HoFF),  
Himachal Pradesh Shimla-1.

To: The Regional Officer,  
Integrated Regional Office GoI, MoEF&CC,  
CGO Complex, Shivalik Khand, Longwood,  
Shimla, Himachal Pradesh.

Dated Shimla-1, the 15 JUL 2022

Subject: **Diversion of 35.1655 hectare of forest land in favour of HPSEB, for the construction of SoP to AIMS Kothipura, within the jurisdiction of Bilaspur & Suket Forest Division, Distt. Bilaspur & Mandi, H.P. (Online Proposal No. FP/HP/Trans/148191/2021)**

Sir,

Kindly refer to your office letter No. FC/HPC/04/34/2022 dated 19.04.2022 on the subject cited above.

2 The pointwise reply to the observations as raised vide your above referred communication is submitted as below:

1. The user agency has intimated that the diversion area and alternates explored have been marked in KML file in distinct color of each Distt. and revised KML file has been uploaded.
2. The user agency has intimated that the alternates explored have been marked in toposheet and Geo referenced map. In justification of project in the forest area, detail of alternatives examined and reason for their rejection are furnished.
3. The correct polygan for 51.01 ha. (Forest and non forest land) is uploaded online by user agency.
4. It is fact that diversion area touches Major River Satluj and Ali Khad & protected area of Govind Sagar Wildlife Sanctuary. Earlier, the GoHP has declared Govind Sagar Lake as Wild Life Sanctuary vide Notification No. FFE-B-F(6)-18/99 dated 23.10.1999. Thereafter, above Wild Life Sanctuary has been de-notified by GoHP vide Notification No. FFE-B-F(6)-11/2005-II/Gobind Sagar dated 07.06.2013. As such, Shree Naina Devi Ji Conservation Reserve is the only protected area in Bilaspur Forest Division and is situated at an aerial distance of 19 Km from proposed site.
5. It is intimated that the CA area patch No. 1, 3, 4, 6, 7 & 8 are mostly infested with lantana and other type of bushes upto 50 to 75 % and overall crown density of vegetation in these patches is as under:-


Sr. No. of Patch	Name of Area	Overall Crown Density of vegetation
1	DPF Chamyon 13 ha.	0.02
3	UPF Bariwala 5 ha.	0.12
4	UPF Bhater 4 ha.	0.11
6	UPF Dabat 6 ha.	0.08
7	UPF Dhara 12 ha.	0.16
8	UPF Chamarda 5 ha.	0.04

Overall crown density in these patches is below 40% as such, these patches are fit for raising of CA as per FCA Guidelines.

6. Employment likely to be generated is filled in column No. E(iii) uploaded online in Part-I by user agency.
7. The Cost benefit analysis has been prepared and uploaded online in Part-I by the user agency.
8. The user agency has intimated that the authenticated layout plan has been uploaded online.

9. The detail of component wise and purpose wise breakup showing Khasra number wise forest land and non forest land in towers form has been uploaded online by user agency.
10. All the Documents, Certificate and Undertakings have been uploaded online by the user agency.
11. Online column of Part-II is now filled up.
12. The user agency has intimated that the length of the transmission line of 18.300 KM and the width of ROW is 27 Mtrs. The proposed diversion comes to 49.4073 ha. The Revenue authorities have demarcated the land and verified it as 51.017 ha. (35.1655 ha. in forest land and 15.8515 ha. in non forest land). The difference in calculation of this land may be due to following reasons:-
  - (i) The line is crossing through the hilly terrain and some portion of it is very steep. Usually when revenue authorities demarcate such land the sum of it differs from the sum of land length calculation in horizontal, particularly in case of private land (Non forest land).
  - (ii) Some portion of this is crossing through water reservoir of Govind Sagar Dam due to which accuracy in measurement of land is not possible and the same has been taken from the revenue record due to which there is a difference.
  - (iii) Some portion of land is required at both ends of the line to erect/ gentries etc. thus there is a difference.
13. The length and width detail of towers to be erected in the project showing design/ structure of tower has been uploaded online by user agency.
14. The proposed CA area of patch No. 1 i.e. DPF Chamarda is notified as DPF and restes of CA patches are waste land under HP Govt. Notification of 1952.
15. To prevent soil erosion, the user agency has submitted sample plan with is enclosed herewith.
16. The user agency has intimated that the land proposed for this line is of barest minimum forest land and HPSEBL have already taken in consideration to lay the transmission line in such a way where very less trees are required to be felled. Therefore, it is not possible to reduce the number of trees now.
17. The user agency has intimated that Sub Station Kothipura is constructed on non forest land bearing khasra No. 112/102/97/92/69 measuring 160.5 Bigha. Photocopy of certificate submitted by the revenue authorities is enclosed herewith.
18. The user agency has intimated that this line is crossing through 2 Muhals of Mandi i.e. Dehar & Alsu and 15 Muhals of Bilaspur Distt. viz Khated, Beri Rajadiyan, Kuddi, Binola Baggi, Sihda, Bandla, Parnali, Jabli, Nouni, Sai Fardyan, Garnal, Salnoo, Pandgal and Changer Plasiyan. The proceedings of 2 Muhals of Mandi Distt. and 14 Muhals of Bilaspur Distt. have already been uploaded. The meeting of FRA of last Muhal i.e. Changer Plasiyan was not convened as the approval of forest clearance of the land through which the line is crossing, has already been obtained.
19. The copy of project approval is uploaded online in the additional information by the user agency.
20. The muck management plan has been authenticated by DFO and uploaded against additional information detail by the user agency.
21. The barest minimum forest land certificate has been uploaded online by the user agency.
22. The abstract & enumeration list of trees of Bilaspur Division is already uploaded online in Part-II.

Yours faithfully,

  
Nodal Officer-cum-Addl.Pr.CCF (FCA)  
O/o Pr. CCF, H.P. Shimla-1.

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Sr. No.	Name of Sub Division	Number of Proposal
1.	Sadar (Rural) and (Sadar Urban)	38
2.	Karsog	89
3.	Jagindernagar	95
4.	Sundernagar	46
5.	Dharampur	16
	Total	284

Sub Division Wise detail of proposal which were received under FRA, were put for discussion:-

SUB DIVISION SADAR MANDI



Sr. No.	Name of Sub Division	Name of Gram Panchayat	Name of Mohal	Date of issuance of proclamation	Date of Meeting of FRC Annexure-I	Date of Meeting of Mohal Sabha Annexure-II	Date of Meeting of SDLC Annexure-III	Remarks
1.	Karsog	Shakra	Jehwadi and Thiru ka Basih	19-01-2014	14-7-2014	14-03-2015	16-8-2015	Case is fit
2.	-do-	Shakra	Shakra	26-01-2014	08-05-2014	15-03-2015	16-08-2016	Case is fit
3.	-do-	Kelodhar	Kelodhar	01-01-2014	10-06-2014	10-06-2014	16-08-2016	Case is fit
4.	-do-	Kelodhar	Balnrunda	31-01-2014	18-08-2014	05-09-2014	16-08-2016	Case is fit
5.	-do-	Kelodhar	Dhalog	01-02-2014	15-10-2014	15-10-2014	16-08-2016	Case is fit

Asst. Engineer  
 Elnit. System Sub-Divn.  
 HPSSEI, Sunder Nagar (H.P.)

District Engineer  
 Mandi, H.P.


81	-do-	Khuddi	Saddoh	08-05-2014	15-10-2014	15-10-2014	11-04-2016	Case is fit
82	-do-	Khuddi	Khuddi	08-05-2014	01-03-2015	01-03-2015	11-04-2016	Case is fit
83	-do-	Khuddi	Sahara	08-05-2014	22-10-2014	22-10-2014	11-04-2016	Case is fit
84	-do-	Khuddi	Chhid	08-05-2014	16-10-2014	16-10-2014	11-04-2016	Case is fit
85	-do-	Khuddi	Magaun	08-05-2014	05-11-2014	05-11-2014	11-04-2016	Case is fit
86	-do-	Khuddi	Karehan	11-05-2014	24-10-2014	24-10-2014	11-04-2016	Case is fit
87	-do-	Khuddi	Bath	16-05-2014	06-11-2014	06-11-2014	11-04-2016	Case is fit
88	-do-	Hargunain	Nakehad	23-05-2014	05-04-2015	05-04-2015	11-04-2016	Case is fit
89	-do-	Ner Gharwasda	Ner Gharwasda	11-05-2014	08-09-2014	15-10-2015	11-04-2016	Case is fit
90	-do-	Ner Gharwasda	Majharma	11-05-2014	08-09-2014	08-09-2015	11-04-2016	Case is fit
91	-do-	Ner Gharwasda	Kunduni	11-05-2014	11-08-2014	10-08-2015	11-04-2016	Case is fit
92	-do-	Ner Gharwasda	Bhelendra	11-05-2014	12-08-2014	22-10-2015	11-04-2016	Case is fit
93	-do-	Ner Gharwasda	Kufu	11-05-2014	11-08-2014	27-10-2015	11-04-2016	Case is fit
94	-do-	Ner Gharwasda	Manoh	11-05-2014	17-08-2014	19-09-2015	11-04-2016	Case is fit
95	-do-	Ner Gharwasda	Chhaprot	15-05-2014	21-08-2014	07-11-2015	11-04-2016	Case is fit
Sundernagar								
1	Sundernagar	Maloh	Sanyun	07-11-2014	14-02-2015	01-03-2015	25-07-2016	Case is fit
2	-do-	Maloh	Maloh	07-11-2014	09-03-2015	01-03-2015	25-07-2016	Case is fit
3	-do-	Maloh	Bogain	06-11-2014	15-02-2015	02-03-2015	25-07-2016	Case is fit
4	-do-	Maloh	Bhadrochale	07-11-2014	13-02-2015	01-03-2015	25-07-2016	Case is fit



  
 Assistant Engineer  
 Elec. System Sub-Divn.  
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 Sunder Nagar (H.P.)






5	-do-	Maloh	Ponyas	07-11-2014	15-02-2015	02-03-2015	25-07-2016	Case is fit
6	-do-	Maloh	Nakani	08-11-2014	15-02-2015	15-02-2015	25-07-2016	Case is fit
7	-do-	Bhalana	Bhalana	23-02-2014	26-05-2014	28-05-2014	25-07-2016	Case is fit
8	-do-	Bhalana	Kahu	25-02-2014	26-05-2014	30-05-2014	25-07-2016	Case is fit
9	-do-	Bhalana	Pabren	24-02-2014	27-05-2014	29-05-2014	25-07-2016	Case is fit
10	-do-	Bhalana	Fagwa	24-02-2014	27-05-2014	29-05-2014	25-07-2016	Case is fit
11	-do-	Bhalana	Khagrao	23-02-2014	25-05-2014	28-05-2014	25-07-2016	Case is fit
12	-do-	Bhalana	Kotla	23-02-2014	25-05-2014	28-05-2014	25-07-2016	Case is fit
13	-do-	Jai Devi	Bothol	18-06-2014	18-09-2014	20-09-2014	25-07-2016	Case is fit
14	-do-	Jai Devi	Jai Devi	18-06-2014	17-09-2014	20-09-2014	25-07-2016	Case is fit
15	-do-	Jai Devi	Sandrotal	17-06-2014	18-09-2014	20-09-2014	25-07-2016	Case is fit
16	-do-	Jai Devi	Kotlu	16-06-2014	17-09-2014	18-09-2014	25-07-2016	Case is fit
17	-do-	Jai Devi	Prachhi	16-06-2014	18-09-2014	18-09-2014	25-07-2016	Case is fit
18	-do-	Jai Devi	Dhar	18-06-2014	17-09-2014	20-09-2014	25-07-2016	Case is fit
19	-do-	Jai Devi	Sianji	18-06-2014	18-09-2014	20-09-2014	25-07-2016	Case is fit
20	-do-	Jai Devi	Kyargi	18-06-2014	18-09-2014	20-09-2014	25-07-2016	Case is fit
21	-do-	Jai Devi	Mehi	18-06-2014	17-09-2014	20-09-2014	25-07-2016	Case is fit
22	-do-	Jai Devi	Chiradi	18-06-2014	18-09-2014	20-09-2014	25-07-2016	Case is fit
23	-do-	Upper Behli	Upper Behli	13-06-2014	07-10-2014	11-10-2014	25-07-2016	Case is fit
24	-do-	Upper Behli	Harwari	14-06-2014	09-10-2014	12-10-2014	25-07-2016	Case is fit

  
 Assistant Engineer  
 Electric System Sub-Divn.  
 (RSEEL, Dunder Nagar (M.P.))

  
  
 District Revenue Officer  
 Mandla, District Mandla


25	-do-	Upper Behli	Lower behli	13-06-2014	07-10-2014	11-10-2014	25-07-2016	Case is fit
26	-do-	Upper Behli	Khatarwari	14-06-2014	09-10-2014	12-10-2014	25-07-2016	Case is fit
27	-do-	Khira	Khira	15-06-2014	20-09-2014	25-09-2014	25-07-2016	Case is fit
28	-do-	Khira	Dharanda	15-06-2014	20-09-2014	25-09-2014	25-07-2016	Case is fit
29	-do-	Mahadev	Mahadev	08-06-2014	13-11-2014	18-11-2014	25-07-2016	Case is fit
30	-do-	Mahadev	Ghanghal	08-06-2014	14-11-2014	20-11-2014	25-07-2016	Case is fit
31	-do-	Jambala	Jror	20-07-2014	20-10-2014	23-10-2014	25-07-2016	Case is fit
32	-do-	Jambala	Ghurana	19-07-2014	19-10-2014	20-10-2014	25-07-2016	Case is fit
33	-do-	Jambala	Pathian	20-07-2014	20-10-2014	27-10-2014	25-07-2016	Case is fit
34	-do-	Jambala	Jambala	17-07-2014	18-10-2014	20-10-2014	25-07-2016	Case is fit
35	-do-	Chamukha	Chamukha	07-06-2014	14-09-2014	14-09-2014	25-07-2016	Case is fit
36	-do-	Chamukha	Talsai	07-06-2014	05-10-2014	12-10-2014	25-07-2016	Case is fit
37	-do-	Chamukha	Dhar	14-06-2014	14-09-2014	21-09-2014	25-07-2016	Case is fit
38	-do-	Chamukha	Sabyalan	29-06-2014	12-10-2014	19-10-2014	25-07-2016	Case is fit
39	-do-	Dugrain	Dugrain	20-06-2014	20-10-2014	23-10-2014	25-07-2016	Case is fit
40	-do-	Bhanwar	Bhanwar	15-05-2014	16-08-2014	17-08-2014	25-07-2016	Case is fit
41	-do-	Bhanwar	Chhapwar	16-05-2014	16-08-2014	17-08-2014	25-07-2016	Case is fit
42	-do-	Bhanwar	Patyora	15-05-2014	16-08-2014	17-08-2014	25-07-2016	Case is fit
43	-do-	Bhanwar	Keran	17-05-2014	16-08-2014	18-08-2014	25-07-2016	Case is fit
44	-do-	Dehar	Dehar	10-06-2014	17-01-2015	27-01-2015	25-07-2016	Case is fit

  
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 Electric System Sub-Divn. District Revenue Office  
 HPSEBL, Sunder Nagar (H.P.) Mandi District Mandi

  
  
 District Revenue Officer  
 Mandi District Mandi

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25	-do-	Dehar	Aisu	10-06-2014	07-01-2015	27-02-2015	25-07-2016	Case is fit
26	-do-	Bhour	Bhour	20-07-2014	23-10-2014	05-01-2015	25-07-2016	Case is fit
Dharampur								
1	Dharampur	Gawella	Gawella	07-08-2014	10-11-2014	12-11-2014	26-07-2016	Case is fit
2	-do-	Gawella	Sindh	08-08-2014	09-11-2014	11-11-2014	26-07-2016	Case is fit
3	-do-	Gawella	Kanhul	07-08-2014	10-11-2014	12-11-2014	26-07-2016	Case is fit
4	-do-	Gawella	Lahsari	08-08-2014	09-11-2014	11-11-2014	26-07-2016	Case is fit
5	-do-	Gawella	Choj	07-08-2014	10-11-2014	12-11-2014	26-07-2016	Case is fit
6	-do-	Gawella	Cheffalini	08-08-2014	09-11-2014	11-11-2014	26-07-2016	Case is fit
7	-do-	Sohar	Sohar	30-07-2014	12-11-2014	04-02-2015	26-07-2016	Case is fit
8	-do-	Sohar	Bahyali	30-07-2014	12-11-2014	04-02-2015	26-07-2016	Case is fit
9	-do-	Sohar	Takrehar	30-07-2014	12-11-2014	04-02-2015	26-07-2016	Case is fit
10	-do-	Bery	Upper Bery	04-02-2014	14-05-2014	22-05-2014	26-07-2016	Case is fit
11	-do-	Bery	Nichil Bery	04-02-2014	14-05-2014	22-05-2014	26-07-2016	Case is fit
12	-do-	Bery	Kakri	04-02-2014	14-05-2014	22-05-2014	26-07-2016	Case is fit
13	-do-	Koon	Koon	15-05-2014	04-01-2015	06-02-2015	26-07-2016	Case is fit
14	-do-	Koon	Deyol	15-05-2014	04-01-2015	06-02-2015	26-07-2016	Case is fit
15	-do-	Neri	Jamalia	22-07-2014	27-11-2014	04-01-2015	26-07-2016	Case is fit
16	-do-	Neri	Neri	22-07-2014	27-11-2014	04-01-2015	26-07-2016	Case is fit

  
 Assistant Engineer  
 E.M.C. System Sub-Divn. District Revenue Office  
 HPSEBL, Sunder Nagar (M.P.) Mandl, District Mandl

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The detailed discussion and scrutiny of the proposals and documents placed on record mentioned against the following Sub-Divisions were found in order:-

Sr. No.	Name of Sub Division	Number of Proposal
1.	Sadar (Rural) and (Sadar Urban)	38
2.	Karsog	89
3.	Jogindernagar	95
4.	Sundernagar	46
5.	Dhvanapur	16
	Total	284

Thus keeping in view the recommendation of SDLC and discussion in DLC the claims of ST and other Forest dwellers of 284 muhals are settled and same are found to be nil.

Beside above case submitted by the Education department for the construction of Government High School, Kandhar to Divisional Forest Officer, Suket under section 3(2) of Forest Rights Act, 2006 was also discussed in detail with Divisional Forest Officer, Suket who has told in the meeting that case under reference does not fulfill either of criteria mentioned in para No. 1<sup>st</sup> and 2<sup>nd</sup> above and rejected the above proposal. Divisional Forest Officer, Sundernagar has also stated during the District Level Committee meeting that section 3(2) of ibid act does not apply in that area where OTFD and ST do not exist. She further opined that both the acts i.e. Forest Conservation Act, 1980 and Forest Rights Act, 2006 are applicable in this case and entire area of Mandi district, but this case do not fall under the purview of section 3 (2) of Forest Rights Act, 2006. This contention of Divisional Forest Officer, Suket that entire Forest Rights Act, 2006 except section 3(2) shall be applicable, does not seem logical.

In this regard as per clarification dated 14-12-2015 issued by Ministry of Tribal Affairs, Government of India "Development facilities under section 3 (2) can be extended in parallel or independently of the process of recognition of rights under section 3(1) clearances of development project under section 3(2) is subject to the condition that the same is recommended by the gram Sabha. It however needs to be ensured that no rights are affected or any forest dweller is evicted due to diversion of forest land till the recognition and verification process under FR Act is complete. Therefore while obtaining recommendation of the Gram Sabha for diversion of forest land under section 3(2), it may also be obtained in writing from the Gram Sabha that no rights under are likely to be affected by such diversion".

A. K. Singh

(B)

Assistant Engineer      District Revenue Officer  
 Elect. System Sub-Div. Mandi, District Mandi  
 HPSEBL, Sumer Nagar (H.P.)

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As per sub-section (2) of Section 3 of the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 provides that notwithstanding anything contained in the Forest (Conservation) Act, 1980, the Central Government shall provide for diversion of forest land for certain facilities managed by the Government, as specified in that Section, which involve felling of trees not exceeding seventy-five trees per hectare, provided that such diversion of forest land shall be allowed only if:-

- (i) The forest land to be diverted for the purposes mentioned in the said sub-section is less than one hectare in each case; and
- (ii) the clearance of such developmental projects shall be subject to the condition that the same is recommended by the Gram Sabha.

Keeping in view the above mentioned facts, the above case for diversion of 0.0488 hectare of forest land in the name of Education department for the construction of Government High School Kandhar has also been approved by the District Level Committee. However, Chairman directed the Addl. District Magistrate to refer the case to the Commissioner, Tribal Development, H.P. for issue necessary direction to the Forest department, Mandi to implement the provision of section 3(2) of Forest Rights Act, 2006 in letter and spirit.

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Sandeep Kadam, IAS,  
Deputy Commissioner,  
Mandi District/Mandi.  
Phone No. 01905-225201.

*[Handwritten signature]*  
Assistant Engineer  
Elect. System Sub-Divn  
HPSEB, Sunder Nagar (H.P.)

## METHODS OF CONTROLLING SOIL EROSION

### For 132kV Transmission Line from Kangoo to AIIMS Kothipura

#### Objectives:

Soil erosion is a natural process in which particles of soil are moved by wind and water, and displaced to another location. When erosion occurs naturally, soil is relocated at about the same rate it is created, so no harm is done to the environment. Erosion is one of the biggest concerns of earth's land surface. It has many impacts on agricultural production and also in all engineering and construction industries. Erosion can be caused by multiple reasons, and every situation has a specific solution depending on the severity of the problem. The objective of this report is to highlight the various methods that can be employed to control soil erosion and the soil conservation practices that are needed for problem soils.

#### 1.0 Introduction:

Soil erosion is a naturally occurring process that affects all landforms. The causes and effects should be studied in order to control soil erosion. Erosion, whether it is by water, wind or tillage, involves three distinct actions – soil detachment, movement and deposition. Erosion takes place all the time naturally. The erosion potential of any surface is determined by four basic factors: soil characteristics, vegetative cover, topography, and climate. Detachment, transport, and deposition are basic processes that occur on upland areas. Detachment of soil particles is a function of the erosive forces of raindrop impact and flowing water. Hydrology, topography, soil erodibility, soil transportability, soil surface cover, incorporated residue, residual land use, subsurface effects, tillage, roughness, and tillage marks are the major factors that affect upland erosion processes. Soil erosion control techniques are theoretically simple and easy but practically tough, time-consuming, laborious and costly. Almost all soil erosion techniques are very much site-specific.

#### 1.1 Erosion and Sedimentation Problems:

Any changes made in the characteristics of the soil itself, are detrimental to infiltration, runoff patterns, and stream flow characteristics. For Example, if protective vegetation is reduced or eliminated, topsoil is removed and stockpiled, and cuts and fills are made, altering the topography and runoff characteristics of the site. This can increase the rate at which erosion takes place in a region. Uncontrolled runoff and the resulting sediment pollution.

#### 1.2 Studies needed before attempts:

The existing topographic features of the project site and the immediate surrounding area. The types, depth, slope, locations and limitations of the soils. The characteristics of the earth disturbance activity, including the past, present and proposed land uses and the proposed alteration to the project site. The volume and rate of runoff from the project site and its upstream watershed area. The location of all surface waters, which may receive runoff within or from the project site.

The preliminary works that are needed here are:

1. Carry out Supporting calculations and measurements.
2. Plan drawings.- Identification of the natural occurring geologic formations or soil conditions that may have the potential to cause pollution during earth disturbance activities.
3. Create Access roads.

- Road access, • Stormwater
- Overburden disposal, • Stockpile areas
- Rehabilitation of worked out areas
- Riparian protection areas
- Maintenance schedule for erosion and sediment control treatment structures.

**b) Trenching:**

Trenching (usually for installing utility services), often occurs at the end of bulk earthworks. Topsoil and sub-soils should be stockpiled separately adjacent to the trench so that at the completion of the operation these soils can be replaced in the appropriate order and vegetation established.

**c) Clean fills:**

Clean fills dispose of unwanted fill material which may contain other material.

**d) Roading:**

The linear nature of roading poses challenges for erosion and sediment control measures. They need to be planned to ensure controls are successful.

**2.3 Minimise Disturbance:**

The most effective form of erosion control is to minimise the area of disturbance, retaining as much existing vegetation as possible. This is especially important on steep slopes or in the vicinity of water bodies, where no single measure will adequately control erosion and where receiving environments may be highly sensitive. Match land development to land sensitivity. Watch out for and avoid areas that are wet (streams, wetlands, springs), have steep or fragile soils. Analyse all the "limits of disturbance".

**a) Stage Construction:**

Temporary stockpiles, access and utility service installation all need to be considered.

**b) Protect Steep Slopes:**

Steep slopes should be avoided where practicable.

**c) Protect Water bodies:**

All water bodies and proposed drainage patterns. Map all waterbodies and show limits of disturbance and protection measures.

**d) Stabilise Exposed Areas Rapidly:**

Conventional sowing to mulching. Mulching is an effective instant protection.

**e) Install Perimeter Controls:**

Perimeter controls above the site keep clean water runoff out of the worked area. Common controls are diversion drains, silt fences and earth bunds.

**f) Employ Detention Devices:**

Earthworks will still discharge sediment-laden runoff during storms.

disturbed areas and/or to reduce or eliminate erosion on critical sites during the period necessary to establish protective vegetation. There are both Temporary and Permanent Non-Degradable GECS.

## **2.4 Revegetation Techniques:**

### **a) Top Soiling:**

The placement of topsoil over a prepared subsoil prior to the establishment of vegetation. To provide a suitable soil medium for vegetative growth while providing some limited short term erosion control capability.

### **b) Temporary and Permanent Seeding:**

The planting and establishment of quick growing and/or perennial vegetation to provide temporary and/or permanent stabilisation on exposed areas. Temporary seeding is designed to stabilise the soil and to protect disturbed areas until permanent vegetation or other erosion control measures can be established.

### **c) Hydroseeding:**

Hydroseeding is a planting process that uses a slurry of seed and mulch. It is often used as an erosion control technique. The application of seed, fertiliser and a paper or wood pulp with water in the form of a slurry which is sprayed over the area to be revegetated. To establish vegetation quickly while providing a degree of instant protection from rain drop impact.

### **d) Mulching:**

**Mulches** are loose coverings or sheets of material placed on the surface of cultivated soil. Organic mulches also improve the condition of the soil. As these mulches slowly decompose, they provide organic matter which helps keep the soil loose. This improves root growth, increases the infiltration of water, and also improves the water-holding capacity of the soil. The application of a protective layer of straw or other suitable material to the soil surface. To protect the soil surface from the erosive forces of raindrop impact and overland flow. Mulching assists in soil moisture conservation, reduces runoff and erosion, controls weeds, prevents soil crusting and promotes the establishment of desirable vegetation.

### **e) Turfing:**

A surface layer of earth containing a dense growth of grass and its matted roots; sod. Turfing is an artificial substitute for such a grassy layer, as on a playing field. The establishment and permanent stabilisation of disturbed areas by laying a continuous cover of grass turf. To provide immediate vegetative cover to stabilise soil on disturbed areas.

## **3.0 Sediment control measures**

### **3.1 Sediment Retention Pond:**

A temporary pond formed by excavation into natural ground or by construction of an embankment and incorporating a device to dewater the pond at a rate that will allow suspended sediment to settle out. To treat sediment-laden runoff and reduce the volume of sediment leaving a site, thus protecting downstream environments from excessive sedimentation and water quality degradation.

### **3.2 Chemical Flocculation Systems:**

A treatment system designed to add a flocculating chemical to sediment retention ponds.

### 3.10 Gabions :

Gabion is an Italian word *gabbia* meaning “cage”. The gabions are riprap encased in galvanized, steel-wire mesh cages or cylinders. These are used to stabilize slopes, stream banks, or shorelines against erosion. They are usually placed on slopes at an angle—either battered or stepped back, rather than stacked vertically. The life expectancy of gabions rely entirely on their wire frames, and premium ones have a guaranteed structural consistency of fifty years.

### 3.11 Buffer Strip:

These are narrow areas of land maintained in permanent vegetation to trap sediment, slow down runoff, and even control air, soil, and water quality. The root systems of the vegetation anchor soil particles together which help stop the soil from being eroded by winds. They also reduce the risk of landslides and other slower forms of erosion by stabilizing stream banks.

### 3.12 Soil Binders:

Soil binders bind soil particles together in order to make the soil matrix more water and pressure resistant. Soil binder has two functions: erosion control and soil stabilization. The success of common soil binder applications varies significantly depending on the local conditions and use of stabilized soil. Soil binders have multiple purposes: soil stabilization, dust control and erosion control. Some soil binder products can combat all these issues at the same time. Cement is commercial soil binder although it has numerous drawbacks. Lime soil binder products are quicklime, hydrated lime and lime slurry. Fly ash is typically used to stabilize subbase or subgrade, and is not among soil binder products suitable for surfacing due to low resistance to abrasive action of traffic. Fly ash application has adverse effect on environment.

## 4.0 Works in Water bodies

Works within water bodies have a high potential for erosion and discharge of sediment. This is because work is undertaken in or near flowing water - the major cause of erosion. Flowing water causes ongoing scour and provides the transport mechanism to allow sediment to be dispersed downstream of works.

### a) Temporary Water body Diversions :

A short term water body diversion to allow works to occur within the main channel under dry conditions. To enable water body diversion without working in wet conditions and without allowing sediment discharges into a water body.

### b) Temporary Water body Crossings:

A bridge, culvert or ford installed across a waterbody for short-term use. To provide a means to cross water bodies without moving sediment into the water body, damaging the bed or channel, or causing flooding during the construction, maintenance or removal of the structure.

## 5.0 Soil Conservation Methods:

The preeminent methods of soil conservation are:

- (i) Expansion of vegetative cover and protective afforestation,
- (ii) Controlled grazing,
- (iii) Flood control,
- (iv) Prohibition of shifting cultivation,

# HIMACHAL PRADESH STATE ELECTRICITY BOARD Ltd.

(A State Govt. undertaking)



Registered office: Widpat Bhowan, HPSEBL, Shimla-171004 (H.P.)  
Number (CIN): U40109HP2009SGC031255  
GST No.: HPSEBL, 02AACCH4894EH2B  
Telephone Number: 01978-222336  
Address: Electrical System Division, HPSEBL Bilaspur  
Email: [st.wpn.es@bilaspur@gmail.com](mailto:st.wpn.es@bilaspur@gmail.com)

**Full Title of the Project:** Diversion of Forest Land for construction of 132kV line from 220/132/33kV Substation Kangoo to proposed 132/33kV, 2X25/31.5 MVA GIS Substation at AIIMS Bilaspur(Kothipura) Distt. Bilaspur.


**File No.:** FP/HP/TRANS/148191/2021  
**Date of Proposal:** 08-10-2021

## CHECK LIST SERIAL NUMBER-10


### JUSTIFICATION FOR LOCATING THE PROJECT IN THE FOREST LAND


The transmission line is required to feed power supply to newly opened national interest project AIIMS, Bilaspur. The Transmission line is crossing through private and forest area of Mandi and Bilaspur Districts. The power is to be supplied from the feeder of 220/132/33kV Sub-station Kangoo to 132/33kV, 2X2.5/31.5 MVA GIS Sub-station Kothipura, Bilaspur, therefore, the location of the transmission line is to be laid from the nearest and the area where the forest is barest minimum. After preliminary survey of three routes mentioned in digital map as well as in kml file, were examined. First route shown in red colour was surveyed/examined through village Dehar, Beri Rajdiya, Nauni, Jabli & Garnai etc. towards the hill facing Govindsagar. This route was objected by the public as well as Paragliding Association. The villagers, being Bhakra Dam oustees, were in apprehension that their very few landholdings will adversely be affected if the line will cross above their fields whereas the Paragliding Association had objected because the line will cross below their flying zone and definitely will cause danger to the lives of the paragliders while flying from flying zone. The second line shown in purple colour was proposed from the other side of the hill through Binola, Bagi, Sihra and Bandla etc. This route was not approved being the reason that the length of this line was above 23 Kms. Moreover this line was involving more inhabited area and coverage of forest area. Third line mentioned in blue colour was approved as this route was the lowest one i.e. of 18.3 Kms and the forest is barest minimum. This line from Kangoo to Kothipura was surveyed mostly along the village road which will prove very beneficial for carrying of tower members & other construction material. In addition to above inhabited area are also avoided in this route. Thus this route is most economical, having less distance and the area having barest minimum forests and thus, the proposed transmission line shown in blue colour is justified in the forest land.

Place:-Bilaspur  
Date

  
Divisional Forest Officer  
Forest Division, Bilaspur.

Countersigned

  
Assistant Engineer  
Forest Division, Sundernagar.  
Suket Forest Division  
Sundernagar (H.P.) - 175018

  
Assistant Engineer  
ES Sub-Division  
HPSEBL, Sundernagar  
HPSEBL, Sunder Nagar (H.P.)

Cost Benefit Analysis for forest land diversion

Table-A : Cases under which a cost-benefit analysis for forest diversion are required

No.	Nature of proposal	Applicable/ not applicable	Remarks
1	All categories of proposals involving forest land upto 20 hectares in plains and upto 5 hectares in hills.	Not Applicable	
2	Proposal for defence installation purposes and oil prospecting (prospecting only)	Not Applicable	
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction.	Not Applicable	
4	All other proposals involving forest land more than 20 hectares in plains and more than 5 hectares in hills including roads, transmission lines, minor, medium and major irrigation projects, hydro projects, mining activity, railway lines, location specific installations like micro-wave stations, auto repeater centres, TV towers etc.	Applicable	The proposal is for diversion of forest land to an extent of 35.1655 ha. for construction of 132kV Transmission line from 220/132/33 kV Substation, Kangoo to proposed 132/33 kV, 2X31.5 MVA GIS Substation at Kothipura(AIIMS), Bilaspur out of total land 51.01 ha.

*K. Kesava*  
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 Elect. System Sub-Divn.  
 HPSEBL, Sunder Nagar (H.P.)

Table- B : Estimation of cost of forest diversion

No.	Parameters	Remarks
1	Ecosystem services losses due to proposed forest diversion	Rs. 3,53,48,712 as per NPV
2	Loss of animal husbandry productivity, including loss of fodder	Rs.35,34,871 as 10% of NPV
3	Cost of human resettlement	Nil
4	Loss of public facilities and administrative (Roads, buildings, schools, dispensaries, electrical lines, railways etc.) on forest land, which would require forest land if these facilities were diverted due to the project	No such public interest facilities are involved in the proposed area of the project.
5	Possession value of forest land diverted	1,06,04,614 as 30% of NPV
6	Cost of suffering to oustees	Nil
7	Habitat Fragmentation Cost	1,76,74,356 as 50% of NPV
8	Compensatory Afforestation and soil & moisture conservation cost	Rs.1,85,33,747
Grand Total		Rs.8,56,96,300 say Rs.8.57 crores

*Aravind*  
Assistant Engineer  
Elect. System Sub-Divn.  
HPSEBL, Sunder Nagar (H.P.)

Table- C : Existing guidelines for estimating benefits of forest-diversion in CBA

No.	Parameters	Remarks
1	Increase in productivity attribute to the specific project	The project is of national importance and directly linked with public health facility. Thus, increase in productivity cannot be measured in monetary term.
2	Benefits to economy due to the specific project	Rs. 1529.27 lakh will be annual financial benefit due to sale of additional energy (net tariff for project area minus net cost of power purchase).
3	No. of population benefitted due to specific project	This project is specifically proposed for AIIMS, Kotlipura, Distt. Bilaspur, H.P. which will provide health facilities to the public of Himachal Pradesh as well as to the public of adjoining states thus it would not be possible to count the population to be benefitted in numbers.
4	Economic benefits due to of direct and indirect employment due to the project	Direct employment for 27 persons (17 permanent and 10 temporary) after functioning of this project whereas indirect employment will be for more than 1000 persons thus assuming total economic benefits can be estimate to the tune of Rs.16 Lakhs per annum.
Total financial benefit of the project		1529.27+16 = 1545.27 lakh say per annum 1545 lakh
Thus assuming project life= 99 years total benefit will be =152995 lakhs		
Total cost of forest diversion= 857 lakhs		
Benefit/Cost Ratio=178.5239		

*Signature*

Assistant Engineer  
Elect. System Sub-Divn.  
HPSEBL, Sunder Nagar (H.P.)

**LAYOUT OF PROPOSED 132KV D/C TRANSMISSION LINE FROM EXISTING 220/132/33KV SUB-STATION HPSEBL KANGOO TO PROPOSED 132/33KV GIS SUB-STATION HPSEBL CHANGER PLASSIYA KOTHIPURA AIIMS.**

Existing 220/132/33KV Sub-Station HPSEBL Kangoo at District Mandi H.P.

Proposed 132KV D/C Transmission line from Kangoo to chnager plassiyen kothipura AIIMS

Proposed 132/33KV GIS Sub-Station HPSEBLtd. Changer Plassiyen Kothipura AIIMS At District Bilaspur H.P.

Total Length of T/line	18.473Kms
Total Nos. of Towers	85 Nos.
Total No. of Gantary	1 No.
Towers B Type	14 Nos.
Tower C Type	17 Nos.
Tower D-Type	16 Nos.
Tower E type	19 Nos.
Tower ES type	19 Nos.


*Suryawati*  
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*APEJAE*


Approved  
*[Signature]*  
 Sr. Xrn S.E. (Design) ES

**Detail of Componentwise and purposewise breakup showing Khasra number wise forest land and non-forest land**

Land required for Erection of Towers			
Forest Land		Non-Forest Land	
Khasra Number	Area (in ha.)	Khasra Number	Area (in ha.)
1165/1	0.0202	797/1	0.0283
1/1	0.0263	795/1	0.0283
1/1	0.0263	791/1	0.0243
1/1	0.0263	1274/1	0.0243
3/1	0.0263	1436/1199/2	0.0243
2/1	0.0263	1145/1	0.0243
7/2	0.0263	1396/1096/1	0.0243
6/2	0.0263	1087/1(Gantry)	0.0185
7/4	0.0263	1086/1	0.0263
7/5	0.0263	808/423/275/290/1	0.0263
10/2	0.0263	369/290/1	0.0263
11/2	0.0190	623/109/1	0.0263
11/3	0.0190	566/1	0.0263
18/2	0.0190	598/1	0.0263
41/20	0.0190	585/1	0.0263
460/450/344/2	0.0190	306/2	0.0263
460/450/344/3	0.0190	314/2	0.0263
234/1	0.0190	195/2	0.0263
234/2	0.0226	197/2	0.0263
706/685/353/2	0.0263	245/2	0.0188
706/685/353/3	0.0263	950/2	0.0263
706/685/353/4	0.0226	963/2	0.0263
706/685/353/5	0.0226	136/2	0.0263
683/185/3	0.0226	157/2	0.0263
720/547/2	0.0226	184/2	0.0263
539/2	0.0226	112/102/97/92/69/2/1/4/2	0.0263
720/547/4	0.0226	112/102/97/92/69/2/1/4/3	0.0263
720/547/5	0.0226	112/102/97/92/69/2/1/4/1	0.0263
608/2	0.0226	112/102/97/92/69/2/1/4/1	0.0263
608/3	0.0226	<b>TOTAL</b>	<b>0.7414</b>
608/4	0.0226		
159/2	0.0226		
159/3	0.0226		
1033/185/2	0.0226		
1078/1038/334/2	0.0226		
1078/1038/334/3	0.0226		
968/244/2	0.0226		
1102/928/2	0.0188		
1102/928/3	0.0188		
1098/927/2	0.0188		
1098/927/3	0.0188		
1109/1062/937/2	0.0188		
1109/1062/937/3	0.0226		
1109/1062/937/5	0.0226		


  
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1109/1062/937/6	0.0226		
965/1	0.0226		
504/465/447/26/2	0.0226		
386/2	0.0226		
137/2	0.0226		
227/2	0.0226		
263/255/230/2	0.0226		
263/255/230/3	0.0226		
186/2	0.0226		
<b>TOTAL</b>	<b>1.1956</b>		
<b>ABSTRACT</b>			
Forest Land		<b>1.1956</b>	
Non-Forest Land		<b>0.7414</b>	
<b>Total land required for erection of towers</b>		<b>1.9370</b>	

  
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**Detail of Componentwise and purposewise breakup showing Khasra number wise forest land and non-forest land**


Land required for RoW			
Forest Land		Non-Forest Land	
Khasra Number	Area (in ha.)	Khasra Number	Area (in ha.)
1165/1	0.0140	1180/1	0.0540
798/1	0.0889	1174/1	0.1414
1276/1	0.0806	1175/1	0.0040
424/375/290/1	0.0226	1172/1	0.0040
424/375/290/2	0.0602	1171/1	0.0040
366/290/1	0.0075	1170/1	0.0654
571/112/1	0.2408	1169/1	0.1469
94/1	0.0452	1166/1	0.0040
565/1	0.0527	797/1	0.0938
606/1	0.0452	795/1	0.2688
674/583/1	0.0038	783/1	0.0184
672/662/583/1	0.3010	790	0.0170
1/1	1.5618	791/1	0.1697
3/1	1.2682	792/1	0.0125
2/1	1.0951	787/1	0.0707
7/1	0.3123	773/1	0.0127
7/2	0.0640	789/1	0.0457
6/1	0.7413	788	0.0041
6/2	0.2032	1277/1	0.1545
7/3	0.1505	1274/1	0.0666
7/4	0.4291	1271/1	0.0121
7/5	0.0640	1191/1	0.0476
9/1	0.0075	1196/1	0.0154
10/1	0.2860	1196/2	0.0069
10/2	0.3876	1193	0.0125
11/1	0.0527	1194/3	0.0453
11/2	0.6320	1195	0.0111
11/3	0.5944	1202/3	0.2049
18/1	0.6096	1404/1197/1	0.0091
18/2	0.1127	1406/1198/1	0.1031
39/19/1	1.1515	1436/1199/1	0.0071
41/20	0.8276	1436/1199/2	0.0137
407/268/1	0.0038	1182	0.0176
260/1	0.0038	1183/1	0.0338
460/450/344/1	0.3048	1181/1	0.0483
460/450/344/2	0.0111	1180/1	0.0764
460/450/344/3	0.2670	1172/1	0.0360
448/344/1	0.0714	1173/1	0.0473
234/1	0.8503	1174/1	0.0366
234/2	0.5381	1171/1	0.0926
706/685/353/1	0.2107	1170/1	0.0051
706/685/353/2	0.1957	1144/3	0.0487
706/685/353/3	0.3801	1142/1	0.0208
706/685/353/4	0.4628	1145/1	0.0219

  
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706/685/353/5	0.0602	1142/1	0.0081
683/185/1	0.0376	1141/1	0.1514
683/185/2	0.5268	1401/1121/1	0.1734
683/185/3	0.2333	1117/1	0.0077
184/1	0.0188	1116/1	0.0080
720/547/1	0.6171	1122/1	0.0061
720/547/2	0.8805	1115/1	0.0386
539/1	0.3199	1123/1	0.0061
540/1	0.0376	1123/2	0.0129
539/2	0.0752	1123/3	0.0200
540/2	0.0188	1114/1	0.0457
720/547/3	0.5080	1109/1	0.1225
720/547/4	0.7225	1107/1	0.0044
720/547/5	0.5456	1110	0.0040
720/547/6	0.1505	1482/1111/1	0.0362
608/1	0.1468	1102/1	0.0257
608/2	0.4591	1101/1	0.0360
608/3	0.4515	1396/1096/1	0.1424
608/4	0.8467	1093/1	0.0641
159/1	0.1204	1090/1	0.0156
159/2	0.3462	1089/1	0.0152
159/3	0.1242	1496/1088/1	0.0243
1033/185/1	0.1656	1087/1	0.0094
1033/185/2	0.0978	1086/1	0.0602
1034/185	0.0339	1084/1	0.0103
191/1	0.0075	808/423/275/290/1	0.1092
1078/1038/334/1	0.0640	1/1	1.0461
1078/1038/334/2	0.7262	9/1	0.0226
1078/1038/334/3	0.1053	11/1	0.1054
969/247/1	0.0376	52/1	0.0677
968/244/1	0.1355	363/290/1	0.1543
968/244/2	0.2032	369/290/1	0.1468
968/244/3	0.0339	370/290/1	0.1769
968/244/4	0.0527	567/112/1	0.0640
1078/1038/334/4	0.2935	623/109/1	0.0641
1102/928/1	0.4252	95/1	0.1693
1102/928/2	0.6360	108/1	0.0075
1102/928/3	0.1091	566/1	0.1581
1098/927/1	0.2559	568/1	0.0753
1098/927/2	0.3236	567/1	0.0941
1098/927/3	0.4440	597/1	0.1505
1109/1062/937/1	0.0263	598/1	0.0677
1109/1062/937/2	0.7601	599/1	0.0790
1109/1062/937/3	0.1354	587/1	0.0113
1109/1062/937/4	0.3500	588/1	0.0527
1109/1062/937/5	0.5870	589/1	0.0075
1109/1062/937/6	0.0263	590/1	0.0075
965/1	0.2634	591/1	0.0339
504/465/447/26/1	0.6661	585/1	0.0301
504/465/447/26/2	0.1693	586/1	0.0075

*kuwame*  
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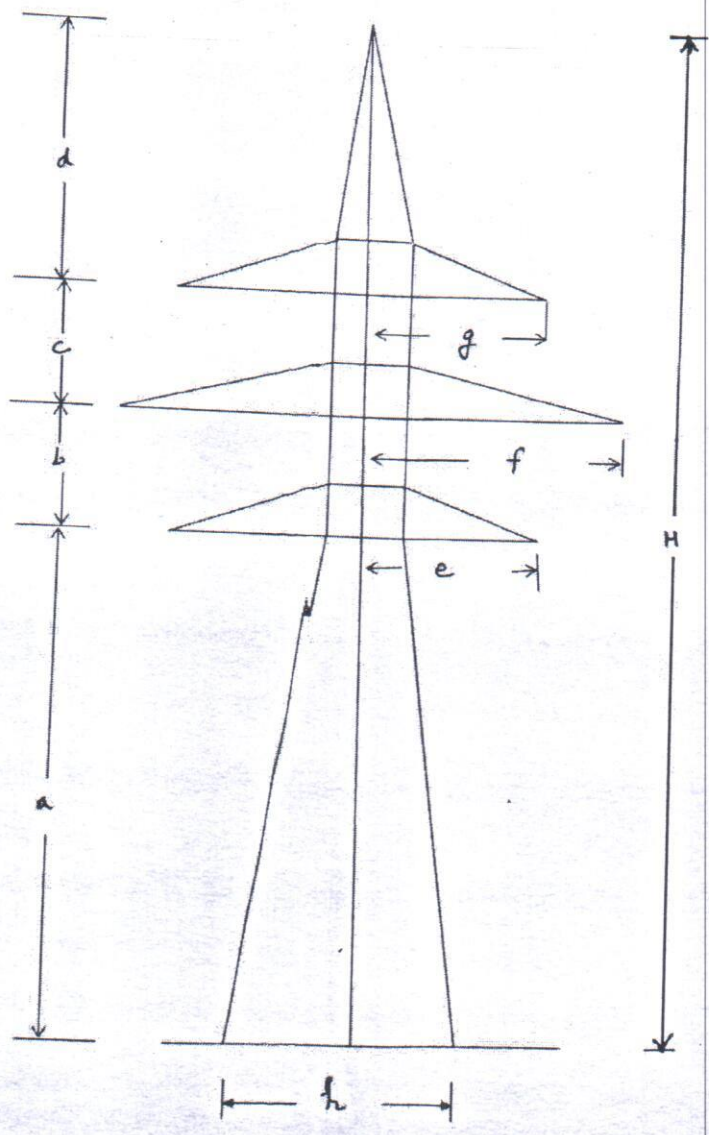
386/1	0.3500	584/1	0.0865
386/2	0.3311	578/1	0.0753
156/147/126/1	0.1392	658/583/1	0.0188
137/1	0.4854	40/20	0.0188
137/2	0.4553	418/337/1	0.1392
156/147/126/2	0.3424	300/1	0.0038
155/147/126/1	0.0188	537/301/1	0.0075
340/1	0.2484	537/301/2	0.0075
227/1	0.2032	302/1	0.1844
227/2	0.4101	304/1	0.0301
263/255/230/1	0.5042	306/1	0.0188
263/255/230/2	0.3311	306/2	0.0603
263/255/230/3	0.2220	308/1	0.0188
186/1	0.3086	309/1	0.0489
186/2	0.0489	312/1	0.0941
186/3	0.3763	313/1	0.0414
<b>TOTAL</b>	<b>33.9699</b>	314/1	0.0263
		314/2	0.0038
		524/320/1	0.0452
		317/1	0.0037
		339/1	0.0564
		445/344/1	0.0489
		444/344/1	0.1769
		473/233/1	0.1091
		473/233/2	0.0527
		474/233/1	0.1580
		235/1	0.0038
		236/1	0.0075
		231/1	0.0113
		449/344/1	0.1844
		193/1	0.0903
		199/1	0.1167
		194/1	0.0903
		195/1	0.0903
		195/2	0.0113
		206/1	0.0113
		207/1	0.0038
		722/183/1	0.0075
		723/183/1	0.1129
		726/183/1	0.0715
		727/183/1	0.1054
		728/183/1	0.0188
		548/1	0.1919
		172/1	0.2822
		173/1	0.2145
		186/1	0.0715
		184/1	0.0378
		1009/189/1	0.0113
		192/1	0.0226
		193/1	0.1129

  
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		197/1	0.3161
		197/2	0.0452
		206/1	0.1543
		207/1	0.2672
		208/1	0.1731
		209/1	0.0188
		248/1	0.0865
		245/1	0.0339
		245/2	0.0489
		244/1	0.1618
		243/1	0.0527
		1060/937/1	0.0263
		1061/937/1	0.0527
		949/1	0.1731
		938/1	0.0301
		6/1	0.0677
		950/2	0.0979
		950/1	0.0188
		6/2	0.2295
		963/1	0.0941
		963/2	0.1468
		962/1	0.2408
		149/147/126/1	0.0151
		136/1	0.0903
		136/2	0.0113
		339/1	0.0339
		338/1	0.0715
		337/1	0.0075
		228/1	0.0300
		157/1	0.0376
		157/2	0.1242
		159/1	0.2070
		160/1	0.1505
		183/1	0.1806
		185/1	0.0564
		184/1	0.1994
		184/2	0.1317
		112/102/97/92/69/2/1/4/2	0.2936
		112/102/97/92/69/2/1/4/3	0.5419
		112/102/97/92/69/2/1/4/1	0.6848
		<b>TOTAL</b>	<b>15.1101</b>
<b>ABSTRACT</b>			
	Forest Land		33.9699
	Non-Forest Land		15.1101
	<b>Total land required for RoW of the line</b>		<b>49.0800</b>

*S. Suresh*  
Assistant Engineer  
Elect. System Sub-Divn.  
HPSEBL, Sunder Nagar (H.P.)



132KV D/C TRANSMISSION TOWERS DIMENSION (MM)

Sl. No.	Dim.	D/C TOWER (DDT -255)				E/ESP.
		A	B	C	D	
1	a	15025	12919	12875	12918	12918
2	b	3900	4350	5275	5900	65.26
3	c	4270	4650	5275	5900	65.26
4	d	3970	5941	6170	7675	76.75
5	e	3620	3460	4150	5380	5230
6	f	4500	4340	5030	6260	6130
7	g	3400	3430	3550	4430	4430
8	h	4750	5750	6600	7600	7600
9	H	27165	28160	29505	32293	33645

*Kaviraj*  
 Assistant Engineer  
 Elect. System Sub-Divn.  
 HPSEBL, Sunder Nagar (H.P.)

Approved  
  
 Sr. Xen  
  
 S.E. (Design) E/S

14

110

105

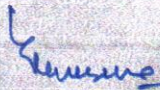
Shri. Anand Kumar, Director  
for High Road, Shimla  
New Delhi - 110 002  
Dated: 05 March, 2019

Principal Secretary,  
Department of Forests & Environment,  
Government of Himachal Pradesh,

Subject: Diversion of 40.5024 ha. of forest land in favour of ADM cum-  
Dy. Dir. ADMS C/o ADM Office Bilaspur for the construction of  
proposed AHMS at Kotlipara, within the jurisdiction of Bilaspur  
Forest Division, District Bilaspur, State of Himachal Pradesh  
Proposal No. PP-HP/DISP/35397/2018-regarding.

In pursuance of my letter no. MOEF (F.C.) Himachal Pradesh's letter  
no. 1149-3721/2018 (FCM) dated 11.03.2018 on the above subject, written  
to the Government of Himachal Pradesh for diversion of 40.5024 ha. of  
forest land in favour of ADM cum Dy. Dir. ADMS C/o ADM Office Bilaspur  
for the construction of proposed AHMS at Kotlipara, within the jurisdiction  
of Bilaspur Forest Division, District Bilaspur, State of Himachal Pradesh,  
in accordance with Section 2 of the Forest Conservation Act,  
1980, after careful consideration of the proposal by the Forest Advisory  
Committee (FAC) constituted under Section 3 of the said Act, in principle  
Stage-I clearance for diversion of the proposed forest land was  
granted by the Ministry vide its letter no. 1149-3721/2018 dated 20.01.2019  
in fulfilment of certain conditions. The State Government of  
Himachal Pradesh has furnished compliance report in respect of the  
said conditions on the stage-I approval, and has requested to the  
Central Government for grant final approval.

2. In this connection, I am directed to say that on the basis of the  
compliance report furnished by the Node Officer-Cum-ADCF (FCM)  
Himachal Pradesh's letter no. 1149-3721/2018 (FCM) dated 21.02.2019,  
Stage-I approval/Stage-II Clearance of the Central Government is hereby  
granted under Section 2 of the Forest Conservation Act, 1980 for diversion  
of 40.5024 ha. of forest land in favour of ADM cum Dy. Dir. ADMS C/o  
ADM Office Bilaspur for the construction of proposed AHMS at Kotlipara.

  
Assistant Engineer  
Elect. System Sub-Divn.  
HPSEBL, Sunder Nagar (H.P.)

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100  
Address, subject to the following conditions:

- ii. The State Government shall ensure that the User Agency will manage the unused area within the diverted forest area as green cover, planting with local species in consultation with the State Forest Department;
- iii. The State Government shall ensure that after dumping is completed, the proposed dumping sites will be reclaimed in a planned manner and shall be kept as green cover by the funds already deposited by the user agency;
- iv. The Compensatory Afforestation shall be done over double degraded forest land to the forest area proposed to be diverted within a period of three years with effect from the date of issue of Stage-II clearance and maintained thereafter in accordance with the approved CA Scheme in consultation with the State Forest Department at the funds already deposited by the User Agency.
- v. At the time of payment to the Net Present Value (NPV) at the then prevailing rate, the User Agency shall furnish an undertaking to pay the additional amount of NPV, if so determined, as per the final decision of the Hon'ble Supreme Court of India;
- vi. The User agency shall obtain the Environment Clearance as per the provisions of the Environment Protection Act, 1986 as required;
- vii. Layout plan of the proposal shall not be changed without the prior approval of the Central Government;
- viii. The forest land shall not be used for any purpose other than that specified in the proposal and under no circumstances be transferred to any other agency, department or person;
- ix. The State Government shall ensure that felling of trees, if unavoidable on the forest land being diverted will be reduced to the bare minimum and trees should be felled under strict supervision of the State Forest Department. Moreover it shall be ensured that wherever possible maximum marked trees for felling should be transplanted in the consultation of the State Forest Department;
- x. The State Government shall complete settlement of rights in terms of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, in the forest land to be diverted and submit the details of settlement

*[Signature]*

*[Signature]*

Assistant Engineer  
Elect. System Sub-Divn.  
HPSEBL, Sunder Nagar (H.F.)

...with 05.07.2013 in support thereof. The State Government shall ensure that boundary of the ... proposed to be diverted shall be demarcated on ground ... already deposited by the User Agency, by erecting four ... reinforced cement concrete pillars, each inscribed with ... number, forward and back bearing distance from pillar ... and GPS co-ordinates;

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Any other condition that the concerned Regional Office of this Ministry may stipulate, from time to time, in the interest of conservation, protection and development of forests & wildlife;

The user agency shall submit the annual self-compliance report in respect of the above conditions to the State Government, concerned Regional Office and this Ministry by the end of March of every year regularly; and

The user agency and the State Government shall ensure compliance to provisions of the all Acts, Rules, Regulations, Guidelines, relevant Hon'ble Court Order (s) and National Green Tribunal (NGT) Order(s), if any, pertaining to this project for the time being in force, as applicable to the project.

Yours faithfully,

*[Signature]*

(Sandeep Sharma)

Assistant Inspector General of Forests

Copy to:-

- 1. The PCCF, Govt. of Himachal Pradesh, Shimla.
- 2. The Addl. PCCF (Central), Regional Office (North Central Zone) Jammu.
- 3. The Nodal Officer (PCA), Forest Department, O/o PCCF, Himachal Pradesh, Shimla.
- 4. User Agency.
- 5. Monitoring Cell, FC Division, MoEF & CC, New Delhi, for uploading.
- 6. Guard File.

*[Signature]*

(Sandeep Sharma)

Assistant Inspector General of Forests

*[Signature]*

No. H.W. 2210-01-110-03  
Ministry of Health & Family Welfare  
Government of Himachal Pradesh

The Additional Chief Secretary (Health)  
Government of Himachal Pradesh

The Director, Health Services,  
Himachal Pradesh Shimla-9  
Dated: Shimla-2

11/11/2018

Subject: - Regarding providing Electricity and water to proposed AIIMS  
Kothipura in District Bilaspur.

Sir,

I am directed to refer to the subject cited above and to say that Additional District  
Magistrate-cum-Deputy Director (Admin) AIIMS, District Bilaspur has submitted  
estimates for providing funds to the proposed AIIMS Bilaspur. The proposals are as  
under:

- 1) The first estimate is regarding providing Electricity to proposed AIIMS at  
Bilaspur (Kothipura), District Bilaspur, Himachal Pradesh. The estimate is  
amounting to Rs. 73.78 Crore for providing Electricity to AIIMS for the  
construction of 132/33 KV, 2\*25/31.5 MVA Sub-station at Kothipura Bilaspur.
- 2) The second estimate amounting to Rs. 303.5 lakhs is for providing SOP on 11 KV  
to Arush Block, OPD-Block & Residential Block in AIIMS Campus at Kothipura  
by providing temporary arrangement with the installation of 33/11 KV 1\*31.5  
MVA /Sta. (Unmanned) along with 11 KV Equipments (Our Docu Type), 11 KV  
KV 630 KVA S/Sta. And 11 KV HT Lines under (E) Sub-Divisional No. 1  
Bilaspur.

9591  
11/11/2018

The aforesaid two estimates were examined at the govt. level and I am directed to  
convey Administrative Approval of the government for Rs. 73.78 Crore for providing  
Electricity to proposed AIIMS at Bilaspur (Kothipura), District Bilaspur, Himachal  
Pradesh. I am further directed to convey the Expenditure Sanction and approval to  
provide an additionality amounting to Rs. 2000.00 Lakh (Twenty Crore Rupees) out  
under M/H 2210-01-110-03 (SOON) Plan in the SOE "Other Charges" for the supply of  
Power (SoP) to AIIMS Kothipura in District Bilaspur, during CFY. It is also conveyed  
to meet out the additional demand of funds amounting to Rs. 303.50 Lakh for providing

Handwritten signatures and stamps in blue ink.

*Keenam*  
Assistant Engineer  
Elect. System Sub-Divn.  
HPSEBL, Sunder Nagar (H.P.)

SCF as temporary arrangement to Ayush Block, OPD Block & Residential Block  
AIIMS Campuses at Kochipura out of the aforesaid additionality provided above.

You are requested to transfer the amount of Rs. 1696.50 lakh to Chief Engineer  
(ES) HPSEBL, Hamirpur and to transfer the amount of Rs. 303.50 lakh to the  
Superintending Engineer, HPSEBL Bilaspur (HP) so that the work could be initiated  
at the earliest.

You are advised to get this amount regularized in the SDG during current  
financial year.

This issues with the prior concurrence of Finance Department obtained vide  
their U.O No. -Fin-G-C(2)-23/2019/54926934, dated 03-01-2020 & U.O No. PLG  
(PI) 1-30/92-Adv-384/19, dated 01-01-2020.

Yours faithfully,

Special Secretary (Health) to the  
Government of Himachal Pradesh

Endst. No. As above dated: 10 January, 2020

Copy forwarded for information and necessary action:-

- 1) Lt. Col S S Nagyal, Deputy Director (Admin), AIIMS Bilaspur.
- 2) The Deputy Commissioner, Bilaspur (H.P.)
- 3) Senior Deputy AG(A&E), AG office, H.P, Shimla-3.
- 4) Chief Engineer (ES) HPSEBL, Hamirpur
- 5) Superintending Engineer, HPSEBL Bilaspur (HP)
- 6) The Under Secretary (Finance) to the Government of Himachal Pradesh w.r.t  
his U.O No. -Fin-G-C(2)-23/2019/54926934, dated, 03-01-2020 & U.O No.  
PLG (PI) 1-30/92-Adv-384/19, dated, 01-01-2020.

Special Secretary (Health) to the  
Government of Himachal Pradesh

NO. HPSEBL/CE (ES)/DB-ANMS/2019-20 - 11158  
copy of above is forwarded to the Superintending Engineer ES Code  
HPSEBL Hamirpur for information and necessary action in the matter please.

K. Verma  
Assistant Engineer  
Elect. System Sub-Divn.  
HPSEBL, Sunder Nagar (H.P.)

[Signature]  
Superintending Engineer (Works)

**Muck Disposal/Management Plan for construction of proposed 132 KC Transmission Line from 220/132/33KV Sub Station Kangoo to proposed 132/33 KV 2X25/31.5MVA Sub Station, Kothipura(AIIMS) Bilaspur, HP**

**Introduction:**

The HPSEBL has proposed to construct 132KV Transmission Line from 220/132/33KV Sub Station Kangoo of Mandi District to proposed 132/33 KV 2X25/31.5MVA Sub Station, Kothipura (AIIMS), District Bilaspur, HP. The total length of this line will be 18.299 KMs for which 81 Towers of following types are proposed to be erected.

<u>type of Towers</u>	<u>No.of Towers</u>
B	14
C	18
D	18
E	15
E Spl.	16
Total	81
Gentries	2

**Quantity of muck likely to be generated**

The footing and base of each tower is to be constructed on the land measuring around 225 to 250 Sq.Mtrs. depending upon the type of towers/land and its slope. The transmission line is proposed to be laid on the land which is hilly and sloppy thus the base of the footing is to be protected by constructing retaining walls from three or four sides. The muck generated from the cutting of soil from one side is to be adjusted to the other side for leveling the base and thus there is no scope of muck to be left after construction of Tower base, thus:

1. No need to calculate the muck generation
2. No need to utilize the muck in the other project activities.
3. No balance muck requires disposal/management plan
4. No carriage of muck generation site to the dumping site.
5. No need to develop the dumping site.
6. No need to rehabilitate of dumping site like leveling, planting of grass, shrubs and trees species.
7. No need to locate dumping site.

Even than the undersigned undertake that muck management, if any, will be carried out as per the guidelines/ instructions of the Government.

*Deven*  
Assistant Engineer  
Elect. System Sub-Divn.  
HPSEBL, Sunder Nagar (H.P.)

*Deven*  
Assistant Engineer,  
Electrical System Sub Division,  
HPSEBL Sundernagar.  
HPSEBL, Sunder Nagar (H.P.)

-71-  
*as*

*CPS*  
Divisional Forest Officer  
Suket Forest Division  
Sundernagar (H.P.) - 175018



**HIMACHAL PRADESH STATE ELECTRICITY BOARD Ltd.**  
(A State Govt. undertaking)



Registered office	Vidyut Bhawan, HPSEBL, Shimla-171004 (H.P)
Number (CIN)	U40109HP20095GCO31255
GST No.	HPSEBL, 02AACCH4894EHZB
Telephone Number	01978-222336
Address	Electrical System Division , HPSEBL Bilaspur
Email	<a href="mailto:sr.xen.esdbilaspur@gmail.com">sr.xen.esdbilaspur@gmail.com</a>

**Full Title of the Project:** Diversion of Forest Land for construction of 132kV Transmission line from 220/132/33kV Substation Kangoo to proposed 132/33kV, 2X25/31.5 MVA GIS Substation at AIIMS Kothipura, Distt. Bilaspur.

**File No.:** FP/HP/TRANS/148191/2021  
**Date of Proposal:** 08.10.2021

**CHECK LIST SERIAL NUMBER-11**

**CERTIFICATE FOR MINIMUM USE OF FOREST LAND**

This is to certify that the forest area involved in the proposal is unavoidable and barest minimum forest area is proposed for diversion, i.e.35.1655 hectare only.

Place:-Bilaspur  
Date

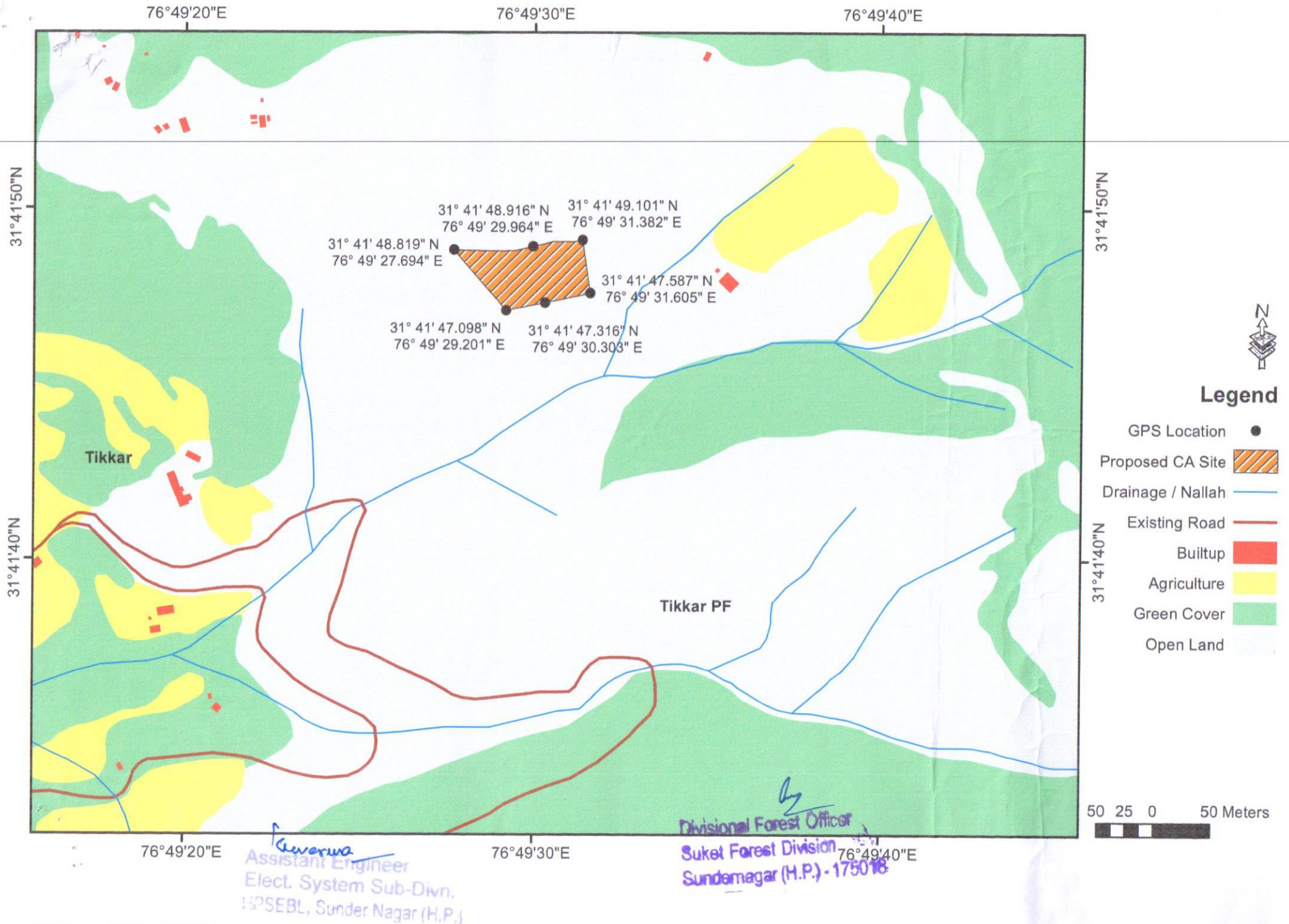
*[Signature]*  
Assistant Engineer  
ES Sub-Division,  
Elect. System Sub.Divn.  
HPSEBL, Sundernagar.  
HPSEBL, Sunder Nagar (H.P.)

Countersigned

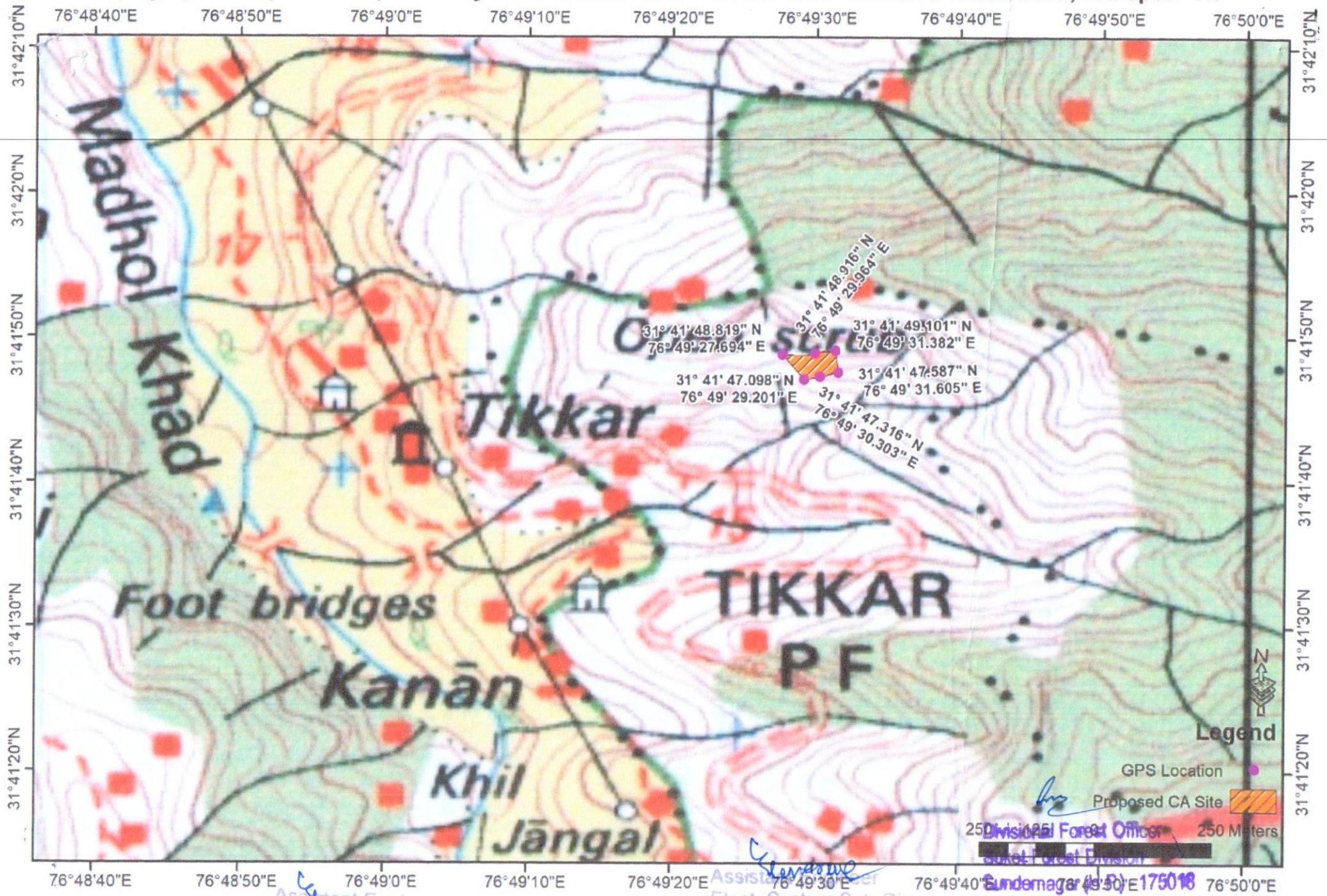
*[Signature]*  
Divisional Forest Officer  
Forest Division, Bilaspur.  
Office Seal

*[Signature]*  
Divisional Forest Officer  
Forest Division, Sundernagar.  
Office Seal  
Sundernagar (H.P.)- 175018

# Compensatory Afforestation Site - Area 0.4074 Hectares w.r.t. AIMS, Bilaspur - HP



Topographic Map of Compensatory Afforestation Site - Area 0.4074 Hectares w.r.t. AIIMS, Bilaspur - HP



Assist. Engineer  
Elect. System Sub-Divn.  
HPSEBL, Sunder Nagar (H.P.)

Assist. Engineer  
Elect. System Sub-Divn.  
HPSEBL, Sunder Nagar (H.P.)

Divisional Forest Officer  
Sunder Nagar (H.P.) 175018

# “ SCHEME FOR COMPENSATORY AFFORESTATION ”

Detail scheme for compensatory Afforestation to be carried out in lieu of forest area to be diverted 0.2037 ha of forest land for the construction of SoP to AIIMS Bilaspur within the jurisdiction of Suket Forest Division, in Mandi District.

## 1. Detail of degraded forest land/non forest land:-

District	Mandi	Village		
Tehsil	Sarkaghat	Range		Tikker
Name of Division	Suket			Sarkaghat
Block/Compartment/Survey No.	Khasra 53A/14			
Area to be afforested:	0.4074 ha.			

## 2. Description of Area

- |   |                     |
|---|---------------------|
| I. Whether the site selected for compensatory Afforestation is a land bank yes or not   | Yes                 |
| ii. If the CA site is other than land bank, reasons be :-   | No                  |
| iii. In case of non forest area identified for CA, then what is the distance of given CA site from the adjoining forest boundary :- | within Forest area  |
| iv. Soil type :-  | Sandy loam, Shallow |
| v. Topography   | Hilly               |
| a. Hilly/Undulating/Plain :-  | Steep               |
| b. Slope:- Steep/Medium/Gentle :-   | Yes                 |
| vi. Whether the area is bearing any root stock of vegetation:-  |                     |

## 3. Plantation Model

Copy of the approved Compensatory Afforestation Scheme/Model showing component wise physical and financial breakup to be enclosed.

Contd.....2.....

## Schedule of Plantation Programme

Detail of year wise breakup of requirement of funds is as under :-

Year	Area	Rate/ha.	Nursery cost	Total Amount
0 <sup>th</sup> Year (New Plantation)	0.4074 ha	83660	19976	42221
1 <sup>st</sup> Year	0.4074 ha	8350	7260	6360
2 <sup>nd</sup> Year	0.4074 ha	5630	4840	4265
3 <sup>rd</sup> Year	0.4074 ha	2915	2420	2173
4 <sup>th</sup> Year	0.4074 ha	2915	2420	2173
5 <sup>th</sup> Year	0.4074 ha	2915	2420	2173
6 <sup>th</sup> Year	0.4074 ha	2915	2420	2173
7 <sup>th</sup> Year	0.4074 ha	2915	2420	2173
8 <sup>th</sup> Year	0.4074 ha	2915	2420	2173
9 <sup>th</sup> Year	0.4074 ha	2915	2420	2173
10 <sup>th</sup> Year	0.4074 ha	2915	2420	2173
<b>Total C.A. Scheme</b>				<b>70234</b>
Contengency charges @ 5%				<b>3512</b>
<b>Total</b>				<b>73746</b>
Departmental charges @ 17.5%				<b>12291</b>
<b>G.Total</b>				<b>86037</b>
10% hike for the year of 2022-23 on CA including contengency Charges				<b>7375</b>
10% hike for the year of 2022-23 on Departmental Charges @ 17.5%				<b>1229</b>
<b>G.Total</b>				<b>94641</b>

## 2. Technical details

Technical details of Compensatory Afforestation Scheme are as follows :

- General Details : The area shall be closed to improve the vegetation cover in locality
- Spacement : 3X3 mtrs. Between pits & pits of size 45X45x45 cm.
- Species : Broad leave
- Plantation Method : Pit digging
- Soil and Moisture Conservation Works : Small scale engg.
- Protection : (Fencing, Watch man, People's Participation etc.)
- Proposed Monitoring , Mechanism : As per guidelines
- Any other information. : No.

Divisional Forest Officer  
Suket Forest Division  
Sundarnagar (H.P.) - 175018

## LAND SUITABILITY CERTIFICATE BY THE DFO

This is to certify that 0.4074 hac land bearing Survey No. / Compartment No./Kh. No 53A/14 Tikker Tehsil Sarkaghat District Mandi, H.P. falling under Thona beat, Tikker block, Sarkaghat range, of Suket Forest Division identified for Compensatory Afforestation is suitable for plantation from management point of view and are free from all sorts of encumbrances and encroachments.

Place: Sundernagar

Date 11 / 07 / 2022

(Divisional Forest Officer)

Suket Forest Division

Sundernagar Forest Officer

Office Seal

Sundernagar (H.P.) - 175000