PART-II

(To be filled by the concerned Deputy Conservator of Forests)
State serial no. of proposal: FP/MN/ROAD/15031/2015
(Construction of Imphal-Kangchup-Tamenglong Road)

7. Location of project/Scheme:

I. State/Union Territory : Manipur StateII. District : Tamenglong

III. Forest Division : Western Forest Division(WFD), Tamenglong

IV. Area of forest land proposed for Diversion (in hectare): 80.87 ha

Sl. No.	Forest Class	Area in ha
1.	Degraded Forest	9.31
2.	Open Forest	44.07
3.	Medium Forest	26.12
4.	Very Dense Forest	1.37
	Total	80.87

V. Legal Status of Forest:

Sl. No.	Status of Forests	Area in ha.
1.	Kangchup – Leimakhong PF	45.76
2.	Tairenpokpi – Tamenglong PF	4.06
3.	Unclass Forest (UF)	31.05
	Total	80.87

VI. Density of vegetation : 20-40%

VII. Species wise (scientific name) and diameter class-wise enumeration of trees (to be enclosed. In case of irrigation/ hydel projects enumeration at FRL-1, FRL-2 meter and FRL-4 meter also to be enclosed).

: Enclosed as annexure -I

VIII. Brief note on vulnerability of the forest area to erosion: <u>Vulnerability to soil erosion is negligible</u>

IX. Approximate distance of proposed site for diversion from boundary of forest: <u>The proposed Imphal-Kangchup-Tamenglong road passes through a portion of Kangchup RF, Kangchup-Laimakhong-Irang and Tairenpokpi Tamenglong PF.</u>

X. Whether forms part of a National Park, Wildlife sanctuary, biosphere reserve, tiger reserve, Elephant corridor etc. (if so, the details of the area and comments of the Chief Wildlife Warden to be annexed)

: It does not touch National Park, Wildlife sanctuary, Biosphere reserve, Tiger reserve, Elephant corridor etc.. The proposed Buning Wildlife Sanctuary 12km in aerial distance is the nearest from the proposed Imphal-Kangchup – Tml Road (GPS Point 69).

XI. Whether any rare /endangered /unique species of flora and fauna found in the area (If so details thereof) : Animals like Serou, porcupine, deer, wild boar, flying squirrel etc are found in the proposed area. Birds like khalij pheasant, Jungle fowl etc. are also found in the area.

Divisional Forest Officer
Western Forest Division, Tamenglong
Govt. of Manipur

- XII. Whether any protected archaeological /heritage site/ defence establishment or any other important monument is located in the area. If so, the detail thereof with NOC from competent authority, if required : <u>No</u>
- 7. Whether the requirement of forest land as proposed by the user agency in col.no.2 of Part –I is unavoidable and barest minimum for the project. If no, recommended area item-wise with details of alternatives examined : Yes, it is unavoidable and barest minimum.
- 8. Whether any work in violation of the Act has been carried out (Yes/No). If Yes detail of the same including period of work done, action taken on erring officials. Whether work in violation is still in progress : No
- 9. Detail of Compensatory Afforestation Scheme:-
- I. Details of non forest area/degraded forest area identified for compensatory afforestation, its distance from adjoining forest, number of patches, and size of each patch. (Detailed Enclosed as annexure II)
- II. Map showing non forest /degraded forest area identified for compensatory afforestation and adjoining forest boundaries. (Please refer survey of India Topo map for attached Annexure-III. (Enclosed as annexure-III)
- III. Detailed Compensatory Afforestation scheme including species to be planted implantation agency, time schedule, cost structure etc. (Enclosed as annexure-IV)
- IV. Total financial outlay for Compensatory Afforestation scheme: Rs. 118.873 lakhs
- V. Certificates from competent authority regarding suitability of area identified for Compensatory Afforestation and from management point of view. (To be signed by the concerned Deputy Conservator of forests.):- Enclosed as annexure -V.
- 11 Site inspection report of the DCF (to be enclosed) especially highlighting facts asked in col. 7 (xi, xii), 2 and 3 above. *[Enclosed as annexure -VI]*
- 12 Division/District profile:-
 - I. Geographical area of the district/Division:

Particulars	Area (Sq Km)
Geographical area of the Western Forest Division, Tamenglong	4391
Forest area/covered of the Western Forest Division, Tamenglong	3902

II. Total forest area diverted since 1980 with number of cases

Sl.	Project	Area (ha)
1	132 KV SC Transmission Line Stage-II cleared	243.00
2.	400 KV DC Transmission Line Stage-II cleared	135.82
3.	Loktak downstream Hydro-Electric Project Stage-II cleared	211.50
	Total forest areas diverted	590.32

III. Total Compensatory Afforestation stipulated in the district/division since 1980 on:-

a. Forest land including penal Compensatory Afforestation:-

Division/ District	Forest Area Diverted(ha)	Compensatory Afforestation(CA)(ha)	Penal CA (ha)	Total (ha)
Western Forest Division, Tamenglong	590.32	1180.64	Nil	1180.64
Tamengiong	TOTAL			1180.64

Divisional Forest Officer

Divisional Forest Officer

Western Forest Division, Tamenglong

Govt. of Manipur

b. Non-forest land

:-Nil

IV. Progress of Compensatory Afforestation as on (date) 18/03/2016 on

a. Forest land

:- 1180.64 ha

b. Non-forest land:-

:- Nil

13. Specific recommendations of the DCF for acceptance or otherwise of the proposal with reasons.

Construction of Imphal-Kangchup-Tamenglong road will give immense benefit to the people of the State particularly the tribal villages of Tamenglong Dist. in communication, easy transportation of products and goods thereby bringing down the cost of essential commodities, improving living condition and providing more employment opportunities to the poor and needy people of the area. The proposed road will connect many villages and also provide shortest distance between Imphal - Tamenglong Dist. with gentle gradient. Hence, the project proposal is hereby recommended for kind acceptance.

Date: 18//03/2016 Place: Tamenglong (Huri Golmei)
Divisional Forest Officer
Western Forest Division, Tamenglong
Divisional Forest Officer
Western Forest Division, Tamenglong
Govt. of Manipur

GIRTH CLASS-WISE ENUMERATION OF TREES

Trees to be damaged by the proposed diversion of 80.87 ha of forest land within the jurisdiction of WFD, Tamenglong for construction of Imphal-Kangchup-Tamenglong Road in favour of PWD, Manipur and enumeration of 0.72% over 80.87 ha (79.676 km X 10.15 m) at 19 stratified sample plots of size (10.15 m x 30 m) were carried out in open, moderate and dense forest to represent equal distribution of trees/bamboos of the proposed affected area. Certain sections of the proposed road involve widening of the existing state road and hence, few trees are liable to be damaged.

The Geo-coordinates of the 19 sample plots are:

Sample Plot No.	Latitude (dd)	Latitude (mm)	Latitude (ss)	Longitude (dd)	Longitude (mm)	Longitude (ss)	Name of Village
1	24	54	38.9	93	41	51.7	Ijeirong
2	24	54	36.9	93	41	51.4	Ijeirong .
3	24	54	55.86	93	40	35.22	Oktan
4	24	56	04	93	39	25.2	Bakwa
5	24	52	1.56	93	39	14.04	Nagaching
6	24	54	15.0	93	35	00.8	Lukhambi
7	24	54	11.5	93	35	02.6	Lukhambi
8	24	54	26.0	93	34	51.1	Wairangba
9	24	54	32.2	93	· 34	44.2	Wairangba
10	24	54	43.5	93	33	49.3	Wairangba
11	24	54	50.1	93	33	24.4	Wairangba
12	24	56	21.3	93	35	03.7	Wairangba
13	24	55	00.8	93	33	12.8	Wairangba
14	24	55	14.0	93	32	46.7	Khebuching
15	24	56	21.3	93	32	08.4	Bhalok
16	24	58	48.66	93	31	41.4	Bhalok
17	24	59	3.96	93	32	23.22	Bhalok
18	24	56 "	21.06	93	32	8.46	Bhalok
19	24	58	17.64	93	33	21.42	Bhalok

Girth class-wise abstract for different tree Species found in 19(nineteen) sample plots of size (10.15 m X 30m x 19 = 5785.5 sqm) are:

SI. No.	Name of species	<30	31-60	61-90	91-120	121-150	>150	Total
1	Gmelina arborea	-	-	2,	1	7	-	10
2	Artocarpus chaplasa	-	3	1	1	1	-	6
3	Mesua ferra	-	1	3	-	-	-	4
4	Schima wallichii	4	6	5	1		-	16
5	Duabanga sonneratiodes	2	10	8	1		-	21
7	Litsea polyanthia	-	4	4	1	-	-	9
8	Misc. Spp.	2	21	7	2	3	-	35
9	Tectona grandis	-	3	1	3	-	-	7
	Sub-Total	8	48	31	10	11	-	108
1	Bambusa gigantia/nutan	52	-	-	-	-	-	52
2	Melocana spp.	190		-	-	-	-	190
	Sub-Total	242	_	-	-	_	-	242



Taking into account the above Girth Class-wise of different tree species and from 19(nineteen) stratified sample plots; the estimated total standing trees and bamboos along the proposed alignment ($80.87 \times 10000 = 808700 \text{ sqm}$) which fall within the jurisdiction of Western Forest Division, Tamenglong is shown below:-

(a) For trees:

Sl. No.	Name of species	<30	31-60	61-90	91-120	121-150	>150	Total
1	No of trees in each Girth class.	8	48	31	10	11		108.00
2	Density of trees in each Girth Class per ha.	13.83	82.97	55.58	17.28	19.01	0	186.67
3	Estimated standing trees over 79.676 Km for a width of 10.15 m(80.87 ha) m	1118.43	6709.78	4494.75	1397.43	1537.34	0	15096.00
	Say	1118	6710	4495	1397	1537		15096

(b) For bamboos:

Sl. No.	Name of species	<30	31-60	61-90	91-120	121-150	>150	Total
1	No of bamboos.	242						242.000
2	Density of bamboos in each Girth Class per Ha.	418.287	0	0	0	0	0	418.287
3	Estimated standing bamboos over 79.676 Km for a width of 10.15 m(80.87 ha) m	33826.870	0	0	0	0	0	33826.870
	Say	33827						33827

(Huri Golmei)

Divisional Forest Officer
Western Forest Division, Tamenglong
Divisional Forest Officer
Western Forest Division, Tamenglong
Govt. of Manipur

DETAILS OF DEGRADED FOREST AREA IDENTIFIED FOR COMPENSATORY AFFORESTATION (CA):

PATCH: 1

Forest Name

:- Langkhong community forest

Forest Division

:- Western Forest Division, Tamenglong

Sub-Division

:- Tamenglong :- Tamenglong

District State

:- Manipur

Size of patch	No. of patches		Co-ordinates of pa	atch for C.A.	Status of land for C.A.	Distance from adjoining forest boundaries
		1.	24 ⁰ 52'22.254"N	93 ⁰ 34'52.013"E		
		2.	24 ⁰ 52'20.681"N	93°34'44.529"E		
		3.	24 ⁰ 52'22.290"N	93 ⁰ 34'38.444"E		
		4.	24 ⁰ 52'26.174"N	93°34'37.045"E		
201	1	5.	24 ⁰ 52'27.799"N	93°34'32.470"E	Degraded/	
30 ha	1	6.	24 ⁰ 52'30.562"N	93°34'31.880"E	Open forest	
		7.	24 ⁰ 52'34.077"N	93 ⁰ 34'41.806"E		
		8.	24 ⁰ 52'39.235"N	93 ⁰ 34'51.935"E		
		9.	24°52'35.132"N	93 ⁰ 34' 5.425"E		
		10.	24°52'27.924"N	93°34'58.562"E		

PATCH: 2

Forest Name

:- Bhalok community forest

Forest Division

:- Western Forest Division, Tamenglong

Sub-Division

:- Tamenglong

District & State

:- Tamenglong, Manipur

Size of patch	No. of patches		Co-ordinates of pa	Status of land for C.A.	Distance from adjoining forest boundaries	
		1.	24 ⁰ 58'44.274"N	93°33° 2.04"E		
		2.	24 ⁰ 58'35.296"N	93°33'23.435"E		
		3.	24 ⁰ 58'21.458"N	93°33'29.676"E		*
501	2	4.	24 ⁰ 58'18.701"N	93°33'34.866"E	Degraded/	
50 ha	2	5.	24 ⁰ 58'15.195"N	93°33'27.730"E	Open forest	
		6.	24 ⁰ 58'14.132"N	93°33'16.791"E		
		7.	24 ⁰ 58'19.686"N	93°33° 4.903"E		
		8.	24 ⁰ 58'31.100"N	93°33° 2.421"E		



PATCH: 3

Forest Name

:- Sonpram community forest

Forest Division

:- Western Forest Division, Tamenglong

Sub-Division

:- Tamenglong

District & State

:- Tamenglong, Manipur

Size of patch	No. of patches		Co-ordinates of pa		Status of land for C.A.	Distance from adjoining forest boundaries
		1.	25° 1'54.168"N	93°35'18.946"E	Degraded/	
		2.	25° 1'50.167"N	93°35'19.499"E		
		3.	25° 1'44.778"N	93 ⁰ 35' 9.247"E		
21.74		4.	25° 1'36.211"N	93°35'10.619"E		
31.74	3	5.	25° 1'32.622"N	93°35° 3.477"E	Open forest	
ha		6.	25° 1'35.327"N	93°35'54.200"E	Open forest	
		7.	25° 1'47.314"N	93°35'57.474"E		
		8.	25° 1'58.243"N	93°35° 2.380"E		
		9.	25 ⁰ 1'57.058"N	93°35'10.054"E		

PATCH: 4

Forest Name

:- Lamlaba community forest

Forest Division

:- Western Forest Division, Tamenglong

Sub-Division

:- Tamei

District

:- Tamenglong

State

:- Manipur

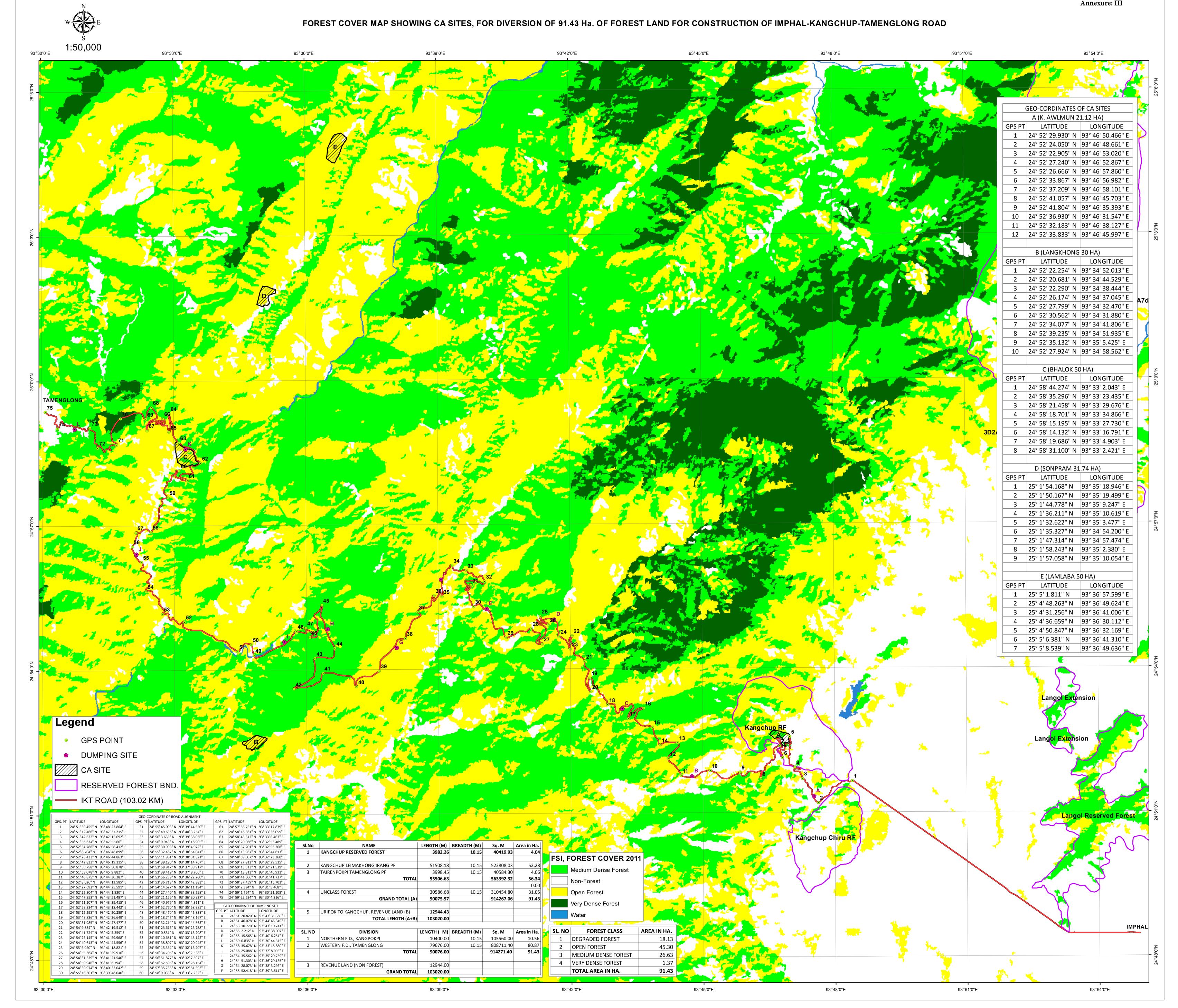
Size of patch	No. of patches	,	Co-ordinates of pa	atch for C.A.	Status of land for C.A.	Distance from adjoining forest boundaries
50 ha	4	1. 2. 3. 4.	25 ⁰ 5' 1.811''N 25 ⁰ 4' 48.263''N 25 ⁰ 4' 31.256''N 25 ⁰ 4' 36.659''N	93°36' 57.599"E 93°36' 49.624"E 93°36' 41.006"E 93°36' 30.112"E	Degraded/	
		5. 6. 7.	25 ⁰ 4' 50.847''N 25 ⁰ 5' 6.381''N 25 ⁰ 5' 8.539''N	93°36' 32.169"E 93°36' 41.310"E 93°36' 49.636"E	Open forest	

The given 4(four) patches of degraded forest land are identified to take up Compensatory Afforestation (CA) over an area of 161.74 ha which is double the actual area being diverted (80.87 ha) for construction of Imphal-Kangchup-Tamenglong Road under Western Forest Division, Tamenglong , Manipur. The aforesaid patches have been selected as there are no other suitable non-forest lands available in the District. The proposed CA Sites in Polygon are marked as B, C, D and E for Langkhong, Bhalok, Sonpram and Lamlaba respectively on the attached Maps.

(Huri Golmei)

Divisional Forest Officer
Western Forest Division Tamenglong
Divisional Forest Officer
Western Forest Division, Tamenglong

Govt. of Manipur



DETAILED COMPENSATORY AFFORESTATION (CA) SCHEME INCLUDING SPECIES TO BE PLANTED BY THE IMPLEMENTING AGENCY, TIME SCHEDULE, COST STRUCTURE ETC ARE AS FOLLOWS:

Division :- Western Forest Division, Tamenglong.

Species to be planted :- Gmelina arborea, T.myriocarpa, Pinus kesiana, Toona

celiata, M. Champaca, A. Chaplasa, Duabanga

sonneratiodes, Juglans regia, etc.

Spacing of planting pits :- 2.5m x 2m

No. of Plants per ha :- 2,000 nos.

Area of plantation :- 161.74 ha (for WFD, Tamenglong)

Implementing agency :- Western Forest Division, Tamenglong

Detailed estimate along with time schedule is given below

For raising of Compensatory Afforestation and subsequent maintenance for 3 years @ of Rs.73,496.35 per ha over 161.74 ha = Rs. 73,496.35 X 161.74 ha = Rs. 118.873 lakhs

Total financial outlay for Compensatory Afforestation for WFD, Tamenglong: -Rs. 118.873 lakhs

(Huri Golmei)

Divisional Forest Officer
Western Forest Division, Tamenglong
Divisional Forest Officer
Western Forest Division, Tamenglong

Govt. of Manipur

<u>CERTIFICATE REGARDING SUITABILITY OF AREA IDENTIFIED FOR COMPENSATORY</u> <u>AFFORESTATION (CA) AND FROM MANAGEMENT POINT OF VIEW</u>

This is to certify that an area double of 80.87 (2 x 80.87= 161.74 ha) ha of degraded forest lands identified are suitable for raising of Compensatory Afforestation (CA) in connection with the construction of Imphal-Kangchup-Tamenglong Road under Western Forest Division, Tamenglong of Manipur State. No suitable alternative non-forest land other than the proposed sites *(enclosed in Annex.II)* could be found available for the purpose.

(Huri Golmei)

Divisional Forest Officer
Western Forest Division, Tamenglong
Divisional Forest Officer
Western Forest Division, Tamenglong
Govt. of Manipur

<u>SITE INSPECTION REPORT OF DIVISIONAL FOREST OFFICER</u> WESTERN FOREST DIVISION, TAMENGLONG

Site Inspection Report of the Divisional Forest Officer, Western Forest Division, Tamenglong in connection with the proposal for diversion of forest land measuring 80.87 ha in favour of PWD, Govt. of Manipur for construction of Imphal-Kangchup-Tamenglong Road under Western Forest Division, Tamenglong.

- 1. The site inspection in respect of forest land for diversion was conducted by the undersigned and RFO Tamenglong along with the representative of user agency on 1st March 2016.
- 2. Vulnerability of forest land proposed is negligible in term of soil erosion as the terrain is gentle slope, existing road and tracks and compact in nature.
- 3. No rare/endangered/unique species of flora and fauna are found in the area except Serou, porcupine, deer, wild boar, flying squirrel etc. Birds like khalij pheasant, Jungle fowl, green doves etc are also found in the area.
- 4. The proposed road section does not form part of any National Park, wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor etc and the nearest point is more than **12Km** from proposed Buning Wildlife Sanctuary.
- 5. No protected archaeological/heritage site/defence establishment or any other important monument is located in the area.
- 6. The required Forest land as proposed by user agency is unavoidable and barest minimum for the project.
- 7. No violation of Forest Conservation Act 1980 is observed from the User Agency.
- 8. Proposed land co-ordinates are:

IKT Road GPS starting Point within the jurisdiction of WFD, Tamenglong	IKT Road GPS ending Point within the jurisdiction of WFD, Tamenglong					
24 ⁰ 51' 50.758"N	24 ⁰ 59' 22.534"N					
93 ⁰ 45' 50.878"E	93 ⁰ 30' 04.316"N					

- 9. Economic Class of proposed land:- Eco-Class I
- 10. The Proposed road passes though part of proposed Kangchup-Leimakhong-Irang PF, Tairenpokpi-Tamenglong PF.

(Huri Golmei)

Divisional Forest Officer
Western Forest Division, Tamenglong
Divisional Forest Officer
Western Forest Division, Tamenglong
Govt. of Manipur

Physical and Financial Targets for Compensatory Afforestation (CA) for Diversion of Forest land for construction of Imphal-Kangchup-Tamenglong Road under Western Forest Division, Tamenglong, Manipur

Location: Langkhong, Bhalok, Sonpram and Lamlaba, under WFD.

Range: Tamenglong & Noney

Division: Western Forest Division, Tamenglong

Physical Target Area = (80.87 x 2) = 161.74 ha. No. of plants = 323480 nos. (2000 x 161.74) Financial (Rs in Lakhs) = 118.873 lakhs

Spacing = 2.5 m x 2 m (2000 Plants / ha.)

d.)	IL	Fin.	15	31.539	25.490	12.713	8.572	8.572	86.886	1.577	8.688	4.346	8.688	8.688	31.987	118.873
S	TOTAL	Phy.	14,	182.86	182.86	182.86	182.86	182.86								
The state of the s	-21	Fin.	13					8.572	8.572		0.857	0.429	0.857	0.857	3.000	11.572
0,	2020-21	Phy.	12		,			161.74								
rgets	-20	Fin.	11				8.572		8.572		0.857	0.429	0.857	0.857	3.000	11.572
ancial Ta	2019-20	Phy.	10				161.74									
Physical & Financial Targets	-19	Fin.	6			12.713			12.713		1.271	0.636	1.271	1.271	4.449	17.162
Physi	2018-19	Phy.	8		7	161.74								٥		
	.18	Fin.	7		25.490				25.490		2.549	1.275	2.549	2.549	8.922	34.412
	2017-18	Phy.	9		161.74											
	-17	Fin.	5	31.539					31.539	1.577	3.154	1.577	3.154	3.154	12.616	44.155
	2016-17	Phy.	4	161.74	7											
Unit	cost per	ha in	3	19,500	15,760	7,860	5,300	5,300		2%	10%	2%	10%	10%	40%	
	Item of Work		2	a) Advance Work	b) Creation	c) 1 st Yr. Maint.	d) 2 nd Yr. Maint.	e) 3 rd Yr Maint.	Sub-Total	Micro planning	Soil & Moisture	Awareness Raising	Fencing	Overheads	Sub-Total	Grand Total
7	Z		_			-				7	3	3	4	2		



(Huri Golmei)

Western Forest Division: Tamenglong Divisional Forest Officer Divisional Forest Officer

Western Forest Division, Tamenglong

Govt. of Manipur

NET PRESENT VALUE

Order dated 28/3/2008 in WP (C) No. 202/1995	
Forest Type as per Supreme Court's order date 28/3/2008 in WP (C) No. 202/1995	6.
Vegetation Covered	5.
Crown density of the area proposed for diversion	4.
Minimum area of forestland required for diversion in a) Western Forest Division, Tamenglong	·ω
User Agency	2.
Name of the project	i,
	Name of the project User Agency Minimum area of forestland required for diversion i a) Western Forest Division, Tamenglong Crown density of the area proposed for diversion Vegetation Covered Forest Type as per Supreme Court's order date 28/3/2008 in WP (C) No. 202/1995 NET PRESENT VALUE as per Supreme Court's Order dated 28/3/2008 in WP (C) No. 202/1995

Western Forest Division, Tamenglong
Divisional Forest Officer
Western Forest Division, Tamenglong
Western Forest Division, Tamenglong
Govt. of Manipur (Huri Golmei)
Divisional Forest Officer

Certificate of Non-availability of Land for Compensatory Afforestation

We, Shri M.Luikham, IAS, Deputy Commissioner, Tamenglong District, Manipur and Shri Huri Golmei, MFS, Deputy Conservator of Forest, Divisional Forest Officer, Western Forest Division, Manipur do hereby certify that:

- (i) Relevant records pertaining to non-forest land, revenue land, zudpi jungle, chote jhar ka jungle, bade jhar ka jungle, jungle-jhari land, civil-soyam lands and all other such categories of forest lands (except the forest land under management and administrative control of the Forest Department) on which the provision of Forest (Conservation) Act, 1980 are applicable, available in Tamenglong District, Manipur have been examined; and
- (ii) We have also conducted such further enquiry as is required to satisfy ourselves for issues of this certificate.

On the basis of examination of all relevant records and such further enquiry, as was required for issue of this certificate, we do hereby certify that non-forest land, revenue lands, *zudpi jungle, chhote jhar ka jungle, bade jhar ka jungle, jungle-jhari land, civil-soyam* lands and all other such categories of forest lands (except the forest land under management and administrative control of the Forest Department) on which the provision of Forest(Conservation) Act, 1980 are applicable, which as per the extant guidelines of the Central Government may be utilised for creation of compensatory afforestation in lieu of forest land diverted for non-forest purposed, is not available in the entire Tamenglong District.

Issued under our hand and seal on the day, month and year mentioned below.

(HURI GOLMED

Divisional Forest Officer

Western Forest Division: Tamenglong

Divisional Forest Officer
Western Forest Division, Tamenglong
Govt. of Manipur

(M.LUIKHAM)

Deputy Commisssioner
Tamenglong District. Manipur

Deputy Commissioner Tamenglong Dist., Manipur.