

Reference EDS:

- A. Nodal Officer, FCA, Govt. of Sikkim letter no. 2021/FCA/F&ED/2022/445 dated 05.08.2022
- B. Parivesh EDS by Nodal Officer, FCA, Govt. of Sikkim dated 04.08.2022

Sl. No.	Essential Detail Sought/ Observation	Compliance
01	The area proposed for diversion in the proposal is mentioned as 116.1 ha between in the site inspection report it is mentioned 116.01 ha in the enumeration list of tree/poles it is mentioned as 118.86 ha and in the cost benefit analysis it is mentioned as 115.656 ha. Clarification may be provided as to the actual area proposed for diversion duly mentioning the purposed wise breakup of area for diversion of forest land	<p>The total forest land area proposed for diversion is 116.1 ha (including forest land area of 87.16 ha required for road and forest land area of 28.94 ha required for muck disposal).</p> <p>The corrected & updated Joint Site Inspection Report jointly signed by User Agency (BRO), DPR consultant (Eptisa), RO concerned, DFO concerned and SDM (Chungthang) is attached.</p> <p>Updated Cost Benefit Analysis (CBA) as per 116.1 ha forest land area is attached.</p> <p>The legal status of 116.1 ha forest land proposed diversion is Reserved Forest and no village is involved, but few yak/cow sheds and grazing land is involved. The same is confirmed in the Land Details certificate (attached) provided by the Range Forest Officer.</p>
02	It has been mentioned in Part-I that there is no involvement of Private/Non Forest land although the road is an existing road proposed for widening. A certificate to be enclosed from the concerned SDMs office	No Revenue land is involved in the subject stretch as certified by SDM, Chungthang, North Sikkim District, Govt. of Sikkim memo no. 1049/SDO/GoS/C dated 16.02.2022 and the same is also referred in the Land Details certificate provided by the the Range Forest Officer, Lachung (Territorial) Forest Range, Govt. of Sikkim. Both the said documents are attached .

03	Please upload acknowledgment letter signed by Nodal Officer FCA or DFO FCA	<p>Six(6) sets of hard copies are submitted to the Nodal Officer, FCA, Govt. of Sikkim vide BRO letter no. 211/Bharatmala/Pkg-VI/64/E2 dated 30.05.2022 (signed by the Receiving section of Nodal Officer Office, FCA) (attached for ready reference)</p> <p>No automated email of Acknowledgment Slip is received from monitoring-fc@nic.in as confirmed by BRO</p>
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Sl No.	Particulars	Report
1	2	3
1	Name of Project	Diversion of Forest Land for up-gradation of two lane with pave shoulders. NH configuration of corridors under Bharatmala Project. NH connectivity to backward areas/religious/Tourist places of the country and ADB funded project in the state of Sikkim.
2	Area of Project with GPS Coordinates	<div>1. 87.16 Hact. of forest land required for the main project, i.e up-gradation of the existing road. The GPS Coordinates are as follows:</div> <div><div>N 27°49'14.09"</div><div>N 27°82'30.28"</div><div>N 27°86'67.41"</div><div>N 27°93'17.39"</div><div>N 27°55'55.69"</div><div>E 88°41'48.01"</div><div>E 88°69'52.71"</div><div>E 88°69'21.80"</div><div>E 88°73'46.25"</div><div>E 88°44'05.04"</div></div> <div>1. 31.105 Hact of additional forest land required for Muck Disposal/Dumping purpose, but could find only 28.94 Hact. because of the undulating terrain, steep slopes and nearby streams. All nine sites/locations requires sausage wall and advised the same to the user agency. The GPS Coordinates of the designated Muck disposal area are as follows:</div> <div><div>N 27°48'37.71"</div><div>N 27°50'37.17"</div><div>N 27°51'01.09"</div><div>N 27°51'27.36"</div><div>N 27°51'48.54"</div><div>N 27°52'55.37"</div><div>N 27°53'50.28"</div><div>E 88°42'13.29"</div><div>E 88°41'38.19"</div><div>E 88°41'38.71"</div><div>E 88°41'39.42"</div><div>E 88°41'39.78"</div><div>E 88°41'01.81"</div><div>E 88°42'23.92"</div><div>N 27°54'21.93"</div><div>N 27°52'59.63"</div><div>E 88°42'30.04"</div><div>E 88°41'01.39"</div></div>
3	Date of inspection	11th/12 th /21 st of December 2021 for the main project and 15 th /21 st /28 th of March 2022 for Muck disposal/dumping area verification.
4	Participants: Name: Designation: Department:	<div><div>Ongay Lepcha (Range Incharge) Phigu Lachungpa (H.F.G) Manoj Kmr. Thapa (F.G)</div><div>Subash Ghimiray Sub Divisional Magistrate Chungthang Sub Division</div><div>Ajab Singh (A.E Civil) Pritesh (J.E Civil) (86 RCC GREF)</div><div>Debashis Guha Roy (Sr. Engner) Hriekesh Saha (J.E Civil) (Bharatmala- Eptisa)</div></div> <div><div>Brijendra Singh JE (Engr) 86 RCC GREF</div><div>Subhrajit Banerjee JE (civ) Eptisa Bharatmala</div><div>Sanjay Sen Sr. surveyor Eptisa (Bharatmala)</div><div>Sujay Kmr Das JE (civ) 86 RCC GREF</div></div>

(Vaidya Swastava)
~~Major~~ Lt Col
 OC Contract
 86 RCC (GREF)

5	Details of the Land: (in Hact) a. Private b. Forest Land: (Road Reserve) c. Total land involved:	Around 116.1 Hact. of land involved falling under Reserve Forest(including the diversion for road & muck disposal area)
6	Legal status of the Land: a. Gaucharan b. Khasmal: c. Reserved Forest: d. Any others:	Reserved Forest
7	Item wise break up of Forest land required as per Project:	
8	Whether any National Park, Wildlife Sanctuary involved or not.	N.A
9	Type of Vegetation: a. Top Canopy b. Middle Canopy c. Ground Flora	Top Canopy Middle canopy
10	No. of felling of trees/poles and other Forest produce involved or not, if yes, indicate details of the plot, etc.	Since the project requires 116.1 Hact of Forest Land (upgradation of road & muck disposal area) and those land ranges from 12, 000 ft to 15, 500 ft from MSL, huge numbers of high altitude trees/ poles, as well as shrubs/ herbs including highly valued medicinal herbs will come under this project. A separate sheet of enumeration lists of trees, poles, shrubs and herbs are enclosed herewith.
11	Brief Observation of Inspection Team	<p>The joint survey /joint inspection was conducted between Land Revenue and Disaster Management Deptt- Chungthang Sub-Division, BRO, 86 RCC-GREF and the User Agency (EPTISA India Pvt.ltd) on 11th/12th and 21st of December 2021, but could not be completed due to continuous falling of the snow. We could continue our joint survey only in the month of march 2022. The proposed land falls under Yumthang, Shiv Mandir, Yumesamdong and will go upto Zero Point, which are all Reserve Forest under Lachung Territorial Range, Forest & Environment Deptt. Gentiana ornata, Swertia multicaulis, Rhododendron anthopogan and Swertia chiraita are some of the rare medicinal plants available in this area. Silver fir, Hemlock, Kapasey and Saur are some of the tree species found in this region.</p> <p>It is also to mention that some of these land are also being used by the locals since many years for herds, grazing of herds/cattles and migration of herds in seasons.</p> <p>Swekin, Yumesamdong and Zero Point are some of the area which are being used by the locals for the above mentioned purposed.</p> <p>Further, this area is considered as one of the tourist hot spot in the state. Every year, thousands of tourist flows in, just to witness and experience the extraordinary natural landscape and beauty of this region.</p> <p>As per the Detail Project Report prepared by the User Agency, the land required for the above project is around 87.16 Hact (for upgradation of</p>

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		<p>road) and 31.105 Hact. (for muck disposal purpose) which falls under beat 3, 5, 6 and compartment 12, 15, 16, 17, 18, 19 and 20 under Lachung Territorial Range. The area is near to international boundary (China), so on security point view; it is a basic necessity to have a good condition of road thought the year to transport arms and weapons during the time of emergency. But, Some of the rich/ rare flora and fauna of this region may come under threat or may eventually vanish in near future due to this project.</p> <p>The joint inspection team recommended the diversion of land keeping in view the national security as well as check in illegal forest activity. However, this diversion of land should not disturb the natural habitat and ecosystem of the area. The User agency should ensure minimum threat and damage to bio-diversity and eco-system wherever possible. Muck disposal should be strictly monitored; otherwise it will make the catchment area vulnerable to hazards such as landslides and erosion. During the course of construction of this road, dumping of garbage by the officials and workers residing here have to be done in designated area only, if not, then the pollution level will increase and will disturb the fragile eco-system of the region. The user agency should ensure that the religious places, pilgrims area and other sacred places should be protected in all conditions.</p>
12	Sketch Map of proposed project area showing detail alignment	Enclosed Topo Sheet.

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OC Contract
86 RCC (GREF)

Divisional Forest Officer
Mangan Division
Territorial Division Mangan
Forest & Environment Department

Sanjaya
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Sub-Divisional Magistrate
JA & DMD / Chungthang
North Sikkim

SANJAY
SUJAY KUMAR DAS
JE(4V)
86 RCC (GREF)

RANGE OFFICER IN-CHARGE
LACHUNG (T) RANGE
FOREST AND ENV. DEPTT.
GOVT. OF SIKKIM

COST BENEFIT ANALYSIS

NAME OF PROJECT : DIVERSION OF 116.1 HA FOREST LAND FOR WIDENING/UPGRADATION OF EXISTING ROAD (NH 310A) TO NHDL SPECIFICATION WITH PAVED SHOULDER FROM YUMTHANG OF DESIGN KM 52+808 TO YUME SAMDANG BORDER OF DESIGN KM 84+160 IN THE STATE OF SIKKIM BY BRO

NATURE OF PROPOSAL : Diversion of Forest Land under FCA,1980 for road widening.

PURPOSE - This Cost Benefit Analysis is being undertaken for Proposed Diversion of Forest Land being affected due to "Widening of existing road (NH 310A) to NHDL specification with paved shoulder from Yumthang of design km 52+808 to Yume Samdang Border of design km 84+160 in the State of Sikkim by BRO".

TABLE - A: ESTIMATION OF COST OF FOREST DIVERSION

SL NO.	PARAMETER	DESCRIPTION
1	Ecosystem services losses due to proposed forest diversion	Rs. 42.61 cr
2	Loss of animal husbandry productivity, including loss of fodder	Rs. 4.26 cr
3	Cost of human resettlement	No Resettlement in the Forest Land that are diverted for the Project
4	Loss of public facilities and administrative infrastructure (Roads, building, schools, dispensaries, electric lines, railways, etc.) on forest land, which would require forest land if these facilities were diverted due to the project	No loss of public facilities and administrative infrastructures will be diverted on Forest land due to Project.
5	Possession value of forest land diverted	Rs. 12.78 cr
6	Cost of suffering to ousters	Nil
7	Habitat Fragmentation Cost	Rs. 21.31 cr
8	Compensatory afforestation and soil & moisture conservation cost	Rs.3.17 cr

 eptisa
Som Prakash Mitra
Environmental Expert

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Officer Commanding
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TABLE - B: ESTIMATION OF BENEFITS OF FOREST DIVERSION

SL NO.	PARAMETER	DESCRIPTION
1	Increase in productivity attribute to the specific project	In lieu of total trees to be affected in forest land in Project, it is proposed to undertake compensatory afforestation as per Forest (Conservation) act. The road will improve accessibility to the remote areas in the districts of Chungthang. This will help in both economic & social development.
2	Benefit to economy due to the specific project	The main objective of this project is to alleviate the current unsafe condition of the highway and provide better quality and safe road to the users by widening of the highway to 2 lane with paved shoulders and improvement of its curves and gradients which will minimize the chances of accidents. The project will yield significant economic benefits to the State. Widening and up gradation of the highway will lead to much better connectivity, which will play a significant role in improving the socioeconomic condition of the people of the State in many folds. It will aid in boosting the tourism in the region and also generate direct and indirect employment opportunities for the people in addition to other indirect benefits by way of saving vehicle operating costs, less fuel consumption and saving time and cost of passenger travel etc. The road shall also attract tourists and will add to the economy of the state from tourism perspective. Economics Benefits- savings in travel time and Vehicle operating cost for 30 years (Due to improvement in design speed and reduction in length of road): Rs. 2836.0797 cr.
3	No. of population benefited due to specific project	Population along NH-310A Chungthang District (3,970) shall be benefited from the project. In addition, the project will boost the economic growth of the Region and State as well by boosting through tourism. The road shall also provide better connectivity to the commuters travelling to neighbouring states
4	Economic benefits due to direct and indirect employment due to the project	1. Economic Benefits due to tourism enhancement, access to schools hospitals, farmer produces etc.: Rs. 292.8592cr Indirect Employment of Labours: Rs. 43.200 cr
5	Economic benefits due to Compensatory Afforestation	Rs. 10.0214 cr

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Environmental Expert

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86 RCC (GREF)



GOVERNMENT OF SIKKIM
OFFICE OF THE SUB DIVISIONAL MAGISTRATE
CHUNGTHANG, NORTH SIKKIM

Memo No: 1049/SDO/GoS/C

Date: 16/02/2022

To,

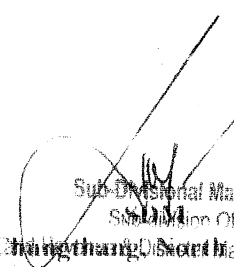
The Officer Commanding
86 RCC GREE
Rangma Range,
North Sikkim.

Sub: No Revenue Land Package VI under Bharatmala Project Yumthang to Yumusamdong.

Sir,

With reference to Joint Inspection conducted on 11th-12th December 2021 it may be informed that NO Revenue Land is found situated within proposed road alignment from Yumthang to Yumesamdong under Bharatmala Project Package VI as entire area falls under Reserved Forest.




Sub-Divisional Magistrate
Sub-Division Office
Chungthang, North Sikkim
Chungthang, North Sikkim Deptt.
Chungthang, North Sikkim



**OFFICE OF THE RANGE OFFICER LACHUNG (T) RANGE
DEPARTMENT OF FOREST AND ENVIRONMENT
GOVERNMENT OF SIKKIM**

LAND DETAILS

NAME OF PROJECT: **WIDENING OF EXISTING ROAD (NH 310A) TO
NHDL SPECIFICATION WITH PAVED SHOULDER FROM YUMTHANG OF
DESIGN KM 52+808 TO YUME SAMDONG OF DESIGN KM 84+160 IN
THE STATE OF SIKKIM UNDER PROJECT SWASTIK OF BRO.**


Details of Land: **Around 116.1 Hact of land involved falling
under Reserved Forest (Including the diversion for road & muck
disposal area)**

Legal status of the Land: **Reserved Forest**

Village involved: **No village involved, but few yak/cow sheds
and grazing land involved.**

Revenue land involved: **No Revenue land involved as per SDM,
Chunghang, North Sikkim District, Govt. of Sikkim memo no.
1049/SDO/GoS/C dated 16.02. 2022**


**RANGE OFFICER IN-CHARGE
LACHUNG (T) RANGE
FOREST AND ENV. DEPTT.
GOVT. OF SIKKIM**


**Lt Col
Officer Commanding
86 RCC (GREF)**

211/Bharatmala/Pkg-VII/6A /E2

May 2022

The CCF-cum-Nodal Officer,
Forest Conservation Act (FCA),
Office of the Addl. Chief Secretary-cum-PCCF,
Forest and Environment Department,
Forest Secretariat, Deorali, Gangtok-737 102,
Government of Sikkim
Email: fca.sikkim@gmail.com

CONSULTANCY SERVICE FOR CARRYING OUT FEASIBILITY STUDY, PREPERATION OF DETAILED PROJECT REPORT AND PROVIDING PRECONSTRUCTION SERVICES ON RESPECT OF UPGRADATION OF TWO LANE WITH PAVED SHOULDERS NH CONFIGURAION OF CORRIDORS UNDER BHARATMALA PROJECT, NH CONNECTIVITY TO BACKWARD AREAS /RELIGIOUS/TOURISTS PLACES OF THE COUNTRY AND ADB FUNDED PROJECTS IN THE STATE OF SIKKIM : MANGAN (310A) KODIYONG CHUNGTHANG – LACHUNG – YUMTHANG – YEME-SAMDONG BORDER & CHUNGTHANG – LACHEN MONASTERY LOG BRIDGE – MUGUTHANG & NAKU TO NAKULA IN STATE OF SIKKIM

Sub: Diversion of 116.1 ha forest land for widening/upgradation of existing road (NH 310A) to NHDL specification with paved shoulder from Yumthang of Design km 52+808 to Yume Samdang Border (Zero point) of design 84.160 kmby BRO in Sikkim - **Submission of hard copies in six (6) sets for FC proposal of PKG-6- reg.**

Sir,

1. Refer:- (a) FC proposal no.: FP/SK/ROAD/154584/2022, dated 18 Apr 2022 for Diversion of forest land (116.1 ha).

(b) Observations raised by Nodal Officer received through E-mail on 23 May 2022.
2. Please refer to the above subject project and references, it is submitted the hard copies in six (6) sets in compliance to the observations raised by Nodal Officer submitted herewith for processing of the Forest Clearance proposal FP/SK/ROAD/154584/2022. The hard copy comprised with the following details:
 - a. Covering letter addressing to the Nodal Officer, FCA, Govt. of Sikkim.
 - b. Uploaded Form-A, Part-I.
 - c. Authorization Certificate of BRO.
 - d. Justification Report.
 - e. Cost Benefit Analysis
 - f. Undertaking certificate for Compensatory Afforestation.
 - g. Undertaking certificate for Net Present Value.
 - h. Undertaking certificate for additional Net Present Value.
 - i. Signed Site Inspection Report by Forest Department of Sikkim.
 - j. Signed Survey of India & Geo-referenced Map by Forest Department of Sikkim.
 - k. Signed Aerial Distance Map from the nearest Protected Area.
 - l. Signed Tree Enumeration Report by Forest Department of Sikkim.
 - m. Signed Muck Disposal Certificate by Forest Department of Sikkim.
 - n. No Revenue Land presence certificate by SDM, Chungthang, North Sikkim District, Govt. of Sikkim.
 - o. Form-A filled data sheet.
 - p. Kml file for area 87.16 ha (PROW) and 28.94 ha (Muck Disposal Site) (attached in soft copy only).



Contd....P/2

[Handwritten signature]
6/6/22

3. It is requested to process the case at the earliest to enable us to commence the work in this alignment please.

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Encls:- 06 Sets of Forest proposal Documents.

Copy to:-

O/o The District Collector cum
Magistrate
Mangan
North Sikkim
Pin 737116

- For info please

O/o The Divisional Forest Officer
Mangan
North Sikkim
Pin 737116

- For info please

HQ CE (P) Swastik
C/o 99 APO
Pin 931717

- For info please

HQ 758 BRTF
C/o 99 APO
Pin 930758

- For info please

M/S EPTISA India Private Limited
Unit 1203, 12th Floor, Tower-1,
PS Srijan Corporate Park, Plot No. 2,
Block EP & GP, Sector V, Salt Lake City
Kolkata – 700 091, (W.B)
E – Mail: Vsehgai@eptisa.com
saibalkumarbanerjee@eptisa.com

- For info w.r.t your letter No. EPTISA/BRO /DPR/Sikkim Pr.- 297 dated 24 May 2022 and requested to liaise with state Govt for the further necessary action please.

(Vaibhav Srivastava)
Major
Officer Commanding