



**GOVERNMENT OF SIKKIM**  
**FORESTS AND ENVIRONMENT DEPARTMENT**  
**FOREST SECRETARIAT, DEORALI, GANGTOK-737 102**  
*Email:fca.sikkim@gmail.com*

Ref. No. 1816/FCA/F&ED/.....<sup>1069</sup>

Dated 21/4/2023

To,

✓ The Inspector General of Forest (C) cum Nodal Officer,  
 Integrated Regional Office,  
 Ministry of Env. Forests & Climate Change,  
 Government of India,  
 IB-198, Sector-III, Salt Lake City,  
 Kolkata -700106.

**Sub: Proposal for diversion of 0.4908 Ha of Forest Land for construction of Rural Connectivity Road from Sakyong PWD to Tinek Chisopani Dokey Gaon in East District of Sikkim by Rural Dev. Department, Govt. of Sikkim – Addl. information req.**

**Proposal No. : FP/SK/ROAD/38739/2019**

Madam,

With reference to letter FP/SK/ROAD/38739/2019/173 dated 24.04.2022, please find enclosed herewith the additional information for the aforesaid proposal furnished by the DFO (T) concerned.

Sl. No.	Query	Reply
1.	As per uploaded Kml file, the forest land proposed for diversion is calculated 2.44 ha instead of 0.4908 ha. Correct kml file may be uploaded.	Correct kml/file of the forest land has been uploaded on Parivesh Portal, as reported by the User Agency.
2.	Sol map showing proposed diversion area with GPS coordinates is not uploaded. It may be uploaded.	Sol map showing proposed diversion area with GPS coordinates has been uploaded on Parivesh Portal as reported by user agency.
3.	As per Decision Support System, proposed CA land is Open to Moderately Dense forest cover. Proposed CA area may be rechecked.	Compensatory Afforestation area has been rechecked and found within the area in open forest. Toposheet Map submitted/uploaded on Parivesh Portal.
4.	The proposed diversion area is near to river. Therefore, quantity of Muck to be generated with GPS coordinates of muck disposal area/ Muck disposal plan and distance from river area is to be submitted.	As reported by the user agency quantity of muck to be generated along with GPS coordinates of muck disposal area/Muck disposal plan is submitted and uploaded on Parivesh Portal.
5.	The RoW and length of road is to be mentioned clearly.	The RoW of road is 12 meter as per PMGSY norms and total Road length is 7.51 Km, as reported by user agency.
6.	Two different certificates of cost of cutting felling logging and transportation of the project affected trees of Rs.1,39,600/- & Rs.95,280/-has been submitted. Correct one may be uploaded.	Actual cost of cutting felling of the project affected trees is Rs. 95,280/-. The same has been uploaded on Parivesh Portal.



7.	In cost cutting form, mentioned 97 nos. of pole and 50 nos, bamboo which is not clearly mentioned in site inspection report submitted by the DFO. Updated Site Inspection Report needs to be uploaded.	Correct Site Inspection has been enclosed in Annexure-III which clearly shows 97 nos of poles and 50 nos of bamboos. The same is also uploaded on Parivesh portal.
8.	Part-V of the proposal for diversion of 1.044 ha forest land for construction of Rural Connectivity Road from SPWD to Rateypani (Passi) is uploaded in this proposal, which needs to be corrected.	Correct Part-V of the proposal is uploaded on Parivesh Portal.

Since, required additional information has been furnished in table above, it is requested to kindly consider the aforesaid proposal for according Stage-I (In-Principle) approval under Section 2 of Forest (Conservation) Act, 1980, please.

Yours sincerely,



(Blen Tsh. Targain, SFS),

Joint Director (FCA)

Blen Tsh. Targain, SFS

Joint Director (FCA)

Forest & Environment Department  
Govt. of Sikkim

Copy for information to:-

1. PCE-cum-Secretary,  
Rural Development Department,  
Govt. of Sikkim
2. CF (T)
3. DFO (T) Namchi
4. File for record.





GOVERNMENT OF SIKKIM  
OFFICE OF THE ASSISTANT ENGINEER  
RURAL DEVELOPMENT DEPARTMENT  
GANGTOK SUB-DIVISION

MEMO NO. 458 AE/GSD

DATED 17 / 09 /2022

To,  
The CF-Cum Nodal Officer (FCA)  
Forest & Environment Department  
Government of Sikkim  
Gangtok.

**Sub: Proposal for diversion of 0.4908 ha of forest land in favour of Rural Mangement and Development Department for construction of rural connectivity road from Sakyong PWD Road to Tinek Chisopani Dokey Gaon in East District of Sikkim -Additional Information -reg.**

Sir,  
Please find enclosed herewith the additional information and the requisite documents which are as follows.

Sl.No	Additional Information Sought	Reply to Additional Information
1	As per uploaded KML file, the forest land proposed for diversion is calculated 2.44ha instead of 0.4908 ha .correct KML file may be uploaded.	Corrected KML/ file of the forest land proposed for diversion is been enclosed.
2	Sol map showing proposal diversion area with GPS coordinated is not uploaded .it may be uploaded.	Sol map showing proposal diversion area with GPS coordinated is been enclosed.
3	The proposed diversion is near to river. therefore quantity of muck to be generated with GPS coordinates of muck disposal area/muck disposal plan and distance from river area is to be submitted.	Quantity of muck to be generated with GPS coordinates of muck disposal area/ muck disposal plan is been enclosed.

4	<b>The Row and Length of Road is to be mentioned clearly.</b>	<b>The Row of Road is 12 meter as per PMGSY norms and Total Road length is 7.51km.</b>
---	---	--

Submitted for favour of perusal and necessary action please.

Yours faithfully,



**ASSISTANT ENGINEER  
RURAL DEVELOPMENT DEPTT.  
GANGTOK SUB-DIVISION.**

**Assistant Engineer  
Rural Development Department  
Gangtok Sub-Division  
Govt. of Sikkim**

(166)

**Name of Project : Diversion of 0.4908 ha of Forest Land for Construction of RCR from Sakyong PWD Road to Tinek Chisopani Dokey Gaon ,in East Sikkim .**

**Proposal No. FP/SK/ROAD/38739/2019/173**

## **MUCK DISPOSAL PLAN**

### **INTRODUCTION**

A large quantity of muck is expected to be generated as a result of construction of roads. Muck generated from excavation of any project component is required to be disposed in a planned manner so that it takes a least possible space and is not hazardous to the environment. The excavation shall result in large quantity of excavated material i.e. muck which have to be evacuated, disposed off and roller compacted or laid on mild slopes pari-passu with the excavation work to such designated areas where the muck piles do not substantially interfere with either environment / ecology or the river flow regime and do not cause turbidity impairing the quality of water. The disposal of muck has to be scientifically planned keeping in view the economic aspects necessitating nearness to the muck generating component of work, which understandably reduce the travel time of dumpers, less interference to surface flow and ground water aquifer and disposition of habitation.

Based on the quantities of surface excavation it has been formulated to manage the disposal of muck and restore such areas from further degradation of the environment. During construction of the project, huge quantities of excavation will be carried out from the surface components and shall be dumped in designated areas to provide stable slopes. The quantity of muck to be disposed has been worked out on the basis of 70% Hill cutting and 30% of Hill cutting shall be used for road surfacing.

### **QUANTITY OF MUCK GENERATED AND ITS CONSUMPTIVE USE**

During construction of the various components of the project, muck is generated from hill cutting. Total quantity of muck / debris, generated due to the project, shall be 25,241.27 cum. Out of the total muck generated, 7,572.51 cum shall be utilized on project work leaving cum to be dumped at designated sites. The muck shall be properly dumped on slopes and treated to mix and match with the surrounding environment with least change in landscape.

#### **Abstract of Muck Generated and its Disposal**

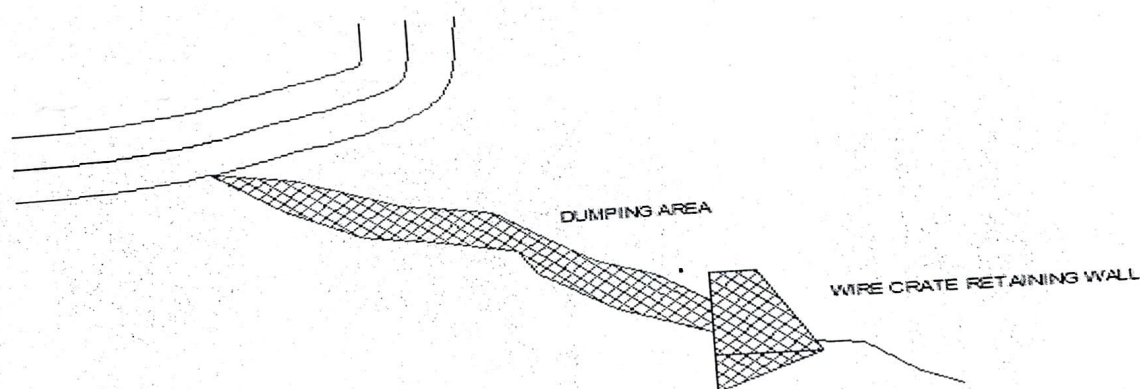
Sl No.	Project Component	Total Quantity of Muck (cum)	Estimated Quantity of Muck proposed to be utilized (cum)	Estimated Quantity of Muck proposed to be dumped (cum)	Name of Dumping Site
1.	Hill Cutting	25,241.27	7,572.51	17,668.76	Tinek



## SELECTION OF MUCK DISPOSAL SITE

The selection of muck disposal sites was carried out considering the quantity of the muck, landscape, cost effectiveness, nearness to source of generation, absence of ground and surface water, relief and scope for afforestation works. All the dumping locations shall be well supported at base and at higher elevation by suitable retaining structures. Subsequently all the spoil tips (muck disposal sites) will be developed by taking up plantation to generate a thick forest canopy over them.

Sl No.	Name of Dumping Site	Location of Dumping Site	Area of Dumping Site (in Ha)	Volume of muck to be dumped (in cum)
1	Tinek	Lat. 27.1430° Long. 88.3002°	0.3960	17668.76



CROSECTION OF DUMPING AREA AND RETAINING WALL

## IMPLEMENTATION OF ENGINEERING MEASURES AT MUCK DISPOSAL SITE


It has been observed that after disposal of muck, it creates problem as it is susceptible to scattering unless the muck disposal yards are supported with engineering measures such as gabions. All the dumping sites need proper handling to avoid spilling of muck into the river water while dumping and in the post dumping stages. All the muck disposal sites have to be developed from the ground level either by providing stone masonry, hand packed wall or by gabion structure. The costing of engineering measures has been worked out based on gabion structure/hand packed. In all the muck dump sites, the


muck brought in dumpers shall be dumped and manually spread behind the crates and roller compacted in such a manner that rock mass is properly stacked behind the crates with minimum of voids.


**ENGINEERING MEASURES**

Retaining Wall-For stacking of dumped material retaining wall is proposed has been built before dumping of material to the sites. In addition, leveling also been done after dumping the material on every cycle and simultaneously improving the drainage of the disposal site. The methodology consists in developing the formation width is half cutting and half filling, so that the materials obtained from cutting are utilized in filling. The excavation on hill side has been done to get a stable slope for the materials encountered.

Enclosed: land Parcha ,( dumping site).  
No Objection Certificate of land owner.

  
Junior Engineer  
Gangtok sub-Division  
Rural Development Department

  
Assistant Engineer  
Gangtok Sub-Division  
Rural Development Department  
Govt. of Sikkim

  
Divisional Engineer (E-I)  
Rural Development Department  
Government of Sikkim  
Gangtok Sub-Division  
Rural Development Department


N O C

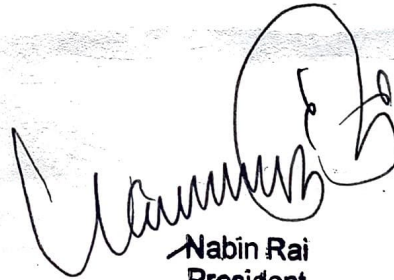
Date:

I Prem Kumar Gurung / resident of Upper  
tiner Sakyang Son of Ranti pa Gurung.  
I give the place for dumping soil for  
work of PMGSY Road.

Name of Contractor - Pradhat Gurung.

Plot No : 454/696.

  
Prem Kumar Gurung



Nabin Rai  
President  
43 Chiopani GP  
East Sikkim



**परचा खतियान**

SAIC YONG स्नोकार्को डिस्ट्रीब्यूशन

**SANG** सुगाभा

**GANGTOK** 146541

**பிரதீபா**

सिद्धिदायक एवम्

[illegible]

Checked  
10/5/12

TESTED

~~Joint Director~~

~~Miss D. C. Caldwell~~

प्रमाणिकता

Director - **Dr. K. R. Narayana**  
District College for  
Eas. - **Gangal**

**Exhib. - General**

Page No.

1

न्यायिक

पिप्लिका

मुखः अ

## Field Surveyor

~~Pluribus Collectorate, B.N.~~

Shirdi, 30/07/2007  
Rev. Fr. Joseph  
Gangotri  
Collector

Centre, Sikkim

Name of work:

**CONSTRUCTION OF PROTECTION WORKS ALONG SAKYONG PWD ROAD TO TINTEK  
CHISOPANI DOKEY GAON UNDER GANGTOK,SUB-DIVISION IN EAST-SIKKIM**

Brief:

Sakyong PWD Road to Tintek Chisopani Dokey Gaon in East-Sikkim has been sanctioned in the year 2017-18 .Hence for the disposal of the muck shall be dumped in the proposed area which fall along the road side by providing the wall and also filling and leveling work shall be carried out after disposal, there is no any water bodies or running of water nearby the proposed disposal area of the muck.Therefore the proposed Estimate has been prepared for constt.of P/W and dumping of the muck excavated

SOR:

2020 SOR has been used to frame the Estimate

Time:

3 to 6 months

Amount:

Rs.74,260.00(Rupees Seventy Four Thousand Two Hundred and Sixty)only


Scope of Work:

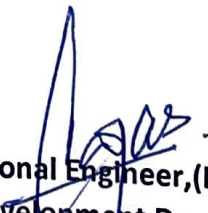
- 1.Jungle Clearance
- 2.Excavation Works
- 3.Constt.of Gabin Structure.
- 4.Landslide Clearance
- 5.Carriages for the same

Mode of Execution:

Tendered/Departmentally

Hence,The estimate has been framed according to the site condition and been forwarded for further necessary action please.

  
Assistant Engineer,  
Rural Development Department,  
Gangtok,Sub-Division  
Assistant Engineer (E-I)  
RM & DD  
Gangtok, Sub Division

  
Divisional Engineer,(East-I)  
Rural Development Department,  
Gangtok,Sub-Division  
Divisional Engineer  
Rural Development Department  
Government of Sikkim  
Gangtok

**CONSTRUCTION OF PROTECTION WORKS ALONG SAKYONG PWD ROAD TO TINTEK CHISOPANI DOKEY  
GAON UNDER GANGTOK, SUB-DIVISION IN EAST-SIKKIM**

- 1 Clearing of jungle and slip along the mentioned road by manual means

$$5 \text{ lab} \times 7 \text{ days} = 35 \text{ Mdays} \\ @ \text{ Rs } 400 / \text{Mdays} \quad \text{₹ } 14,000.00$$

- 2 Excavation in ordinary rock using manual means including loading in a truck and carrying of excavated material to embankment site with in all lifts and leads upto 1000 metres

Rd:1600mtr

$$20.00 \times \frac{1}{2} \times 1.43 \times 2.98 = \frac{42.68148}{42.68148} \text{ m}^3 \\ @ \text{ Rs } 346.42 / \text{Mdays} \quad \text{₹ } 14,785.72$$

- 3 Providing and laying Sausage wall with clean hard selected stones including centering, aligning and slopes/curves etc., as per the direction of engineer in charge. Analysis for 10cum R/W:Rd:45mtr

$$20.00 \times \frac{1}{2} \times 1.4333 \times 0.48 = 6.85 \text{ m}^3 \\ 20.00 \times \frac{0.60 + 1.43}{2} \times 2.50 = 50.83 \text{ m}^3 \\ 57.68 \\ @ \text{ Rs } 334.63 / \text{m}^3 \quad \text{₹ } 19,301.95$$

4

Land Slide Clearance in soil (Clearance of land slides in soil and ordinary rock by a bull-dozer D 80 A-12, 180 HP and disposal of the same on the valley side)  
Vide Item no2: 42.68 m<sup>3</sup>

$$@ \text{ Rs } 41.07 / \text{m}^3 \quad \text{₹ } 1,752.93$$

- 5 Carriage of stock materials ( 30 km)

Cement: 30 km

$$\text{V.I.no.3 } 57.68 \times 1.693 = 97.65 \text{ bags} \\ 97.65 \text{ bags} \\ 48.83 \text{ qntl} \\ 4.88 \text{ mt}$$

Loading and unloading

$$@ 228.47 \text{ mtkm}$$

Cost of Haulage

$$@ 6.83 \text{ mtkm}$$

$$\text{₹ } 1,115.56 \\ \text{₹ } 1,000.47$$



6 Carriage of Sand: 35 km

## Loading & Unloading

V.I.no.3	57.681 x	0.188 =	10.84 cum
			10.844 t-km
		@	87.00 /cum

₹ 943.44

## Haulage

759.09 @ 5.57 /t-km

₹ 4,228.12

**7 Carriage of Stone:25 km**

$$V.I.no.3 \quad 57.681 \quad \times \quad 0.261 \quad = \quad 15.0549 \text{ cum}$$

@ Rs 106.65 /m3

**₹ 1,605.60**

## Haulage

752.74 @ 5.57 /t-km

₹ 4,192.78

**₹ 62,926.58**

9% CGST

₹ 5,663.39

9% SGST

₹ 5,663.39

TOTAL

₹ 74,253.36

say

**₹ 74,260.00**

**(RUPEES SEVENTY FOU THOUSAND TWO HUNDRED AND SIXTY)only**

Junior Engineer,  
Rural Development Deptt,  
Gangtok, Sub-Division

Junior Engineer  
Rural Management & Dev. Deptt.  
Gangtok, Sub-Division

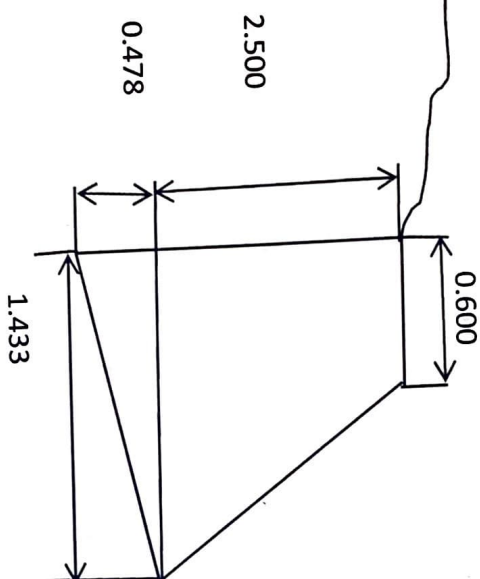
**Assistant Engineer**  
**Rural Development Deptt,**  
**Gangtok, Sub-Division**

~~Assistant Engineer (E-I)~~

RM &amp; DD

Gangtok, Sub Division

Filling works



Length = 20.00 Mtr  
Height = 2.500 Mtr  
Top = 0.600 Mtr

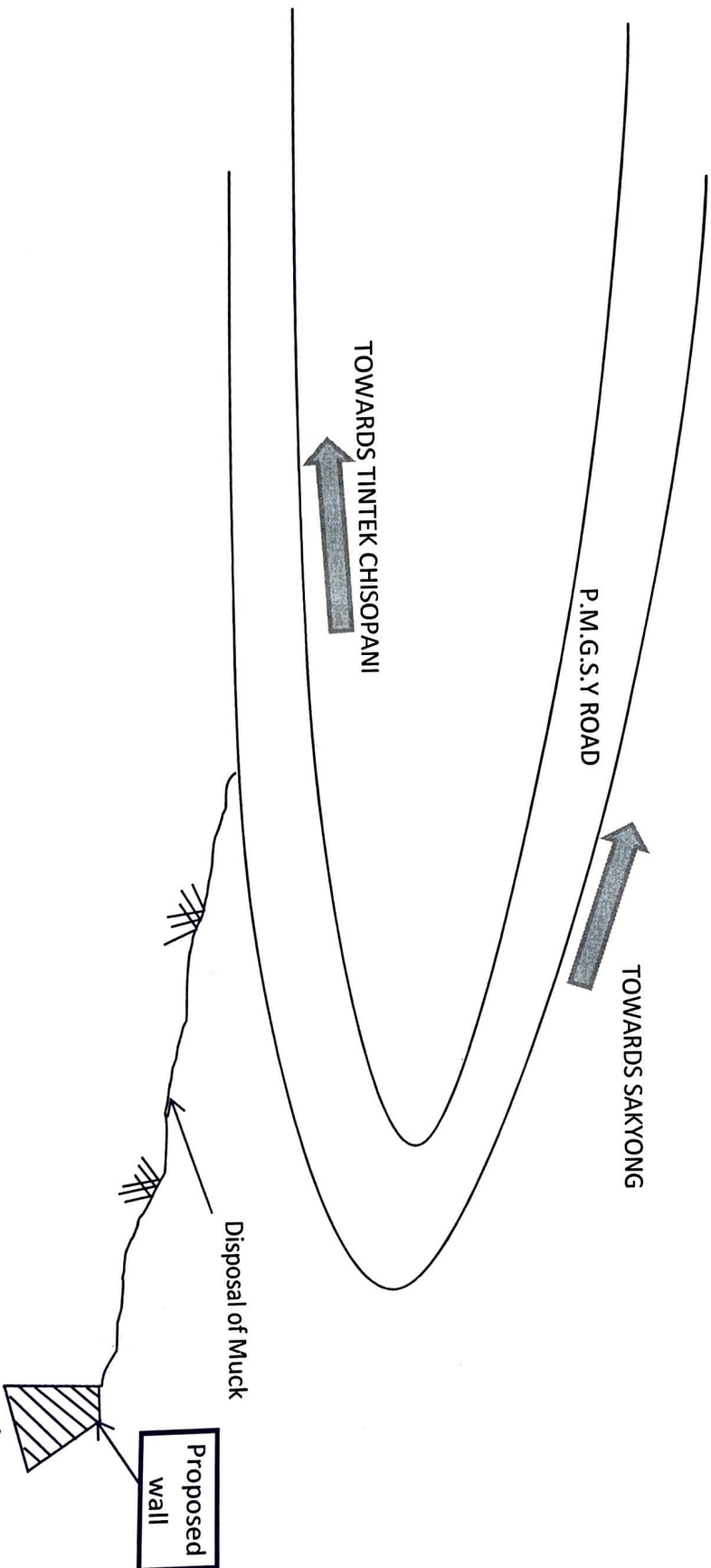
<p>Junior Engineer. Gangtok, Sub-Division Rural Development Deptt.</p>	<p>Assistant Engineer. Gangtok, Sub-Division Rural Development Deptt.</p>
--	---

Junior Engineer  
Rural Management & Dev. Dept  
Gangtok, Sub-Division

Assistant Engineer (E-I)  
RM & DD

Gangtok, Sub Division

SITE PLAN FOR MUCK DISPOSAL



**Junior Engineer.**  
Gangtok, Sub-Division  
Rural Development Deptt.

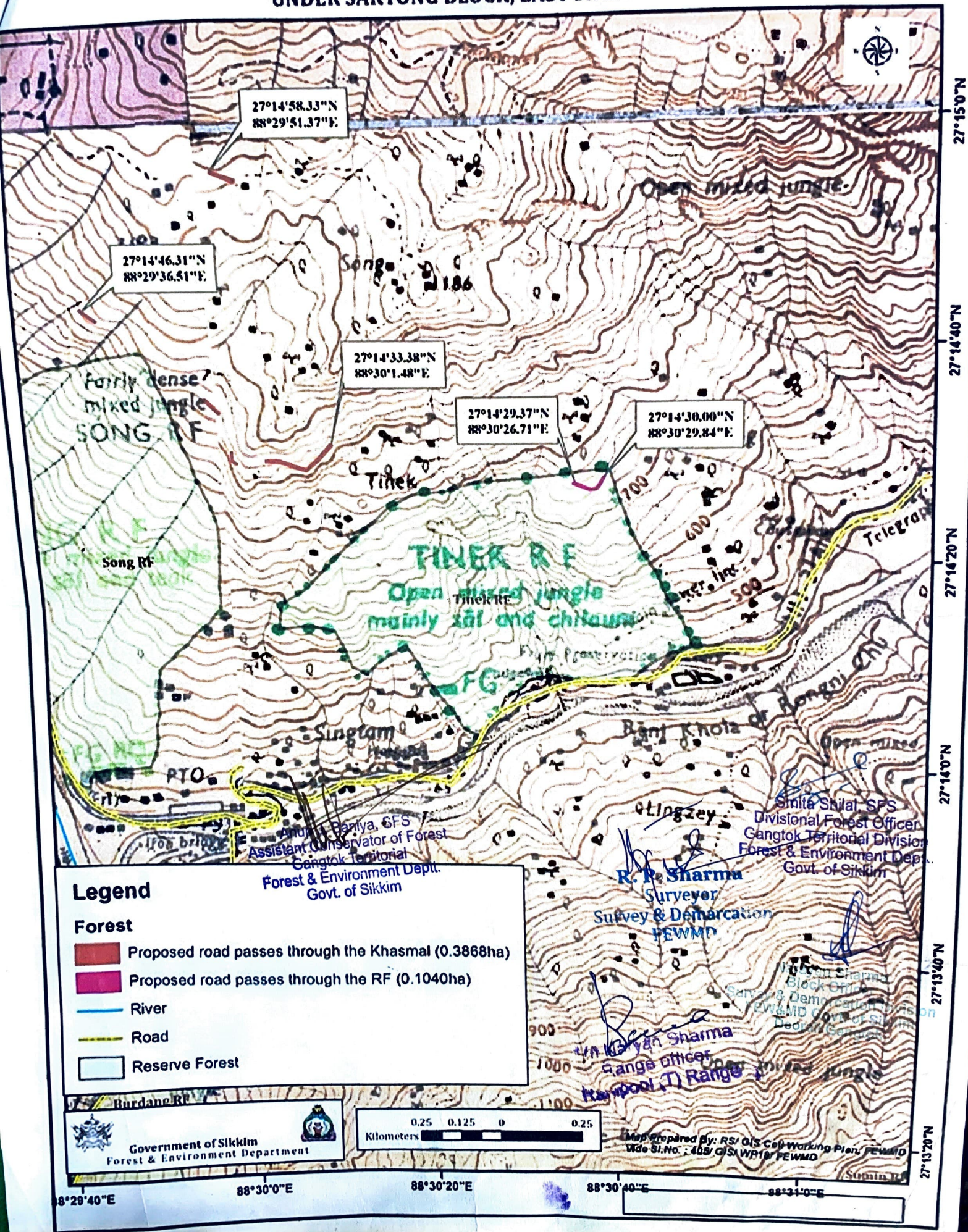
**Assistant Engineer.**  
Gangtok, Sub-Division  
Rural Development Deptt.

**Junior Engineer**  
Rural Management & Dev. Deptt.  
Gangtok, Sub-Division

**Assistant Engineer (E-I)**  
RM & DD  
Gangtok, Sub Division



SHOWING THE LOCATION OF DIVERSION OF (0.4908 HA) OF FOREST LAND FOR CONSTRUCTION OF RCR FROM SAKYONG PWD ROAD TO TINEK CHISOPANI DOKEY GAON, UNDER SAKYONG BLOCK, EAST SIKKIM. (116)





## Part - V

(To be filled in by the Secretary in charge of Forest Department or by any other authorized Officer of the State Government not below the rank of an Under Secretary)

18. Recommendation of the State Government :

(Adverse comments made by any officer or authority in Part – B or Part-C or Part-D above should be specifically commented upon)

The proposal for diversion of 0.4908 Ha of Forest Land for construction of Rural Connectivity Road from Sakyong PWD to Tinek Chisopani Dokey Gaon in East District of Sikkim by Rural Dev. Department, Govt. of Sikkim, is accepted and recommended for forest clearance under Section 2 of Forest (Conservation) Act, 1980.

Signature : 

Name & Designation : M.L. Srivastava, IFS  
PCCF-cum-Addl. Chief Secretary.

Date: 04.03.2021

Place: Gangtok (Sikkim)

M. L. Srivastava, IFS  
Addl Chief Secretary-cum-PCCF  
Forest & Environment Deptt.  
Official Seal Govt. of Sikkim