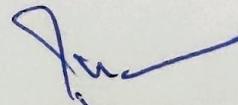


**Full title of the Project:** -: Diversion of 2.4657 hectare of Forest land in favour of Himachal Pradesh Public work Department for C/O Link Road from Neri-Kotli, Sanohat to Village Draina RD 0/0 to 5/560, within the jurisdiction of Rajgarh Forest Division, distt. Sirmour Himachal Pradesh. Online proposal no FP/HP/ROAD/156332/2022

### **CERTIFICATE**

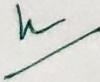
It is certified that during the construction of road the effect of land sliding and soil erosion will be mitigated by providing necessary protection work i.e R/Wall, B/Wall, Wire crate works and cutting work will be done in scientific manner. The plantation of various species of grass, beds and bushes also be done in the soil erosion portion in specific manner which helps to counter the land sliding/soil erosion efforts in the affected area with the help and direction of expert team of forest department.

Biological measures, however, require special efforts as the muck disposed in disposal yards will in general be devoid of nutrients and soil contents to support vegetation. The selection of soil for spreading over such an area would require nutrient profiling of soil for different base elements. Suitable admixture of nutrients would be done before placing the soil on the top surface of muck disposal areas to have administered growth of forest canopy.



Executive Engineer  
Rajgarh Division  
H.P.P.W.D. Rajgarh

C/S

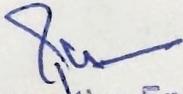


Deputy Conservator of Forests  
Rajgarh Forest Division  
Rajgarh

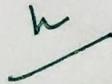
**Full title of the Project:** -: Diversion of 2.4657 hectare of Forest land in favour of Himachal Pradesh Public work Department for C/O Link Road from Neri-Kotli, Sanohat to Village Draina RD 0/0 to 5/560, within the jurisdiction of Rajgarh Forest Division, distt. Sirmour Himachal Pradesh. Online proposal no FP/HP/ROAD/156332/2022

**UNDERTAKING**

I/ Executive Engineer, HP.PWD Division Rajgarh, here by undertake that no trees will be felled in the dumping site.

  
Executive Engineer  
Rajgarh Division  
H.P.P.W.D. Rajgarh

CIS

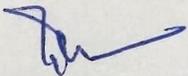


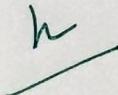
Deputy Conservator of Forests  
Rajgarh Forest Division  
Rajgarh

**Full title of the Project:** -: Diversion of 2.4657 hectare of Forest land in favour of Himachal Pradesh Public work Department for C/O Link Road from Neri-Kotli, Sanohat to Village Draina RD 0/0 to 5/560, within the jurisdiction of Rajgarh Forest Division, distt. Sirmour Himachal Pradesh. Online proposal no FP/HP/ROAD/156332/2022

**UNDERTAKING**

I/ Executive Engineer, HP.PWD Division Rajgarh, here by undertake that to protect the sapling trees during the construction of this road. Also try to transplant Sapling trees to nearby places with the help of forest department.

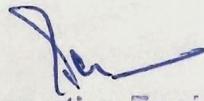
  
Executive Engineer  
Rajgarh Division  
H.P.P.W.D. Rajgarh

CS  
  
Deputy Conservator of Forests  
Rajgarh Forest Division  
Rajgarh

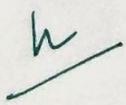
**Full title of the Project:** -: Diversion of 2.4657 hectare of Forest land in favour of Himachal Pradesh Public work Department for C/O Link Road From Neri-Kotli, Sanohat to Village Draina RD 0/0 to 5/560, within the jurisdiction of Rajgarh Forest Division, distt. Sirmour Himachal Pradesh. Online proposal no FP/HP/ROAD/156332/2022

### **UNDERTAKING**

I/ Executive Engineer, HP.PWD Division Rajgarh, here by giving undertaking to pay the entire amount for Soil and Moisture Conservation Plan in lieu of forest area diverting for diversion of 2.4657 Hect. of forest land, for the C/O Link Road from Neri-Kotli, Sanohat to Village Draina RD 0/0 to 5/560, within the jurisdiction of Rajgarh Forest Division, distt. Sirmour Himachal Pradesh.

  
Executive Engineer  
Rajgarh Division  
H.P.P.W.D. Rajgarh

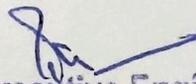
C/S

  
Deputy Conservator of Forests  
Rajgarh Forest Division  
Rajgarh

**Full title of the Project:** -: Diversion of 2.4657 hectare of Forest land in favour of Himachal Pradesh Public work Department for C/O Link Road From Neri-Kotli, Sanohat to Village Draina RD 0/0 to 5/560, within the jurisdiction of Rajgarh Forest Division, distt. Sirmour Himachal Pradesh. Online proposal no FP/HP/ROAD/156332/2022

### **UNDERTAKING**

I/ Executive Engineer, HP.PWD Division Rajgarh, here by giving undertaking that During the C/O Link Road from Neri-Kotli, Sanohat to Village Draina RD 0/0 to 5/560 the recharge point of the seasonal streams and springs shall be taken due care from the disturbance, and sufficient measures shall be adopted to preserve the sources of these natural springs/streams and their flow to.

  
Executive Engineer  
Rajgarh Division  
H.P.P.W.D. Rajgarh

C/S



Deputy Conservator of Forests  
Rajgarh Forest Division  
Rajgarh

CHECK LIST NO. 28

Detail Reclamation Plan, whenever required. It should be realistic exhaustive and complete in all respects along with relevant maps in distinct colors. It should also include the details of back fillings, afforestation and execution of such works, whenever required.

Diversion of 2.4657 hectare of forest land has been proposed for the C/O Link Road From Neri-Kotli, Sandhat to Village Draina RD 0/0 to 5/560.in Tehsil Rajgarh District Sirmour. The construction of this road will generate muck to the extent of 71000.00 Cubic meter. By taking Deduction for useful stone 1/3 and a swell factor of 40% on the total muck become 66266.66 cubic meter (Detail attached at Page\_\_\_) Out of this 45061.30 cubic meter of muck will be used for construction of masonry walls, Edge/wall R/Wall and B/wall, leveling and half cutting half filling of the proposed road. The remaining 21205.36 Cubic meter of muck will require safe disposal. The user agency has identified 3 No. dumping sites for the disposal of this muck. The dumping site has been identified along the proposed site and the capacity of these dumping sites has been worked out to be 21546.42 cubic meter (Detail attached at Page\_\_\_) which is sufficient to hold the muck to be generated.

Thus all the muck generated will be dumped in the designated dumping sites. 3 number dumping site designated as DS-I & III had been identified for dumping of muck / debris to be produced during the construction phase of the project. It is proposed that the dumping sites are treated in such a manner that these do not pose any problem to the environmental management consideration arising out of the necessity to stabilize the dumping sites at the earliest. Therefore, this reclamation plan has been formulated with the following objectives:-

1. To arrest the dumped muck in-situ so that it does not find its way to the nearby drainage channels, thus altering the drainage pattern of the area.
2. To rehabilitate the dumped area over a period of time so that it merges with the Adjoining natural landscape and does not stand out as a sore point.
3. To improve the aesthetics of the dumping grounds/ dumping site by planting suitable Plants and trees species thereby increasing the forest cover in the area.
4. To stabilize the dumping site by vegetative and engineering structures.

### Implementation :

The proposal will be implemented by the user agency itself at its own cost as detailed in this plan. The implementation of the plan will be supervised by the forest department from time to time and the progress will be periodically monitored. In case of default the sanction of diverted land may be revoked with suitable penalty as decided by the Govt. of India.

### Strategy :

The pronged approach will be followed for reclamation of dumping sites. In the first instance crate wall will be erected around the dumping site so that required capacity for dumping of muck is created at the sites. The detailed drawings of the crate work to be undertaken are enclosed. The primary objective of the crate works will be to arrest the dumped muck at the dumping sites itself and not allow its spillage to adjoining areas and eventually to nearby drainage lines. The capacity of the dumping sites has been calculated as detailed in the table and will be enough to hold the muck required to be dumped in each of the sites.

In the second phase, once the dumping is complete it will be ensured that the dumping site is planted with grasses, bushes, shrubs and tree so that it gives an aesthetic look. This vegetal cover will also help in binding the soil and will prevent its erosion. For vegetating the dumping sites, suitable local species will be preferred. However, it may be noted that bulk of the muck to be dumped will be excavated material which will be lacking in essential nutrients and organic matter. Hence it will be desirable to increase the nutrient status of the top soil to make it conducive to tree/ vegetal growth. For this purpose maturing of top soil shall be done. If required, imported soil shall be brought to replenish the top soil. Instantly grasses and bushes will be planted in the area to improve the soil condition. Once these grasses and bushes take hold of the site, tree species will be planted in next phase. The tree species to be planted will be namely Robinia, Lucinea, albizia, Drek Amla Bamboo, Khair,Chail and Devdar.

Grasses like Steria and Napier will also be propagated. Trees will be Planted as the closer spacing so that canopy is closed at the earliest. Hence the spacing will be kept at 1.5 mtr. x 1.5 mtr. The total area involved in dumping is 3078 Square metre. Also due to inert nature of soil, plants will need extra care for their establishment. For this purpose, imported soil/ organic manure will be added in each pit for easy establishment of plants. Watering of the plant in dry season will be provided to prevent mortality. The plantation will be further maintained at project cost for next five year beating up of failure will be done.

### Post reclamation arrangement :

Since the area in question is required by the user agency only for the temporary use of dumping, hence the area will be reverted back to forest department after implementing the reclamation plan, if so stipulated by Govt. of India. However if at the time of so reverting back the

to forest department if any activities as per this reclamation plan is found wanting then the forest department may realize the cost that activity from the user agency at the prevailing wages rates applicable in forest department and may get the same done departmentally at the project cost.

Place : Rajgarh  
Dated : 9-06-2022



Assistant Engineer  
Habban Sub Division  
H.P.P.W.D. Habban



Executive Engineer,  
Rajgarh Division,  
H.P.P.W.D. Rajgarh.

C/S



Deputy Commissioner of Forests  
Rajgarh Forest Division  
Rajgarh

98 82

: c/O Link Road From Neri-Kotli, Sanohat to Village Draina RD 0/0 to 5/560.

**MUCK MANAGEMENT PLAN (MMP)**

Sr.	Description	Quantity
1	Total Quantity of Muck being produced	71000.00
2	Deduction for useful stone as required under the clause of agreement to be executed by the Contractor and Executive Engineer of Project. 1/3 17333cum	23666.67
3	Net Balance Quantity of Debris/Muck (1-2)	47333.33
4	Quantity available on site with swell factor @ 40% 1.40A (B)	18933.33
5	Total (sr.3+4)	66266.66cum(B)
5	Material /Muck to be used in Project:-	
(i)	Deduction of material required for the construction of dumping place in dry masonry wall/Edge wall/ @ 24% of (B)	16566.66
(ii)	Less for material/Muck required for leveling of the proposed road for the construction @15% of (B)	9940.00
(iii)	Less for material /Muck required for the construction of the proposed road on the analogy of half cutting half filling R Wall and B/wall @ 28% of (B)	18554.64
	Total :- (i)+(ii)+(iii)	45061.30 (C)
6	<b>Net material/Muck to dumped in dumping site (B-C) in Cum</b>	<b>21205.36 cum</b>

**Proposed dumping sites**

Material/Muck left at the site which required carriage for the proper dumping at the recognized site as per the instructions of forest and environment Ministry reinforced by various judgments of the Apex Court Govt. of india.

Sr. No.	Dumping Site No.	Kh no.	Design Annexed Yes/No.	Capacity
1.	1	755/2	yes	8241.80
	2	392/374/338/2	yes	4768.47
	3	183/2	yes	8536.15
			<b>Total</b>	<b>21546.42Cum</b>

CIS

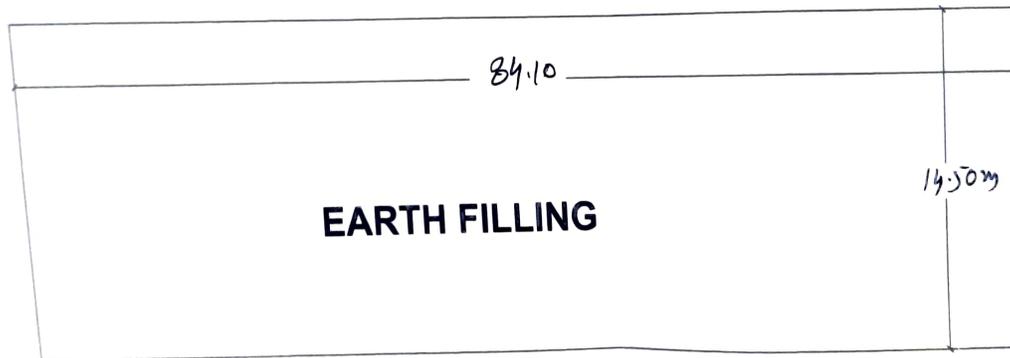
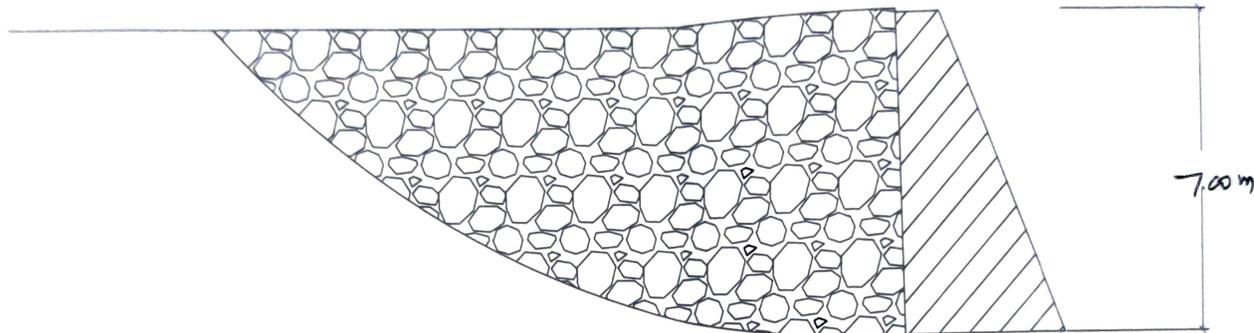
*[Signature]*  
 Assistant Engineer  
 Habban C. Division  
 H.P.P.W.D. Habban

*[Signature]*  
 Executive Engineer,  
 Rajgarh Division,  
 H.P.P.W.D. Rajgarh.

Deputy Conservator of Forests  
 Rajgarh Forest Division  
 Rajgarh  
*[Signature]*  
 76

Muck Dumping Plan For the C/O Link Road From Neri-Kotli, Sanohat to Village Draina RD 0/0 to 5/560

(D3)



**TOTAL DUMPING  
DUMPING SITE**

**L B H** only  
84.10 14.50 7.00 = 8586.15 m<sup>3</sup>

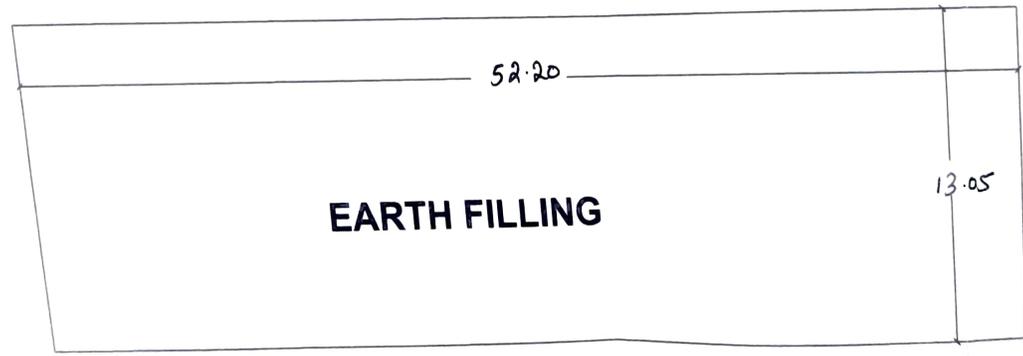
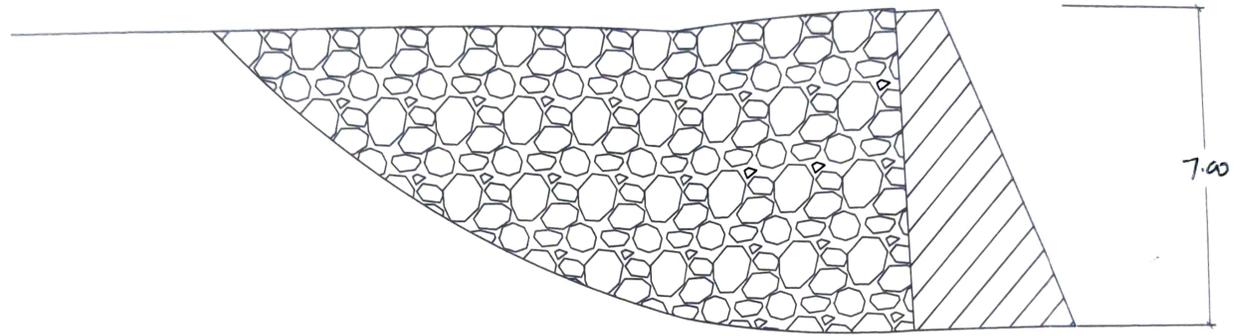
Deputy Conservator of Forests  
Rajgarh Division  
*[Signature]*

*[Signature]*  
Assistant Engineer  
Rajgarh Sub Division  
H.P.W.D., Rajgarh

*[Signature]*  
Executive Engineer,  
Rajgarh Division,  
HP.PWD., Rajgarh.

# Muck Dumping Plan For the C/O Link Road From Neri-Kotli, Sanohat to Village Draina RD 0/0 to 5/560

(D<sub>2</sub>)



**TOTAL DUMPING DUMPING SITE**

<b>L</b>	<b>B</b>	<b>H</b>	<b>Qty</b>
52.20	13.05	7.00	= 4768.47 m <sup>3</sup>

Dep

*[Handwritten signature]*

Forest  
Dept

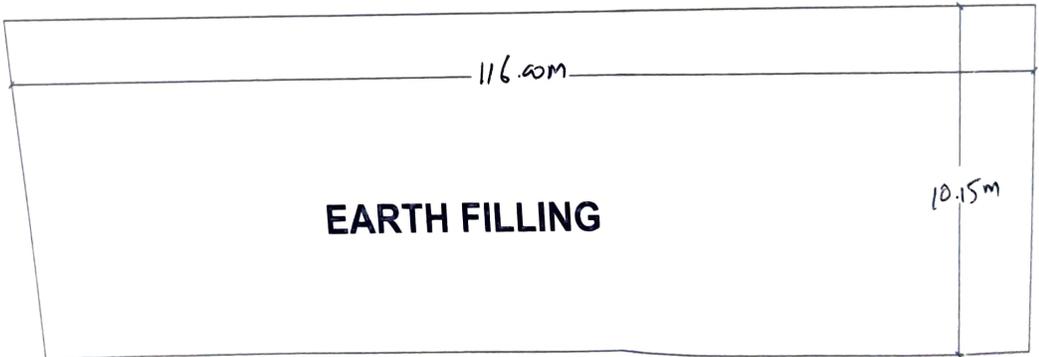
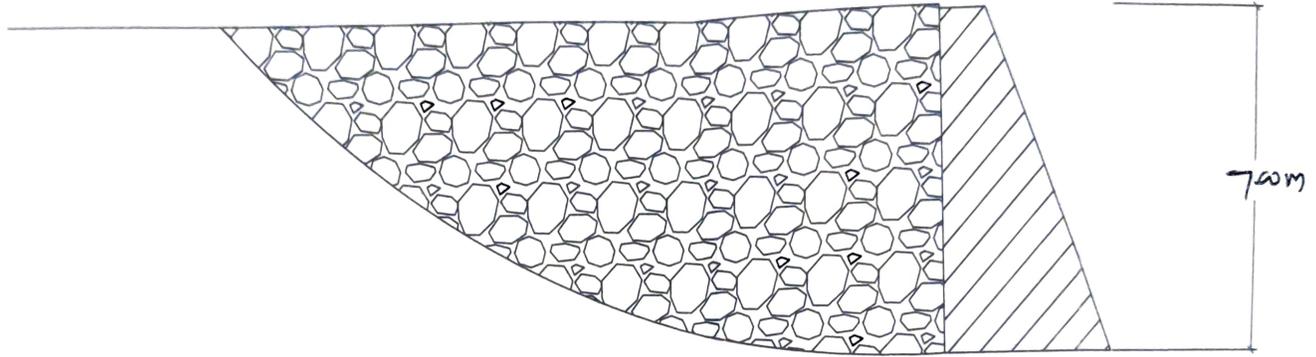
*[Handwritten signature]*

*[Handwritten signature]*  
 Assistant Engineer  
 H... ..  
 H.I., W.D. Habban

*[Handwritten signature]*  
 Engineer  
 F. Tari...  
 H.P., W.D., ...

# Muck Dumping Plan For the C/O Link Road From Neri-Kotli, Sanohat to Village Draina RD 0/0 to 5/560.

(D<sub>1</sub>)



**TOTAL DUMPING DUMPING SITE**

L	B	H	Qty
116	10.15	7.00	= 8241.80m <sup>3</sup>

Dept. of Forests  
Division

*[Signature]*  
Assistant Engineer  
H. Sub Division  
H. W.D. Habban

*[Signature]*  
Executive Engineer  
H. Div.  
H.P. W.D., Rajgarh.