

**HIMACHAL PRADESH
PUBLIC WORKS DEPARTMENT**

No.PWC-WA-I/Forest/Ghatti Ghar/2025-26-14164-66 Dated / /2026

9/026

To

The Divisional Forest Officer,
Chamba Forest Division
Chamba Distt Chamba.

Subject: - **Diversion of 1.8810 Ha. Of Forest Land in favour of HPPWD for the construction of Link road Gatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338, within the jurisdiction of Chamba Forest Division, Distt. Chamba HP.**

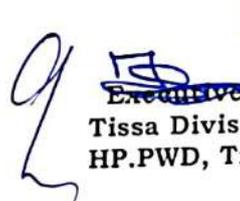
Reference:- RO Shimla EDS No. Nil dated 08/08/2025

Sir,

With reference to R.O. office letter as referred above, the following observations have been attended and reply to the same is given as under:-

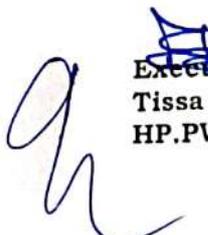
Sr No	Observation as raised	Reply
1	In reference to the observation No-3, REPLY NOT ACCEPTED, observation was sought regarding the clarification of violation. In this regard, State Govt has submitted that, there is no existing road to the proposed villages, whereas the existing road /path which is visible in the KML file is a Bridal path widening work/ repaired by the concerned Gram Panchayat, and DFO concerned visited the proposed road site in dated 20.06.2023, which is uploaded on the portal against Part-I by UA and in Part-II. However, same was not found uploaded. Therefore, DFO concerned shall upload the revised Site inspection report with remarks regarding the violation.	Site inspection report of D.F.O Chamba dated 20-6-2023 has been uploaded against additional information in Part-I of PARIVESH Portal.
2	In reference to the observation No-4 & 8, REPLY NOT ACCEPTED, as per the DSS analysis, the proposed area is 1.881 ha however, the calculated area is 0.13 ha. Therefore, State Govt. may review the difference in the proposed DA area and calculated area, and accordingly, fresh KML showing all the components in distinct colours in polygon features may be uploaded under the appropriate column of the online portal	The necessary correction has been in the KML file and made uploaded against appropriate Column in online Part-I
3	In reference to the observation No-9, REPLY NOT ACCEPTED, layout plan has been uploaded however same is handmade and also not marked in Scale and RD wise. Therefore, State Govt shall upload the detailed layout plan showing a legend and the proper dimensions of each component, in the forest land and non-forest land in distinct colors, duly authenticated by the concerned DFO.	The detailed and scaled layout plan in legible format and in proper Scale chainage wise length and width of the proposed road and mark (Forest land/Non-Forest land//Dumping sites etc.) duly authenticated by DFO concerned is uploaded in the parivesh portal against additional information in Part-I.

4	<p>In reference to the observation No-12, REPLY NOT ACCEPTED, revised enumeration list has been uploaded in which 05 tree species has been mentioned however in S.No-4 (ii), part-II only 04 trees species are proposed for felling. Also, as per the Tree enumeration details the total tree proposed for felling is 70 however as per the S.No-4(ii), part-II, total No. of trees proposed for felling is 68. State Govt shall rectify the discrepancy and upload the correct details in part-II and tree enumeration details. Also, State Govt make sure to remove the erroneous list from the part-I/II.</p>	<p>The matter pertains to Forest Department Part-II.</p>
5	<p>In reference to the observation No-13, REPLY NOT ACCEPTED, Certificate has been provided by the UA mentioning that total 70 No of trees are in the alignment and 13 no of trees are coming in the Dumping sites. And 13 No of trees shall be retained and not to be felled. Therefore, the State Govt shall exclude the 13 No of trees from the tree enumeration and mentioned only the no of trees which is to be felled.</p>	<p>The matter pertains to Forest Department Part-II. However List of Trees Coming in the alignment of road and proposed for felling is uploaded in online Part-I against Additional information</p>
6	<p>In reference to the observation No-14, REPLY NOT ACCEPTED, Muck Management Plan has been submitted, however details of protection and engineering work is not found uploaded. Therefore, State Govt shall provide the detailed muck disposal plan mentioning the detailed calculation of muck, scientific measures adopted for muck stabilization, photograph of sites.</p>	<p>Detailed Reclamation Plan muck management plan with details of protection and engineering work mentioning the detailed calculation of muck, scientific measures adopted for muck stabilization & photograph of sites. Has been uploaded in the parivesh portal against additional information in Part-I.</p>


Executive Engineer,
Tissa Division,
HP.PWD, Tissa.

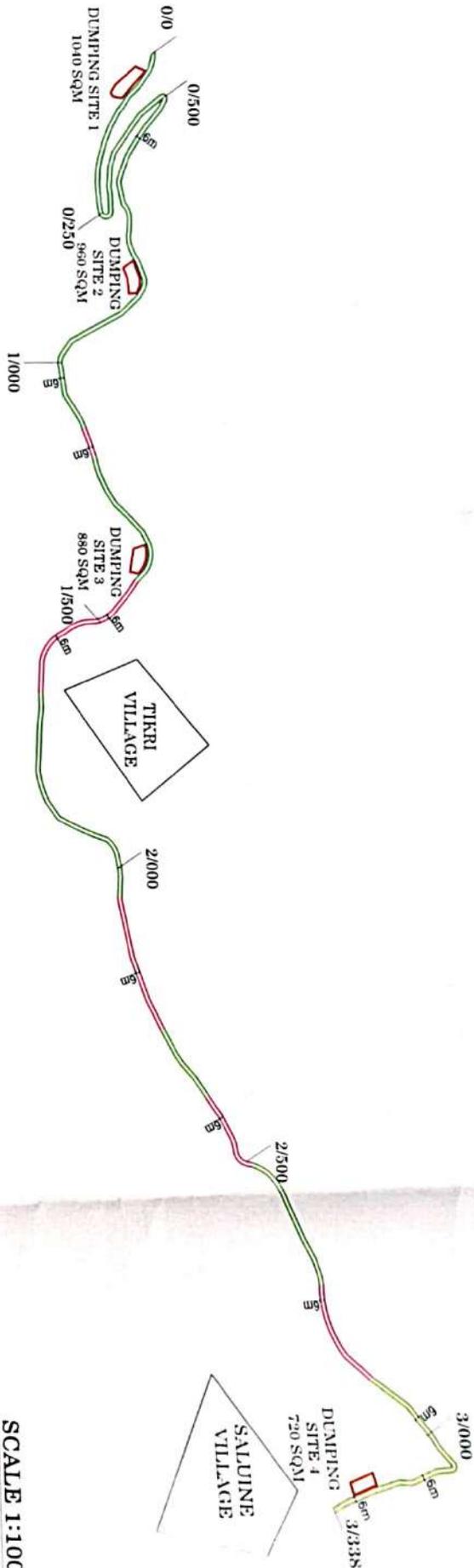
Copy to the Chief Conservator of Forest, Chamba for kind information please.

Copy to the Assistant Engineer, Sub-Division Koti, HPPWD., Tissa for information and necessary action.


Executive Engineer,
Tissa Division,
HP.PWD, Tissa.


 Received
 @mish
 9/1/26

NAME OF WORK:-CONSTRUCTION OF LINK ROAD FROM GATTI GHAR (PUKHRI)TO VILLAGE SALUIN CHAMBA HMACHAL PRADESH



SCALE 1:100

AREA STATEMENT

FOREST LAND	= 1 5210 HECT
NON-FOREST LAND	= 0 4818 HECT
DUMPING SITE 1	= 0 1010 HECT
DUMPING SITE 2	= 0 0961 HECT
DUMPING SITE 3	= 0 0888 HECT
DUMPING SITE 4	= 0 0720 HECT

LEGENDS

	FOREST LAND
	NON-FOREST LAND
	DUMPING SITE
	VILLAGE AREA

[Signature]
 Assistant Engineer
 Koti Sub Division
 HPPWD Kotli

[Signature]
 Executive Engineer
 Tissa Division
 HPPWD Tissa

[Signature]
 Deputy Conservator of Forests
 Chambal Forest Division
 Chamba-176310

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 colours. It should also include the details of back fillings, afforestation and execution of such works, whenever required.

RECLAMATION PLAN

Diversion of 1.8810 hectare of forest land has been proposed for the Construction of motorable link road From Ghatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338 in Tehsil & District Chamba. The construction of this road will generate muck to the extent of 54501.15 Cubic Metre. By taking a swell factor of 40% on Pick+Jumper work and 25% on Blast work the total muck become 113936.29 cubic metre. Out of this 68361.78 cubic metre of muck will be used locally in filling, construction of masonry walls in dumping place and in leveling of road. The remaining 45574.52 Cubic metre of muck will require safe disposal (Detail attached at Page 54). The user agency has identified 4 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 45799.00 cubic metre (Detail attached at Page 54) which is sufficient to hold the muck to be generated.

Thus all the muck generated will be dumped in the designated dumping sites. 4 number dumping site designated as DS-I, DS-II, DS-III & DS-IV have 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 tress species to be planted will be namely Robinia, Lucinea, albizia, Drek Amla Bamboo, Khair and Shisham. 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 3600.18 square metres. 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 ten year beating up of failure will be done.

Post-reclamation arrangements:

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

Place: Tloa

Dated: -



Assistant Engineer,
Kot Sub Division,
HP PWD Kot



Executive Engineer,
Tloa Division,
HP PWD Tloa

MUCK MANAGEMENT PLAN

Name of work :- Construction of Link road from Gatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338

	Total Quantity of muck being produced	54501.15
1	Deduction for useful stone as required under clauses of agreement to be executed by the Executive Engineer of Proeject Implementing unit Division in behalf of Govt. of H.P. for using in project.(Credit for useful stones to be obtained from cutting i.e. 1/3rd quantity of hard blasting	6246.84
	Net balance quantity of debries / Muck	48254.31
2	Add quantity available on site with swell factor @ 40% on P.W. & J.W.	50064.87
	Add quantity available on site with swell factor @ 25% on Blast work	15617.11
	GRAND TOTAL (A)	113936.29
3	Less of material required for the construction of duming in dry masonry wall @ 5% of (A)	5696.81
4	Less of material / muck required for the levelling of proposed road @ 15% of (A)	17090.44
5	Less of material / muck required for the levelling of proposed road on the analogy of half cutting and half filling @ 40% of (A)	45574.52
	GRAND TOTAL (B)	68361.78
6	Material / muck left in the site which required carriage for the proper dumping at the recognised site as per the iustruction of Forest and Environment Ministry reinforced by various judgement of the Apex Court Govt. of India i.e. (A-B)	45574.52
	Design proposed for dumping DS-I, DS-II,DS-III, DS-IV	4 No.
	Total capacity of dumping places :	45799.00
		Cum.
	Area in Hectares for dumping site	0.3600

[Signature]
Assistant Engineer,
Koti Sub Division,
HP.PWD.Koti

[Signature]
Assistant Engineer
Koti Sub Division
HPPWD Koti

[Signature]
Executive Engineer,
Tissa Division HP. PWD.
Tissa, Chhatigaru 176316

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Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

ABSTRACT OF QUANTITY

Name of work :- Construction of Link road from Gatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338

PAGE	TOTAL QUANTITY	PICK WORK	JUMPER WORK	BLASTING WORK
01	5759.55	1471.14	2570.04	1718.37
02	3995.05	894.61	1377.44	1723.01
03	4419.55	1648.62	1648.62	1122.31
04	4508.32	991.73	991.73	2524.86
05	4891.65	1038.83	1244.28	2608.55
06	3709.05	1720.76	1720.76	267.54
07	4066.23	1544.03	1544.03	978.18
08	2677.00	1101.70	1267.90	307.40
09	4235.95	957.56	957.56	2320.83
10	5241.25	1549.67	1549.67	2141.91
11	5334.22	1214.04	1214.04	2906.15
12	4919.75	2399.17	2399.17	121.42
13	743.58	371.79	371.79	0.00
TOTAL	54501.15	16903.62	18857.00	18740.53

- i) Ordinary soil = $16903.62 + 18857.00 = 35760.62$ Cum.
ii) Blast work = 18740.53 Cum.


Assistant Engineer
Koti Sub Division,
HP:PWD Koti

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

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Detail of Measurement

Name of work :- Construction of Link road from Gatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338

(SH:-Formation Cutting)

RD.	X-Section area	Mean Area	Length	Quantity	Classifications			Quantity		
					PW	JW	BW	PW	JW	BW
0/ 0	0.00	0.00	0.00	0.00	0%	50%	50%	0.00	0.00	0.00
0/ 10	17.27	8.64	10.00	86.35	0%	50%	50%	0.00	43.18	43.18
0/ 20	17.62	17.45	10.00	174.45	0%	50%	50%	0.00	87.23	87.23
0/ 30	17.97	17.80	10.00	177.95	0%	50%	50%	0.00	88.98	88.98
0/ 40	18.32	18.15	10.00	181.45	0%	50%	50%	0.00	90.73	90.73
0/ 50	18.67	18.50	10.00	184.95	0%	50%	50%	0.00	92.48	92.48
0/ 60	19.02	18.85	10.00	188.45	0%	50%	50%	0.00	94.23	94.23
0/ 70	19.37	19.20	10.00	191.95	0%	50%	50%	0.00	95.98	95.98
0/ 80	19.72	19.55	10.00	195.45	0%	50%	50%	0.00	97.73	97.73
0/ 90	20.07	19.90	10.00	198.95	0%	50%	50%	0.00	99.48	99.48
0/ 100	20.42	20.25	10.00	202.45	0%	50%	50%	0.00	101.23	101.23
0/ 110	20.77	20.60	10.00	205.95	0%	50%	50%	0.00	102.98	102.98
0/ 120	21.12	20.95	10.00	209.45	0%	50%	50%	0.00	104.73	104.73
0/ 130	21.47	21.30	10.00	212.95	40%	40%	20%	85.18	85.18	42.59
0/ 140	21.82	21.65	10.00	216.45	40%	40%	20%	86.58	86.58	43.29
0/ 150	22.17	22.00	10.00	219.95	40%	40%	20%	87.98	87.98	43.99
0/ 160	22.52	22.35	10.00	223.45	40%	40%	20%	89.38	89.38	44.69
0/ 170	22.87	22.70	10.00	226.95	40%	40%	20%	90.78	90.78	45.39
0/ 180	23.22	23.05	10.00	230.45	50%	50%	0%	115.23	115.23	0.00
0/ 190	23.57	23.40	10.00	233.95	50%	50%	0%	116.98	116.98	0.00
0/ 200	23.92	23.75	10.00	237.45	40%	40%	20%	94.98	94.98	47.49
0/ 210	24.27	24.10	10.00	240.95	40%	40%	20%	96.38	96.38	48.19
0/ 220	24.62	24.45	10.00	244.45	40%	40%	20%	97.78	97.78	48.89
0/ 230	24.97	24.80	10.00	247.95	40%	40%	20%	99.18	99.18	49.59
0/ 240	25.32	25.15	10.00	251.45	40%	40%	20%	100.58	100.58	50.29
0/ 250	25.67	25.50	10.00	254.95	40%	40%	20%	101.98	101.98	50.99
0/ 260	26.02	25.85	10.00	258.45	40%	40%	20%	103.38	103.38	51.69
0/ 270	26.37	26.20	10.00	261.95	40%	40%	20%	104.78	104.78	52.39
TOTAL				5759.55				1471.14	2570.04	1718.37

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

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RD.	X-Section area	Mean Area	Length	Quantity	Classifications			Quantity		
					PW	JW	BW	PW	JW	BW
0/ 270	26.37	0.00	0.00	0.00	40%	40%	20%	0.00	0.00	0.00
0/ 280	13.45	19.91	10.00	199.10	40%	40%	20%	79.64	79.64	39.82
0/ 290	13.50	13.48	10.00	134.75	0%	0%	100%	0.00	0.00	134.75
0/ 300	13.55	13.53	10.00	135.25	0%	0%	100%	0.00	0.00	135.25
0/ 310	15.40	14.48	10.00	144.75	0%	0%	100%	0.00	0.00	144.75
0/ 320	15.45	15.43	10.00	154.25	50%	50%	0%	77.13	77.13	0.00
0/ 330	15.50	15.48	10.00	154.75	50%	50%	0%	77.38	77.38	0.00
0/ 340	15.55	15.53	10.00	155.25	50%	50%	0%	77.63	77.63	0.00
0/ 350	15.60	15.58	10.00	155.75	50%	50%	0%	77.88	77.88	0.00
0/ 360	15.65	15.63	10.00	156.25	50%	50%	0%	78.13	78.13	0.00
0/ 370	13.22	14.44	10.00	144.35	50%	50%	0%	72.18	72.18	0.00
0/ 380	13.27	13.25	10.00	132.45	0%	0%	100%	0.00	0.00	132.45
0/ 390	13.32	13.30	10.00	132.95	0%	0%	100%	0.00	0.00	132.95
0/ 400	13.37	13.35	10.00	133.45	0%	0%	100%	0.00	0.00	133.45
0/ 410	13.42	13.40	10.00	133.95	0%	0%	100%	0.00	0.00	133.95
0/ 420	13.47	13.45	10.00	134.45	50%	50%	0%	67.23	67.23	0.00
0/ 430	13.52	13.50	10.00	134.95	50%	50%	0%	67.48	67.48	0.00
0/ 440	13.57	13.55	10.00	135.45	50%	50%	0%	67.73	67.73	0.00
0/ 450	13.62	13.60	10.00	135.95	50%	50%	0%	67.98	67.98	0.00
0/ 460	13.67	13.65	10.00	136.45	0%	50%	50%	0.00	68.23	68.23
0/ 470	13.72	13.70	10.00	136.95	0%	50%	50%	0.00	68.48	68.48
0/ 480	13.77	13.75	10.00	137.45	0%	50%	50%	0.00	68.73	68.73
0/ 490	13.82	13.80	10.00	137.95	0%	50%	50%	0.00	68.98	68.98
0/ 500	13.87	13.85	10.00	138.45	0%	50%	50%	0.00	69.23	69.23
0/ 510	13.92	13.90	10.00	138.95	0%	50%	50%	0.00	69.48	69.48
0/ 520	13.97	13.95	10.00	139.45	0%	50%	50%	0.00	69.73	69.73
0/ 530	14.02	14.00	10.00	139.95	20%	20%	60%	27.99	27.99	83.97
0/ 540	14.07	14.05	10.00	140.45	20%	20%	60%	28.09	28.09	84.27
0/ 550	14.12	14.10	10.00	140.95	20%	20%	60%	28.19	28.19	84.57
TOTAL				3995.05				894.61	1377.44	1723.01

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

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RD.	X-Section area	Mean Area	Length	Quantity	Classifications			Quantity		
					PW	JW	BW	PW	JW	BW
0/ 550	14.12	0.00	0.00	0.00	20%	20%	60%	0.00	0.00	0.00
0/ 560	14.51	14.32	10.00	143.15	20%	20%	60%	28.63	28.63	85.89
0/ 570	14.90	14.71	10.00	147.05	20%	20%	60%	29.41	29.41	88.23
0/ 580	15.29	15.10	10.00	150.95	20%	20%	60%	30.19	30.19	90.57
0/ 590	15.68	15.49	10.00	154.85	20%	20%	60%	30.97	30.97	92.91
0/ 600	16.07	15.88	10.00	158.75	40%	40%	20%	63.50	63.50	31.75
0/ 610	16.46	16.27	10.00	162.65	40%	40%	20%	65.06	65.06	32.53
0/ 620	16.85	16.66	10.00	166.55	40%	40%	20%	66.62	66.62	33.31
0/ 630	17.24	17.05	10.00	170.45	40%	40%	20%	68.18	68.18	34.09
0/ 640	17.63	17.44	10.00	174.35	40%	40%	20%	69.74	69.74	34.87
0/ 650	18.02	17.83	10.00	178.25	40%	40%	20%	71.30	71.30	35.65
0/ 660	18.41	18.22	10.00	182.15	40%	40%	20%	72.86	72.86	36.43
0/ 670	18.80	18.61	10.00	186.05	40%	40%	20%	74.42	74.42	37.21
0/ 680	19.19	19.00	10.00	189.95	40%	40%	20%	75.98	75.98	37.99
0/ 690	12.25	15.72	10.00	157.20	40%	40%	20%	62.88	62.88	31.44
0/ 700	12.64	12.45	10.00	124.45	40%	40%	20%	49.78	49.78	24.89
0/ 710	13.03	12.84	10.00	128.35	40%	40%	20%	51.34	51.34	25.67
0/ 720	13.42	13.23	10.00	132.25	40%	40%	20%	52.90	52.90	26.45
0/ 730	13.81	13.62	10.00	136.15	40%	40%	20%	54.46	54.46	27.23
0/ 740	14.20	14.01	10.00	140.05	40%	40%	20%	56.02	56.02	28.01
0/ 750	14.59	14.40	10.00	143.95	40%	40%	20%	57.58	57.58	28.79
0/ 760	14.98	14.79	10.00	147.85	40%	40%	20%	59.14	59.14	29.57
0/ 770	15.37	15.18	10.00	151.75	40%	40%	20%	60.70	60.70	30.35
0/ 780	15.76	15.57	10.00	155.65	40%	40%	20%	62.26	62.26	31.13
0/ 790	16.15	15.96	10.00	159.55	40%	40%	20%	63.82	63.82	31.91
0/ 800	16.54	16.35	10.00	163.45	40%	40%	20%	65.38	65.38	32.69
0/ 810	16.93	16.74	10.00	167.35	40%	40%	20%	66.94	66.94	33.47
0/ 820	17.32	17.13	10.00	171.25	40%	40%	20%	68.50	68.50	34.25
0/ 830	17.71	17.52	10.00	175.15	40%	40%	20%	70.06	70.06	35.03
TOTAL				4419.55				1648.62	1648.62	1122.31

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

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RD.	X-Section area	Mean Area	Length	Quantity	Clasifications			Quantity		
					PW	JW	BW	PW	JW	BW
0/ 830	17.71	8.86	0.00	156.82	40%	40%	20%	62.73	62.73	31.36
0/ 840	17.37	17.54	10.00	175.40	40%	40%	20%	70.16	70.16	35.08
0/ 850	17.03	17.20	10.00	172.00	40%	40%	20%	68.80	68.80	34.40
0/ 860	16.69	16.86	10.00	168.60	40%	40%	20%	67.44	67.44	33.72
0/ 870	16.35	16.52	10.00	165.20	40%	40%	20%	66.08	66.08	33.04
0/ 880	16.01	16.18	10.00	161.80	40%	40%	20%	64.72	64.72	32.36
0/ 890	15.67	15.84	10.00	158.40	40%	40%	20%	63.36	63.36	31.68
0/ 900	15.33	15.50	10.00	155.00	40%	40%	20%	62.00	62.00	31.00
0/ 910	14.99	15.16	10.00	151.60	40%	40%	20%	60.64	60.64	30.32
0/ 920	14.65	14.82	10.00	148.20	40%	40%	20%	59.28	59.28	29.64
0/ 930	14.31	14.48	10.00	144.80	40%	40%	20%	57.92	57.92	28.96
0/ 940	13.97	14.14	10.00	141.40	0%	0%	100%	0.00	0.00	141.40
0/ 950	18.85	16.41	10.00	164.10	0%	0%	100%	0.00	0.00	164.10
0/ 960	18.51	18.68	10.00	186.80	0%	0%	100%	0.00	0.00	186.80
0/ 970	18.17	18.34	10.00	183.40	0%	0%	100%	0.00	0.00	183.40
0/ 980	17.83	18.00	10.00	180.00	0%	0%	100%	0.00	0.00	180.00
0/ 990	17.49	17.66	10.00	176.60	0%	0%	100%	0.00	0.00	176.60
1/ 0	17.15	17.32	10.00	173.20	0%	0%	100%	0.00	0.00	173.20
1/ 10	16.81	16.98	10.00	169.80	0%	0%	100%	0.00	0.00	169.80
1/ 20	16.47	16.64	10.00	166.40	0%	0%	100%	0.00	0.00	166.40
1/ 30	16.13	16.30	10.00	163.00	0%	0%	100%	0.00	0.00	163.00
1/ 40	15.79	15.96	10.00	159.60	0%	0%	100%	0.00	0.00	159.60
1/ 50	15.45	15.62	10.00	156.20	0%	0%	100%	0.00	0.00	156.20
1/ 60	15.11	15.28	10.00	152.80	0%	0%	100%	0.00	0.00	152.80
1/ 70	14.77	14.94	10.00	149.40	50%	50%	0%	74.70	74.70	0.00
1/ 80	14.43	14.60	10.00	146.00	50%	50%	0%	73.00	73.00	0.00
1/ 90	14.09	14.26	10.00	142.60	50%	50%	0%	71.30	71.30	0.00
1/ 100	13.75	13.92	10.00	139.20	50%	50%	0%	69.60	69.60	0.00
1/ 110	13.41	13.58	10.00	135.80	50%	50%	0%	67.90	67.90	0.00
TOTAL				4508.32				991.73	991.73	2524.86

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

(70)

	X- Section area	Mean Area	Length	Quantity	Classifications			Quantity		
					PW	JW	BW	PW	JW	BW
110	13.41	0.00	0.00	0.00	50%	50%	0%	0.00	0.00	0.00
120	12.44	12.93	10.00	129.25	50%	50%	0%	64.63	64.63	0.00
130	12.30	12.37	10.00	123.70	50%	50%	0%	61.85	61.85	0.00
140	12.16	12.23	10.00	122.30	50%	50%	0%	61.15	61.15	0.00
150	12.02	12.09	10.00	120.90	0%	0%	100%	0.00	0.00	120.90
160	11.88	11.95	10.00	119.50	0%	0%	100%	0.00	0.00	119.50
170	11.74	11.81	10.00	118.10	0%	0%	100%	0.00	0.00	118.10
180	11.60	11.67	10.00	116.70	0%	0%	100%	0.00	0.00	116.70
190	11.46	11.53	10.00	115.30	0%	0%	100%	0.00	0.00	115.30
200	11.32	11.39	10.00	113.90	0%	0%	100%	0.00	0.00	113.90
210	11.18	11.25	10.00	112.50	0%	0%	100%	0.00	0.00	112.50
220	11.04	11.11	10.00	111.10	0%	0%	100%	0.00	0.00	111.10
230	10.90	10.97	10.00	109.70	0%	0%	100%	0.00	0.00	109.70
240	10.76	10.83	10.00	108.30	0%	0%	100%	0.00	0.00	108.30
250	22.40	16.58	10.00	165.80	0%	0%	100%	0.00	0.00	165.80
260	22.26	22.33	10.00	223.30	0%	0%	100%	0.00	0.00	223.30
270	22.12	22.19	10.00	221.90	0%	0%	100%	0.00	0.00	221.90
280	21.98	22.05	10.00	220.50	0%	0%	100%	0.00	0.00	220.50
290	21.84	21.91	10.00	219.10	40%	40%	20%	87.64	87.64	43.82
300	21.70	21.77	10.00	217.70	40%	40%	20%	87.08	87.08	43.54
310	21.56	21.63	10.00	216.30	40%	40%	20%	86.52	86.52	43.26
320	21.42	21.49	10.00	214.90	40%	40%	20%	85.96	85.96	42.98
330	21.28	21.35	10.00	213.50	40%	40%	20%	85.40	85.40	42.70
340	21.14	21.21	10.00	212.10	40%	40%	20%	84.84	84.84	42.42
350	21.00	21.07	10.00	210.70	40%	40%	20%	84.28	84.28	42.14
360	20.86	20.93	10.00	209.30	40%	40%	20%	83.72	83.72	41.86
370	20.72	20.79	10.00	207.90	40%	40%	20%	83.16	83.16	41.58
380	20.58	20.65	10.00	206.50	40%	40%	20%	82.60	82.60	41.30
390	20.44	20.51	10.00	205.10	0%	50%	50%	0.00	102.55	102.55
400	20.30	20.58	10.00	205.80	0%	50%	50%	0.00	102.90	102.90
TOTAL				4891.65				1038.83	1244.28	2608.55

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

(11)

RD.	X-Section area	Mean Area	Length	Quantity	Classifications			Quantity		
					PW	JW	BW	PW	JW	BW
1/ 400	20.30	0.00	0.00	0.00	50%	50%	0%	0.00	0.00	0.00
1/ 410	12.44	16.37	10.00	163.70	40%	40%	20%	65.48	65.48	32.74
1/ 420	12.30	12.37	10.00	123.70	40%	40%	20%	49.48	49.48	24.74
1/ 430	12.16	12.23	10.00	122.30	40%	40%	20%	48.92	48.92	24.46
1/ 440	12.02	12.09	10.00	120.90	40%	40%	20%	48.36	48.36	24.18
1/ 450	11.88	11.95	10.00	119.50	40%	40%	20%	47.80	47.80	23.90
1/ 460	11.74	11.81	10.00	118.10	40%	40%	20%	47.24	47.24	23.62
1/ 470	11.60	11.67	10.00	116.70	40%	40%	20%	46.68	46.68	23.34
1/ 480	11.46	11.53	10.00	115.30	40%	40%	20%	46.12	46.12	23.06
1/ 490	11.32	11.39	10.00	113.90	40%	40%	20%	45.56	45.56	22.78
1/ 500	11.18	11.25	10.00	112.50	40%	40%	20%	45.00	45.00	22.50
1/ 510	11.04	11.11	10.00	111.10	40%	40%	20%	44.44	44.44	22.22
1/ 520	10.90	10.97	10.00	109.70	50%	50%	0%	54.85	54.85	0.00
1/ 530	14.45	12.68	10.00	126.75	50%	50%	0%	63.38	63.38	0.00
1/ 540	14.31	14.38	10.00	143.80	50%	50%	0%	71.90	71.90	0.00
1/ 550	14.17	14.24	10.00	142.40	50%	50%	0%	71.20	71.20	0.00
1/ 560	14.03	14.10	10.00	141.00	50%	50%	0%	70.50	70.50	0.00
1/ 570	13.89	13.96	10.00	139.60	50%	50%	0%	69.80	69.80	0.00
1/ 580	13.75	13.82	10.00	138.20	50%	50%	0%	69.10	69.10	0.00
1/ 590	13.61	13.68	10.00	136.80	50%	50%	0%	68.40	68.40	0.00
1/ 600	13.47	13.54	10.00	135.40	50%	50%	0%	67.70	67.70	0.00
1/ 610	13.33	13.40	10.00	134.00	50%	50%	0%	67.00	67.00	0.00
1/ 620	13.19	13.26	10.00	132.60	50%	50%	0%	66.30	66.30	0.00
1/ 630	13.05	13.12	10.00	131.20	50%	50%	0%	65.60	65.60	0.00
1/ 640	12.91	12.98	10.00	129.80	50%	50%	0%	64.90	64.90	0.00
1/ 650	12.77	12.84	10.00	128.40	50%	50%	0%	64.20	64.20	0.00
1/ 660	12.63	12.70	10.00	127.00	50%	50%	0%	63.50	63.50	0.00
1/ 670	12.49	12.56	10.00	125.60	50%	50%	0%	62.80	62.80	0.00
1/ 680	12.35	12.42	10.00	124.20	50%	50%	0%	62.10	62.10	0.00
1/ 690	12.21	12.49	10.00	124.90	50%	50%	0%	62.45	62.45	0.00
TOTAL				3709.05				1720.76	1720.76	267.54

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

62

RD.	X-Section area	Mean Area	Length	Quantity	Clasifications			Quantity		
					PW	JW	BW	PW	JW	BW
1/ 690	12.21	0.00	0.00	0.00	50%	50%	0%	0.00	0.00	0.00
1/ 700	14.55	13.38	10.00	133.80	50%	50%	0%	66.90	66.90	0.00
1/ 710	14.41	14.48	10.00	144.80	50%	50%	0%	72.40	72.40	0.00
1/ 720	14.27	14.34	10.00	143.40	50%	50%	0%	71.70	71.70	0.00
1/ 730	14.13	14.20	10.00	142.00	50%	50%	0%	71.00	71.00	0.00
1/ 740	13.99	14.06	10.00	140.60	50%	50%	0%	70.30	70.30	0.00
1/ 750	13.85	13.92	10.00	139.20	50%	50%	0%	69.60	69.60	0.00
1/ 760	13.71	13.78	10.00	137.80	50%	50%	0%	68.90	68.90	0.00
1/ 770	13.57	13.64	10.00	136.40	50%	50%	0%	68.20	68.20	0.00
1/ 780	13.43	13.50	10.00	135.00	50%	50%	0%	67.50	67.50	0.00
1/ 790	13.29	13.36	10.00	133.60	50%	50%	0%	66.80	66.80	0.00
1/ 800	13.15	13.22	10.00	132.20	50%	50%	0%	66.10	66.10	0.00
1/ 810	18.56	15.86	10.00	158.55	50%	50%	0%	79.28	79.28	0.00
1/ 820	24.28	21.42	10.00	214.20	50%	50%	0%	107.10	107.10	0.00
1/ 830	24.14	24.21	10.00	242.10	50%	50%	0%	121.05	121.05	0.00
1/ 840	24.00	24.07	10.00	240.70	50%	50%	0%	120.35	120.35	0.00
1/ 850	23.86	23.93	10.00	239.30	50%	50%	0%	119.65	119.65	0.00
1/ 860	23.72	23.79	10.00	237.90	50%	50%	0%	118.95	118.95	0.00
1/ 870	23.58	23.65	10.00	236.50	50%	50%	0%	118.25	118.25	0.00
1/ 880	23.44	23.51	10.00	235.10	0%	0%	100%	0.00	0.00	235.10
1/ 890	23.30	23.37	10.00	233.70	0%	0%	100%	0.00	0.00	233.70
1/ 900	23.16	23.23	10.00	232.30	0%	0%	100%	0.00	0.00	232.30
1/ 912	23.02	23.09	12.00	277.08	0%	0%	100%	0.00	0.00	277.08
1/ 920	22.88	22.95	8.00	183.60	0%	0%	100%	0.00	0.00	183.60
1/ 930	23.01	22.95	8.00	183.56	0%	0%	100%	0.00	0.00	183.56
1/ 940	23.14	23.08	8.00	184.60	0%	0%	100%	0.00	0.00	184.60
1/ 950	23.27	23.21	8.00	185.64	0%	0%	100%	0.00	0.00	185.64
1/ 960	23.40	23.34	8.00	186.68	0%	0%	100%	0.00	0.00	186.68
1/ 970	23.53	23.47	8.00	187.72	0%	0%	100%	0.00	0.00	187.72
1/ 980	23.66	23.60	8.00	188.76	0%	0%	100%	0.00	0.00	188.76
1/ 990	23.79	23.73	8.00	189.80	0%	0%	100%	0.00	0.00	189.80
TOTAL				4066.23				1544.03	1544.03	978.18

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

63

RD.	X-Section area	Mean Area	Length	Quantity	Classifications			Quantity		
					PW	JW	BW	PW	JW	BW
1/ 990	0.00	0.00	0.00	0.00	0%	50%	50%	0.00	0.00	0.00
2/ 0	15.45	7.73	10.00	77.25	40%	40%	20%	30.90	30.90	15.45
2/ 10	15.80	15.63	10.00	156.25	40%	40%	20%	62.50	62.50	31.25
2/ 20	16.15	15.98	10.00	159.75	40%	40%	20%	63.90	63.90	31.95
2/ 30	13.35	14.75	10.00	147.50	40%	40%	20%	59.00	59.00	29.50
2/ 40	13.70	13.53	10.00	135.25	40%	40%	20%	54.10	54.10	27.05
2/ 50	14.05	13.88	10.00	138.75	40%	40%	20%	55.50	55.50	27.75
2/ 60	14.40	14.23	10.00	142.25	40%	40%	20%	56.90	56.90	28.45
2/ 70	14.75	14.58	10.00	145.75	40%	40%	20%	58.30	58.30	29.15
2/ 80	15.10	14.93	10.00	149.25	40%	40%	20%	59.70	59.70	29.85
2/ 90	15.45	15.28	10.00	152.75	50%	50%	0%	76.38	76.38	0.00
2/ 100	15.80	15.63	10.00	156.25	50%	50%	0%	78.13	78.13	0.00
2/ 110	16.15	15.98	10.00	159.75	40%	60%	0%	63.90	95.85	0.00
2/ 120	12.50	14.33	10.00	143.25	40%	60%	0%	57.30	85.95	0.00
2/ 130	12.85	12.68	10.00	126.75	40%	60%	0%	50.70	76.05	0.00
2/ 140	13.20	13.03	10.00	130.25	40%	60%	0%	52.10	78.15	0.00
2/ 150	13.55	13.38	10.00	133.75	40%	60%	0%	53.50	80.25	0.00
2/ 160	13.90	13.73	10.00	137.25	40%	60%	0%	54.90	82.35	0.00
2/ 170	14.25	14.08	10.00	140.75	40%	40%	20%	56.30	56.30	28.15
2/ 180	14.60	14.43	10.00	144.25	40%	40%	20%	57.70	57.70	28.85
TOTAL				2677.00				1101.70	1267.90	307.40

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

64

RD.	X-Section area	Mean Area	Length	Quantity	Classifications			Quantity		
					PW	JW	BW	PW	JW	BW
2/ 180	14.60	0.00	0.00	0.00	40%	40%	20%	0.00	0.00	0.00
2/ 190	13.45	14.03	10.00	140.25	40%	40%	20%	56.10	56.10	28.05
2/ 200	13.50	13.48	10.00	134.75	0%	0%	100%	0.00	0.00	134.75
2/ 210	13.55	13.53	10.00	135.25	0%	0%	100%	0.00	0.00	135.25
2/ 220	13.60	13.58	10.00	135.75	0%	0%	100%	0.00	0.00	135.75
2/ 230	13.65	13.63	10.00	136.25	40%	40%	20%	54.50	54.50	27.25
2/ 240	13.70	13.68	10.00	136.75	40%	40%	20%	54.70	54.70	27.35
2/ 250	13.75	13.73	10.00	137.25	40%	40%	20%	54.90	54.90	27.45
2/ 260	13.80	13.78	10.00	137.75	40%	40%	20%	55.10	55.10	27.55
2/ 270	16.77	15.29	10.00	152.85	40%	40%	20%	61.14	61.14	30.57
2/ 280	16.82	16.80	10.00	167.95	40%	40%	20%	67.18	67.18	33.59
2/ 290	16.87	16.85	10.00	168.45	40%	40%	20%	67.38	67.38	33.69
2/ 300	16.92	16.90	10.00	168.95	40%	40%	20%	67.58	67.58	33.79
2/ 310	16.97	16.95	10.00	169.45	40%	40%	20%	67.78	67.78	33.89
2/ 320	14.33	15.65	10.00	156.50	40%	40%	20%	62.60	62.60	31.30
2/ 330	14.38	14.36	10.00	143.55	50%	50%	0%	71.78	71.78	0.00
2/ 340	14.43	14.41	10.00	144.05	50%	50%	0%	72.03	72.03	0.00
2/ 350	14.48	14.46	10.00	144.55	50%	50%	0%	72.28	72.28	0.00
2/ 360	14.53	14.51	10.00	145.05	50%	50%	0%	72.53	72.53	0.00
2/ 370	15.66	15.10	10.00	150.95	0%	0%	100%	0.00	0.00	150.95
2/ 380	15.71	15.69	10.00	156.85	0%	0%	100%	0.00	0.00	156.85
2/ 390	15.76	15.74	10.00	157.35	0%	0%	100%	0.00	0.00	157.35
2/ 400	15.81	15.79	10.00	157.85	0%	0%	100%	0.00	0.00	157.85
2/ 410	15.86	15.84	10.00	158.35	0%	0%	100%	0.00	0.00	158.35
2/ 420	15.91	15.89	10.00	158.85	0%	0%	100%	0.00	0.00	158.85
2/ 430	15.96	15.94	10.00	159.35	0%	0%	100%	0.00	0.00	159.35
2/ 440	15.96	15.94	10.00	159.85	0%	0%	100%	0.00	0.00	159.85
2/ 450	16.01	15.99	10.00	159.85	0%	0%	100%	0.00	0.00	159.85
2/ 460	16.06	16.04	10.00	160.35	0%	0%	100%	0.00	0.00	160.35
2/ 460	16.11	16.09	10.00	160.85	0%	0%	100%	0.00	0.00	160.85
TOTAL				4235.95				957.56	957.56	2320.83

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

65

RD.	X-Section area	Mean Area	Length	Quantity	Classifications			Quantity		
					PW	JW	BW	PW	JW	BW
2/ 460	16.11	0.00	0.00	0.00	0%	0%	100%	0.00	0.00	0.00
2/ 470	16.50	16.31	10.00	163.05	0%	0%	100%	0.00	0.00	163.05
2/ 480	16.89	16.70	10.00	166.95	0%	0%	100%	0.00	0.00	166.95
2/ 490	17.28	17.09	10.00	170.85	0%	0%	100%	0.00	0.00	170.85
2/ 500	17.67	17.48	10.00	174.75	0%	0%	100%	0.00	0.00	174.75
2/ 510	15.44	16.56	10.00	165.55	0%	0%	100%	0.00	0.00	165.55
2/ 520	15.83	15.64	10.00	156.35	0%	0%	100%	0.00	0.00	156.35
2/ 530	16.22	16.03	10.00	160.25	0%	0%	100%	0.00	0.00	160.25
2/ 540	16.61	16.42	10.00	164.15	0%	0%	100%	0.00	0.00	164.15
2/ 550	17.00	16.81	10.00	168.05	0%	0%	100%	0.00	0.00	168.05
2/ 560	17.39	17.20	10.00	171.95	0%	0%	100%	0.00	0.00	171.95
2/ 570	19.77	18.58	10.00	185.80	0%	0%	100%	0.00	0.00	185.80
2/ 580	20.16	19.97	10.00	199.65	40%	40%	20%	79.86	79.86	39.93
2/ 590	20.55	20.36	10.00	203.55	40%	40%	20%	81.42	81.42	40.71
2/ 600	20.94	20.75	10.00	207.45	40%	40%	20%	82.98	82.98	41.49
2/ 610	21.33	21.14	10.00	211.35	40%	40%	20%	84.54	84.54	42.27
2/ 620	21.72	21.53	10.00	215.25	40%	40%	20%	86.10	86.10	43.05
2/ 630	21.55	21.64	10.00	216.35	40%	40%	20%	86.54	86.54	43.27
2/ 640	21.94	21.75	10.00	217.45	40%	40%	20%	86.98	86.98	43.49
2/ 650	22.33	22.14	10.00	221.35	50%	50%	0%	110.68	110.68	0.00
2/ 660	22.72	22.53	10.00	225.25	50%	50%	0%	112.63	112.63	0.00
2/ 670	16.89	19.81	10.00	198.05	50%	50%	0%	99.03	99.03	0.00
2/ 680	17.28	17.09	10.00	170.85	50%	50%	0%	85.43	85.43	0.00
2/ 690	17.67	17.48	10.00	174.75	50%	50%	0%	87.38	87.38	0.00
2/ 700	18.06	17.87	10.00	178.65	50%	50%	0%	89.33	89.33	0.00
2/ 710	18.45	18.26	10.00	182.55	50%	50%	0%	91.28	91.28	0.00
2/ 720	18.84	18.65	10.00	186.45	50%	50%	0%	93.23	93.23	0.00
2/ 730	19.23	19.04	10.00	190.35	50%	50%	0%	95.18	95.18	0.00
2/ 740	19.62	19.43	10.00	194.25	50%	50%	0%	97.13	97.13	0.00
TOTAL				5241.25				1549.67	1549.67	2141.91

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

66

RD.	X-Section area	Mean Area	Length	Quantity	Classifications			Quantity		
					PW	JW	BW	PW	JW	BW
1/ 740	19.62	9.81	0.00	192.47	50%	50%	0%	96.24	96.24	0.00
1/ 750	19.28	19.45	10.00	194.50	40%	40%	20%	77.80	77.80	38.90
2/ 760	18.94	19.11	10.00	191.10	40%	40%	20%	76.44	76.44	38.22
2/ 770	18.60	18.77	10.00	187.70	40%	40%	20%	75.08	75.08	37.54
2/ 780	18.26	18.43	10.00	184.30	40%	40%	20%	73.72	73.72	36.86
2/ 790	17.92	18.09	10.00	180.90	40%	40%	20%	72.36	72.36	36.18
2/ 800	17.58	17.75	10.00	177.50	40%	40%	20%	71.00	71.00	35.50
2/ 810	17.24	17.41	10.00	174.10	40%	40%	20%	69.64	69.64	34.82
2/ 820	16.90	17.07	10.00	170.70	40%	40%	20%	68.28	68.28	34.14
2/ 830	16.56	16.73	10.00	167.30	40%	40%	20%	66.92	66.92	33.46
2/ 840	16.22	16.39	10.00	163.90	40%	40%	20%	65.56	65.56	32.78
2/ 850	15.88	16.05	10.00	160.50	0%	0%	100%	0.00	0.00	160.50
2/ 860	15.54	15.71	10.00	157.10	0%	0%	100%	0.00	0.00	157.10
2/ 870	18.85	17.20	10.00	171.95	0%	0%	100%	0.00	0.00	171.95
2/ 880	18.51	18.68	10.00	186.80	0%	0%	100%	0.00	0.00	186.80
2/ 890	18.17	18.34	10.00	183.40	0%	0%	100%	0.00	0.00	183.40
2/ 900	17.83	18.00	10.00	180.00	0%	0%	100%	0.00	0.00	180.00
2/ 910	22.77	20.30	10.00	203.00	0%	0%	100%	0.00	0.00	203.00
2/ 920	22.43	22.60	10.00	226.00	0%	0%	100%	0.00	0.00	226.00
2/ 930	22.09	22.26	10.00	222.60	0%	0%	100%	0.00	0.00	222.60
2/ 940	21.75	21.92	10.00	219.20	0%	0%	100%	0.00	0.00	219.20
2/ 950	21.41	21.58	10.00	215.80	0%	0%	100%	0.00	0.00	215.80
2/ 960	21.07	21.24	10.00	212.40	0%	0%	100%	0.00	0.00	212.40
2/ 970	20.73	20.90	10.00	209.00	0%	0%	100%	0.00	0.00	209.00
2/ 980	20.39	20.56	10.00	205.60	50%	50%	0%	102.80	102.80	0.00
2/ 990	20.05	20.22	10.00	202.20	50%	50%	0%	101.10	101.10	0.00
3/ 0	19.71	19.88	10.00	198.80	50%	50%	0%	99.40	99.40	0.00
3/ 10	19.37	19.54	10.00	195.40	50%	50%	0%	97.70	97.70	0.00
3/ 20	19.03	19.20	10.00	192.00	50%	50%	0%	96.00	96.00	0.00
TOTAL				5334.22				1214.04	1214.04	2906.15

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

67

RD.	X-Section area	Mean Area	Length	Quantity	Classifications			Quantity		
					PW	JW	BW	PW	JW	BW
3/ 20	19.03	0.00	0.00	0.00	50%	50%	0%	0.00	0.00	0.00
3/ 30	12.44	15.74	10.00	157.35	50%	50%	0%	78.68	78.68	0.00
3/ 40	12.30	12.37	10.00	123.70	50%	50%	0%	61.85	61.85	0.00
3/ 50	12.16	12.23	10.00	122.30	50%	50%	0%	61.15	61.15	0.00
3/ 60	12.02	12.09	10.00	120.90	50%	50%	0%	60.45	60.45	0.00
3/ 70	11.88	11.95	10.00	119.50	50%	50%	0%	59.75	59.75	0.00
3/ 80	11.74	11.81	10.00	118.10	50%	50%	0%	59.05	59.05	0.00
3/ 90	11.60	11.67	10.00	116.70	50%	50%	0%	58.35	58.35	0.00
3/ 100	11.46	11.53	10.00	115.30	50%	50%	0%	57.65	57.65	0.00
3/ 110	11.32	11.39	10.00	113.90	50%	50%	0%	56.95	56.95	0.00
3/ 120	11.18	11.25	10.00	112.50	50%	50%	0%	56.25	56.25	0.00
3/ 130	11.04	11.11	10.00	111.10	50%	50%	0%	55.55	55.55	0.00
3/ 140	10.90	10.97	10.00	109.70	40%	40%	20%	43.88	43.88	21.94
3/ 150	10.76	10.83	10.00	108.30	40%	40%	20%	43.32	43.32	21.66
3/ 160	22.40	16.58	10.00	165.80	40%	40%	20%	66.32	66.32	33.16
3/ 170	22.26	22.33	10.00	223.30	40%	40%	20%	89.32	89.32	44.66
3/ 180	22.12	22.19	10.00	221.90	50%	50%	0%	110.95	110.95	0.00
3/ 190	22.05	22.05	10.00	220.50	50%	50%	0%	110.25	110.25	0.00
3/ 200	21.98	21.91	10.00	219.10	50%	50%	0%	109.55	109.55	0.00
3/ 210	21.84	21.77	10.00	217.70	50%	50%	0%	108.85	108.85	0.00
3/ 220	21.70	21.77	10.00	217.70	50%	50%	0%	108.15	108.15	0.00
3/ 230	21.56	21.63	10.00	216.30	50%	50%	0%	107.45	107.45	0.00
3/ 240	21.42	21.49	10.00	214.90	50%	50%	0%	106.75	106.75	0.00
3/ 250	21.28	21.35	10.00	213.50	50%	50%	0%	106.05	106.05	0.00
3/ 260	21.14	21.21	10.00	212.10	50%	50%	0%	105.35	105.35	0.00
3/ 270	21.00	21.07	10.00	210.70	50%	50%	0%	104.65	104.65	0.00
3/ 280	20.86	20.93	10.00	209.30	50%	50%	0%	103.95	103.95	0.00
3/ 290	20.72	20.79	10.00	207.90	50%	50%	0%	103.25	103.25	0.00
3/ 300	20.58	20.65	10.00	206.50	50%	50%	0%	102.55	102.55	0.00
3/ 310	20.44	20.51	10.00	205.10	50%	50%	0%	102.90	102.90	0.00
3/ 310	20.30	20.58	10.00	205.80	50%	50%	0%	102.90	102.90	0.00
TOTAL				4919.75				2399.17	2399.17	121.42

Construction of Motorable Link road to village Saluin Km. 0/0 to 3/338

68

RD.	X- Section area	Mean Area	Length	Quantity	Classifications			Quantity		
					PW	JW	BW	PW	JW	BW
3/ 310	20.30	0.00	0.00	0.00	50%	50%	0%	0.00	0.00	0.00
3/ 320	28.50	24.40	10.00	244.00	50%	50%	0%	122.00	122.00	0.00
3/ 330	26.44	27.47	10.00	274.70	50%	50%	0%	137.35	137.35	0.00
3/ 338	29.78	28.11	8.00	224.88	50%	50%	0%	112.44	112.44	0.00
TOTAL				743.58				371.79	371.79	0.00


 Assistant Engineer,
 Koti Sub Division,
 HP.PWD. Koti

MUCK MANAGEMENT (DUMPING SITES)
DETAIL OF SHOWING THE CAPACITY OF MUCK WILL BE ADJUSTED

Name of work :- Construction of Link road from Gatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338

S.No	RD/ Km.	Name of Dunping Place	Forest area under dumping (In Hactares)	X- section area	Length	Quantity
1	0/035	Dumping site - I	122.00x8.50=1037.00 Sqm.or 0.104 ha	108.75	122.00	13268.00
2	0/995	Dumping site - II	116.00x8.25=957.00 Sqm. or 0.096 ha	106.45	116.00	12348.00
3	2/035	Dumping site - III	107.00x8.24=881.68 Sqm. or 0.088 ha	102.45	107.00	10962.00
4	3/010	Dumping site - IV	90.00x8.05=724.50.00 Sqm. or 0.072 ha	102.45	90.00	9221.00
					Total	45799.00


Assistant Engineer,
Koti Sub Division,
HP.PWD. Koti


Executive Engineer,
Tissa Division,
HP.PWD., Tissa

PURPOSE WISE BREAK UP OF FOREST / NON FOREST AND DUMPING SITE

Name of work :- Construction of Link road from Gatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338

S.No	Component	Forest area required in Sqm or Hect.	Non Forest area required in Sqm or Hect.	Total area required
(A) LAND REQUIRED FOR ROAD CONSTRUCTION :-				
1	Road	2535x6=15210.00 Sqm.=1.5210 Hect	803x6=4818.00 Sqm.=0.4818 Hect	3338x6=20028.00 Sqm.=2.0028 Hect
(B) LAND REQUIRED FOR DUMPING SITES FOR DISPOSAL OF MUCK :-				
2	Dumping site -I	122.00x8.50=1037.00 Sqm.or 0.104 ha	....	3600.18 Sqm= or 0.3600 Hect.
	Dumping site -II	116.00x8.25=957.00 Sqm. or 0.096 ha		
	Dumping site -II	107.00x8.24=881.68 Sqm. or 0.088 ha		
	Dumping site -IV	90.00x8.05=724.50.00 Sqm. or 0.072 ha		
	Total (B)	3600.18 Sqm= or 0.3600 Hect.		
G.Total (A+B)		1.8810 Hect.	2.3628 Hect.


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ANNEXURE -3

Name of work :- Construction of Link road from Gatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338

S.No	Descriptions	Unit	Qty.	Rate	Amount
A	Engineering Measures				
	Wire crate & Retaining walls	As per detail attached			2123366.00
B	Survey, Demaracation & Fencing				
1	Survey & Demarcation of plantation area	Ha.	1.8810	101	190.00
2	Preparation/purchase of RCC Fence Post	Nos.	94	250	23500.00
3	Carriage of fence post upto 165 cm long over a distance of 2.00 km.uphill/downhill	Km/ Nos.	94	33.50	6298.00
4	Preparation of digging holes of 20x30x50cm size	Nos.	94	9.06	852.00
5	Fixing of RCC Fence post i/c strutting	Nos.	94	7.16	673.00
6	Carriage of barbed wire over a distance of 2.00 km.uphill/downhill	Km/ Qtl	1.41	73.65	208.00
7	Streching & fixing of Barbed wire in 4 Stands	Rmt.	1128.60	4.80	5417.00
8	Interlacing of thorny brushes along the Fence	Rmt.	282.15	4.09	1154.00
9	Cost of warbed wire	Qtl.	1.8810	6510	12245.00
			Total (B)		50537.00
C	Planting:				
1	Brush cutting in strips (3mx3m)	Ha.	1.8810	1192.80	2244.00
2	Digging of pits 45x45x45cm.	Nos.	2069.10	9.54	19739.00
3	Filling of pits 45x45x45cm.	Nos.	2069.10	2.72	5628.00
4	Carriage of plant in P. Bags over a distance of 2.00 km.uphill/downhill	Km/ Nos.	2069.10	1.90	7862.58
5	Planting of plants Raised in P/ Bags	Nos.	2069.10	2.18	4511.00
6	Construction of Inspeotyion Path	Rmt.	188.10	11.00	2069.00
7	Cost of Sign Baords, Carriage & Fixing	Nos.	56.00	15.00	840.00
			Total (C)		42893.58
			Total (B+C)		93430.58
					4671.53
D	Add 5% contingencies Chagres (B+C)				35282.20
E	Maintenance of Ist year of 10th year				
			Total (A+B+C+D+E)		2256750.31

(Signature)
Assistant Engineer,
Koti Sub Division,
HP.PWD., Koti

(Signature)
Executive Engineer,
Tissa Division.
HP.PWD. Tissa

FIRST YEAR MAINTENANCE (30% BEATING UP)

Name of work :- Construction of Link road from Gatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338

S.No	Descriptions	Unit	Qty.	Rate	Amount
1	Re-digging of pits 45x45x45cm.	Nos	621	4.77	2962.00
2	Filling of pits 45x45x45cm.	Nos	621	2.72	1689.00
3	Planting of Plants raised in P/Bags	Nos	621	2.18	1354.00
4	Carriage of plant in P. Bags over a distance of 2.00 km.uphill/downhill	KM/No.	621	1.90	2359.80
5	Repair of fence post	Rmt.	112.86	1.80	203.00
				Total	8567.80


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SECOND YEAR MAINTENANCE (20% BEATING UP)

Name of work :- Construction of Link road from Gatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338

S.No	Descriptions	Unit	Qty.	Rate	Amount
1	Re-digging of pits 45x45x45cm.	Nos	414	4.77	1975.00
2	Filling of pits 45x45x45cm.	Nos	414	2.72	1126.00
3	Planting of Plants raised in P/Bags	Nos	414	2.18	903.00
4	Carriage of plant in P. Bags over a distance of 2.00 km.uphill/downhill	KM/No.	414	1.90	1573.20
5	Repair of fence post	Rmt.	112.86	1.80	203.00
				Total	5780.20


Assistant Engineer,
Koti Sub Division,
HP.PWD., Koti

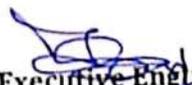

Executive Engineer,
Tissa Division.
HP.PWD.Tissa

THIRD TO TENTH YEAR MAINTENANCE (10% BEATING UP)

Name of work :- Construction of Link road from Gatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338

S.No	Descriptions	Unit	Qty.	Rate	Amount
1	Re-digging of pits 45x45x45cm.	Nos	207	4.77	987.00
2	Filling of pits 45x45x45cm.	Nos	207	2.72	563.00
3	Planting of Plants raised in P/Bags	Nos	207	2.18	451.00
4	Carriage of plant in P. Bags over a distance of 2.00 km.uphill/downhill	KM/No.	207	1.90	786.60
5	Repair of fence post	Rmt.	112.86	1.80	203.00
				Total	2990.60


Assistant Engineer,
Koti Sub Division,
HP.PWD., Koti


Executive Engineer,
Tissa Division.
HP.PWD.Tissa

"ABSTRACT OF COST"

e of work :- Construction of Link road from Gatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338

(SH:- CONSTRUCTION OF WIRE CRATES)

Item	Qty	Rate	Unit	Amount
Earthwork in excavation for structures as per drawing and technical specifications clauses 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable materials Ordinary soil Upto 3 m depth	1099.13	128.15	Per cubic metre	140853.00
Providing and laying of boulder apron laid in wire crates with 4 mm dia GI wire conforming to IS:280 and IS:4826 in 100 mm x 100 mm mesh (woven diagonally) including 10 per cent extra for laps and joints laid with stone boulders weighing not less than 25 kg each as per drawing and technical specifications Clause 1301	1359.38	1458.40	Per cubic metre	1982513.00
Total				2123366.00


Assistant Engineer,
Koti Sub Division,
HP.PWD. Koti


Executive Engineer,
Tissa Division,
HP.PWD. Tissa

DETAIL OF MEASUREMENT

Name of work :- Construction of Link road from Gatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338

(SH:- CONSTRUCTION OF WIRE CRATES)

S.No	Item	Dumping site	LxBxH	Quantity
1	Earthwork in excavation for structures as per drawing and technical specifications clauses 305.1 including setting out, construction of shoring and bracing, removal of stumps and other deleterious material and disposal upto a lead of 50 m, dressing of sides and bottom and backfilling in trenches with excavated suitable materials Ordinary soil Upto 3 m depth	DS-I	200x1.25x0.20	160.13
		DS-II	270x1.25x0.15	348.00
		DS-III	270x1.25x0.15	321.00
		DS-IV	270x1.25x0.15	270.00
			Total	1099.13
2	Providing and laying of boulder apron laid in wire crates with 4 mm dia GI wire conforming to IS:280 and IS:4826 in 100 mm x 100 mm mesh (woven diagonally) including 10 per cent extra for laps and joints laid with stone boulders weighing not less than 25 kg each as per drawing and technical specifications Clause 1301	DS-I	2x200x1.25x1.25	381.25
		DS-II	2x270x1.25x1.25	362.50
		DS-III	2x270x1.25x1.25	334.38
		DS-IV	2x270x1.25x1.25	281.25
			Total	1359.38


Assistant Engineer,
Koti Sub Division,
HP.PWD., Koti

PROFORMA-V

STATEMENT SHOWING THE DETAILS OF PLACES FOR DISPOSAL OF MUCK / DEBRIS OF ROAD/ CANAL/
RAILWAY LINE TO BE CONSTRUCTED IN CHAMBA DISTRICT OF HP STATE

Name of work :- Construction of motorable link road to From Ghatti Ghar (Pukhri) to village
Saluin Km. 0/0 to 3/338

S.No	Name of dumping place	Location of dumping place i.e. Village & Khasra No.	Slope of dumping place	Length breadth and area of dumping place (Sqm)	Quantity of Muck debris to be dumped (Cum)	Height of dumping expected in mtrs.	Remark
1	2	3	4	5	6	7	8
1	DS-I	650/2	1:3	122.00x8.50=1037.00 Sqm.	13268.00	12.795	
2	DS-II	940/1	1:3	116.00x8.25=957.00 Sqm	12348.00	12.903	
3	DS-III	1896/1172/2	1:3	107.00x8.24=881.68 Sqm	10962.00	12.433	
4	DS-IV	1917/1715/2	1:3	90.00x8.05=724.50.00 Sqm.	9221.00	12.727	

Place : Tissa

Date :


Assistant Engineer,
Koti Sub Division,
HP:PWD Koti


Executive Engineer.
Tissa Division,
HP:PWD Tissa

RD. WISE / METRE WISE / SQUARE METRE AND HECTRAES WISE WISE AREA OF LAND.

Name of work :- Construction of motorable link road From Ghatti Ghar (Pukhri) to village Saluin Km. 0/0 to 3/338 in Tehsil & District Chamba . (HP).

S.No	RD From	RD To	Distance in Metres.			Width of right way	Area of the road (sqm)		
			In forest land	In Private Land	Total		In forest land	In Private Land	Total (in Ha)
1	2	3	4	5	6	7	9	10	11
1	0/0	1/258	1258	----	1258	5/7m	7548	0	0.7548
2	1/258	1/315	-----	57	57	5/7m	0	342	0.0342
3	1/315	1/302	287	----	287	5/7m	1722	0	0.1722
4	1/302	1/912	.....	310	310	5/7m	0	1860	0.1860
5	1/912	2/394	482	----	482	5/7m	2892	0	0.2892
6	2/394	2/592	-----	198	198	5/7m	0	1188	0.1188
7	2/592	2/684	92	----	92	5/7m	552	0	0.0552
8	2/684	2/799	.....	115	115	5/7m	0	690	0.0690
9	2/799	2/945	146	.....	146	5/7m	876	0	0.0876
10	2/945	3/068	....	123	123	5/7m	0	738	0.0738
11	3/068	3/338	270	....	270	5/7m	1620	0	0.1620
TOTAL			2535	803	3338		15210	4818	2.0028 Ha
DUMPING SITE FOR DISPOSAL OF MUCK									
1	Total area for dumping site for disposal of muck								0.3600
G.Total									2.3628

Name of the village and forest near by.	Muck debris to be produced total.	Muck debris to be used locally.	Muck debris to be dumped.	Remarks.
12	13	14	15	16
	18222.70 Cum with swell factor 113936.29 Cum.	48879.53 Cum.	32586.36 Cum.	Detail attached at page____

Place : Tissa
Date.....


Assistant Engineer,
Koti Sub Division,
HP:PWD Koti


Executive Engineer.
Tissa Division,
HP:PWD Tissa



MUCK DUMPING DETAIL

Name of work :- Construction of motorable link road From Ghatti Ghar (Pukhri) to village Saluin m. 0/0 to 3/338 in Tehsil & District Chamba . (HP).

Name of component	Location of Dumping	Slope of dumping place in degree	Qty. of muck generated (Cu. Mtr)	Qty. of muck with swell factor (Cu. M)	Qty. muck to used (Cu. Mtr)	Qty. of muck disposed (Cu. Mtr.)	Height of dumping expected in mtr.
Road	Dumping Site I	10°-15°	54501.15 Cum.	113936.29 Cum	68361.78 Cum.	45574.52 Cum	12.795
	Dumping Site II	10°-15°					12.903
	Dumping Site III	10°-15°					12.433
	Dumping Site IV	10°-15°					12.727

Sr. No	Description	Khasra no.	Area in Sqm	Height of dumping expected in mtr.	Capacity of muck to be dumped (in Cum)
1.	Dumping Place -DS- I	650/2	1037.00 Sqm.	12.795	13268.00
2.	Dumping Place -DS- II	940/1	957.00 Sqm	12.903	12348.00
3.	Dumping Place -DS- III	1896/1172/2	881.68 Sqm	12.433	10962.00
4.	Dumping Place- IV	1917/1715/2	724.50 Sqm.	12.727	9221.00


Assistant Engineer,
Koti Sub Division,
HP:PWD Koti


Executive Engineer.
Tissa Division,
HP:PWD Tissa

NAME OF WORK: C/O LINK ROAD FROM GATTI GHAR (PUKHRI) TO VILLAGE SALUIN, CHAMBA, H.P.

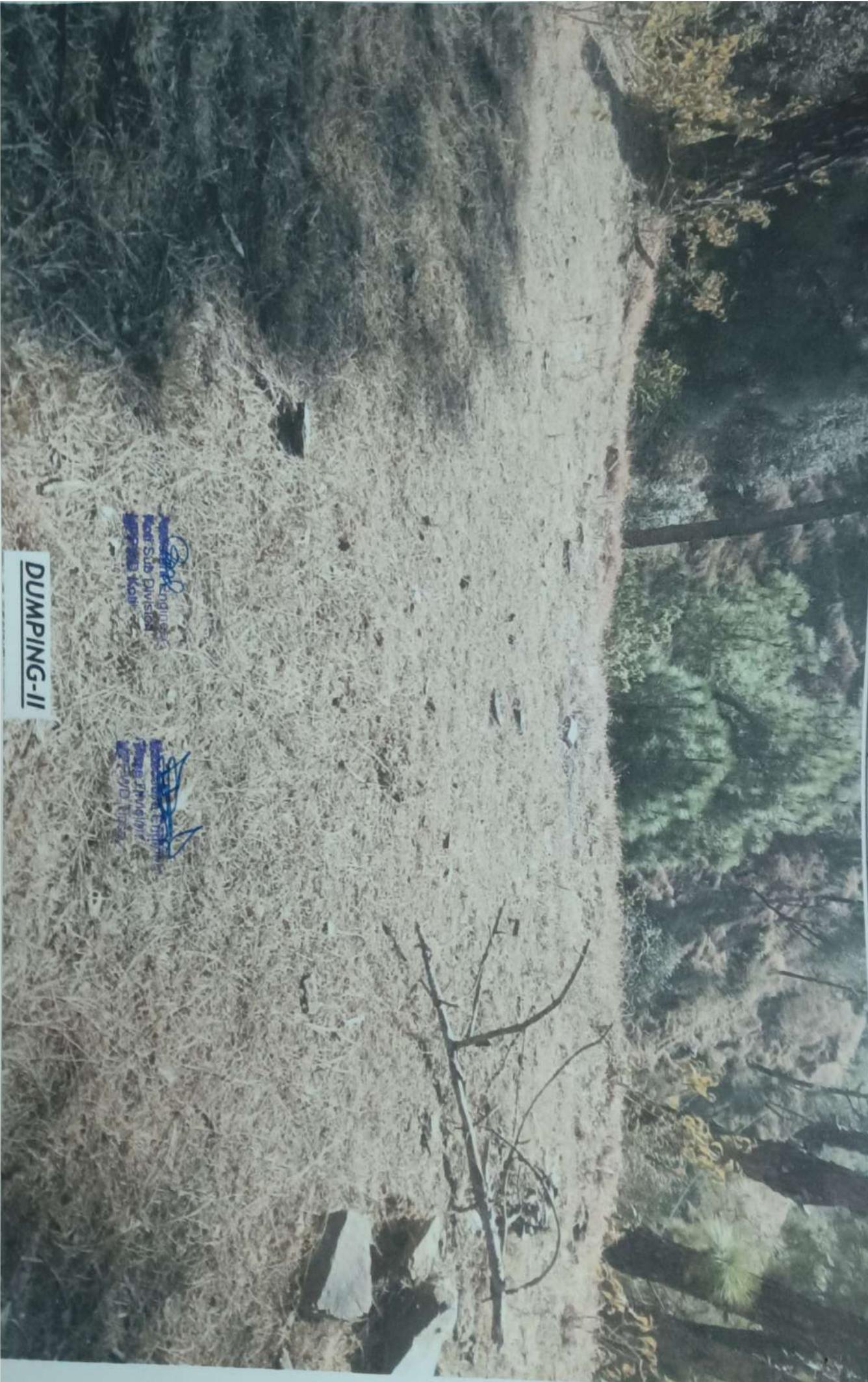


DUMPING-I

Assistant Engineer
Koti Sub Division
HPPWD Koti

Executive Engineer
Tissa Division
HPPWD Tissa

NAME OF WORK: C/O LINK ROAD FROM GATTI GHAR (PUKHRI) TO VILLAGE SALUIN, CHAMBA, H.P.



Chief Engineer
Road Sub-Division
Chamba, H.P.

Assistant Engineer
Road Sub-Division
Chamba, H.P.

DUMPING-II

NAME OF WORK: C/O LINK ROAD FROM GATTI GHAR (PUKHRI) TO VILLAGE SALUIN, CHAMBA, H.P.


Engineer
Kali Sait Division
HPWD, KASH


Inspector
Kali Sait Division
HPWD, KASH

DUMPING-III

NAME OF WORK: C/O LINK ROAD FROM GATTI GHAR (PUKHRI) TO VILLAGE SALUIN, CHAMBA, H.P.


Assistant Engineer
Road Sub-Division
HPPWD Kotli


Executive Engineer
Road Division
HPPWD Tissa

DUMPING-IV