



No. 17870 /OMC/F&E/2017  
19<sup>th</sup> December, 2017

To

**The Divisional Forest Officer  
Keonjhar Forest Division,  
Dist-Keonjhar.**

Sub: Proposal for permission of 7.94 ha of forest land within the total mining lease area of 265.29 ha. for undertaking exploratory drilling of 59 nos. of boreholes in Dalki Iron & Manganese Ore Mining Lease of M/s OMC Ltd in Barbil Tahasil under the jurisdiction of Keonjhar Forest Division of Keonjhar District, Odisha. (Proposal No.FP/OR/ MRL/16/2014, State Sl.No.OR-01/2015 dated 31.12.2014).

Ref: Memo No. 21952 Dt.11.10.2017 of Addl. PCCF, Forest Diversion & Nodal Officer, F.C Act.

Sir,

Addl. P.C.C.F, Forest Diversion & Nodal Officer, F.C Act, while scrutinizing the diversion proposal has pointed out some discrepancies vide Memo under reference. The point wise compliance on the observations is furnished as below:

Non-forest Government land for Compensatory Afforestation over 6.76 ha. has been allotted by Collector Kalahandi. Compensatory Afforestation Scheme over 6.76 ha. has been prepared by the D.F.O, Kalahandi (South) Division and submitted to Addl. PCCF, Forest Diversion & Nodal Officer, F.C Act, for technical approval.

The non-forest land selected for Compensatory Afforestation will be mutated in favour of Forest Department after Stage-I clearance is accorded by MoEF&CC.

Copy of the land schedule of the non-forest land duly signed by the Tahasildar, letter by Collector Kalahandi for allotment of non-forest land for Compensatory Afforestation, non-encroachment and non-encumbrance certificate by Tahasildar, Thuamulrampur, Site suitability certificate by DFO, Kalahandi(S), shape file and KML file of non-forest land in form of CD are enclosed herewith along with a copy of Compensatory Afforestation scheme.

It is requested to kindly forward the above compliance to higher quarter for taking necessary action.

Yours faithfully

  
Executive Director (F&E)

**The Odisha Mining Corporation Ltd.**

(A Gold Category State PSU)

Registered Office : OMC House, Bhubaneswar-751001, India  
Tel: 0674-2377400/2377401, Fax: 0674-2396889, 2391629, www.omcltd.in  
CIN : U13100OR1956SGC000313

Memo No. /OMC/F&E/2017, dtd.19.12.2017

Copy forwarded to the Special Secretary to Government of Odisha, F&E Department, Bhubaneswar for kind information and necessary action.

Copy forwarded to the Addl. Principal Chief Conservator of Forests, Forest Diversion and Nodal Officer, FC Act, O/o the Principal Chief Conservator of Forests, Odisha, Bhubaneswar for kind information and necessary action.

Copy forwarded to the Regional Chief Conservator of Forest, Rourkela Circle for kind information and necessary action.

Executive Director (F&E)

Memo No. /OMC/F&E/2017, dtd.19.12.2017

Copy forwarded to the Regional Manager, Barbil, OMC Ltd, for information. He is requested to co-ordinate with the DFO, Keonjhar to forward the compliance to the higher quarter at an early date.

Executive Director (F&E)

**SCHEME FOR  
COMPENSATORY AFFORESTATION  
  
FOR  
  
DIVERSION OF FOREST LAND FOR NON-FOREST PURPOSE  
IN EXPLORATION OF MINERALS IN DALKI IRON &  
MANGANESE ORE MINES OF  
ODISHA MINING CORPORATION LTD.**

**Over an area of 6.760 hectares situated  
in Keonjhar Forest Division**

**Detailed scheme for Compensatory Afforestation to be carried out in lieu of 6.76 hectares of forest area to be diverted for prospecting in Dalki Iron & Manganese Ore Mines of Odisha Mining Corporation Ltd. in Keonjhar District.**

Exploration will be done in Dalki Iron & Manganese Ore Mines of OMC Ltd in Keonjhar District. Total Mining Lease area of the mine is 265.29 hectare out of which 246.524 ha. area is forest land. Temporary roads to be constructed for movement of drilling equipments to 36 Bore Hole Pads will cover forest area of 6.76 ha. and Compensatory Afforestation needs to be raised over equivalent non-forest area. Collector, Kalahandi vide letter No. 1901/Rev Dated 9.11.2017 (Annexure-A) forwarded the land details with trace maps to DFO, Kalahandi South Division permitting transfer of 6.76 hectares non-forest land for raising compensatory afforestation by the State Forest Department at project cost. The site specific schemes are therefore prepared as follows:

**1. Details of non-forest land:-**

District: Kalahandi

Tahasil: Thuamul Rampur

Village	Khata No	Kisam	Plot No.	Area of the plot	Area taken for this project
Tala Ambapadar	51 (Abad Ajogya Anabadi)	Dangar	61	38.75	12.37
		Dangar	62	34.25	4.33
Total					16.7 ac. Or 6.76 ha.

The village maps showing the land details for the proposed compensatory afforestation is enclosed as Plate No. \_\_\_\_\_ of the FDP.

The jointly verified non-forest land by Forest and Revenue authorities is enclosed as Annexure-(B).

Proposed Compensatory Afforestation area showing on the topo sheet No. E44F2 is furnished as Annexure-(C).

G.P.S co-ordinates of survey stations of Compensatory Afforestation area are furnished as Annexure-(D).

**2. Description of Area**

- I. Whether the site selected for Compensatory Afforestation is a land bank or not: This identified non-forest area is under the control of Revenue Department and classified as 'Dangar'. It is not a land bank
- II. If the CA site is other than the land bank, reasons be given: No land bank has been established yet for this purpose.



III. In case of non forest area identified for CA, then what is the distance of CA site from the adjoining forest boundary: 1 km from Khakes R.F.

IV. Soil type: Lateritic soil.

V. Topography :

- Hilly/Undulating/Plain: The Compensatory Afforestation sites are hilly and undulating.
- Slope: Steep/Medium/Gentle: The sites selected for Compensatory Afforestation have medium to gentle slope.

VI. Whether the area is bearing any root stock of vegetation: The sites selected for Compensatory Afforestation are either barren or with weed growth like *Lantana*, *Eupatorium*, *Woodfordia fruticosa*, *Combretum decandrum*. Root stock of any principal species like Sal is not available.

### 3. Plantation Model:-

Since the area is hilly, Bald Hill plantation with 1600 plants per hectare will be raised. Maintenance of plantation for 10 years is also required as per F.No. 11-168/2009-FC Date 14.2.2012 of MoEF. Considering these facts a site specific cost norm for the plantation is furnished as Annexure-(F).

### 4. Schedule of Plantation Programme:-

Detail of year wise break up of requirements of funds is as under:-

Year	Area in Ha.	Rate/ Ha.	Amount
0th Year	6.76	69978.00	473051.00
1st Year		65752.75	444489.00
2nd Year		24632.50	166516.00
3rd Year		14945.00	101028.00
4th Year		11315.50	76493.00
5th Year		11315.50	76493.00
6 <sup>th</sup> Year		11315.50	76493.00
7th Year		11315.50	76493.00
8th Year		11315.50	76493.00
9th Year		11315.50	76493.00
10th Year		11315.50	76493.00
Total		254516.75	1720533.00

5. Technical details:- Technical details of Compensatory Afforestation Scheme are as follows:

a) General Details :

Survey & Demarcation of boundary:

The identified area will be surveyed by DGPS and the area will be demarcated with RCC pillars of size 2.5 mtr x 30 cm x 30 cm. This work will be done by the User Agency at Project cost.

**Fencing:**

To protect the plantation from grazing and other biotic interference, it will be provided with 7 strand barbed wire fencing with RCC pillars, the cost for which will be paid by the User Agency. Since non-forest areas adjoining this site have also been taken for Compensatory Afforestation for other projects and barbed wire fencing will be done around the entire patch, the length of barbed wire fence needed in this project is furnished below.

Sl No	Village	Length of outer periphery of the site in mtr	Length of enclosures if required to be fenced	Length of common fence of adjoining project which need not be fenced	Total length of fence required (3+4+5)
(1)	(2)	(3)	(4)	(5)	(6)
1	Tala Ambapadar	1131.714	Nil	With Parulipada CA = 412.1 mtr + with CA for Daitari conveyor 134.68 mtr	584.934 mtr
Total		1131.714		546.78 mtr	584.934 mtr

Estimate for barbed wire fencing has been provided in Annexure – (E).

**Planting and post-planting:**

- b) Compensatory Afforestation areas of this project and its adjoining projects should be treated as a single plantation for proper management. Bald Hill plantation shall be taken up with 1600 plants per hectares at spacing of 2.5 m x 2.5 m. Alignment and pit marking should be done carefully in slopes so that the horizontal distance between plants in a row remains 2.5 mtrs and not the distance measured along the slope. All post planting measures like casualty replacement, soil working, manuring, fire protection etc. will be undertaken. The plantation area should be divided into 4 hectare plots. These plots should be demarcated in the field before digging of pits so that the demarcating line does not cross a plantation row. The 4 ha plots should be shown on map. Cost norm for Bald Hill plantation is furnished as Annexure-(F).

While taking up plantation, the following vital points shall be taken up for consideration: -

- Care to be taken to raise healthy plantable seedlings of minimum 60 cm height. 10% extra seedlings are to be raised for replacement of casualty.
- Pitting shall invariably be done during November-February i.e., before onset of monsoon. If possible the soil of upper portion and lower portion of pit should be placed separately in specific direction so that while planting the pits will be filled with top-soil first.
- Planting shall be done on the onset of monsoon to get full benefit of monsoon rain and planting should never be delayed.

- Basal dose of 50 grams of NPK and 5 grams of Chlorpyrifos dust per plant should be applied at the time of planting carefully by mixing with top-soil so that the roots of seedlings do not come in direct contact with fertilizer.
- In case of any mortality of planted seedlings, it should be replaced with good seedlings as soon as possible for better success rate.
- Complete weeding in proper time will be done. Strip weeding will not be permitted.
- Soil-working and application of 2<sup>nd</sup> dose fertilizer of 50 gms NPK per plant should be done in time.
- Since the area is provided with barbed wire fence, watch & ward will be easier and the watchers may be engaged in weeding in problematic areas alongwith watch & ward.

**c) Species:**

Although indigenous species are to be preferred in the plantation, considering adverse soil & moisture conditions we may go for hardy exotic species where required so that the plants are able to survive. For success of plantation in interior tribal areas, plantation of fruit and NTFP species plays a great role since economic species have a little value for local people. Considering the topography, soil and moisture availability of the plantation area, the following species will be planted

Name of species	Common name	Remarks
<i>Azadirachta indica</i>	Neem	
<i>Derris indica</i>	Karanja	
<i>Emblica officinalis</i>	Amla	
<i>Terminalia chebula</i>	Harida	In lower areas with good soil depth
<i>Terminalia bellirica</i>	Bahada	In lower areas with good soil depth
<i>Dalbergia sissoo</i>	Sissoo	In lower areas with good soil depth
<i>Gmelina arborea</i>	Gambhari	In lower areas with good soil depth
<i>Dendrocalamus strictus</i>	Salia bamboo	In lower areas with good soil depth healthy seedlings from rhizomes may be planted
<i>Cassia siamea</i>	Chakunda	In lower areas with good soil depth
<i>Tamarindus indica</i>	Tentuli	In lower areas with good soil depth
<i>Madhuca indica</i>	Mahul	Only two years old seedlings may be planted
<i>Simaruba glauca</i>	Simaruba	In rocky areas with low soil depth
<i>Zizyphus mauritania</i>	Barkoli	In rocky areas with low soil depth
<i>Tectona grandis</i>	Teak	Potted seedlings from pre-sprouted healthy stumps will be planted
<i>Mangifera indica</i>	Mango	In situ plantation (direct placing of mango stone in planting site) during pre-monsoon may be adopted in few lower areas or where life-saving watering can be done during summer

**d) Soil and Moisture Conservation Works :-**

Since most of the areas are hilly and undulating, half-moon trenches on down-hill side of plants should be constructed.

**e) Protection of the plantation:** - 7 strand Barbed wire fence with RCC pillars all along the periphery of the plantation will be provided. Few watchers will also be engaged for protection of the plantation.

**6. Proposed Monitoring Mechanism:** - The scheme shall be executed by the Divisional Forest Officer, Kalahandi South Division with his staff and all prescribed records are to be maintained. In addition to internal monitoring by Forest Officers of State Government, a Monitoring Committee under item no. 3.4(iii) of consolidated guidelines under F.C Act 1980 issued by MoEF, shall be established with a nominee of the Central Government to oversee that the stipulations, including those pertaining to Compensatory Afforestation are carried out.

**7. Total cost of the project:** The total cost of the project is Rs. 30, 29,500.00 (Rupees Thirty lakh Twenty-nine thousand Five hundred) only as detailed in Annexure-(G) which shall be payable by the user agency to the D.F.O, Kalahandi South Division on demand.

  
Divisional Forests Officer  
Kalahandi South Division  
Divisional Forest Officer  
Kalahandi South Division

## OFFICE OF THE COLLECTOR &amp; DISTRICT MAGISTRATE, KALAHANDI

No. 1901 /Rev- Date: 09.11.2017

To,

Divisional Forest Officer (South)  
Kalahandi, Bhawanipatna

Sub: Filing of requisition for Compensatory Afforestation -- allocation of non-forest Govt. land.

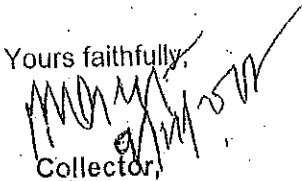
Ref: This office letter No. 1610/Rev. dtd 26.09.2017 and your letter No. 4083 / 3F dated 27.10.2017.

Sir,

I am to say that non-forest Government land measuring to an area of 21.483 hector in village Tal Ambapadar under Th.Rampur Tahasil has been identified for allocation for raising compensatory afforestation in lieu of diversion of forest land pertaining to different mining projects of M/S. OMC Ltd., Bhubaneswar.

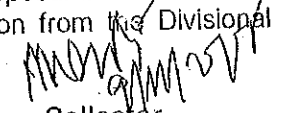
As such, you are requested to file requisition in Form No. 1-A for each project separately alongwith copy of joint verification reports before Tahasildar, Th.Rampur immediately for processing the alienation of the said Govt land in favour of Forest & Environment Department.

Yours faithfully,

  
Collector,  
Kalahandi

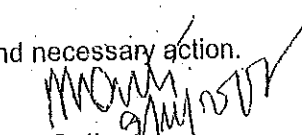
Memo No. 1902 /Rev. Date: 09.11.2017

Copy alongwith joint verification report forwarded to Tahasildar, Th.Rampur for information. He is requested to process the alienation proposal in favour of the Forest & Environment Department on obtaining the requisition from the Divisional Forest Officer (South), Kalahandi

  
Collector,  
Kalahandi

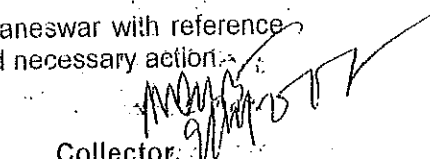
Memo No. 1903 /Rev. Date: 09.11.2017

Copy to Sub-Collector, Bhawanipatna for information and necessary action.

  
Collector,  
Kalahandi

Memo No. 1904 /Rev. Date: 09.11.2017

Copy to Managing Director, OMC Ltd., Odisha, Bhubaneswar with reference to his letter No.13323/OMC dtd 11.09.2017 for information and necessary action.

  
Collector,  
Kalahandi



JOINT VERIFICATION REPORT OF NON-FOREST GOVT. LAND IN VILLAGE TALA AMBAPADAR UNDER TH.RAMPUR TAHASIL OF KALAHANDI DISTRICT FOR RAISING COMPENSATORY AFFORESTATION AGAINST EXPLORATORY DRILLING OF DALKI AND MANGANESE MINES OF OMC LTD LOCATED IN THE DISTRICT OF KEONJHAR, ODISHA.

Certified that on joint verification of non-forest Govt. land (Kissam- Dangar) in Village Tala Ambapadar of Th.Rampur Tahasil of Kalahandi District, it is found that the schedule wise land mentioned as given under is suitable for bald hill block plantation and free from encroachment and encumbrances, does not comes under DLC land and FR Settlement.

Name of the Mines	Tahasil	Village	Khata No	Plot No	Kissam	Total area of the plot (Ac)	Area considered (Ac)
Dalki Iron and Manganese Mines	THUAMULRAMPUR	TALA AMBAPADAR	53 (AAA)	61	Dangar	38.75	12.37
				62	Dangar	34.25	4.33
		Total					16.700 Ac or 6.760 Ha.

Revenue Inspector  
Nakarundi

Forester  
Th. Rampur North Range

Range Officer  
Th. Rampur North Range

Tahasildar  
Th. Rampur



**OMC Ltd.**



Kyoshin  
12/10/17  
Iainasidar  
Th. Rampur

63° 7' 30" E Range Officer  
Th. Rampur North Range  
Quampur Section



## ANNEXURE - (D)

## GPS READING OF THE AREA PROPOSED FOR COMPENSATORY AFFORESTATION

CO-ORDINATES OF THE BOUNDARY PILLARS						
From	To	Longitude	Latitude	Forward bearing	Backward bearing	Distance in mtr
1	2	83°08'03.53"	19°33'58.22"	50°29'49"	230°29'49"	15.263
2	3	83°08'03.93"	19°33'58.54"	47°06'11"	227°06'11"	21.347
3	4	83°08'04.45"	19°33'59.02"	61°15'22"	241°15'22"	46.800
4	5	83°08'05.84"	19°33'59.78"	56°56'38"	236°56'38"	132.133
5	6	83°08'09.58"	19°34'02.21"	42°22'05"	222°22'05"	38.744
6	7	83°08'10.45"	19°34'03.15"	180°56'26"	0°56'26"	412.725
7	8	83°08'10.54"	19°33'49.75"	271°56'21"	91°56'21"	206.344
8	1	83°08'03.47"	19°33'49.83"	1°42'27"	181°42'27"	258.358
PERIMETER 1131.714 MTR & AREA- 6.760						

  
Revenue Inspector,  
Nakrundi

  
Tahasildar  
Th. Rampur

  
Range Officer  
Th. Rampur North Range

  
Divisional Forest Officer  
Kalahandi South Division

## ANNEXURE-(E)

**COST NORM FOR BALD HILL PLANTATION @ 1600 PLANTS PER HECTARE**

Labour cost @ Rs 213.50 per manday

Sl No	Item of work	Preferable period of execution	Manday	Labour cost @ Rs 213.50 per day	Material cost per hectare in Rs	Total cost per hectare in Rs.
<b>Preparatory operation (0<sup>th</sup> Year)</b>						
1.	Survey and demarcation	June	2	427.00	0	427.00
2.	Pitting (1600 pits per ha.)- each pit 45cm <sup>3</sup>	Nov-Dec	128	27328.00	0	27328.00
3.	Soil and water conservation measures					
	(a) Staggered trench along the contour @ 300 per ha (2.5mx0.5mx0.5m), digging of percolation pits @ 600 per ha in lieu of staggered trenches, gully plugging and Drainage line treatment, half moon trench on the uphill side of each planting pit (100 MD for staggered trench/ percolation pits and 30 MD for gully plugging, drainage line treatment and half moon trench)	Sept-Nov	130	27755.00	0	27755.00
	(b) Green Fencing To be strengthened by planting of bamboo and other seedlings in two rows. Bamboo to be planted at 2 meters spacing in staggered manner on the two rows, and the rest of the species to be planted at ½ meter spacing along the two rows, the rows being 2m apart. Thus 500 plant (125 bamboo and 375 others) to be planted in two rows to cover 126 m of periphery / Ha. by the vegetative fence (Bamboo seedlings @ Rs. 9.45 per seedling x 125 = Rs. 1181.00 Agave seedling @ Rs. 3.50per seedling x 375 + Rs. 1312.00)	June – Sept.	11	2348.50	2493.00	4841.50
	(c) Site clearance-8 MD. Alignment and staking of contour lines on ground, planting pits, contour trenches/ percolation pits and check dam sites etc.-2 MD	July-Aug	10	2135.00	0	2135.00
4	Raising of seedlings in poly bags (minimum 60 cm high) @ Rs 9.45 per seedling (Rs 6.67 in 0 <sup>th</sup> year) Part (1760 saplings to be raised for one hectare from January-March @ Rs 11739/-	October-March	44	9394.00	2939.00	12333.00
<b>Total 0<sup>th</sup> year</b>			<b>325</b>	<b>69387.50</b>	<b>5432.00</b>	<b>74819.50</b>
<b>Planting Operation (1<sup>st</sup> Year)</b>						
1	Cost of sapling (balance) from April-June/July @ Rs 2.78 per seedling for 1760 seedlings = Rs.4893/-	April-July	21.5	4590.25	593.00	5183.25
2	Freshening of pits-64 MD, filling with fertile soil and farm yard manure (FYM)-24 MD, application of insecticide and planting of 60 cm tall saplings including carriage of plants-21MD	June-July	109	23271.50	0	23271.50
3	Cost of fertile soil 0.25 cft @ Rs 6 per cft/ FYM 0.25 cft @ Rs 15 per cft per pit		0	0	9200.00	9200.00
4	Sowing of seeds on dug out earth of trench	June	6	1281.00	200.00	1481.00
5	Carriage-6 MD. Planting including casualty replacement-6 MD, fertilizer application-5 MD, 1 <sup>st</sup> weeding-7 MD, 2 <sup>nd</sup> weeding-5 MD, soil working-7 MD.	July-August	36	7686.00	0	7686.00
6	Cost of fertilizer and insecticide (Granular insecticide @ 5gms/plant @Rs 80/- per kg = Rs 640.00, NPK 100 gms/plant in two doses @ Rs 24 per kg = Rs 3840.00		0	0	4480.00	4480.00

7	Maintenance of Soil and Moisture Conservation measures (20% of cost)	October-Dec	26	5551.00	0	5551.00
8	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	30	6405.00	0	6405.00
9	Fire tracing and control, display board construction, painting/writing, other miscellaneous cost	Jan-Feb	10	2135.00	360.00	2495.00
<b>Total (1<sup>st</sup> year)</b>			<b>238.5</b>	<b>50919.75</b>	<b>14833.00</b>	<b>65752.75</b>
<b>Maintenance Operation (2<sup>nd</sup> Year)</b>						
1	Casualty replacement-6 MD including seedling cost @ Rs 9.45 per seedling and its transportation	June-July	10	2135.00	1512.00	3647.00
2	Soil working-7 MD, 1 <sup>st</sup> weeding-6 MD, 2 <sup>nd</sup> weeding-6 MD and fertilizer application-4 MD	August-October	23	4910.50	0	4910.50
3	Cost of fertilizer @ 50 gms NPK per plant @ Rs 24/- per kg for 1600 plants = Rs 1920.00. Insecticide @ 5 gm per plant for 160 nos of plants @ Rs 80 per kg = Rs 64.00		0	0	1984.00	1984.00
4	Maintenance of Soil and Moisture Conservation measures (20% of cost)	August-October	26	5551.00	0	5551.00
5	Fire tracing and control, and other misc. cost	Feb-Mar	10	2135.00	0	2135.00
6	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	30	6405.00	0	6405.00
<b>Total 2<sup>nd</sup> Year</b>			<b>99</b>	<b>21136.50</b>	<b>3496.00</b>	<b>24632.50</b>
<b>Maintenance Operation (3<sup>rd</sup> Year)</b>						
1.	S.M.C measures (Renovation)--	Apr-Mar	26	5551.00	0	5551.00
2	Maintenance of plantation	Apr-Mar	14	2989.00	0	2989.00
3	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	30	6405.00	500.00	6905.00
4	Repair of barbed wire fence		42.15	9000.00	0	9000.00
<b>Total 3<sup>rd</sup> Year</b>			<b>112.15</b>	<b>23945.00</b>	<b>500.00</b>	<b>24445.00</b>
<b>Maintenance Operation (4<sup>th</sup> Year)</b>						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	46	9821.00	500.00	10321.00
<b>Total 4<sup>th</sup> Year</b>			<b>81</b>	<b>17293.50</b>	<b>500.00</b>	<b>17793.50</b>
<b>Maintenance Operation (5<sup>th</sup> Year)</b>						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	46	9821.00	500.00	10321.00
<b>Total 5<sup>th</sup> Year</b>			<b>81</b>	<b>17293.50</b>	<b>500.00</b>	<b>17793.50</b>
<b>Maintenance Operation (6<sup>th</sup> Year)</b>						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	18	3843.00	500.00	4343.00
3	Repair of barbed wire fence		42.15	9000.00	0	9000.00
<b>Total 6<sup>th</sup> Year</b>			<b>123.15</b>	<b>26293.50</b>	<b>500.00</b>	<b>26793.50</b>
<b>Maintenance Operation (7<sup>th</sup> Year)</b>						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	46	9821.00	500.00	10321.00
<b>Total 7<sup>th</sup> Year</b>			<b>81</b>	<b>17293.50</b>	<b>500.00</b>	<b>17793.50</b>
<b>Maintenance Operation (8<sup>th</sup> Year)</b>						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	46	9821.00	500.00	10321.00



<b>Total 8<sup>th</sup> Year</b>			<b>81</b>	<b>17293.50</b>	<b>500.00</b>	<b>17793.50</b>
<b>Maintenance Operation (9<sup>th</sup> Year)</b>						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	46	9821.00	500.00	10321.00
3	Repair of barbed wire fence		42.15	9000.00	0	9000.00
<b>Total 9<sup>th</sup> Year</b>			<b>123.15</b>	<b>26293.50</b>	<b>500.00</b>	<b>26793.50</b>
<b>Maintenance Operation (10<sup>th</sup> Year)</b>						
1	S.M.C measures- 21MD, and maintenance of plantation – 14 MD	April-March	35	7472.50	0	7472.50
2	Closure to grazing, fire and other biotic interference by engaging watch & ward	April-March	46	9821.00	500.00	10321.00
<b>Total 10<sup>th</sup> Year</b>			<b>81</b>	<b>17293.50</b>	<b>500.00</b>	<b>17793.50</b>

### ABSTRACT

Sl	Year	Mandays	Labour cost (Rs.)	Material cost (Rs.)	Total (Rs.)
1	0 <sup>th</sup> year	325	69387.50	5432.00	74819.50
2	1 <sup>st</sup> year	238.5	50919.75	14833.00	65752.75
3	2 <sup>nd</sup> year	99	21136.50	3496.00	24632.50
4	3 <sup>rd</sup> year	112.15	23945.00	500.00	24445.00
5	4 <sup>th</sup> year	81	17293.50	500.00	17793.50
6	5 <sup>th</sup> year	81	17293.50	500.00	17793.50
7	6 <sup>th</sup> year	123.15	26293.50	500.00	26793.50
8	7 <sup>th</sup> year	81	17293.50	500.00	17793.50
9	8 <sup>th</sup> year	81	17293.50	500.00	17793.50
10	9 <sup>th</sup> year	123.15	26293.50	500.00	26793.50
11	10 <sup>th</sup> year	81	17293.50	500.00	17793.50
<b>Grand Total</b>		<b>1425.95</b>	<b>304443.25</b>	<b>27761.00</b>	<b>332204.25</b>

## ANNEXURE – (F)

**ESTIMATE FOR BARBED WIRE FENCE**

7 strands (5 straight + 2 cross strands) of 2 ply barbed wire on RCC posts fixed at 2.5 mtr intervals.							
Two fencing posts extra, used as struts at each corner point							
Number of fence posts required per kilometer 500 nos.							
Fence post size 2 mtr long; 10cm x 10cm top; 15cm x 15cm bottom							
Minimum wage rate Rs. 213.50 per day for unskilled labourer							
<b>Lead Statement &amp; cost of materials</b>							
Sl. No	Item	Unit	Basic price	Lead in Km	Transport charge	Royalty	Total price
1	4cm hand broken granite metal	Cum	609.00	15	248.40	98.79	956.19
2	12mm H.G hand broken chips	Cum	934.00	15	248.40	98.79	1281.19
3	Screened & washed sand	Cum	59.00	25	340.40	27.44	426.84
4	M.S rod	Ant.	4000.00	90	76.80	0.00	4076.80
5	Cement	Qntl.	651.00	90	76.80	0.00	727.80
6	Barbed wire	Kg	66.00	90	0.76	0.00	66.76
<b>Analysis of rate</b>							
Sl. No.	Item	Qty.	Unit	Rate	Amount		
1	<b>Cement concrete (1:4:8) with 4 cm HG metal</b>						
a	Materials						
	Hand broken granite stone 4 cm size	0.96	Cum	956.19	917.94		
	Sand (Screened & washed)	0.48	Cum	426.84	204.88		
	Cement	1.72	Qntl.	727.80	1251.82		
					2374.64		
b	Labour						
	Mason second class	0.18	Each	253.50	45.63		
	Man mulia	1.80	Each	213.50	384.30		
	Women mulia	1.40	Each	213.50	298.90		
	Man mulia for mixing stone, sand and cement and water	0.70	Each	213.50	149.45		
					878.28		
c	Overhead charges 7.5% of (a+b)				243.97		
	<b>Total cost per cum</b>				<b>3496.89</b>		
2	<b>C.C (1:2:4) in 12 mm hand broken H,G chips including hoisting and laying per cum.</b>						
a	Materials						
	Hand broken granite stone 12 cm size	0.96	Cum	1281.19	1229.94		
	Sand (Screened & washed)	0.45	Cum	426.84	192.08		
	Cement	3.23	Qntl.	727.80	2350.79		
					3772.81		
b	Labour						
	Mason second class	0.68	Each	253.50	172.38		
	Man mulia	1.80	Each	213.50	384.30		
	Women mulia	1.40	Each	213.50	298.90		
	Man mulia for mixing stone, sand and cement and water	1.40	Each	213.50	298.90		
	Mason second class	0.50	Each	233.50	106.75		
					1261.23		
c	Overhead charges 7.5% of (a+b)				377.55		
	<b>Total cost per cum</b>				<b>5411.59</b>		

3	<b>Labour for M.S reinforcement for R.C.C work including cutting, bending and tying the grills and placing in position, including cost of binding wire (per 1 Qntl.)</b>				
	Blacksmith (Special)	1.00	Each	273.50	273.50
	Semiskilled mulia	1.00	Each	233.50	233.50
	30% sundries, binding wires and T&P etc.				152.10
	Total charges per quintal				<b>659.10</b>
<b>Estimated cost per fence post of 2 mtr long, 15 cm x 15cm bottom and 10 cm x 10 cm top in RCC (1:2:4) with 12mm H.G chips</b>					
	Cost for concrete 2.0 mtr x 0.01625 sq. mtr =	0.0325	Cum	5411.59	175.88
	Cost of 8 mm rod (4 x 2 mtr) + 6mm rod 0.6 mtr for rings =	3.25	Kg	40.77	132.50
	Labour for cutting, bending, binding & laying in position of rods including cost of binding wire	3.15	Kg	6.59	20.76
	Cost of staples for holding barbed wire				20.00
					<b>349.14</b>
<b>Estimated cost for fixing each fence post with C.C (1:4:8) cm metal</b>					
1	Cost of concrete (45cm x 45 cm) + 45cm) - (15cm x 15cm x 15cm)	0.081	Cum	3496.89	<b>283.25</b>
<b>Estimated per Kilometre of Barbed wire Fencing</b>					
<b>Sl No</b>	<b>Work</b>	<b>Qty.</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
1	Cost of fence post RCC (1:2:4) with 12mm H.G chips 2 mtr long 15cm x 15cm bottom and 10cm x 10cm top	500.00	Each	349.14	174570.00
2	Digging of pits for fixing of fence posts	500.00	Each	20.00	10000.00
3	Fixing of fence post with C.C (1:4:8) with 4 cm H.G metal	500.00	Each	283.25	141625.00
4	Cost of 2 ply barbed wire 7 strands x 1000 mtr= 7000 mtr @ 8 mtr per kg	875.00	Kg	66.76	58415.00
5	Labour for fixing barbed wire fencing and post by means of staples and straining hooks	7000	Mtr	6.00	42000.00
6	Average expenditure needs for extra lead for transporting RCC fence posts in hill slopes manually 0.5 man-day per pillar	500.00	Each	100.00	50000.00
	<b>Total expenditure for 1 km of barbed wire fence</b>				<b>476610.00</b>

## ANNEXURE-(G)

**TOTAL COST OF THE COMPENSATORY AFFORESTATION SCHEME**

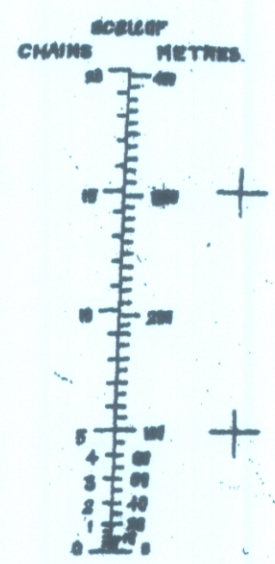
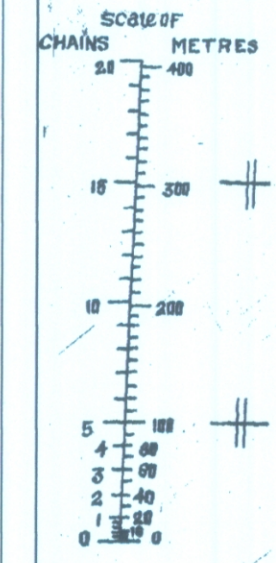
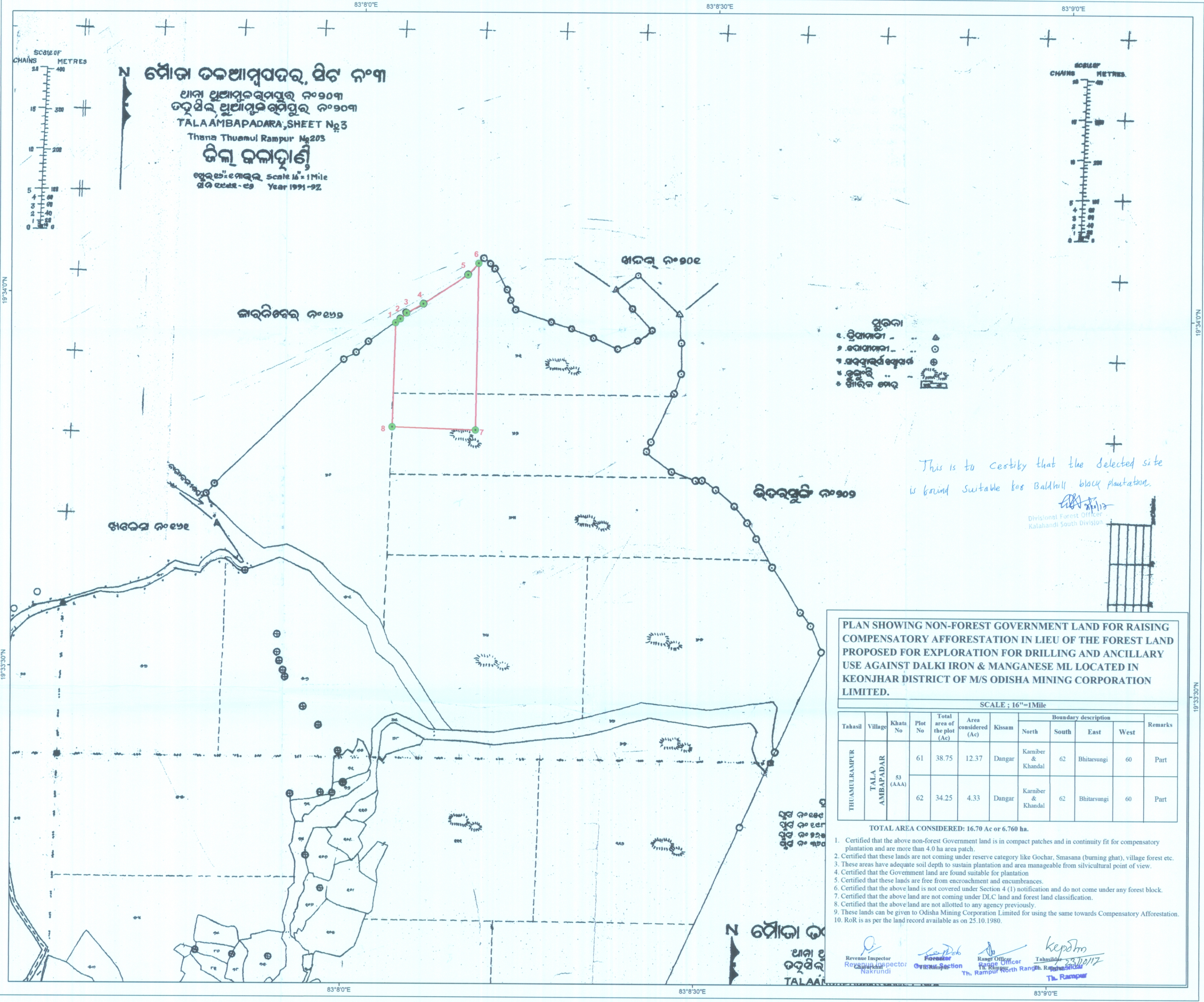
Sl. No.	Item of Work	Total Estimated cost in Rs.
1	Barbed wire fence around plantation site Rs 476610/- X 0.585 km	278816.85
2	Bald Hill plantation over 6.760 ha. X Rs 332204.25	2245700.73
	Total	2524517.58
	Cost of Escalation in future 20%	504903.52
	Grand Total	3029421.10 or say Rs.30,29,500.00

(Rupees Thirty lakh Twenty-nine thousand Five hundred only)



Divisional Forest Officer,  
Kalahandi South Division.  
Divisional Forest Officer  
Kalahandi South Division





୧୩୩୩ ଡକ୍ଟରାୟପଦ୍ମ, ପିଟ ନଂ୩  
ଥାନା ଥୁଆମୁଲରାମ୍ପୁର ନଂ୨୦୩  
ଡକ୍ଟରାୟପଦ୍ମ, ଥୁଆମୁଲରାମ୍ପୁର ନଂ୨୦୩  
TALAAMBAPADARA, SHEET No 3  
Thana Thuamul Rampur No 203  
ଡକ୍ଟରାୟପଦ୍ମ  
ଥାନା ଥୁଆମୁଲରାମ୍ପୁର Scale 16"=1 Mile  
ସନ ୧୯୯୧-୯୨ Year 1991-92

- ସୂଚକ
- ୧. ଡକ୍ଟରାୟପଦ୍ମ
  - ୨. ଡକ୍ଟରାୟପଦ୍ମ
  - ୩. ଡକ୍ଟରାୟପଦ୍ମ
  - ୪. ଡକ୍ଟରାୟପଦ୍ମ
  - ୫. ଡକ୍ଟରାୟପଦ୍ମ

This is to certify that the selected site is found suitable for Balhul block plantation.

Divisional Forest Officer  
Kalahandi South Division

PLAN SHOWING NON-FOREST GOVERNMENT LAND FOR RAISING COMPENSATORY AFFORESTATION IN LIEU OF THE FOREST LAND PROPOSED FOR EXPLORATION FOR DRILLING AND ANCILLARY USE AGAINST DALKI IRON & MANGANESE ML LOCATED IN KEONJHAR DISTRICT OF M/S ODISHA MINING CORPORATION LIMITED.

SCALE : 16"=1 Mile

Tahasil	Village	Khatas No	Plot No	Total area of the plot (Ac)	Area considered (Ac)	Kissam	Boundary description				Remarks
							North	South	East	West	
THUAMULRAMPUR	TALA AMBAPADAR	53 (AAA)	61	38.75	12.37	Dangar	Karniber & Khandal	62	Bhitarisungi	60	Part
			62	34.25	4.33	Dangar	Karniber & Khandal	62	Bhitarisungi	60	Part

TOTAL AREA CONSIDERED: 16.70 Ac or 6.760 ha.

1. Certified that the above non-forest Government land is in compact patches and in continuity fit for compensatory plantation and are more than 4.0 ha area patch.
2. Certified that these lands are not coming under reserve category like Gochar, Smasana (burning ghat), village forest etc.
3. These areas have adequate soil depth to sustain plantation and area manageable from silvicultural point of view.
4. Certified that the Government land are found suitable for plantation
5. Certified that these lands are free from encroachment and encumbrances.
6. Certified that the above land is not covered under Section 4 (1) notification and do not come under any forest block.
7. Certified that the above land are not coming under DLC land and forest land classification.
8. Certified that the above land are not allotted to any agency previously.
9. These lands can be given to Odisha Mining Corporation Limited for using the same towards Compensatory Afforestation.
10. RoR is as per the land record available as on 25.10.1980.

Revenue Inspector  
Range Officer  
Tahasil  
Th. Rampur North Range