

Estimate for Compensatory Aforestation in 4.56 HA Block against diversion proposal of 2.28 Ha Forest Land for ONGC Exploratory Drilling Location -KHDE

1	AREA (HA)	4.56	Dimensions of the Block in m		
2			162	331	126.5
3	PERIMETER	924	304.5		
4	SPACING	2 X 2	Name of Speceis to be planted:		
5	NUMBER OF SAPLINGS / HA	2500			
6	LENGTH OF FENCE (RM)	924			
7	WAGE RATE FOR FIRST YEAR	240			
8	Increase in wage rate for subsequent year by a factor	1.1	Holak, Holong, Mekai, Khokan, Morhal, Hingori, Titachopa, Panchopa, Gahorichopa, Shyamkothal, Bandardima, Nahar, Moz, Kadam, Hilikha.		
9	Appreciation of material cost by a factor	1.1			
10	Compartment Number	11			
11	Location of plantation : Upper Dehing Reserved Forest (EB)				
12	GPS: Co-ordinates: :				
	27° 26' 21.40" N ; 95° 44' 41.50" E				
	27° 26' 23.53" N ; 95° 44' 46.90" E				
	27° 26' 23.50" N ; 95° 44' 40.40" E				
	27° 26' 30.30" N ; 95° 44' 36.50" E				
13	Name of Range: Digboi Range				

Sl. No.	Particulars of works`	Units	Qty/ ha	Total Qty.	Rate Rs	Amount Rs
A	ERECTION OF FENCING					
	(a) Cost of full Chain-linked Goat Proof fencing (4' ht. with 10 Gauge, 3" dia link) to be fitted on Pre-cast RCC pillars* at 1.8 mt. apart including transportation of fencing materials to site for 4330 RM @ Rs. 800 per RM as per estimate	RM		924	800	739200
	(b) Wages of DLS for carrying, fitting, fixing etc. of fencing materials @ 20 DLS/100 RM	DL		184.8	240	44352
	Sub-total					783552
B	INFRASTRUCTURE IN PLANTATION AREA					
	Construction of camp hut as per estimate.	Nos.		1	150000	150000
	Installation of ring/tube well	Nos.		1	50000	100000
	Irrigation facility with Diesel generation and hose pipes for watering the nursery and plantation (during dry spells)	Nos.		1	50000	50000
	Cost of tools & implements	Nos		1	10000	10000
	Cost of RCC signboard & Gate including fitting and fixing of the same	Nos		1	60000	60000
	Camp accessories @ Rs. 10,000/- per camp	Nos		1	10000	10000
	Construction of Inspection Path @ Rs. 50/- RM	RM		493	50	24650
	Construction of Staff quarters as per estimate.	No.		0	800000	0
	Provision of Solar energy for staff quarters including installation.	No.		1	70000	70000
	Sub-total					474650
C	ADVANCE WORK					
	Site selection, surveying, demarcation, jungle cutting, burning etc.20 DLS/ha	DLS	20	91.2	240	21888
	Preparation and acquisition of polypot sapling in the field nursery for planting 2500 Nos. Seedling/ha @ Rs. 6/- per polypot	No.	2500	11400	6	68400
	Preparation of polypot saplings in the field nursery for vacancy filling.					
	a)25% mortality expected during 1st year (to be planted in the field during the 2nd year),i.e., 625 Seedlings/ha @ Rs.6.5/- per polypot.	No.	625	2850	6.5	18525
	b)20% mortality expected during 2nd year (to be planted in the field during the 3rd year), i.e., 500 Seedlings/ha @ 7/- per polypot.	No.	500	2280	7	15960
	c) 15% mortality expected during 3rd year (to be planted in the field during the 4th year),i.e., 375 Seedlings/ha @ 7.5/- per polypot.	No.	375	1710	7.5	12825
	d) 10% mortality expected during 4th year (to be planted in the field during the 5th year),i.e., 250 Seedlings/ha @ 8/- per polypot.	No.	250	1140	8	9120
	Cost of Bamboo, making of stacking & transportation etc.	No.	625	2850	1	2850
	Line alignment,carriage of stacking materials and fixing the satacking @ 5 DLS/ha	DLS	5	22.8	240	5472
	Supervision and Monitoring.	LS				10000
	Sub-total					165040

Sl. No.	Particulars of works	Units	Qty/ha	Total Qty.	Rate Rs	Amount Rs
D	CREATION & 1st YEAR MAINTENANCE	Wage Rate		240		
	Soil working, carriage of stumps, popypot seedlings and planting at the plantation site including, dibbling of seeds wherever necessary to complete raising of plantation with all necessary operation @ 40 DLs/ha	DLS	40	182.4	240	43776
	5 weedings, mulching and fire protection works @ 18 DLs/ha/weeding	DLS	90	410.4	240	98496
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha.	DLS	5	22.8	240	5472
	Maintenance and protection of field nursery for 1 DLs for 365 days	DLs		365	240	87600
	Watch and ward for the plantation area for 365 days	DLs		0	152	0
	Maintenance of camp huts, implements, ring/tube-well, upkeepment of plantation, signboard, documentation, upkeepment of records and other mise. work.	LS				10000
	Awareness & Monitoring @ Rs.800/ha	DLs		4.56	800	3648
	Sub total					248992
E	2nd YEAR MAINTENANCE	Wage Rate		264		
	5 weedings, fire protection woks @15 DLs/ha weeding	DLs	75	342	264	90288
	25% Vacancy filling by 1 year old seedlings from nursery @ 10 DLs/ha	DLs	10	45.6	264	12038.4
	Upkeepment of plantation, and making of inspection path, repairing of fence etc on day to day basis @ 5 DLs/ha	DLs	5	22.8	264	6019.2
	Maintenance and protection of field nursery for 1 DLs for 365 days	DLs		365	264	96360
	Watch and ward for the plantation area for 365 days	DLS		0	264	0
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records etc.	LS				11000
	Supervision Cost	LS				3648
	Contingency L.S.	LS				2500
	Sub total					221854
F	3rd YEAR MAINTENANCE	Wage Rate		290		
	4 weedings, fire protection works @ 15 DLs/ha/weeding	DLs	60	273.6	290	79344
	20% Vacancy filling by 2 year old seedlings from nursery @ 8DLs/ha	DLs	8	36.48	290	10579.2
	Protection work, cattle, watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	22.8	290	6612
	Maintenance and protection of field nursery for 1 DLs for 365 days	DLs		365	290	105850
	Watch and ward for the plantation area for 365 days	DLs		0	290	0
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation, upkeepment of records.	LS				12100
	Supervision Cost	LS				3648
	Contingency @ 15% over previous year	LS	0.15			2875
	Sub total					221008
G	4th YEAR MAINTENANCE	Wage Rate		319		
	4 weedings, fire protection woks @ 15 dls/ha/weeding	DLs	60	273.6	319	87278.4
	15% Vacancy filling by 2 year old seedlings from nursery @ 6DLs/ha	DLs	6	27.36	319	8727.84
	Upkeepment of plantation, and making of inspection path,repairing of fence etc. on day to day basis @ 5 DLs/ha	DLs	5	22.8	319	7273.2
	Maintenance and protection of field nursery for 1 DLs for 365 days	DLS		365	319	116435
	Watch and ward for the plantation area for 365 days	DLs		0	319	0
	Maintenance of camp hut, implements, ring/tube-well upkepment of plantation, signboard, documentation, upkeepment of records etc.	LS				13310
	Supervision Cost	LS				3648
	Contingency @ 15% over previous year.	LS	0.15			3306.25
	Sub total					239979

Sl. No.	Particulars of works`	Units	Qty/ ha	Total Qty.	Rate Rs	Amount Rs
H	5th YEAR MAINTENANCE	Wage Rate		351		
	Climber cutting, weeding & other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	68.4	351	24008.4
	10% Vacancy filling by 2 year old seedlings from nursery @ 4 DLs/ha	DLs	4	18.24	351	6402.24
	Maintenance & fencing post replacement @ 3% initial cost of material.		0.03	739200		22176
	Upkeepment of plantation and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha.	DLs	4	18.24	351	6402.24
	Watch and ward for the plantation area for 365 days	DLs		0	351	0
	Maintenance of camp hut, implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				14641
	Supervision Cost	LS				3648
	Contingency @ 15% over previous year.	LS	0.15			3802.1875
	Sub total					81080
I	6th YEAR MAINTENANCE	Wage Rate		386		
	Climber cutting, other silvicultural works and fire protection works @ 15DLs/ha	DLs	15	68.4	386	26402.4
	Upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha.	DLs	4	18.24	386	7040.64
	Watch and ward for the plantation area for 365 days	DLs		0	386	0
	Maintenance of camp hut, implements, ring/tube-well upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				16105.1
	Supervision Cost	LS				3648
	Contingency @ 15% over previous year.	LS	0.15			4372.515625
	Sub total					57569
J	7th YEAR MAINTENANCE	Wage Rate		425		
	Climber cutting, other silvicultural works and fire protection works @ 12DLs/ha.	DLs	12	54.72	425	23256
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha.	DLs	5	22.8	425	9690
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				17715.61
	Supervision Cost					3648
	Contingency @ 15% over previous year.	LS	0.15			5028.392969
	Sub total					59338
K	8th YEAR MAINTENANCE	Wage Rate		468		
	Climber cutting, other silvicultural works and fire protection works @ 8DLs/ha.	DLs	8	36.48	468	17072.64
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha.	DLs	5	22.8	468	10670.4
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				19487.171
	Supervision Cost	LS				3648
	Contingency @ 15% over previous year.	LS	0.15			5782.651914
	Sub total					56661
L	9th YEAR MAINTENANCE	Wage Rate		515		
	Climber cutting, other silvicultural works and fire protection works @ 7DLs/ha.	DLs	7	31.92	515	16438.8
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 5 DLs/ha.	DLs	5	22.8	515	11742
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				21435.8881
	Supervision Cost	LS				3648
	Contingency @ 15% over previous year.	LS	0.15			6650.049701
	Sub total					59915

Sl. No.	Particulars of works`	Units	Qty/ ha	Total Qty.	Rate Rs	Amount Rs
M	10th YEAR MAINTENANCE	Wage Rate		567		
	Climber cutting, other silvicultural works and fire protection works @ 6DLs/ha.	DLs	6	27.36	567	15513.12
	Protection work, cattle watching, upkeepment of plantation, and making of inspection path, repairing of fence etc. on day to day basis @ 4 DLs/ha.	DLs	4	18.24	567	10342.08
	Maintenance of camp hut implements, ring/tube-well, upkeepment of plantation, signboard, documentation & upkeepment of records etc.	LS				23579.47691
	Supervision Cost	LS				3648
	Contingency @ 15% over previous year.	LS	0.15			7647.557156
	Sub total					60730
	Total					2730368

Compensatory Afforestation Scheme for 10 Years in

4.56

Ha Block

Particulars of Works	Amount (Rs.)
Erection pf Fencing	783552
Infrastructure in Plantation Area	474650
Advance Work	165040
Creation & 1 st Year Maintenance	248992
2 nd Year Maintenance	221854
3 rd Year Maintenance	221008
4 th Year Maintenance	239979
5 th Year Maintenance	81080
6 th Year Maintenance	57569
7th Year Maintenance	59338
8th Year Maintenance	56661
9th Year Maintenance	59915
10thYear Maintenance	60730
Total	2730368
Overhead cost @ 50% on total cost	1365184
Grand Total	4095552
Rate Per Ha Plantation	898147

NOTE:

Cost escalation of 10% annually has been considered for wages.

The norms should be revised annually based on wage rate & cost of materials

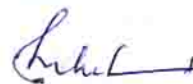
*Pre-cast RCC pillar with 5"x5" cross-section of ft height (1.5 ft below ground & 4.5 ft above ground) with

Technically Approved



Chief Conservator of Forests
Eastern Assam Circle, Jorhat

Submitted



Divisional Forest Officer
Digboi Forest Division