# Detailed estimate for raising Plantation for compensatory afforestation of "Diversion of 4.00 ha of Forest Land for Limestone Mining in respect of M/s Hills Cement Company Limited

Total area of plantation:

4.00ha

Location:

Mulhoi, East Jaintia Hills District

**Current Wage rate:** 

Rs. 338.00 (Current Wage Rate (where z is notified wage rate by Labour Department on the date of payment by User Agency)

SI. No.	Item of works	Amount(Rs)	Remarks
1	Cost of expenditure for raising of Plantation and maintenance for 10 years	34,66,408.00	*
2	Erecting a Watch Tower for monitoring of plantation	5,00,000.00	Detailed estimate enclosed as Annexure-A
3	Construction of Camp Hut cum store room for keeping tools, Equipments and other materials	3,00,000.00	
	Total	42,66,408.00	

Rupees Forty Two Lakh Sixty Six Thousand Four Hundred Eight) only

#### **Detailed Estimate for Compensatory Afforestation**

#### PRELIMINARY WORKS.

Sl. No.	Item of works	Mandays/ Per Ha	Rate ( in terms of Z	Amount
1	2	3	4	5
1	Survey and demarcation including fixing of boundary marks at strategic points	2.00	2.00	676/-
2	Jungle clearance, burning, land preparation including staking, pit digging, hoeing, etc	24.00	24.00	8,112/-
3	Fencing  With 3 strand barbed wire and wooden fencing posts including cost of staples, fixing, fitting, etc, complete	64.00	64.00	21,632/-
4	Cost of collection of seeds	5.00	5.00	1,690/-
5	Construction of camp hut and inspection paths	4.00	4.00	1,352/-
6	Purchase of tools and plants	2.00	2.00	676/-
7	Supervisory staff to be engaged on casual basis from amongst the local people	12.00	12.00	4,056/-
8	Raising of polypot nursery for 2 beds per hectare to cover for mortality rate of plants in the plantation site	61.00	61.00	20,618/-
9	Provision for signboards, documentation, unkeep of records and other miscellaneous works	30.00	30.00	10,140/-
10	Sub Total in the Preliminary year	204.00	204.00	68,952/-
11	Soil & Moisture conservation measures in the plantation area @ 15%	30.60	30.60-	10,342.8/-
12	Monitoring & Evaluation @ 2%	4.08	4.08	1,379.04/-
13	Adding 15% contingency due to escalation cost and revision of wages rate etc.	35.80	35.80	12101.076/-
	Total in the preliminary year	274.48	274.48	92774.916/-

(Rupees Ninety Two Thousand Seven Hundred Seventy Four) only

# Creation and Maintenance (1st year)

# Wage Rate is 1.12z

SI. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z	Amount
1	2	3	4	5
1	Planting of nursery seedlings including carriage	20.00	22.40	7,571.2
	from nursery centres to plantation sites and			
	proper ramming after planting etc.			
2	Cost of manure and bio- fertilizer	40.00	44.80	15,142.4
3	Mulching and 3 times weeding	50.00	56.00	18,928.00
4	Fire protection during dry and windy season			
	(i) Wages of fire watchers from November of	et 1		
	the creation year to April of the following year	10.00	11.20	3,785.6
	(ii) Fire line clearance including controlled			3,785.6
	burning from November in the creation year to	10.00	11.20	
	April of the following year			
5	2 <sup>nd</sup> year maintenance of poly pot nursery	3.20	3.58	1,210.04
6	Maintenance of camp hut, signboard,	30.00	33.60	11,356.8
	documentation, protection from grazing, unkeep			
	of records and other miscellaneous works			
7	Supervision cost	12.00	13.44	4,542.72
	Sub Total	175.20	196.22	66322.36
8	Soil & Moisture conservation measures in the	26.28	29.43	9,947.34
	plantation area @ 15% of total cost of 1 <sup>st</sup> year			
	creation			
9	Monitoring & Evaluation @ 2%	3.50	3.92	1,324.96
10	Adding 8.5% being contingency due to	17.42	19.51	6,594.38
	escalation cost of materials etc. after			
	ascertaining the rate of interest due to accrue			
	from CA money to be deposited by User			3
	Agency			
	Total for 1st year creation and maintenance	222.41	249.10	84,189.04

(Rupees Eighty Four Thousand One Hundred Eighty Nine) only

# Maintenance of (2<sup>nd</sup> Year)

#### Wage Rate is 1.26z

SI. No.	Item of works	Mandays/ Per Ha	Rate ( in terms of Z	Amount
1	2	3	4	5
1	Vacancy filling by one year old seedlings in mortality areas	5.00	6.30	2129.4
2	Climber cutting and weedings 3 times	45.00	56.70	19164.6
3	Fire Protection			
	(i) Wages of fire watchers	10.00	. 12.60	4258.8
	(ii) Fire line clearance including controlled burning	10.00	12.60	4258.8
4	Maintenance of camp hut, signboard, inspection paths, fencing, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	37.80	12776.4
5	Supervision cost	12.00	15.12	5110.56
	Sub Total	112.00	141.12	47698.56
6	Provision for soil & moisture conservation measures in the plantation area @ 15%	16.80	21.17	7154.784
7	Monitoring & Evaluation @ 2%	2.24	2.82	953.9712
8	Adding 8.5% being contingency due to escalation cost etc. after ascertaining the rate of interest due to accrue from CA money to be deposited by User Agency	11.14	14.03	4743.6218
	Total in the 2 <sup>nd</sup> year	142.18	179.14	60550.937

(Rupees Sixty Thousand Five Hundred Fifty) only

# Maintenance (3<sup>rd</sup> Year)

#### Wage Rate is 1.41z

SI. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z	Amount
1	2	3	4	5
1	Vacancy filling wherever necessary	4.00	5.64	1906.32
2	Climber cutting and weedings 3 times	45.00	63.45	21446.1
3	Fire Protection			4765.8
	(i) Wages of fire watchers	10.00	14.10	,
	(ii) Fire line clearance including controlled burning	10.00	14.10	4765.8
4	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	42.30	14297.4
5	Supervision cost	12.00	16.92	5718.96
	Sub Total	111.00	156.51	52900.38
6	Provision for soil & moisture conservation measures in the plantation area @ 15%	16.65	23.48	7936.24
7	Monitoring & Evaluation @ 2%	2.22	3.13	1057.94
8	Adding 8.5% being contingency due to escalation cost etc. after ascertaining the rate of interest due to accrue from CA money to be deposited by User Agency	11.04	15.56	5260.9428
	Total in the 3 <sup>rd</sup> year	140.91	198.68	67155.5028

(Rupees Sixty Seven Thousand One Hundred Fifty Five) only

# Maintenance (4<sup>th</sup> Year)

# Wage Rate is 1.58z

SI. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z	Amount
1	2	3	4	5
1	Vacancy filling wherever necessary	2.00	3.16	1068.08
2	Climber cutting and 3 times weeding	45.00	71.10	2403.18
3	Fire Protection		15.80	5340.4
	(i) wages of fire watchers	10.00		
	(ii) Fireline clearance including controlled burning, etc.	10.00	. 15.80	5340. 4
4	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	47.40	1602.12
5	Supervision cost	12.00	18.96	6408.48
	Sub Total	109.00	172.22	58210.36
6	Provision for soil & moisture conservation measures in the plantation area @ 15%	16.35	25.83	8730.54
7	Monitoring & Evaluation @ 2%	2.18	3.44	1162.72
8	Adding 8.5% being contingency due to escalation cost etc. after ascertaining the rate of interest due to accrue from CA money to be deposited by User Agency	10.84	17.13	5789.0203
	Total in the 4 <sup>th</sup> year	138.37	218.62	73895,142

(Rupees Seventy Three Thousand Eight Hundred Ninety Five) only

# Maintenance (5<sup>th</sup> Year)

# Wage Rate is 1.77z

Sl. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z	Amount
1	2	3	4	5
1	Climber cutting including silvicultural works and two (2) times weedings	30.00	53.10	17947.8
2	Fire Protection		17.70	5982.6
	(i) Wages of fire watchers	10.00		
	(ii) Maintenance of fire line including controlled burning etc.	10.00	17.70	5982.6
3	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	53.10	17947.8
4	Supervision cost	12.00	21.24	7179.12
	Sub Total	92.00	162.84	55039.92
5	Provision for soil & moisture conservation measures in the plantation area @ 15%	13.80	24.43	8257.34
6	Monitoring & Evaluation @ 2%	1.84	3.26	1101.88
7	Adding 8.5% being contingency due to escalation cost etc. after ascertaining the rate of interest due to accrue from CA money to be deposited by User Agency	9.15	16.19	5473.72
	Total in the 5 <sup>th</sup> year	116.79	206.72	69870.426

(Rupees Sixty Nine Thousand Eight Hundred Seventy) only

# Maintenance (6<sup>th</sup> Year)

# Wage Rate is 1.98z

Sl. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z	Amount
1	2	3	4	5
1	Climber cutting including silvicultural works	20.00	39.60	13384.8
2	Fire Protection			
	(i) Wages of fire watchers	10.00	19.80	6692.4
	(ii) Maintenance of fire line including controlled burning etc.	10.00	19.80	6692.4
3	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	59.40	20077.2
4	Supervision cost	12.00	23.76	8030.88
	Sub Total	82.00	162.36	54887.82
5	Provision for soil & moisture conservation measures in the plantation area @ 15%	12.30	24.35	8230.3
6	Monitoring & Evaluation @ 2%	1.64	3.25	1098.5
7	Adding 8.5% being contingency due to escalation cost etc. after ascertaining the rate of interest due to accrue from CA money to be deposited by User Agency	8.15	16.15	5457.5853
	Total in the 6 <sup>th</sup> year	104.09	206.11	69664.471

(Rupees Sixty Nine Thousand Six Hundred Sixty Four) only

# Maintenance (7<sup>th</sup> Year)

# Wage Rate is 2.22z

SI. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z	Amount
1	2	3	4	5
1	Climber cutting including silvicultural works	16.00	35.52	12005.76
2	Fire Protection		22.20	7503.6
	(i) Wages of fire watchers	10.00		
			22.20	7503.6
	(ii) Maintenance of fireline including controlled	10.00		
	burning etc.	P4 (3), 802 (32 S		
3	Maintenance of camp hut, signboard, fencing,	30.00	66.60	22510.8
	inspection paths, protection from grazing,			
	documentation, unkeep of records and other			
	miscellaneous works			
4	Supervision cost	12.00	26.64	9004.32
	Sub Total	78.00	173.16	58528.08
5	Provision for soil & moisture conservation	11.70	25.97	8777.86
	measures in the plantation area @ 15%			
6	Monitoring & Evaluation @ 2%	1.56	3.46	1169.48
7	Adding 8.5% being contingency due to	7.76	17.22	5820.6176
	escalation cost etc. after ascertaining the rate of			)
	interest due to accrue from CA money to be			
	deposited by User Agency			
	Total in the 7 <sup>th</sup> year	99.02	219.82	74298.471

(Rupees Seventy Four Thousand Two Hundred Ninety Eight) only

# Maintenance (8<sup>th</sup> Year)

# Wage Rate is 2.49z

SI. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z	Amount
1	2	3	4	5
1	Climber cutting including silvicultural works	14.00	34.86	11782.68
2	Fire Protection  (i) Wages of fire watchers	10.00	24.90	8416.2
	(ii) Maintenance of fireline including controlled burning etc.	10.00	24.90	8416.2
3	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	. 74.70	25248.6
4	Supervision cost	12.00	29.88	10099.44
	Sub Total	76.00	189.21	63952,98
5	Provision for soil & moisture conservation measures in the plantation area @ 15%	11.40	28.39	9595.82
6	Monitoring & Evaluation @ 2%	1.52	3.78	1277.64
7	Adding 8.5% being contingency due to escalation cost etc. after ascertaining the rate of interest due to accrue from CA money to be deposited by User Agency	7.56	18.82	6361.1323
	Total in the 8 <sup>th</sup> year	96.48	240.23	81197.7123

(Rupees Eighty One Thousand One Hundred Ninety Seven) only

# Maintenance (9th Year)

# Wage Rate is 2.79z

SI. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z	Amount
1	2	3	4	5
1	Climber cutting including silvicultural works	12.00	33.48	11316.24
2	Fire Protection  (i) Wages of fire watchers	10.00	27.90	9430.2
	(ii) Maintenance of fireline including controlled burning etc.	10.00	27.90	9430.2
3	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	. 83.70	28290.6
4	Supervision cost	12.00	33.48	11316.24
	Sub Total	74.00	206.46	69783.48
5	Provision for soil & moisture conservation measures in the plantation area @ 15%	11.10	30.97	10467.86
6	Monitoring & Evaluation @ 2%	1.48	4.13	1395.94
7	Adding 8.5% being contingency due to escalation cost etc. after ascertaining the rate of interest due to accrue from CA money to be deposited by User Agency	7.36	20.53	6939.9671
	Total in the 9 <sup>th</sup> year	93.94	262.09	88586.639

(Rupees Eighty Eight Thousand Five Hundred Eighty Six) only

# Maintenance (10<sup>th</sup> Year)

# Wage Rate is 3.12z

SI. No.	Item of works	Man days/ Per Ha	Rate (in terms of Z	Amount
1	2	3	4	5
1	Climber cutting including silvicultural works	10.00	31.20	10545.6
2	Fire Protection			
	(i) Wages of fire watchers	10.00	31.20	10545.6
	(ii) Maintenance of fireline including controlled	10.00	31.20	10545.6
	burning etc.			
3	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other	30.00	. 93,60	31636.8
	miscellaneous works			
4	Supervision cost	12.00	37.44	12654.72
5	Misc. expenditure e.g salvaging of fencing materials from the plantation center wherever fencing is no longer necessary	6.00	18.72	3627.36
	Sub Total	78.00	243.36	82255.68
6	Provision for soil & moisture conservation measures in the plantation area @ 15%	11.70	36.50	12337
7	Monitoring & Evaluation @ 2%	1.56	4.87	1646.06
8	Adding 8.5% being contingency due to escalation cost etc. after ascertaining the rate of interest due to accrue from CA money to be	7.76	24.20	8180.3274
	deposited by User Agency			
	Total in the 10 <sup>th</sup> year	99.02	308.93	104419.47

(Rupees One Lakh Four Thousand Four Hundred Nineteen) only

#### **COST ABSTRACT FOR COMPENSATORY SCHEMES**

Sl. No.	Year	Man days	Amount in terms of z (where z is notified wage rate on the date of payment by user Agency)	Amount
1	Preliminary year	274.48	274.48	92774.916
2	First year creation & maintenance	222.41	249.10	84189.04
3	Second year maintenance	142.18	179.14	60550.937
4	Third year maintenance	140.91	198.68	67155.5028
5	Fourth year maintenance	138.37	218.62	73895.142
6	Fifth year maintenance	116.79	206.72	69870.426
7	Sixth year maintenance	104.09	206.11	69664.471
8	Seventh year maintenance	99.02	219.82	74298.471
9	Eight year maintenance	96.48	240,23	81197.7123
10	Ninth year maintenance	93.94	262.09	88586.639
11	Tenth year maintenance	99.02	308.93	104419.47
	Grand Total per hectare	1527.68	2563.93	866602.7271

#### (Rupees Eighty Six Lakh Sixty Six Thousand Six Hundred Two) only

The Cost of creation of plantation per Ha: Rs. 866602.7271

Total area of Plantation: 4.00ha

Total cost for creation of Plantation 9.7ha:  $866602 \times 4.00 = Rs. 34,66,408.00$ 

Erecting of watch Tower for monitoring of plantation: 5,00,000.00

Construction of Camp Hut cum store room for keeping tools, equipments and other materials:

3,00,000.00

Total Cost: 34,66,408+5,00,000+3,00,000=42,66,408.00 ( i.e. Forty Two Lakh Sixty Six Thousand Four Hundred Eight) only