Detailed estimate for compensatory afforestation in lieu of the proposal "Diversion of 32.693 ha of Forest Land for establishment of Cement plant and other allied activities at Mynkre in respect of M/s Hills Cement Company Limited

Total area of plantation:

32.693 ha.

Location:

Molhoi Village, Saipung Elaka,, East Jaintia

Hills District

**Current Wage rate:** 

Rs. 357.00 (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	2,99,24,655	Detàiled estimate enclosed
2	Erecting a Watch Tower	5,00,000.00	Monitoring of plantation raised under CAMPA
3	Construction of Camp Hut cum store room for	3,00,000.00	To keep tools, Equipments and other materials used in the plantation. Due to remoteness of area, a camp hut is required for the stay of field staffs and officers on patrolling or inspection time.
4	One Bolero Pick-up to the Saipung Range	11,00,000	Transportation of tools equipment, FYM, seeds and mobilization of the staffs/labours to the plantation sites under CAMPA of Saipung Range.
	Total	3,18,24,655	1

(i.e. Three Crore, Eighteen Lakh, Twenty Four Thousand Six Hundred and Fifty Five) only

### <u>Detailed Estimate for Compensatory Afforestation</u> <u>Current wage rate: Rs. 357/ Man day.</u>

#### PRELIMINARY WORKS.

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

Total cost: 274.48 @ 357/Mandays = Rs. 97,989.36

(Rupees Ninety Seven Thousand Nine Hundred and Eighty Nine) only

# Creation and Maintenance (1st year) Wage Rate is 1.12z

SI. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z
1	2	3	4
1	Planting of nursery seedlings including carriage from nursery centres to plantation sites and proper ramming after planting etc.	20.00	22.40
2	Cost of manure and bio- fertilizer	40.00	44.80
3	Mulching and 3 times weeding	50.00	56.00
	Fire protection during dry and windy season		
4	(i) Wages of fire watchers from November of the creation year to April of the following year	10.00	. 11.20
	(ii) Fire line clearance including controlled burning from November in the creation year to April of the following year	10.00	11.20
5	2 <sup>nd</sup> year maintenance of poly pot nursery	3.20	3.58
6	Maintenance of camp hut, signboard, documentation, protection from grazing, unkeep of records and other miscellaneous works	30.00	33.60
7	Supervision cost	12.00	13.44
	Sub Total	175.20	196.22
8	Soil & Moisture conservation measures in the plantation area @ 15% of total cost of 1 <sup>st</sup> year creation	26.28	29.43
9	Monitoring & Evaluation @ 2%	3.50	3.92
10	Adding 8.5% being contingency due to escalation cost of materials etc. after ascertaining the rate of interest due to accrue from CA money to be deposited by User Agency	17.42	19.51
	Total for 1st year creation and maintenance	222,41	249.10

Total Cost: 249 @357/ Mandays =Rs. 88,928.00

(Rupees Eighty Eight Thousand Nine Hundred Twenty Eight) only

### Maintenance of (2<sup>nd</sup> Year) Wage Rate is 1.26z

Sl. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z
1	2	3	4
1	Vacancy filling by one year old seedlings in mortality areas	5.00	6.30
2	Climber cutting and weedings 3 times	45.00	56.70
	Fire Protection		
3	(i) Wages of fire watchers	10.00	12.60
*	(ii) Fire line clearance including controlled burning	. 10.00	12.60
4	Maintenance of camp hut, signboard, inspection paths, fencing, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	37.80
5	Supervision cost	12.00	15.12
	Sub Total	112.00	141.12
6	Provision for soil & moisture conservation measures in the plantation area @ 15%	16.80	21.17
7	Monitoring & Evaluation @ 2%	2.24	2.82
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
	Total in the 2 <sup>nd</sup> year	142.18	179.14

Total Cost: 179.14 @ 357 Mandays = Rs. 63,952.98

(Rupees Sixty Three Thousand Nine Hundred Fifty Two) only

# Maintenance (3<sup>rd</sup> Year) Wage Rate is 1.41z

Sl. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z
1	2	3	4
1	Vacancy filling wherever necessary	4.00	5.64
2	Climber cutting and weedings 3 times	45.00	63.45
3	Fire Protection  (i) Wages of fire watchers	10.00	14.10
	(ii) Fire line clearance including controlled burning	10.00	14.10
4	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	42.30
5	Supervision cost	12.00	16.92
	Sub Total	111.00	156.51
6	Provision for soil & moisture conservation measures in the plantation area @ 15%	16.65	23.48
7	Monitoring & Evaluation @ 2%	2.22	3.13
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
	Total in the 3 <sup>rd</sup> year	140.91	198,68

Total Cost: 198.68 @357 Mandays = Rs. 70,928.76

(Rupees Seventy Thousand Nine Hundred Twenty Nine) only

# Maintenance (4<sup>th</sup> Year) Wage Rate is 1.58z

Sl. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z
1	2	3	4
1	Vacancy filling wherever necessary	2.00	3.16
2	Climber cutting and 3 times weeding	45.00	71.10
2	(i) wages of fire watchers	10.00	15.80
3	(ii) Fire line clearance including controlled burning, etc.	10.00	15.80
4	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	47.40
5	Supervision cost	12.00	18.96
	Sub Total	109.00	172.22
. 6	Provision for soil & moisture conservation measures in the plantation area @ 15%	16.35	25.83
7	Monitoring & Evaluation @ 2%	2.18	3.44
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
	Total in the 4 <sup>th</sup> year	138.37	218.62

Total cost: 218.62 @ 357 Mandays= Rs. 78,047.00

(Rupees Seventy Eight Thousand Forty Seven) only

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# Maintenance (5<sup>th</sup> Year) Wage Rate is 1.77z

SI. No.	Item of works	Mandays/ Per Ha	Rate ( in terms of Z
1	2	3	4
1	Climber cutting including silvicultural works and two (2) times weedings	30.00	53.10
2	Fire Protection  (i) Wages of fire watchers	10.00	17.70
2	(ii) Maintenance of fire line including controlled burning etc.	10.00	17.70
3	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	53.10
4	Supervision cost	12.00	21.24
4	Sub Total	92.00	162.84
5	Provision for soil & moisture conservation measures in the plantation area @ 15%	13.80	24.43
6	Monitoring & Evaluation @ 2%	1.84	3.26
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	9.15	16.19
	deposited by User Agency  Total in the 5 <sup>th</sup> year	116.79	206.72

Total cost: 206.72 @ 357 Mandays= Rs.73,799.04

(Rupees Seventy Three Thousand Seven Hundred Ninety Nine) 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
1	2	3	4
1	Climber cutting including silvicultural works	20.00	39.60
2	Fire Protection  (i) Wages of fire watchers	10.00	19.80
	(ii) Maintenance of fire line including controlled burning etc.	10.00	19.80
3	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	59.40
4	Supervision cost	12.00	23.76
	Sub Total	82.00	162.36
5	Provision for soil & moisture conservation measures in the plantation area @ 15%	12.30	24.35
6	Monitoring & Evaluation @ 2%	1.64	3.25
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
	Total in the 6 <sup>th</sup> year	104.09	206.11

Total cost: 206.11 @ 357 Mandays =73,581.27

(Rupees Seventy Three Thousand Five Hundred Eighty One) only

# Maintenance (7<sup>th</sup> Year) Wage Rate is 2.22z

Sl. No.	Item of works	Mandays/ Per Ha	Rate ( in terms of Z
1	2	3	4
1	Climber cutting including silvicultural works	16.00	35.52
2	Fire Protection  (i) Wages of fire watchers	10.00	22.20
50001	(ii) Maintenance of fireline including controlled burning etc.	10.00	22.20
3	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	66.60
4	Supervision cost	12.00	26.64
	Sub Total	78.00	173.16
5	Provision for soil & moisture conservation measures in the plantation area @ 15%	11.70	25.97
6	Monitoring & Evaluation @ 2%	1.56	3.46
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	7.76	17.22
	Total in the 7 <sup>th</sup> year	99.02	219.82

Total Cost: 219.82 @ 357 Mandays = Rs. 78,475.74

(Rupees Seventy Eighty Thousand Four Hundred Seventy Six) only

# Maintenance (8<sup>th</sup> Year) Wage Rate is 2.49z

Sl. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z
1	2	3	4
1	Climber cutting including silvicultural works	14.00	34.86
2	Fire Protection  (i) Wages of fire watchers	10.00	24.90
	(ii) Maintenance of fire line including controlled burning etc.	10.00	24.90
3	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	74.70
4	Supervision cost	12.00	29.88
	Sub Total	76.00	189.21
5	Provision for soil & moisture conservation measures in the plantation area @ 15%	11.40	28.39
6	Monitoring & Evaluation @ 2%	1.52	3.78
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
	Total in the 8 <sup>th</sup> year	96.48	240.23

Total cost: 240.23 @ 357 Mandays = Rs. 85,762.11

(Rupees Eighty Five Thousand Seven Hundred Sixty Two) only

### Maintenance (9<sup>th</sup> Year) Wage Rate is 2.79z

Sl. No.	Item of works	Mandays/ Per Ha	Rate (in terms of Z
1	2	3	4
1	Climber cutting including silvicultural works	12.00	33.48
2	Fire Protection  (i) Wages of fire watchers	10.00	27.90
	(ii) Maintenance of fire line including controlled burning etc.	10.00	27.90
3	Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, and keep of records and other miscellaneous works	30.00	83.70
4	Supervision cost	12.00	33.48
	Sub Total	74.00	206.46
5	Provision for soil & moisture conservation measures in the plantation area @ 15%	11.10	30.97
6	Monitoring & Evaluation @ 2%	1.48	4.13
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
	Total in the 9 <sup>th</sup> year	93.94	262.09

Total cost: 262.09 @ 357 Mandays = Rs. 93,566.13

(Rupees Ninety Three Thousand Five Hundred Sixty Six) only

# Maintenance (10<sup>th</sup> Year) Wage Rate is 3.12z

Sl. No.	Item of works	Mandays/ Per Ha	Rate ( in terms of Z
1	2	3	4
1	Climber cutting including silvicultural works	10.00	31.20
2	Fire Protection  (i) Wages of fire watchers  (ii) Maintenance of fireline including controlled	10.00	31.20 31.20
3	burning etc.  Maintenance of camp hut, signboard, fencing, inspection paths, protection from grazing, documentation, unkeep of records and other miscellaneous works	30.00	93.60
4	Supervision cost	12.00	. 37.44
5	Misc. expenditure e.g salvaging of fencing materials from the plantation center wherever fencing is no longer necessary	6.00	18.72
	Sub Total	78.00	243.36
6	Provision for soil & moisture conservation measures in the plantation area @ 15%	11.70	36.50
7	Monitoring & Evaluation @ 2%	1.56	4.87
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	7.76	24.20
	Total in the 10 <sup>th</sup> year	99.02	308.93

Total cost: 308.93 @ 357 Mandays = Rs. 1,10,288.00

(Rupees One Lakh Ten Thousand Two Eighty Eight) 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	97,989
2	First year creation & maintenance	222.41	249.10	88,928
3	Second year maintenance	142.18	179.14	63,953
4	Third year maintenance	140.91	198.68	70,929
5	Fourth year maintenance	138.37	218.62	78,047
6	Fifth year maintenance	116.79	206.72	73,799
7	Sixth year maintenance	104.09	206.11	73,581
8	Seventh year maintenance	99.02	219.82	78,476
9	Eight year maintenance	96.48	240.23	85,762
10	Ninth year maintenance	93.94	262.09	93,566
11	Tenth year maintenance	99.02	308.93	1,10,288
	Grand Total per hectare	1527.68	2563.93	9,15,323

### (Rupees One Lakh Ten Thousand Two Hundred Eighty Eight) only

The Cost of creation of plantation per Ha: Rs. 9,15,323

Total area of Plantation: 32.693ha

Total cost for creation of Plantation of 32.693ha:  $9,15,323 \times 32.693 = Rs.2,99,24,655$ 

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

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

3,00,000.00

One Bolero Pick-up to the Saipung Range

Total Cost: 2,99,24,655+5,00,000+3,00,000+11,00,000=3,18,24,655 (i.e. Rupees Three Crore , Eighteen Lakh, Twenty Four Thousand Six Hundred and Fifty Five ) only