

Diversión de 0,2520 Ha. of forest land for the construction of Solid Waste Management Plant at MC Rohru Distt. Shimla HP.

Cost Model: for 0.20 ha. Block Plantation with 100 tall plants (Deodar and Oak, 4 strand B/Wire fencing with RCC fence post with 10 Years maintenance.

Particulars of works	Rates for 1 ha	Rates for 0.20 ha	Year of execution of works	Cost escalation	Amount of cost escalation	Total Amount
(A) Survey, Demarcation and Fencing	34600	6920	2021-2022	10%	692	7612
(B) Planting	133400	26680	2021-2022	10%	2668	29348
1st Year maintenance	9500	1900	2022-2023	20%	380	2280
2nd Year maintenance	4800	960	2023-2024	30%	288	1248
3rd Year maintenance	4800	960	2024-2025	40%	384	1344
4th Year maintenance	2900	580	2025-2026	50%	290	870
5th Year maintenance	2900	580	2026-2027	60%	348	928
6th Year maintenance	2000	400	2027-2028	70%	280	680
7th Year maintenance	2000	400	2028-2029	80%	320	720
8th Year maintenance	2000	400	2029-2030	90%	360	760
9th Year Maintenance	2000	400	2030-2031	100%	400	800
10th Year maintenance	2000	400	2031-2032	110%	440	840

Note: The Cost of Plants have been included in (B) Planting.

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Cost model for 1 ha. Block plantation with 500 tall plants per ha. 4 strands B/wire fencing with RCC Fence post and maintenance for 7 year to be raised. Based on 5 ha. Compact site of plantation.)

Sr. No.	Particular of works	Unit	Quantity	Rate per unit at the wage rate of 210	Amount
A- Survey, demarcation & fencing.					
1	Survey and demarcation & fencing	Hac.	1	134.66	134.66
2	Cost of RCC Poles and painting	Hac.	60	300.0	18000.00
3	Cost of carriage of RCC Poles up to 2 Kms uphill/downhill	Nos.	60	44.67	2679.93
4	Preparation/Digging of holes of 20x30x50x cm size for fixing of fence	No	60	12.08	724.78
5	Fixing of RCC fence posts in concrete i/c strutting	Nos.	140	9.55	572.79
6	Carriage of B/wire from store to nearest road head near plantation site in motor transport (average carriage 10 kms)	Qntl.	0.9	Ls	500.00
7	Carriage of b/wire manually over a distance of 2km uphill/downhill from road side to plantation site	Per Km Per qntl	0.9	98.20	176.76
8	Stretching and fixing of b/wire in four strands	Rmt	720	6.40	4607.88
9	Interlacing of thorny bushes along the fence	Rmt	180	5.45	981.56
10	Cost of procurement of B/wire	Qntl.	0.90	6930	6237.00
	Total A survey demarcation & fencing				34600.00
Or say					
B - Planting					
1	Clearing the site of weeds / bush cutting in strips of 1 to 2 mtrs. Wide.	Hac.	1	1590.36	1590.36
2	Digging of pits 90x90x90 cm	Nos.	500	83.17	41585.63
3	Filling of pits 90x90x90 cm	Nos.	500	7.08	3539.91
4	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 15kms)	Nos.	500	Ls	7500.0
5	Carriage of plant in Poly bags (18"x24") from road side to plantation site over a distance of 2 kms uphill/downhill manually	Nos.	500	30.0	15000.00
6	Addition of fertilizer/FYM to planting pits	Nos.	500	Ls	5000.00
7	Planting of tall Plants in pits i/c ramming	Nos.	500	8.72	4359.89
8	Construction of Inspection Path 60 cm wide	Rmt	100	14.67	1466.83
9	Cost of Tall plants raised in Departmental Nurseries (3 year old in 18"x24" bags)	Nos.	500	75.00	37500.00

	De-weeding and hoeing twice year	Nos.	500	10.91	10906.39
	Watering the plants during months of stress	Nos.	500	Ls	4000.00
	Plantation Display Board (depicting the Name of the Compensatory plantation, Total area of plantation, Total number of plants, Species planted and the Name of all the Proposals with corresponding number of plants planted against each, for which the land was diverted)	Nos.	1	Ls	1000.00
	Total planting				133448.31
	Or say				133400.00
	Total fencing and planting (A+B)				168000.00
	Gross total				168000.00
C.	MAINTENANCE				
	1 st year maintenance (10% beating up of failures)				
	Re digging and pits 90x90x90cm	No	50	49.89	2494.00
	Filling of pits 90x90x90cm	No	50	7.08	353.99
	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 10kls)	No	50	Ls	750.00
	Carriage of plants in poly bags (18"x24") from road side to plantation site over distance of 2 kms uphill/downhill	No	50	30.00	1500.00
	Planting of Tall plants in pits i/c ramming	No	50	8.72	435.99
	Cost of tall plants raised in departmental Nurseries (3 year old in 18"x24" bags)	No	50	75.00	3750.00
	Repair of fencing	Rmt	72	2.40	172.80
	Total 1 st year Maintenance				9457.38
	Or Say				9500.00
	2 nd year maintenance (5% beating up of failures)				
	Re digging and pits 90x90x90cm	No	25	49.80	1247.30
	Filling of pits 90x90x90cm	No	25	7.08	177.00
	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 10kls)	No	25	Ls	350.00
	Carriage of plants in poly bags (18"x24") from road side to plantation site over distance of 2 kms uphill/downhill	No	25	30.00	750.00
	Planting of Tall plants in pits i/c ramming	No	25	8.72	217.99
	Cost of tall plants raised in departmental Nurseries (3 year old in 18"x24" bags)	No	25	75.00	1875.00
	Repair of fencing	No	72	2.40	172.80
	Total 2 nd Year Maintenance				4790.00
	Or Say				4800.00
	3 rd year maintenance (5% beating up of failures)				
	Re digging and pits 90x90x90cm	No	25	49.80	1247.30
	Filling of pits 90x90x90cm	No	25	7.08	177.00
	Carriage of poly plants from nursery to nearest road	No	25	Ls	350.00

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	head near plantation site in motor transport (average distance 10kls)				
1	Carriage of plants in poly bags (18"x24") from road side to plantation site over distance of 2 kms uphill/downhill	No	25	30.00	750.00
2	Planting of Tall plants in pits i/c ramming	No	25	8.72	217.99
3	Cost of tall plants raised in departmental Nurseries (3 year old in 18"x24" bags)	No	25	75.00	1875.00
4	Repair of fencing	Rmt.	72	2.40	172.80
	Total 3 rd Maintenance				4790.00
	Or Say				4800.00
	4 th year maintenance (3% beating up of failures)				
1	Re digging and pits 90x90x90cm	No	15	49.80	748.35
2	Filling of pits 90x90x90cm	No	15	7.08	106.20
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 10kls)	No	15	Ls	210.00
4	Carriage of plants in poly bags (18"x24") from road side to plantation site over distance of 2 kms uphill/downhill	No	15	30.00	450.00
5	Planting of Tall plants in pits i/c ramming	No	15	8.72	130.80
6	Cost of tall plants raised in departmental Nurseries (3 year old in 18"x24" bags)	No	15	75.00	1125.00
7	Repair of fencing	Rmt	72	2.40	172.80
	Total 4 th year Maintenance				2943.17
	Or Say				2900.00
	5 th year maintenance (3% beating up of failures)				
1	Re digging and pits 90x90x90cm	No	15	49.80	748.35
2	Filling of pits 90x90x90cm	No	15	7.08	106.20
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 10kls)	No	15	Ls	210.00
4	Carriage of plants in poly bags (18"x24") from road side to plantation site over distance of 2 kms uphill/downhill	No	15	30.00	450.00
5	Planting of Tall plants in pits i/c ramming	No	15	8.72	130.80
6	Cost of tall plants raised in departmental Nurseries (3 year old in 18"x24" bags)	No	15	75.00	1125.00
7	Repair of fencing	Rmt.	72	2.40	172.80
	Total 5 th year Maintenance				2943.17
	Or Say				2900.00
	6 th year maintenance (2% beating up of failures)				
1	Re digging and pits 90x90x90cm	No	10	49.80	498.92
2	Filling of pits 90x90x90cm	No	10	7.08	70.80
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 10kls)	No	10	Ls	140.00
4	Carriage of plants in poly bags (18"x24") from road	No	10	30.00	300.00

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Side to plantation site over distance of 2 kms uphill/downhill				
Planting of Tall plants in pits i/c ramming	No	10	8.72	87.20
Cost of tall plants raised in departmental Nurseries (3 year old in 18"x24" bags)	No	10	75.00	750.00
Repair of fencing	Rmt	72	2.40	172.80
Total 6 th year Maintenance				2019.71
Or say				2000.00
7 th year maintenance (2% beating up of failures)				
Reddigging and pits 90x90x90cm	No	10	49.80	498.02
Filling of pits 90x90x90cm	No	10	7.08	70.80
Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 10kls)	No	10	Ls	140.0
Carriage of plants in poly bags (18"x24") from road side to plantation site over distance of 2 kms uphill/downhill	No	10	30.00	300.00
Planting of Tall plants in pits i/c ramming	No	10	8.72	87.20
Cost of tall plants raised in departmental Nurseries (3 year old in 18"x24" bags)	No	10	75.00	750.00
Repair of fencing	Rmt	72	2.40	172.80
Total 7 th year Maintenance				2019.71
Or say				2000.00
Total (C) Maintenance cost of 7 years				28900.00
Total				1969000.00
D TOTAL (NEW + MAINTENANCE) D=(A+B+C)				9845.00
E Contingency 5% of all above				9845.00
Total Contingency (E)				205745.00
Total (Plantation +Contingency) (D+E)				36180.33
F Departmental Charges				36180.33
17.5% of all above				242925.38
Total departmental Charges (F)				242925.38
Grand Total Of Scheme (D+E+F)				242900.30
Or Say				


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