

CALCULATION OF C.A AREA IN CONNECTION WITH ADDITIONAL FOREST PROPOSAL FOR MUCK DISPOSAL AREA FOR WIDENING/IMPROVEMENT OF EXISTING ROAD TO NHDL SPECIFICATION OF HAYULIANG-CHANGWINTI(KM 45.05 TO 50.820) AND CHANGWINTI-WALONG-NAMTI(KM 0.000 TO KM 54.450) NET LENGTH 60.220 KM UNDER PROJECT IN ANIAW DISTRICT

C.A Area:- Dilehu R.f.  
Area:- 21.35

Speices to be planted :- Pine,Alnus,Hingori,Siris, Jutuli etc

(PROPOSAL NO:- FP/AR/ROAD/145483/2021

| Sl. No. | Item of work  | Unit         | Qty.                                       | Rate   | Amount   | Remarks  |   |
|---------|---|--------------|--|--|--|--|---|
| A.      | Creation of Nursery<br>Cost of Saplings @ 1100 nos./Ha. @ Rs. 19/-  | No           | 23479.94                                   | 19.00  | 446118.86  | As per new wages (Area-II)   |   |
|         | <b>Sub Total:-</b>  |              |  |  | <b>446118.86</b>   |  |   |
| 1       | <b>1st YEAR OPERATION</b><br>Survey & Demarcation and Preparation of map @ 4 Mandays/ha.  | 4 Nos        |  |  |  |  |   |
|         | <b>Sub-Total</b>  | <b>4 Nos</b> | <b>21.35</b>                               | <b>350.00</b>  | <b>29890.00</b>  |  |   |
| 2       | <b>2nd Year operation</b><br>I) Erection of barbed wire fence ( 5 strand )<br>Fencing per 100 Rmt.<br><br>II) Maint. Of barbed wire fencing @ 5% of erection cost in each year from 3rd year to 6th year Add.<br>Add escalation value by multiplying factor :<br>1.2 for 3rd year<br>1.3 for 4th year<br>1.4 for 5th year<br>1.5 for 6th year   | Rmt          |  | 18400.00   |  | Annex ure 'A'  |   |
|         | <b>Sub-Total</b>  | <b>Rmt</b>   | <b>13</b>                                  | <b>23368.00</b>  | <b>303784.00</b>   |  |   |
| 3       | <b>Raising of seedlings for casualty replacement (Per Ha.)</b><br>3rd year 15% = 165 Nos.<br>4th year 10% = 110 Nos. = 275 Nos.   | No           | 3523<br>2349                               |  |  |  |   |
|         | <b>Sub-Total</b>  |              | <b>5871</b>                                | <b>19.00</b>   | <b>111553.75</b>   |  |   |
| 4       | <b>Raising of plantation (Per Ha.)</b><br>(i) Clearance of brush wood, planting lines and staking of debries @ 15 Mandays/Ha.<br>(ii) Alignment of pits & preparation of stakes, staking @ 10 Mandays/Ha.<br>(iii) Digging of pits 30cm X30cmX30cm @ 22 Mandays/Ha.<br>(iv) Preparation of thala by uprooting of debris by hoeing around pits @ 22 Mandays/per.<br>(v) Carring of sapling to the planting site i/c planting of sapling @ 30 Mandays (Area II).<br>(vi) Making of inspection path 1 mtr wide @ 3 Mandays/ha.<br>(vii) Fire line cutting 3 mtrs wide along the periphery @ 5 Mandays/ha.<br>(viii) Tending 4 weeding @ 12 Mandays/Weeding per ha. | ha           | 15<br>10<br>22<br>22<br>30<br>3<br>5<br>48 | 21.35<br>21.35<br>21.35<br>21.35<br>21.35<br>21.35<br>21.35<br>21.35 | 320.25<br>213.5<br>469.70<br>469.7<br>640.5<br>64.05<br>106.75<br>1024.8 | 350.00<br>350.00<br>350.00<br>350.00<br>350.00<br>350.00<br>350.00<br>350.00 | 112087.50<br>74725.00<br>164395.00<br>164395.00<br>224175.00<br>22417.50<br>37362.50<br>358680.00 |

|    |   |              |              |                |               |                   |
|----|---|--------------|--------------|----------------|---------------|-------------------|
|    | Add 10% escalation value on total of item No. 4 (i) to 4 (viii)             | 15.5         | 21.35        | 330.925        | 350.00        | 115823.75         |
|    | <b>Sub-Total</b>  | <b>170.5</b> | <b>21.35</b> | <b>3640.18</b> | <b>350.00</b> | <b>1274061.25</b> |
| 5  | <b>3rd Year operation (per ha.)</b>   |              |              |                |               |                   |
|    | i) Tending - 3 weeding @ 12 Mandays/Ha.                                     | 36           | 21.35        | 768.6          | 350.00        | 269010.00         |
|    | ii) Casualty replacement 15%  | 7            | 21.35        | 149.45         | 350.00        | 52307.50          |
|    | iii) Maint. Of Inspection path @ 1 Mandays/Ha.                              | 1            | 21.35        | 21.35          | 350.00        | 7472.50           |
|    | iv) Maint. Of fire line @ 1 Mandays/Ha.                                     | 1            | 21.35        | 21.35          | 350.00        | 7472.50           |
|    | Add 20% escalation value on total of item 5(i) to 5(iv)                     | 9            | 21.35        | 192.15         | 350.00        | 67252.50          |
|    | <b>Sub-Total</b>  | <b>54</b>    | <b>21.35</b> | <b>1152.90</b> | <b>350.00</b> | <b>403515.00</b>  |
| 6  | <b>4th Year operation (per Ha.)</b>   |              |              |                |               |                   |
|    | i) Tending -2 weeding @ 12 mandays/ Ha.                                     | 24           | 21.35        | 512.4          | 350.00        | 179340.00         |
|    | ii) Casualty replacement 10% @ 7 Mandays/ha.                                | 7            | 21.35        | 149.45         | 350.00        | 52307.50          |
|    | iii) Maint. Of Inspection path @ 1 DL/Ha.                                   | 1            | 21.35        | 21.35          | 350.00        | 7472.50           |
|    | iv) Maint. Of fire line @ 1 DL/Ha.  | 1            | 21.35        | 21.35          | 350.00        | 7472.50           |
|    | Add 30% escalation value on item 6(i) to 6 (iv)                             | 9.9          | 21.35        | 211.365        | 350.00        | 73977.75          |
|    | <b>sub-Total</b>  | <b>42.9</b>  | <b>21.35</b> | <b>915.915</b> | <b>350.00</b> | <b>320570.25</b>  |
| 7  | <b>5th Year operation (per Ha.)</b>   |              |              |                |               |                   |
|    | i) Tending -1 weeding @ 12 Mandays/Ha.                                      | 12           | 21.35        | 256.2          | 350.00        | 89670.00          |
|    | ii) Maint. Of Inspection path @ 1 DL/Ha.                                    | 1            | 21.35        | 21.35          | 350.00        | 7472.50           |
|    | iii) Maint. Of fire line @ 1 DL/Ha.   | 1            | 21.35        | 21.35          | 350.00        | 7472.50           |
|    | Add 40% escalation value on item 7(i) to 7 (iii)                            | 5.6          | 21.35        | 119.56         | 350.00        | 41846.00          |
|    | <b>sub-Total</b>  | <b>19.6</b>  | <b>21.35</b> | <b>418.46</b>  | <b>350.00</b> | <b>146461.00</b>  |
| 8  | <b>6th Year operation (per Ha.)</b>   |              |              |                |               |                   |
|    | i)Tending -1 weeding @ 12 Mandays/weeding/Ha.                               | 12           | 21.35        | 256.2          | 350.00        | 89670.00          |
|    | ii) Maint. Of Inspection path @ 1 DL/Ha.                                    | 1            | 21.35        | 21.35          | 350.00        | 7472.50           |
|    | iii) Maint. Of fire line @ 1 DL/Ha.   | 1            | 21.35        | 21.35          | 350.00        | 7472.50           |
|    | Add 50% escalation value on item 8 (i) to 8 (iii)                           | 7            | 21.35        | 149.45         | 350.00        | 52307.50          |
|    | <b>sub-Total</b>  | <b>21</b>    | <b>21.35</b> | <b>448.35</b>  | <b>350.00</b> | <b>156922.50</b>  |
| 9  | <b>7th Year operation (per Ha.)</b>   |              |              |                |               |                   |
|    | i) Maint. Of Inspection path, fire line and climber cutting 5 Mandays/ha.   | 5            | 21.35        | 106.75         | 350.00        | 37362.50          |
|    | Add 60% escalation value on total item 9 (i)                                | 3            | 21.35        | 64.05          | 350.00        | 22417.50          |
|    | <b>Sub-Total</b>  | <b>8</b>     | <b>21.35</b> | <b>170.8</b>   | <b>350.00</b> | <b>59780.00</b>   |
| 10 | <b>8th Year operation</b>   |              |              |                |               |                   |
|    | i) Maint. Of Inspection path, fire line and climber cutting 5 Mandays/ha.   | 5            | 21.35        | 106.75         | 350.00        | 37362.50          |
|    | Add 70% escalation value on item 10 (i)                                     | 3.5          | 21.35        | 74.725         | 350.00        | 26153.75          |
|    | <b>sub-Total</b>  | <b>8.5</b>   | <b>21.35</b> | <b>181.475</b> | <b>350.00</b> | <b>63516.25</b>   |
| 11 | <b>9th Year operation (per ha.)</b>   |              |              |                |               |                   |
|    | i) Maint. Of Inspection path, fire line and climber cutting @ 5 Mandays/ha. | 5            | 21.35        | 106.75         | 350.00        | 37362.50          |
|    | Add 80% escalation value on total of item 11(i)                             | 4            | 21.35        | 85.4           | 350.00        | 29890.00          |
|    | <b>sub-Total</b>  | <b>9</b>     | <b>21.35</b> | <b>192.15</b>  | <b>350.00</b> | <b>67252.50</b>   |
| 12 | <b>10th Year operation</b>  |              |              |                |               |                   |
|    | i) Maint. Of Inspection path, fire line and climber cutting @ 5 Mandays/ha. | 5            | 21.35        | 106.75         | 350.00        | 37362.50          |
|    | Add 90% escalation value on total of item 12 (i)                            | 4.5          | 21.35        | 96.075         | 350.00        | 33626.25          |

| sub-Total |  | 9.5               | 21.35 | 202.825   | 350.00     | 70988.75   |
|-----------|--|-------------------|-------|-----------|------------|------------|
| 13        | Wages for plantation watchman at the rate of U/skilled labourer round the yr for the 10 yrs (one watchman for every 25 ha. Of area subject to a minimum area of 15 ha.) @ Rs. 10500/- for Area -II per month Adding escalation value by multiplying factor as below<br>Sub Total for 10 Years<br>(M.F.=1.1) for 2nd year.<br>(M.F.=1.2) for 3rd year<br>(M.F.=1.3) for 4th year<br>(M.F.=1.4) for 5th year<br>(M.F.=1.5) for 6th year<br>(M.F.=1.6) for 7th year<br>(M.F.=1.7) for 8th year<br>(M.F.=1.8) for 9th year<br>(M.F.=1.9) for 10th year | 12 month<br>1 Nos |       |           |            |            |
|           |  |                   | 1.10  | 126000.00 | 126000.00  |            |
|           |  |                   | 1.20  | 126000.00 | 138600.00  |            |
|           |  |                   | 1.30  | 126000.00 | 151200.00  |            |
|           |  |                   | 1.40  | 126000.00 | 163800.00  |            |
|           |  |                   | 1.50  | 126000.00 | 176400.00  |            |
|           |  |                   | 1.60  | 126000.00 | 189000.00  |            |
|           |  |                   | 1.70  | 126000.00 | 201600.00  |            |
|           |  |                   | 1.80  | 126000.00 | 214200.00  |            |
|           |  |                   | 1.90  | 126000.00 | 226800.00  |            |
|           | Sub-Total  | 1                 |       |           | 239400.00  |            |
|           |  |                   |       |           | 1827000.00 | 1827000.00 |
| 14        | a) Cost of LMV - 1 (one) No. for every 300 Ha of CA area.<br>b) Cost of HMV 1 (one) No. For every 300 ha of CA area.   |                   |       |           |            | N.A.       |
| 15        | a) 1 (one) driver @ Rs. 11500 for Area II per month for a period of 10 years for every 300 ha of CA area against item No. 14 (b)<br>(M.F.=1.1) for 2nd year.<br>(M.F.=1.2) for 3rd year<br>(M.F.=1.3) for 4th year<br>(M.F.=1.4) for 5th year<br>(M.F.=1.5) for 6th year<br>(M.F.=1.6) for 7th year<br>(M.F.=1.7) for 8th year<br>(M.F.=1.8) for 9th year<br>(M.F.=1.9) for 10th year  |                   |       |           |            | N.A.       |
|           | Sub Total  |                   |       |           |            | 0.00       |
|           | b) 1 (one) handyman @ Rs. 10500/- for Area II per month for a period of 10 years for CA area more than 300 ha.<br>(M.F.=1.1) for 2nd year.<br>(M.F.=1.2) for 3rd year<br>(M.F.=1.3) for 4th year<br>(M.F.=1.4) for 5th year<br>(M.F.=1.5) for 6th year<br>(M.F.=1.6) for 7th year<br>(M.F.=1.7) for 8th year<br>(M.F.=1.8) for 9th year<br>(M.F.=1.9) for 10th year  |                   |       |           |            | N.A.       |
|           | Sub Total  |                   |       |           |            | 0.00       |

|    |   |          |            |          |            |      |                                      |
|----|---|----------|------------|----------|------------|------|--------------------------------------|
| 16 | <p>a) Const. of OBT labours shed (2 room) for workers at plantation site subject to a minimum area of 15 ha. And upto 25 ha. Beyond 25 ha. one room to be added for every 13 ha. or part thereof at proportionate cost.</p> <p>(b) Maint. Of OBT hut @ 25% of the construction cost per year from 4th year to 6th year including escalation value by multiplying factor</p> <p>1.3 for 4th year<br/>1.4 for 5th year<br/>1.5 for 6th year</p> | 1        | No. Rooms  |          | 258000.00  |      |                                      |
|    |   |          | 1.30       | 83850.00 | 83850.00   |      |                                      |
|    |   |          | 1.40       | 90300.00 | 90300.00   |      |                                      |
|    |   |          | 1.50       | 96750.00 | 96750.00   |      |                                      |
|    | <b>Sub-Total</b>  | <b>1</b> | <b>Nos</b> |          | 528900.00  |      | <b>528900.00</b>                     |
| 17 | <p>a) Const of Modified Improved Basha Type standard size quarter for every 50 ha.</p> <p>b) Maint. Of @ 20% of const. cost per year (from 2nd year to 9th year) including:</p> <p>1.2 for 3rd year<br/>1.3 for 4th year<br/>1.4 for 5th year<br/>1.5 for 6th year<br/>1.6 for 7th year<br/>1.7 for 8th year<br/>1.8 for 9th year</p>   | 2        | No         |          | 846000.00  |      |                                      |
|    |   |          | 1.20       | 203040   | 203040.00  | N.A. |                                      |
|    |   |          | 1.30       | 219960   | 219960.00  |      |                                      |
|    |   |          | 1.40       | 236880   | 236880.00  |      |                                      |
|    |   |          | 1.50       | 253800   | 253800.00  |      |                                      |
|    |   |          | 1.60       | 270720   | 270720.00  |      |                                      |
|    |   |          | 1.70       | 287640   | 287640.00  |      |                                      |
|    |   |          | 1.80       | 304560   | 304560.00  |      |                                      |
|    | <b>Sub Total</b>  |          |            |          | 2622600.00 |      |                                      |
| 18 | <p>a) If CA area is 10 Km away from the nearest forest office/establishment 1 (one) Const. SPT Beat Office (31.39 Sqm) for area over 100 Ha.</p> <p>b) Maint. Of @ 10% of const. cost per year (from 2nd year to 9th year) including:</p> <p>1.3 for 4th year<br/>1.4 for 5th year<br/>1.5 for 6th year<br/>1.6 for 7th year<br/>1.7 for 8th year<br/>1.8 for 9th year</p>  | 1        | No.        |          | 1022000.00 |      | Based on Departmental approved rate. |
|    |   |          | 1.30       | 102200   | 132860.00  |      |                                      |
|    |   |          | 1.40       | 102200   | 143080.00  |      |                                      |
|    |   |          | 1.50       | 102200   | 153300.00  |      |                                      |
|    |   |          | 1.60       | 102200   | 163520.00  |      |                                      |
|    |   |          | 1.70       | 102200   | 173740.00  |      |                                      |
|    |   |          | 1.80       | 102200   | 183960.00  |      |                                      |
|    | <b>Sub Total</b>  |          |            | 1        | 1972460.00 |      | <b>1972460.00</b>                    |
| 19 | <p>Provision for Plantation Supervisor for every 150 ha @ Rs. 11500/- for Area-II per month for 10 yrs. where CA area is more than 150 ha. adding escalation value as item no 13 above. Adding escalation value by multiplying factor as below.</p> <p>2nd year -(M.F.=1.1)<br/>3rd year -(M.F.=1.2)<br/>4th year -(M.F.=1.3)<br/>5th year -(M.F.=1.4)<br/>6th year -(M.F.=1.5)<br/>7th year -(M.F.=1.6)</p>                                  | 1        | No         |          | 138000.00  |      |                                      |
|    |   |          | 1.10       | 138000   | 151800.00  |      |                                      |
|    |   |          | 1.20       | 138000   | 165600.00  |      |                                      |
|    |   |          | 1.30       | 138000   | 179400.00  |      |                                      |
|    |   |          | 1.40       | 138000   | 193200.00  |      |                                      |
|    |   |          | 1.50       | 138000   | 207000.00  |      |                                      |
|    |   |          | 1.60       | 138000   | 220800.00  |      |                                      |

|                        |   |     |      |        |                   |                    |
|------------------------|---|-----|------|--------|-------------------|--------------------|
|                        | 8th year -(M.F.=1.7)  |     | 1.70 | 138000 | 234600.00         |                    |
|                        | 9th year -(M.F.=1.8)  |     | 1.80 | 138000 | 248400.00         |                    |
|                        | 10th year -(M.F.=1.9)   |     | 1.90 | 138000 | 262200.00         |                    |
|                        | <b>Sub Total</b>  | 1   | Dls  |        | 2001000.00        | <b>2001000.00</b>  |
| 20                     | Approach foot track to plantation in area where necessary   | 200 | Rmt  | 200    | 716.00            | 143200.00          |
| 21                     | Monitoring, Supervision ( POL,Maint. Of Vechicle, including TE etc.) @ 12% and Contingency @ 3% to meet up unseen expenditure i.e 15% on Item No. 1 to 20 plus nursery cost over Rs. 321860/- |     |      | 15%    | <b>9523459.11</b> | <b>9523459.11</b>  |
| 22                     | Entry Point Activities at the rate of Rs. 15800/- per ha. for Area-II   |     |      | 21.35  | 15800.00          | <b>337330.00</b>   |
| 23                     | Provision for soil and moisture conservation structure ( Site specific, if required)) @ Rs. 8050/- per ha.  |     |      | 21.35  | 8050.00           | <b>171867.50</b>   |
| <b>GRAND TOTAL Rs.</b> |   |     |      |        |                   | <b>22968817.08</b> |

Say:-

**22968817**

**(Rupees Two Crore Twenty Nine Lakh Sixty Eight Thousand Eight Hundred Seventeen) only.**

Estimated by:-



**(K.Lollen)FR**  
**Range Forest Officer**  
**Ditchu Forest Range**

Countersigned by:-



**(T.Mibang)ADCF**  
**Divisional Forest Officer**  
**Anjaw Forest Division**