CHECK LIST SERIAL NUMBER : 18 "SCHEME FOR COMPENSATORY AFFORESTATION"

Full Title of the Project : Access road to cart the soil from Khodiya Kheri village Non Forest Land for Construction of Eight Lane Carriageway Starting Near Junction with NII-76 to Junction with NII-12 near Village Ummedpura (Ch.388.420 to Ch.419.00)

File No. :- FP/RJ/Approach/153700/2022

Detail scheme for Compensatory Access road to eart the soil from Khodiya Kheri village Non Forest Land for Construction of Eight Lane Carriageway Starting Near Junction with NH-76 to Junction with NH-12 near Village Ummedpura (Ch.388.420 to Ch.419.00)Afforestation to Kota district.

1. Details of Degraded forest land :-

District-<u>kota</u>, Village-<u>Kasar</u>, Teshil-<u>Ladpura</u> Name of the forest Division-<u>DCF kota</u> Range Mandana . Forest block-<u>Badkala ji</u>

Description of Area

- I) Whether the site selected for Compensatory Afforestation is a land bank or not : Not
- II)If the CA site is other than the land bank, reasons be given : As per Minutes of meeting Dated 18/07/2017 CA on non forest land is not required for development projects for Central Government.
- III) Soil type : grawel & boulders.
- IV) Topography :
 - (A)Hilly/Undulating/Plain-Plain
 - (B) Slope: Steep/Medium/Gentle: Gentle
- V) Whether the area is bearing any root stock of vegetation :- Yes

2. Plantation Model:-

Copy of the approved Compensatory Afforestation Scheme/Model showing component wise physical and financial break up will be uploaded later.

3. <u>Schedule of Plantation Programme :-</u> Detail of year wise break up of requirements of funds is as under:-: Estimate attached

- 4. <u>Technical details</u>:- Technical details of Compensatory Afforestation Scheme are as follows:-
- a) General Details : Land degraded due to grazing pressure of the cattles in the area.
- b) Spacing : 3 meter X 3 meter)
- c) Species :- Khair. Churel, Ber, Amla, Amaltas, etc.
- d) Plantation Method : Using the ANR Model (Plantation of DFL)
- e) Soil and Moisture Conservation Works :- LSCD, Gabians, staggered Contour Trenches and Continidurs Contour tenches, Pakka check dam and W.H.S..
- f) Protection (Fencing, Watch man, People's Participation etc.):- The area will be fenced and protected through EDC. A watch man will be deployed for protection.
- g) Proposed Monitoring Mechanism :- Annual survival percentage and evaluation in month of June will be done every year. Complete, remedial measures will be taken in the coming monsoon season.
- h) Any other information:- Nil

Model Cost estimate for compensatory afforestation

ON DEGRADED FOREST LAND

| Unit in ha | - 1.926 |
|---------------|------------|
| PERIMETER | - |
| LABOUR RATE | - 252/DAY |
| COST-ESTIMATE | : IN Rs/Ha |

YEAR 0-ADVANCE ACTION

| sl no | Item of works | unit | Rate/U | Quantity | Labour | Material | Total |
|----------|---|----------------|---------|----------|--------|----------|--------|
| 1 | | | nit(RS) | • | cost | cost | |
| 1 | Survey of area layout & alignmemt for fencing ,marking of segments | | | | | | |
| 2 | | На | 84.03 | 1.926 | 162 | 0 | 162 |
| - | Preparation of plantion record plantaion cards, estimates, journals etc. | Ua | 227.0 | 1.026 | 120 | | |
| 3 | Fencing-by stone wall | Ha | 227.8 | 1.926 | 439 | 0 | 439 |
| | size (0.80+0.60/2)x1.20 | cum | 383.17 | 340.2 | 130354 | 0 | 130354 |
| 4 | cost of raising 1483 seedling | plant | 3.93 | 1483 | | 0 | |
| 5 | Digging up 578 rmt staggered contour trenches 45x45cm cross section on middle | plant | 5.75 | 1465 | 5828 | | 5828 |
| 6 | slopes and Vditch as per site | RMT | 25.82 | 578 | 14924 | | 14924 |
| | Digging of 578 pits of size $0.45x(0.4+0.5/2)2$ cum hard soil upto 10% boulders | | | | | | |
| 7 | cost of collection and purchase of grass and other seeds of tree and shrubs | pit prorata | 14.87 | 578 | 8595 | | 8595 |
| | In situ soil & moisture conservation measures like cheak dams/ earthan/ brushwood | prorata | | · | | | 377 |
| 9 | Construction of cattle Guard hut | prorata | | | | | 1415 |
| | Purchese or construction of water storage Tank | prorata | | | | | 412 |
| | Labour amenities | prorata | | | | | 244 |
| 12 | Watch & ward for 4 month | prorata | | | | | 342 |
| | Purchese of tools& plants. | prorata | | | | | 2792 |
| 2 | Construction of 50 mtr long countour dykes of 30x30 cm cross section on upper slopes and sowing of suitable thrny shrub | cum | 252 | 14.445 | | | 212 |
| 5 (f | Construction of the pillars of appropiate size for gate | prorata | 432 | 14.445 | 3640 | | 3640 |
| | | | | | \ | | 343 |

| 16 | purchase ofsing Board & Fixing of sing Board | prorata | |
|----|--|---------|--------|
| 17 | Miscellaneous and unforeseen expenditure | | 239 |
| | | prorata | 747 |
| 21 | Total 0-ADVANCE ACTION administrative charges 10% | | 171065 |
| | | | 17106 |
| | Total | | |
| | | | 188171 |
| EA | R 1-PLANTING VEAD | | |

YEAR 1-PLANTING YEAR

| sl n | item of works | unit | Rate/U nit(RS) | Quantity | Labour | Material | Total |
|----------|---|---------|-------------------|----------|------------------|----------|--------------|
| 1 | maintenance of 1483 seedling in nursery | plant | 2.11 | 1483 | cost 3129 | cost | 2120 |
| 2 | Digging of 770 pits of size 0.45x(0.4+0.5/2)2 cum hard soil upto 10% boulders | pits | 14.87 | 770 | 11450 | | 3129 |
| 3 | In situ soil & moisture conservation measures like cheak dams/ earthan/ brushwood | prorata | | | | | |
| 4 | digging of 30x30 cm cross section trench along inner side of stone wall fencing and seed sowing | cum | 230.96 | 36.45 | 8418 | | 5984 8418 |
| 5 | sowing/dibbling of seeds of grass/thrny trees species on the mounds of countour trench and ditch fencing | rmt | 0.62 | 983 | 609 | | 609 |
| | Purchase of fertilizers / pesticides/organicmanure | plant | 0.53 | 1348 | 714 | | 714 |
| 1 | sowing of pellats of grass/piece of seed mud cakes of gress seeds between row of pits by ploughing and furrowing | prorata | | | | | 1098 |
| F | transportation of 1348 plants from nursery to planting site 15 km | plant | 2.47 | 1348 | 3330 | | 3330 |
| P 0 | planting of 1348 seedling including refilling of pits | plant | 5.53 | 1348 | 7454 | | 7454 |
| P | vatering & application of insection in 1348 lants at the time of planting | plant | 3.16 | 1348 | 4260 | | 4260 |
| oi tr | estoration of natural regenration by making rescent shapad mounts on the lower slopes f seedling and sapling and making ring anches around the natural trees/shrubs (150 lant/ha) | plant | 6.93 | 290 | 2010 | | 2010 |

| | Total | | | | | 162746 |
|----|---|---------------|---------|------|-------|--------|
| 21 | administrative charges 10% | | - | | | 14795 |
| 21 | Total Year 1 | | 1. 1 | | | 147951 |
| 20 | Miscellaneous and unforeseen expendituer including additional watering | prorata | | | | 397 |
| 19 | construction of sing Board & Fixing of sing Board | prorata | - | | | 1254 |
| 18 | construction of approach road / inspection path | prorata | | | | 824 |
| 17 | Laouber Amenitiess and hut repair | prorata | | | | 797 |
| 16 | Watch & ward for 12 month | months | 6552 | 12 | 78624 | 78624 |
| 15 | raising of 135 seediling in nursery for casuality replecement in year-2 (10% of 1348) | seedilin g | 3.94 | 135 | 532 | 532 |
| 14 | Weeding on countour trenches and V ditch and spacement/singling | rmt | 2.38 | 578 | 1376 | 1376 |
| 13 | Weeding and hoeing of plants with repairing plant mounds -2 times | plant | 4.03 | 2696 | 10865 | 10865 |
| 12 | making of crescent shaped mounds below planted sapling after planting and dibbling of 3 seeds of throny tree species modal acordding | plant | 3.58 | 1348 | 4826 | 4826 |

YEAR 2-MAINTENANCE YEAR

| sl no | item of works | unit | Rate/U nit(RS) | Quantity | Labour cost | Material cost | Total |
|-------|--|---------|-------------------|----------|----------------|------------------|-------|
| 1 | maintenance of 135 seediling in nursery for casuality replecement in year-2 | plants | 2.11 | 135 | 285 | cost | 285 |
| 2 | Repair of fencing | prorata | | | | | 485 |
| 3 | casuality replecement 135 plants including redigging of pits transportation planting watering and application of insectiones | plants | 11.55 | 135 | 1559 | | 1559 |
| 4 | Weeding and hoeing in 1348 plants in pits -2 times | plant | 4.03 | 2696 | 10865 | | 10865 |
| 5 | Watch & ward for 12 month | months | 6552 | 12 | 78624 | | 78624 |
| | Miscellaneous and unforeseen expendituer including additional watering | prorata | | | | | 1188 |

| | Total Year 2 | | | 93006 |
|---|----------------------------|--|--|--------|
| 7 | Administrative charges 10% | | | 9300 |
| | Total | | | 102306 |

SUBSEQUENT MAINTENANCE YEAR 3 TO 12

| sl no | item of works | unit | Rate/U nit(RS) | Quantity | Labour cost | Material cost | Total |
|-------|--|---------|-------------------|----------|----------------|------------------|-------|
| 1 | Watch & ward for 12 month | months | 6552 | 12 | 78624 | | 78624 |
| | Miscellaneous and unforeseen expendituer including additional watering | prorata | 1 1 1 1 | | | | 2051 |
| 3 | Total Year 3 | | | | | | 80675 |
| 4 | Administrative charges 10% | | | | 1 | | 8067 |
| 5 | Total | | | | | | 88742 |



| 1 | ADVANCE ACTION | | |
|----|------------------|----------|---------|
| 2 | PLANTATION YEAR | YEAR 0 | 188171 |
| 3 | MAINTENANCE YEAR | YEAR 1 | 162746 |
| 4 | MAINTENANCE YEAR | YEAR 2 | 102306 |
| 5 | MAINTENANCE YEAR | YEAR 3 | 88742 |
| | MAINTENANCE YEAR | YEAR- 4 | 88742 |
| 6 | | YEAR- 5 | 88742 |
| 7 | MAINTENANCE YEAR | YEAR- 6 | 88742 |
| 8 | MAINTENANCE YEAR | YEAR- 7 | 88742 |
| 9 | MAINTENANCE YEAR | YEAR- 8 | 88742 |
| 10 | MAINTENANCE YEAR | YEAR- 9 | 88742 |
| 11 | MAINTENANCE YEAR | YEAR- 10 | |
| 12 | MAINTENANCE YEAR | | 88742 |
| 3 | MAINTENANCE YEAR | YEAR- 11 | 88742 |
| | | YEAR- 12 | 88742 |
| _ | | TOTAL | 1340643 |
| | | SAY | 1340400 |

Model Cost Norms- Mitigative Measures



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