OFFICE OF THE DIVISIONAL FOREST OFFICER, PARALAKHEMUNDI DIVISION

Memo No 1545 4F/2019(OPTCL-DP), Dated 3/4/19

To

The Regional Chief Conservator of Forests,
Berhampur Circle, Berhampur.

Sub: - Proposal for construction of 132 KV LILO transmission line project from existing 132 KV Mohana – Digapahandi SC Line for 132/33 KV GRID station at R. Udayagiri in Gajapati District of Odisha – Diversion of Forest land over 14.012 Ha. To Odisha Power Transmission Corporation Ltd. (OPTCL)
State Serial no OR-048/2017.

Ref: - Memo no 541 dated 9.1.2019 of the Additional Principal Chief Conservator of Forests, Forest Diversion & Nodal Officer, FC Act, O/o the Pr. C.C.F, Odisha, BBSR.

In inviting a kind reference to the memo on the subject cited above, the Deputy General Manager (EHT) construction Division OPTCL, Berhampur, Dist- Ganjam has complied the discrepancies and submitted the documents there of as detailed below relating to above proposal.

1. Joint verification report for CA Land . 5 Copies
2. Cadastral sheet map 5 Nos.
3. Topo Map Sheet 5 Nos.

As regards the scheme for compensatory Afforestation over an area of 36 Ha. in degreded Forest Land identified in Manikur UDPF under R. Udayagiri Range is prepared and enclosed here with.

Above documents are transmitted here with for onward transmission of the same to the Additional Principal Chief Conservator of Forests, Forest Diversion & Nodal Officer, FC Act, O/o the Principal Chief Conservator of Forests, Odisha, BBSR for further needful action at his end.

Encl: - As above

Divisional Forest Officer,
Paralakhemundi Division.

Memo No 1546 (2)/ Dated 3-4-19.

Copy forwarded to the: -

1. Additional Principal Chief Conservator of Forests, Forest Diversion & Nodal Officer, FC Act, O/o the Principal Chief Conservator of Forests, Odisha, BBSR with reference to his memo no 542 dated 9.1.2019 and memo no 185 dated 11.1.2019 of the Regional Chief Conservator of Forests, Berhampur Circle, Berhampur.
2. The Deputy General Manager (Elect.) EHT (C) Division, (OPTCL) Berhampur with reference to memo no 543 dated 9.1.2019 of the Additional Principal Chief Conservator of Forests, Forest Diversion & Nodal Officer, FC Act, O/o the Principal Chief Conservator of Forests, Odisha, BBSR. He is requested to receive the hard copy of the above documents from this office for submission of the same in the O/o the Regional Chief Conservator of Forests, Berhampur circle, Berhampur for further course of action.

Divisional Forest Officer,
Paralakhemundi Division.

SCHEME FOR COMPENSATORY AFFORESTATION OVER AN AREA OF 36 HA IN DEGREDED FOREST LAND IDENTIFIED IN MANIKUR UDPF UNDER R.UDAYAGIRI RANGE OF PARLAKHEMUNDI FOREST DIVISION FOR DIVERSION OF 14.012 HA OF FOREST LAND FOR THE PURPOSE OF CONSTRUCTAION OF 132KV LILO TRANMISSION LINE FROM EXISTING 132KV MOHANA TO DIGAPANDI SC LINE TO PROPOSED 132/32KV SUB – STATION R- UDAYAGIRI BY ODISHA POWER TRANSMISSION CORPORATION LIMITED, BERHAMPUR, GANJAM IN THE DISTRICT OF - GAJAPATI, & IN THE STATE OF ODISHA.

PREPARED BY

DIVISIONAL FOREST OFFICER

PARLAKHEMUNDI FOREST DIVISION

PARLAKHEMUNDI

ELEMENTS OF THE SCHEME FOR COMPENSATORY AFFORESTATION

CHAPTER-I

BRIEF NOTE ON THE PROPOSED FOREST DIVERSION PROPOSAL.

M/S OPTCL Berhampur have a proposal for construction of proposed 132KV LILO transmission line from existing 132KV Mohana to Digapahandi SC line to proposed 132/33 KV sub-station at R- Udayagiri. This project comes under Gajapati District as well as under Parlakhemundi Forest Division, Parlakhemundi. These sub-stations are to be constructed in Gajapati District in order to cater qualitative power with stability in transmission system as well as to meet the increased load demand. This line passess through village- Chandiput and Chandragiri revenue circles of Mohana Tahasil and villages of Chheliguda revenue circle of under R- Udayagiri Tahasil. R- Udayagiri is one of the major town of the district Gajapati. It is situated on the State Highway connecting Mohana to Parlakhemundi, which is the District Hade Quarter

This system shall also fulfill the requirement of additional power to these areas. Therefore the power transmitted through this line will boost the Small Industries and agricultural growth of the area.

Since the project involves Forest land and User Agency has submitted the Forest Diversion Proposal over an area of 14.012ha under FC Act 1980. As per guideline F.No.11-423/2011-FC, dated 8th November 2017 of Ministry of Forest & Environment & Climate Change, Govt. of India, and the User Agency shall pay the Compensatory Afforestation cost over 36.00ha of Degraded Forest Land (2 times of the Forest Land Diverted) identified in Manikur UDPF for the purpose.

The present Scheme aims at preparation of Site Specific Compensatory Afforestation Scheme over 36.00 Ha in degraded forest land identified in Manikur UDPF under R. Udayagiri Range of Parlakhemundi Forest Division with maintenance of a period of 10 years.

CHAPTER-II

DETAILS OF LAND IDENTIFIED FOR COMPENSATORY AFFORESTATION

A-LAND IDENTIFICATION AND JOINT VERIFICATION OF THE IDENTIFIED SITE.

The site for Compensatory Afforestation has been identified in Manikur UDPF under R.Udaygiri Range of Parlakhemundi Forest Division over an area of 36.00ha and the area has jointly verified by the Forest Range Officer R.Udaygiri, Forester Khajuripada Section and the User Agency. The above identified land has been allotted in favour of M/S OPTCL Berhampur by the Divisional Forest Officer, Parlakhemundi Forest Division vide there Letter No--------Dated----------

B- INFORMATION ON NON-ENCROACHMENT AND NON-ENCUMBRANCE.

The Range Officer R. Udayagiri Range has verified and Inform that regarding non-encroachment and non-encumbrance on the identified Degraded Forest Land for raising Compensatory Afforestation.

C- INFORMATION ON LAND STATUS.

The Land Status identified and allotted for Compensatory Afforestation in furnished here under.

Sl No	Name of the Forest Division	Name of the Range	Name of the RF	Area in Ha
1.	Parlakhemundi Forest Division	R. Udaygiri	Manikur UDPF	36.00Ha

D-SUITABILITY OF IDENTIFIED SITE FOR COMPENSATORY AFFORESTATION.

The Identified land is free from encroachment and encumbrance. The Identified land is within Manikur UDPF. The area is situated in hilly slopes with existing Sal crop with its associate species.

The topography of the area is mainly hilly with eroded soil profile having exposed rocks at places necessitating Soil Conservation Measures. However good depth Soil is still available which is conducive for plantation with suitable Soil Conservation Measures. The average temperature varies from 14^0C minimum in December & 45^0C maximum in May. The annual rain fall varies from 1100mm to 1450mm.The maximum rain fall is received during the rainy season from July to September. The identified land is therefore taken up for Compensatory Afforestation in ANR model (600 no of seedlings/ Ha) over an area of 36.00 Ha in Manikur UDPF with site specific SMC measures.

CHAPTER-III

DELINEATION OF PROPOSED AREA ON SUITABLE MAP

A-TOPOSHEET SHOWING COMPENSATORY AFFORESTATION SITE.

The identified degraded Forest Land over an area of 36.00 Ha in Manikur UDPF has been shown in Toposheet no- E 45A4 or 74A/4.

B-GPS COORDINATES GPS MAP OF THE COMPENSATORY AFFORESTATION SITE.

The area has been demarcated through GPS survey and RCC pillars have been posted around the identified area and the same has been depicted in the Toposheet.

GPS survey data showing latitude and longitude of each point and their chainage with bearing is also enclosed in the Map prepared thereon (Map enclosed).

CHAPTER-IV

AGENCY RESPONSIBLE FOR COMPENSATORY AFFORESTATION

A-AGENCY RESPONSIBLE FOR PLACEMENT OF FUNDS.

The user agency shall provide funds for raising Compensatory Afforestation as per approved scheme.

B-AGENCY RESPONSIBLE FOR EXECUTION OF COMPENSATORY AFFORESTATION.

The territorial wing of the Forest Department i.e. Divisional Forest Officer Parlakhemundi Forest Division will be assigned the task for Execution of Compensatory Afforestation.

CHAPTER-V

DATAILS OF WORK SCHEDULE PROPOSED FOR COMPENSATORY AFFORESTATION.

A-PLANTING PLAN

Planting plan reflects the species specific treatment of the identified site. Choice of species is based on the geo-morphology of the site, soil-texture, structure, fertility and depth, proneness of the site to water logging etc. Specific treatment of the site in terms of soil and moisture conservation intervention will be depicted in the treatment map. A treatment map will invariably be prepared for Species to be planted and treatments to be applied to the different patches shown in the treatment map and planting plan. This plan will be followed when actual planting is carried out.

Species to be planted:-

1. Sizyzium cumini (Jamu)
2. Adina cardifolia (Kuruma)
3. Anogeissus latifolia (Dhaura)
4. Accacia catechu (Khair)
5. Dalbergia sissoo (Sissoo)
6. Azadirrachta indica (Neem)
7. Gmelina arborea (Gambhar)
8. Terminalia belerica (Bahada)
9. Terminalia chebula(Harida)
10. Pongamia pinnata (Karanja)
11. Emblica officinalis (Amla)
12. Tectona grandis (Teak)

B-PRE-PLANTING OPERATION

B (I) - RAISING OF PLANTATION STOCK- NURSERY-

Nursery will be raised @ 660 seedlings per ha including 10% for casualty replacement.

B (II) – SURVEY, DEMARCATION & PILLAR POSTING, GPS READING WITH MAPPING-

The area has been demarcated through GPS survey and RCC pillars have been posted around the identified area and same has been depicted in the Maps. GPS survey data showing latitude and longitude of each point and the chainage with bearing is also enclosed in the Map prepared thereon. The user agency has erected one sign board depicting the details of the site, area, purpose etc. at the identified site.

B (III- SITE PREPARATION AND SILVICULTURAL OPERATION INCLUDING CLEARANCE OF WEED, CLIMBER CUTTING, HIGH STUPM CUTTING, SINGLING OF SHOOTS-

The clearing of site involving removal of invasive weeds, bushes, climbers, high stumps and singling of shoots will be taken up preferably by the end of February and latest by the end of March. Pits of the dimension 30 x 30 x 30 cm. will be dug @ 600nos per Ha. In the available gaps preferably 2 month before or at least a month before planting of seedling.

C-PLANTING OPERATION.

Planting seedling will be taken up in the month of July. Before planting the seedling raised in the nurseries are to be transported to the planting site and care should be taken so that no seedling will be damaged. The Polythene covering of the balls of earth will be carefully removed before planting. Care will be taken to see that the ball of earth is not broken while doing so. The seedling with all the ball of earth will then be placed firmly in the pit and buried at such a depth that the root collar is well below the surface of the soil. The soil around the plant will be well compacted with the heal as a final step so that there is a proper bond between the ball and the surrounding soil. The earth close to the collar will be slightly elevated so that rain water does not a accumulate very close to the plant.

D – POST PLANTING OPERATION

D (1)-CASUALTY REPLACEMENT

The entire area will be done over in the same order as plantation was carried out and casualties, if any, will replaced as soon as the main plantation operation is over.

D (2)-WEEDING AND SOIL WORKING

Regular and effective weeding will start immediately after sprouting of the stumps is complete or after the seedling have started throwing up new buds.

D (3)-MANURING AND INSECTICIDE APPLICATION

On degraded sites urban compost or farmyard manure wherever available, will be added to the soil while refilling the pits. As regards chemical fertilizers, the fertilizer required and dosage @ 50 gms NPK per plant as basal dose and urea @ 70gms per plant will be applied in two spilt doses one in August and the other in September.

D (4)-SOIL MOISTURE CONSERVATION MEASURES

Special Soil Moisture Conservation Measures will be taken up over the entire plantation area with staggered trenches of dimension 2m x 0.5m x 0.5m to the tune of 60nos per ha.

D (5)-PROTECTION AGAINST FIRE AND GRAZING

Measures are to be taken to protect the entire plantation area from fire and grazing. For that fire line tracing will be ensured to protect the plantation from fire and watch & ward will be provided as per the approved norm to augment protection.

CHAPTER-VI

COST STRUCTURE OF PLANTATION, PROVISION OF FUNDS AND UTILIZATION

A. ESTIMATE OF COST FOR 1.00 HA. UNDER ANR MODEL (600 seedlings per Ha.) – Wage rate Rs. 280.00/day. (Advance work) pre-planting operation.

0^{th} year Operation

Sl - No.	Item of Work	Preferable Period of Execution	Person days	Labour (Rs.)	Material (Rs.)	Total (Rs.)
1	Survey, Demarcation & pillar posting.GPS Regarding with mapping.	Nov/Dec	2	560	-	560
2	Site Preparation	Nov/Dec	2	560	-	560
3	Silvicultural Operation including clearance of weed, climber cutting, high stump cutting singling of shoots etc.	Jan/Feb	5	1400	-	1400
4	Nursery cost (6 months old seedling) Part @ Rs.12.43/- seedling part (Rs.8.67 in 0^{th} year +Rs.3.76 in 1^{st} year) for 660 seedling (600+60)	Jan-Mar	16.5	4620	1102	5722
5	Contingency and Unforeseen Expenditures	-	-	-	198	198
	Sub Total-		**25.5**	**7140**	**1300**	**8440**
6	Monitoring & Supervision Charge 5% of the total cost		**0**	**0**	**0**	**422**
	Grand Total		**25.5**	**7140**	**1300**	**8862**

1st year Operation

1.	Nursery cost (6 months old seedling)balance @ Rs. 3.76 for 660 seedlings	April -June	8	2240	241.50	2481.50
2.	Pitting 30cm cube size	Feb-Mar	18	5040	0	5040
3.	Carriage and Planting including casualty replacement	Jul/Aug	15	4200	0	4200
4.	Complete weeding Soil working, Manuring	Aug-Sep	18	5040	0	5040
5.	Cost of Vermi compost 200gms/plant @ Rs.20.00per kg= Rs.2400.00 and Granular Insecticide 5gms/plant @ Rs.80.00/-per kg.=Rs.240.00	Aug-Sep	0	0	2640	2640
6.	Cost of Chemical fertilizer (a) Urea 70gms/plant in two subsequent doses @ Rs.6/-per kg=Rs.252.00 (b) NPK 50gms/plant @ Rs.24/-per kg=Rs.720.00 as basal dose	Jul-Aug	0	0	972	972
7.	Silvicultural operation involving clearance of weeds, cutting of climbers, singling of shoots etc.	Sep-Oct	15	4200	0	4200
8.	Soil Conservation Measures (Staggered trenches of dimension 2m x 0.5m x 0.5m @ 60 nos per ha) or its equivalent	Sep/Oct	20	5600	0	5600
9.	Fireline Tracing and Inspection path	Feb-Mar	3	840	0	840
10.	Watch & ward	Aug/Mar	7	1960	0	1960

(9)						
11.	Contingency and Unforeseen Expenditures		0	0	353	353
	Sub Total		**104**	**29120**	**4207**	**33327**
12	Monitoring & Supervision charge 5% of the total cost		**0**	**0**	**0**	**1666**
	Grand Total		**104**	**29120**	**4207**	**34993**
2nd Year Operation						
1.	Casualty Replacement including cost of seedling, carriage and planting	Jul/Aug	3	840	745.80	1585.80
2.	Complete weeding and cultural operations	Sep/Oct	6	1680	0	1680
3.	Soil working and manuring	Sep/Oct	6	1680	0	1680
4.	Cost of Fertiliser and insecticide (a) Vermicompost 200gm/plant @ Rs.20.00/-per kg=Rs.2400.00 (b) Granular Insecticides 5gms/plant for 60 plants 300gms @ Rs.80.00/- per kg = Rs.24.00	Sep/Oct	0	0	2424	2424
5.	Fire line Tracing and Inspection Path	Feb/Mar	1	280	0	280

		(10)				
6.	Soil Conservation Measures (Renovation of staggered trenches etc.)	Sep/Oct	8	2240	0	2240
7.	Watch & ward (whole year)	Apr/Mar	7	1960	0	1960
8.	Contingency and Unforeseen Expenditures		0	0	193	193
	Sub Total		**31**	**8680**	**3363**	**12043**
9.	Monitoring & Supervision charge 5% of the total cost		**0**	**0**	**0**	**602**
	Grand Total		**31**	**8680**	**3363**	**12645**
		3rd Year Operation				
1.	Complete weeding and culture operation	Aug/Sep	3	840	0	840
2.	Soil working	Aug/Sep	3	840	0	840
3.	Fire line Tracing and Inspection Path	Feb/Mar	1	280	0	280
4.	Watch @ ward (whole year)	Apr/Mar	7	1960	0	1960
	Sub Total		**14**	**3920**	**0**	**3920**
5.	Monitoring & Supervision charge 5% of the total cost		**0**	**0**	**0**	**196**

	Grand Total		**14**	**3920**	**0**	**4116**
	4th Year Operation					
1.	Fire line tracing and Inspection Path	Feb/Mar	1	280	0	280
2.	Watch & ward and cultural operation	Apr/Mar	2	560	0	560
	Sub Total		**3**	**840**	**0**	**840**
3	Monitoring & Supervision Charge 5%of the cost		**0**	**0**	**0**	**42**
	Grand Total		**3**	**840**	**0**	**882**
	5th Year Operation					
1.	Fire line tracing and Inspection Path	Feb/Mar	1	280	0	280
2.	Watch & ward and cultural operation	Apr/Mar	2	560	0	560
	Sub Total		**3**	**840**	**0**	**840**
3	Monitoring & Supervision Charge 5%of the cost		**0**	**0**	**0**	**42**

	Grand Total		**3**	**840**	**0**	**882**
	6th Year Operation					
1.	Fire line tracing and Inspection Path	Feb/Mar	1	280	0	280
2.	Watch & ward and cultural operation	Apr/Mar	2	560	0	560
	Sub Total		**3**	**840**	**0**	**840**
3	Monitoring & Supervision Charge 5%of the cost		**0**	**0**	**0**	**42**
	Grand Total		**3**	**840**	**0**	**882**
	7th Year Operation					
1.	Fire line tracing and Inspection Path	Feb/Mar	1	280	0	280
2.	Watch & ward and cultural operation	Apr/Mar	2	560	0	560
	Sub Total		**3**	**840**	**0**	**840**
3	Monitoring & Supervision Charge 5%of the cost		**0**	**0**	**0**	**42**

	Grand Total		**3**	**840**	**0**	**882**
	8th Year Operation					
1.	Fire line tracing and Inspection Path	Feb/Mar	1	280	0	280
2.	Watch & ward and cultural operation	Apr/Mar	2	560	0	560
	Sub Total		**3**	**840**	**0**	**840**
3	Monitoring & Supervision Charge 5%of the cost		**0**	**0**	**0**	**42**
	Grand Total		**3**	**840**	**0**	**882**
	9th Year Operation					
1.	Fire line tracing and Inspection Path	Feb/Mar	1	280	0	280
2.	Watch & ward and cultural operation	Apr/Mar	2	560	0	560
	Sub Total		**3**	**840**	**0**	**840**
3	Monitoring & Supervision Charge 5%of the cost		**0**	**0**	**0**	**42**

(14)						
	Grand Total		**3**	**840**	**0**	**882**
10th Year Operation						
1.	Fire line tracing and Inspection Path	Feb/Mar	1	280	0	280
2.	Watch & ward and cultural operation	Apr/Mar	2	560	0	560
	Sub Total		**3**	**840**	**0**	**840**
3	Monitoring & Supervision Charge 5%of the cost		**0**	**0**	**0**	**42**
	Grand Total		**3**	**840**	**0**	**882**

ABSTRACT

Sl No	Item of work	Person Days	Lobour (Rs.)	Material (Rs.)	Monitoring & Supervision charge 5%of the total Cost	Total (Rs.)
1.	0^{th} Year Operation	25.5	7140	1300	422	8862
2.	1^{st} Year Operation	104	29120	4207	1666	34993
3.	2^{nd} Year Operation	31	8680	3363	602	12645
4.	3^{rd} Year Operation	14	3920	0	196	4116
5.	4^{th} Year operation	3	840	0	42	882
6.	5^{th} Year Operation	3	840	0	42	882
7.	6^{th} year Operation	3	840	0	42	882
8.	7^{th} Year Operation	3	840	0	42	882
9.	8^{th} Year Operation	3	840	0	42	882
10.	9^{th} Year Operation	3	840	0	42	882
11.	10^{th} Year Operation	3	840	0	42	882
Grand Total		**195.5**	**54740**	**8870**	**3180**	**66790**

(Rupees Sixty Six Thousand Seven Hundred and Ninety only/Ha)

B. ETIMATE OF COST FOR LOOSE BOULDER STRUCTURE

It has been proposed to take up Soil Conservation Measures by construction of Boulder Structure over the area of size (2mt=10 No's., 3mt=10 No's., 4mt=10No's) in the Compensatory Afforestation site in consideration of the degraded area due to soil erosion.

(i) <u>Span of 2mtr. Size:-</u>

Sl. No	Item of activity	Cost per unit (Rs.)	Total unit (No/cum)	Total Cost in Rs.
1.	Leveling the unshaped surface of the selected site & layout the structure foundation L.S. 1MD.	280.00	1	280.00
2.	Excavation of foundation in hard soil within initial lead of 50 meter including rough dressing and breaking of clods to maximum size 5cm to 7cm laying in layer not exceeding 0.3 in depth to strengthing both sides U/S approx. bund loose boulder structure. = 2.0 x 4.60 x 0.60 = 5.52 cum @ Rs.167.81 per cum.	167.81	5.52	926.31
3.	Rough stone dry packing upto GL 2.0 x 4.60 x 0.60=5.52 cum above GL Cross sectional area x span = 2.60m x 2.0m = 5.20 cum For Apron 1.0 x 0.6 x 0.6 x 1.0 = 0.36 cum	837.79	11.08	9282.71
I	Total = 5.52 + 5.20 + 0.36 = 11.08 @ Rs. 837.79 per cum			
	Grand Total	**10489.02 or 10489.00**		

For 10 nos of LBCD structure = Rs. 10489 x 10 = Rs. 1, 04, 890.00

One Lakh four thousand eight hundred ninety rupees only.

(ii) Span of 3mtr. Size:-

Sl. No	Item of activity	Cost per unit (Rs.)	Total unit (No/cum)	Total Cost in Rs.
1.	Leveling the unshaped surface of the selected site & layout the structure foundation L.S. 1MD.	280.00	1	280.00
2.	Excavation of foundation in hard soil within initial lead of 50 meter including rough dressing and breaking of clods to maximum size 5cm to 7cm laying in layer not exceeding 0.3 in depth to strengthing both sides U/S approx. bund loose boulder structure. = 3.0 x 4.60 x 0.60 = 8.28 cum @ Rs.167.81 per cum.	167.81	8.28	1389.47
3.	Rough stone dry packing upto GL 3.0 x 4.60 x 0.60=8.28 cum above GL Cross sectional area x span = 2.60m x 3.0m = 7.80 cum For Apron 1.0 x 0.6 x 0.6 x 1.0 = 0.36 cum	837.79	16.44	13773.26
I	Total = 8.28 + 7.80 + 0.36 = 16.44 @ Rs. 837.79 per cum			
	Grand Total	**15442.73 or 15443.00**		

For 10 nos of LBCD structure = Rs. 15443 x 10 = Rs. 1, 54, 430.00

One Lakh fifty four thousand four hundred thirty rupees only.

(iii) Span of 4mtr. Size:-

Sl. No	Item of activity	Cost per unit (Rs.)	Total unit (No/cum)	Total Cost in Rs.
1.	Leveling the unshaped surface of the selected site & layout the structure foundation L.S. 1MD.	280.00	1	280.00
2.	Excavation of foundation in hard soil within initial lead of 50 meter including rough dressing and breaking of clods to maximum size 5cm to 7cm laying in layer not exceeding 0.3 in depth to strengthing both sides U/S approx. bund loose boulder structure. = 4.0 x 4.60 x 0.60 = 11.04 cum @ Rs.167.81 per cum.	167.81	11.04	1852.62
3.	Rough stone dry packing upto GL 4.0 x 4.60 x 0.60=11.04 cum above GL Cross sectional area x span = 2.60m x 4.0m = 10.40 cum For Apron 2.0 x 0.6 x 0.6 x 1.0 = 0.36 cum	837.79	21.80	18263.82
I	Total = 11.04 + 10.40 + 0.36 = 21.80 @ Rs. 837.79 per cum			
	Grand Total	**20396.44 or 20396.00**		

For 10 nos of LBCD structure = Rs. 20396 x 10 = Rs. 2, 03, 960.00

Two Lakh three thousand nine hundred sixty rupees only.

C. ESTIMATE FOR FENCING (STONE WALL)

It has been proposed to take up Stone wall fencing in the vulnerable places to check the biotic interfenance around the plantation area over a length of 1000 meters.

Size of the Stone Wall:	**Bottom**	**: 1.20 meters**
	Top Width	**: 0.80 meters**
	Height	**: 1.25 meters**
	Cross Section	**: 1.25 sqm.**

Volume of stone wall in 1RMT = 1m x 1.25sqm = 1.25 cum

Dry Stone masonry in guard wall as per

PWD Scheduled of Rate, 2014 over 1M3 with collection

And conveyance of locally collected boulders cost of metals

(Stone other than granite picked up broken and stacked,

Above 0.003 cum = Rs. 196.00

Conveyance of boulders within a lead of 5 KM = Rs. 156.00

Royalty per Cum = Rs. 130.00

Labour Charges

Mason 2nd class 0.52 No's @ Rs. 370.00 = Rs. 192.40

Semiskilled 2nd class 0.52 @ Rs. 320.00 = Rs. 166.40

Labourer 0.87 No's @ Rs. 280.00 = Rs. 243.60

Total labour Charges = Rs. 602.40

Expenditure for 1RMT

= 1.25 X (196.00+156.40+130.00+602.40) = Rs. 1356.00

Labour cess = Rs. 13.56

Rs. 1369.56 or

Rs. 1370.00

Maintenance for 1st year	= Rs. 164.00
Maintenance for 2nd year	= Rs. 164.00
Maintenance for 3rd year	= Rs. 164.00
Maintenance for (4th to 10th) year	= Rs. 1148.00

Cost for 1 meter length	Rs. 3010.00

Total cost of the stone wall over 1000 meter	Rs. 30, 10, 000.00

Thirty Lakhs Ten Thousand Rupees only.

D. TOTAL COST OF THE COMPENSATORY AFFORESTATION SCHEME

Sl. No	Items	Amount in Rs.
1	**Cost of ANR Plantation (600 plants per Ha) over an area of 36 Ha @ Rs. 66790.00 / Ha**	**24, 04, 440.00**
2	**SMC measures – LBCD structure of dimension 2.0 m @ Rs. 10,489.00 for LBCD for 10nos**	**1, 04, 890.00**
3	**SMC measures – LBCD structure of dimension 3.0 m @ Rs. 15,443.00 00 for LBCD for 10nos**	**1, 54, 430.00**
4	**SMC measures – LBCD structure of dimension 4.0 m @ Rs. 20,396.00 00 for LBCD for 10nos**	**2, 03, 960.00**
5	**Stone walling over 1000 meter @ Rs. 3010.00/RMT**	**30, 10, 000.00**
7	**Total (S.No 1 to 5)**	**58, 77, 720.00**
8	**Add 20 % Escalation**	**11, 75, 544.00**
	Grand Total (S. No 7 & 8)	**70, 53, 264.00 OR 70, 53, 300.00**

Seventy Lakhs fifty three thousand three hundred rupees only.

E. PROVISION OF FUNDS AND FUND UTILIZATION

Rs. 70, 53, 300.00 (Seventy Lakhs fifty three thousand three hundred rupees only) shall be deposited by M/s OPTCL Berhampur on approval of the scheme to the Ad-hoc CAMPA Account and the funds will be utilized for raising of Compensatory Afforsstation by the Divisional Forest Officer, Parlakhemundi Forest Division on allotment by the Principal Chief Conservator of Forest, Odisha, Bhubaneswar.

CHAPTER-VII

DETAILS OF PROPOSED MONITORING MECHANISM

Compensatory Afforestation will be taken up in the identified site by the Range Officer, R.Udaigiri Range of Parlakhemundi Forest Division. The Range Forest Officer, R.Udaigiri will undertake field checks of the works undertaken at the identified site and will be cross checked by the Asst. Conservator of Forests, (Affn.) and Divisional Forest Officer, Parlakhemundi Forest Division. GPS Co-ordinates along with other requird informations of Compensatory Afforestation will be uploaded in the e-Greenwatch Portal of NIC, MOEF & CC, Govt. of India for the purpose of online monitoring. Annual progress of plantation involving growth of planted seedling, survival percentage etc. will be monitored and recorded in the plantation journal by the field staffs of R.Udaigiri Range and reported to the Divisional Forest Officer for necessary action. The same thing will be reported to the Regional Chief Conservator of Forests, Berhampur Circle and Chief Conservator of Forests (PP&A), O/o the Pr. Chief Conservator of Forests, Odisha, Bhubaneswar and necessary corrective measures will be followed if required so.

Divisional Forest Officer,

Parlakhemundi Forest Division.

Parlakhemundi.