AS PER MoEF &CC GUIDELINE NO 7-69/2011-FC(Pt), Date-01.08.2017

TABLE-B. ESTIMATION OF COST OF FOREST DIVERSION

SI.No	PARAMETERS.	Amount in Lakhs
1	Ecosystem services losses due to proposed forest diversion (NPV)	298.436
2.	Loss of Animal Husbandry productivity including Loss of fodder (over 14.012 hects(10% of NPV)	29.844
3.	Cost of human re-settlement	NIL
4.	Loss of Public facilities and administrative infrastructures (roads, buildings, schools, dispensaries, electric lines, railways etc) on forest or which would require forest land, if these facilities were diverted due to the project.	NIL
5.	Possession value of Forest land Diverted (30% of environmental cost (NPV) due to loss of forest or circle rate of adjoining area in the district should be added as a cost component as possession value of forest land whichever is maximum).	89.531
6.	Habitat Fragmentation Cost (While the relationship between fragmentation and forest goods and services is complex, for the sake of simplicity the cost due to fragmentation has been pegged at 50% of NPV applicable as a thumb rule)	149.218
7.	Suffering of Oustees	Nil
8.	Cost of compensatory afforestation and soil &moisture conservation cost (Double land 31.152x2=62.304ha. and 31.152x 1000plant/ha. = 31152 nos. of plant will be planted, now land is required = 500plant/ha. = 62.304Ha) the cost of CA /ha. Rs. 142904.00	89.035
	Total Loss (1-8)	686.064

ANNEXURE-

TABLE-C. ESTIMATE BENEFITS OF FOREST DIVERSION IN CBA

SI. No.	Parameters	Compliance in lakhs
1.	Increase in productivity as attribute to the specific project	547.924/annum
2.	Benefit to Economy due to the specific project	442.27/annum
3.	No. of population benefited from the specific project	967911 people
4.	Economic benefits due to of direct and indirect Employment due to the project	300 employment
5.	Economic benefits due to Compensatory afforestation. (The benefit from such compensatory afforestation accruing over next 50 years monetized and discounted to the present value should be included as benefit by compensatory afforastation) FOR NEXT 50 YEARS. the estimated cost of NPV for present value is taken as benefit by compensatory aforastation i.e. Present value X (1+i) ^N =89.035X(1+0.027) 50 (i= inetrest, N=Time)	337.352
	Grand Total (SL.No1 to 5)	1327.546

COST BENEFIT ANALYSIS RATIO					
1	Benefit to economy	1327.546			
2	Loss on forest	686.064			
3	Cost benefit ratio -	1: 1.935 or say 1 : 2			

Dy. Chief Engineer (Con)/II, E.Co.Railway, Visakhapatnam Authorized Signatory,
PIONEER SURVEYORS