

JUSTIFICATION

Six Laning of the project from Chordaha (Jharkhand – Bihar border) to Gorhar of NH-2 from km 249+525 to km 320+810 in the state of Jharkhand under NHDP phase –V is important due to its East west connectivity, high volume of traffic 37732 PCU in Aug 2019 and to enforce safety features in the project as per recommendation of Safety consultant of NHAI.

The Project Highway has 71.285 km length Six lane Cement Concrete Pavement with 3 flyovers, 1 ROB, 2 major bridges, 41 Minor Bridges and 109 culverts so as to cater to high volume of traffic of 37732 PCU as surveyed in Aug 2019.

The Project Highway particularly in DhanuGhati section is accident prone zone as per Accident data report wherein 27 fatalities occurred at km 254+150 in dhanuGhati during period from November 2018 to June 2019. Most accidents are due to deficiency in curves and due to vehicles negotiating some of the curves at design speed of 100kmph. Further, During the Month of April & May 2019 there were nos. of accident /Fatal Accidents occurs(around 50nos. of accidents)

Thus for a semi access controlled 6 lane highway with high speed of operations, these substandard curves are likely to cause serious hazards of traffic operation. Thus it was recommended by safety expert of HQ to modify the design for consistency in the curves by changing the alignment marginally as will be required for improving the curves for their radii.

The curve that needs improvement are as follows:

SL NO	Chainage	Radius	Remarks
1	Km 254+997	310	Deficient curves in DhanuGhati with radii less than 400m which are major cause of
2	Km 256+096	370	
3	Km	240	



	257+136		accidents.
4	Km 257+600	305	
5	Km 259+296	360	

Accordingly, to improve the curves, forest land should be made available to implement the curveoption towards realignment and providing extra for safe movement of Traffic.

Hence the curves to be improved with wider radii are likely to improve the safety of traffic operation along the project highway.



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Table -C-Existing guideline for estimation benefit of forest-diversion in CBA

Sr No.	Parameters	Remarks	Monetary equivalent
1	Increase productively attribution to the specific project	To be quantified & expressed in monetary terms avoiding double counting	
2	Benefits to economy due to the specific project	The incremental economic benefit in monetary terms due to the specific project	
3	No. of population benefited due to specific project	As per the Detailed project report	
4	Economic benefits due to direct and indirect employment due to the project	As per the Detail project report	
5	Economic benefits due to Compensatory afforestation	Benefits from such compensatory forestation accruing over next 50 years monetized and discounted to the present value should	



		be included as benefit of compensatory afforestation *For benefit of CA the guideline of the ministry for NVP estimation may be consulted	
Total benefits of the project (monetary equivalent)			

