

**Annexure- IV**

**A Detail Note On the Project**

Indian Academy of Highway Engineer (IAHE), Government of India has decided to upgrade the Newly declared sections of National Highways to two lane/two lane with paved shoulder and /or strengthening of various sections of National Highways. The work would be taken up for up gradation on corridor concept. Therefore, corridors include strengthening (in adjoining stretches) in addition to widening to 2 lane / 2 lane with paved shoulder standards in order to have a better facility in a long continuous stretch.

In pursuance of the above, SA Infrastructure Consultants Pvt. Ltd., Sec. 142 Noida-(UP) have been appointed as Consultants to carry out the Feasibility Study and Detailed Project Report for rehabilitation and upgrading to 2 lane / 4 lane with paved shoulders configuration of Mahuva to Jetpur section (km 0/000 to km 180/100) of NH-351 which is a package/16 Gujarat State.

Mahuva-Jetpur road "Project Road" situated at southern part of Gujarat and is a section of National Highway No-351, having total length of about 177+927 KM. The project road (NH-351) located in Mahuva, district in Bhavnagar borders with Ahmedabad District to the northeast, Botad District to the northwest, the Gulf of Cambay to the east and south and Amreli District to the west. Project road is situated at 21.08' Latitude and 71.80' Longitude at an Elevation of 19m above from Sea level.

Amreli has a hot semi-arid climate, with hot, dry summers from March to mid-June, the wet monsoon season from mid-June to October during which the city receives around 550 mm of rain on average, and mild winters from November to February. The semiarid classification is due to the city's high evapotranspiration. The average temperature from November to February is around 25 °C, with low humidity. Due to proximity to the sea, the climate remains fairly humid throughout the year. The highest record temperature was 54 °C (129 °F) on 26 May 1988, while the lowest record temperature was 2 °C (36 °F) on 11 December 1973.

Following are the expected benefits due to the improvement in the project road:

- Better level of service in terms of improved riding quality and smooth traffic flow.
- Faster transportation will ultimately lead to massive savings in the form of reduced wear and tear of vehicles, reduced vehicle operating costs (VOCs) and total reduction in transportation costs etc.
- With the improvement of road surface, the traffic congestion due to obstructed movement of vehicles will be minimized and thus wastage of fuel emissions from the vehicles will be reduced.
- Increased road landscaping and safety features.

- Enhanced connectivity between rural & urban population which will benefit the all sections of the society like general population, small-medium-large scale industries, farmers, businessmen etc.
- Improved access to higher education facilities & modern health facilities.
- Strengthening of both rural & urban economies which in turn will improve economic scenario of the state and country.
- Improved road connectivity helps in better implementation and management of government schemes.
- With improvement in economy, more generation of employment opportunities.
- Overall improvement of the region.

Place:.....

Date: .....

Executive Engineer

National Highway Division

Rajkot

### COST BENEFIT ANALYSIS

Detailed Project report for "Up-gradation of Mahuva- Savarkundla- Amreli- Bagasara-Jetpur section of NH-351 in the State of Gujarat to two/four lane with paved shoulder configuration"

#### Cost Analysis

S.N	Parameters	Cost Analysis
1.	Loss of value of timber, fuel wood and minor forest produce on an annual basis, including loss of man-ours per annum of people who derived livelihood and wages from the harvest of these commodities.	The loss of value of timber will be provided after the completion of tree counting activity which will be jointly carried out by the concerned Forest department and User Agency.
2.	Loss of animal husbandry productivity, including loss of fodder.	There is no loss of animal husbandry due to proposed diversion.
3.	Cost of Human resettlement	There is no human settlement in the forest area. The diversion of forest land consisting of Road side Plantation which is declared as protected forest vide Government Notification. So cost of human resettlement is not applicable.
4.	Loss of Public facilities and administrative infrastructure (roads, buildings, school, dispensaries, electric lines, railway etc.) on forest land, or which would require forest land if these facilities were diverted due to the project.	There is no such infrastructure loss.
5	Environmental Losses: (Soil erosion, effect on hydrological cycle, wildlife habitat, micro climate upsetting of ecological balance).	The Environmental Cost has been estimated as Rs. 29.05 crore (approx.)
7.	Cost of Acquisition of facility on non forest land where ever feasible	As per National Highway act, 1956.