Project: Diversion of 4.7732 Hectare Reserve Forest Land for upgrdation of Kalavad-Jamnagar section (PKG-II) of NH-927D in the State of Gujarat from 2 lane to four lane

DETAILED NOTE ON PROJECT

The work for Consultancy Services for Preparation of Feasibility cum Detailed Design Report of Kalavad-Jamnagar Section of NH-927D has been awarded to M/s Consulting Engineers Group Ltd., Jaipur vide IAHE/Admin/07/Project-MORT&H/2014-15/18 dated 14.05.2015. Accordingly consultant has commenced the services on 29.05.2015 vide CEG/D-121/2015/79 dated 22.05.2015. After detail reconnaissance survey and preliminary option study Draft Inception Report has been submitted by consultant on 19.06.2015 vide CEG/D- 121/2015/128. The comments on Draft Inception Report has been issued on 20.07.2015 vide IAHE/DPR/Tech/NH-IAHE/18/2015-16. Accordingly the DPR consultant incorporated the observations received from IAHE on Draft Inception Report and submitted the Final Inception Report on 29.07.2015. After completion of survey and Investigation work Draft Feasibility Report was submitted on 8th October 2015 vide CEG/D-121/2015/308. The review meeting for approval of alignment and project proposal was conducted at various levels with PWD and IAHE. Meanwhile MORTH issued a circular for capacity augmentation dated 26.05.2016 that when traffic triggers 10000 PCU the road section should be taken up for four lane up-gradation. Accordingly IAHE asked the prepare packages eligible for four laning and two lane configuration. The consultant accordingly submitted for eligible stretches for four laning that stretch from Km. 50+925 to Km. 3+665 shall be eligible for four lane as traffic in this section is 10537 PCU. Alignment site visit also conducted with RO-MoRTH and PWD officials and accordingly comments on Draft Feasibility Report issued by RO-MoRTH was issued by IAHE vide IAHE/DPR/Tech/NH-IAHE/2015-16 dated 6.09.2015 and asked to submit Final Feasibility Report with instruction to PWD for giving their comments on Draft Feasibility Report. This report contains Final Feasibility Report based on comments received from MoRTH/IAHE/PWD.

Project Alignment Details

National Highway No. 927D (NH 927D) lies in western India. Earlier it was SH-26 and recently converted into NH-927D. The SH-26 notified into NH-927D vide S.O. No. at the Junction of NH-27 and SH-26. The project end point is at km 3+665 junction of SH-26 (old) and SH-25. The existing length as per km stone difference is 47+270 km. The existing project highway is mainly having two lane configurations, intermediate lane configuration. However, the highway sections passing through Kalavad, Haripar and Vijarkhi towns are having four lane configurations with.

Table: List of Existing and Proposed Salient Features

S. No.	Descriptions	Existing Features	Proposed Features	Remarks
1	ROW	From Km 50+925	Minimum 60m	Approx. 60 Ha. Land
		to3+665 = 24.0 m	PROW(47.652 Km)	acquisition will be
				required
2	Carriageway Width (m)	Project Road Configuration is Intermediate lane (6.10 m) to 2-lane except 2.2 km length of 4-lane configuration is 3.500 km length in Kalavad	In Rural – 4-Lane with Paved Shoulder (46.260 Km) In Urban – 4-lanes with footpath cum drain (1.391Km)	4-lane configuration has been proposed.
3	Bridges	Major Bridges – 2 Nos Minor Bridges – 16 Nos	Major Bridges – 05 Nos. Minor Bridges – 16 Nos.	Major Bridges: a) New (03 Nos) b) Existing Minor bridges reconstructed (02 nos) Minor Bridges: a) New (04 nos) b) Reconstruction (10 nos) c) New on Service road (02 nos)
4	Culverts	72 Nos.	73 nos.	Reconstruction (26 Nos) New (16 nos) Widening (31 nos)
5	Major Junctions	4 Nos	5 Nos	Major Junctions increased due to Bypass
6	Bypass	Nil	Kalavad- 9430m Length	Total Bypass length is 9.430 km

S. No.	Descriptions	Existing Features	Proposed Features	Remarks
7	Realignments	Nil	 Haripar-1093m Length Khandera -1373m Length Vijarkhi-1970m Length 	Total Realignments length is 4.436 km
8	Truck Lay Bye	Nil	2 Nos.	Design Ch 10.517 and Ch 45.925
9	Bus Stops/Bus Bays	16 Nos.	26 Nos. (including both side)	Shelter Type Bus stop- 12 (Both Side) Bus Bay -14 (Both Side)
10	Drain	Earthen Drain in Few Stretches along the alignment	RCC Covered Drain - 5.254 km Earthen Drain 42.398km	There is no Existing Line drain along the project stretch
11	Vehicular Underpass	Nil	VUP-2 LVUP-1	Design Ch. 1.230 (LVUP) Design Ch. 4.607 & 8.245 (VUP)
12	Flyover	Nil	1 Nos.	Design Ch. 46.690
13	Toll Plaza	Nil	1 Nos.	Design Ch. 41.835

DEMOGRAPHIC FEATURES

The Land of the Legends, stands bordered by Pakistan and Rajasthan in the north east, Madhya Pradesh in the east, and Maharashtra and the Union territories of Diu, Daman, Dadra and Nagar Haveli in the south. The Arabian Gujarat is located on the western coast of India and has the longest coastline of 1,600 km in the country. The state shares its borders with Rajasthan, Madhya Pradesh, Maharashtra and the Union Territories of Daman & Diu and Dadra & Nagar Haveli. The Arabian Sea borders the state both to the west and the southwestern borders the state both to the west and the south west.

Population

Total population of Gujarat as per 2011 census is 60,439,692 of which male and female are 31,491,260 and 28,948,432 respectively. **Jamnagar** had population of 2,160,119 of which male and female were 1,114,192 and 1,045,927 respectively. **Rajkot** district had population of 3,169,881 of which male were 1,642,018 and remaining 1,527,863 were females. Table below show the demography of Project Influenced Area in 2011.

Table: Demography of Project Influenced Area in 2011

Section	Project	Jamnagar	Rajkot	Gujarat
Dhoraji-Jamnagar	Area	67.500 km	35.300 km	-
Population	2506856	2,160,119	3,169,881	6,04,39,692
Population density per sq. km.	217	152	340	308
Decadal Growth	15.7	13.44%	20.02%	19.28 %
Male	1295440	1,114,192	1,642,018	3,14,91,260
Female	1211417	1,045,927	1,527,863	2,89,48,432
Sex Ratio	942	939	949	919
Percentage of total population	4.5	3.57%	6.29%	4.99%
Child sex Ratio (0-6)	895	904	879	890
Literacy Rate	74.0	73.65%	74.65%	78.03%
Male Literacy	82.0	81.50%	83.01%	85.75%
Female Literacy	65.5	65.33%	65.93%	63.31%
Scheduled Caste Population (in %)	8.0	8.13%	7.71%	6.7
Scheduled Tribe Population (in %)	0.5	0.55%	0.42%	14.8%
Urban Population	49.5	44.95%	58.19%	42.06%
Rural Population	50.5	55.05%	41.81%	57.04%

Source: Primary Census Abstract 2011

The villages being benefitted by upgrdation of Kalavad-Jamnagar section (PKG-1I) of NH-927D in the State of Gujarat to Four lane with paved shoulder configuration are falling in Jamnagar District are as follows:

Sr. No.	Jamnagar District
1.	Mota Bhadukiya
2.	Pipaliya (LHS) Sarbarbhag (RHS)
3.	Wavadi
4.	Ranuja
5.	Khankotda
6.	Nani Matli
7.	Pasaya
8.	Beraja
9.	Aliya
10.	Miyathara
11.	Vijrakhi
12.	Suwarada
13.	Theba
14.	Khambaliya (LHS) Dhrol (RHS)

Social Development in Gujarat

In order to strengthen various basic amenities either area based or population based, the Social and Community Programmes are required to be geared up at State level as well as

district level so as the life of the people can be improved, Additional efforts in important

sectors like health, education, women & child welfare, labour, environment, water supply,

and sanitation, social welfare, rural housing, village & cottage industries etc. are required to bring significant improvement in the Human Development of the State. With a view to

achieve the above mentioned objectives, various initiatives have been taken by the State

Government.

In recent years, social infrastructure in areas such as health and education has improved

significantly. This can, to some extent, be attributed to the increased presence of the private

sector in the state. However, it is crucial to ensure that access to services is enhanced for those who need it the most, especially the marginalized tribal communities living in hard-to-

reach areas.

Issues of quality and access to basic services by the poor have emerged as a priority for the

State Government. Responding to this, Gujarat's 12th Five Year plan has enhanced

allocations for the social sector by 40 per cent. This will not only help address the

infrastructural gaps, but will also be instrumental in meeting the critical needs and

entitlements of children and women.

Place: Rajkot

Executive Engineer National Highway Division

RAJKOT.