

SHORT DESCRIPTION OF THE PROJECT

Background of the Project

National Highways Authority of India (NHAI) has been entrusted to implement the development of stretches of NH under DPR/KAR/phase – IV B/2010 on BOT Mode / EPC mode. NHAI has decided for carrying out feasibility study and detailed project preparation for 2-lane with paved shoulders (with provision of capacity augmentation) / 4 lane standard as per the traffic volume.

Project Location and size

NH-209 starts in the state of Tamil Nadu near Dindigal and ends at Bangalore in Karnataka. The Project Road is 2 lanes with Paved Shoulder / 4 laning from Km 438.475 (proposed Km 435.250) Harohalli to Km 461.550 (proposed Km 458.420) Bangalore section of NH 209 in the State of Karnataka. Total existing length of the project road is 23.075 Km & the proposed length is 23.17 Km. Since the project road is an existing road, the decision to upgrade the road to 2 lane with paved Shoulder / 4 laning with a proposed ROW of 30m all throughout except for bypass (45m).

Major Settlements along Project Road

Sl. No	Existing Chainage		Length (m)	Village/Town Names
	From	To		
1	439+400	440+400	1000	Harohalli
2	442+400	442+600	200	Gabadikeval
3	443+400	443+800	400	Gabbadi
4	445+000	445+200	200	Kaggalahalli
5	445+000	445+2000	200	Kangalipure
6	446+800	447+000	200	Vedarahalli
7	448+400	448+800	400	Bolaragatte
8	451+600	451+800	200	Somanahalli
9	454+000	455+600	1600	Kaggalipura
10	456+600	457+400	800	Udayapur
11	458+200	459+000	800	Lakshmipura

Features of the Proposed Highway

2 lanes with paved shoulders / 4 lanes are proposed for the entire project road. The features are:

1. The flexible new pavement has been designed for sub grade overlaid by layers of GSB, WMM, BM, DBM and BC respectively.
2. Following structures are provided:
 - Minor Bridges: 06
 - Culverts: 54
 - Bus Shelters / Bays: 06
 - Underpasses & RoB: 01
 - Truck Lay byes: 1
 - Toll plaza: 1
3. Bypass for Harohalli (3.250 Km), Kaggalipura (4.375 Km), and realignments / curve

improvements for 2.030 Km are proposed.

4. Median openings have been provided.
5. The traffic signs of the project roads have been provided in accordance with the IRC Code of Practice for Road Signs (IRC 67-2001).
6. Metal Beam Crash Barriers shall be provided on both edges of the road where road height exceeds 3 m, and on the outer edge of the road on sharp curves.
7. The project includes provision for the drainage system along the entire road stretch.
8. It is proposed to provide Illumination at all interchange up to sufficient lengths.
9. The project road is to be constructed on BOT basis in DBFO pattern

Expected Project Benefits

The existing Project road passes through settlement areas which results in congestion and delay to both through as well as local traffic. To alleviate the traffic congestion and delay problems widening of the road is proposed. The details of the needs and benefits from the project are as follows:

- This increased road capacity and improved pavements can reduce travel time, lower the cost of vehicle use, increase access to market, jobs, education and health services and reduce transport costs for both freight and passengers.
- The project is seen as a major generator of economic momentum, and shall benefit in a very significant way through better access and connectivity to big cities.
- The project in conjunction with other state policies and initiative is expected to assist to industrial development bottlenecks, reduce transportation cost, and thereby benefit all sections of the society.
- The foremost benefit for the local communities would be the increased levels of road safety.
- The proposed widening will reduce the accidents and traffic congestions

PROJECT NOTE

Introduction

Infrastructure development particularly faster movement and transportation of goods in a country like India is a guiding factor for economic development. Proper transportation of goods requires comprehensive transport systems and increasing road traffic requires better roads. Hence it becomes necessary to widen the existing road carriageways, form of new roads and bypasses. To increase safety and efficiency in trade and business and also promote free movement of traffic India has embarked on a 10-year highway transportation improvement program as part of the national policy to globalise its economy.

The National highway authority of India (NHAI) a statutory body under The Ministry of Road Transport and Highways (MORTH), Govt. of India has taken up the development of the National Highway Development Project (NHDP).

The National Highway Development Project Phase III aspires to construct 48254 Km of 4/6 lane roads in the country. The first phases of NHDP included the Golden Quadrilateral project with a total length of around 5,846 Kms connecting the cities of Delhi, Kolkata, Chennai & Mumbai. North South East West (NSEW) project was under NHDP Phase I &II which together had a total length of around 7,300 Kms connecting Kashmir to Kanyakumari including Salem to Cochin Spur and Silchar to Porbandar. The other phases are NHDP III, IV, V, VI, VII and SARDP-NE.

The National Highway Development Project Phase III plans to construct 12109 Km of 4 lane roads in the country. The Project Road is part of NHDP Programme.

Location of Project Road

NH-209 starts in the state of Tamil Nadu near Dindigal and ends at Bangalore in Karnataka.

The Project Road NH-209 starts in the state of Tamil Nadu near Dindigal and ends at Bangalore in Karnataka. The Project Road is 2 lanes with Paved Shoulder / 4 laning from Km 438.475 (proposed Km 435.250) Harohalli to Km 461.550 (proposed Km 458.420) Bangalore section of NH 209 in the State of Karnataka. Total existing length of the project road is 23.075 Km & the proposed length is 23.17 Km. Since the project road is an existing road, the decision to upgrade the road to 2 lane with paved Shoulder / 4 laning with a proposed ROW of 30m all throughout except for bypass (45m).

The project is located in the districts of Ramanagara & Bangalore Urban in Karnataka. In order to avoid the congestion and delay to both through as well as local traffic bypasses have been provided at Harohalli (3.250 Km), Kaggalipura (4.375 Km).

Proposed Major Improvements

1. 2 lanes with paved shoulder / 4 lanes carriageway as per IRC specifications proposed
2. The flexible new pavement has been designed for sub grade overlaid by layers of granular sub-base, wet-mix macadam, bituminous macadam, dense bituminous macadam and bituminous concrete respectively.
3. Following structures are provided:
 - Major bridges: Nil
 - Minor Bridges: 06
 - Culverts: 54
 - Bus Shelters / Bays: 06

- Underpasses & RoB: 01
 - Truck Lay byes: 01
 - Toll plaza: 01
4. Median openings have been provided.
 5. The traffic signs of the project roads have been provided in accordance with the IRC Code of Practice for Road Signs (IRC 67-2001).
 6. Metal Beam Crash Barriers shall be provided on both edges of the road where road height exceeds 3 m, and on the outer edge of the road on sharp curves.
 7. The project includes provision for the drainage system along the entire road stretch.
 8. It is proposed to provide illumination at all interchange up to sufficient lengths.
 9. The project road is to be constructed on BOT basis in DBFO pattern

Expected Project Benefits

The existing Project road passes through settlement areas which results in congestion and delay to both through as well as local traffic. To alleviate the traffic congestion and delay problems widening of the road is proposed. The details of the needs and benefits from the project are as follows:

- This increased road capacity and improved pavements can reduce travel time, lower the cost of vehicle use, increase access to market, jobs, education and health services and reduce transport costs for both freight and passengers.
- The project is seen as a major generator of economic momentum, and shall benefit in a very significant way through better access and connectivity to big cities.
- The project in conjunction with other state policies and initiative is expected to assist to industrial development bottlenecks, reduce transportation cost, and thereby benefit all sections of the society.
- The foremost benefit for the local communities would be the increased levels of road safety.
- The proposed widening will reduce the accidents and traffic congestions.

Requirement of Land for the Project

A total of 63.4305 Ha of land is proposed to be acquired for the improvement of the project

Losses of Forests Due to Project Road

For implementation of the above project road, 1.8935 Ha of forest land in Bangalore Urban Forest Division has to be diverted in Bangalore Rural District. Accordingly this proposal for forest clearance is prepared and submitted for approval.

SALIENT FEATURES OF THE PROJECT

- The project road starts from existing Km 438.475 of NH-209 at Harohalli and ends at Km 461.550 on NH-209 near Bangalore. Total existing length of the project road is 23.075 Km
- The proposed starting point is Km 435.250 and end point is Km 458.420 on NH-209. The total proposed length of the project road is 23.17 Km
- Predominantly the road is passing through plain terrain for 23 Km. The land use pattern of the project area is agriculture, built-up, govt., barren & forest
- Project Road passes through approximately 11 settlements in Karnataka
- The Project Road doesn't attract Environment and Wildlife Clearance.
- The existing right of way varies from 7 to 30 m. The proposed right of way is 30m all throughout except for bypass (45m)
- Total 63.43 Ha of land is proposed to be acquired for the improvement of the project
- Total 1.8935 Ha of forest land in Bangalore Urban Forest Division are required for diversion for widening of the project road.
- 6 minor bridges, 54 culverts, 6 Bus shelters / bays, 1 Truck Lay bye & 1 toll plaza has been proposed
- Bypass for Harohalli (3.250 Km), Kaggalipura (4.375 Km), and realignments / curve improvements for 2.030 Km are proposed.
- Total 296 KLD water shall be required for construction and other purposes.
- Approx 699 trees might be affected due to proposed road, against which compensatory plantation shall be taken up
- The total civil construction cost is Rs. 119.32 crores .