

मुंबई जेएनपीटी पोर्ट रोड कंपनी लिमिटेड

(भारतीय राष्ट्रीय राजमार्ग प्राधिकरण का संयुक्त उपक्रम)

(सडक परिवहन एवं राजमार्ग मंत्रालय, भारत सरकार)

Mumbai JNPT Port Road Company Limited

(A SPV of National Highways Authority of India)

(Ministry of Road, Transport & Highway, Govt. of India)

परियोजना कार्यान्वय इकाई, Project Implementation Unit

सर्व्हे नं. 63, एनएच 4 बी 'डी' पॉइन्ट, चिंचपाडा-कलंबोली बायपास रोड, पनवेल - 410 206.

Survey No. 63 "D" Point on NH-4B, Chinchpada - Kalamboli Bypass Road, Panvel - 410 206

JUSTIFICATION FOR LOCATING THE PROJECT IN FOREST AREA

The Proposed Project is essentially a Highway Upgrading Project and involves Widening of the existing road to Six/Eight lane facility.

PROJECT NECESSITY

- Enhanced safety of the traffic, the road users and the people living close to the highway
- Enhanced operational efficiency of the highway
- Fulfillment of the access needs of the local population
- Minimal adverse impact on the road users and the local population due to construction
- Feasible and constructible options for the project with least cost option.
- Economic benefits to the local population during & after construction
- Easy transport of Agricultural Goods & access to greater markets
- Easy access to Health care and emergency services
- Improved quality of life in the project area
- Increased Employment opportunity
- Enhanced Environment & Increased Safety

Detailed Project Note is Enclosed.

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मुख्य कार्यालय

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Corporate Off

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EXECUTIVE SUMMARY

1.0 BACKGROUND

The project consists of 3 roads NH-4B (A1-E & D-G) section, part of SH -54 (Km. 5.300 to Km. 14.850) and Amra Marg (NH-348) from Km.0.000 to Km. 6.200 (NH-348) in the state of Maharashtra. The Project roads connect Jawaharlal Nehru Port and are present on boundaries of proposed Navi Mumbai International Airport. The project roads have been planned for widening to a 6/8-lane configuration by Mumbai JNPT Port Road Company Ltd (MJPRCL), a SPV of National Highway Authority of India (NHAI).

MJPRCL has planned 6/8 laning of NH – 4B (A1-E) section from Km 3.600 to km 27.270, NH – 4B (D-G) section from Km 0.000 to Km 4.492, SH – 54 from Km 5.300 to Km 14.850 and Amra Marg from Km 0.000 to Km 6.200 (NH-348). The current project is to be executed by private entrepreneurs as DBFOT project (Design – Build – Finance – Operate – Transfer).

2.0 PROJECT ROAD & SALIENT FEATURES

2.1 The present project consists of following road stretches as indicated in table – E-1:

Table – E-1: Project Stretch

Sl. No.	Road Name/No.	From (km)	To (km)	Length (kms)
1	NH – 4B (A1 – E)	3.600	27.270	23.670
2	NH – 4B (D – G)	0.000	4.492	4.492
3	SH – 54	5.300	14.850	9.550
4	Amra Marg	0.000	6.200	6.200
Total Length of Project Roads				43.912

The entire project road in its present condition is a four lane divided highway. The layout plan indicating the project road is presented in Figure – E-1.

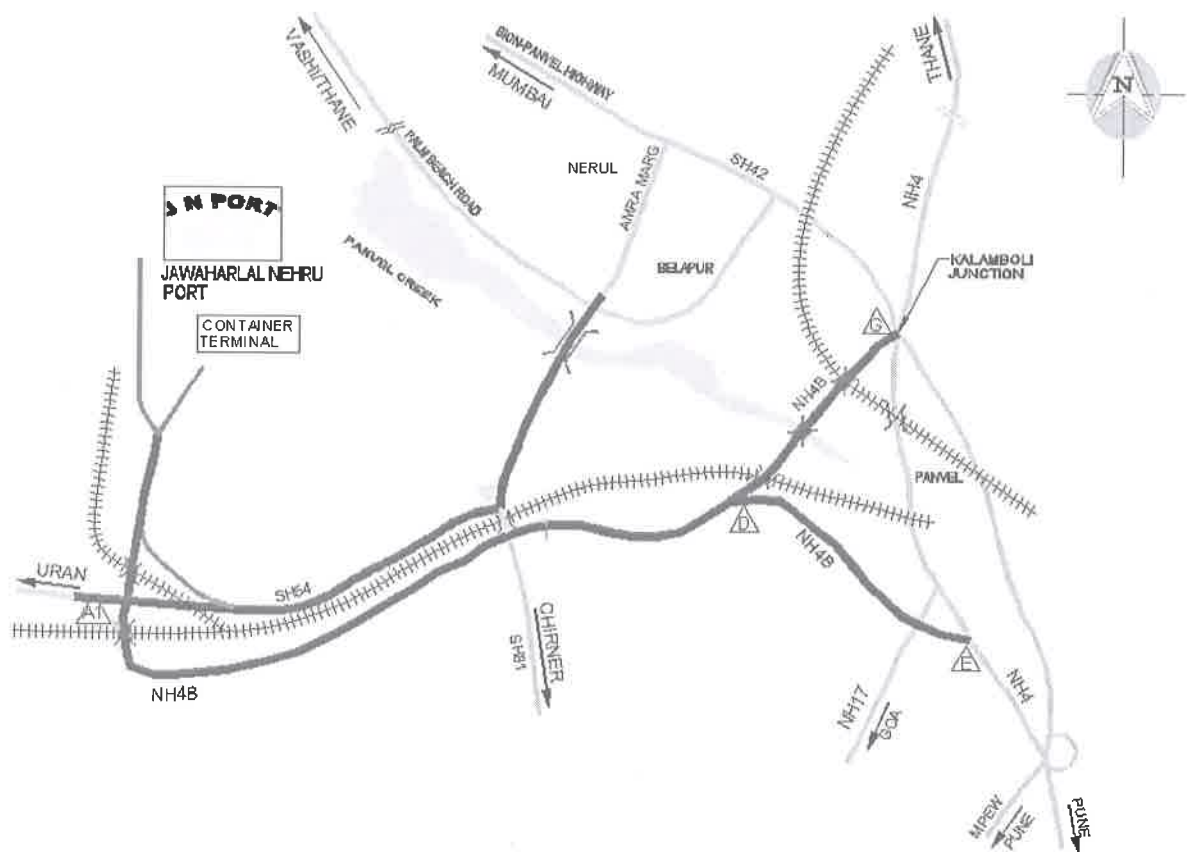


Fig – E-1: Layout Plan

2.2 The project has both flexible & concrete pavement. Both the C/W of Amra Marg is of concrete pavement and the C/W of SH-54 is flexible. Both flexible & concrete pavements are present in NH4B.

2.2 Bridges and Other Structures

The following structures are present in the project road:

• Major Bridges	-	03 nos
• Minor Bridges	-	12 nos
• ROBs	-	04 nos
• Underpasses	-	07 nos
• Cross Drainage Structures	-	114 nos

4.0 PROPOSALS

4.1 Roads & Pavements

Existing 4-laned C/W is proposed to be widened to 8-laned C/W with service road for Km. 15.000 to 21.600 of NH – 4B (A1-D Section), NH – 4B (D-E Section) from Km 21.600 to Km 27.270, NH – 4B (D-G Section) from Km 0.000 to Km 4.492 and Amra

Marg (NH-348) from Km 0.000 to Km 6.200. Similarly, 4-laned existing C/W is proposed to be widened to 6-laned C/W with service road for Km. 3.600 to Km. 15.000 of NH – 4B (A1-D) and SH – 54 (Km.5.300 to Km. 14.850).

4.2 Bridges & other Structures

All the existing Bridges and other structures are proposed to be widened to 8 lanes irrespective of the widening scheme of roads for various stretches.

4.3 New Proposals of Flyovers

The following new flyovers have been proposed for the project:

Table – E-2: Flyover Details

Sl. No	Existing Chainage (Km)	Proposed Chainage (Km)	No of Intersecting Roads	Proposed Carriageway Configuration	Proposed Structure Type	Proposed Span Arrangement & Total Viaduct Length	Total Width (m)
Amra Marg (NH-348) Section							
1	0.280	0.280 (Kille-gaonton Junction)	2	8-lane	PSC girder / PSC Box girder	2x20+2x40+2x20 = 160m	2 x 16.90
2	1.585	1.585 (Ambuja Cement Jetty)	2	8-lane	PSC girder / PSC Box girder	1x30 = 30m	2 x 16.90
3	2.460	2.460 (Targhar)	1	8-lane	RCC BOX	1x12 = 12m	2 x 16.90
NH – 4B (A1-E) Section							
4	26.590	26.590 (Phalaspe phata)	2	8-lane	PSC I girder / PSC Box Girder	1x20+ 2x35+ 1x20 = 110m	2 x 16.90
5	26.875	26.875 (Phalaspe phata)	2	8-Lane	PSC I girder / PSC Box Girder	1x20 + 2x35 + 1x20 = 110m	2 x 16.90
6	21.570	21.570 (D-Point)	1	8- Lane	PSC I girder / PSC Box Girder	2x20 + 2x40 + 2x20 = 160m	2 x 16.90

Sl. No	Existing Chainage (Km)	Proposed Chainage (Km)	No of Intersecting Roads	Proposed Carriageway Configuration	Proposed Structure Type	Proposed Span Arrangement & Total Viaduct Length	Total Width (m)
SH – 54 Section							
7	14.020	14.020	1	4-lane	PSC I girder	24x25 = 600	17.20

4.4 New Proposals of VUP

The following new VUPs have been proposed for the project:

Table – E-3: VUP Details

Sl. No	Existing Chainage (Km)	Proposed Chainage	Proposed Carriageway Width	Proposed Structure Type	Proposed Size (L X H) (m)	Total Width (m)
Amra Marg Section						
1	Underpass in approach of ROB towards Devi Shuddle (Killegaon) (Ch. -0.400)			RCC BOX	2 cell box with 22m overall length	As per ROB approach
2	Underpass in approach of Panvel Creek Bridge (Ch. 0.831)			RCC BOX	2 cell box with 22m overall length	As per Bridge approach
3	4.470 (Vahal)	4.470	8-lane	RCC BOX	15 X 3.5 Single cell	2 x 16.90
4	4.800 (Vahal)	4.800	8-lane	RCC BOX	15 X 5.50 Single cell	2 x 16.90
NH – 4B (A1 – E Section)						
5	6.500 (CIDCO SEZ)	6.500	8-lane	RCC BOX	2 cells of 15 X 6.0	2 x 16.90
6	7.455 (Central Warehousing Corporation - CWC)	7.455	8-lane	RCC BOX	2 cells of 18 X 6.0	2 x 16.90
7	8.555 (Indian Oil Terminal – IOT)	8.550	8-lane	RCC BOX	2 cells of 18 X 6.0	2 x 16.90

Sl. No	Existing Chainage (Km)	Proposed Chainage	Proposed Carriageway Width	Proposed Structure Type	Proposed Size (L X H) (m)	Total Width (m)
8	18.150 (Pushpak)	18.150	8-lane	RCC BOX	2 cells of 18 X 5.5	2 x 16.90
9	20.150 (Pushpak)	20.150	8-lane	RCC BOX	2 cells of 18 X 5.5	2 x 16.90
10	25.850 (MMRDA Rented Housing)	25.850	8-lane	RCC BOX	12 X 5.5 – Single cell	2 x 16.90

4.4 Interchanges

In addition to the above, separate interchanges have also been proposed at Gauvan Phata & Karal Phata to provide adequate connectivity between Amra Marg & NH4B and SH54 & NH4B respectively.

4.5 The following Interchanges have been proposed for the upcoming Airport project:

- Partial Cloverleaf interchange at Km 2.800 on Amra Marg
- Cloverleaf interchange at Km 2.370 on NH-4B(D-G)

5.0 Cost

The Project Civil Cost is Rs. 2035.32 Crores.

The Total Project Cost is Rs. 2955.62 Crores.

Yours Faithfully,

(Prashant J.Fegde)
General Manager (Tech) & Project Director
PIU - Panvel