

BRIEF SUMMARY OF PROJECT

PROJECT BACKGROUND

NHAI planning to establish the technical, economic and financial viability of the project and prepare Detailed Project Reports for proposed 6 / 8 lane access controlled Chennai Salem greenfield highway of 277.3 km long including Salem Bypass and 51 km long three Spurs (Kanchipuram to Changelpattu Spur of 30.000 km (SH 132b), Chetpet Spur of 4.7 (SH 4) km and Tiruvannmalai Spur of 16 km (NH 38)), development of Tovarankurichi to Natham road to 4 lane facility and Tanjavur to Trichy road (56 km) to 6 lane facility in a sound technical and most economical manner, taking into consideration the environment and social aspects of the area, quality audit and safety audit requirement in design and to carry out through financial analysis for implementation. The Consultants have already submitted the Inception Report and Alignment Report as part of the assignment. This report pertains to Feasibility Study of the **Green Field Chennai-Salem highway** (From Chennai Outer Ring Road to end of Salem Bypass) along with 3 Spurs as mentioned above.

NEED OF THE PROJECT

1. Better connectivity to major towns through spurs at Kanchipuram-Changalpattu, Chetpet & Tiruvannamalai utilising existing SH-58, SH-4 & NH-234 respectively.
2. Shorter travel time and distance compared to existing routes.
3. Completely access controlled for high a speed corridor.
4. Green field highway intends to connect industrial area and special economic zones present along Chennai and Salem districts.
5. The new access controlled green field highway will pave the way for economic development of the region.

Salient feature of Proposed Road and Existing Road

Comparative statement of proposed green field highway with the existing routes between Chennai to Salem is presented in table below

Sl. No	Description	Existing Route I	Existing Route II	Existing Route III	Proposed Alignment
1	Length, km	352.70	331.89	334.28	277.300
2	Start point	Alignment starts at Maduravoyal Cloverleaf junction in Chennai	Alignment starts at Maduravoyal Cloverleaf junction in Chennai	Alignment starts at Maduravoyal Cloverleaf junction in Chennai	Alignment starts near Chennai ring road in Vandalur due to constraints for the green field highway in the Chennai city. It is about 24.89 Km from proposed start location to Maduravoyal Cloverleaf junction
3	End point	Alignment ends at NH-544 Trumpet interchange junction	Alignment ends at NH-544 Trumpet interchange junction	Alignment ends at NH-544 Trumpet interchange junction	After bypassing Salem district alignment ends connecting NH-544
4	Districts	Chennai, Thiruvallur, Kanchipuram, Vellore, Krishnagiri, Dharmapuri, Salem	Chennai, Thiruvallur, Kanchipuram, Vellore, Krishnagiri, Dharmapuri, Salem	Chennai, kanchipuram, Villupuram, Salem	Kanchipuram, Thiruvannmalai, Krishnagiri, Dharmapuri, Salem
5	Connecting Highways	NH-48 & NE2	NH-48 & SH-18 (New NH-179A)	NH-32, NH-132, NH-38, NH-79 & NE2	-
6	Design speed, Kmph	60-80	60-80	60-80	120
7	Lane	4/6 Lane	4 Lane	2/4 Lane	6 lane / 8 Lane Access Controlled

Development of Economic Corridors, Inter Corridors, Feeder Routes and National corridors (GQ and NS-EW Corridors) to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Chennai-Salem Highway)

Sl. No	Description	Existing Route I	Existing Route II	Existing Route III	Proposed Alignment
	Configuration		(2 Lane SH-18)		
8	Right of Way, m	30 - 45	30 – 45 (10 – 15 SH-18)	30 - 45	70m / 90m
9	Approx Travel Time, Hours minutes	5.43	6.54	5.24	3.00
10	No of NH crossings	6	5	6	5
11	No of SH crossings	21	21	20	10
12	Access Control	No access /Partial access control	No access /Partial access Control	No access /Partial access Control	Complete access control with only 9 possible location for Entry and exit.
13	Merits	1. Since roads are already present, there is no structure affecting and land acquisition, unlike the proposed greenfield highway. 2. All the existing routes are either no access/partial access controlled, the connectivity is much higher to the villages/town along its path. 3. Although the average travel time for these routes from Chennai to Salem is 5 hours 45 minutes, with the improvements to the existing it can be reduced. 4. There is no forest land acquisition, which is a very difficult & lingering process required for proposed greenfield highway. 5. Proposed highway with closed toll policy system is difficult to access for a common man.			1. Better connectivity to major towns through spurs at Kanchipuram-Changalpattu, Chepet & Tiruvannamalai utilising existing SH-58, SH-4 & NH-234 respectively. 2. Shorter travel time and distance compared to existing routes. 3. Completely access controlled for high a speed corridor. 4. Green field highway intends to connect industrial area and special economic zones present along Chennai and Salem districts. 5. The new access controlled green field highway will pave the way for economic development of the region.

The location of the project road is presented in Figure below.

0.1 PROJECT AREA

Project Road is passing thru 5 districts (Kanchipuram, Thiruvannmalai, Krishnagiri, Dharmapuri, Salem), 14 Taluk and 159 villages. Details are given in PFR.

Eco-sensitive Areas within 15km from Project Road is presented in table below

S. No.	Category	Details	Distance (km) / Side
1	Wildlife Sanctuary	Karikili Bird Sanctuary	13.1 / LHS
2	Zoological Park	Arignar Zoological Park, Chennai	1.5 / Towards West from Start of Project road
3		Kurumbapatti Zoological Park	11.3 / RHS
4	Crocodile Farm	Sathanur Crocodile Farm	12.0 / LHS

No wildlife Sanctuary or National is located within 10km from the project road. Hence, clearance under wildlife protection act, 1972 shall not be applicable for the project.

Development of Economic Corridors, Inter Corridors, Feeder Routes and National corridors (GQ and NS-EW Corridors) to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Chennai-Salem Highway)

Part of project stretch passes through the **forest area**. Chainage wise tentative details of affected forest stretches is given in Table below.

S. No.	Approx. Chainage		Approx. Length (Km)	District	Division Name	Forest Range	Reserved Forest Name
	From	To					
Main Alignment (Chennai-Salem Highway)							
1	13.000	13.560	460	Kancheepuram	Chengalpattu	Chengalpattu	Siruvanthur
2	81.000	81.340	340	Tiruvannamalai	Tiruvannamalai(n)	Arani	Nambedu
3	107.300	108.700	1340	Tiruvannamalai	Tiruvannamalai(n)	Polur	Alialamangalam
4	171.600	172.400	690	Tiruvannamalai	Tiruvannamalai(s)	Chengam	Anandavadi
5	175.650	176.400	710	Tiruvannamalai	Tiruvannamalai(s)	Chengam	Ravandavadi
6	180.900	182.700	1800	Tiruvannamalai	Tiruvannamalai(s)	Chengam	Ravandavadi
7	238.700	241.600	1780	Salem	Salem	Shervaroy north	Manjavadi ghat & Pallipatti extn
8	262.700	264.100	1360	Salem	Salem	Shervaroy South	Jarugumalai
9	264.450	265.300	780	Salem	Salem	Shervaroy South	Jarugumalai
10	266.200	267.100	855	Salem	Salem	Shervaroy South	Jarugumalai
11	267.300	267.500	145	Salem	Salem	Shervaroy South	Jarugumalai
Tiruvannamalai Spur							
1	6.250	8.250	2030	Tiruvannamalai	Tiruvannamalai(s)	Tiruvannamalai	Sorakolathur

Exact length of affected forest area shall be calculated after joint inspection with forest dept. during detailed designing.

0.2 PROJECT PROPONENT

The project proponent is National Highways Authority of India, Government of India.

0.3 PROPOSED IMPROVEMENTS

Proposed development will be as per latest IRC Guideline

Service lane at 10 locations, Lay bays at 10 locations, toll plaza at 8 locations, Road marking, road sign, kilometer stone, Delineators and objects markers, Guard post and Crash barrier will be provided at the appropriate locations.