

National Highways Authority of India  
(Ministry of Road Transport & Highways)

Four Laning of Cholopuram Thanjavur from Km. 116.440 to Km. 164.275 of NH-45C under NHDP-IV on Hybrid Annuity Mode Basis.

PATEL CHOLOPURAM THANJAVUR HIGHWAY PRIVATE LIMITED



MONTHLY PROGRESS REPORT

JANUARY 2023

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## Executive Summary

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The old National Highway (NH -36) runs through the state of Tamil Nadu. The project road is part of the 168 km long Vikravandi to Thanjavur section of the existing National Highway 36 (NH-36). Recently MORTH has amended the number and Length of the National Highways. The old NH 12 in the state of Tamil Nadu has become the part of the New National Highway 45C. It links Chennai with Thanjavur and is 418 km long.

The Cholopuram to Thanjavur section of NH-45C is an important link to connect Metropolitan city of Chennai to religious and tourist places of Kumbakonam, Thanjavur, Tiruchirapalli. The project is also expected to provide improved connectivity to other religious places & other major cities like Thanjavur, Rameswaram, Madurai, Tiruchirappalli, etc.

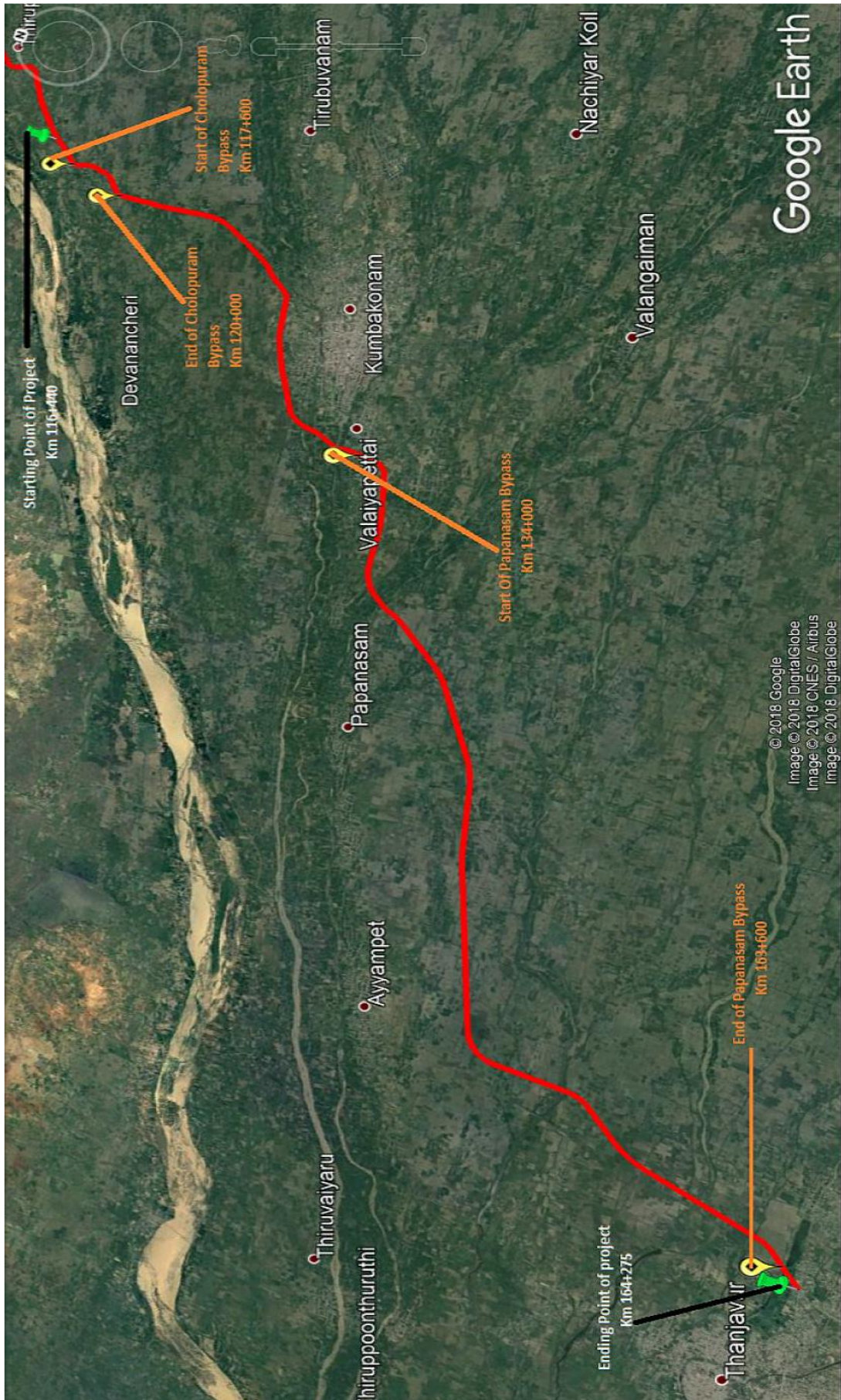
### Project Synopsis

The Government of India had entrusted to the National Highway Authority of India (NHAI) the development, maintenance and management of National Highway No. 45C including the section from km 116.440 to Km 164.275 (approx. 47.835 Km). The Authority had resolved to augment for four Laning of Cholopuram - Thanjavur from Km 116.440 to Km 164.275 section of NH - 45C in the State of Tamilnadu under NHDP Phase-IV on "Hybrid Annuity" basis.

The scope of work will broadly include rehabilitation, upgradation and widening of the existing carriageway to four - lane standards with construction of new pavement, rehabilitation of existing pavement, construction and/or rehabilitation of major and minor bridges, culverts, road intersections, interchanges, drains etc. Including those prescribed in the Concession Agreement and its Schedule and the operation and maintenance itself. The map of project road is given in Figures below. The details of habitations are given in table - 01.

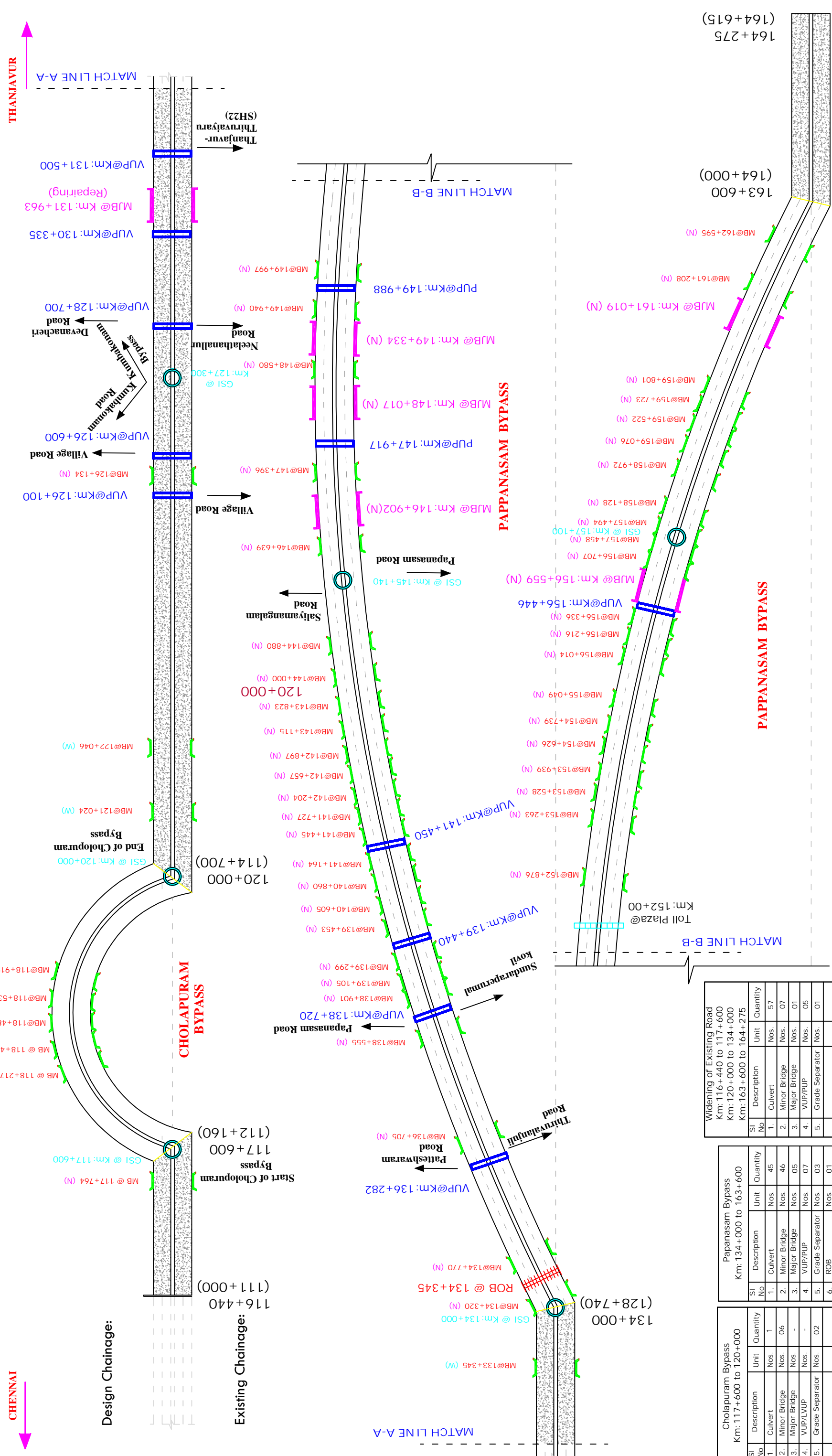


Figure 1: Project Location Map





# STRIP PLAN - CHOLAPURAM TO THANJAVUR HIGHWAY PROJECT OF NH45 C



CHENNAI

THANJAVUR

Design Chainage:

Existing Chainage:

SI No	Description	Unit	Quantity
1.	Culvert	Nos.	57
2.	Minor Bridge	Nos.	07
3.	Major Bridge	Nos.	01
4.	VUP/LVUP	Nos.	05
5.	Grade Separator	Nos.	01

Widening of Existing Road  
 Km: 116+440 to 117+600  
 Km: 120+000 to 134+000  
 Km: 163+600 to 164+275

SI No	Description	Unit	Quantity
1.	Culvert	Nos.	45
2.	Minor Bridge	Nos.	46
3.	Major Bridge	Nos.	01
4.	VUP/LVUP	Nos.	07
5.	Grade Separator	Nos.	03
6.	ROB	Nos.	01

Pappanasam Bypass  
 Km: 134+000 to 163+600

SI No	Description	Unit	Quantity
1.	Culvert	Nos.	1
2.	Minor Bridge	Nos.	06
3.	Major Bridge	Nos.	-
4.	VUP/LVUP	Nos.	-
5.	Grade Separator	Nos.	02

Cholapuram Bypass  
 Km: 117+600 to 120+000

**LEGEND:**

- ▬ Major Bridge(MJB)
- ▬ Minor Bridge(MB)
- ▬ Grade Separated Structure
- ▬ ROB
- ▬ Vehicle Under Pass (LVUP/VUP)
- ▬ Toll Plaza
- ▬ Reconstruction of Existing Road
- ▬ Bypass/Newconstruction

**Salient Features of Project:**

SI No	Description	Unit	Scope
1.	Total Length of Project	Km	47.835
2.	Length of Widening Portion	Km	15.335
3.	Length of Bypass	Km	32.000
4.	Length of service/Ship Road	Km	27.100
5.	Culverts	Nos.	74
6.	Minor Bridge	Nos.	59
7.	Major Bridge	Nos.	06
8.	VUP/PJP	Nos.	12
9.	Grade Separated Structure	Nos.	06
10.	ROB	Nos.	01
11.	Minor Intersection	Nos.	22
12.	Major Intersection	Nos.	20
13.	Bus Bays and Shelters	Nos.	05
14.	Toll Plaza	Nos.	01

**Drawing Title**  
 Strip Plan - Cholapuram to Thanjavur Highway Project

**Date:** 30-09-2018  
**Project No.** PCTHP/NHAI/TN/001



**Table- 01: Details of Project Alignments**

Sr. no.	Design Chainage (Km)		Length (Km)	TCS Type	Remarks
	From	To			
1	116.440	117.200	0.760	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
2	117.200	117.900	0.700	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
3	117.900	119.600	1.700	Type-A-3 (Fig 2.4 of the manual)	Bypass
4	119.600	120.420	0.820	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
5	120.420	122.000	1.580	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
6	122.000	125.300	3.300	Type-A-3 (Fig 2.4 of the manual)	Eccentric widening
7	125.300	125.700	0.400	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
8	125.700	127.700	2.000	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
9	127.700	128.300	0.600	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
10	128.300	129.100	0.800	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
11	129.100	129.970	0.870	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
12	129.970	130.700	0.730	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
13	130.700	131.050	0.350	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
14	131.050	131.850	0.800	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
15	131.850	132.100	0.250	Type-A-3 (Fig 2.4 of the manual)	Eccentric widening
16	132.100	133.580	1.480	Type-B (Fig 2.6 of the manual) without service road	Concentric widening

Sr. no.	Design Chainage (Km)		Length (Km)	TCS Type	Remarks
	From	To			
17	133.580	134.800	1.220	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
18	134.800	136.000	1.200	Type-A-3 (Fig 2.4 of the manual)	Bypass
19	136.000	136.600	0.600	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
20	136.600	138.500	1.900	Type-A-3 (Fig 2.4 of the manual)	Bypass
21	138.500	139.750	1.250	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
22	139.750	141.100	1.350	Type-A-3 (Fig 2.4 of the manual)	Bypass
23	141.100	141.800	0.700	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
24	141.800	144.450	2.650	Type-A-3 (Fig 2.4 of the manual)	Bypass
25	144.450	145.580	1.130	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
26	145.580	147.600	2.020	Type-A-3 (Fig 2.4 of the manual)	Bypass
27	147.600	148.320	0.720	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
28	148.320	149.720	1.400	Type-A-3 (Fig 2.4 of the manual)	Bypass
29	149.720	150.450	0.730	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
30	150.450	152.700	2.250	Type-A-3 (Fig 2.4 of the manual)	Bypass
31	152.700	153.300	0.600	Toll Plaza	
32	153.300	156.000	2.700	Type-A-3 (Fig 2.4 of the manual)	Bypass
33	156.000	157.350	1.350	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
34	157.350	164.275	6.925	Type-A-3 (Fig 2.4 of the manual)	Bypass
		<b>Total Length</b>	<b>47.835</b>		

## 1.1. Project Overview

<b>Name of Work</b>	Four Laning of Cholopuram-Thanjavur from km. 116.440 to Km.164.275 of NH-45C under NHDP-IV on Hybrid Annuity Mode Basis
<b>Name of Employer</b>	National Highways Authority of India (NHAI) G-5 & 6, Sector-10, Dwarka, New Delhi -110075
<b>Name of Concessionaire</b>	Patel Cholopuram-Thanjavur Highway Pvt Ltd, Patel House, Beside Prakruti Resorts, Chanani Road, Vadodara. Gujarat- 391740 Tel: +91-265 277 6678 Fax: +91-265 277 7878
<b>Independent Engineer</b>	M/s. Theme Engineering Services Pvt. Ltd, 8, Thomaiyammal Nagar, 6 <sup>th</sup> Street, R.S College (Post), Thanjavur-613005.
<b>EPC Contractor</b>	M/s. Patel Infrastructure Limited, Patel House, Beside Prakruti Resorts, Chanani Road, Vadodara Gujarat- 391740, Tel: +91-265 277 6678 Fax: +91-265 277 7878
<b>Design Consultant</b>	CTL Global Services Pvt. Ltd. 101, IST Floor, Krishna Chambers, HAL, Airport Road, Bangalore-560017
<b>Senior Lender</b>	Punjab National Bank, Large Corporate Branch, Neelkamal Building, Opp. Sales India, Ashram Road, Ahmedabad - 380009
<b>Lenders Independent Engineers</b>	Sharul Techno-Financial Consultancy Services Pvt. Ltd., 403, Aspire Tower 5, Amanora Park Town, Hadapsar, Pune - 411028.
<b>Length of Road (Design Length)</b>	47.835 Kms.
<b>Total Bid Cost</b>	Rs. 1345.60 Crores (as per concession agreement)
<b>Date of Concession Agreement</b>	October 12, 2017
<b>Concession Period</b>	17 Years ( Construction Period 2 Years from Appointed date, Operation period 15 years from COD)

Appointed Date	06.09.2018
Construction Period	02 years from Appointed date
Completion Date	04.09.2020
Settlement Agreement Date	04.03.2021
PCOD-I Date as per SA	31.05.2021
PCOD-II Date as per SA	30.11.2021
COD Date as per SA	31.07.2022
Maintenance Period	15 years from COD

## 1.2. Salient Project Features

Besides the construction of new carriageways and widening and strengthening of existing carriageways, the following table summaries the major elements of the project construction:-

4 - Lane Divided Carriage Way	47.835 Kms
Service Road/ Slip Road	13.550 Kms
Major Bridge	06 Nos.
Minor Bridge	56 Nos.
Grade Separate Intersection	06 Nos.
Vehicular Underpass	10 Nos.
Pedestrian Underpass	02 Nos.
Rail-road Bridges	01 Nos
Culverts	103 Nos.
Major Intersections	20 Nos.
Minor Intersections	22 Nos.
Bus Bays	20 Nos.
Rest Area	01 Nos
Toll Plaza	01 Nos.



### 1.3. Contractual Project Milestones

Following is a listing of the Key Project Milestones:-

Mile Stone	Description	Target Dates as per CA	Revised Target Dates as per Settlement Agreement	Revised Target Dates recommended by PD, NHAI considering EOT of 87 days for PCOD-I & (105 + 200) Days for PCOD-II & PCOD-III
Mile Stone -I	Concessionaire shall expended not less than 20 % of the Total capital cost and shall have commenced construction of the project and achieved 20% of physical progress on 214 <sup>th</sup> day from the Appointed Date.	07 <sup>th</sup> April 2019	➤ 31 <sup>st</sup> May'2021- Total 22.846 Km. four lane to be completed for PCOD-I.	➤ 27 <sup>th</sup> Aug'2021- Total 22.846 Km. four lane to be completed for PCOD-I (EOT of 87 days considered). ➤ 27 <sup>th</sup> Feb'2023- Total 34.675 Km. four lane to be completed for PCOD-II (EOT of 105 + 200 days considered). ➤ 01 <sup>st</sup> June'2023- Total 37.304 Km. four lane to be completed for PCOD-III (EOT of 105 + 200 days along with descope proposal in 10.531 Km length considered).
Mile Stone -II	Concessionaire shall expended not less than 35% of the Total capital cost and shall have commenced construction of the project and achieved 35% of physical progress on 334 <sup>th</sup> day from the Appointed Date.	05 <sup>th</sup> August 2019	➤ 30 <sup>th</sup> Nov'2021- Total 34.675 Km. four lane to be completed for PCOD-II.  ➤ Balance 11.990 Km. four lane shall be handed over to the Concessionaire by 31 <sup>st</sup> May'2021 and shall be completed by 31 <sup>st</sup> July'2022.	
Mile Stone -III	Concessionaire shall expended not less than 75 % of the Total capital cost and shall have commenced construction of the project and achieved 75% of physical progress on 584 <sup>th</sup> day from the Appointed Date.	11 <sup>th</sup> April 2020		
Sched uled Com pletio n	Concessionaire shall have completed Project on 730 <sup>th</sup> day from the Appointed Date.	04 <sup>th</sup> September 2020	➤ Balance 1.170 Km. to be de-scoped from the scope of Concessionaire.	

**Note:-** The Settlement Agreement has been signed between Authority and Concessionaire for the completion of 22.846 Kms length by 31.05.2021, and further completion of additional 11.829 Kms length by 30.11.2021 i.e. up to Payment Date of 1<sup>st</sup> Annuity. The non-workable length/non-handed over length is 13.160 Km as per joint site verification by Concessionaire, IE and NHAI. Out of the total non-workable length/non-handed over length of 13.160 Kms, length equal to 11.990 Kms shall be handed over to the Concessionaire by 31.05.2021 and shall be completed by 31.07.2022. Remaining length of 1.170 Kms (i.e. 13.160 kms -11.990 kms) shall be de-scoped from the scope of work of Concessionaire as per the provision given in Article 16.6 of the Concession Agreement.

However, out of 11.990 Kms, only 2.870 Kms was handed over to the Concessionaire by 31.05.2021. Out of the balance length equal to 9.120 Kms (i.e. 11.990 kms - 2.870 kms), Concessionaire considered 1.599 Kms length as workable length and remaining length equal to 7.521 Kms (i.e. 9.120 kms - 1.599 kms) was under approval of descope proposal at NHAI, HQ in addition to 1.170 Kms which was already descope from the scope of work of Concessionaire.

The Independent Engineer (IE) also requested to Authority to provide EOT of 105 days for PCOD - 2 & PCOD - 3 on account of 2<sup>nd</sup> wave of COVID-19 and the request for EOT is also under approval at NHAI, HQ.

The Concessionaire had also requested to Authority/IE for the extension of time for PCOD-2 up to 28.02.2023 and PCOD-3 up to 28.06.2023 due to constraints of issue in obtaining permission for extracting soils from borrow area and also due to interruption in the availability of pond ash.

The Concessionaire had also submitted the proposal for additional descope to Authority/IE in 1.840 Km length in addition to the already proposed descoping of 8.691 Km length due to interruption in the availability of pond ash required for the construction of RE Wall stretches, also due to local villagers were not allowing the concessionaire to continue the construction activities in some stretches and due to presence of existing irrigation canal within the project alignment. Hence, the concessionaire was not able to execute any construction activity in 1.840 Km length up to 31.05.2021 and submitted the proposal of additional descope to Authority/IE.

In line of the submission done by the concessionaire, Independent Engineer has examined both the proposals submitted by the concessionaire and Independent Engineer vide IE letter no. 4896 Dt. 04.11.2022 has recommended both the proposals to PIU, NHAI (i.e. total comprehensive descope proposal in 10.531 Km length (8.691Km+1.84Km) and extension of time proposal for PCOD-02 (completion of 34.675 Km) up to 27.02.2023 and extension of time proposal for PCOD-03 (completion of 37.304 Km duly considering the descope proposal of 10.531 Km length) up to 01.06.2023 for the approval of competent authority.

In line of the recommendation done by IE, PIU NHAI vide letter no. 3152 Dt. 04.11.2022 has also recommended both the proposals to RO, NHAI (i.e. total comprehensive descope proposal in 10.531 Km length (8.691Km+1.84Km) and extension of time proposal for PCOD-02 (completion of 34.675 Km) up to 27.02.2023 and extension of time proposal for PCOD-03 (completion of 37.304 Km duly considering the descope proposal of 10.531 Km length) up to 01.06.2023 for getting the approval from the competent authority.

Both the proposals recommended by PIU, NHAI (i.e. total comprehensive descope proposal in 10.531 Km length (8.691Km+1.84Km) and extension of time proposal for PCOD-02 (completion of 34.675 Km) up to 27.02.2023 and extension of time proposal for PCOD-03 (completion of 37.304 Km duly considering the descope proposal of 10.531 Km length) up to 01.06.2023) are under review of competent authority.

#### Status of Progress of Work as per Settlement Agreement Dt. 04.03.2021 :-

Sr. No.	Description	Target	Achieved as on date	Remarks
1	Completion of 22.846 kms by 31.05.2021	45.01% (605.62 Cr.)	62.80%	IE vide letter no. 987 dated 02.11.2021 has issued the Provisional Completion Certificate-1 (PCC-1) for the completion of 22.846 Kms w.e.f. 27.08.2021.
2	Completion of 34.675 kms (i.e. 22.846 Kms + 11.829 Kms) by 30.11.2021	68.41% (920.48 Cr.)		
3	Completion of balance 11.990 kms by 31.07.2022	27.25% (366.74 Cr.)		
4	Estimate of balance 1.170 kms length (i.e. 13.160 Kms - 11.990 Kms)	4.34% (58.38 Cr.)		

#### 1.4. Payment milestone during Construction Period

Payment Milestone	Eligibility Criteria	Payment Amount (Rs.)
Milestone-I	On Achievement of 10% of Physical Progress	107.65 Crs.
Milestone-II	On Achievement of 30% of Physical Progress	107.65 Crs.

<b>Milestone-III</b>	On Achievement of 50% of Physical Progress	107.65 Crs.
<b>Milestone-IV</b>	On Achievement of 75% of Physical Progress	107.65 Crs.
<b>Milestone-V</b>	On Achievement of 90% of Physical Progress	107.65 Crs.

### 1.5. Permits & Approvals

Sr. No.	Details	Authority	Current Status	Remarks
1	Extraction of Boulders from Quarries	Dist. Mining Officer	Obtained	PIL (EPC Contractor) have engaged Agate Infra Engineering for supply of boulders that is having a valid license for extraction of boulders and other required permission for the quarry at Kalpadi Village, Perambalur District.
2	Installation of Crusher	Village Panchayat Head	Obtained	
3	-----D O-----	Pollution Control Board	Obtained	
4	Use of Explosives	Dist. Collector	Obtained	
5	Labour License	Labour Commissioner	Obtained	
6	Environmental Clearance		NA	
7	Trees Cutting Permission	Forest department through NHAI	Obtained	Work in Progress ( Permission for removal of Teak wood trees is awaited )
8	Electric Poles Shifting	Tamil Nadu Electricity Board	Obtained	Work in Progress
9	Water Pipes Shifting	Tamil Nadu Water Supply and Drainage Board	Obtained	Work in Progress
10	Drawing Water from river/ reservoir	-	NA	-

### 2.1. Land Acquisition

As per the Schedule – A of Concession Agreement, the Proposed Right of Way (ROW) is of 45 & 60 meters as per table below.

	Design Chainage (Km)	Design Length (Km)	Width (m)	Remarks
<b>(i) Full Right of Way (full width)</b>				
Stretch	116.440 to 117.600	1.160	30	Within 15 (Fifteen) days from the date of Agreement.
Stretch	117.600 to 120.000	2.400	60	
Stretch	120.000 to 134.000	14.000	30	
Stretch	134.000 to 164.275	30.280	60	
<b>Total Length</b>		<b>47.835</b>		

	Design Chainage (Km)	Design Length (Km)	Width (m)	Remarks
Stretch	116.440 to 117.600	1.160	30	Within 90 (Ninety) days of the Appointed date
Stretch	120.000 to 120.340	0.34	20	
Stretch	124.700 to 126.100	1.40	20	
Stretch	126.700 to 127.655	0.95	20	
Stretch	130.600 to 134.000	3.40	20	
<b>Total Length</b>		<b>7.250</b>		

Besides this, the Authority has to acquire additional land at Toll plaza location, Bus bays/Bus Shelter, turning radius at Minor & Major junctions. The location of Bus bays/Bus Shelter as per Schedule C of Concession Agreement & Finalized by IE is given below in the tabular form:-

Sr. No.	Design Chainage	Side	Remarks
1	116.487	Both Hand Side	
2	116.860	Both Hand Side	
3	117.460	Both Hand Side	
4	120.600	Both Hand Side	
5	121.250	Both Hand Side	
6	121.630	Both Hand Side	
7	123.200	Both Hand Side	
8	123.850	Both Hand Side	
9	125.500	Both Hand Side	
10	126.100	Both Hand Side	
11	127.330	Both Hand Side	
12	128.715	Both Hand Side	

13	130.349	Both Hand Side	
14	131.750	Both Hand Side	
15	133.240	Both Hand Side	
16	134.010	Both Hand Side	
17	136.307	Both Hand Side	
18	145.165	Both Hand Side	
19	157.188	Both Hand Side	
20	163.620	Both Hand Side	

**Table 2.1-2: Status of Land Acquisition as per Site Condition**

Sl. No.	Description	Unit	Present Status	Remarks
A )	<b>Total Length of the Project Highway</b>	<b>Km</b>	<b>47.835</b>	
i)	Use of Existing Road Portion	Km	15.835	
ii)	Proposed Bypass / Realignment portion	Km	32.000	
B )	Hindered Length			
i)	LA Pending/Land under disputes	Km	8.691	
ii)	Existing Buildings	Km		
iii)	Pending for Disbursement of Payment	Km		
iv)	Electrical Lines	Km		
v)	Rural Water Supply lines	Km		
C )	Net Hindered Length (Both side)	Km	8.691	
D )	Total Project Length (Both side)	Km	47.835	
E )	<b>% Hindered Length</b>	<b>%</b>	<b>18.17%</b>	

The details of land acquisition status and available hindrances are produced on a strip chart under section 04.

The status of compensation disbursed for Land & Structure is as below: -

**Table 2.1-3: Compensation disbursement for land**

Sr. No.	Name of the District	Total No. of Land cases	Amount paid (in Nos.)	Balance to be Paid (in Nos.)	Remarks
1	Thanjavur	1467	1074	393	
	<b>Total in Nos.</b>	<b>1467</b>	<b>1074</b>	<b>393</b>	
	<b>Total in %</b>		<b>73.21%</b>	<b>26.79%</b>	

**Table 2.1-4 - Compensation disbursement for Structures**

Sr. No.	Name of the District	Total No. of structures	Amount paid (in Nos)	Balance to be Paid (in Nos)	Remarks
1	Thanjavur	813	670	143	
	<b>Total in Nos</b>	<b>813</b>	<b>670</b>	<b>143</b>	
	<b>Total in %</b>		<b>82.41%</b>	<b>17.59%</b>	






The details of Chainages under hindrance due to such balance compensation issues to their land owners, structure payment issues, standing crops, water pipe lines etc. which are jointly inspected by the Independent Engineer and Authority are as below:-

Sr. No.	Start Chainage	End Chainage	Non Workable Length as on 31.01.2023 (Km)	Reason	Remarks
1	116.440	117.900	1.460	Removal of structures	
2	119.600	120.721	1.121	Removal of structures	
3	125.580	127.300	1.720	Removal of structures	
4	128.300	129.100	0.800	Removal of structures	
5	133.580	134.800	1.220	Removal of structures	
6	138.300	139.500	1.200	Removal of structures	
7	146.550	147.000	0.450	PWD Canal having a length of 700m need to be shifted for which NOC to be granted by PWD/WRD.	
8	147.600	148.320	0.720		
<b>Total Length (Km)</b>			<b>8.691</b>		

The 8.691 Km. length is still under non-workable length out of 13.16 km. non-workable length as per Settlement Agreement executed on dated 04.03.2021.

In addition to above 8.691 Km non-workable length, following are the details of Stretches under Hindrance due to practical constraints available at site:-

Sr. No.	Chainage		Length (km)	Length can not be taken up due to practical constraints	Side	Reason	Remarks
	From	To					
1	118.680	118.800	0.120	0.120	BHS	Local Villager's Problem	
2	127.300	127.700	0.400	0.400	BHS	Pond Ash Issue	
3	134.800	135.200	0.400	0.400	BHS	Electrical utility Problem	
4	144.450	145.160	0.710	0.710	BHS	Irrigation Canal within the Project alignment	
5	153.900	153.980	0.080	0.080	BHS	Local Villager's Problem	
6	155.070	155.200	0.130	0.130	BHS	Local Villager's Problem	
<b>Total in Kms</b>				<b>1.840 Km</b>			

Hindrance List in the Project												Date:- 31.01.2023
Details of Stretches Under Hindrance with Photographs												
Sr. No.	CHAINAGE		Effectd Length	Side	Name of the Village	Type of Hindrances	Total No of Structures	Name of the Owner	Survey No	Payment Status	Photos	Remarks
	FROM	TO										
1	116+480	116+490	15	LHS	Manambadi	Hut	1	Tamilselvan S/o Annasamy	43/2A	Paid		Paid for 1st Payment and Awaiting for 2nd Payment
2	116+630	116+650	20	LHS	Manambadi	Sheet House	1	Ethiraj	49/7	Not paid		Proper Documents not Submitted
3	116+640	116+660	20	LHS	Manambadi	Hut	1	Elangovan Rajathi	49/11A,11B	Not paid		Family distribute Problem
4	116+660	116+680	20	LHS	Manambadi	Sheet House	1	Sitarasu S/O Thambusamy	49/7C, 2B	Paid		Paid for 1st Payment and Awaiting for 2nd Payment
5	116+670	116+690	20	LHS	Manambadi	Temple	1	-	-	Not paid		Land Owner not Identified
6	116+890	116+910	20	LHS	Manambadi	Hut	1	Chinnadurai S/O Murugesan	129/11, 12	Not paid		RDO Problem (Survey Number Change)

Sr. No.	CHAINAGE		Effectd Length	Side	Name of the Village	Type of Hindrances	Total No of Structures	Name of the Owner	Survey No	Payment Status	Photos	Remarks
	FROM	TO										
7	116+895	116+905	10	LHS	Manambadi	Sheet House	1	Sellakannu S/O Swaminathan	129/9	Not paid		RDO Problem (Survey Number Change)
8	116+890	116+910	20	LHS	Manambadi	RCC House	1	Ganesan S/o lakshmanan	129/8	Not paid		RDO Problem (Survey Number Change)
9	116+905	116+920	15	LHS	Manambadi	RCC House	1	AyiPonnu W/o Chinnaiyan	129/6,7	Not paid		RDO Problem (Survey Number Change)
10	120+685	120+695	10	LHS	Kovilacheri	RCC BUILDING	1	SANTHOSH KUMAR	48/7	Paid		Building Payment Paid Land Payment not Paid
11	122+080	122+100	20	RHS	Bagavathapuram	BIG BANIYAN TREE WITH VANAKALIAMMAN TEMPLE	1	MANOHARAN		Not Paid		
12	129+030	129+040	10	LHS	Asoor	DEVAR STATUE	1			Not Paid		Awaiting Approval from District Administration

## 2.2. Removal of Religious Structures

The following structures coming within the ROW are to be demolished

Table 2.2-1: Status of Removal of Religious structures				
Sl. No.	Name of the District	Total No. of structures	Removed as on Date (in Nos.)	Balance (in Nos.)
1	Thanjavur	13	10	3 (125+670-RHS 126+870-RHS 133+180-LHS)
Note: Pending for disbursement of payment to the Religious structures.				

## 2.3. Shifting of Utilities and Electrical HT/LT Lines

To proceed with the project construction, several utilities are required to be shifted under the supervision of the respective authorities. These include a water supply line, hand pumps, overhead water tanks, besides Electrical lines, as shown in the table below.

Table 2.3-1: Status of sanction of Estimates - Relocation of RWS Pipe line						
Sl. No	Name of the District	Chainages			Total Number of Estimates	Remarks
		From	To	Length in Km		
1	Thanjavur	116+440	164+275	47.835	32	Work is in Progress

Table 2.3-2: Status of sanction of Estimates - Electrical Lines Relocation							
Sl. No	Name of the District	Chainages			Number of Estimates	Present Status	Remarks
		From	To	Length in Km			
1	Thanjavur	116+440	164+275	47.835	16	Work in Progress	

Sl. No.	Authority	Description	Unit	Total Length/ Nos.	Work done	Balance	Remarks
1	BDO & EE, TWAD	Water Supply Pipe Line (including DI and PVC lines)	Kms.	35.750	7.960	27.79	Work in Progress
2	BDO of Concern Union	Hand Pump/Pump Room with Bore well	Nos.	16	3	13	
3	BDO of Concern Union	Over Head Tank	Nos.	2	2	0	Completed
4	TNEB	Electrical Lines	Kms.	19.215	15.605	3.610	Work in Progress

#### 2.4. Tree felling

Sl. No.	Name of the District	Chainages			Effected Length in Kms	Total No. of Trees	Felled/ Removed as on Date	Balance no. of Trees	Remarks
		From	To	Length in Km					
1	Thanjavur	116+440	164+275	47.835	15.310	1461	1461	0	
2	Thanjavur	116+440	164+275	47.835	-	508	508	0	Teak Wood trees
<b>Total</b>				<b>47.835</b>					



## 3.1. Pre-Construction Activities

## Detailed Design &amp; Drawings

The Plan and Profile, as well as the Pavement Designs for the entire 47.835 km project length has been completed and reviewed by the Independent Engineer (IE). Construction Methodology, QA & QC procedures submitted to the IE has been reviewed and accepted.

Table 3.1-1: Status of Design and Drawings-Highway

Sl. No.	Description	Unit	Total Scope as per Sch.-B	Design/ Drawings submitted	Design/ Drawings Approved
1	Pavement Design	Km	47.835	47.835	47.835
2	Plan & Profile	Km	47.835	47.835	47.835
3	Typical Cross Sections	Type	5	5	-
4	Major Intersections	No	20	9	1
5	Minor Intersections	No	22	2	-
6	Toll Plaza	No	01	01	01
7	Rest Area	No	01	-	
8	Bus Bay	No	20	20	20
9	Service Roads	No	27.10	26.97	26.97

Table 3.1-2 : Status of Design and Drawings –Structures

Sr. No	Description	Unit	Total Scope as per Sch. B	Design/ Drawings Submitted	Design/ Drawings Approved
1	Major Bridges	No	06	04	04 (02 Nos of Major Bridges proposed for Descope from the scope of work)
2	Minor Bridges	No	56	56	54
3	Grade Separated Intersection	No	06	06	06
4	VUP/PUP	No	12	12	12
5	Box /Slab Culvert	No	103	103	103
6	ROB	No	01	01	Structural drawing approved

#### 4. Physical Progress of Work

##### 4.1. Physical Progress of Work

The following table summarize the quantum of work achieved towards the construction of the various elements of the highway.

The Progress of the Major works carried out at the Site in the Month of January 2023 is as follows.

##### CUMULATIVE STATEMENT

##### For Main Carriageway

Sr. No	Description	Total Length of Highway Excluding Toll Plaza (in. Km.)	Progress up to Previous Report (in Km)	Progress during this Report (In Km.)	Cumulative Progress Achieved up to this Report (In Km)	In Progress (In Km.)	Balance Length to be Completed	Cumulative % of Progress Achieved
1	<b>Clearing and Grubbing</b>							
	LHS	46.925	42.980	0.000	42.980	0	3.945	91.59%
	RHS	46.925	42.910	0.000	42.910	0	4.015	91.44%
2	<b>Embankment</b>							
	LHS	46.925	32.199	0.420	32.619	2.550	14.306	69.51%
	RHS	46.925	32.299	0.420	32.719	2.450	14.206	69.73%
3	<b>Subgrade</b>							
	LHS	46.925	31.111	0.811	31.922	0.697	15.003	68.03%
	RHS	46.925	31.101	0.641	31.742	0.977	15.183	67.64%
4	<b>GSB/ Cement Treated Sub-Base</b>							
	LHS	46.925	30.446	0.621	31.067	0	15.858	66.21%
	RHS	46.925	30.451	0.546	30.997	0	15.928	66.06%
5	<b>Wet Mix Macadam</b>							
	LHS	46.925	29.820	1.217	31.037	0	15.888	66.14%
	RHS	46.925	29.710	1.027	30.737	0	16.188	65.50%
6	<b>Dense Bituminous Macadam</b>							
	LHS	46.925	29.700	1.137	30.837	0	16.088	65.72%
	RHS	46.925	29.620	1.047	30.667	0	16.258	65.35%
7	<b>Bituminous Concrete</b>							
	LHS	46.925	26.178	0.000	26.178	0	20.747	55.79%
	RHS	46.925	26.078	0.000	26.078	0	20.847	55.57%

**For Service Road**

Sr. No.	Description	Total Length of Service Road (Km.)	Progress up to Previous Month (in Km)	Progress during this Month (In Km.)	Cumulative Progress Achieved up to this Month (In Km)	In Progress (In Km.)	Balance Length to be Completed	Cumulative % of Progress Achieved
1	Embankment	27.1	5.370	0	5.370	0.150	21.730	19.82%
2	Sub grade	27.1	5.370	0	5.370	0	21.730	19.82%
3	GSB/ Cement Treated Base	27.1	5.355	0	5.355	0	21.745	19.76%
4	Wet Mix Macadam	27.1	5.275	0	5.275	0	21.825	19.46%
5	Dense Bituminous Macadam	27.1	5.275	0	5.275	0	21.825	19.46%
6	Bituminous Concrete	27.1	2.400	0	2.400	0	24.700	8.86%

**For Structure Works**

Sr. No.	Type of Structure	Total No. of Structures	No. of Structures					Remarks
			Completed up to previous Report	Completed during this Report	Completed up to this Report	In Progress	Balance	
1	Culvert	103	92.775	0	92.775	9.225	1.00	
2	Pedestrian Underpass (PUP)	2	2	0	2	0	0	
3	Vehicular Under Pass (VUP)	10	9.00	0	9.00	0	1	Balance 1 No. has been included under Negative COS
4	Minor Bridges (MNB)	56	49.00	0	49.00	1	6	4 Nos. has been included under descope proposal & 2 No. has been included under Negative COS
5	Major Bridges (MJB)	5	2.00	0	2.00	1.00	2	Balance 2 Nos. has been included under descope proposal
6	Flyover	6	6	0	6	0	0	
7	ROB	1	1.00	0	1.00	0	0	

The Physical Progress of the Project up to **January 2023** as per approved Schedule G is given below:-

**Table 4.1 : Physical Progress of Works**

Item	Stage for Payment	Unit	Qty.	Weightage in % to Contract Price	Completed up to Jan' 2023	% Physical Progress	Remarks
<b>Road works including culverts, minor bridges, underpasses, overpasses, approaches to ROB/RUB/ Major Bridges/ Structures (but excluding service roads)</b>	<b>A- Widening and strengthening of existing road</b>						
	(1) Earthwork up to top of the sub-grade	Km.	28.70	4.26%	17.072	2.532%	
	(2) Granular work (sub-base, base, shoulders)	Km.					
	(a) GSB/ Cement Treated Base	Km.	28.70	1.40%	16.872	0.824%	
	(b) WMM/ Cement Treated Base	Km.	28.70	2.10%	16.822	1.231%	
	(3) Shoulders	Km.	7.10	0.03%	7.10	0.030%	
	(4) Bituminous work						
	(a) DBM	Km.	28.70	1.61%	16.582	0.929%	
	(b) BC	Km.	28.70	1.48%	15.972	0.826%	
	(5) Rigid Pavement Concrete Work	Km.					
	(6) Widening and Repair of Culverts	Nos.	33	0.57%	31.650	0.548%	
	(7) Widening and Repair of Minor Bridges	Nos.	3	0.38%	2.415	0.307%	
	<b>B- New realignment/bypass</b>						
	(1) Earthwork up to top of the sub-grade	Km.	63.33	16.30%	46.592	11.995%	
	(2) Granular work (sub-base, base, shoulders)	Km.					
	(a) GSB/ Cement Treated Base	Km.	62.13	3.39%	45.192	2.469%	
	(b) WMM/ Cement Treated Base	Km.	62.13	3.83%	44.952	2.770%	
	(3) Shoulders	Km.	48.19	0.10%	33.220	0.069%	
	(4) Bituminous work						
	(a) DBM	Km.	62.13	3.48%	44.922	2.516%	
(b) BC	Km.	62.13	3.21%	36.284	1.876%		
(5) Rigid Pavement Concrete Work	Km						
<b>Road works including culverts,</b>	<b>C- New culverts, minor bridges, underpasses, overpasses on existing road, realignments, bypasses:</b>						

minor bridges, underpasses, overpasses, approaches to ROB/RUB/ Major Bridges/ Structures (but excluding service roads)	<b>(1) Culverts</b>	Nos.	70	5.95%	61.125	5.191%	
	<b>(2) Minor bridges</b>						
	(i) Foundation	Nos.	170	6.71%	116.00	4.580%	
	(ii) Substructure	Nos.	270	3.50%	208.00	2.693%	
	(iii) Superstructure (including crash barrier etc. complete)	Nos.	142	3.78%	94.95	2.525%	
	<b>(3) Cattle/Pedestrian underpasses</b>						
	(i) Foundation	Nos.	4	0.15%	4.00	0.150%	
	(ii) Substructure	Nos.	8	0.08%	8.00	0.084%	
	(iii) Superstructure (including crash barrier etc. complete)	Nos.	4	0.06%	3.70	0.052%	
	<b>(4) Pedestrian overpasses</b>						
	(i) Foundation	Nos.					
	(ii) Substructure	Nos.					
	(iii) Superstructure (including crash barrier etc. complete)	Nos.					
	<b>(5) Grade separated structures</b>						
	<b>(a) Underpass (10 VUP)</b>						
	(i) Foundation	Nos.	40	2.50%	36.00	2.249%	
	(ii) Substructure	Nos.	40	0.91%	36.00	0.818%	
	(iii) Superstructure (including crash barrier etc. complete)	Nos.	20	1.14%	15.75	0.895%	
	<b>(c) Vehicular Overpass (VOP)</b>						
	(i) Foundation	Nos.					
	(ii) Substructure	Nos.					
	(iii) Superstructure (including crash barrier etc. complete)	Nos.					
	<b>(c) Flyover</b>						
	(i) Foundation	Nos.	24	2.25%	24.00	2.250%	
	(ii) Substructure	Nos.	24	0.82%	24.00	0.818%	
	(iii) Superstructure (including crash barrier etc. complete)	Nos.	12	1.02%	10.65	0.908%	
		<b>Major Bridge works and ROB/RUB</b>					
	<b>A- Widening and Repair of Minor Bridges</b>						
	(1) Foundations						



Major Bridge works and ROB/RUB	(a) Open Foundation	Nos.						
	(b) Pile foundation/ well foundation	Nos.						
	(2) Substructure	Nos.						
	(3) Superstructure (including crash barrier etc. complete)	Nos.						
	<b>C- New Major Bridges</b>							
	(1) Foundations							
	(a) Open Foundation	Nos.						
	(b) Pile foundation/ well foundation	Nos.	76	2.17%	47.00	1.345%		
	(2) Substructure	Nos.	76	1.23%	47.00	0.762%		
	(3) Superstructure (including crash barrier etc. complete)	Nos.	62	1.50%	32.40	0.782%		
	<b>D- New rail-road bridges</b>							
	<b>(a) ROB</b>							
	(i) Foundation	Nos.	8	1.50%	8.00	1.500%		
	(ii) Substructure	Nos.	8	0.80%	8.00	0.800%		
(iii) Superstructure (including crash barrier etc. complete)	Nos.	6	1.49%	5.10	1.264%			
Structures (elevated sections, reinforced earth)	<b>Structures (elevated sections, reinforced earth)</b>							
	(1) Foundation	Nos.						
	(2) Substructure	Nos.						
	(3) Superstructure (including crash barrier etc. complete)	Nos.						
	(4) Reinforced earth Wall (includes Approaches of ROB, Underpasses, Overpasses, Flyover etc)	Sqm	179469	7.52%	42,340.00	1.774%		
Other Works	<b>Other Works</b>							
	(i) Service roads/ Slip Roads	Km	27.1	3.86%	2.400	0.342%		
	(ii) Toll Plaza	Nos.	1	1.38%				
	(iii) Road side drains	Km	12.08	1.64%	2.752	0.373%		
	(iv) Road signs, markings, km stones, safety devices, ....							
	(a) Road signs, markings, km stones, ...	Km	95.67	2.02%	46.820	0.989%		
	(b) Concrete Crash Barrier/ W-Beam Crash Barrier in Road work	Km						
	(i) Concrete Crash Barrier	Km	25.42	2.01%	5.360	0.425%		

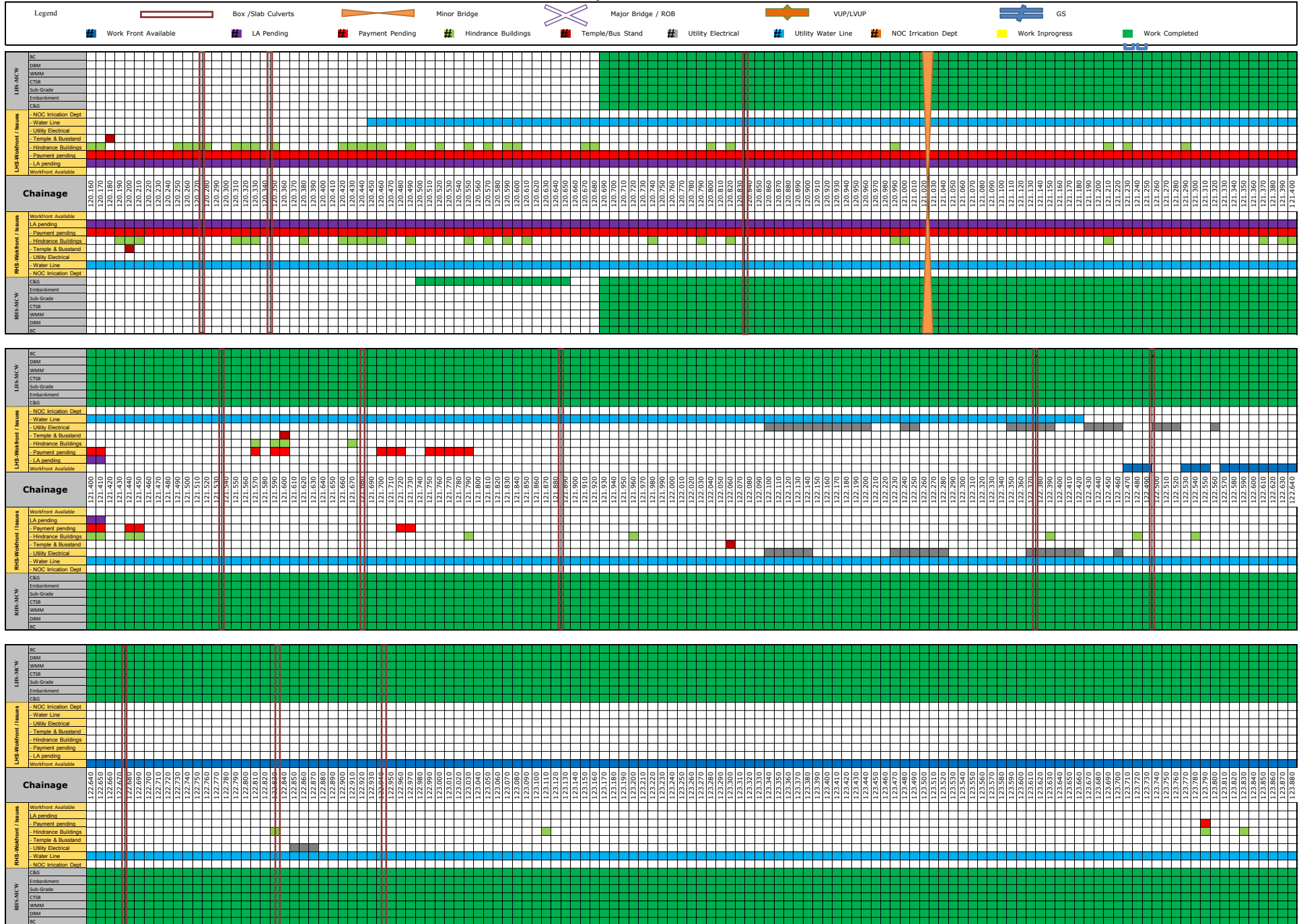
(ii) W-Beam Crash Barrier	Km	32.75	0.70%	11.340	0.243%	
<b>(v) Project facilities</b>						
(a) Bus Bays	No.	20	0.01%	3.00	0.001%	
(b) Truck Lay-byes	No.					
(b) Rest areas	No.	2	0.22%			
(vi) Repairs to bridges/structures	Nos.	4	0.01%			
(vii) Road side plantation	Km	22.54	0.60%			
(viii) Protection works						
(a) Boulder pitching on slopes	Km	32.75	0.19%	11.340	0.065%	
(b) Toe/Retaining wall	Km					
(x) Miscellaneous	Ls.	100%	0.150%			
<b>Total</b>			<b>100.00%</b>		<b>62.80%</b>	



Four Lining of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.

Cholopuram - Thanjavur Project

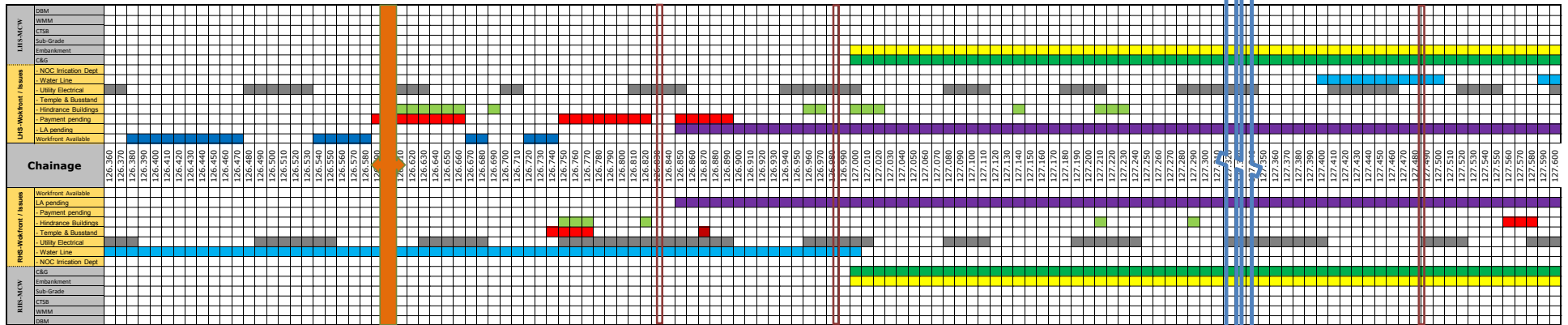
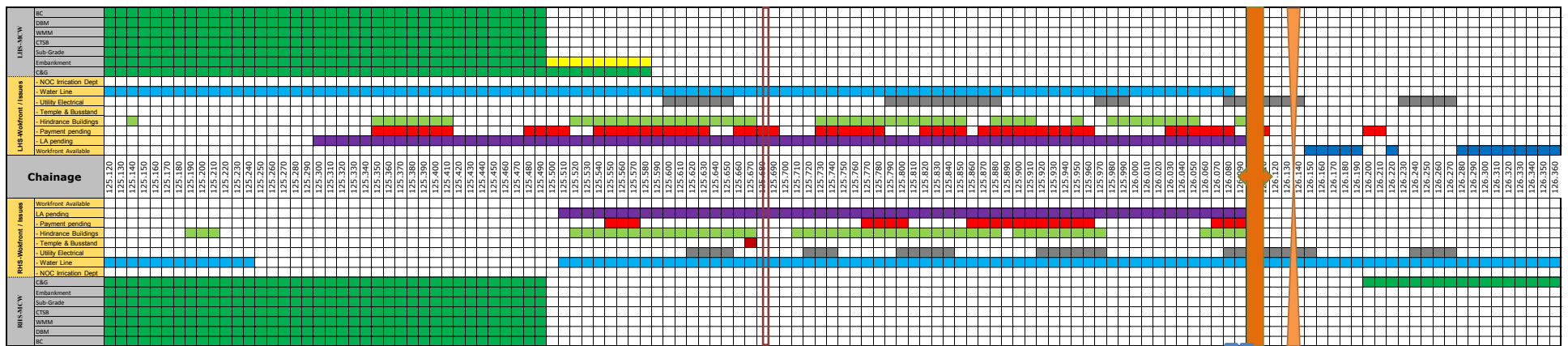
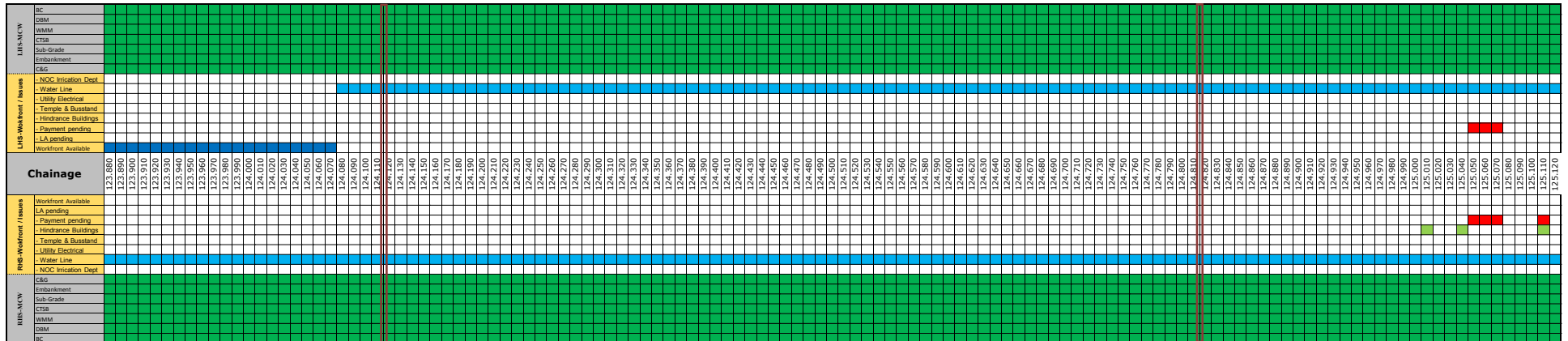
Strip Chart as on 31.01.2023



Four Laning of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.

Cholopuram - Thanjavur Project

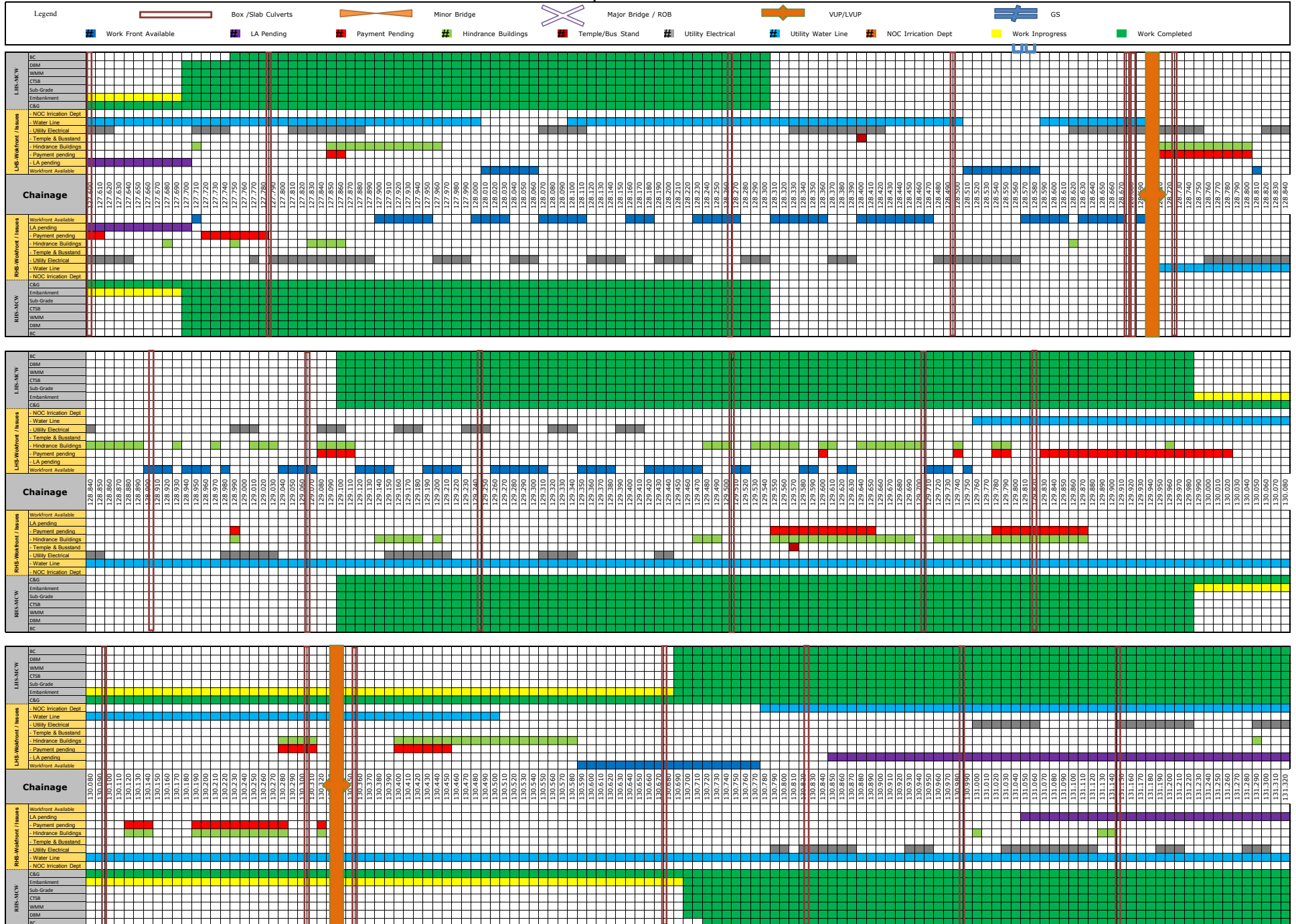
Strip Chart as on 31.01.2023



Four Laning of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.

Cholopuram - Thanjavur Project

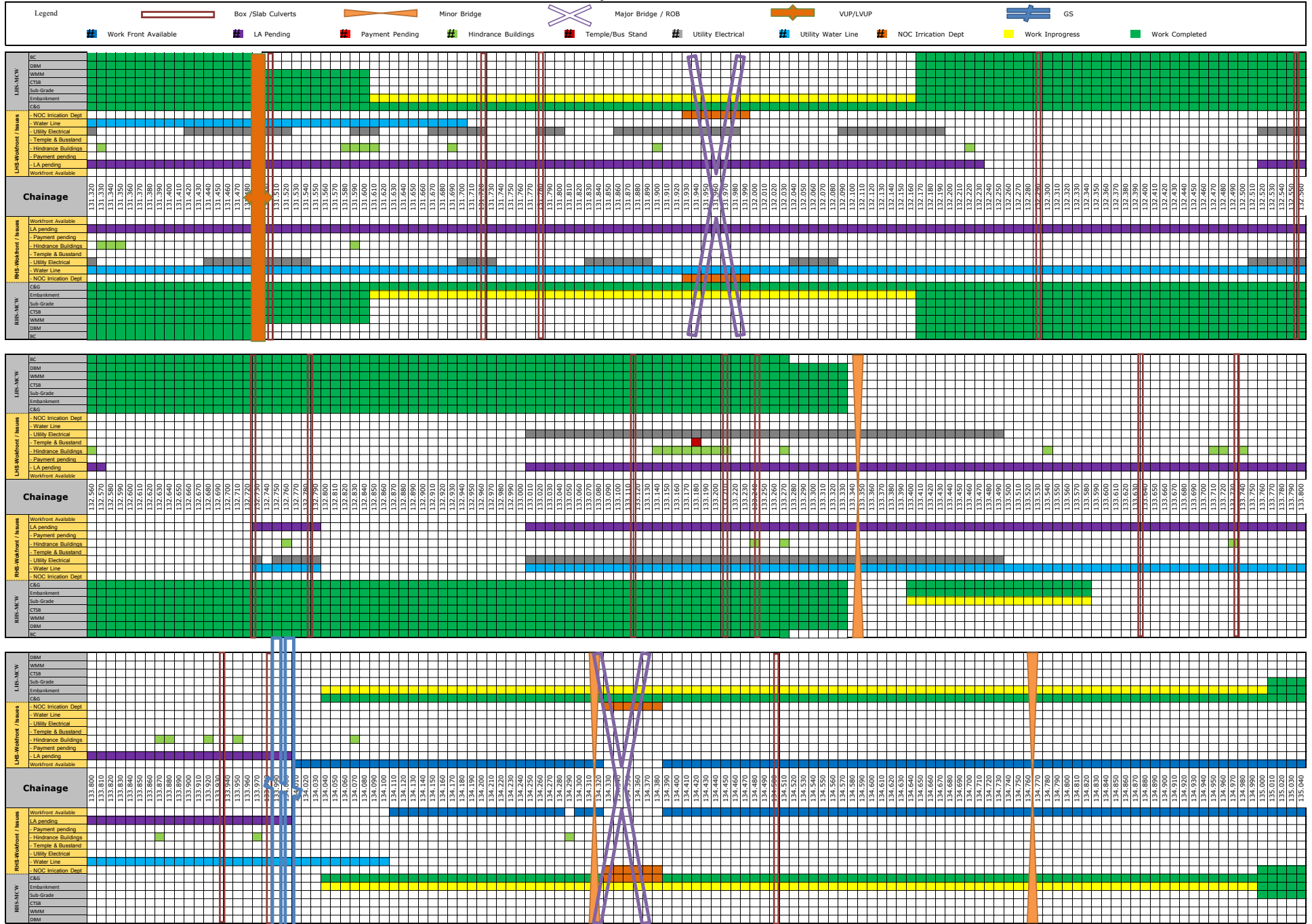
Strip Chart as on 31.01.2023





**Four Lining of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.**  
**Cholopuram - Thanjavur Project**

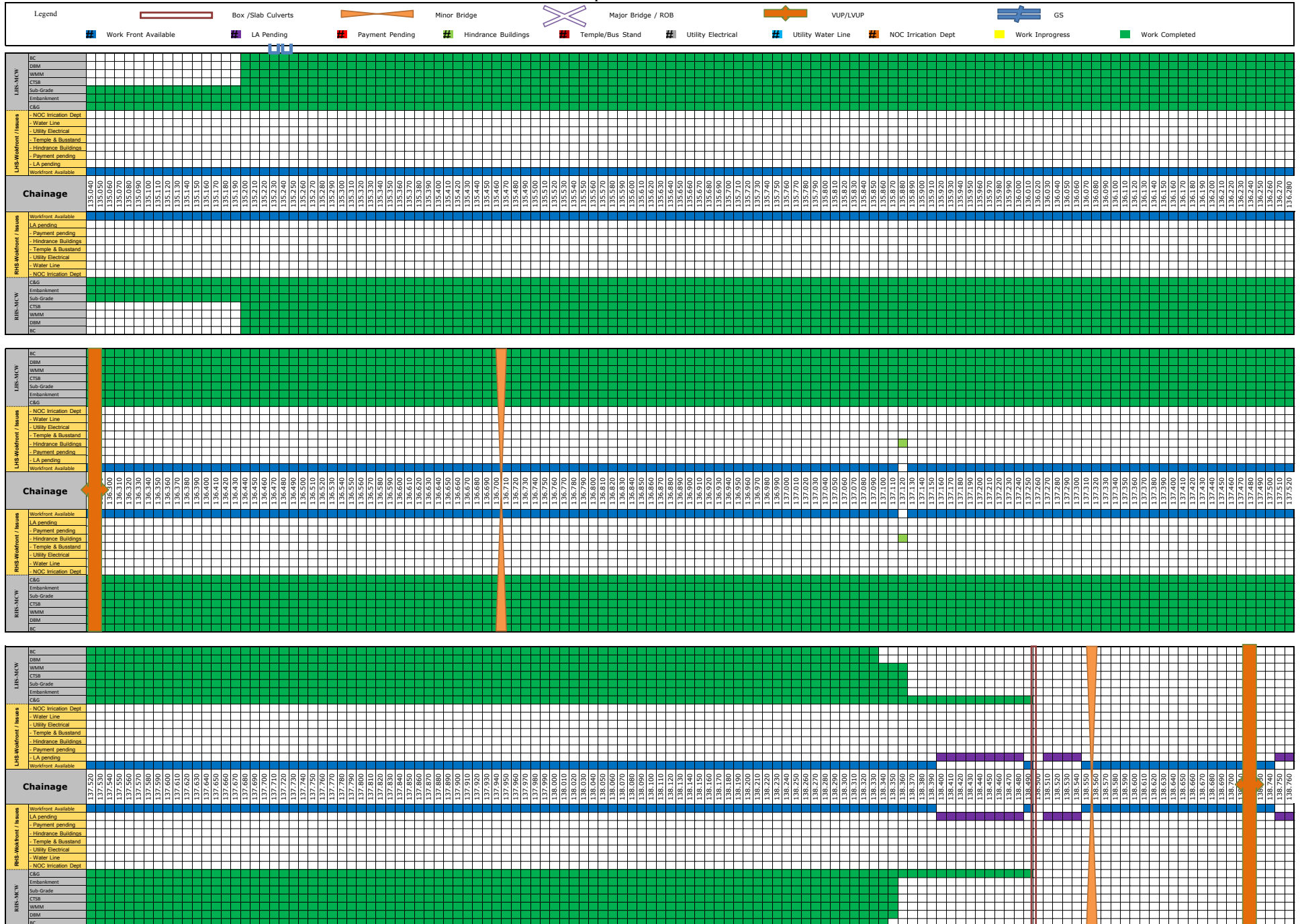
**Strip Chart as on 31.01.2023**



Four Laning of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.

Cholopuram - Thanjavur Project

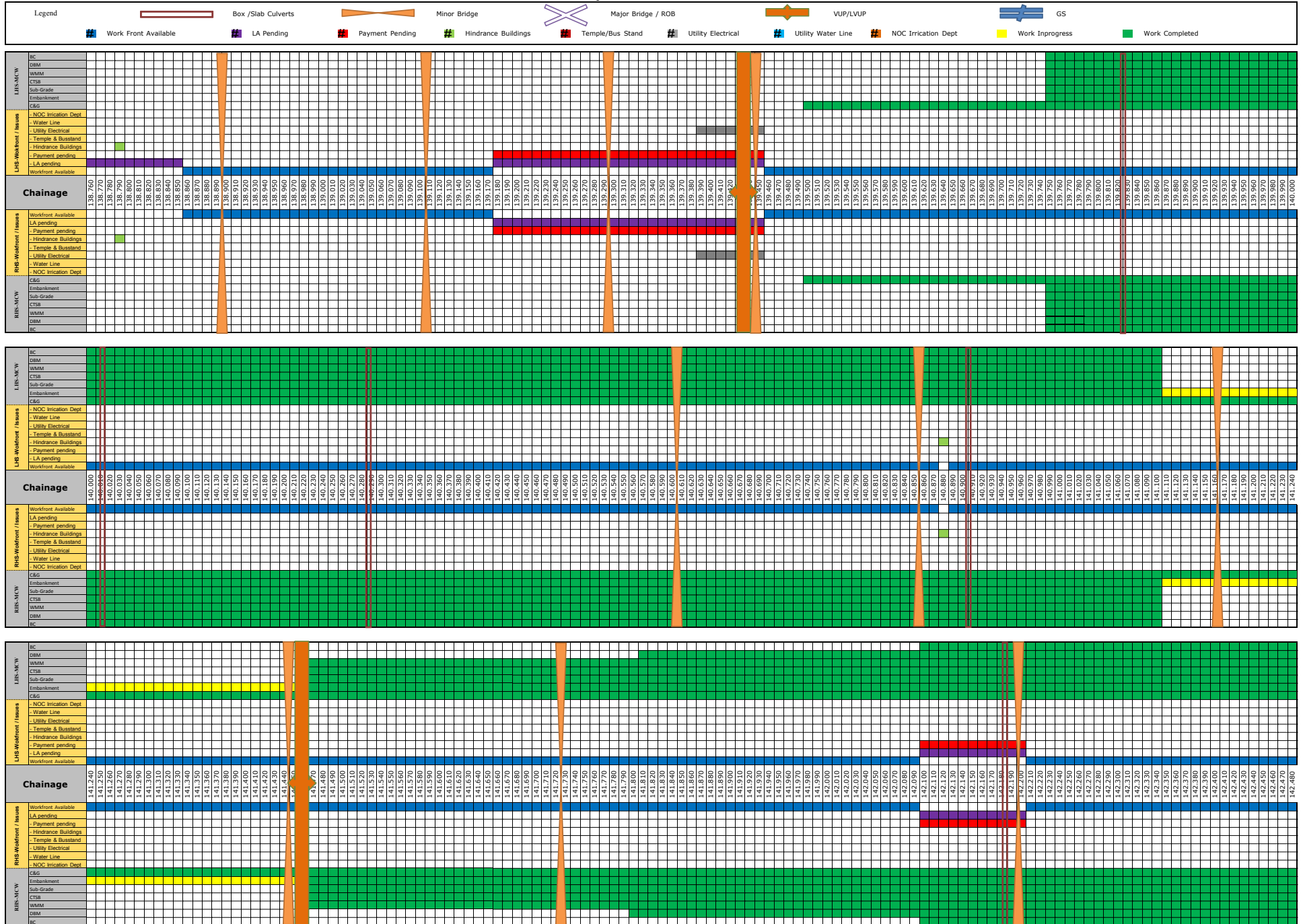
Strip Chart as on 31.01.2023



Four Laning of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.

Cholopuram - Thanjavur Project

Strip Chart as on 31.01.2023



Four Lining of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.

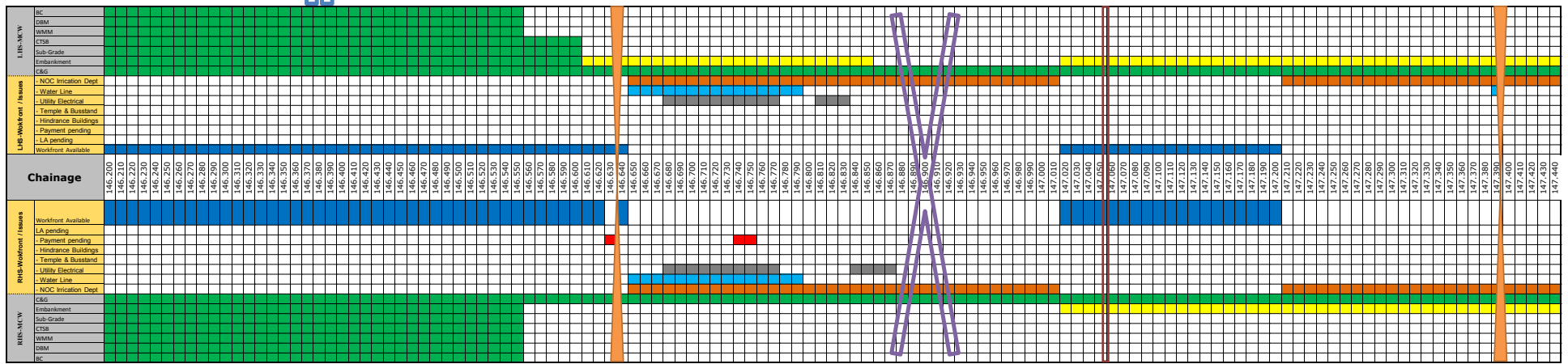
Cholopuram - Thanjavur Project

Strip Chart as on 31.01.2023



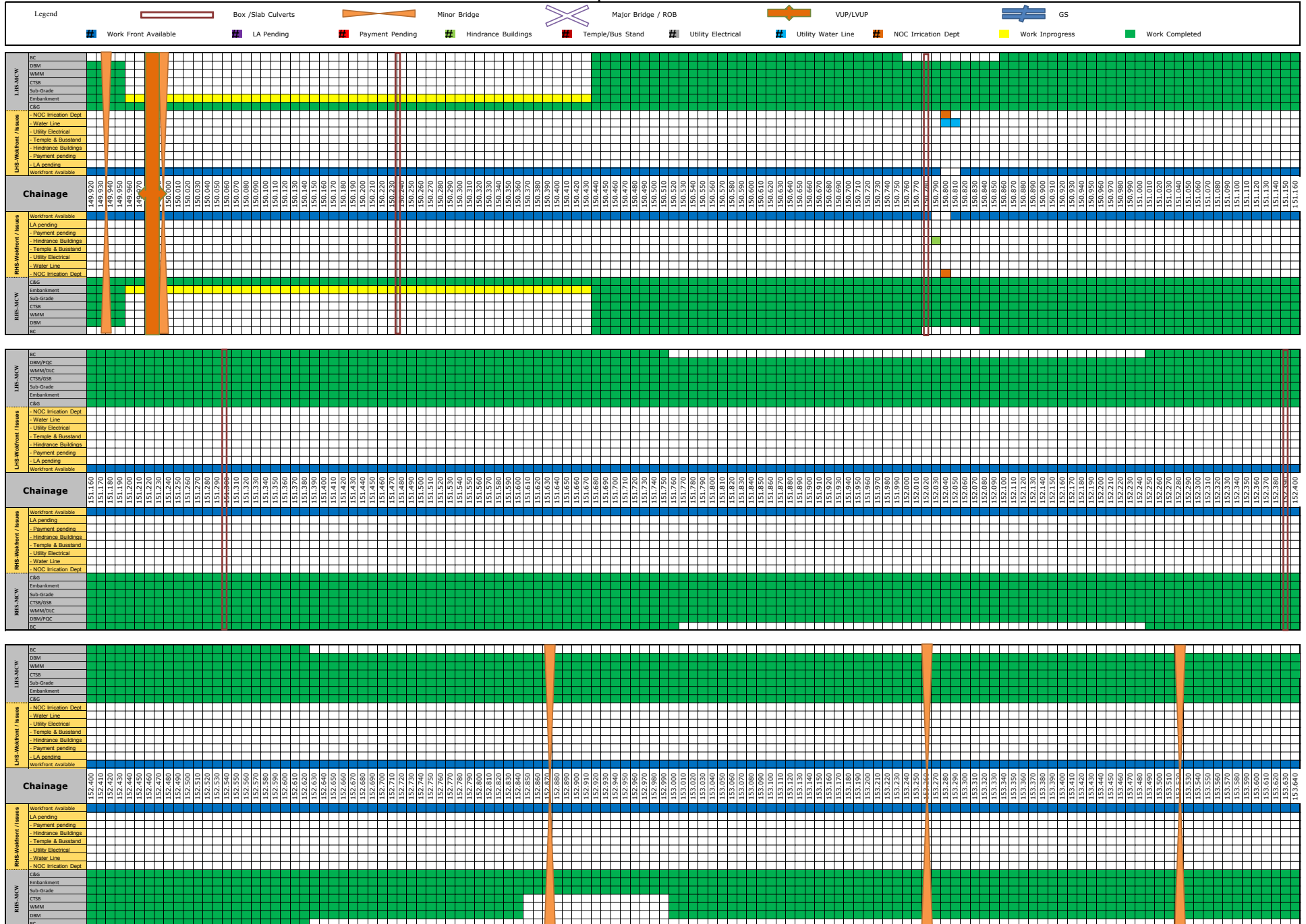
**Four Laning of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.**  
**Cholopuram - Thanjavur Project**

**Strip Chart as on 31.01.2023**



**Four Laning of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.  
Cholopuram - Thanjavur Project**

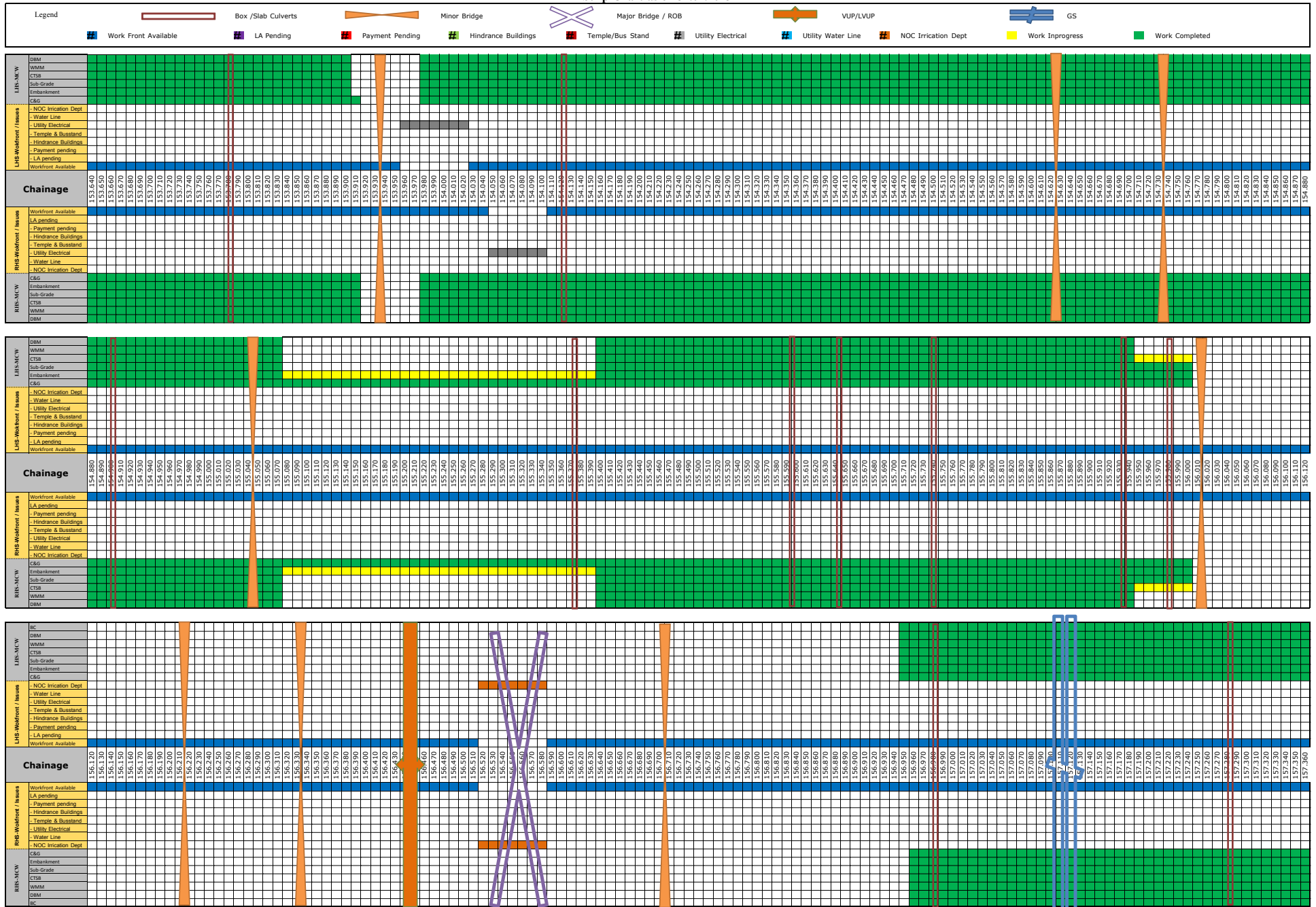
**Strip Chart as on 31.01.2023**



Four Laning of Cholapuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.

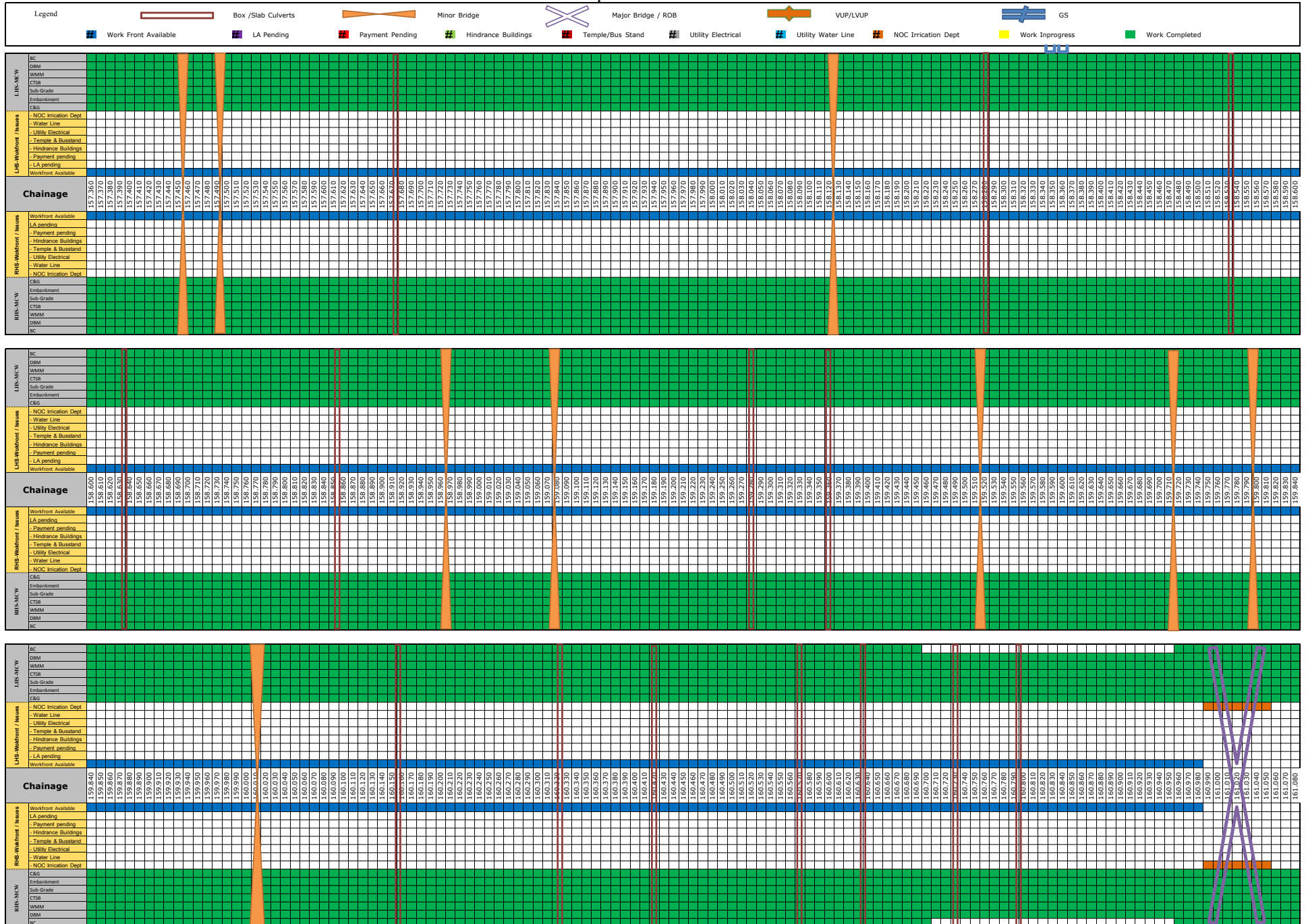
Cholapuram - Thanjavur Project

Strip Chart as on 31.01.2023



**Four Laning of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.  
Cholopuram - Thanjavur Project**

**Strip Chart as on 31.01.2023**

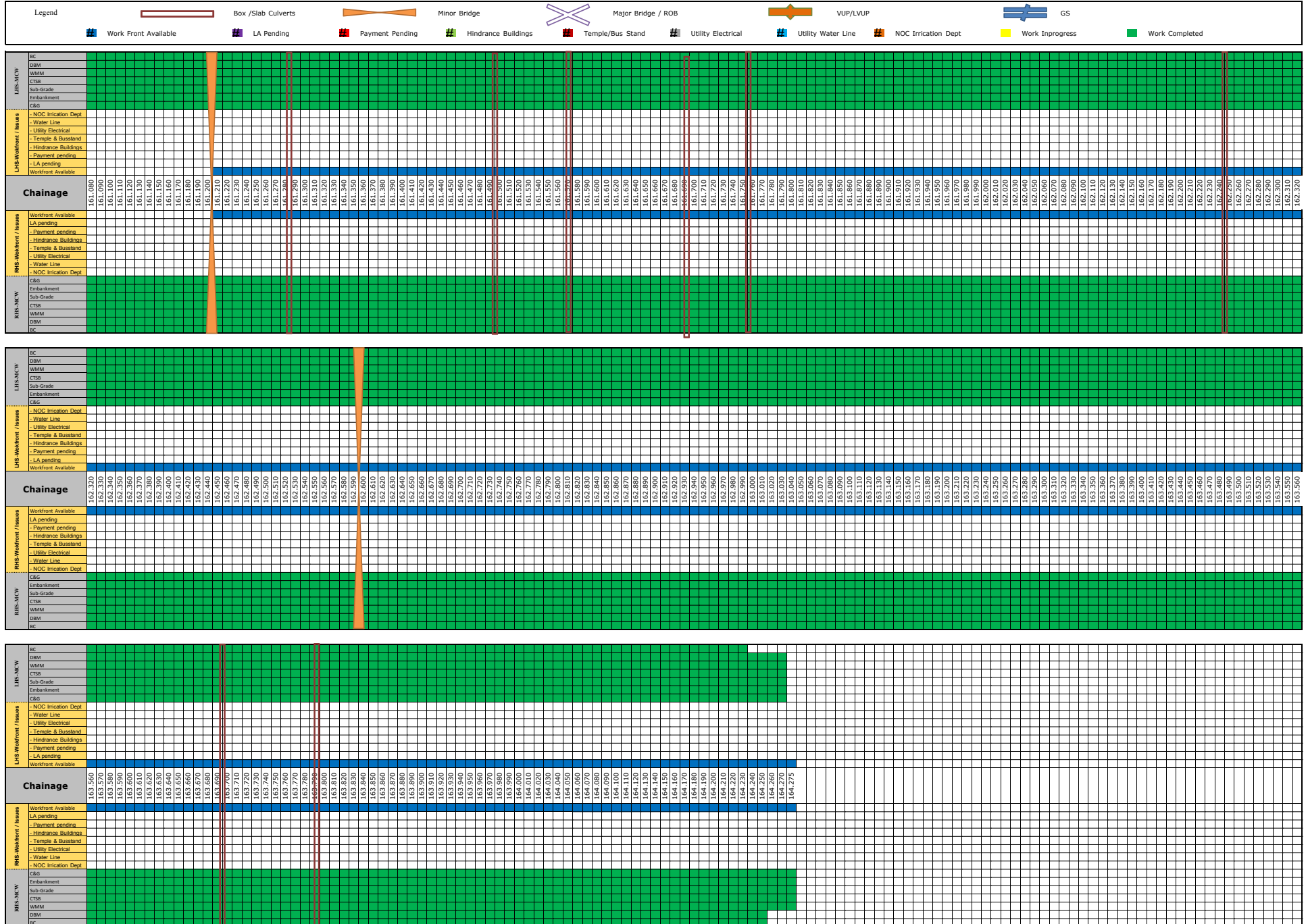




Four Lining of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.

Cholopuram - Thanjavur Project

Strip Chart as on 31.01.2023



**Four Laning of Cholapuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode**

**Table 4.3 - 1 : Strip Chart for status of Box Culverts on Existing Road  
( Main Carriageway )**

MPR JANUARY 2023						IN PROGRESS								COMPLETED								
MPR JANUARY 2023						LHS								RHS								
Sr. No.	Design Chainage As per CA	Revised Design Chainage	Number and Length of Spans (m)	Remarks (As per Schd B)	Type of Existing Structure	Protection Work	Return Wall & Parapet	Slab	Wall	Raft	PCC	Granular Filling	Excavation	Excavation	Granular Filling	PCC	Raft	Wall	Slab	Return Wall & Parapet	Protection Work	
1	116.602	116.612	1 x 2.0m	Widening	Slab Culvert																	
2	116.837	116.846	1 x 2.0m	Widening	Slab Culvert																	
3	116.954	116.963	1 x 1.6m	Widening	Slab Culvert																	
4	120.068	120.077	1 x 3.0m	Reconstruction	Slab Culvert																	
5	120.280	120.289	1 x 1.5m	Reconstruction	Slab Culvert																	
6	120.346	120.356	1 x 1.5m	Reconstruction	Box Culvert																	
7	120.836	120.845	1 x 2.0m	Widening	Box Culvert																	
8	121.540	121.550	1 x 3.0m	Widening	Slab Culvert																	
9	121.683	121.693	1 x 1.5m	Widening	Slab Culvert																	
10	121.885	121.895	2 x 1.0m	Widening	Pipe Culvert																	
11	122.375	122.385	1 x 1.0m	Widening	Pipe Culvert																	
12	122.497	122.508	2 x 1.0m	Widening	Pipe Culvert																	
13	122.678	122.688	2 x 1.0m	Widening	Pipe Culvert																	
14	122.835	122.845	1 x 3.0m	Widening	Slab Culvert																	
15	122.943	122.952	2 x 1.0m	Widening	Pipe Culvert																	
16	124.118	124.120	1 x 1.5m	Widening	Slab Culvert																	
17	124.820	124.823	1 x 1.0m	Widening	Pipe Culvert																	
18	125.682	125.685	1 x 1.5m	Widening	Slab Culvert																	
19	126.836	126.854	1 x 3.0m	Reconstruction	Slab Culvert																	
20	126.987	127.007	1 x 2.0m	Reconstruction	Slab Culvert																	
21	127.488	127.498	1 x 1.2m	Reconstruction	Pipe Culvert																	
22	127.600	127.612	3 x 1.2m	Reconstruction	Pipe Culvert																	
23	127.788	127.800	1 x 0.9m	Widening	Pipe Culvert																	
24	128.267	128.279	1 x 0.9m	Widening	Pipe Culvert																	
25	128.494	128.505	1 x 1.2m	Reconstruction	Pipe Culvert																	
26	128.675	128.667	1 x 2.0m	Reconstruction	Box Culvert																	
27	128.682	128.693	1 x 2.0m	Reconstruction	Slab Culvert																	
28	128.727	128.724	3 x 1.2m	Reconstruction	Pipe Culvert																	
29	128.904	128.916	1 x 1.2m	Reconstruction	Pipe Culvert																	
30	129.067	129.079	1 x 1.2m	Reconstruction	Pipe Culvert																	
31	129.246	129.260	1 x 0.9m	Widening	Pipe Culvert																	
32	129.507	129.519	1 x 3.0m	Widening	Slab Culvert																	
33	129.707	129.719	1 x 2.5m	Widening	Slab Culvert																	
34	129.823	129.835	1 x 0.9m	Widening	Pipe Culvert																	
35	130.096	130.109	1 x 1.2m	Reconstruction	Pipe Culvert																	
36	130.307	130.318	1 x 1.5m	Reconstruction	Slab Culvert																	
37	130.357	130.369	1 x 1.5m	Reconstruction	Slab Culvert																	
38	130.680	130.693	2 x 1.2m	Reconstruction	Pipe Culvert																	
39	130.827	130.839	1 x 0.9m	Widening	Pipe Culvert																	
40	130.989	130.999	1 x 3.0m	Widening	Slab Culvert																	
41	131.146	131.159	1 x 0.9m	Widening	Pipe Culvert																	
42	131.505	131.517	1 x 3.0m	Reconstruction	Slab Culvert																	
43	131.722	131.733	1 x 1.2m	Reconstruction	Pipe Culvert																	
44	131.780	131.792	1 x 1.2m	Reconstruction	Pipe Culvert																	
45	132.300	132.319	1 x 3.0m	Widening	Slab Culvert																	
46	132.557	132.571	1 x 3.0m	Widening	Slab Culvert																	
47	132.730	132.742	1 x 3.0m	Widening	Slab Culvert																	
48	132.789	132.803	1 x 2.0m	Widening	Slab Culvert																	
49	133.115	133.128	1 x 5.0m	Widening	Slab Culvert																	
50	133.210	133.222	1 x 2.0m	Widening	Slab Culvert																	
51	133.240	133.268	1 x 0.9m	Widening	Pipe Culvert																	
52	133.635	133.579	1 x 2.0m	Reconstruction	Slab Culvert																	
53	133.734	133.748	1 x 2.0m	Reconstruction	Slab Culvert																	
54	133.935	133.948	1 x 1.2m	Reconstruction	Pipe Culvert																	
55	133.987	133.979	1 x 1.5m	Reconstruction	Slab Culvert																	
56	163.700	163.700	2 x 0.9m	Widening	Pipe Culvert																	
57	163.793	163.828	1 x 0.9m	Widening	Pipe Culvert																	

**Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode**

Table 4.3 - 1 : Strip Chart for status of Box Culverts on Existing Road (Service Road)						IN PROGRESS								COMPLETED								
MPR JANUARY 2023						LHS								RHS								
Sr. No.	Design Chainage As per CA	Revised Design Chainage	Number and Length of Spans (m)	Remarks (As per Schd B)	Type of Existing Structure	Protection Work	Return Wall & Parapet	Slab	Wall	Raft	PCC	Granular Filling	Excavation	Excavation	Granular Filling	PCC	Raft	Wall	Slab	Return Wall & Parapet	Protection Work	
1	120.068	120.077	1 x 3.0	Reconstruction	Slab Culvert																	
2	120.280	120.289	1 x 1.5	Reconstruction	Slab Culvert																	
3	120.346	120.356	1 x 1.5	Reconstruction	Box Culvert																	
4	126.836	126.854	1 x 3.0	Reconstruction	Slab Culvert																	
5	126.987	127.007	1 x 2.0	Reconstruction	Slab Culvert																	
6	127.488	127.498	1 x 1.2	Reconstruction	Pipe Culvert																	
7	127.600	127.612	3 x 1.2	Reconstruction	Pipe Culvert																	
8	128.494	128.505	1 x 1.2	Reconstruction	Pipe Culvert																	
9	128.675	128.667	1 x 2.0	Reconstruction	Box Culvert																	
10	128.682	128.693	1 x 2.0	Reconstruction	Slab Culvert																	
11	128.727	128.724	3 x 1.2	Reconstruction	Pipe Culvert																	
12	128.904	128.916	1 x 1.2	Reconstruction	Pipe Culvert																	
13	129.067	129.079	1 x 1.2	Reconstruction	Pipe Culvert																	
14	130.096	130.109	1 x 1.2	Reconstruction	Pipe Culvert																	
15	130.307	130.318	1 x 1.5	Reconstruction	Slab Culvert																	
16	130.357	130.369	1 x 1.5	Reconstruction	Slab Culvert																	
17	130.680	130.693	2 x 1.2	Reconstruction	Pipe Culvert																	
18	131.146	131.159	1 X 0.9	Widening	Pipe Culvert																	
19	131.505	131.517	1 x 3.0	Reconstruction	Slab Culvert																	
20	131.722	131.733	1 x 1.2	Reconstruction	Pipe Culvert																	
21	131.780	131.792	1 x 1.2	Reconstruction	Pipe Culvert																	
22	133.635	133.579	1 x 2.0	Reconstruction	Slab Culvert																	
23	133.734	133.748	1 x 2.0	Reconstruction	Slab Culvert																	
24	133.935	133.948	1 x 1.2	Reconstruction	Pipe Culvert																	
25	133.987	133.979	1 x 1.2	Reconstruction	Pipe Culvert																	

**Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode**

Table 4.3 - 2 : Strip Chart for status of Box Culverts on Bypass ( Main Carriageway )						IN PROGRESS								COMPLETED								
MPR JANUARY 2023						LHS								RHS								
Sr. No.	Design Chainage As per CA	Revised Design Chainage	Number and Length of Spans (m)	Remarks	Type of Structure	Protection Work	Return Wall & Parapet	Slab	Wall	Raft	PCC	Granular Filling	Excavation	Excavation	Granular Filling	PCC	Raft	Wall	Slab	Return Wall & Parapet	Protection Work	
1	119.971	119.879	1 x 1.5m	Reconstruction	Slab Culvert																	
2	134.500	134.514	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
3	138.492	138.523	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
4	139.827	139.856	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
5	140.010	140.040	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
6	140.292	140.322	1 x 3.0m x 2.0m	New Costruction	Box Culvert																	
7	140.911	140.945	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
8	142.189	142.048	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
9	142.776	142.812	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
10	144.426	144.500	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
11	146.049	146.079	1 x 3.0m x 2.0m	New Costruction	Box Culvert																	
12	147.060	147.075	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
13	148.650	148.650	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
14	150.237	150.265	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
15	150.780	150.791	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
16	152.390	152.418	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
17	153.781	153.809	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
18	154.129	154.157	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
19	154.900	154.927	1 x 3.0m x 2.0m	New Costruction	Box Culvert																	
20	155.381	155.407	1 x 3.0m x 2.0m	New Costruction	Box Culvert																	
21	155.601	155.628	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
22	155.645	155.672	1 x 3.0m x 2.0m	New Costruction	Box Culvert																	
23	155.743	155.770	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
24	155.938	155.962	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
25	156.984	157.012	1 x 3.0m x 2.0m	New Costruction	Box Culvert																	
26	157.283	157.310	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
27	157.678	157.701	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
28	158.283	158.310	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
29	158.531	158.558	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
30	158.639	158.665	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
31	158.852	158.882	1 x 5.0m x 2.0m	New Costruction	Box Culvert																	
32	159.282	159.300	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
33	159.361	159.385	1 x 3.0m x 2.0m	New Costruction	Box Culvert																	
34	160.157	160.176	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
35	160.326	160.350	1 x 3.0m x 2.0m	New Costruction	Box Culvert																	
36	160.420	160.445	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
37	160.572	160.594	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
38	160.635	160.658	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
39	160.733	160.754	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
40	160.798	160.850	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
41	161.288	161.310	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
42	161.499	161.501	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
43	161.573	161.595	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
44	161.693	161.717	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
45	161.757	161.759	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
46	162.243	162.255	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	

**Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode**

Table 4.3 - 2 : Strip Chart for status of Box Culverts on Bypass ( Service Road )						IN PROGRESS								COMPLETED								
MPR JANUARY 2023						LHS								RHS								
Sr. No.	Design Chainage As per CA	Revised Design Chainage	Number and Length of Spans (m)	Remarks	Type of Structure	Protection Work	Return Wall & Parapet	Slab	Wall	Raft	PCC	Granular Filling	Excavation	Excavation	Granular Filling	PCC	Raft	Wall	Slab	Return Wall & Parapet	Protection Work	
1	119.971	119.879	1 x 1.5m	Reconstruction	Slab Culvert																	
2	134.500	134.514	1 x 2.0m x 2.0m	New Costruction	Box Culvert																	
3	138.492	138.523	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
4	144.426	144.500	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
5	150.237	150.265	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	
6	156.984	157.012	1 x 3.0m x 2.0m	New Costruction	Box Culvert																	
7	157.283	157.310	1 x 4.0m x 2.0m	New Costruction	Box Culvert																	

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode																						
Table 4.3 - 3 : Strip Chart for status of MNB - Box ( Main Carriageway )						IN PROGRESS										COMPLETED						
MPR JANUARY 2023						LHS										RHS						
Sr. No.	Design Chainage As per CA	Revised Chainage	Number and Length of Spans (m)	Type of Structure	Stretch	Protection Work	Retaining Wall + CB	Slab	Wall	Raft	PCC	Granular Filling	Excavation	Excavation	Granular Filling	PCC	Raft	Wall	Slab	Retaining Wall + CB	Protection Work	
<b>MNB IN EXISTING LENGTH</b>																						
1	121.024	121.035	1 x 6.0m	MNBB	Existing																	
2	122.046	122.058	3 x 7.5m	MNBB	Existing																	
<b>MNB IN BYPASS</b>																						
1	117.764	117.779	2 x 10.0m	MNBB	Bypass																	
2	118.217	118.110	1 x 8.0m	MNBB	Bypass																	
3	118.400	119.570	1 x 6.0m	MNBB	Bypass																	
4	118.480	118.480	1 x 6.0m	MNBB	Bypass																	
5	118.539	118.548	1 x 8.0m	MNBB	Bypass																	
6	118.919	119.100	1 x 6.0m	MNBB	Bypass																	
7	126.134	126.134	2 X 10.0m	MNBB	Bypass																	
8	134.320	134.320	2x 10.0m	MNBB	Bypass																	
9	134.770	134.774	1 x 10.0m	MNBB	Bypass																	
10	136.705	136.738	1 x 6.0m	MNBB	Bypass																	
11	138.555	138.585	1 x 6.0m	MNBB	Bypass																	
12	138.901	138.935	6 x 7.5m	MNBB	Bypass																	
13	139.105	139.138	2 x 15m	MNBB	Bypass																	
14	139.299	139.335	4 x 7.5m	MNBB	Bypass																	
15	139.453	139.485	1 x 7.0m	MNBB	Bypass																	
16	140.605	140.637	1 x 6.0m	MNBB	Bypass																	
17	140.860	140.892	1 x 8.0m	MNBB	Bypass																	
18	141.164	141.145	1 x 10.0m	MNBB	Bypass																	
19	141.445	141.466	1 x 8.0m	MNBB	Bypass																	
20	141.727	141.760	1 x 8.0m	MNBB	Bypass																	
21	142.204	142.235	1 x 8.0m	MNBB	Bypass																	
22	142.657	142.687	1 x 6.0m	MNBB	Bypass																	
23	142.897	142.932	2 x 8.0m	MNBB	Bypass																	
24	143.115	143.136	6 x 7.5m	MNBB	Bypass																	
25	143.823	143.852	2 x 8.0m	MNBB	Bypass																	
26	144.000	143.995	2 x 10.0m	MNBB	Bypass																	
27	144.880	144.916	4 x 7.5m	MNBB	Bypass																	
28	146.639	146.671	1 x 10.0m	MNBB	Bypass																	
29	147.396	147.426	1 x 8.0m	MNBB	Bypass																	
30	148.560	148.592	1 x 8.0m	MNBB	Bypass																	
31	149.940	149.962	1 x 10.0m	MNBB	Bypass																	
32	149.997	150.028	1 x 6.0m	MNBB	Bypass																	
32	150.800			MNBB	Bypass																	
32	152.876	152.911	2 x 10.0m	MNBB	Bypass																	
32	153.263	153.287	1 x 10.0m	MNBB	Bypass																	
35	153.528	153.557	1 x 6.0m	MNBB	Bypass																	
36	153.939	153.968	1 x 10.0m	MNBB	Bypass																	
37	154.626	154.659	1 x 6.0m	MNBB	Bypass																	
38	154.739	154.764	1 x 10.0m	MNBB	Bypass																	
39	155.049	155.082	2 x 7.5m	MNBB	Bypass																	
40	156.014	156.040	1 x 8.0m	MNBB	Bypass																	
41	156.216	156.244	1 x 6.0m	MNBB	Bypass																	
42	156.336	156.366	1 x 6.0m	MNBB	Bypass																	
43	156.707	156.734	1 x 10.0m	MNBB	Bypass																	
44	157.458	157.485	1 x 7.0m	MNBB	Bypass																	
45	157.494	157.517	1 x 8.0m	MNBB	Bypass																	
46	158.128	158.155	1 x 7.0m	MNBB	Bypass																	
47	158.972	158.994	1 x 6.0m	MNBB	Bypass																	
48	159.076	159.103	1 x 8.0m	MNBB	Bypass																	
49	159.723	159.742	1 x 6.0m	MNBB	Bypass																	
50	159.801	159.835	1 x 6.0m	MNBB	Bypass																	
51	161.208	161.227	1 x 8.0m	MNBB	Bypass																	
52	162.595	162.618	2 x 15m	MNBB	Bypass																	

**Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode**

Table 4.3 - 3 : Strip Chart for status of MNB - Deck Type (Main Carriageway)				IN PROGRESS								COMPLETED									
MPR JANUARY 2023				LHS								RHS									
SR. NO.	MNB at Chainage	Span	Pier/ Abutment	Crash Barrier	Slab	Girder Launching	Girder Casting	Piercap/Abtc ap	Pier/Abt	Open Foundation	PCC For foundation	PCC For foundation/Pi ling work	Open Foundation/P ile Cap	Pier/Abt	Piercap/Abtc ap	Girder Casting	Girder Launching	Slab	Crash Barrier		
1	133+345	3x12.5m	A1	EXISTING STRUCTURE																	
			P1																		
			P2																		
			A2																		
2	159+522	1x15.0m	A1																		
			A2																		

**Four Laning of Cholapuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode**

**Table 4.3 - 3 : Strip Chart for status of MNB - Box (Service Road)**

MPR JANUARY 2023						IN PROGRESS							COMPLETED							
MPR JANUARY 2023						LHS							RHS							
Sr. No.	Design Chainage As per CA	Revised Chainage	Number and Length of Spans (m)	Type of Structure	Stretch	Protection Work	Slab	Wall	Raft	PCC	Granular Filling	Excavation	Excavation	Granular Filling	PCC	Raft	Wall	Slab	Protection Work	
<b>MNB SERVICE ROAD IN BYPASS</b>																				
1	117.764	117.779	2 x 10.0m	MNBB	Bypass															
2	126.134	126.134	2 X 10.0m	MNBB	Realign															
3	134.320	134.320	2x 10.0m	MNBB	Bypass															
4	134.770	134.774	1 x 10.0m	MNBB	Bypass															
5	138.555	138.585	1 x 6.0m	MNBB	Bypass															
6	138.901	138.935	6 x 7.5m	MNBB	Bypass															
7	139.105	139.138	2 x 15m	MNBB	Bypass															
8	139.299	139.335	4 x 7.5m	MNBB	Bypass															
9	139.453	139.485	1 x 7.0m	MNBB	Bypass															
10	141.164	141.145	1 x 10.0m	MNBB	Bypass															
11	141.445	141.466	1 x 8.0m	MNBB	Bypass															
12	141.727	141.760	1 x 8.0m	MNBB	Bypass															
13	144.880	144.916	4 x 7.5m	MNBB	Bypass															
14	149.940	149.962	1 x 10.0m	MNBB	Bypass															
15	149.997	150.028	1 x 6.0m	MNBB	Bypass															
16	156.014	156.040	1 x 8.0m	MNBB	Bypass															
17	156.216	156.244	1 x 6.0m	MNBB	Bypass															
18	156.336	156.366	1 x 6.0m	MNBB	Bypass															
19	156.707	156.734	1 x 10.0m	MNBB	Bypass															



Four Laning of Cholapuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.3 - 4 : Strip Chart for status of PUP					IN PROGRESS						COMPLETED					
MPR JANUARY 2023					LHS						RHS					
Sr. No.	Design Chainage As per CA	Chainage as Per Site	Number and Length of Spans (m)		Protection Work	Slab	Wall	Raft	PCC	Excavation	Excavation	PCC	Raft	Wall	Slab	Protection Work
1	147.917	147.951	1 X 7 m	BYPASS												
2	149.988	150.023	1 X 7 m	BYPASS												

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.3- 5 : Strip Chart for status of MJB ( Main Carriageway )									IN PROGRESS								COMPLETED	
MPR JANUARY 2023																		
MJB at Chainage 131+980 (3x20) -WIDENING RHS																		
LHS/LSR									RHS/RSR									
Crash Barrier	Slab	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile		Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Slab	Crash Barrier		
A1	Existing Bridge (Repair Only)																	
P1	Existing Bridge (Repair Only)																	
P2	Existing Bridge (Repair Only)																	
A2	Existing Bridge (Repair Only)																	
MJB at Chainage 149+334 (3x20)- BYPASS																		
LHS/LSR									RHS/RSR									
Crash Barrier	Slab	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile		Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Slab	Crash Barrier		
A1																		
P1																		
P2																		
P3																		
A2																		
MJB at Chainage 156+559 (6x20)- BYPASS																		
LHS/LSR									RHS/RSR									
Crash Barrier	Slab	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile		Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Slab	Crash Barrier		
P2																		
P3																		
P4																		
P5																		
P6																		
A2																		
MJB at Chainage 161+019 (6x20)- BYPASS																		
LHS/LSR									RHS/RSR									
Crash Barrier	Slab	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile		Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Slab	Crash Barrier		
A1																		
P1																		
P2																		
P3																		
P4																		
P5																		
P6																		
A2																		

**Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu  
Under NHDP Phase-IV on Hybrid Annuity Mode**

Table 4.3 - 6 : Strip Chart for status of FLYOVER					IN PROGRESS										COMPLETED								
MPR JANUARY 2023					LHS										RHS								
Sr. No.	FO at Chainage	Span			Crash Barrier	Slab	Girder Launching	Girder Casting	Piercap/Abt cap	Pier/Abt	Pile Cap	PCC	Pile	Pile	PCC	Pile Cap	Pier/Abt	Piercap/Abt cap	Girder Casting	Girder Launching	Slab	Crash Barrier	
1	117+600	1 x 30 m	BYPASS+ EXISTING	A1																			
				A2																			
2	120+000	1 x 30 m	BYPASS+ EXISTING	A1																			
				A2																			
3	127+300	1 x 30 m	EXISTING	A1																			
				A2																			
4	134+000	1 x 30 m	BYPASS+ EXISTING	A1																			
				A2																			
5	145+140	1 x 30 m	BYPASS	A1																			
				A2																			
6	157+100	1 x 30 m	BYPASS	A1																			
				A2																			

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu  
Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.3 - 7 : Strip Chart for status of VUP				IN PROGRESS										COMPLETED								
MPR JANUARY 2023				LHS										RHS								
SR. NO.	VUP at Chainage	Span		Crash Barrier	Slab	Girder Launching	Girder Casting	Piercap/Abt cap	Pier/Abt	Pile Cap	PCC	Pile	Pile	PCC	Pile Cap	Pier/Abt	Piercap/Abt cap	Girder Casting	Girder Launching	Slab	Crash Barrier	
1	126+100	1x25	EXISTING	A1																		
				A2																		
2	126+600	1x25	EXISTING	A1																		
				A2																		
3	128+700	1x25	EXISTING	A1																		
				A2																		
4	130+335	1x25	EXISTING	A1																		
				A2																		
5	131+500	1x25	EXISTING	A1																		
				A2																		
6	136+282	1x25	BYPASS	A1																		
				A2																		
7	138+720	1x25	BYPASS	A1																		
				A2																		
8	139+440	1x25	BYPASS	A1																		
				A2																		
9	141+450	1x25	BYPASS	A1																		
				A2																		
10	156+446	1x25	BYPASS	A1																		
				A2																		

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu  
Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.3 - 8 : Strip Chart for status of ROB			IN PROGRESS											COMPLETED						
MPR JANUARY 2023		ROB at Chainage 134+345 (1 x 20.285m+1 x 30.426m+1 x 20.285m (Skew 9.6 °))- EXISTING																		
LHS/LSR											RHS/RSR									
	Crash Barrier	Slab	Steel Girder Launching	Steel Girder Fabrication	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Steel Girder Fabrication	Steel Girder Launching	Slab	Crash Barrier
A1			NA	NA													NA	NA		
P1					NA	NA									NA	NA				
P2					NA	NA									NA	NA				
A2			NA	NA													NA	NA		

## 5. Financial & Physical Progress of Work

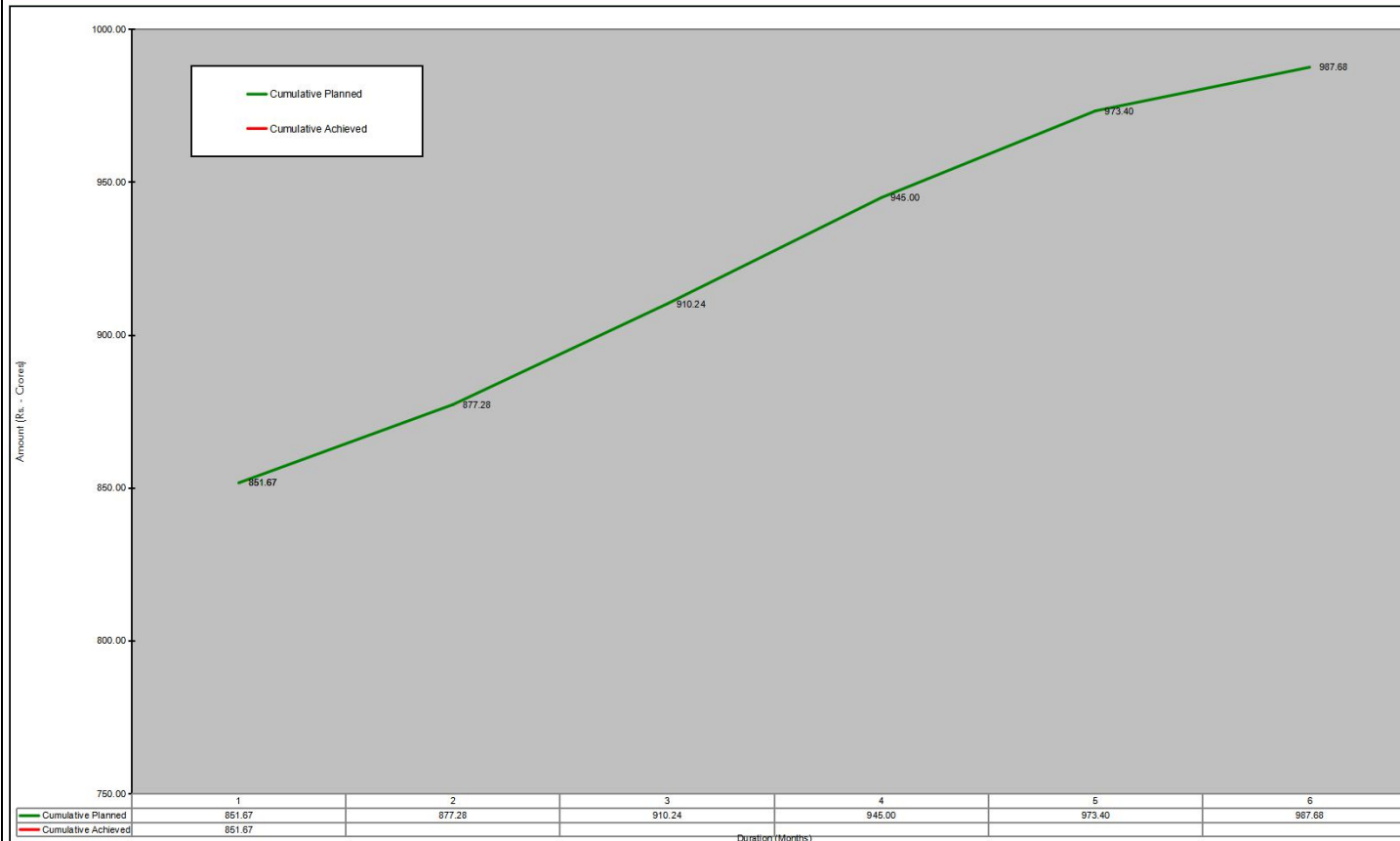
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Figure 3a : Financial Progress - Planned vs Achieved - S Curve

Figure 3b : Physical Progress - Planned vs Achieved - S Curve

**Four Laning of Cholopuram – Thanjavur from Km. 116.440 to 164.275 Section of NH45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode**

**Fig. 03a- Financial Progress (Revised S-Curve) as per revised Target mentioned in the Settlement Agreement dated 04.03.2021 including recommendation of EOT of 105 days, recommendation of additional EOT of 200 days and descoping of 10.531 Km length.**

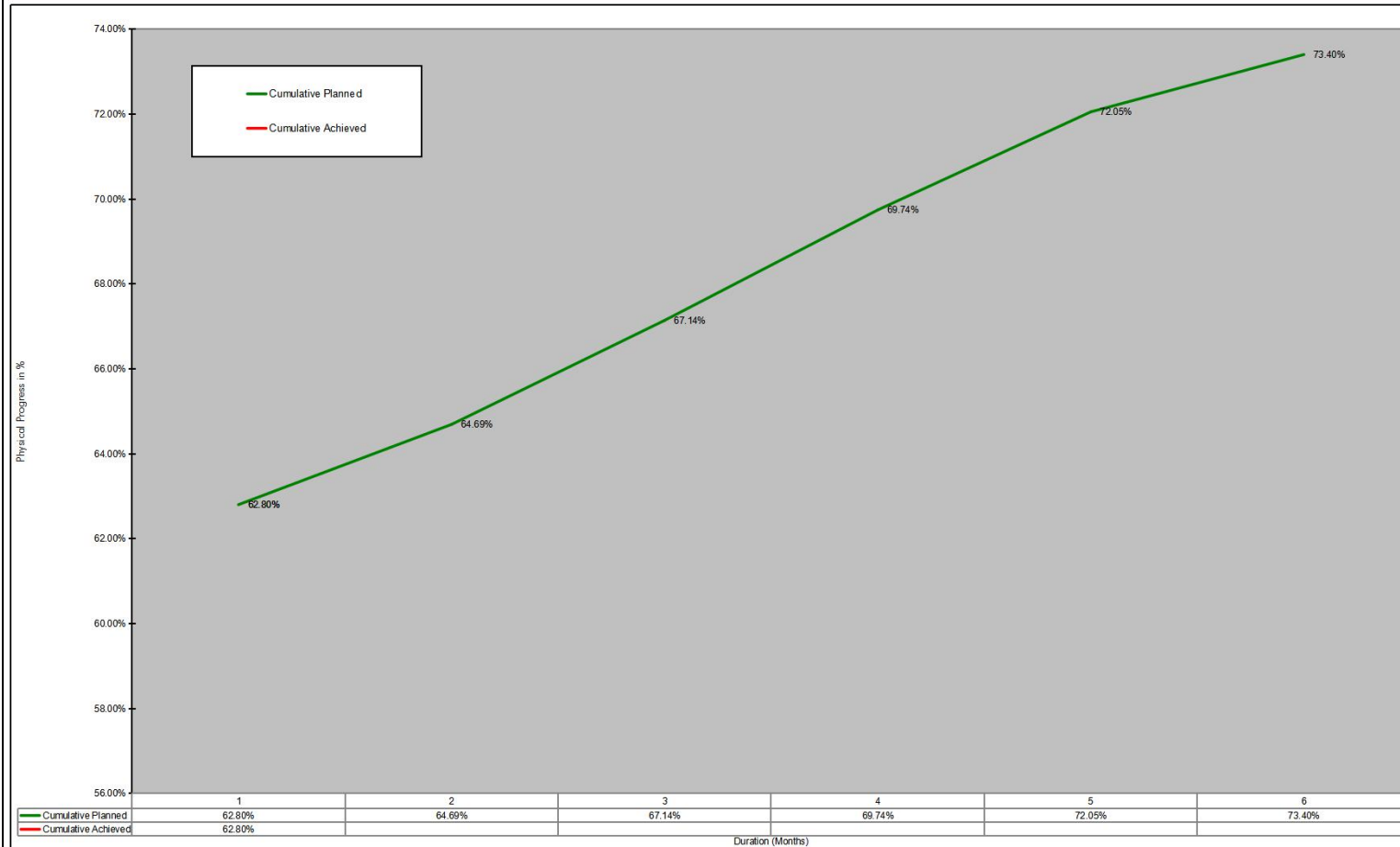


Schedule	2023					
	Up to Jan 1	Feb 2	Mar 3	April 4	May 5	June 6
Monthly Planned	851.67	25.61	32.97	34.75	28.40	14.28
Monthly Achieved	851.67					
Cumulative Planned	851.67	877.28	910.24	945.00	973.40	987.68
Cumulative Achieved	851.67					
Monthly Planned (%)	63.29%	1.90%	2.45%	2.58%	2.11%	1.06%
Monthly Achieved (%)	63.29%					
Cumulative Planned (%)	63.29%	65.20%	67.65%	70.23%	72.34%	73.40%
Cumulative Achieved (%)	63.29%					

Note:- Extension of Time for 105 days on account of 2nd wave of COVID-19 was already recommended by NHAI, RO Madurai. PIU, NHAI has also given recommendation for additional Extension of Time for 200 days due to practical problems/constraints at site & descoping of 10.531 Km length having the descope amount equal to 357.92 Cr. Hence, the revised bid project cost after the recommendation of descoping in 10.531 Km length will be 987.68 Cr. Hence, the concessionaire need to complete 73.40% of the project work. The revised S-Curve for financial progress has been updated accordingly and may modify subject to the approval of both the recommendations from the competent authority.

**Four Laning of Cholopuram – Thanjavur from Km. 116.440 to 164.275 Section of NH45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode.**

**Fig. 03b- Physical Progress (Revised S-Curve) as per revised Target mentioned in the Settlement Agreement dated 04.03.2021 including recommendation of EOT of 105 days, recommendation of additional EOT of 200 days and descoping of 10.531 Km length.**



	Schedule	2023					
		Up to Jan	Feb	Mar	April	May	June
		1	2	3	4	5	6
Revised Target vs Achieved as per revised target	Monthly Planned	62.80%	1.89%	2.45%	2.60%	2.31%	1.35%
	Monthly Achieved	62.80%					
	Cumulative Planned	62.80%	64.69%	67.14%	69.74%	72.05%	73.40%
	Cumulative Achieved	62.80%					

Note:- Extension of Time for 105 days on account of 2nd wave of COVID-19 was already recommended by NHAI, RO Madurai. PIU, NHAI has also given recommendation for additional Extension of Time for 200 days due to practical problems/constraints at site & descoping of 10.531 Km length having the descoped amount equal to 357.92 Cr. Hence, the revised bid project cost after the recommendation of descoping in 10.531 Km length will be 987.68 Cr. Hence, the concessionaire need to complete 73.40% of the project work. The revised S-Curve for physical progress has been updated accordingly and may modify subject to the approval of both the recommendations from the competent authority.



The Escrow Details / Financial Expenses details up to the month of January 2023 are given below in the tabular form:-

Table 5.1- 1 Pen Picture Escrow

Total Project Cost (Cr.)	Cumulative inflow to Escrow till Jan- 2022 (Cr.)	Cumulative out flow from escrow till Jan- 2023 (Cr.)	Inflow to Escrow During Jan- 2023 (Cr.)	Outflow from Escrow during Jan- 2023 (Cr.)
1,345.60	1,091.11	1,090.26	3.43	3.14

Table 5.1- 2 Escrow Details

Total Project Cost (Cr.)	Cumulative expenses till Jan- 2023 (Cr.)	Escrow Plan till Jan- 2023 - Debt (HAM) (Cr.)	Escrow Plan till Jan- 2023 - Equity (HAM) (Cr.)	Escrow Plan till Jan- 2023 - VGF (HAM) (Cr.)	Escrow actual till Jan- 2023 - Debt (HAM) (Cr.)	Escrow actual till Jan- 2023 - Equity (HAM) (Cr.)	Escrow actual till Jan- 2023 - VGF (HAM) (Cr.)
1,345.60	870.77	645.89	161.47	538.24	367.47	118.51	349.29

### 6.1. List of Lab Equipment's

A site laboratory has been set up with all equipments required for testing soil, GSB, WMM, Bitumen, aggregate and concrete. Following tables represents the list of QA/QC equipment's available at Pateeswaram Lab.

Sl. No	Equipment List	Quantity
<b>A) SOIL</b>		
1	Proctor Moulds (Big) Collar or Base plate & Rammer 4.89 kg	6
2	Proctor Moulds (Small) Collar or Base plate & Rammer 2.6 kg	4
3	Atterberg Limits Test(Apparatus)	1
4	Soil Cone Penetrometer	1
5	CBR Moulds with collar or Base Plate	60
6	CBR Plunger	4
7	Proving Ring(25 KN)	1
8	Proving Ring(10 KN)	1
9	Proving Ring(2.5 KN)	1
10	FSI JARS BOROSIL -100 ml	40
11	Spacer Disc(with Handle)	4
12	CBR Testing Machine	1
13	CBR Surcharge Central Hole Weights 2.5 kg	60
14	CBR Surcharge Slotted Weights 2.5 kg	60
15	CBR Perorated Brass plates	60
16	Sand Pouring Cylinders (100 mm Dia) Complete with Calibrating Container with Trays	2
17	Sand Pouring Cylinders (150 mm Dia) Complete with Calibrating Container with Trays	2
18	Sand Pouring Cylinders (200 mm Dia) Complete with Calibrating Container with Trays	2
19	Rapid Moisture Meters	4
20	Calcium Carbide Bottles	10
21	Spatula Big	10
22	Spatula Small	10

23	Hammers big	4
24	Chisels big	20
25	Electronic Balance Capacity 100 kg (10 gram accuracy)	1
26	Electronic Balance Capacity 50 kg (1 gram accuracy)	2
27	Electronic Balance Capacity 30 kg (1 gram accuracy)	2
28	Electronic Balance Capacity 10 kg (1 gram accuracy)	1
29	Electronic Balance Capacity 5 kg (0.5 gram accuracy)	1
30	Electronic Balance Capacity 600gram(0.01 gram accuracy)	2
31	Hot Air Oven (Big)250oC	1
32	Hot Air Oven (Small)250oC	1
33	Direct Shear Test Apparatus	1
34	Filter Paper Dia 100 mm	10
35	Filter Paper Dia 150 mm	10
36	Pipettes	4
37	Plastic Bottles	4
38	Enamel tray -450x300x40 mm	12
39	G.I tray-1500x1500x100mm	4
40	French Curves	2
<b><u>B) CONCRETE WORKS</u></b>		
41	Compressive Testing machine(2000KN)	1
42	Flexural strength testing machine digital	1
43	Concrete Cube Moulds With Base Plate(15cm)	200
44	Concrete Cube Moulds With Base Plate(10cm)	18
45	Motor Cube Moulds (7.06cm) with Base Plate	12
46	Motor Cube Vibrating Machine(12000 Rmp)	1
47	Concrete Mixer Electrically Operated	1
48	Cube Vibrating Machine (Big)	1
49	Slump Cone Testing Apparatus	10
50	Vicat Needle Apparatus , with dash pot complete with set of needles and brass mould	2
51	Soundness Testing Apparatus	2
52	Trowels With Wooden Handles	4
53	A I V Testing Machine	1
54	Loss Angels abrasion Testing Machine	1

55	Sand Equivalent Testing Apparatus	1
56	Flakiness Index Test Gauge	1
57	Elongation Index Test Gauge	1
58	Density Basket	2
59	Bulk Density Cylinder (5lt)	1
60	Bulk Density Cylinder (15lt)	1
61	Bulk Density Cylinder (30lt)	1
62	Gi trays -450x600x50mm	9
63	Enamel trays -300x250x40 mm	9
64	Trays for Samples Collections	12
65	Riffle Box ( 40 MM )	1
66	Riffle Box ( 20 MM )	1
67	Pycnometer Bottles ( 1000 ml)	4
68	Specific Gravity & water absorption test apparatus with Electronic balance	1
69	DLC Compaction vibrating hammer	1
70	Cement mortar cube mould 5.0 cm	12
71	Standard Sand Grade-1 bag of 25 kg	2
72	Standard Sand Grade-2 bag of 25 kg	2
73	Standard Sand Grade-3 bag of 25 kg	2
<b>C) BITUMINOUS WORKS</b>		
74	Specific Gravity Bottles ( 50 ml )	2
75	Specific Gravity Bottles ( 100 ml )	2
76	Pen Sky- Martins closed Tester (Flash & Fire point)	2
77	Dial gauge 0.01x30 mm adis make	4
78	Ring & Ball Apparatus ( Softening Point )	1
79	Bitumen Penetrometer ( automatic)	1
80	Marshall Stability Apparatus (set)	1
81	Marshall Compaction Pedestal	2
82	Marshall Compaction Rammer 4.53 KG	4
83	Marshall Moulds (101.6 mm Dia )	30
84	Modified Marshall Compaction Pedestal	1
85	Modified Marshall Compaction Rammer 10.2 KG	4
86	viscometer u tub size no 12	2

87	Breaker - glass 600 ml for ring and ball apparatus	4
88	Bitumen Extraction Apparatus (centrifuge Type)	1
89	Proving Ring(50 KN)	1
90	Proving Ring(100 KN)	1
91	Digital Thermometers	10
92	Glass Thermometer	10
93	IR Thermometer	5
94	Core Cutting Machine With Apparatus (set)	1
95	Diamond Core Cutting Bit (100mm Dia)	1
96	Core Barrels for Core Cutting Machine	1
97	Vacuum Pump (specific Gravity of Bitumen Mix GMM )	1
98	Constant temperature Water bath (Digital)	2
99	Penetration cup 55x70 mm	2
100	penetration cup 55x35 mm	2
101	Specific Gravity Flask (2000 ml )	1
102	Specific Gravity Flask (5000 ml )	1
103	Specimen Extractor (Tikki, Goli & Rod)Marshall	1
104	Emulsion Trays	6
105	Viscometer viscosity of emulsified bitumen	1
106	Stop Watch	4
107	Hot Plates Electrical	2
108	Viscometer viscosity of bitumen	1
<b>FOR I.S SIEVES 450 MM DIA</b>		
109	100MM	2
110	90MM	2
111	75MM	2
112	63MM	2
113	53MM	2
114	50MM	2
115	45MM	2
116	40MM	2
117	37.5MM	2
118	31.5MM	2
119	26.5MM	2

120	25MM	2
121	22.4MM	2
122	20MM	2
123	19MM	2
124	16 MM	2
125	14MM	2
126	13.2MM	2
127	12.5MM	2
128	11.2MM	2
129	10MM	2
130	9.5MM	2
131	6.3MM	2
132	5.6MM	2
133	4.75MM	2
134	2.36 MM	2
<b>FOR I.S SIEVES 200 MM DIA</b>		
135	37.5MM	2
136	6.5MM	2
137	22.4MM	2
138	19MM	2
139	16MM	2
140	14 MM	2
141	13.2MM	2
142	12.5MM	2
143	11.2MM	2
144	10MM	2
145	9.5MM	2
146	5.6MM	2
147	4.75MM	2
148	2.80MM	2
149	2.36MM	2
150	2.00MM	2
151	1.80MM	2
152	1.40MM	2

153	1.18MM	2
154	1.00MM	2
155	0.710 mc	1
156	0.600 mc	2
157	0.500 mc	1
158	0.45 mc	1
159	0.425 mc	2
160	0.355 mc	2
161	0.300 mc	2
162	0.150 mc	2
163	0.090 mc	2
164	0.075 mc	6
<b>GENERAL &amp; CONTROL OF PROFILE AND SURFACE EVENNESS</b>		
165	Rain Gauge	1
166	Vernier Calliper	1
167	Glass Measuring Cylinder -1000 ml	2
168	Glass Measuring Cylinder -500 ml	2
169	Glass Measuring Cylinder -250 ml	2
170	Glass Measuring Cylinder -250 ml	2
171	Plastic Measuring Cylinder- 1000 ml	2
172	Plastic Measuring Cylinder- 500 ml	2
173	Plastic Measuring Cylinder- 250 ml	2
174	Plastic Measuring Cylinder- 250 ml	2
175	Depth gauge	4
176	Digital thermo hygrometer	2
177	Sampling containers 100 gms	200
178	3 Meter straight edge and measuring wedge	1
179	Camber template board	2
180	5 mtr tape	2
181	10 mtr tape	2
182	30 mtr tape	4
183	50 mtr tape	4

## 6.2 Quality Control Test Summary

GSB material, soil samples from borrow areas, aggregates, cement and bitumen are being tested regularly. Trial mix design for concrete with different admixtures is also in progress.

The detailed list of quality control test conducted up to the month of January 2023 are tabulated below:-



**Four Lining of Cholopuram - Thanjavur From Km 116.440 to Km 164.275 Section of NH-45C in the State of TamilNadu Under NHDP Phase-IV on Hybrid Annuity Mode.**

**Summary of Quality Control Report / Monthly Progress Report (QC) - Month : January 2023**

Sr. No.	Description	IS Specification Clause	Frequency of Tests	Test conducted upto Previous month				Tests conducted during reporting month January 2023				Test conducted upto this month			
				No. of test Conducted	Passed	Failed	Nos. of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos. of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos. of test witnessed by IE
<b>1.0 Tests on OGL</b>															
1.1	Grain size analysis	IS:2720 (Part4)	1 test / 250 meters	421	421	0	224	0	0	0	0	421	421	0	224
1.2	Atterberg Limits	IS:2720 (Part5)	1 test / 250 meters	421	421	0	224	0	0	0	0	421	421	0	224
1.3	Proctor	IS:2720 (Part8)	1 test / 250 meters	233	233	0	68	0	0	0	0	233	233	0	68
1.4	Free Swell index	IS:2720 (Part40)	1 test / 250 meters	421	403	18	224	0	0	0	0	421	403	18	224
<b>2.0 Cutting &amp; Existing Portion for EMB/ SG (MoRT&amp;H 305)</b>															
2.1	Grain size analysis	IS:2720 (Part4)	1 test / 1500 m <sup>3</sup>	114	114	0	42	0	0	0	0	114	114	0	42
2.2	Atterberg Limits	IS:2720 (Part5)	1 test / 1500 m <sup>3</sup>	114	114	0	42	0	0	0	0	114	114	0	42
2.3	Proctor	IS:2720 (Part8)	1 test / 1500 m <sup>3</sup>	114	114	0	42	0	0	0	0	114	114	0	42
2.4	Free Swell index	IS:2720 (Part40)	1 test / 1500 m <sup>3</sup>	114	114	0	42	0	0	0	0	114	114	0	42
2.5	California bearing ratio	IS:2720 (Part16)	1 test / 3000 m <sup>3</sup>	108	108	0	44	0	0	0	0	108	108	0	44
<b>3.0 Borrow Area for EMB/ Subgrade (MoRT&amp;H 305)</b>															
3.1	Grain size analysis	IS:2720 (Part4)	1 test / 1500 m <sup>3</sup>	2514	2514	0	558	61	61	0	15	2575	2575	0	573
3.2	Atterberg Limits	IS:2720 (Part5)	1 test / 1500 m <sup>3</sup>	2514	2514	0	558	61	61	0	15	2575	2575	0	573
3.3	Proctor	IS:2720 (Part8)	1 test / 1500 m <sup>3</sup>	2528	2528	0	558	71	71	0	15	2599	2599	0	573
3.4	Free Swell index	IS:2720 (Part40)	1 test / 1500 m <sup>3</sup>	2510	2510	0	558	61	61	0	15	2571	2571	0	573
3.5	California bearing ratio	IS:2720 (Part16)	1 test / 3000 m <sup>3</sup>	295	292	0	127	2	2	0	1	297	294	0	128
3.6	Angle of Internal Friction (ø)	IS:2720 (Part13)	As required	264	264	0	62	28	28	0	7	292	292	0	69
<b>4.0 Field Density Test (MoRT&amp;H 305)</b>															
4.1	Field density (OGL)	IS:2720 (Part28)	10 test / 3000 sqm	6720	6720	15	2253	0	0	0	0	6720	6720	15	2253
4.2	Field density (EMB)	IS:2720 (Part28)	10 test / 3000 sqm	104732	104523	209	18488	7453	7453	0	1870	112185	111976	209	20358
4.3	Field density (SG)	IS:2720 (Part28)	10 test / 2000 sqm	13035	13032	3	2362	70	70	0	25	13105	13102	3	2387
4.4	Field density (Shoulder)	IS:2720 (Part28)	10 test / 2000 sqm	422	422	0	104	0	0	0	0	422	422	0	104
<b>5.0 Safe Bearing capacity of soil (Highway &amp; Structure)</b>															
5.1	Grain size analysis	IS:2720 (Part4)	As required	169	169	0	41	0	0	0	0	169	169	0	41
5.2	Atterberg Limits	IS:2720 (Part5)	As required	169	169	0	41	0	0	0	0	169	169	0	41
5.3	Proctor	IS:2720 (Part8)	As required	169	169	0	40	0	0	0	0	169	169	0	40
5.4	Free Swell index	IS:2720 (Part40)	As required	169	162	7	41	0	0	0	0	169	162	7	41
5.5	Bearing Capacity	IS:6403 / IS:1888	As required	169	18	151	41	0	0	0	0	169	18	151	41
5.6	Plate Load Test	IS:6403 / IS:1888	As required	36	36	0	27	0	0	0	0	36	36	0	27
<b>6.0 Filter Media &amp; Back filling (MoRT&amp;H 2500)</b>															
6.1	Gradation		As required	422	422	0	116	10	10	0	3	432	432	0	119
6.2	Backfilling field density		1 test / 1000 m <sup>3</sup>	48	48	0	36	0	0	0	0	48	48	0	36
<b>7.0 Granular Bedding Material (For Structures-Ground Improvement)- Stock &amp; Site Testing</b>															
7.1	Gradation	Table 400-1	As required	244	244	0	53	0	0	0	0	244	244	0	53
7.2	Atterberg Limits	IS:2720 (Part5)	As required	244	244	0	53	0	0	0	0	244	244	0	53
7.3	Proctor	IS:2720 (Part8)	As required	137	137	0	25	0	0	0	0	137	137	0	25
7.4	CBR Test	IS:2720 (Part16)	As required	29	29	0	24	0	0	0	0	29	29	0	24
7.5	Aggregate Impact value	IS:2386 (Part4)	As required	42	42	0	29	0	0	0	0	42	42	0	29
7.6	Field Density	IS:2720 (Part28)	As required	2215	2215	0	479	0	0	0	0	2215	2215	0	479
<b>8.0 CTSB</b>															
8.1	Gradation	Table 400-4	1 test / 400m <sup>3</sup>	535	535	0	131	16	16	0	5	551	551	0	136
8.2	Atterberg Limits	IS:2720 (Part5)	1 test / 400m <sup>3</sup>	533	533	0	130	16	16	0	5	549	549	0	135
8.3	Proctor	IS:2720 (Part8)	As required	24	24	0	22	1	1	0	1	25	25	0	23
8.4	Aggregate Impact value	IS:2386 (Part4)	As required	128	128	0	75	1	1	0	1	129	129	0	76
8.5	Field Density	IS:2720 (Part28)	1 set of 2 Test per 500 Sqm	5819	5819	0	1167	173	173	0	42	5992	5992	0	1209
8.6	Specific gravity & Water absorption	IS:2386 (Part3)	As required	5	5	0	5	0	0	0	0	5	5	0	5
8.7	Cubes casting & Testing (Sets)	IRC SP 89 (2010)	A set of 3 specimens	1335	1335	0	287	84	84	0	24	1419	1419	0	311
8.8	CBR Test	IS:2720 (Part16)	As required	16	16	0	13	0	0	0	0	16	16	0	13

**Four Lining of Cholopuram - Thanjavur From Km 116.440 to Km 164.275 Section of NH-45C in the State of TamilNadu Under NHDP Phase-IV on Hybrid Annuity Mode.**

**Summary of Quality Control Report / Monthly Progress Report (QC) - Month : January 2023**

Sr. No.	Description	IS Specification Clause	Frequency of Tests	Test conducted upto Previous month				Tests conducted during reporting month January 2023				Test conducted upto this month			
				No. of test Conducted	Passed	Failed	Nos. of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos. of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos. of test witnessed by IE
<b>9.0 WMM</b>															
9.1	Individual / Combined Gradation	Table 400-3	1 test / 200m <sup>3</sup>	516	516	0	111	14	14	0	5	530	530	0	116
9.2	Aggregate Impact Value	IS:2386 (Part4)	1 test/ 1000m <sup>3</sup>	307	307	0	75	6	6	0	2	313	313	0	77
9.3	Flakiness & Elongation index	IS:2386 (Part1)	1 test/ 500m <sup>3</sup>	304	304	0	81	8	8	0	3	312	312	0	84
9.4	Atterberg Limits	IS:2720 (Part5)	1 test / 200m <sup>3</sup>	482	482	0	105	14	14	0	6	496	496	0	111
9.5	Proctor	IS:2720 (Part8)	As required	18	18	0	15	1	1	0	1	19	19	0	16
9.6	CBR	IS:2720 (Part16)	As required	15	15	0	13	1	1	0	1	16	16	0	14
9.7	Field Density	IS:2720 (Part28)	1 set Test per 1000 Sq.m / 3 pits	1922	1922	0	455	50	50	0	20	1972	1972	0	475
<b>10.0 Dense Bituminous Macadam (Grade - II)</b>															
10.1	Gradation	MoRT&H Section-500 / Clause-507 & Table 500-10	One set for individual constituent and mixed aggregate from dryer for each 400 tonnes of mix subject to minimum of two Tests per day per plant	468	468	0	145	12	12	0	3	480	480	0	148
10.2	Flakiness & Elongation Index	IS:2386 (Part1)1963	1 Test for 350 m <sup>3</sup>	161	161	0	60	6	6	0	2	167	167	0	62
10.3	Aggregate Impact Value Test	IS:2386 (Part4)1963	1 Test for 350 m <sup>3</sup>	161	161	0	60	6	6	0	2	167	167	0	62
10.4	Binder content and grading of mix	IRC: SP 11-1988(APP-5)	One Test for each 400 tonnes of mix produced subject to a minimum of two test per day per plant	176	176	0	68	4	4	0	2	180	180	0	70
10.5	Marshall Stability of mix	ASTM D 2726/1188	3 Tests for stability flow value density and void contents for each 400 tonnes of mix subject to minimum of two Tests per plant per day	270	270	0	83	4	4	0	2	274	274	0	85
10.6	Core Cutting and Density of Compacted Layer	Table 900-4 of MoRT&H	1 set Test per 700 Sq.m / 1 pits	833	833	0	251	35	35	0	10	868	868	0	261
10.7	Sand Equivalent Test	IS:2720 Part 37)1963	One Test for each source	16	16	0	15	0	0	0	0	16	16	0	15
10.8	Los Angeles Abrasion Value	IS:2386 (Part 3)1963	1 Test for 350 m <sup>3</sup>	122	122	0	41	6	6	0	2	128	128	0	43
10.9	Stripping	IS:6241	One Test for each source	7	7	0	7	0	0	0	0	7	7	0	7
10.10	Retained Tensile Strength	AASHTO 284	One Test for each source	8	8	0	8	0	0	0	0	8	8	0	8
10.11	Water absorption of Aggregates	IS:2386 (Part3)	One Test for each source	3	3	0	1	0	0	0	0	3	3	0	1
10.12	Plasticity Index	IS:2720 (Part 5)	One Test for each source	6	6	0	5	0	0	0	0	6	6	0	5
<b>11.0 Bituminous Concrete Grade - (II)</b>															
11.1	Gradation	MoRT&H Section-500 / Clause-507 & Table 500-10	One set for individual constituent and mixed aggregate from dryer for each 400 tonnes of mix subject to minimum of two Tests per day per plant	225	225	0	53	0	0	0	0	225	225	0	53
11.2	Flakiness & Elongation Index	IS:2386 (Part 1)1963	1 Test for 350 m <sup>3</sup>	80	80	0	24	0	0	0	0	80	80	0	24
11.3	Aggregate Impact Value Test	IS:2386 (Part 4)1963	1 Test for 350 m <sup>3</sup>	80	80	0	24	0	0	0	0	80	80	0	24
11.4	Binder content and grading of mix	IRC: SP 11-1988(APP-5)	One Test for each 400 tonnes of mix produced subject to a minimum of two test per day per plant	110	110	0	36	0	0	0	0	110	110	0	36
11.5	Marshall Stability of mix	ASTM D 2726/1188	3 Tests for stability flow value density and void contents for each 400 tonnes of mix subject to minimum of two Tests per plant per day	533	533	0	34	0	0	0	0	533	533	0	34
11.6	Core Cutting and Density of Compacted Layer	Table 900-4 of MoRT&H	1 set Test per 700 Sq.m / 1 pits	774	774	0	204	0	0	0	0	774	774	0	204
11.7	Sand Equivalent Test	IS:2720 Part 37)1963	One Test for each source	1	1	0	1	0	0	0	0	1	1	0	1
11.8	Los Angeles Abrasion Value	IS:2386 (Part 3)1963	1 Test for 350 m <sup>3</sup>	80	80	0	25	0	0	0	0	80	80	0	25
11.9	Stripping	IS:6241	One Test for each source	2	2	0	2	0	0	0	0	2	2	0	2
11.10	Retained Tensile Strength	AASHTO 284	One Test for each source	2	2	0	2	0	0	0	0	2	2	0	2
11.11	Water absorption of Aggregates	IS:2386 (Part3)	One Test for each source	2	2	0	2	0	0	0	0	2	2	0	2
11.12	Plasticity Index	IS:2720 (Part 5)	One Test for each source	2	2	0	2	0	0	0	0	2	2	0	2

**Four Lining of Cholopuram - Thanjavur From Km 116.440 to Km 164.275 Section of NH-45C in the State of TamilNadu Under NHDP Phase-IV on Hybrid Annuity Mode.**

**Summary of Quality Control Report / Monthly Progress Report (QC) - Month : January 2023**

Sr. No.	Description	IS Specification Clause	Frequency of Tests	Test conducted upto Previous month				Tests conducted during reporting month January 2023				Test conducted upto this month			
				No. of test Conducted	Passed	Failed	Nos. of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos. of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos. of test witnessed by IE
<b>12.0 Bitumen test</b>															
12.1	Absolute Viscosity at 60° C poise, Minimum	IS:1206-1978 part-2	As per table 2 of IS:73-2013	171	171	0	54	5	5	0	2	176	176	0	56
12.2	Penetration Test at 25° C, 100gr, 0.1mm, 5sec	IS:1203-1978	As per table 2 of IS:73-2013	242	242	0	54	5	5	0	2	247	247	0	56
12.3	Softening point (R & B) Min	IS:1205-1978	As per table 2 of IS:73-2013	286	286	0	74	5	5	0	2	291	291	0	76
12.4	Elastic Recovery of half thread in ductilometer at 15°C, Percent, min	IS:15462 -2019	As per table 2 of IRC SP 53	115	115	0	34	1	1	0	1	116	116	0	35
12.5	Separation, Difference in Softening Point (R&B)° C max	IS:15462 -2019	As per table 2 of IRC SP 53	115	115	0	34	1	1	0	1	116	116	0	35
12.6	Test on Residue from TFOT											0	0	0	0
12.7	Viscosity ratio at 60° C max	IS:1206-1978 part-2	1 Test per Lot	44	44	0	25	1	1	0	1	45	45	0	26
12.8	Ductility at 25° C, cm, Min	IS:1208-1978	1 Test per Lot	44	44	0	25	1	1	0	1	45	45	0	26
<b>13.0 Emulsion SS1 &amp; RS1</b>															
13.1	Saybolt fural Viscosity	IS:13117	1 Test per Lot	33	33	0	21	0	0	0	0	33	33	0	21
13.2	Residue on 600 micron IS sieve	IS:8887	1 Test per Lot	33	33	0	21	0	0	0	0	33	33	0	21
13.3	Water Content, Percent by mass	IS:8887	1 Test per Lot	33	33	0	21	0	0	0	0	33	33	0	21
<b>14.0 Emulsion Prime coat &amp; Tack Coat</b>															
14.1	Rate of Spread of Binder	IRC: SP 16	Three test per Day	804	804	0	182	12	12	0	3	816	816	0	185
<b>15.0 Coarse/Fine Aggregate (MoRT&amp;H 1007 &amp; 1008)</b>															
15.1	Gradation	IS:2386 (Part2)	As required	1222	1222	0	379	5	5	0	3	1227	1227	0	382
15.2	Specific gravity & Water absorption	IS:2386 (Part3)	As required	78	78	0	42	0	0	0	0	78	78	0	42
15.3	Aggregate Impact Value	IS:2386 (Part4)	As required	242	242	0	86	2	2	0	1	244	244	0	87
15.4	Flakiness index	IS:2386 (Part1)	As required	239	239	0	84	2	2	0	1	241	241	0	85
<b>16.0 Cement (MoRT&amp;H 1006)</b>															
16.1	Fineness	IS:4031 (Part1)	500mt (or) Every week	297	297	0	113	5	5	0	2	302	302	0	115
16.2	Normal Consistency	IS:4031 (Part4)	500mt (or) Every week	297	297	0	113	5	5	0	2	302	302	0	115
16.3	Initial & Final setting time	IS:4031 (Part5)	500mt (or) Every week	297	297	0	113	5	5	0	2	302	302	0	115
16.4	Soundness of Cement	IS:4031 (Part3)	500mt (or) Every week	167	167	0	73	0	0	0	0	167	167	0	73
16.5	Compressive Strength-set	IS:4031 (Part6)													
	3 days		500mt (or) Every week	318	318	0	120	5	5	0	3	323	323	0	123
	7 days		500mt (or) Every week	308	308	0	117	4	4	0	2	312	312	0	119
	28 days		500mt (or) Every week	310	310	0	96	4	4	0	2	314	314	0	98
<b>17.0 Concrete Cube Strength of Site Cubes 28 Days</b>															
17.1	M15 PCC	IS:516 / IS:456	MoRT&H Sec. 1700	1195	1195	0	450	4	4	0	2	1199	1199	0	452
17.2	M20 PCC	IS:516 / IS:456	MoRT&H Sec. 1700	46	46	0	15	0	0	0	0	46	46	0	15
17.3	M20 RCC	IS:516 / IS:456	MoRT&H Sec. 1700	428	428	0	49	0	0	0	0	428	428	0	49
17.4	M20 KERB	IS:516 / IS:456	MoRT&H Sec. 1700	587	587	0	132	10	10	0	5	597	597	0	137
17.5	M25 RCC	IS:516 / IS:456	MoRT&H Sec. 1700	436	436	0	97	0	0	0	0	436	436	0	97
17.6	M30 RCC	IS:516 / IS:456	MoRT&H Sec. 1700	2654	2654	0	672	0	0	0	0	2654	2654	0	672
17.7	M30 RCC PUMPABLE	IS:516 / IS:456	MoRT&H Sec. 1700	855	846	0	215	0	0	0	0	855	846	0	215
17.8	M35 RCC	IS:516 / IS:456	MoRT&H Sec. 1700	1110	1093	17	375	0	0	0	0	1110	1093	17	375
17.9	M35 RCC PILING	IS:516 / IS:456	MoRT&H Sec. 1700	3030	3030	0	998	20	20	0	10	3050	3050	0	1008
17.10	M35 RCC PUMPABLE	IS:516 / IS:456	MoRT&H Sec. 1700	5070	5070	0	1408	29	29	0	12	5099	5099	0	1420
17.11	M35 RE BLOCK	IS:516 / IS:456	MoRT&H Sec. 1700	1916	1916	0	613	0	0	0	0	1916	1916	0	613
17.12	M40 RCC	IS:516 / IS:456	MoRT&H Sec. 1700	1894	1894	0	367	0	0	0	0	1894	1894	0	367
17.13	M45 PUMP	IS:516 / IS:456	MoRT&H Sec. 1700	644	644	0	164	0	0	0	0	644	644	0	164
17.14	Cement Grout	IS:516 / IS:456	MoRT&H Sec. 1700	56	56	0	13	0	0	0	0	56	56	0	13

**Four Lining of Cholopuram - Thanjavur From Km 116.440 to Km 164.275 Section of NH-45C in the State of TamilNadu Under NHDP Phase-IV on Hybrid Annuity Mode.**

**Summary of Quality Control Report / Monthly Progress Report (QC) - Month : January 2023**

Sr. No.	Description	IS Specification Clause	Frequency of Tests	Test conducted upto Previous month				Tests conducted during reporting month January 2023				Test conducted upto this month			
				No. of test Conducted	Passed	Failed	Nos. of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos. of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos. of test witnessed by IE
<b>18.0 BENTONITE</b>															
18.1	Density	MoRT&H Sec. 1115.2.3	As required	443	443	0	135	3	3	0	1	446	446	0	136
18.2	Marsh Cone Viscosity			443	443	0	135	3	3	0	1	446	446	0	136
18.3	pH Value			443	443	0	135	3	3	0	1	446	446	0	136
18.4	Silt Content			15	15	0	6	0	0	0	0	15	15	0	6
18.5	Liquid Limit			18	18	0	7	0	0	0	0	18	18	0	7
<b>19.0 Fine Aggregate (MoRT&amp;H 1008)-(RE-Block)</b>															
19.1	Grade / Sieve analysis	IS:2386 (Part1)	As required	728	728	0	223	0	0	0	0	728	728	0	223
19.2	Fineness Modulus	MoRT&H Sec. 1008 & 383	As required	728	728	0	223	0	0	0	0	728	728	0	223
19.3	Specific gravity & Water absorption	IS:2386 (Part2)	As required	24	24	0	12	0	0	0	0	24	24	0	12
<b>20.0 Coarse Aggregate (MoRT&amp;H 1007)-(RE-Block)</b>															
20.1	Gradation	IS:2386 (Part2)	As required	676	676	0	182	0	0	0	0	676	676	0	182
20.2	Specific gravity & Water absorption	IS:2386 (Part3)	As required	27	27	0	19	0	0	0	0	27	27	0	19
20.3	Aggregate Impact Value	IS:2386 (Part4)	1 test / each source & monthly	72	72	0	36	0	0	0	0	72	72	0	36
20.4	Flakiness index	IS:2386 (Part1)	1 test / each source & monthly	52	52	0	23	0	0	0	0	52	52	0	23
<b>21.0 DLC</b>															
21.1	Gradation	MoRT&H Section-601	1 test / 400m <sup>3</sup>	11	11	0	5	0	0	0	0	11	11	0	5
21.2	Field Density	MoRT&H Sec 903.5.1	3 Sample for 2000 Sqm	43	43	0	10	0	0	0	0	43	43	0	10
21.3	Cubes casting & Testing (Sets)	IS:516	1 set for 1000 Sqm	20	20	0	6	0	0	0	0	20	20	0	6
<b>22.0 Pavement Quality Concrete</b>															
22.1	Gradation	IS:2386 (Part1)	1 Test per day	35	35	0	11	0	0	0	0	35	35	0	11
22.2	Aggregate Impact Value	IS:2386 (Part4)1963	As required	16	16	0	7	0	0	0	0	16	16	0	7
22.3	Los Angeles Abrasion Value	IS:2386 (Part4)1963	As required	16	16	0	7	0	0	0	0	16	16	0	7
22.4	Compressive Strength	IS:516	2 Cubes / 150 cum (min 6 cubes)	42	42	0	13	0	0	0	0	42	42	0	13
22.5	Flexural Strength	IS:516	2 Beams / 150 cum (min 6 Beams)	42	42	0	14	0	0	0	0	42	42	0	14
22.6	Measurement of thickness for trial length	IS:516	3 cores per trial length	16	16	0	7	0	0	0	0	16	16	0	7
<b>23.0 Steel Third Party</b>															
23.1	8 mm Dia	IS:1786	Physical & Chemical Properties (1) Test on first lot. (2) Further supply will be provided with mtc. (3) As required by engineer.	21	21	0	12	0	0	0	0	21	21	0	12
23.2	10 mm Dia	IS:1786		23	23	0	15	0	0	0	0	23	23	0	15
23.3	12 mm Dia	IS:1786		27	27	0	18	0	0	0	0	27	27	0	18
23.4	16 mm Dia	IS:1786		30	30	0	18	0	0	0	0	30	30	0	18
23.5	20 mm Dia	IS:1786		23	23	0	11	0	0	0	0	23	23	0	11
23.6	25 mm Dia	IS:1786		25	24	0	14	0	0	0	0	25	24	0	14
23.7	32 mm Dia	IS:1786		10	10	0	5	0	0	0	0	10	10	0	5

## 7. Weather Report

Date	Temperature (Celsius)		Humidity (%)		Rainfall (mm)	Remarks
	Min	Max	Min	Max		
01-01-2023	22.7	41.4	34	78	0.00	Sunny
02-01-2023	26.2	33.9	44	87	0.00	Sunny
03-01-2023	24.6	30.1	53	91	0.00	Sunny
04-01-2023	26.8	37.6	51	86	0.00	Sunny
05-01-2023	29.2	36.4	60	92	0.00	Sunny
06-01-2023	25.6	35.7	49	79	0.00	Sunny
07-01-2023	24.1	33.5	45	76	0.00	Sunny
08-01-2023	26.7	36.5	47	84	0.00	Sunny
09-01-2023	24.0	30.7	49	88	0.00	Sunny
10-01-2023	27.4	37.9	50	87	0.00	Sunny
11-01-2023	24.5	31.2	60	83	0.00	Sunny
12-01-2023	27.7	38.5	57	92	0.00	Sunny
13-01-2023	28.2	36.5	59	89	0.00	Sunny
14-01-2023	23.2	34.1	56	91	0.00	Sunny
15-01-2023	23.5	29.4	60	92	0.00	Sunny
16-01-2023	27.1	39.9	49	86	0.00	Sunny
17-01-2023	27.9	40.7	36	84	0.00	Sunny
18-01-2023	28.6	37.2	33	86	0.00	Sunny
19-01-2023	26.4	39.1	49	89	0.00	Sunny
20-01-2023	28.1	39.3	50	88	0.00	Sunny
21-01-2023	26.8	35.2	61	91	0.00	Sunny
22-01-2023	22.9	38.8	79	82	0.00	Sunny
23-01-2023	22.5	33.9	59	87	0.00	Sunny
24-01-2023	21.9	31.6	84	88	0.00	Sunny
25-01-2023	20.5	31.6	86	88	0.00	Sunny
26-01-2023	20.8	32.1	51	87	0.00	Sunny
27-01-2023	20.7	31.2	52	87	0.00	Sunny
28-01-2023	21.3	31.0	49	88	0.00	Sunny
29-01-2023	22.4	30.8	57	86	0.00	Sunny
30-01-2023	23.4	29.1	67	87	0	Cloudy
31-01-2023	23.7	30.4	61	89	0	Cloudy



Various issues related to environment and safety, such as safety signage's, disposal of waste materials and oil spillage, housekeeping, area barricading and traffic management, etc., are being taken care of during the execution of the construction work in the project.

Periodic Safety meetings being conducted on a regular basis and the details of the photographs for the same along with action taken are given below:-



### Concessionaire requests NHAI to take early action on the following issues:-

1. Pending Disbursement of Payment to the beneficiaries from CALA towards Land and Buildings in Thanjavur District. – Request Authority to advise/instruct the Competent Authority of Land Acquisition to speed up the process of disbursement of pending payment.
2. Permission from Local Authorities for procurement of Borrow Earth for Irrigation Tanks.
3. NOC from PWD/WRO, Govt. of Tamil Nadu for construction of project highways in the existing ponds (in a length of 1.667 Kms).
4. Additional land acquisition for Bus bays, Turning radius at Minor & Major junctions.
5. Removal of Religious structures of 02 Nos. and Bus stand from the proposed ROW.
6. Required State Support Agreement between NHAI & Govt. of Tamil Nadu as due priority will be given to NH Projects by the State Govt. officials.
7. Estimate for shifting of water supply utilities in Missing locations-Request Authority for earlier Approval.
8. With reference to our several correspondence time to time vide which we intimated the matter of enforced nationwide lockdown as well as its impact on the Project Highway, the World Health Organization (WHO) on 11th March' 2020 had characterized the Novel Coronavirus Disease (COVID-19) outbreak as a global Pandemic. In view of the WHO's announcement and over all prevailing condition of the nation, the Union Government of India (GOI) had invoked section 2 of Epidemic Disease Act 1897 on 12.03.2020 to prevent the spread of novel coronavirus in India. Accordingly, the State Government of Tamilnadu has enforced complete lockdown of the entire state from 24.03.2020 to 31.03.2020 to avoid the spread of COVID-19. Subsequently, The Ministry of Home Affairs (MHA) vide Order No. 40-3/2020-DM-I(A), dated 24.03.2020 directed to enforce complete nationwide lockdown for the period of 21 days from 25.03.2020 to 14.04.2020.

Further, based on the outcome of COVID-19 spread containment during 1st nationwide lockdown till 14<sup>th</sup> April' 2020 & condition of country as a whole, Ministry of Home Affairs (MHA), Govt. of India in exercise of powers conferred under Section 10(2)(l) of Disaster Management Act 2005, has issued an Order bearing no. 40-3/2020-DM-I(A), dated 15.04.2020 that the nationwide lockdown will remain continue till 3rd May' 2020 to contain the spread of COVID-19 in the country. However, to mitigate hardship of the public select additional activities will be allowed with effect from 20th April' 2020 including Road Construction Activities as per sr. no. 16 of Consolidated Revised Guidelines on the measures to be taken by Ministries / Departments of GOI, State/ UT Govt. and State/ UT Authorities incorporating these guidelines are enclosed with the MHA order.

Accordingly, we have submitted the detailed work program during the extended lock down period up to 03.05.2020 along with the list of Manpower & Machineries to be involved in the Construction work to take suitable action for the issuance of necessary permission from District Administration in this regard.

Further, vide our letter no. 12 dated 23.04.2020 we informed that Press released no. 280 dated 20.04.2020 issued by Government of Tamilnadu that Government of Tamilnadu had instructed to continue to enforce all the existing restrictions issued by MHA order dated 24.03.2020 during extended lock down period i.e. up to 03.05.2020.

After that, a notification issued by Revenue and Disaster Management (D-II) Department, Govt. of Tamilnadu bearing no. 203 dated 23.04.2020 vide which it is informed that resumption of construction of road & bridge project can be done with taking all precaution as per Standard Operating Procedure (SOPs) for social distancing and obtain permission from District Administration.

Further, vide our letter no. 16 dated 08.05.2020 & 19 dated 20.05.2020 we informed that Government of Tamilnadu had instructed to continue to enforce all the existing restrictions issued by MHA order dated 24.03.2020 during extended lock down period i.e. up to 31.05.2020.

Furthermore, we also notified in our earlier correspondence that Ministry of Home Affairs, Govt. of India vide their order dated 29.04.2020 allowed the movement of stranded migrant workers to their home town and subsequently, Local officials of District Administration are now approaching to our staff/ labours directly & taking their willingness for movement to their home town; Due to this and havoc of spreading of coronavirus, our workers and labours are putting their voice/desire for roaming to their home town. Based on prevailing situation and circumstances thereto & on human ground we could not restrict them from going to their home town and many migrant labours/ staffs have registered their name for the movement to their home town.

Further, Concessionaire has also reported that order dated 31.05.2020 issued by Health and Family Welfare (P1) Department, Government of Tamilnadu vide which they notified that state of Tamilnadu has been divided into 8 zones and issued additional guidelines for strict adherence on movement of person/ vehicle, testing & quarantine strategies for management of COVID-19 in the state.

After that Government of India has announced "Unlock 1.0" in entire country except containment zones but Government of Tamilnadu has instructed to extended all restrictions issued vide additional guidelines for strict adherence on movement of person/ vehicle, testing & quarantine strategies for management of COVID-19 in the state.

In addition to that due to surge of cases of COVID-19 in State of Tamilndau, Government of these states has given instruction to compulsory quarantine period of 14 days for passenger/ people who are coming in the state from another state.

Thus, Concessionaire started construction activities in Project Highway after getting permission from District Administration as well as tried to get momentum of the Progress of work as like they have on 20.03.2020 but they are facing lots of challenges like non-availability of desired nos. of skilled labours, non-availability of desired staff for operation of our machineries, non-availability of spare parts in local market due to disturbance of supply chain, due to enforcement of 14 days Quarantine as per Govt. norms labours are also not willing to come back to work considering upcoming Monsoon season, etc. which are beyond of control of Concessionaire.

9. The second wave of COVID-19 in India appears to be ascending faster than the first wave that peaked in mid-September last year. Nevertheless, India is already leading the world in terms of average daily cases detected and registers the third-highest average daily deaths. The whole country is facing big difficulties and struggling for the survival of human life. The impact of this event is an extremely painful and great loss to the nation. Looking to such an uncontrolled situation, Supreme Court intervened on 22.04.2021 and asked for the national plan for COVID-19 with the central Government and took own cognizance of what it called a national health emergency situation. The Health System has been collapsed due to the severe scarcity of oxygen. The spread of Coronavirus cases in Tamil Nadu right now is so fast, that it took only half the duration to overtake the daily infection peak number reported in the first wave.

Due to many restrictions in persisting conditions arise due to occurring of 2nd wave of extra ordinary event COVID-19, the supply chain of required material is being disturbed and not in smooth shape



which leads to hampering the work progress during this valuable working season. Due to surge in cases of 2nd wave of COVID-19 drastically day by day and additional lockdown like restriction imposing by State Government, migrants labours are leaving the state and going to their native place under the fear of prevailing situation. Further migrants labours who were gone to their home at Holi Festival are not returning back due to fear and precarious situation of the spike of COVID-19 pandemic. Due to this condition, we are facing acute shortage of labour/operator/driver for the construction activities in Project Highway and work is being affected because of the impediments beyond the control of the Concessionaire. It is also pertaining to mention that despite taking all necessary precaution and follow the safety guidelines of COVID-19, unfortunately, our many manpower including senior-level deployed at Project i.e. have been infected by COVID-19.

10. COVID-19 cases due to 3<sup>rd</sup> wave is being drastically increased and occurring never-seen before spikes in infected cases of COVID-19 day by day. You may also aware that in our country 3.47 Lakh new cases in a day have been recorded on 20.01.2022, which is already bigger than the peak of the first wave of this pandemic in India and continuously increasing day by day.

It clearly shows that the 3<sup>rd</sup> wave of COVID-19 is spreading rapidly. It is also pertinent to mention that in Tamil Nadu 28,561 cases in a day have been recorded on 20.01.2022 (for reference, the highest number of cases per day in Tamil Nadu during the peak of 2<sup>nd</sup> wave was 36,184 cases per day on 21<sup>st</sup> May 2021) and continuously increasing day by day

In view of rising daily cases of the coronavirus disease (Covid-19), the Tamil Nadu government has imposed a complete lockdown in the state on Sunday (January 16, 2022) in view of the rising Covid-19 cases. The state government has been reimposing a Sunday lockdown in the state since January 9. The Tamil Nadu government had also extended the existing Covid-19 lockdown restrictions, including night curfew and imposed fresh restrictions around the Pongal festival till January 31. The city of Thanjavur has been continuing to report majority of cases in Tiruchirapalli region along with Tiruchi. This is the first time such a high number has been reported after the second wave in May 2021.

11. Unprecedented heavy rain affected the construction activities in the project highway due to the occurrence & effect of severe cyclonic storm MANDOUS on dated 09.12.2022.

Table 10.1. Details of Important Events

Sl. No	Date of Events	Description of Events	Remarks
1	03.01.2023	Review meeting held at New Delhi	
2	17.01.2023	Review meeting held at New Delhi	

The following figures represent the organization structure of the EPC and SPV Team.

1. Fig. 4 - Organization Chart - EPC Team

2. Fig. 5 - Organization Chart - SPV Team

Figure - 4 Organization Chart of EPC

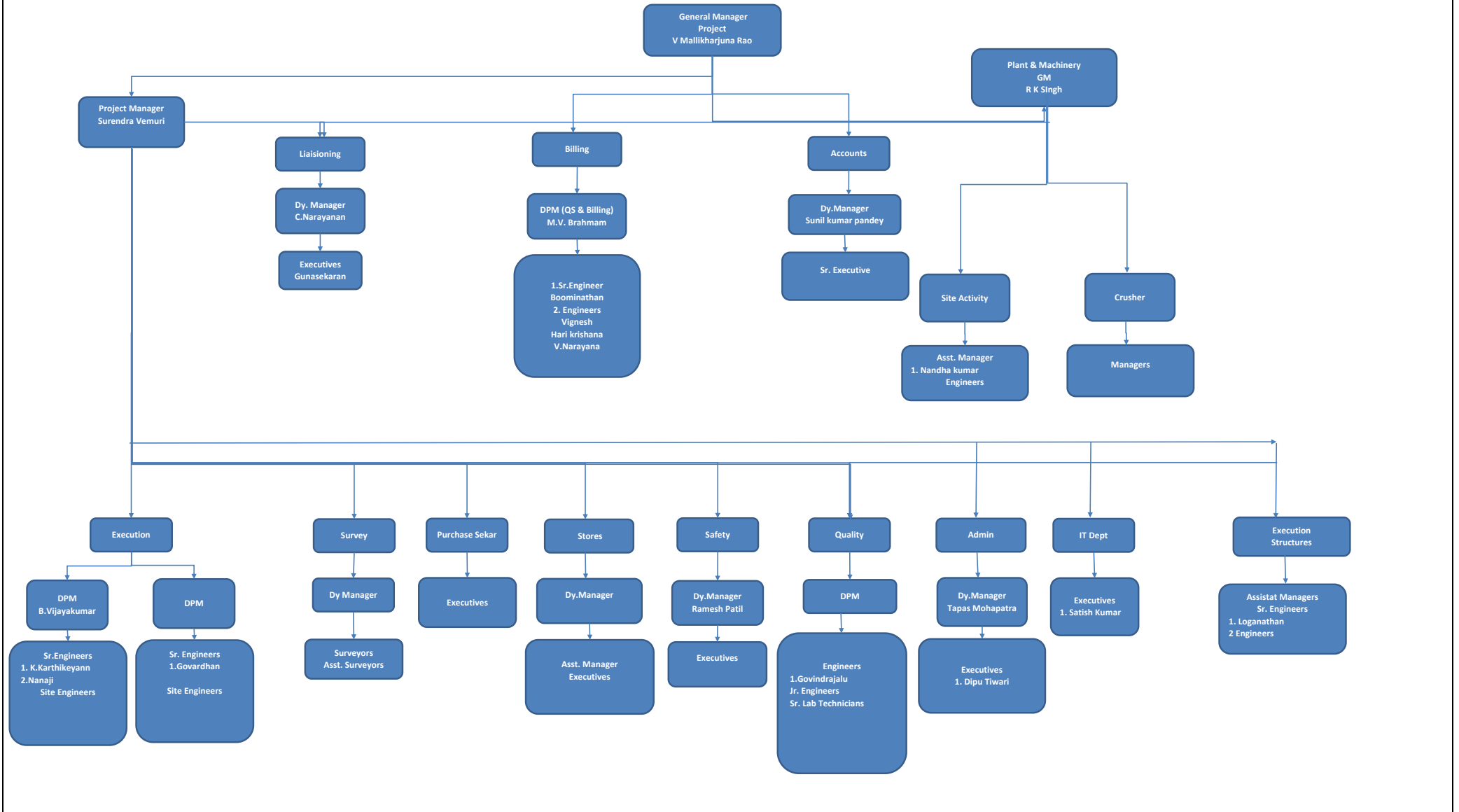
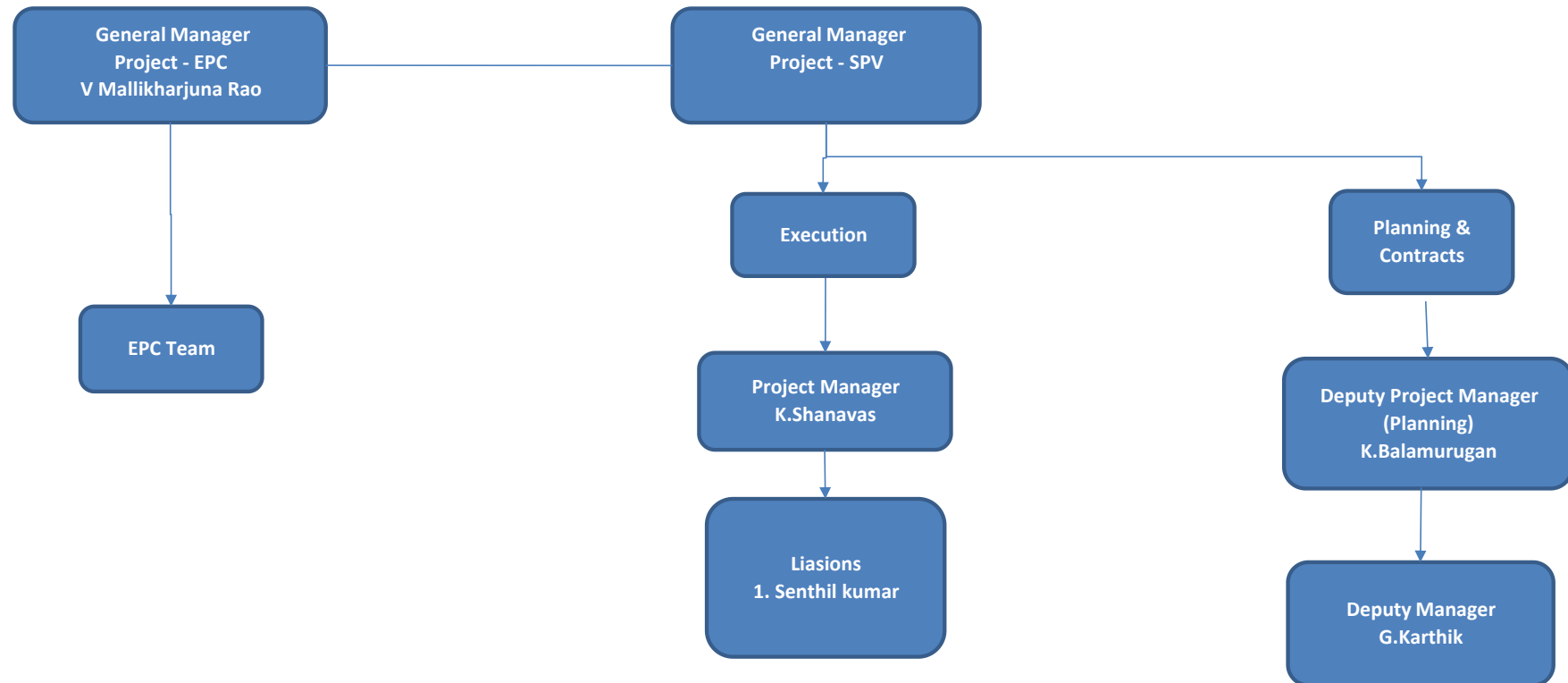


Figure - 5 Organization Chart of Concessionaire



12. List of Plants, Machinery and Equipment's and Man power

Table 12.1 List of Plants, Machinery and Equipment's

S.No	Name of the Machinery	Capacity / Model	Mobilized at Site	Remarks
1	Grader	120K2	5	
2	Excavator/JCB	JCB-220	3	
3	PT Roller		1	
4	Soil Compactor	HAMM 311	7	
5	Backhoe Loader	JCB 3DX	4	
6	Tipper	Bharat Benz- 3128C	21	
7	Transit Mixer	2523C	06	
8	Loader	455 ZX	10	
9	Trailer		2	
10	Water Tanker		9	
11	Diesel Tanker		2	
12	Tandem Roller		3	
13	Tractor	5036 D V-2	4	
14	Mobile Service Van		1	
15	Tower Light	AJASKY	7	
16	Hydra Crane		2	
17	Asphalt Batch Mix Plant		1	
18	Wet Mix Plant	250 TPH	1	
14	Concrete Batch Mix Plant 45 cum	45 cum	2	
15	Bitumen sprayer		2	
16	Crusher Plant (3 Stage)	250 TPH	2	
17	Weigh Bridge for Camp 100MT	100MT	4	
18	Weigh Bridge for Crusher 100MT	100MT	3	
19	Genset Base Camp	25KV	2	
20	Genset (Crusher) 63KVA	63KVA	1	
21	Genset (H.M & B/P)	82.50KV	2	
22	Genset (B/P-CP-45)	125KV	2	
23	Genset 650 KVA	650 KVA	1	
26	Genset (Crusher)	500KVA	2	

27	Genset 15KVA	45KVA	1	
28	Light moving vehicles-car, Jeep, Van		21	
29	Paver		3	
30	Kerb laying Machine		1	

## 13. Change of Scope Proposals

Table 13.1 - Status of Change of Scope Proposals

Sl. No.	Proposal Details	Date of Proposal	Current Status	COS Amount	Actual Date of Approval
1	Replacement of Pipe Culvert with box Culvert	25.04.2018	Approval obtained from the Authority.	3.76 Cr.	06.02.2020
2	Upgradation strengthening the Incident Management services.	10.05.2019	IE recommended to Authority vide ref. 148 for issuance under COS and is under scrutiny with Authority	NA	NA
3	Comprehensive Change of Scope proposal	19.03.2019	Approval obtained from the Authority.	9.37 Cr.	23.03.2022
4	Interchanging of Structures	26.09.2020	IE recommended to Authority for approval.	(-) 2.99 Cr.	NA



The following tables list out the correspondences between the parties.

Table 14.1. - Concessionaire to NHAI

Table 14.2. - NHAI to Concessionaire

Table 14.3. - Concessionaire to Independent Engineer

Table 14.4. - Independent Engineer to Concessionaire

Four laning of Cholapuram to Thanjavur from Km 116+440 to 164+275 section of NH-45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode.

**TABLE 14.1 - CORRESPONDANCE - CONCESSIONAIRE TO NHAI**

Sr. No.	Date	Letter No	Subject	Remarks
1	03.01.2023	PCTHPL/HO/CTP/PIU/001/2023	Submission of Extension Guarantee Bond to 1st and 2nd Mobilization Advanced BG-Reg	
2	04.01.2023	PCTHPL/HO/CTP/PIU/002/2023	Reimbursement of 50% Cost & Expenditure of IE's Payment for the month of Nov-22	
3	09.01.2023	PCTHPL/CTP/NHAI/2023/1740	Construction activities hampered due to public protest at Km 147+300 (BHS)-reg	
4	10.01.2023	PCTHPL/CTP/NHAI/2023/1741	Metal beam crash barrier damage by local public and not allowing for rectification work-Reg	
5	12.01.2023	PCTHPL/CTP/NHAI/2023/1745	Recording of Drone Video for the Month of December '2022.	
6	20.01.2023	PCTHPL/CTP/NHAI/2023/1751	Submission of GST payment Auditor certificate return and request to release the withheld GST amount (RA Bill-07)	
7	20.01.2023	PCTHPL/CTP/NHAI/2023/1752	Submission of GST payment Auditor certificate return and request to release the withheld GST amount (RA Bill-24)	
8	24.01.2023	PCTHPL/CTP/NHAI/2023/1757	Concessionaires compliance on laying OFC cable in the Project stretch-reg	
9	30.01.2023	PCTHPL/CTP/NHAI/2023/1768	Request for release of withheld amounts in the IPC's against damages-reg	

**Four laning of Cholapuram to Thanjavur from Km 116+440 to 164+275 section of NH-45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode.**

**TABLE 14.2 - CORRESPONDANCE - NHAI TO CONCESSIONAIRE**

Sr. No.	Date	Letter No	Subject	Remarks
1	02.01.2023	NHAI/PIU/Thanj/11026/28/2018/009	Rerouting of Existing canal from Km 146+600 to 147+050 and from Km 147+900 to Km 148+150-reg	
2	05.01.2023	NHAI/PIU/Thanj/11026/15/2018/064	Bank guarantee submitted for mobilization advance payment 1st and 2nd installment-Confirmation of extended BG-reg	
3	06.01.2023	NHAI/19011/04(NRSW)/2018/RO Madurai/025	Observance of National Road safety week during 11th to 17th January 2023, under swachhata pakhwada-reg	
4	06.01.2023	NHAI/PIU/Thanj/11026/16/2018/077	Extension of time for IE services upto 31.08.2023_Proposal submitted for approval of competent authority-Approval of Competent Authority-communiated-reg	
5	06.01.2023	NHAI/PIU/Thanj/11021/31/2009/079	Request for permission to lay underground OFC on Vikravandi-Thanjavur section NH 45C along the road -Remarks called for-reg	
6	07.01.2023	NHAI/PIU/Thanj/11099/05/2009/082	Application under RTI by Smt. Elen P.Kurian-Report called for-reg -	
7	09.01.2023	NHAI/PIU/Thanj/11015/51/2011/095	Activities to be caried out before and during Road safety week-reg	
8	12.01.2023	NHAI/11015/139/2017/RO Chennai/90	Grievance registered on CPGRAMS Portal No. MORTH E 2022 17559 dated 18.11.2022 & MORTH E 2022 17699 dated 21.11.2022 forwarded-reg -	
9	12.01.2023	NHAI/11015/139/2017/RO Chennai/094	Grievance registered on CPGRAMS portal No. MORTH E 2022 17634 dated 20.11.2022 & MORTH E 2022 19145 dated 24.12.2022-forwarded-reg	
10	12.01.2023	NHAI/11015/139/2017/RO Chennai/96	Grievance registered on CPGRAMS portal no. MORTH E 2022 18429 dated 04.12.2022-forwarded-reg	
11	13.01.2023	NHAI/PIU/Thanj/11026/06/2018/136	Local villagers protest to provide PUP at Km. 147+300-Feasibility report requested-reg	
12	18.01.2023	NHAI/19011/05/05/2018/RO Madurai/84	Expedite the process of rectification of pending black spots/Accident spots-reg	
13	19.01.2023	NHAI/PIU/Thanj/11099/05/2009/187	Information sought for under Right to Information Act 2005 by Sh. Sanjay Pal-reply sent-reg	
14	21.01.2023	NHAI/PIU/Thanj/11026/32/2019/201	Payment of IPC 07 of 4th Payment Milestone against monthly executed works-Payment intimation	
15	23.01.2023	NHAI/PIU/Thanj/11026/12/2018/219	Payment of RA Bill No. 25-Payment intimation-reg	

Four laning of Cholapuram to Thanjavur from Km 116+440 to 164+275 section of NH-45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode.

**TABLE 14.3 - CORRESPONDANCE - CONCESSIONAIRE TO INDEPENDENT ENGINEER**

Sr. No.	Date	Letter No	Subject	Remarks
1	02.01.2023	PCTHPL/CTP/IE/2023/1731	Submission of IPC 08 of 4th PMS against monthly executed work as per NHAI Policy guidelines dated 22.06.2020	
2	04.01.2023	PCTHPL/CTP/IE/2023/1733	Submission of Escrow Account Statement for the month of December-2022-reg	
3	06.01.2023	PCTHPL/CTP/IE/2023/1735	Submission of Monthly Progress Report for the month of December-2022-reg	
4	06.01.2023	PCTHPL/CTP/IE/2023/1736	Submission of Monthly status & Management (O&M) Report for the month of December 2022-reg	
5	09.01.2023	PCTHPL/CTP/IE/2023/1739	Resubmission of IPC 08 of 4th PMs against monthly executed work as per NHAI policy guidelines	
6	24.01.2023	PCTHPL/CTP/IE/2023/1758	Compliance report-Inspection Report of Independent Engineer for the month of December 2022-Reg	
7	24.01.2023	PCTHPL/CTP/IE/2023/1759	Review of Monthly Status & Management Report (O&M) for the month of December 2022-Reply-Reg	
8	24.01.2023	PCTHPL/CTP/IE/2023/1760	The Concessionaires compliance-Review of Monthly Status & Management Report (O&M) for the month of December 2022-Reply-reg	
9	27.01.2023	PCTHPL/CTP/IE/2023/1761	Request to release 3rd Biannual annuity as per Cl.23.6.3 of CA, interest on 3rd Biannual annuity as per Cl. 23.6.4 of CA	
10	27.01.2023	PCTHPL/CTP/IE/2023/1762	Compliance report-Review of monthly progress report for the month of December 2022-reg	
11	29.01.2023	PCTHPL/CTP/IE/2023/1766	Submission of methodology for rebarring in dirt wall including Return wall with Epoxy Resin-reg	

**Four laning of Cholapuram to Thanjavur from Km 116+440 to 164+275 section of NH-45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode.**

**TABLE 14.4 - CORRESPONDANCE - INDEPENDENT ENGINEER TO CONCESSIONAIRE / NHAI**

Sr. No.	Date	Letter No	Subject	Remarks
1	04.01.2023	THEME/NHAI/CHO-TNJR/CON/0123/1326	Submission of condition survey report for the existing minor bridge at Km.122+058 LHS-reg	
2	07.01.2023	THEME/NHAI/CHO-TNJR/CON/0123/1328	Submission of IPC 08 of 4th payment milestone against monthly executed work as per NHAI Policy guidelines dated 22.06.2020-reg	
3	11.01.2023	THEME/NHAI/CHO-TNJR/ATH/0123/965	Concessioanires submission of IPC 08 of PMS 04 against monthly executed work as per NHAI policy guidelines dated 22.06.2020. -comments recommendations by IE-reg	
4	12.01.2023	THEME/NHAI/CHO-TNJR/ATH/0123/966	Request to lay underground OFC on vikravandi-thanjavur section of NH45C along the road- Remarks called for-reg	
5	16.01.2023	THEME/NHAI/CHO-TNJR/CON/0123/1332	Review of monthly progress report for the month of December 2022-reg	
6	16.01.2023	THEME/NHAI/CHO-TNJR/CON/0123/1333	Review of monthly status & management report (O&M) for the month of December 2022-reg	
7	17.01.2023	THEME/NHAI/CHO-TNJR/ATH/0123/968	Inspection report for the month of December 2022-reg	
8	17.01.2023	THEME/NHAI/CHO-TNJR/ATH/0123/969	O&M Inspection report for the month of December 2022 for PCC-1-reg	
9	19.01.2023	THEME/NHAI/CHO-TNJR/ATH/0123/973	Local villagers protest to provide PUP at Km 147+300- Feasibility report requested	
10	24.01.2023	THEME/NHAI/CHO-TNJR/ATH/0123/975	Metal Beam crash Barrier damaged by local public and not allowing for rectification work-reg	

15. Progress Photographs

Sr. No	Description	Location	Side	Remarks
1.	RE Wall Filling work in Progress	141+150	LHS	Bypass
2.	RE Wall Filling work in Progress	130+400	RHS	Existing Road



Sr. No	Description	Location	Side	Remarks
3.	Subgrade Layer work in progress	131+510	LHS	RE Wall
4.	Subgrade Layer work in progress	141+500	RHS	Bypass

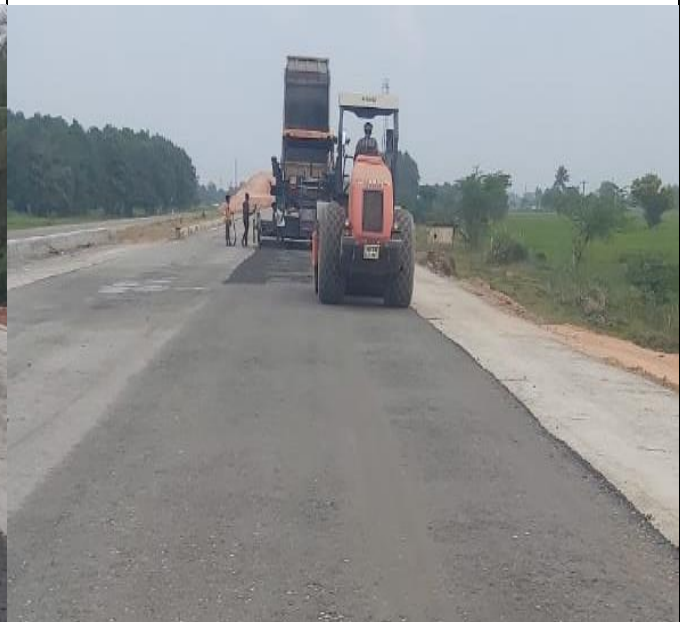




Sr. No	Description	Location	Side	Remarks
5.	CTSB Layer Work in progress	131+690	LHS	Existing Road
6.	CTSB Layer Work in progress	141+510	LHS	Bypass



Sr. No	Description	Location	Side	Remarks
7.	WMM Rolling Work in process	155+590	LHS	Bypass
8.	WMM Laying Work in process	150+735	LHS	Bypass





Sr. No	Description	Location	Side	Remarks
9.	DBM Layer Work in progress	155+420	LHS	Bypass
10.	DBM Layer Work in progress	131+510	LHS	Existing Road



Sr. No	Description	Location	Side	Remarks
11.	Pile concreting work in progress	149+355	LHS	Major Bridge
12.	Raft concrete pouring work in progress	133+948	LSR	Box Culvert





Sr. No	Description	Location	Side	Remarks
13.	RCC Girder launching work in progress	133+345	RHS	Minor Bridge

