



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

PATEL SETHIYAHOPU - CHOLOPURAM HIGHWAY PRIVATE LIMITED

Four laning of Sethiyahopu - Cholopuram from Km 65.960 to Km.116.440 section of NH-45C in the state of Tamil Nadu under NHDP Phase-IV on Hybrid Annuity Mode.

INDEPENDENT ENGINEER  
M/s. Theme Engineering Services Pvt. Ltd

**MONTHLY PROGRESS REPORT**  
**OCTOBER 2018**

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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 Sethiyahopu to Cholopuram section of NH-45C is an important link to connect Metropolitan city of Chennai to religious and tourist places of Cholopuram, Thanjavur, kumbakonam, Puducherry. The project is also expected to provide improved connectivity to other religious places & other major cities like 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 65.960 to Km 116.440 (approx. 50.480 Km). The Authority had resolved to augment for four Laning of Sethiyahopu - Cholopuram from Km 65.960 to Km 116.440 section of NH - 45C in the State of Tamil Nadu under NHDP Phase-IV on design, build, operate and transfer (the "DBOT Annuity" or "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

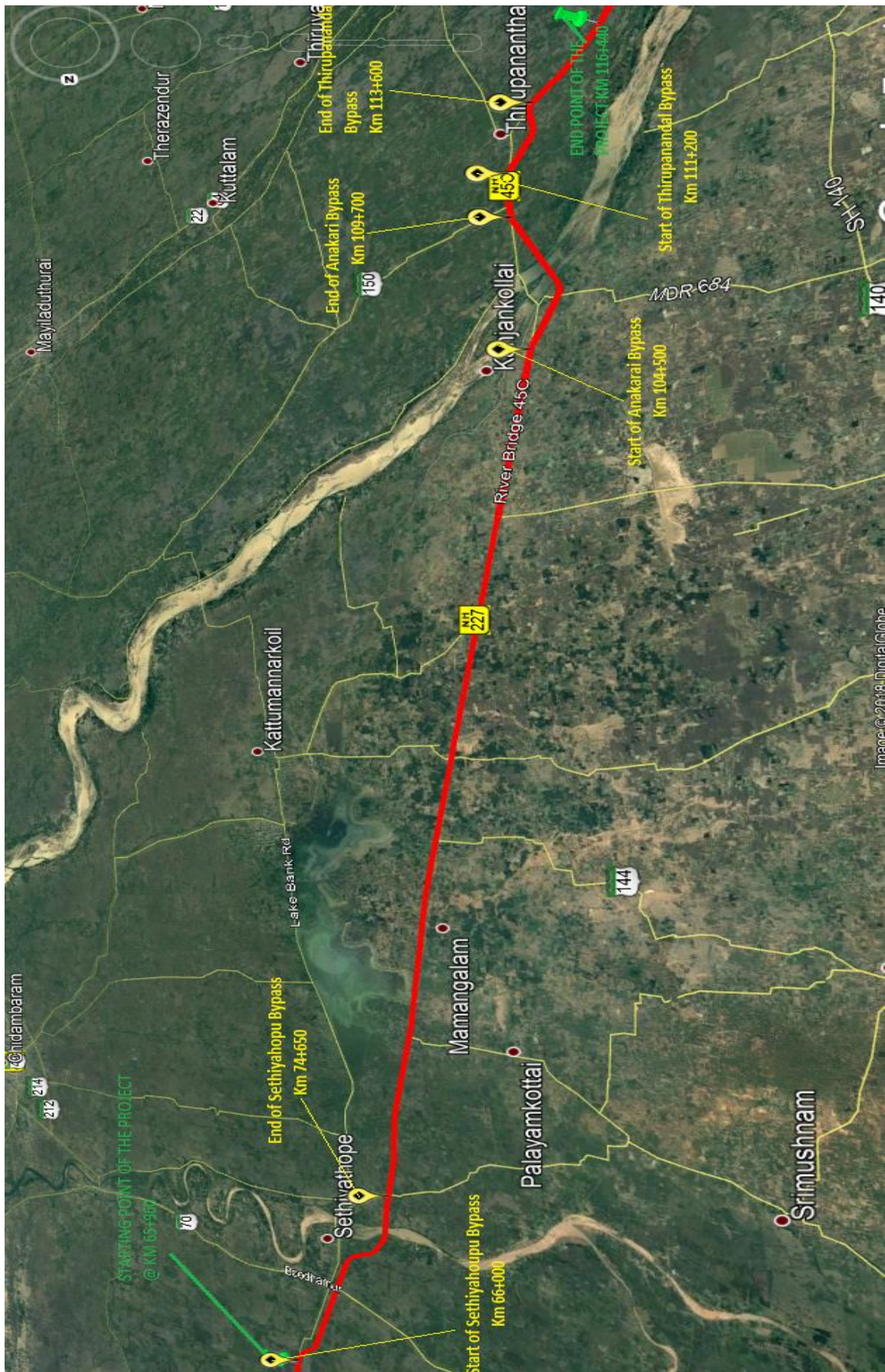
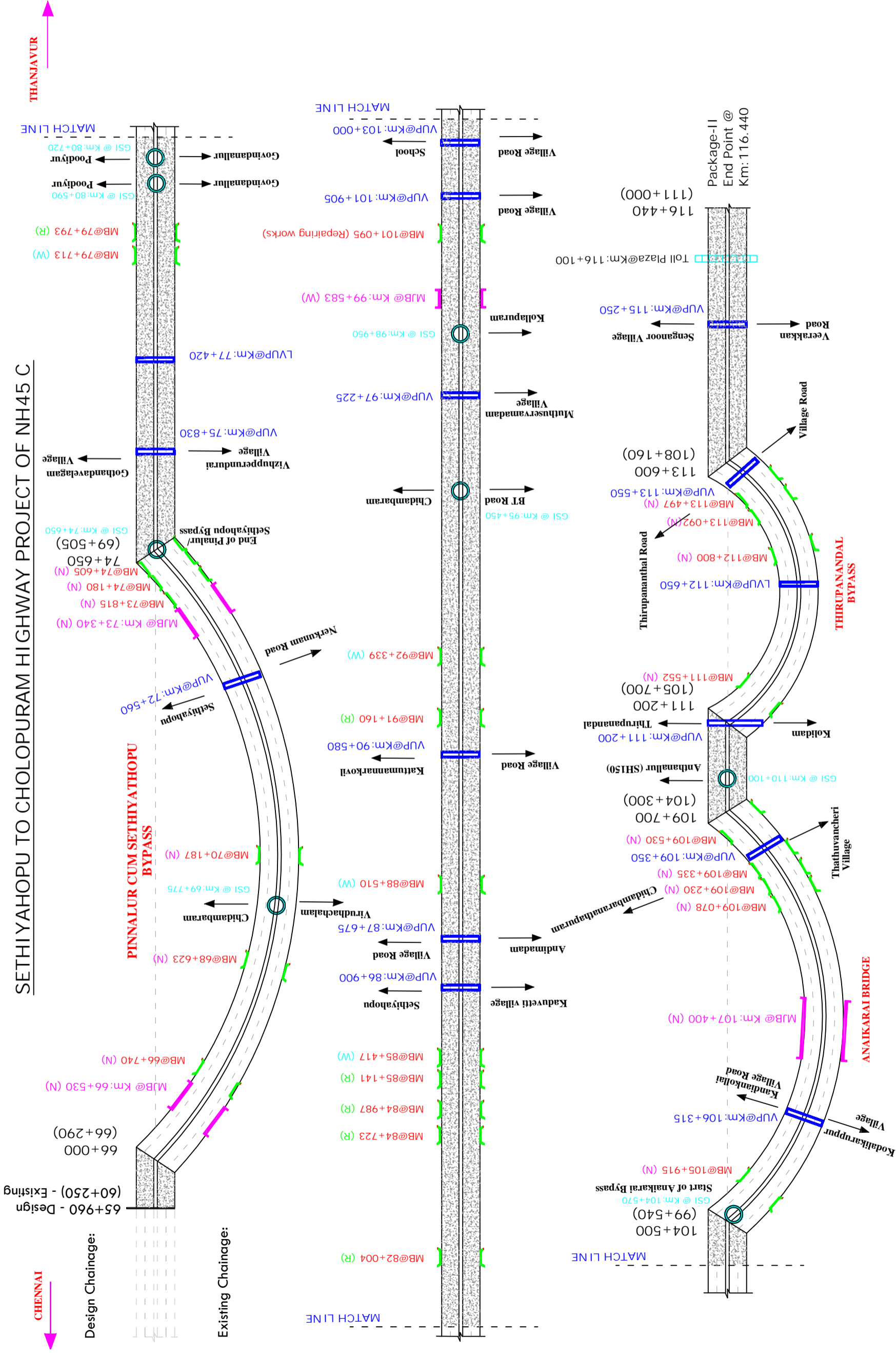


Figure 2: Project Alignment Map



CHENNAI

THANJAVUR

Design Chainage:

Existing Chainage:

MATCH LINE

MATCH LINE

MATCH LINE

Package-II End Point @ Km: 116.440

Pinnaluru /Sethiyathopu Bypass  
Km: 66+000 to 74+650

Sl No	Description	Unit	Quantity
1.	Culvert	Nos.	05
2.	Minor Bridge	Nos.	06
3.	Major Bridge	Nos.	02
4.	VUP/LVUP	Nos.	01
5.	Grade Separator	Nos.	02

Widening of Existing Road  
Km: 74+650 to 104+500

Sl No	Description	Unit	Quantity
1.	Culvert	Nos.	29
2.	Minor Bridge	Nos.	10
3.	Major Bridge	Nos.	01
4.	VUP/LVUP	Nos.	08
5.	Grade Separator	Nos.	04

Anaikarai Bypass  
Km: 104+500 to 109+700

Sl No	Description	Unit	Quantity
1.	Culvert	Nos.	12
2.	Minor Bridge	Nos.	05
3.	Major Bridge	Nos.	01
4.	VUP/LVUP	Nos.	02
5.	Grade Separator	Nos.	01

Widening of Existing Road  
Km: 109+700 to 111+200

Sl No	Description	Unit	Quantity
1.	Culvert	Nos.	6
2.	Minor Bridge	Nos.	-
3.	Major Bridge	Nos.	-
4.	VUP/LVUP	Nos.	01
5.	Grade Separator	Nos.	01

Thirupandanai Bypass  
Km: 111+200 to 113+600

Sl No	Description	Unit	Quantity
1.	Culvert	Nos.	-
2.	Minor Bridge	Nos.	04
3.	Major Bridge	Nos.	-
4.	VUP/LVUP	Nos.	02
5.	Grade Separator	Nos.	-

Widening of Existing Road  
Km: 113+600 to 116+440

Sl No	Description	Unit	Quantity
1.	Culvert	Nos.	08
2.	Minor Bridge	Nos.	-
3.	Major Bridge	Nos.	-
4.	VUP/LVUP	Nos.	01
5.	Toll Plaza	Nos.	01

LEGENT:

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

Salient Features of Project:

Sl No	Description	Unit	Scope
1.	Total Length of Project	Km	50.480
2.	Length of Widening Portion	Km	34.230
3.	Length of Bypass	Km	16.250
4.	Length of service/Slip Road	Km	27.100
5.	Culverts	Nos.	53
	Box Culvert	Nos.	01
	Slab Culvert	Nos.	07
	Minor Bridge	Nos.	25
	Major Bridge	Nos.	04
	VUP/LVUP	Nos.	15
	Grade Separated Structure	Nos.	08
	Toll Plaza	Nos.	01
	Minor Intersection	Nos.	100
	Major Intersection	Nos.	07
	Bus Bays and Shelters	Nos.	09

Drawing Title

Strip Plan - Sethiyahopu to Cholapuram Highway Project

Date: 31-08-2018

Project No. PSCHP/NHA/TN/001

Table- 01: Details of Project Alignments

Existing and Proposed Alignments							
Sl. no.	Existing Chainage (Km)		Design Chainage (Km)		LENGTH (Km)	TCS Type	Remarks
	From	To	From	To			
1	60.250	Bypass	65.960	69.460	3.500	Type-A-3 (Fig 2.4 of the manual)	Bypass
2	Bypass	Bypass	69.460	70.090	0.630	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
3	Bypass	Bypass	70.090	72.350	2.260	Type-A-3 (Fig 2.4 of the manual)	Bypass
4	Bypass	Bypass	72.350	72.775	0.425	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
5	Bypass	Bypass	72.775	74.335	1.560	Type-A-3 (Fig 2.4 of the manual)	Bypass
6	Bypass	69.820	74.335	74.960	0.625	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
7	69.820	70.375	74.960	75.520	0.560	Type-A-3 (Fig 2.4 of the manual)	Eccentric Widening
8	70.375	71.010	75.520	76.150	0.630	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
9	71.010	71.855	76.150	76.900	0.750	Type-B (Fig 2.6 of the manual) with both side service road	Eccentric Widening
10	71.855	72.170	76.900	77.220	0.320	Type-B (Fig 2.6 of the manual) with both side service road	Concentric Widening
11	72.170	72.570	77.220	77.620	0.400	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
12	72.570	72.800	77.620	77.850	0.230	Type-B (Fig 2.6 of the manual) with both side service road	Concentric Widening
13	72.800	73.230	77.850	78.300	0.450	Type-B (Fig 2.6 of the manual) with both side service road	Eccentric Widening
14	73.230	75.105	78.300	80.150	1.850	Type-A-3 (Fig 2.4 of the manual)	Eccentric Widening
15	75.105	76.080	80.150	81.120	0.970	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
16	76.080	76.460	81.120	81.500	0.380	TCS-1	Concentric Widening
17	76.460	77.000	81.500	82.240	0.740	Type-A-3 (Fig 2.4 of the manual)	Eccentric Widening
18	77.000	78.115	82.240	83.150	0.910	Type-B (Fig 2.6 of the manual) with both side service road	Eccentric Widening
19	78.115	79.110	83.150	84.150	1.000	Type-B (Fig 2.6 of the manual) with both side service road	Concentric Widening
20	79.110	79.510	84.150	84.550	0.400	Type-B (Fig 2.6 of the manual) with both side service road	Eccentric Widening
21	79.510	80.610	84.550	85.650	1.100	Type-A-3 (Fig 2.4 of the manual)	Eccentric Widening
22	80.610	81.555	85.650	86.580	0.930	Type-B (Fig 2.6 of the manual) with both side service road	Concentric Widening
23	81.555	82.170	86.580	87.210	0.630	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	

24	82.170	82.320	87.210	87.360	0.150	Type-B (Fig 2.6 of the manual) with both side service road	Concentric Widening
25	82.320	82.910	87.360	87.990	0.630	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
26	82.910	83.180	87.990	88.265	0.275	Type-B (Fig 2.6 of the manual) with both side service road	Concentric Widening
27	83.180	83.660	88.265	88.745	0.480	Type-A-3 (Fig 2.4 of the manual)	Eccentric Widening
28	83.660	85.220	88.745	90.265	1.520	Type-B (Fig 2.6 of the manual) with both side service road	Concentric Widening
29	85.220	85.850	90.265	90.895	0.630	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
30	85.850	86.555	90.895	91.600	0.705	Type-A-3 (Fig 2.4 of the manual)	Eccentric Widening
31	86.555	87.015	91.600	92.050	0.450	TCS-1	Concentric Widening
32	87.015	87.525	92.050	92.560	0.510	Type-A-3 (Fig 2.4 of the manual)	Eccentric Widening
33	87.525	90.000	92.560	95.035	2.475	Type-B (Fig 2.6 of the manual) with both side service road	Concentric Widening
34	90.000	90.830	95.035	95.865	0.830	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
35	90.830	91.350	95.865	96.400	0.535	Type-B (Fig 2.6 of the manual) with both side service road	Concentric Widening
36	91.350	91.970	96.400	96.910	0.510	TCS-1	Concentric Widening
37	91.970	92.460	96.910	97.535	0.625	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
38	92.460	93.550	97.535	98.535	1.000	TCS-1	Concentric Widening
39	93.550	94.370	98.535	99.335	0.800	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
39A	94.370	94.875	99.335	99.840	0.505	Type-A-3 (Fig 2.4 of the manual)	Eccentric Widening
40	94.875	95.350	99.840	100.300	0.460	Type-B (Fig 2.6 of the manual) with both side service road	
41	95.350	96.630	100.300	101.590	1.290	Type-A-3 (Fig 2.4 of the manual)	Eccentric Widening
42	96.630	97.260	101.590	102.225	0.635	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
43	97.260	97.720	102.225	102.685	0.460	Type-B (Fig 2.6 of the manual) with both side service road	Eccentric Widening
44	97.720	98.360	102.685	103.315	0.630	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
45	98.360	99.190	103.315	104.160	0.845	Type-B (Fig 2.6 of the manual) with both side service road	Eccentric Widening
46	99.190	Bypass	104.160	104.990	0.830	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
47	Bypass	Bypass	104.990	106.000	1.010	Type-A-3 (Fig 2.4 of the manual)	Bypass



48	Bypass	Bypass	106.000	106.625	0.625	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
49	Bypass	Bypass	106.625	109.035	2.410	Type-A-3 (Fig 2.4 of the manual)	Bypass
50	Bypass	104.260	109.035	109.660	0.625	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
51	104.260	105.015	109.660	110.515	0.855	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
52	105.015	105.390	110.515	110.890	0.375	Type-B (Fig 2.6 of the manual) with both side service road	Eccentric Widening
53	105.390	Bypass	110.890	111.515	0.625	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
54	Bypass	Bypass	111.515	112.430	0.915	Type-A-3 (Fig 2.4 of the manual)	Bypass
55	Bypass	Bypass	112.430	112.840	0.410	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
56	Bypass	Bypass	112.840	113.225	0.385	Type-A-3 (Fig 2.4 of the manual)	Bypass
57	Bypass	108.410	113.225	113.850	0.625	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
58	108.410	109.395	113.850	114.835	0.985	Type-A-3 (Fig 2.4 of the manual)	Eccentric Widening
59	109.395	110.220	114.835	115.660	0.825	Figure 7.8- Grade separator and its approaches with RE wall and both side 5.5 m wide Slip road	
60	110.220	111.000	115.660	116.440	0.780	Type-A-3 (Fig 2.4 of the manual)	Eccentric Widening

## 1.1. Project Overview

<b>Name of Work</b>	Four Laning of Sethiyahopu-Cholopuram from km. 65.960 to Km.116.450 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 Sethiyahopu –Cholopuram 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, S.F B1&B2, gateway Apartments, koranattu Karuppur, Kumbakonam – 612501.
<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>	50.480 Kms
<b>Total Bid Cost</b>	Rs. 1461.00 Crores (as per concession agreement)
<b>Date of Concession Agreement</b>	November 9, 2017
<b>Concession Period</b>	17 Years ( Construction Period 2 Years from Appointed date, Operation period 15 years from COD)
<b>Appointed Date</b>	16.08.2018
<b>Construction Period</b>	2 years from Appointed date
<b>Completion Date</b>	15.08.2020
<b>Maintenance Period</b>	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	50.48 Km.
Service Road/ Slip Road	27.10 Km
Major Bridge	04 Nos.
Minor Bridge	26 Nos.
Grade Separate Intersection	08 Nos.
Vehicular Underpass	13 Nos.
Light Vehicular Underpass	2 Nos.
Box Culverts	53 Nos.
Slab Culverts	07 Nos.
Major Intersections	100 Nos.
Minor Intersections	07 Nos.
Bus Bays	09 Nos.
Toll Plaza	01 Nos.

### 1.3. Contractual Project Milestones

Following is a listing of the Key Project Milestones:

Mile Stone	Description	Target Date
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.	18 <sup>th</sup> March 2019
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	16 <sup>th</sup> July 2019
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	22 <sup>nd</sup> March 2020
Scheduled Completion	Concessionaire shall have completed Project on 730 <sup>th</sup> day from the Appointed Date	15 <sup>th</sup> August 2020

### 1.4. Payment milestone during Construction Period

Payment Mile Stone	Eligibility Criteria	Payment Amount (Rs.)
Mile Stone-I	On Achievement of 10% of Physical Progress	116.88 Crs.
Mile Stone-II	On Achievement of 30% of Physical Progress	116.88 Crs.
Mile Stone-III	On Achievement of 50% of Physical Progress	116.88 Crs.
Mile Stone-IV	On Achievement of 75% of Physical Progress	116.88 Crs.
Mile Stone-V	On Achievement of 90% of Physical Progress	116.88 Crs.

### 1.5. Permits & Approvals

Sr. No.	Details	Authority	Current Status	Remarks
1	Extraction of Boulders from Quarries	Dist. Mining Officer	Obtained	We have executed an agreement with Mr. Thiru V. Sekar for supply of boulders that is having a valid license for extraction of boulders for the quarry at Padalur Village, Perambalur District.
2	Installation of Crusher	Village Panchayat Head	Obtained	
3	-----D O-----	Pollution Control Board	Obtained	
4	Use of Explosives	Distt. Collector	Obtained	
5	Labour License	Labour Commissioner	Obtained	
6	Environmental Clearance		NA	

Sr. No.	Details	Authority	Current Status	Remarks
7	Trees Cutting Permission	Forest department through NHAI	In Progress	Tree felling permission obtained for all the three districts.
8	Electric Poles Shifting	Tamilnadu Electricity Board	In progress	Work in progress in Cuddalore & Thanjavur district, for Ariyalur district, estimate approval is in progress.
9	Water Pipes Shifting	Tamilnadu Water Supply and Drainage Board	In Progress	All the estimates are approved and supervision charges also remitted to the concern department.
10	Drawing Water from river/ reservoir		NA	

## 2. Right of Way Status

## 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>Full Right of Way (full width)</b>				
Stretch	65.960 to 75.150	9.190	60.00	Within 15 days of date of Agreement.
Stretch	75.150 to 82.380	7.230	45.00	
Stretch	82.380 to 83.080	0.700	60.00	
Stretch	83.080 to 84.050	0.970	45.00	
Stretch	84.050 to 86.440	2.390	60.00	
Stretch	86.440 to 87.660	1.220	52.50	
Stretch	87.660 to 91.730	4.070	45.00	
Stretch	91.730 to 93.730	2.000	52.50	
Stretch	93.730 to 95.900	2.170	45.00	
Stretch	95.900 to 99.700	3.800	60.00	
Stretch	99.700 to 104.500	4.800	30.00	
Stretch	104.500 to 109.700	5.200	60.00	
Stretch	109.700 to 110.980	1.280	30.00	
Stretch	110.980 to 113.700	2.720	60.00	
Stretch	113.700 to 116.440	2.740	30.00	
<b>Total Length</b>		<b>50.480</b>		

	Design Chainage (Km)	Design Length (Km)	Width (m)	Remarks
Stretch	099.700 to 104.500	4.800	15.00	Within 90(Ninety) days of the Appointed date
Stretch	109.700 to 110.980	1.280	15.00	
Stretch	113.700 to 116.400	2.740	15.00	

Besides this, the Authority has to acquire additional land at Toll plaza location, Bus bays, Turning radius at Major junctions.

Sl. No.	Description	Unit	Present Status	Remarks
A)	<b>Total Length of the Project Highway</b>	<b>Km</b>	<b>50.48</b>	
i)	Use of Existing Road Portion	Km	34.23	
ii)	Proposed Bypass / Realignment portion	Km	16.25	
B)	<b>Hindered Length</b>			
i)	Paddy/Cotton fields	Km	5.450	
ii)	Existing Buildings	Km	8.250	
iii)	Electrical Lines	Km	4.350	
iv)	Trees	Km	3.175	
v)	Rural Water Supply lines	Km	20.914	
C)	Net Hindered Length (both Side)	Km	42.770	
D)	Total Project Length (both Side)	Km	100.96	
E)	<b>% Hindered Length</b>	<b>%</b>	<b>42.36%</b>	

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

The status of compensation disbursed is as below: -

SL No.	Name of the District	Total No. of Land cases	Amount paid (in Nos.)	Balance to be Paid (in Nos.)	Remarks
1	Cuddalore	710	537	173	
2	Ariyalur	328	100	228	
3	Thanjavour	102	53	49	
	<b>Total in Nos.</b>	<b>1140</b>	<b>690</b>	<b>450</b>	
		<b>Total in %</b>	<b>60.53%</b>	<b>39.47%</b>	

Sl No.	Name of the District	Total No. of structures	Amount paid (in Nos.)	Balance to be Paid (in Nos.)	Remarks
1	Cuddalore	386	231	155	
2	Ariyalur	359	59	300	
3	Thanjavur	153	153	0	
	<b>Total in Nos.</b>	<b>898</b>	<b>443</b>	<b>455</b>	
		<b>Total in %</b>	<b>49.33%</b>	<b>50.66%</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. are as below -

Sr. No.	From	To	Length	Effective Hindered Length	Side	Remarks
1	66+100	66+260	160	320	BHS	Veeranam Pipe Line
2	68+550	68+620	70	140	BHS	Compensation Disbursement balance - Not allowed to work by owner
3	70+520	70+600	80	160	BHS	Compensation Disbursement balance - Not allowed to work by owner
4	70+800	70+900	100	200	BHS	Compensation Disbursement balance - Not allowed to work by owner
5	71+400	71+700	300	600	BHS	Compensation Disbursement balance - Not allowed to work by owner
6	72+450	72+600	150	300	BHS	Compensation Disbursement balance - Not allowed to work by owner
7	72+600	72+700	100	200	BHS	Compensation Disbursement balance - Not allowed to work by owner
8	72+800	73+100	300	600	BHS	Compensation Disbursement balance - Not allowed to work by owner
9	73+900	74+200	300	600	BHS	Compensation Disbursement balance - Not allowed to work by owner
10	74+570		10	20	BHS	Structure - Payment pending

Sr No.	From	To	Length	Effective Hindered Length	Side	Remarks
11	75+500	76+150	650	1300	BHS	Compensation Disbursement balance - Not allowed to work by owner
12	76+300	76+500	200	400	BHS	Compensation Disbursement balance - Not allowed to work by owner
13	77+200	77+600	400	800	BHS	Village Limit - Ribbon Development - Compensation Disbursement balance - Not allowed to work owner
14	80+100	81+150	1050	2100	BHS	Village Limit - Ribbon Development - Compensation Disbursement balance - Not allowed to work owner
15	82+700	84+500	1800	3600	BHS	Compensation Disbursement balance - Not allowed to work by owner
16	84+700	88+200	3500	7000	BHS	Compensation Disbursement balance - Not allowed to work by owner
17	88+900	91+000	2100	4200	BHS	Compensation Disbursement balance - Not allowed to work by owner
18	95+050	95+850	800	1600	BHS	Village Limit - Ribbon Development - Compensation Disbursement balance - Not allowed to work owner
19	98+500	99+400	900	1800	BHS	Village Limit - Ribbon Development - Compensation Disbursement balance - Not allowed to work owner
20	99+400	99+900	500	500	RHS	Compensation Disbursement balance - Not allowed to work by owner
21	99+900	100+300	400	800	BHS	Village Limit - Ribbon Development - Compensation Disbursement balance - Not allowed to work owner
22	100+300	101+600	1300	1300	RHS	Compensation Disbursement balance - Not allowed to work by owner
23	101+600	102+230	630	1260	BHS	Village Limit - Ribbon Development - Compensation Disbursement balance - Not allowed to work owner
24	102+230	102+700	470	940	BHS	Village Limit - Ribbon Development - Compensation Disbursement balance - Not allowed to work owner
25	102+700	103+320	620	620	RHS	Compensation Disbursement balance - Not allowed to work by owner



Sr No.	From	To	Length	Effective Hindered Length	Side	Remarks
26	103+320	104+200	880	880	RHS	Compensation Disbursement balance - Not allowed to work by owner
27	104+200	104+500	300	600	BHS	Compensation Disbursement balance - Not allowed to work by owner
28	109+500	110+600	1100	2200	BHS	Village Limit - Ribbon Development - Compensation Disbursement balance - Not allowed to work owner
29	110+600	110+900	300	600	BHS	Compensation Disbursement balance - Not allowed to work by owner
30	110+900	111+100	200	200	RHS	Compensation Disbursement balance - Not allowed to work by owner
31	112+200	112+400	200	400	BHS	Temple Land, Local not allowing to Work
32	112+900	113+450	550	1100	BHS	Temple Land, Local not allowing to Work
33	114+400	114+650	250	500	BHS	Village Limit - Ribbon Development - Compensation Disbursement balance - Not allowed to work owner
34	115+700	116+440	740	1480	BHS	Toll Plaza Area - LA under Progress
	<b>Total Hindered Length (Km.)</b>			<b>39.320</b>		
	<b>Total Project Length including both side (Km.)</b>			<b>100.960</b>		
	<b>% Hindered Length</b>			<b>38.95%</b>		

Table 2.1.6 - Hindrance Photographs

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	10	Trees (2 Nos)	66+400					
			67+400		Motor Room	25		
			67+450		Transformer	20		
			67+850		Motor Room	50		
			67+850		Trees			
			67+850		Bore Well	20		
			67+850	68+200	EB Pole (10Nos)	250		
	100	Transformer & 3 EB Poles	68+200					
			68+600		Motor Room & Tree	50		
			68+600		Sluice Gate (2 Nos)	40		
	500	EB Poles (25Nos)	68+850	69+750				
		Well & Trees	68+850					
		Transformer	69+080					


Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Huts ( 3 Nos) & Building	69+720	69+750				
		Bore Well & Water Tank	69+750					
			69+750		Tin Shed			
	250	EB Poles (10 Nos)	69+800	69+950				
		Building	69+800					
		Flag Post Pedestal	69+850					
	25	Well, Coconut Farm	70+000					
	150	HT Line Crossing & EB Poles (6 Nos)	70+030	7+200				
		Pump Set & Coconut Farm	70+150					
		Pump Set & Coconut Farm	70+200					
	150	Transformer & 9 EB Poles	70+650	70+800				
		Fish Farm	70+650					
			70+700		Building, Tree, Coconut Farm			



Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	50	Transformer, EB Pole (4 Nos) Tree (5Nos)	70+950					
	550	Agriculture Land & Trees	71+000	71+550				
		Trees & 2 Eb Poles	71+100		Trees			
		Teek Farm, Pump Set & 5 Poles	71+250					
		Bore Well	71+300					
	200		71+550	72+450	EB Pole ( 10 Nos)	200		
		Borewell	71+550		Borewell			
		Pump Set	72+200					Damaged
	100	Veera mudaiyaan natham Village	72+450	72+550	Veera mudaiyaan natham Village	100		
	10	Hand Pump	72+550		Hand Pump	10		
	50	Eb Pole 7 Nos	72+650	72+700				
	50	Pump Set & Trees	72+700					
			72+850	72+950	EB Pole 6 Nos	100		

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			72+850		Pump Set, Bore Well & Trees			
			72+900		Bore & Pump Set			
		Bore & Pump Set	72+950					
			73+400		HT Line Tower	20		
			73+450		Bore Well, Pump Set & Tree EB Pole	50		
	150	Kumarakudi Village	73+500	73+650	Kumarakudi Village	150		
			73+500		Bore Well & Tree			
		EB Pole 6 Nos	73+500	74+500		350		
	130	Trees	74+710	74+850	Trees	130		53 Trees
		EB, Telephone Poles	74+710	74+850	EB, Telephone Poles			4- EB Pole 2 - Telephone Pole
		Temple, Hand Pump, EB Pole (2 Nos)	74+710		Transformer & 3 EB Poles			
	300	Eb Poles	74+850	75+200	EB Poles	300		8 Nos
			74+890		Transformer			

















Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Trees	74+850	75+200	Trees			57 Nos
			74+900		Marriage Hall			
	500	Poles (EB & Telephone)	75+200	75+700	Poles (EB & Telephone)	500		EB Pole 13 T Pole - 1
		Trees	75+200	75+700	Trees			140 Nos
		Hut	75+210					
			75+260		Bore Well & Water Tank			
		Huts	75+270	75+350	Huts			
		Flag Poles	75+390					
			75+520		Huts			
			75+530		Transformer			
			75+560		Huts			
			75+565	75+640	Pond			
		Building	75+640					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			75+650		Temple			
			75+660		Water Tap			
		Building	75+680					
			75+700		OFC			
		Bore Well & Water Tank	75+700					
	500	Poles (EB & Telephone)	75+700	76+300	Poles (EB & Telephone)	500		EB - 35 T Pole - 2
		Trees	75+700	76+300	Trees			172 Nos
		Kothanda vilagam Village	75+700	76+200	Kothanda vilagam Village			
		Hand Pump	75+710					
		Water Tap	75+810					
		Street Light	75+840					
		Flag Pole	75+840		Existing Culvert			
		Water Tap	75+880					







Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Transformer	75+980					
		Bore Well & Water Tank	76+025					
		Pump Set	76+260					
		Trees & EB Poles	76+300	76+800	Trees & EB Poles	450		13 poles, 58 Trees
		Trees & EB Poles	76+300	76+800				
		Bus Shelter	76+410					
			76+410		Flag Pole			
			76+600		Temple			
			76+695		OFC & Compound Wall			
	500	Trees	76+800	77+300	Trees	500		65 Nos
		EB Poles	76+800	77+300	EB Poles			23 Nos
			76+800	77+300	Telephone Pole			3 nos
			76+850		OFC			



Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			76+940		Bore & Water Tank			
		Buildings	76+980		Buildings			
			77+060		Bore & Water Tank			
			77+080	77+190	School Compound Wall			
		Building	77+100	77+300				
			77+220		Building			
			77+240		OFC			
			77+280		Compound Wall			
	300	Buildings	77+300	77+600	Buildings	300		
		Trees, EB Poles	77+300	77+600	Trees, EB Poles			Tree- 27, EB - 10
		Flag Pole	77+390	77+420				4 Nos
		Hand Pump	77+505					
		Telephone Pole	77+390	77+510				3 Nos


Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Hand Pump	77+590					
	300	Trees	77+600	77+900	Trees	300		5 Nos
		EB Poles	77+600	77+900	EB Poles			4 Nos
			77+700		OFC			
		Building	77+730					
			77+760		Water Tank & Motor Room			
	400	Trees	77+900	78+400	Trees	400		69 Nos
		EB Pole	77+900	78+400	EB Pole			10 Nos
		Water Tap	77+975					
			78+120		OFC			
		Hut & Transformer	78+365					
			78+390		EB Pole, Bore Well			
		OFC	78+400					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	450		78+400	79+000	EB Pole, Trees	450		340 Trees, 16 Poles
			78+680		OFC			
			78+725		Transformer			
		Huts	78+670	78+760				
			78+860		OFC			
	400	Trees & EB Poles	79+000	79+500	Trees & EB Poles	400		164 Trees, 6 Poles
			79+080		OFC			
		Hand Pump	79+105					
		Existing Culvert	79+110					
			79+220		Flag Pole			
		Water Tank & Motor Room	79+240					
			79+260		OFC			
	400	Trees, EB Poles	79+500	80+000	Trees, EB Poles	400		55 Trees, e EP Poles

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			79+520		Transformer			
			79+565		OFC			
		Hut	79+955					
	400	EB Pole, Water Tap, Trees, Telephone Pole	80+000	80+500	EB Pole, Water Tap, Trees, Telephone Pole	400		EB - 39, Water Tap - 49, Tree - 91, T. Post - 9
		Water Tank, Motor Room, Hand Pump & Existing Culvert	80+120					
			80+125		Temple			
			80+170		Existing Culvert			
			80+190		OFC			
			80+300	80+390	Pond			
		Transformer	80+340					
	400	EB Poles, Telephone Poles, Trees, Water Tap	80+500	81+000	EB Poles, Telephone Poles, Trees, Water Tap	400		EB - 11, T Pole - 18 Tree 134 Tap 9
		Flag Poles	80+530	80+570	Flag Poles			6nos
			80+710		Existing Culvert			

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Bore Well	80+740					
			80+900		OFC			
	400	Tree, EB Poles	81+000	81+500	Tree, EB Poles	400		Trees - 187, EB Pole 17
			81+125		OFC			
			81+325	81+360	Existing Culvert & Compound Wall			
		Pond	81+360	81+460				
		OFC & Temple	81+445					
	450	EB Pole & Tress	81+500	82+000	EB Pole & Tress	450		EB - 10, Tree - 204
			81+585		OFC			
		Transformer	81+715					
	250	EB Pole & Tress	82+000	82+500	EB Pole & Tress	250		EB - 1, Tree - 80
		Sluice Gate	82+020		Sluice Gate			5 Nos
	400	EB Pole, Trees	82+500	83+000	EB Pole, Trees	400		11 Poles, 214 Trees

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			82+510		OFC			
			82+570		Transformer			
			82+595		OFC			
			82+875		Existing Culvert			
			82+890		OFC			
		Transformer	82+920					
		Existing Culvert, Compound Wall	82+975					
	450	Tree, Pole & Water Tap	83+000	83+500	Tree, Pole & Water Tap	450		Pole 18, Tree 160, Tap - 6
			83+060		OFC			
		Existing Culvert	83+205					
		OFC	83+265					
			83+310		OFC			
		Flag Post	83+385					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			83+425		Transformer			25
	450	EB Pole, Water Tap, Trees, Telephone Pole	83+500	84+000	EB Pole, Water Tap, Trees, Telephone Pole	450		Pole - 13, Tap - 37, Tree - 239
			83+615		Temple			
			83+625		OFC			
		EB, Transformer	83+850					
			83+890		Flag Poles			4 nos
			83+935		Water Tank			
			83+995		Hand Pump			
	450	EB Pole, Water Tap, Trees, Telephone Pole & Buildings	84+000	84+500	EB Pole, Water Tap, Trees, Telephone Pole & Buildings	450		EB Pole - 14, Tap - 2, Tree - 185
		Temple & Well	84+070					
		Flag Pole, Telephone Pole	84+110					
			84+110		OFC & Flag Pole			
			84+280		Transformer			

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Transformer	84+480					
			84+500	84+560	Huts			
			84+560		Flag & Ex Culvert			Pole 2 Nos
			84+650		OFC			
			84+920		OFC			
		Building	84+930	84+980				
	400		85+000	85+500	EB Pole, Trees	400		Poles - 23 & Tree 200
		Hut	85+045					
			85+060		EB, Transformer			
			85+090		OFC			
	300		85+500	86+000	EB Pole, Tree, Water Tap	300		Pole -17, Tree -30, Tap - 3
			85+770		OFC			
		Transformer	85+865					



Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Building	85+910					
		Hut	85+930					
			85+955		Temple			
			85+990		OFC			
	500		86+000	86+700	EB Pole, Tree, Water Tap, T Poles	500		EB Pole - 20, Tree - 275, Tap - 36, T Pole - 5
			86+280		Temple			
			86+350		Bore Well			
		Temple	86+390					
			86+500		OFC			
			86+585		Motor Room			
		Buildings	86+000	86+700	Buildings			
	700	Building & Huts	86+700	87+500	Building & Huts	700		
			86+700	87+500	EB Pole, Tree, Water Tap, T Poles			EB - 38, Tree - 392, Tap - 30, T Pole - 2
















Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			86+720		Flag Pole			
			86+830		OFC, Transformer			
		Transformer	86+915					
			86+985		OFC			
		Existing Culvert	87+080					
			87+155		OFC			
		Transformer	87+330					
			87+360		OFC			
	400	EB Pole, Tree, Tap, Telephone Pole	87+500	88+000	EB Pole, Tree, Tap, Telephone Pole	400		EB - 24, Tree - 163, Tap - 13, T Pole - 5
		Buildings & Huts	87+500	88+000	Buildings & Huts			
		Temple	87+500					
			87+640		OFC			
			87+670		Water Tank, Motor Room			


Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			87+690		Temple			
			87+735		Flag Pole			
			87+810		Transformer & OFC			
			87+835		Water Tank			
			87+990		OFC			
	450	EB Pole, Tree, Tap, Telephone Pole	88+000	88+500	EB Pole, Tree, Tap, Telephone Pole	450		EB - 16, Tree - 145 Water Tap - 15
		Buildings	88+000	88+500	Huts			
			88+190		OFC			
			88+225		Transformer			
	450	EB Pole, Tree, Tap	88+500	89+000	EB Pole, Tree, Tap	450		EB - 11. Tap - 2, Tree - 110
		House	88+500	89+000	House			
			88+580		OFC			
			88+590	88+710	Compound Wall			
















Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			88+780		OFC			
			88+910		Temple			
		Existing Culvert	88+965					
	450	EB Pole, Tree, water Tap, Telephone Pole	89+000	89+500	EB Pole, Tree, water Tap, Telephone Pole	450		EB - 14, Tap - 15, T Pole - 5, Tree - 195
		Flag Post Pedestal	89+110					
			89+210		Transformer			
			89+240		OFC			
			89+350		Water Tank With Bore Well			
			89+355		Temple			
	450	EB Pole, Tree, water Tap, Telephone Pole	89+500	90+000	EB Pole, Tree, water Tap, Telephone Pole	450		EB - 16, Tap - 18, T Pole - 3, Tree - 270
		Water Tank	89+515					
		Flag Pole	89+590					
		Motor Room	89+690					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			89+710		OFC			
			89+805		Well			
			89+910		OFC			
	400	EB Pole, Water Tap, Telephone Pole, House	90+000	90+500	EB Pole, Water Tap, Telephone Pole, House	400		EB - 34, Tap - 4, T. Pole - 6
		Pond	90+000	90+060				
			90+090	90+180	Compound Wall			
			90+180		Transformer			
			90+195		OFC			
			90+230		Transformer			
			90+325		Temple			
			90+375		Existing Culvert			
	400	EB Pole, Telephone Pole, Tree, Water Tap	90+500	91+000	EB Pole, Telephone Pole, Tree, Water Tap	400		EB - 14, Tap - 5, T. Pole 7, Tree - 130
			90+560		OFC			

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			90+610		Water Tank			
		Water Tank	90+630					
			90+830	90+860	Pond			
			90+955		OFC			
	450	EB Pole, Tree	91+000	91+500	EB Pole, Tree	450		EB - 34, Tree 71
			91+080		OFC			
			91+480		OFC			
	450	EB Pole, Water Tap, Telephone Pole, Trees	91+500	92+000	EB Pole, Water Tap, Telephone Pole, Trees	450		
			91+600		OFC			
			91+730		OFC			
			91+780		Temple			
		Pond	91+780	91+860				
			91+840		OFC			















Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			91+955		OFC			
	700	EB Pole, Water Tap, Tree, Telephone Pole	92+000	93+000	EB Pole, Water Tap, Tree, Telephone Pole	700		EB - 16, Tap - 10, Tree - 26, T Pole - 7
			92+080		OFC			
		Temple	92+135					
			92+265		OFC			
		Pond	92+270	92+330				
			92+300	92+380	Water Pipe Crossing			
			92+390		OFC			
		Temple	92+455					
			92+570		Temple			
			92+600		OFC			2 Nos
			92+770		OFC			2 Nos
		OFC	92+995					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	750	EB Pole, Water Tap, Tree	93+000	94+000	EB Pole, Water Tap, Tree	750		EB - 44, Tape - 14, Tree - 270
			93+045		OFC			
			93+115		Transformer			
			93+200		OFC			
			93+360		OFC			
			93+660		OFC			
			93+800		OFC			
			93+930		Hand Pump			
			93+975		OFC			
	400	Tree, EB Poles, T. Pole, Water Tap, House	94+000	94+500	Tree, EB Poles, T. Pole, Water Tap, House	400		Tree - 220, EB - 25, T Pole - 5, Tap - 7
			94+130		OFC			
		OFC, MOTOR ROOM	94+170					
			94+385		OFC			



Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		TEMPLE	94+440					
	400		94+500	95+000	Tree, EB Pole, T. Pole	400		Tree - 146, EB - 23, T Pole - 4, Tap - 6
			94+530		OFC			
		OFC	94+555					
			94+780		OFC, Transformer			
		Pond, Pipe Line	94+830	94+900				
			94+935		OFC			
	450	EB Pole, Tree, Tape, Telephone Pole	95+000	95+500	EB Pole, Tree, Tape, Telephone Pole	450		EB - 16, T Pole - , Tap 5, Tree 150
			95+130	95+230	Compound Wall			
			95+210		Telephone Panel, Water Tank With Well			
			95+255		Police Station Arch			
			95+290		OFC			
		Flag Pole & Stage	95+415					





Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			95+435		Street Light			
	400	EB Pole, Tree, Tape, Telephone Pole	95+500	96+000	EB Pole, Tree, Tape, Telephone Pole	400		EB - 25, T Pole - 7, Tap - 6, Tree 150
			95+570		Temple			
		OFC	95+850					
		Pond	95+950					
	400	EB Pole, Tree, Tape, Telephone Pole	96+000	96+500	EB Pole, Tree, Tape, Telephone Pole	400		EB - 39, T Pole - 5, Tap - 6, Tree - 120
			96+120		OFC			
			96+150		Transformer			
			96+480		Transformer			
	450	EB Pole, Tree, Tape, Telephone Pole	96+500	97+000	EB Pole, Tree, Tape, Telephone Pole	450		EB - 16, T Pole - 3, Tree - 180
			96+710		OFC			
			96+965		OFC			
			97+080		OFC			






Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			97+195		OFC			
			97+395		OFC			
			97+390	97+500	Pond			
	300	EB Pole, Tree, Tape, Telephone Pole	97+500	98+000	EB Pole, Tree, Tape, Telephone Pole	300		EB - 16, Tap - 5, Tree - 80
		Temple	97+520					
			97+600		OFC			
			97+680		Motor Room With Bore			
		Transformer	97+700					
		OFC	97+770					
			97+880		OFC			
		OFC	97+965					
	350	EB Pole, Tree, Tape, Telephone Pole	98+000	98+500	EB Pole, Tree, Tape, Telephone Pole	350		EB - 9, T Pole - 2, Tree - 120
		OFC	98+280					


















Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	350	EB Pole, Tree, Tape, Telephone Pole	98+500	99+000	EB Pole, Tree, Tape, Telephone Pole	350		EB - 19, T Pole - 3, Tree 110
			98+620		Transformer			
		OFC	98+635		Temple			
			98+710		Temple			
		Water Tank with Bore	98+735					
		OFC	98+825					
		Street Light	98+920					
		Flag Pole	98+940					
		OFC	98+950					
	750	EB Pole, Tree, Tape, Telephone Pole	99+000	100+000	EB Pole, Tree, Tape, Telephone Pole	750		EB - 47, T Pole - 4, Tap - 5, Tree 118
			99+120		Temple			
		Motor Room With Bore	99+150					
			99+160		Transformer			















Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			99+195		Temple With Water Tank			
		OFC	99+300					
		OFC	99+490					
	650	EB Pole, Tree, Tape, Telephone Pole	100+000	101+000	EB Pole, Tree, Tape, Telephone Pole	650		EB - 32, Tap - 12, Tree 210, T Pole - 3
		Transformer	100+150					
			100+195		Bore Well			
			100+200		OFC			
		OFC	100+320					
		Pond	100+350					
		Motor Room With Tank	100+390					
			100+475		Water Tank			
		OFC	100+600					
		OFC	100+670					

















Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		OFC	100+720					
		OFC	100+740					
		Pond	100+740	100+820				
	650	EB Pole, Tree, Tape, Telephone Pole	101+000	102+000	EB Pole, Tree, Tape, Telephone Pole	650		EB - 42, T Pole - 5, Tap - 6 Tree 100
			101+005		OFC			
		OFC	101+125					
			101+120	101+300	Pond			
		OFC	101+330					
			101+480		Hand Pump			
			101+805		OFC			
		Transformer	101+835					
	750	EB Pole, Tree, Tape, Telephone Pole	102+000	103+000	EB Pole, Tree, Tape, Telephone Pole	750		EB - 30, T Pole - 2, Tap - 13, Tree 110
		OFC	102+100					















Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			102+240		Temple			
			102+365		Transformer			
		OFC	102+390					
		OFC	102+435					
			102+520		Flag Pole			
		OFC	102+575					
		OFC	102+730					
		Transformer	102+930					
		Schooh Arch	102+960					
	800	EB Pole, Tree, Tape, Telephone Pole	103+000	104+000	EB Pole, Tree, Tape, Telephone Pole	800		EB - 30, Tree - 110, T Pole - 2, Tap - 13
		OFC	103+025					
		Pond	103+090	103+300				
		OFC	103+130					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		OFC	103+320					
		OFC	103+400					
		OFC	103+425					
		OFC	103+530					
			103+590		Temple			
		OFC & Flag Pole	103+720					
		Pond	103+775	103+815				
			103+860	103+910	Pond			
		Pond	103+935	104+250				
	400	EB Pole, Tree	104+000	104+500	EB Pole, Tree	400		EB - 4 , Tree - 3
		House	104+500		House			
	350	EB Pole, Tree, Tape	104+500	105+200	EB Pole, Tree, Tape	350		Tree - 21, EB - 23, Tap - 3
	500	EB Pole, Tree, Tape	105+200	105+900	EB Pole, Tree, Tape	500		Tree - 42, EB - 4, Tap 4






Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			105+850		Motor Room			
	750	EB Pole, Tree, Tape	105+900	106+900	EB Pole, Tree, Tape	750		Tree - 100, EB - 1, Tap 7
			105+920		Well			
		Motor Room	106+900					
	1150	EB Pole, Tree, Tape	107+900	109+700	EB Pole, Tree, Tape	1150		Tree - 94, EB - 9, Tap 6
	1350	EB Pole, Telephone Pole, Tree, Tape	109+700	111+200	EB Pole, Telephone Pole, Tree, Tape	1350		Tree - 110, EB -30, T Pole - 6. Tap - 18
		OFC	109+705					
		OFC	109+710					
			109+720		Motor Room			
			109+985		Water Pipe			
		OFC	110+330					
		Water Tank	110+450					
			110+725		OFC			

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Transformer	110+740		Motor Room with well			
	1750	EB Pole, Tree, Tape	111+200	113+500	EB Pole, Tree, Tape	1750		Tree - 460, EB -23, Tap 12
		OFC	111+230		OFC			
			111+450		Motor Room With Bore			
		Gate Valve	111+500					
		Motor Room With Bore	111+600					
			111+680		Motor Room With Bore			
		Motor Room With Bore	112+300					
			112+310		House & Hand Pump			
			112+390		Motor Room With Bore			
			113+220		Motor Room With Bore			
			113+250		House			
			113+330		Motor Room With Bore			

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	750	EB Pole, Telephone Pole, Tree, Tape	113+500	114+600	EB Pole, Telephone Pole, Tree, Tape	750		Tree - 280, EB -38, T Pole - 9, Tap - 6
			113+670	113+720	Sub Station			
			113+700		HT Line Crossing			
			114+060		Flag Pole			
			114+090		Flag Pole, Water Tank			
		HT Line	114+130					
		Transformer	114+460					
		Water Tank	114+450					
		Water Tank	114+495					
		OFC	114+520		Temple			
		Pond	114+540	114+580				
	650	EB Pole, Telephone Pole, Tree, Tape	114+600	115+600	EB Pole, Telephone Pole, Tree, Tape	650		Tree - 80, EB -18, Tap - 2
		Hand Pump	114+610					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Transformer	114+950					
		Transformer	115+210					
			115+230		Flag Pole			5 Nos
	700	EB Pole, Telephone Pole, Tree, Tape	115+600	116+440	EB Pole, Telephone Pole, Tree, Tape	700		Tree - 90, EB -26, T Pole - 2 Tap - 16
			115+650		Motor Room			
		OFC	115+820					
		Transformer	115+970					
		OFC	116+095					
		OFC	116+170					
		Hand Pump	116+200					
		Water Tank & Motor Room	116+210					
		OFC	116+275					
		OFC	116+410					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			116+560		Flag Pole			
		House	115+600	116+440	House			

## 2.2. Removal of Religious Structures

The following structures coming within the ROW are to be demolished

Sl No.	Name of the District	Total No. Of structures	Removed as on Date (in Nos.)	Balance (in Nos.)
1	Cuddalore	10	0	10
2	Ariyalur	10	0	10
3	Thanjavur	2	0	2
	<b>Total in Nos.</b>	<b>22</b>	<b>0</b>	<b>22</b>

## 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.

Sr. No.	Name of the District	Chainages			Total Number of Estimates	Remarks
		From	To	Length in Km		
1	Cuddalore	65+960	86+440	20.48	25	Work in Progress
2	Ariyalur	86+440	106+860	20.42	46	
3	Thanjavur	106+860	116+440	9.58	4	

Sr. No	Name of the District	Chainages			Number of Estimates	Present Status	Remarks
		From	To	Length in Km			
1	Cuddalore	65+960	86+440	20.48	10	Estimate Approved	Supervision Charges paid.
2	Ariyalur	86+440	106+860	20.42	5	05 estimates under scrutiny with RO Madurai	-
3	Thanjavur	106+860	116+440	9.58	4	Estimate Approved	Supervision charges paid for 03 estimates.

Estimates for shifting of the above Electric lines have been prepared. The estimated cost is approximately Rs. 19.45crores.

Estimates have been done for the shifting of the water supply pipeline & related items mentioned above. The final amount of Rs. 15.87crores sanctioned by RO, NHAI, Madurai.

Table 2.3-3: Status of Utility Relocation

Sl. No.	Authority	Description	Unit	Total Length/ Nos.	Work done	Balance	Remarks
1	BDO & EE,TWAD	Water Supply Pipe Line	Kms.	23.50	1.920	21.580	Work in progress
2	BDO of Concern Union	Hand Pump/Pump Room with Bore well	Nos.	24	Nil	24.0	
3	BDO of Concern Union	Over Head Tank	Nos.	17	Nil	17.0	
4	TNEB	Electrical Lines	Kms.	6.83	2.48	4.35	

## 2.4. Tree felling

Table 2.4-1: Status of Tree felling

Sl.No.	Name of the District	Chainages			Effectuated Length in Kms.	Completed as on Date	Balance as on Date	Balance no. of Trees	Remarks
		From	To	Length in Km					
1	Cuddalore	65+960	86+440	20.48	6.535	5.875	0.660	57	Work in Progress
2	Ariyalur	86+440	106+860	20.42	8.385	8.220	0.170	78	
3	Thanjavur	106+860	116+440	9.58	2.515	0	2.515	1139	
Total				50.48	17.65	9.32	8.120	2678	

## 3.1. Pre-Construction Activities

## Detailed Design &amp; Drawings

The Plan and Profile, as well as the Pavement Designs for the entire 50.48 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 As per Sch. B	Design submitted	Drawing Approved
1	Pavement Design	Km	50.480	50.48	-
2	Plan & Profile	Km	50.480	50.48	50.48
3	Typical Cross Sections	Type	7	7	7
4	Major Intersections	No	07	-	-
5	Minor Intersections	No	100	-	-
6	Toll Plaza (Typical Details)	No	01	-	-
7	Service Roads	No	27.10	27.10	-

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

Sr. No	Description	Unit	Total Scope As per Sch. B	Design Submitted	Drawing Approved
1	Major Bridges	No	04	03	0
2	Minor Bridges	No	26	18	8
3	Grade Separated Intersection	No	08	08	1
4	VUP/LVUP	No	15	15	14
5	Box /Slab Culvert	No	60	50	10



#### 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.

Table 4.1 - Physical Progress of Works

Item	Satage for measurement of Physical Progress	Weightage of Total Project Work	Unit	Total Scope	As on 31.10.2018	
					Qty.	Physical Progress (%)
Road works including culverts, minor bridges, underpasses, overpasses, approaches to ROB/RUB/ Major Bridges/ Structures (but excluding service roads)	<b>A- Widening and strengthening of existing road</b>					
	<b>(1) Earthwork up to top of the sub-grade</b>					
	(A) Clearing & Grubbing/ Jungle Clearance	2.14%	Km	66.96	16.79	0.54%
	(B) Earthwork up to Embankment Top	1.20%	Km	48.88	0.00	0.00%
	(C) Earthwork up to Subgrade Top	0.88%	Km	48.88	0.00	0.00%
	(E) Earthwork Filling in RE Wall Approach up to Sub Grade Top	5.31%	Sqm	120984.77	0.00	0.00%
	<b>(2) Granular work (sub-base, base, shoulders)</b>					
	(a) GSB/ Cement Treated Base	2.87%	Km	66.96	0.00	0.00%
	(b) WMM/ Cement Treated Base	3.55%	Km	66.96	0.00	0.00%
	<b>(3) Shoulders</b>	0.11%	Km	48.88	0.00	0.00%
	<b>(4) Bituminous work</b>					
	(a) DBM	5.37%	Km	66.96	0.00	0.00%
	(b) BC	2.00%	Km	66.96	0.00	0.00%
	<b>(5) Rigid Pavement</b>					
	<b>(6) Widening and repair of culverts</b>			No.	16	
	(a) Pipe Culvert (Wid.)			No.	5	
	(i) PCC	0.02%	Nos.	5	0.00	0.00%
	(ii) PIPE laying	0.11%	Nos.	5	0.00	0.00%
	(iii) Head Wall	0.03%	Nos.	5	0.00	0.00%
	(iv) Protection Work	0.01%	Nos.	5	0.00	0.00%
	(b) Box Culvert/ Slab Culvert- Wid.			Nos.	11	
	(i) PCC	0.02%	Nos.	11	2.00	0.00%
	(ii) Raft (Foundation)	0.02%	Nos.	11	1.00	0.00%
	(iii) Wall (Substructure)	0.04%	Nos.	11	0.00	0.00%
	(iv) Slab	0.02%	Nos.	11	0.00	0.00%
	(v) Protection Work	0.16%	Nos.	11	0.00	0.00%
	<b>(7) Widening and repair of minor bridges</b>			No.	4	
	(a) Minor Bridge (Box Type)- Wid.			Nos.	4	
	(i) PCC	0.12%	Nos.	4	2.00	0.06%
	(ii) Raft	0.17%	Nos.	4	2.00	0.09%
	(iii) Wall	0.26%	Nos.	4	2.00	0.13%
	(iv) Slab	0.17%	Nos.	4	0.50	0.02%
	(v) Protection Work	0.24%	Nos.	4	0.00	0.00%
	<b>B- New realignment/bypass</b>					
	<b>(1) Earthwork up to top of the sub-grade</b>					
	(A) Clearing & Grubbing/ Jungle Clearance	1.08%	Km	28.68	19.78	0.75%
	(B) Earthwork up to Embankment Top	2.99%	Km	21.44	0.00	0.00%
	(C) Earthwork up to Subgrade Top	0.57%	Km	21.44	0.00	0.00%
	(E) Earthwork Filling in RE Wall Approach up to Sub Grade Top	2.79%	Sqm	48443.43	0.00	0.00%
	<b>(2) Granular work (sub-base, base, shoulders)</b>					
	(a) GSB/ Cement Treated Base	1.61%	Km	28.68	0.00	0.00%
	(b) WMM/ Cement Treated Base	1.44%	Km	28.68	0.00	0.00%
	<b>(3) Shoulders</b>	0.11%	Km	21.44	0.00	0.00%
	<b>(4) Bituminous work</b>					
	(a) DBM	1.66%	Km	28.68	0.00	0.00%
	(b) BC	0.78%	Km	28.68	0.00	0.00%
	<b>C- New culverts, minor bridges, underpasses, overpasses on existing road,</b>					
	<b>(1) Culverts</b>			No.	44	
	<b>(A) Pipe Culvert- New/ Reconstruction</b>			Nos.	11	
	(i) PCC	0.01%	Nos.	11	0.00	0.00%
(ii) Pipe laying	0.03%	Nos.	11	0.00	0.00%	
(iii) Head Wall	0.01%	Nos.	11	0.00	0.00%	
(iv) Protection Work	0.00%	Nos.	11	0.00	0.00%	
<b>(B) Box Culvert/ Slab Culvert- New/ Reconstruction</b>			Nos.	33		
(i) PCC	0.21%	Nos.	33	5.00	0.03%	
(ii) Raft	0.25%	Nos.	33	4.00	0.03%	
(iii) Wall	0.44%	Nos.	33	2.00	0.03%	
(iv) Slab	0.29%	Nos.	33	0.00	0.00%	
(v) Protection Work	0.33%	Nos.	33	0.00	0.00%	
<b>(2) Minor bridges</b>						
<b>(A) Minor Bridge (Box Type)- New</b>			Nos.	16		
(i) PCC	0.38%	Nos.	16	3.50	0.08%	
(ii) Raft	0.79%	Nos.	16	1.50	0.07%	
(iii) Wall	1.87%	Nos.	16	0.00	0.00%	
(iv) Slab	0.78%	Nos.	16	0.00	0.00%	
(v) Protection Work	0.46%	Nos.	16	0.00	0.00%	
<b>(B) Minor Bridge (Deck Type)- New</b>			Nos.	5		
(i) Pile	0.04%	Nos.	48	0.00	0.00%	
(ii) Pile Cap	0.03%	Nos.	8	0.00	0.00%	
(iii) PCC	0.04%	Nos.	28	0.00	0.00%	
(iv) Open Foundation	0.17%	Nos.	20	0.00	0.00%	
(v) Abutment/Pier Wall	0.32%	Nos.	28	0.00	0.00%	
(vi) Abutment/Pier Cap	0.23%	Nos.	28	0.00	0.00%	
(vii) Girder Casting	0.09%	Nos.	20	0.00	0.00%	
(viii) Girder Launching	0.04%	Nos.	20	0.00	0.00%	
(ix) Slab	0.11%	Nos.	16	0.00	0.00%	

Item	Satage for measurement of Physical Progress	Weightage of Total Project Work	Unit	Total Scope	As on 31.10.2018		
					Qty.	Physical Progress (%)	
Road works including culverts, minor bridges, underpasses, overpasses, approaches to ROB/RUB/ Major Bridges/ Structures (but excluding service roads)	(x) Misc	0.08%	Nos.	6	0.00	0.00%	
	<b>(3) Cattle/Pedestrian underpasses</b>		Nos.	2			
	(i) PCC	0.01%	Nos.	2	0.00	0.00%	
	(ii) Raft	0.06%	Nos.	2	0.00	0.00%	
	(iii) Wall	0.13%	Nos.	2	0.00	0.00%	
	(iv) Slab	0.06%	Nos.	2	0.00	0.00%	
	(v) Protection Work	0.03%	Nos.	2	0.00	0.00%	
	<b>(5) Grade separated structures</b>						
	<b>(a) Underpass</b>			Nos.	13		
	(i) Pile	0.80%	Nos.	312	57.00	0.15%	
	(ii) Pile Cap	0.37%	Nos.	52	2.00	0.01%	
	(iii) PCC	0.04%	Nos.	52	0.00	0.00%	
	(iv) Open Foundation	0.00%	Nos.				
	(v) Abutment/Pier	0.12%	Nos.	52	0.00	0.00%	
	(vi) Abutment/Pier Cap	0.50%	Nos.	52	0.00	0.00%	
	(vii) Girder Casting	0.60%	Nos.	130	0.00	0.00%	
	(viii) Girder Launching	0.26%	Nos.	130	0.00	0.00%	
	(ix) Slab	0.44%	Nos.	26	0.00	0.00%	
	(x) Misc	0.20%	Nos.	13	0.00	0.00%	
	<b>(b) Overpass</b>						
	<b>(c) Flyover</b>			Nos.	8		
	(i) Pile	0.61%	Nos.	216	15.00	0.04%	
	(ii) Pile Cap	0.28%	Nos.	36	0.00	0.00%	
	(iii) PCC	0.03%	Nos.	36	0.00	0.00%	
	(iv) Open Foundation	0.00%	Nos.	0			
	(v) Abutment/Pier	0.10%	Nos.	36	0.00	0.00%	
	(vi) Abutment/Pier Cap	0.37%	Nos.	36	0.00	0.00%	
	(vii) Girder Casting	0.65%	Nos.	100	0.00	0.00%	
	(viii) Girder Launching	0.28%	Nos.	100	0.00	0.00%	
	(ix) Slab	0.61%	Nos.	20	0.00	0.00%	
	(x) Misc	0.21%	Nos.	8	0.00	0.00%	
	(d) Foot over Bridge		No.	0			
Major Bridge works and ROB/RUB	<b>C- New Major Bridges</b>		Nos.	4		0.00%	
	(i) Pile	3.56%	Nos.	612	31.00	0.18%	
	(ii) Pile Cap	1.63%	Nos.	92	0.00	0.00%	
	(iii) PCC	0.11%	Nos.	92	0.00	0.00%	
	(iv) Open Foundation	0.00%	Nos.	0			
	(v) Abutment/Pier	1.70%	Nos.	92	0.00	0.00%	
	(vi) Abutment/Pier Cap	1.91%	Nos.	92	0.00	0.00%	
	(vii) Girder Casting	1.74%	Nos.	861	0.00	0.00%	
	(viii) Girder Launching	0.74%	Nos.	861	0.00	0.00%	
	(ix) Slab	0.12%	Nos.	43	0.00	0.00%	
	(x) Misc	0.61%	Nos.	5	0.00	0.00%	
Structures (elevated sections, reinforced earth)	(b) RUB			0			
	<b>(4) Reinforced earth wall (includes Approaches to ROB, Underpasses, Overpasses, Flyovers)</b>						
	(a) Casting of RS Wall Facia	2.73%	Sqm	196027.20	0.00	0.00%	
	(b) Erection of RS Wall Facia	6.37%	Sqm	196027.20	0.00	0.00%	
Other works	<b>(f) Service roads/ Slip Roads</b>						
	<b>(A) Earthwork up to Subgrade Top</b>	0.84%	Sqm	340885	0.00	0.00%	
	<b>(B) Granular work (sub-base, base, shoulders)</b>						
	(a) GSB/ Cement Treated Base	1.39%	Sqm	340885	0.00	0.00%	
	(b) WMM/ Cement Treated Base	1.60%	Sqm	340885	0.00	0.00%	
	<b>(C) Bituminous work</b>						
	(a) DBM/ Aggregate Layer	1.01%	Sqm	340885	0.00	0.00%	
	(b) BC/ SDBC	0.86%	Sqm	340885	0.00	0.00%	
	<b>(ii) Toll Plaza</b>						
	(a) Earthwork up to SGT	0.16%	Sqm	24616.5	0.00	0.00%	
	(b) Pavement Work	0.60%	Sqm	24616.5	0.00	0.00%	
	(c) Drain work with footpath	0.04%	Rmt	365.56	0.00	0.00%	
	(d) Toll Building	0.10%	No.	1	0.00	0.00%	
	(e) Toll Booth	0.02%	No.	11	0.00	0.00%	
	(f) Toll Canopy	0.11%	Sqm	1162	0.00	0.00%	
	(g) Toll Fencing	0.00%	Rmt	1200	0.00	0.00%	
	(h) Toll Tunnel	0.08%	Rmt	64	0.00	0.00%	
	(i) Toll System	0.59%	LS	1	0.00	0.00%	
	(j) Electrical Work	0.03%	LS	1	0.00	0.00%	
	(k) Sign board & Other Mis. Work	0.02%	LS	1	0.00	0.00%	
	(l) Medical Aid Post	0.05%	No.	1	0.00	0.00%	
	(m) Traffic Aid Post	0.01%	No.	1	0.00	0.00%	
	<b>(iii) Road side drains</b>						
	(a) PCC	0.53%	Km	28.85	0.00	0.00%	
	(b) Raft	3.71%	Km	28.85	0.00	0.00%	
	(c) Wall	0.82%	Km	28.85	0.00	0.00%	
	(d) Slab	0.38%	Km	28.85	0.00	0.00%	
	<b>(iv) Road signs, markings, km stones, safety devices, ....</b>						
	<b>(a) Road signs, markings, km stones, ...</b>			Km			
	(i) Road Sign except Toll Plaza	0.65%	Km	100.96	0.00	0.00%	
	(ii) Road Marking	0.20%	Km	100.96	0.00	0.00%	

Item	Satage for measurement of Physical Progress	Weightage of Total Project Work	Unit	Total Scope	As on 31.10.2018	
					Qty.	Physical Progress (%)
	(iii) Km. , Hectometer, 5th Km. Stone & ROW Boundary etc.	0.01%	Km	100.96	0.00	0.00%
	(iv) Pedestrian Guard Rail	0.63%	Rmt	1,812.00	0.00	0.00%
	(v) Kerb	0.90%	Km	95.64	0.00	0.00%
	(vi) Electrical Work (Street Lighting)	0.67%	Km	34.49	0.00	0.00%
	<b>(b) Concrete Crash Barrier/ W-Beam Crash Barrier in Road work</b>		Km			
	(i) W-Beam Crash Barrier (MBCB)	0.79%	Km	21.77	0.00	0.00%
	(ii) Concrete Friction Slab Crash Barrier	1.68%	Km	13.54	0.00	0.00%
	<b>(v) Project facilities</b>					
	(a) Bus bays	0.01%	No.	18.00	0.00	0.00%
	<b>(vii) Road side plantation</b>		Km			
	(a) Median Plantation	0.41%	Km	36.07	0.00	0.00%
	(a) Avenue (near ROW) Plantation	0.04%	Km	21.52	0.00	0.00%
	<b>(viii) Protection works</b>					
	(a) Boulder pitching on slopes	0.22%	Km	5.85	0.00	0.00%
	<b>(x) Miscellaneous</b>					
	(a) Diversion	0.10%	Lumpsum	1.00	0.00	0.00%
	(b) Rain water harvesting	0.07%	No.	71.00	0.00	0.00%
	(c) Assisting in the work of making the awarded stretch encumbrance free by	1.72%	Km	50.48	40.38	1.37%
	(d) Carrying out routine maintenance and repairs to potholes / patches, repair or	2.68%	Per Month	1514.40	454.32	0.80%
	(e) Detail Design & Drawing Work	1.74%	Lumpsum	1	0.80	1.40%
	(f) Setup Work (Base Camp & Plant)	1.72%	Lumpsum	1	0.90	1.55%
	<b>Total Physical Progress</b>	<b>100.00%</b>				<b>7.33%</b>

Table 4.2 : Strip Chart for Highway works

		Total Design Length of Highway = 50480 M																			
		Legend																			
		Brick/Cement Lights	5450	RM			Brick/Cement Lights	5450	RM												
		Rural Water Supply Lines	201914	RM			Rural Water Supply Lines	201914	RM												
		Electrical Lines	43550	RM			Electrical Lines	43550	RM												
		Trees	3175	RM			Trees	3175	RM												
		Existing Buildings	8925	RM			Existing Buildings	8925	RM												
		C & G	18054	RM			C & G	18054	RM												
		Embankment in Progress	2555	RM			Embankment in Progress	2555	RM												
LHS - MCM - Construct	LHS-Service Road Construction																				
LHS - MCM - Construct	LHS-Service Road Work Front																				
LHS - MCM - Construct	Subgrade																				
LHS - MCM - Construct	C & G																				
LHS - MCM - Construct	Embankment																				
LHS - MCM - Construct	Paddy/Cotton Field																				
LHS - MCM - Construct	Rural Water Supply Pipe Lines																				
LHS - MCM - Construct	Electrical Lines																				
LHS - MCM - Construct	Trees																				
LHS - MCM - Construct	Work Front Available - LHS																				
LHS - MCM - Construct	Design Chainage																				
LHS - MCM - Construct	Work Front Available - RHS																				
LHS - MCM - Construct	Structures																				
LHS - MCM - Construct	Trees																				
LHS - MCM - Construct	Electrical Lines																				
LHS - MCM - Construct	Rural Water Supply Pipe Lines																				
LHS - MCM - Construct	Paddy/Cotton Field																				
LHS - MCM - Construct	Embankment																				
LHS - MCM - Construct	C & G																				
LHS - MCM - Construct	Subgrade																				
LHS - MCM - Construct	LHS-Service Road Construction																				
LHS - MCM - Construct	RHS-Service Road Construction																				
LHS - MCM - Construct	Bypass																				
LHS - MCM - Construct	Status of Structures																				
LHS - MCM - Construct	Number of Structures																				
LHS - MCM - Construct	Type of Structures																				
LHS - MCM - Construct	LHS-Service Road Construction																				
LHS - MCM - Construct	LHS-Service Road Work Front																				
LHS - MCM - Construct	Subgrade																				
LHS - MCM - Construct	C & G																				
LHS - MCM - Construct	Embankment																				
LHS - MCM - Construct	Paddy/Cotton Field																				
LHS - MCM - Construct	Rural Water Supply Pipe Lines																				
LHS - MCM - Construct	Electrical Lines																				
LHS - MCM - Construct	Trees																				
LHS - MCM - Construct	Work Front Available - LHS																				
LHS - MCM - Construct	Design Chainage																				
LHS - MCM - Construct	Work front available - RHS																				
LHS - MCM - Construct	Structures																				
LHS - MCM - Construct	Electrical Lines																				
LHS - MCM - Construct	Rural Water Supply Pipe Lines																				
LHS - MCM - Construct	Paddy/Cotton Field																				
LHS - MCM - Construct	Embankment																				
LHS - MCM - Construct	C & G																				
LHS - MCM - Construct	Subgrade																				
LHS - MCM - Construct	LHS-Service Road Work Front																				
LHS - MCM - Construct	RHS-Service Road Construction																				
LHS - MCM - Construct	Bypass																				
LHS - MCM - Construct	Status of Structures																				
LHS - MCM - Construct	Number of Structures																				
LHS - MCM - Construct	Type of Structures																				

















TABLE 4.3 - 1 STRIP CHART FOR STATUS OF BOX CULVERTS ON EXISTING ROAD

Sr. No.	As Approved by IE	Type of Structure	Number and Length of Spans (m)	LHS						RHS										
				Protection Work	Slab	Wall	Raff	PCC	Excavation	Protection Work	Slab	Wall	Raff	PCC	Excavation					
1	74+675	EXISTING	1 x 3.0m x 2.0m	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
2	74+800	EXISTING	1 x 1.20m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	75+558	EXISTING	1x3.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	75+902	EXISTING	1 x 2.0m x 2.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	76+390	EXISTING	1 x 3.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	77+382	EXISTING	1 x 4.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	77+766	EXISTING	1 x 2.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	81+868	EXISTING	1 x 2.0m x 2.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	81+913	EXISTING	1 x 1.95m x 1.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	83+012	EXISTING	2 x 2.0m x 2.0m	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
11	83+065	EXISTING	1 x 2.0m x 2.0m	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
12	89+973	EXISTING	4 x 0.75m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	90+640	EXISTING	1 x 1.20m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	94+509	EXISTING	1 x 3.6m x 1.6m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	95+495	EXISTING	1 x 1.2m x 0.9m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	95+794	EXISTING	1 x 1.20m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	96+511	EXISTING	1 x 5.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	97+530	EXISTING	1x2.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	97+742	EXISTING	1 x 3.0m x 1.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	99+471	EXISTING	1 x 3.0m x 4.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	99+776	EXISTING	1 x 2.0m x 2.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	99+840	EXISTING	1 x 1.5m x 1.5m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	100+177	EXISTING	1 x 1m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	100+364	EXISTING	1 x 10m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	100+823	EXISTING	1 x 3.5m x 2.5m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	101+851	EXISTING	1 x 1.5m x 1.5m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	103+220	EXISTING	1 x 4.0m x 2.5m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	104+197	EXISTING	1 x 1.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	104+215	EXISTING	1 x 1.0m	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

				LHS							RHS							
Sr. No.	As Approved by IE		Number and Length of Spans (m)	Type of Structure	Protection Work	Slab	Wall	Raft	PCC	Excavation	Protection Work	Slab	Wall	Raft	PCC	Excavation	Protection Work	
30	109+786	EXISTING	1 x 1.0m	PIPE CULVERT														
31	109+975	EXISTING	1 x 2.0m x 1.7m	BOX CULVERT														
32	110+167	EXISTING	2 x 1.0m	PIPE CULVERT														
33	110+795	EXISTING	1 x 1.2m x 2.0m	BOX CULVERT														
34	110+980	EXISTING	1 x 1.5m x 2.0m	BOX CULVERT														
35	113+897	EXISTING	1 x 1.0m	PIPE CULVERT														
36	114+313	EXISTING	1 x 1.0m	PIPE CULVERT														
37	114+703	EXISTING		PIPE CULVERT														
38	114+954	EXISTING	1 x 1.0m	PIPE CULVERT														
39	115+097	EXISTING	2 x 1.0m	PIPE CULVERT														
40	115+232	EXISTING	1 x 2.0m x 2.0m	BOX CULVERT														
41	115+381	EXISTING	1 x 2.0m	BOX CULVERT														
42	115+884	EXISTING	2 x 1.0m	PIPE CULVERT														
43	115+978	EXISTING	1 x 2.0m x 2.0m	BOX CULVERT														
					0	0	0	1	2	2	6	0	0	1	2	5	0	0

TABLE 4.3 - 2 STRIP CHART FOR STATUS OF BOX CULVERTS ON BYPASS

Sr. No.	As Approved by IE	Number and Length of Spans (m)	Type of Structure	LHS							RHS										
				Protection Work	Slab	Wall	Raft	PCC	Excavation	Excavation	PCC	Raft	Wall	Slab	Protection Work						
1	66+357	1 x 3.0m x 2.0m	BOX CULVERT																		
2	67+068	1 x 3.0m x 2.0m	BOX CULVERT						1	1	1	1	1	1							
3	69+357	1 x 2.0m x 2.0m	BOX CULVERT						1	1	1	1	1	1							
4	72+570	1 x 3.0m x 2.0m	BOX CULVERT																		
5	73+755	1x1.2.0mx2.0m	PIPE CULVERT																		
6	104+622	1 x 2.0m x 2.0m	BOX CULVERT																		
7	104+998	1 x 4.0m x 2.0m	BOX CULVERT																		
8	105+440	1 x 2.0m x 2.0m	BOX CULVERT						1	1	1	1	1	1							
9	105+536	1 x 2.0m x 2.0m	BOX CULVERT						1	1	1	1	1	1							
10	106+442	1 x 2.0m x 2.0m	BOX CULVERT																		
11	108+002	1 x 3.0m x 2.0m	BOX CULVERT																		
12	108+080	1 x 4.0m x 2.0m	BOX CULVERT																		
13	108+225	1 x 3.0m x 2.0m	BOX CULVERT																		
14	108+345	1 x 3.0m x 2.0m	BOX CULVERT																		
15	108+441	1 x 3.0m x 2.0m	BOX CULVERT																		
16	108+540	1 x 2.0m x 2.0m	BOX CULVERT						1	1	1	1	1	1							
17	108+767	1 x 4.0m x 2.0m	BOX CULVERT																		
18	111+205	1 x 1.0m	PIPE CULVERT																		
19	111+452		PIPE CULVERT																		
				0	0	2	4	5	7	7	7	7	7	5	4	2	0	0	0		

TABLE 4.3 - 3 STRIP CHART FOR STATUS OF MNB-BOX

Sr. No.	As Approved by IE	Design Chainage As per CA	Number and Length of Spans (m)	LHS								RHS										
				Protection Work	Slab	Wall	Raff	PCC	Excavation	Excavation	Slab	Wall	Raff	PCC	Excavation	Excavation	Slab	Protection Work				
1	79+716	79.715	1 x 12.50m																			
2	79+795	79.795	2 x 12.50m																			
3	82+007	82.006	2 x 12.50m					1	1	1	1	1	1									
4	85+144	85.144	2 x 12.50m					1	1	1	1	1	1									
5	85+435	85.432	1 x 12.50m																			
6	88+513	88.513	1 x 12.50m					1	1	1	1	1	1									
7	91+164	91.165	2 x 12.50m					1	1	1	1	1	1									
8	92+343	92.342	1 x 12.50m																			
9	101+101	101.100																				
10	109+195	109.208	2 x 12.5m																			
				0	1	4	4	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0
1	66+757	66.730	2 x 12.5m										1									1
2	68+644	68.650	2 x 12.5m																			
3	74+173	74.175	2 x 12.5m										1	1	1	1	1	1	1	1	1	1
4	74+605	74.600	2 x 12.5m											1	1	1	1	1	1	1	1	1
14	105+915	105.915	2 x 12.5m											1	1	1	1	1	1	1	1	1
15	109+090	109.088	2 x 12.5m												1	1	1	1	1	1	1	1
16	109+365	109.365	2 x 12.5m																			
17	109+540	109.540	2 x 12.5m																			
18	111+563	111.565	2 x 12.5m																			
19	113+100	113.100	2 x 12.5m																			
20	113+505	113.505	2 x 12.5m																			
				0	0	0	0	3	4	4	5	0	0	0	0	0	0	0	0	0	0	0



TABLE 4.3 - 4 STRIP CHART FOR STATUS OF LVUP

Sr. No.	As Approved by IE	Number and Length of Spans (m)	Type of Structure	LHS					RHS											
				Protection Work	Slab	Wall	Raft	PCC	Excavation	Protection Work	Slab	Wall	Raft	PCC	Excavation					
1	77+420	1X10.5	LVUP																	
2	112+650	1X10.5	LVUP																	

TABLE 4.3 - 5 STRIP CHART FOR STATUS OF MNB (> 1.5m Span)

SR.NO.	MNB at Chainage	Span		LHS						RHS									
				Crash Barrier	Slab	Girder Launc hing	Girder Casti ng	Pierca p/Abt cap	Pier/A bt	Pile Cap	Pile	Crash Barrier	Slab	Girder Launc hing	Girder Casti ng	Pierca p/Abt cap	Pier/A bt	Pile Cap	Pile
1	70+185	2 x 20	BYPASS	A1															
				P1															
				A2															
2	73+815	1 x 15	BYPASS	A1															
				A2															
				A1															
3	84+725	1 x 15	EXISTING	A1															
				A2															
				A1															
4	84+987	2 x 15	EXISTING	A1															
				P1															
				A2															
5	112+807	1 x 25	BYPASS	A1															
				A2															
				Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE 4.3 - 6 STRIP CHART FOR STATUS OF MJB														
MJB at Chainage 66+530 (8x30) - BYPASS														
	LHS/LSR						RHS/LSR							
	Crash Barrier	Slab	Girder Launc hing	Girder Castin g	Pier Cap/A bt Cap	Pier/ Abt	Pile Cap	Pile	Pier/ Abt	Pier Cap/A bt Cap	Girder Castin g	Girder Launc hing	Slab	Crash Barrie r
A1														
P1														
P2														
P3														
P4														
P5														
P6														
P7														
A2														
Total Completed	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MJB at Chainage 73+340 (9x30) - BYPASS															
LHS/LSR							RHS/LSR								
Crash Barrier	Slab	Girder Launc hing	Girder Castin g	Pier Cap/A bt Cap	Pier/ Abt	Pile Cap	Pier Cap/A bt Cap	Pier/ Abt	Pile Cap	Girder Launc hing	Girder Castin g	Pier Cap/A bt Cap	Pier/ Abt	Pile Cap	Crash Barrier
A1															
P1															
P2															
P3															
P4															
P5															
P6															
P7															
P8															
A2															
Total Completed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MJB at Chainage 99+583 (3x25) - EXISTING ROAD															
LHS/LSR							RHS/LSR								
Crash Barrier	Slab	Girder Launc hing	Girder Castin g	Pier Cap/A bt Cap	Pier/ Abt	Pile Cap	Pier Cap/A bt Cap	Pier/ Abt	Pile Cap	Girder Launc hing	Girder Castin g	Pier Cap/A bt Cap	Pier/ Abt	Pile Cap	Crash Barrier
A1															
P1															
P2															
A2															
Total Completed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MJB at Chainage 107+400 - BYPASS

	LHS/LSR							RHS/LSR						
	Crash Barrier	Slab	Girder Launc hing	Girder Castin g	Pier Cap/A bt Cap	Pier/ Abt	Pile Cap	Pile	Pier/ Abt	Pier Cap/A bt Cap	Girder Castin g	Girder Launc hing	Slab	Crash Barrier
A1														
P1														
P2								1						
P3								4						
P4														
P5														
P6														
P7														
P8														
P9														
P10														
P11														
P12														
P13														
P14														
P15														
P16														
P17														
P18														
P19														
A2														
Total Completed	0	0	0	0	0	0	0	19	6	6	6	6	12	0

TABLE 4.3 - 7 STRIP CHART FOR STATUS OF FLYOVER

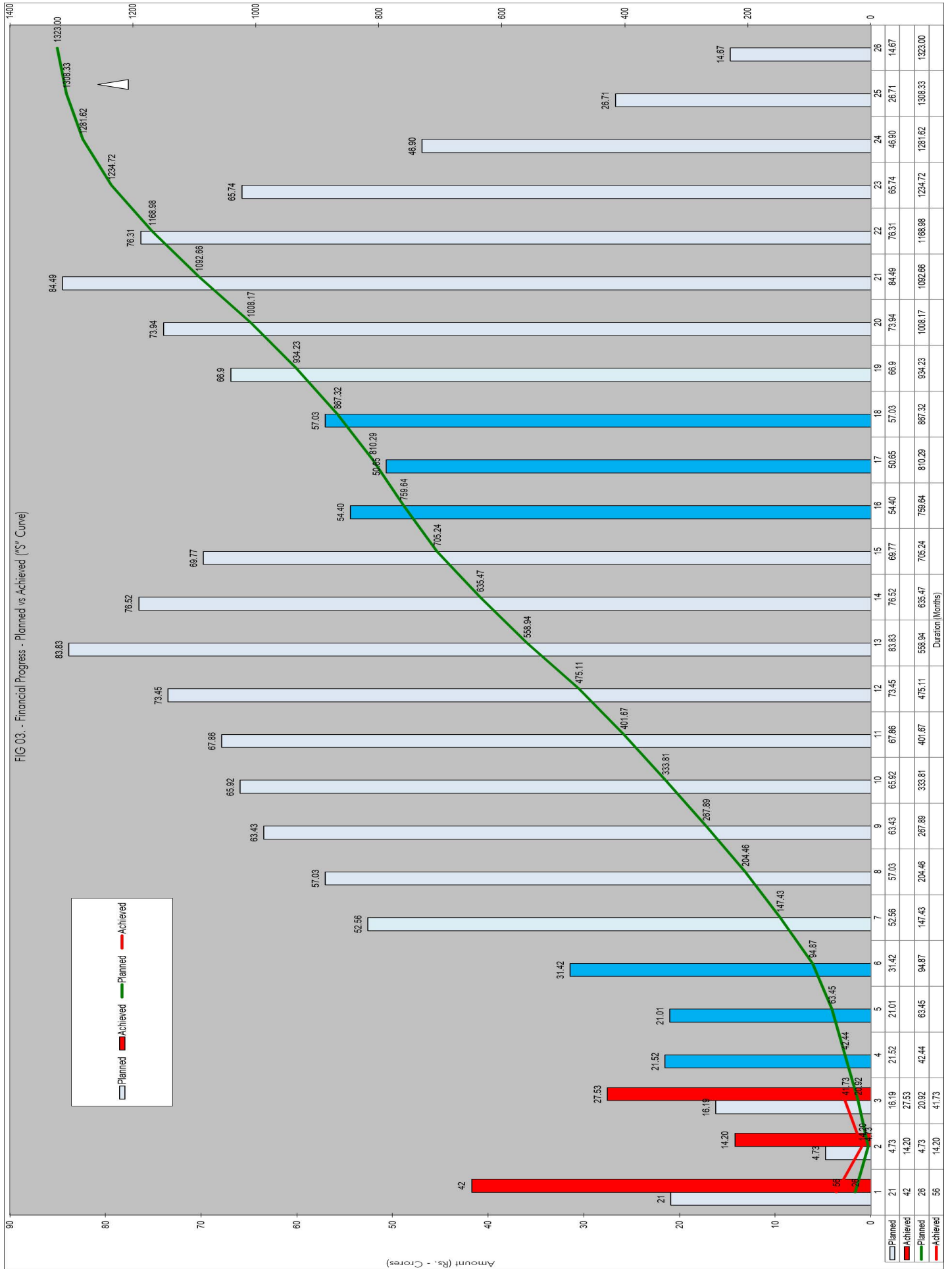
TABLE 4.3 - 7 STRIP CHART FOR STATUS OF FLYOVER																	
LHS										RHS							
Sr.No.	FO at Chainage	Span		Crash Barrier	Slab	Girder Launching	Girder Casting	Pierca p/Abtc ap	Pier/A bt	Pile Cap	Pier/A bt	Pierca p/Abtc ap	Girder Casting	Girder Launching	Slab	Crash Barrier	
1	69+785	1x30	BYPASS	A1						2							
				A2						1							
2	74+655	1x30	BYPASS+EXISTING	A1						1							
				A2						6							
3	80+556	1x30	EXISTING	A1													
				A2													
4	80+720	1x30	EXISTING	A1													
				A2													
5	95+455	2x30	EXISTING	A1													
				P1													
				A2													
6	98+950	2x30	EXISTING	A1													
				P1													
				A2													
7	104+570	1x30	BYPASS	A1						1							
				A2						4							
8	110+110	1x30	EXISTING	A1						1							
				A2						1							
										13	0	0	0	0	0	0	0

TABLE 4.3 - 8 STRIP CHART FOR STATUS OF VUP

SR.NO.	VUP at Chainage	Span	Status	LHS								RHS									
				Crash Barrier	Slab	Girder Launching	Girder Casting	Piercap /Abtcp	Pier/Abt	Pile Cap	Pile	Pier/Abt	Piercap /Abtcp	Girder Casting	Girder Launching	Slab	Crash Barrier				
1	72+545	1x25	BYPASS	A1																	
2	75+830	1x25	EXISTING	A2								2	1	6							
3	86+677	1x25	EXISTING	A1																	
4	87+670	1x25	EXISTING	A2																	
5	90+580	1x25	EXISTING	A1																	
6	97+225	1x25	EXISTING	A2								1	1	5							
7	101+910	1x25	EXISTING	A1																	
8	102+975	1x25	EXISTING	A2																	
9	106+318	1x25	BYPASS	A1								1	6								
10	109+350	1x25	BYPASS	A2																	
11	111+235	1x25	BYPASS+EXISTING	A1																	
12	113+550	1x25	BYPASS+EXISTING	A2																	
13	115+258	1x25	EXISTING	A1																	
				A2								10	1	47	2	0	0	0	0	0	0

5. Financial Progress of Work

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





## 6.1. List of Lab Equipment's

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

Table 6.1 - 1 QA/QC Lab Equipment at Annaikarai Lab		
Sl. NO	EQUIPEMENT LIST'S	QUANTITY
1	compression testing machine 2000 kN	1
2	cement mortar vibrating machine	1
3	AIV Apparatus	1
4	Electronic weighing balance (50 kg)	1
5	Electronic weighing balance (600 gm)	1
6	Hot Air Oven( 250° c)	1
7	Hot plate	1
8	Rain Gauge	1
9	Sieve: as per IS 460 -1962 200 dia Brass frame	
10	4.75 mm	1
11	1.18 mm	1
12	600 mic	1
13	300 mic	1
14	90 mic	1
15	75 mic	1
16	Pan with Lid	1
17	Sieve: as per IS 460 -1962 200 dia GI frame	
18	40 mm	1
19	20 mm	1
20	12.5 mm	1
21	10 mm	1
22	4.75 mm	1
23	2.36 mm	1
24	Pan with Lid	1
25	Thickness Gauge	1
26	Glass Rain measuring jar (200CM <sup>2</sup> )	2
27	GI Tray ( 18 x24 x50 )	5
28	Enamel Tray ( medium)	4
29	Enamel Tray ( small)	6
30	spectula wooden handle	8
31	GI Tray ( )	1
32	Iron tray	1
33	slump cone apparatus with tamping rod	2

Table 6.1 - 2 QA/QC Lab Equipment at Meensurity Lab		
Sl. NO	EQUIPEMENT LIST'S	QUANTITY
1	Test Sieves Set 450mm internal diameter as per IS complete with lid & pan of hole sizes	
a	100mm	2 Nos
b	75mm	2 Nos
c	90mm	2 Nos
d	63mm	2 Nos
e	53mm	2 Nos
f	50mm	2 Nos
g	45mm	2 Nos
h	40mm	2 Nos
i	37.5mm	2 Nos
j	31.5mm	2 Nos
k	26.5mm	2 Nos
l	25mm	2 Nos
m	22.4mm	2 Nos
n	20.0mm	2 Nos
o	19.0mm	2 Nos
p	18mm	2 Nos
q	16mm	2 Nos
r	14mm	2 Nos
s	13.2mm	2 Nos
t	12.5mm	2 Nos
v	11.2mm	2 Nos
u	10mm	2 Nos
w	9.5mm	2 Nos
x	6.3mm	2 Nos
y	5.6mm	2 Nos
z	4.75mm	2 Nos
2	Test Sieves Set 200mm internal diameter (Brass frame & steel or brass wire cloth mesh ) as per IS complete with lid & pan of sieve	
a	37.5mm	2 Nos
b	26.5mm	2 Nos
c	22.4mm	2 Nos
d	19mm	2 Nos
e	16mm	2 Nos
f	14mm	2 Nos
g	13.2mm	2 Nos
h	12.5	2 Nos
i	11.2mm	2 Nos
j	10mm	2 Nos
k	9.5mm	2 Nos
l	4.75mm	2 Nos
m	2.8mm	2 Nos
n	2.36mm	2 Nos
o	2.0mm	2 Nos

Sl. NO	EQUIPEMENT LIST'S	QUANTITY
p	1.80mm	2 Nos
q	1.7mm	2 Nos
r	1.4mm	2 Nos
s	1.18mm	2 Nos
t	1.0mm	3 Nos
v	0.600mm	2 Nos
u	0.425mm	2 Nos
w	0.355mm	2 Nos
x	0.300mm	2 Nos
y	0.180	2 Nos
z	0.090mm	2 Nos
aa	0.075mm	6 Nos
3	Measuring cylinder - Borosilicate glass - 100ML	40 Nos
4	Glass Thermometer 0 <sup>o</sup> c to 300 <sup>o</sup> c	10 Nos
5	Flash filtering borosil glass - 2000ML	1 No
6	Flash filtering borosil glass - 5000ML	1 No
7	Round hot Plate	2 Nos
8	Measuring cylinder - Borosilicate glass - 1000ML	4 Nos
9	Measuring cylinder - Borosilicate glass - 250ML	4 Nos
10	Measuring cylinder- Borosilicate glass - 500ML	4 Nos
11	Beakers - glass borosil - low from cap 600ML	4 Nos
12	Compaction pedestal - 4"	4 Nos
13	Extractor plate - 6" dia for marshal test	1 No
14	Rammer marshal - 4"	4 Nos
15	Thermometer Infra red - MTX - 2	2 Nos
16	LE - Chatlier mould one set of six	2 Nos
17	Cone penetrometer	1 No
18	Los angeles abrasion testing machine	1 No
19	Marshal Mould - 4" dia	51 nos
20	G.I Tray - 1500*1500*100MM	4 Nos
21	Compaction pedestal - 6"	1 No
22	Marshal stability apparatus	1 No
23	Measuring cylinder- Plastic - 50ML	4 Nos
24	Measuring cylinder- Plastic - 250ML	2 Nos
25	Measuring cylinder- Plastic - 500ML	2 Nos
26	Measuring cylinder- Plastic - 1000ML	2 Nos
27	Vibrating machine with digital timer	1 No
28	Hot Air Oven - Thermostatic - NoN Digital - 45*45*45 CM	1 No
29	Hot Air Oven - Thermostatic - NoN Digital - 90*60*60 CM	1 No
30	Penetration cup - 55*70 MM	2 Nos
31	Penetration cup - 55*35MM	6 Nos
32	Standard Penetrometer - Automatic with digital timer	1 No
33	proctor compaction mould 100mm dia with 2.69kg Rammer mid steel	4 Nos
34	proctor compaction mould 150mm dia with 4.89kg Rammer mid steel	6 Nos
35	proving ring compression type 10kn	1 Nos

Sl. NO	EQUIPEMENT LIST'S	QUANTITY
36	proving ring compression type 2.5kn	1 Nos
37	proving ring compression type 25kn	1 Nos
38	proving ring compression type 50kn	1 Nos
39	pycnometter bottle	4 Nos
40	Rapid moisture meter-0-25%	4 Nos
41	Riffle sample divider -G.I-20mm , no of slot ;16	1 nos
42	Riffle sample divider -G.I-40mm , no of slot ;12	1 Nos
43	Pipette borosilicate glass - 10 ml	4 Nos
44	Sant equivalent value test apparaus with accessories	1 Nos
45	fileld density test app - sand replacement method small	2 Set
46	shrinkage limit set W/O mercury	1 Nos
47	Mercury 250 Gm	1 Nos
48	Buoyancy balance	1 Nos
49	Spatula 8"	10 Nos
50	Spatula 4"	10 Nos
51	Standard sand - grade III - Bag of 25 kg	2 Nos
52	Standard sand - grade I - Bag of 25 kg	2 Bag
53	Standard sand - grade II - Bag of 25 kg	2 Bag
54	stanard penetrometer - automatic with digital timer	1 Nos
55	Beaking head assembly - 6'	1 Nos
56	Bulk density cylindrical metal measure - 15 LTR	1 Nos
57	Bulk density cylindrical metal measure - 5 LTR	1 Nos
58	Bulk density cylindrical metal measure - 30 LTR	1 Nos
59	Calcium carbide - 500 GM for rapid moisture meter	10 Nos
60	Liquid limits device - hand operated	1 Nos
61	CBR mould mild steel 150mm dia eith coller and base plate	60 Nos
62	Perforated plate - for CBR test AS per 1377	57 Nos
63	Spacer disc - for CBR test	4 nos
64	surcharge weight 2.5kg annular for cbr test	120 nos
65	cbr load frame electrical single speed	1 nos
66	chiesel 25mm wide *300mm long	20 nos
67	compression testing machine 2000kn digital manual pace	1 nos
68	cube moulds 7.06cm isi marked for cement	12
69	Concrete mixer - Tilting drum type	1 No
70	Constant temperature waterbath for marshal test with digital	2 Nos
71	Core drilling machine with disel engine	1 No
72	Electronic weighing balance - 10KG	1 No
73	Cube moulds - 10CM	18 Nos
74	Cube moulds - 5CM	12 Nos
75	Electronic weighing balance - 600Gms	2 Nos
76	Dial gauge 0.01*30mm	4 Nos
77	Electronic platform balance - 100KG	1 Nos
78	Electronic weighing balance - 30KG	2 Nos
79	Electronic weighing balance - 50KG	2 Nos
80	Electronic weighing balance - 5KG	1 No
81	Stop watch - digital	4 Nos

Sl. NO	EQUIPEMENT LIST'S	QUANTITY
82	Direct shear apparatus	1 No
83	Bottle wash plastic - 1000ML	4 Nos
84	Length gauge	1 No
85	Tray - G.I 300*300MM (12"*12")	6 Nos
86	Enamel tray -300*250*40 mm (10"*12")	9 Nos
87	Tray G.I -300*250*40 mm (10"*12")	9 Nos
88	Enamel tray -450*600*40 mm (18"*12")	12 Nos
89	Field density test app -sand replacement method medium	2 Set
90	Field density test app -sand replacement method Large	2 Set
91	Filter paper for marshal test 100mm dia	10 PKT
92	Filter paper for CBR test 15cm dia PKT of 100 circles	10 PKT
93	Flakiness gauge - M.S .Chrome / powder coated	1 Nos
94	Pensky marten flash piot apparatus	1 Nos
95	Flexural strength testing machine curve	1 Nos
96	French curve	2 Nos
97	Slump test aprpratus with tamping rod 16mm dia *600mm long	9 Nos
98	Thermometer dial 100mm dia * 300mm long 0 <sup>0</sup> - 300 <sup>0</sup> c	10 Nos
99	Tripod stand for CBR test	4 Nos
100	Gauging trowel 6" (150mm)	4 Nos
101	U tube glass viscometer	1 Nos
102	Saybolt viscometer with energy regulator	1 Nos
103	Vacuum pump -Singal Stage	1 Nos
104	Vibrating table -60*60 CM	1 Nos
105	Needle final setting time for vicat needle aprpratus	1 Nos
106	Needle Intial setting time for vicat needle aprpratus	1 Nos
107	Vicat Needle apparatus	2 Nos
108	Hammer with Handle - 1000 GM	4 Nos
109	Aggregate Impact testing machine	1 Nos
110	Beakers - glass borosil - low form cap ; 600ML	2 Nos
111	Beam mould -15*15*70 CM - Mild steel	17 Nos

## 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 August - 2018 are tabulated below -

S. No.		Description	IS Specification Clause	Tests conducted during Oct-2018										Total Tests up to Sep-2018									
				Previous Month					Tests conducted during Oct-2018					Tested	Failed								
				Tested	Passed	Failed	Concession aire	IE	Tested	Passed	Failed	Concession aire	IE			Tested	Passed	Failed					
<b>1.0 Tests on OGI</b>																							
1.1	Grain size analysis	As required	IS-2720 (Part4)	226	226	0	63	16	63	16	0	0	0	289	289	0							
1.2	Liquid Limit & Plastic limit	As required	IS-2720 (Part5)	226	226	0	63	16	63	16	0	0	0	289	289	0							
1.3	Maximum Dry Density	As required	IS-2720 (Part8)	226	226	0	63	16	63	16	0	0	0	289	289	0							
1.4	Free Swell index	As required	IS-2720 (Part40)	226	221	5	63	16	63	16	0	0	0	289	284	5							
1.5	California bearing ratio	As required	IS-2720 (Part16)	0	0	0	0	0	0	0	0	0	0	0	0	0							
<b>2.0 Borrow Area for EMB/Subgrade</b>																							
2.1	Grain size analysis	1 test / 1500 m <sup>3</sup>	MORT&H 305 IS-2720 (Part4)	61	61	0	20	20	20	20	0	0	0	81	81	0							
2.2	Liquid Limit & Plastic limit	1 test / 1500 m <sup>3</sup>	IS-2720 (Part5)	61	61	0	20	20	20	20	0	0	0	81	81	0							
2.3	Proctor	1 test / 1500 m <sup>3</sup>	IS-2720 (Part8)	61	61	0	20	20	20	20	0	0	0	81	81	0							
2.4	Free Swell index	As required	IS-2720 (Part40)	61	61	0	20	20	20	20	0	0	0	81	81	0							
2.5	California bearing ratio	As required	IS-2720 (Part16)	0	0	0	0	0	0	0	0	0	0	0	0	0							
<b>3.0 Curing portion &amp; Esting for EMB/SG</b>																							
3.1	Grain size analysis	1 test / 1500 m <sup>3</sup>	MORT&H 305 IS-2720 (Part4)	0	0	0	0	0	0	0	0	0	0	0	0	0							
3.2	Liquid Limit & Plastic limit	1 test / 1500 m <sup>3</sup>	IS-2720 (Part5)	0	0	0	0	0	0	0	0	0	0	0	0	0							
3.3	Maximum Dry Density	1 test / 1500 m <sup>3</sup>	IS-2720 (Part8)	0	0	0	0	0	0	0	0	0	0	0	0	0							
3.4	Free Swell index	As required	IS-2720 (Part40)	0	0	0	0	0	0	0	0	0	0	0	0	0							
3.5	California bearing ratio	As required	IS-2720 (Part16)	0	0	0	0	0	0	0	0	0	0	0	0	0							
<b>4.0 FLYASH for Embankment</b>																							
4.1	Liquid Limit & Plastic limit	1 test / 1500 m <sup>3</sup>	IRC SP58:2001 TABLE-1	35	35	0	0	0	0	0	0	0	0	35	35	0							
4.2	Maximum Dry Density	1 test / 1500 m <sup>3</sup>	Clause 5.2	35	35	0	0	0	0	0	0	0	0	35	35	0							
<b>5.0 Field Density Test</b>																							
5.1	Field density (OGI)	10 pits / 3000 sqm	MORT&H 305 IS-2720 (Part28)	410	400	10	0	0	0	0	0	0	0	410	400	10							
5.2	MB field density	10 pits/3000 sqm	IS-2720 (Part28)	203	192	11	0	0	0	0	0	0	0	203	192	11							
5.3	SG field density	10 pits/ 2000 sqm	IS-2720 (Part28)	0	0	0	0	0	0	0	0	0	0	0	0	0							
5.4	Shoulder field density	10 pits/ 2000 sqm	IS-2720 (Part28)	0	0	0	0	0	0	0	0	0	0	0	0	0							
5.5	CSB field density	1 pit/ 1000 sqm	IS-2720 (Part28)	0	0	0	60	15	60	15	0	0	0	60	60	0							
<b>6.0 Soil Bearing capacity of soil</b>																							
6.1	Free Swell index	As required	IS-2720 (Part40)	20	16	4	6	6	6	6	0	0	0	26	22	4							
6.2	Grain size analysis	As required	IS-2720 (Part4)	20	20	0	6	6	6	6	0	0	0	26	26	0							
6.3	Liquid Limit & Plastic limit	As required	IS-2720 (Part5)	20	20	0	6	6	6	6	0	0	0	26	26	0							
6.4	Direct shear Test	As required	IS-6403	20	15	5	6	4	6	4	2	2	2	26	19	7							
<b>7.0 Fine Aggregate</b>																							
7.1	Grad / Sieve analysis	1 test / Daily	MORT&H 1008 IS-2386 (Part1)	54	54	0	38	20	38	20	0	0	0	92	92	0							
7.2	Specific gravity	As required	IS-2386 (Part2)	5	5	0	9	9	9	9	0	0	0	14	14	0							
7.3	Water absorption	As required	IS-2386 (Part2)	5	5	0	9	9	9	9	0	0	0	14	14	0							
<b>8.0 Course Aggregate</b>																							
8.1	Gradation	1 test / Daily	MORT&H 1007 IS-2386 (Part2)	54	54	0	38	20	38	20	0	0	0	92	92	0							
8.2	Specific gravity	As required	IS-2386 (Part3)	5	5	0	9	9	9	9	0	0	0	14	14	0							
8.3	Aggregate Impact Value	1 test / weekly once days	IS-2386 (Part4)	10	10	0	24	12	24	12	0	0	0	34	34	0							
8.4	Flakiness index	1 test / weekly once days	IS-2386 (Part1)	10	10	0	12	6	12	6	0	0	0	22	22	0							
8.5	Water absorption	As required	IS-2386 (Part3)	5	5	0	9	9	9	9	0	0	0	14	14	0							
<b>9.0 Granular Sub base</b>																							
9.1	Gradation	1 test / 400 M <sup>3</sup>	MORT&H 1007 IS-402	54	54	0	38	20	38	20	0	0	0	92	92	0							
9.2	Liquid Limit & Plastic limit	1 test / 400 M <sup>3</sup>	IS-402	35	35	0	0	0	0	0	0	0	0	35	35	0							
<b>9.0 Cement</b>																							
9.1	Fineness	Every batch	MORT&H 1006 IS-4031 (Part1)	40	40	0	18	6	18	6	0	0	0	58	58	0							
9.2	Consistency	Every batch	IS-4031 (Part4)	40	40	0	18	6	18	6	0	0	0	58	58	0							
9.3	Initial/Final setting time	Every batch	IS-4031 (Part5)	40	40	0	18	6	18	6	0	0	0	58	58	0							
9.4	Soundness of Cement	Every batch	IS-4031 (Part3)	40	40	0	5	2	5	2	0	0	0	45	45	0							
9.5	Compressive Strength-set	1 test per Lot	IS-4031 (Part6)	33	33	0	4	2	4	2	0	0	0	37	37	0							
3 days		1 test per Lot		31	31	0	4	2	4	2	0	0	0	35	35	0							
7 days		1 test per Lot		16	16	0	7	4	7	4	0	0	0	23	23	0							
28 days																							

S. No.	Description	IS Specification Clause	Previous Month				Tests conducted during Oct-2018								Total Tests up to Sep-2018		
			Tested	Passed	Failed	Tested		Passed		Failed		Tested	Passed	Failed			
						Concession aire	IE	Concession aire	IE	Concession aire	IE						
<b>10.0 Concrete-cube</b>																	
10.1	<b>M15 PCC</b>	<b>MORT&amp;H 1700</b>															
	7Days Compressive Strength	MORT&H Sec. 1700	26	26	0	14	5	14	5	0	0	0	0	40	40	0	
	28Days Compressive Strength	MORT&H Sec. 1700	28	28	0	29	8	29	8	0	0	0	0	57	57	0	
10.2	<b>M30 RCC</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	11	11	0	5	2	5	2	0	0	0	0	16	16	0	
	28Days Compressive Strength	MORT&H Sec. 1700	3	3	0	20	8	20	8	0	0	0	0	23	23	0	
10.3	<b>M35 RCC</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	36	36	0	10	4	10	4	0	0	0	0	46	46	0	
	28Days Compressive Strength	MORT&H Sec. 1700	31	31	0	36	12	36	12	0	0	0	0	67	67	0	
10.4	<b>M35 Pile</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	59	59	0	24	9	24	9	0	0	0	0	83	83	0	
	28Days Compressive Strength	MORT&H Sec. 1700	102	102	0	60	18	60	18	0	0	0	0	162	162	0	
10.5	<b>M40 Pile</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	28	28	0	1	1	1	1	0	0	0	0	29	29	0	
	28Days Compressive Strength	MORT&H Sec. 1700				29	9	29	9	0	0	0	0				
10.4	<b>M35 RE Block</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	59	59	0	14	8	14	8	0	0	0	0	73	73	0	
	28Days Compressive Strength	MORT&H Sec. 1700	102	102	0	36	15	36	15	0	0	0	0	138	138	0	
<b>11.0 Mix Design- Concrete-cube</b>																	
11.1	<b>M15 PCC</b>	<b>MORT&amp;H 1700</b>															
	7Days Compressive Strength	MORT&H Sec. 1700	27	18	0	0	0	0	0	0	0	0	0	27	18	0	
	28Days Compressive Strength	MORT&H Sec. 1700	24	24	0	6	6	6	6	0	0	0	0	30	30	0	
11.2	<b>M30 RCC</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	18	18	0	6	6	6	6	0	0	0	0	24	24	0	
	28Days Compressive Strength	MORT&H Sec. 1700	24	24	0	6	6	6	6	0	0	0	0	30	30	0	
11.3	<b>M35 RCC</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	18	18	0	3	3	3	3	0	0	0	0	21	21	0	
	28Days Compressive Strength	MORT&H Sec. 1700	24	24	0	3	3	3	3	0	0	0	0	27	27	0	
11.4	<b>M35 Pile</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	18	18	0	6	6	6	6	0	0	0	0	24	24	0	
	28Days Compressive Strength	MORT&H Sec. 1700	24	24	0	6	6	6	6	0	0	0	0	30	30	0	
11.5	<b>M40 Pile</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	18	18	0	3	3	3	3	0	0	0	0	21	21	0	
	28Days Compressive Strength	MORT&H Sec. 1700	24	24	0	0	0	0	0	0	0	0	0	24	24	0	
11.6	<b>M35 RE-Block</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	9	9	0	3	3	3	3	0	0	0	0	12	12	0	
	28Days Compressive Strength	MORT&H Sec. 1700	12	12	0	6	6	6	6	0	0	0	0	18	18	0	
11.7	<b>M40 RCC</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	9	9	0	0	0	0	0	0	0	0	0	9	9	0	
	28Days Compressive Strength	MORT&H Sec. 1700	12	12	0	0	0	0	0	0	0	0	0	12	12	0	
11.8	<b>M45 RCC</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	9	9	0	0	0	0	0	0	0	0	0	9	9	0	
	28Days Compressive Strength	MORT&H Sec. 1700	12	12	0	0	0	0	0	0	0	0	0	12	12	0	
11.9	<b>M50 RCC</b>																
	7Days Compressive Strength	MORT&H Sec. 1700	9	9	0	0	0	0	0	0	0	0	0	9	9	0	
	28Days Compressive Strength	MORT&H Sec. 1700	12	12	0	0	0	0	0	0	0	0	0	12	12	0	

## 7. Weather Report

DATE	Temperature (°C)		Rainfall in mm	Humidity in %		Remarks
	Min	Max		Min	Max	
01-10-2018	41.0	28.3	-	37	56	Sunny
02-10-2018	38.9	28.5	-	38	61	Drizzling
03-10-2018	37.6	27.4	21.40	39	60	Rain Fall
04-10-2018	36.8	26.9	130.02	40	62	Rain Fall
05-10-2018	35.7	26.5	5.80	41	63	Rain Fall
06-10-2018	36.3	27.3	28.40	40	61	Rain Fall
07-10-2018	39.7	27.9	48.80	39	58	Rain Fall
08-10-2018	39.5	26.8	-	39	60	Sunny
09-10-2018	40.1	26.6	5.20	38	57	Rain Fall
10-10-2018	39.7	27.2	-	36	55	Sunny
11-10-2018	39.3	27.5	-	37	57	Sunny
12-10-2018	40.2	27.9	-	35	56	Sunny
13-10-2018	39.7	27.3	-	36	59	Sunny
14-10-2018	40.2	27.8	-	37	56	Sunny
15-10-2018	40.7	27.1	-	38	58	Sunny
16-10-2018	39.3	27.6	4.60	35	61	Rain Fall
17-10-2018	40.2	28.3	-	36	59	Sunny
18-10-2018	39.7	27.4	3.20	35	57	Rain Fall
19-10-2018	39.8	27.9	-	37	56	Sunny
20-10-2018	40.1	28.1	-	36	58	Sunny
21-10-2018	39.7	27.5	11.60	39	65	Rain Fall
22-10-2018	39.4	26.3	-	34	61	Sunny
23-10-2018	39.7	26.9	-	35	59	Sunny
24-10-2018	40.2	26.1	-	36	57	Sunny
25-10-2018	41.2	26.5	-	34	55	Sunny
26-10-2018	40.9	27.3	-	36	57	Sunny
27-10-2018	40.1	26.8	-	34	59	Sunny
28-10-2018	40.3	27.1	-	36	58	Sunny
29-10-2018	40.5	26.2	-	34	59	Sunny
30-10-2018	41.3	26.1	-	35	57	Sunny
30-11-2018		25.9		34		Sunny



- Various issues related to environment and safety, such as traffic management, safety signages, disposal of waste materials and oil spillage, housekeeping, area barricading and traffic **management, etc, are being taken care of during the** execution of the project.

Periodic Safety meetings being conducted on a regular basis and the details of the phonographs for the same along with action taken are as below.



## 9. Support required from NHAI

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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.
2. Payment of Supervision charges for TNEB for relocation of Electrical lines in Thanjavur District and Ariyalur District.
3. Relocation of High Tension transmission tower lines.
4. Relocation of electrical substation of TANGENDCO at Km: 85+300 to 85+400(LHS) and Km:113+700 to 113+800(RHS).
5. NOC from PWD/WRO for commencement construction activities of Irrigation Structures.
6. Permission from Local Authorities for procurement of Borrow Earth from Irrigation Tanks.
7. In sufficient Right of Way with respect to the land handed over as per Clause 10.3.1 of Concession Agreement at the time of Signing of Joint Memorandum.

## 10. Important Events

Table 10.1. Details of Important Events			
Sl. No	Date of Events	Description of Events	Remarks
1)	05.10.2018	District Collector Meeting for taking precautionary measures for upcoming monsoon held at Thanjavur Collectorate.	
2)	23.10.2018	Technical Presentation on Reinforced Wall Structures	
3)	24.10.2018	RO-Madurai Site Visit	
4)	31-10-2018	Rashtriya Ekta Diwas	

## 11. Organization Chart

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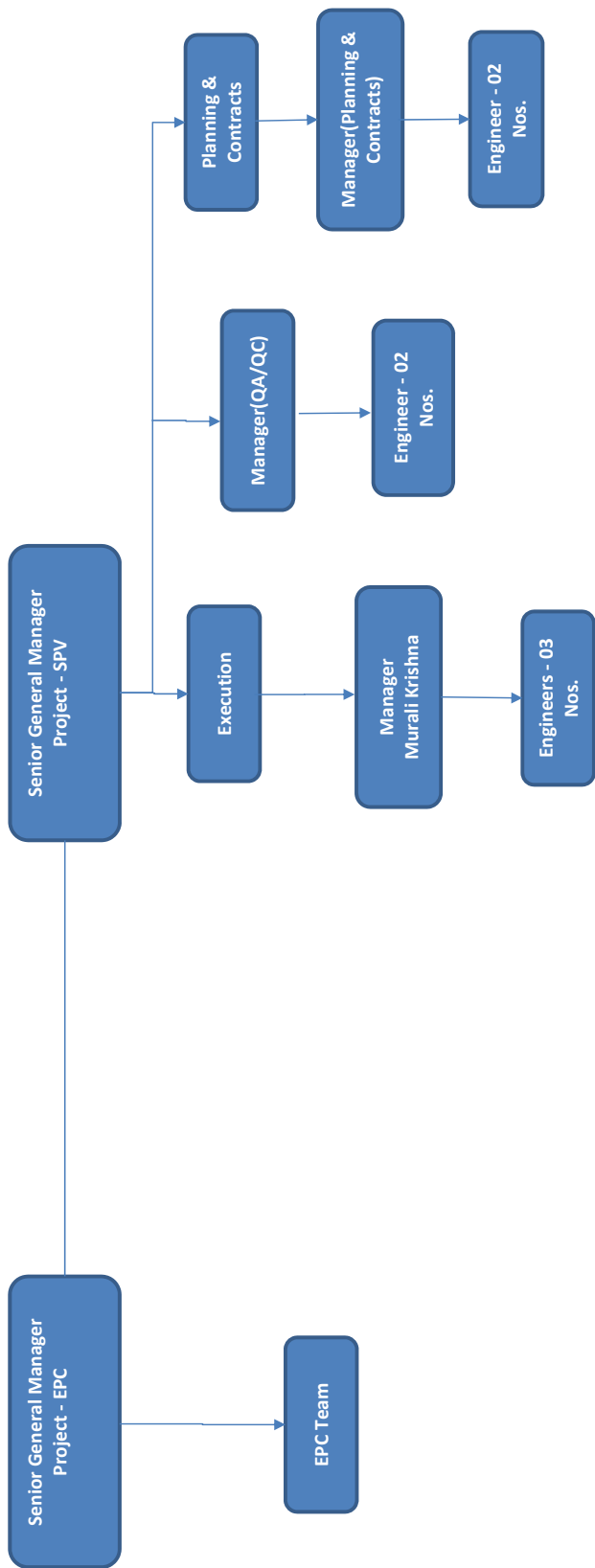
The following figures represents the organization structure of the EPC and SPV Team.

1. Fig. 4 - Organization Chart - EPC Team
2. Fig. 5 - Organization Chart - SPV Team

Figure 4 - ORGANIZATION CHART - EPC Team



Figure 5 - ORGANIZATION CHART - SPV Team



## 12. List of Plants, Machinery and Equipment's

S.No	Name of the Machinery	Capacity / Model	Mobilized in Nos.	Remarks
1	Grader	120K2	9	
2	Excavator	JCB-220	9	
3	Dozer		3	
4	Soil Compactor	HAMM 311	8	
5	Backhoe Loader	JCB 3DX	7	
6	Tipper	Bharat Benz- 3128C	65	
7	Transit Mixture	2523C	8	
8	Loader	455 ZX	4	
9	Trailer		2	
10	Water Tanker		5	
11	Boom Placer	S-36	1	
12	Tractor	5036 D V-2	2	
13	Mobile Service Van		1	
14	Tower Light	AJASKY	3	
11	Hydra Crane		2	
12	Asphalt Batch Mix Plant		1	Erection in Progress
13	Wet Mix Plant	250 TPH	1	Erection in Progress
14	Concrete Batch Mix Plant	45 cum	1	
15	Concrete Batch Mix Plant	60 cum	1	
16	Crusher Plant (3 Stage)	250 TPH	1	
17	Weigh Bridge for Camp 100MT	100MT	3	
18	Weigh Bridge for Crusher 100MT	100MT	2	
19	Genset Base Camp	25KV	1	
20	Genset 63KVA Boiler	63KVA Boile	1	
21	Genset (H.M & B/P)	82.50KV	3	
22	Genset (B/P-CP-45)	125KV	2	
23	Genset Concrete Plant-180 KVA	180 KVA	1	
24	Genset (Crusher)	1010KVA	3	

## 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	Approved in-principle by Authority. Preparation of Details Quantities in proper order is in Progress.	NA	NA



## 14. Details of Correspondences

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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

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

S.No	Date	Letter No	Subject	Remarks
1	16.10.2018	PSCHPL/SCP/NHAI/2018/146	Submission of Video recording No-02 as per clause 13.6 of CA	
2	20.10.2018	PSCHPL/SCP/NHAI/2018/148	Submission of GAD for 1 MJB for Concurrence from PWD/WRO	
3	20.10.2018	PSCHPL/SCP/NHAI/2018/149	Submission of GAD for 1 MNB for Concurrence from PWD/WRO	
4	20.10.2018	PSCHPL/SCP/NHAI/2018/150	Hindrance/Obstruction of Irrigation within Proposed Carriage way	
5	20.10.2018	PSCHPL/SCP/NHAI/2018/151	Submission of GAD for 3 MNB & 1 MJB for Concurrence from PWD/WRO	
6	26.10.2018	PSCHPL/SCP/NHAI/2018/153	RA Bill No-02 Utility shifing	
7	31.10.2018	PSCHPL/SCP/NHAI/2018/159	Distruprtion of Construction activities by local Villagers in Sethiyathope Bypass	

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

S.No	Date	Letter No	Subject	Remarks
1	04.10.2018	NHAI/PIU/Thanj/11025/04/2018/1917	Encroachments in Road Stretch of Tirupanandal Bypass-Eviction Carried Out	
2	05.10.2018	NHAI/PIU/Thanj/11025/25/2018/1924	Commencement of Construction Work-Work Stopped-Complaint Made-Police Protection Requested	
3	06.10.2018	NHAI/PIU/Thanj/11025/19/2018/1934	Disperncies with respect to actual requirement and size of structure as per CA	
4	23.10.2018	NHAI/PIU/Thanj/11025/19/2018/2013	Link between Existing Anakarai Bridge and proposed new bridge	
5	25.10.2018	NHAI/PIU/Thanj/11025/19/2018/2017	Submission of GAD for Review-NOC Requested	
6	25.10.2018	NHAI/PIU/Thanj/11025/19/2018/2018	Submission of GAD for Review-NOC Requested	
7	25.10.2018	NHAI/PIU/Thanj/11025/19/2018/2019	Submission of GAD for Review-NOC Requested	

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

S.No	Date	Letter No	Subject	Remarks
1	09.10.2018	PSCHPL/SCP/IE/2018/136	Action taken report on preparedness for the upcoming Monsoon 2018	
2	09.10.2018	PSCHPL/SCP/IE/2018/139	Submission of Drawings of 8 Nos of Grade Separators	
3	13.10.2018	PSCHPL/SCP/IE/2018/141	Submission of Test reports of High Strain Dynamic Test & Pile Integrity Test of routine load test on piles for the Proposed VUP at Km 106+320	
4	13.10.2018	PSCHPL/SCP/IE/2018/142	Submission of Monthly Progress Report for the Month of Sep 2018	
5	13.10.2018	PSCHPL/SCP/IE/2018/143	Submission of GFC drawings of Box Culverts & Minor Bridges	
6	13.10.2018	PSCHPL/SCP/IE/2018/144	Procurement of Elastomeric Bearing from Ms Ammenji Rubber Pvt Ltd	
7	16.10.2018	PSCHPL/SCP/IE/2018/147	Proposal of Borrow Area No.04 of Kaitanakaram Village at Km 113+250 (LHS)	
8	25.10.2018	PSCHPL/SCP/IE/2018/152	Submission of test Report of Safe Bearing capacity for Box Culverts & Minor Bridge	
9	26.10.2018	PSCHPL/SCP/IE/2018/154	Procurement of Cement from Ms Bharathi Cement Corporation Private Ltd	
10	29.10.2018	PSCHPL/SCP/IE/2018/155	Submission of Point wise reply of 13 Nos. of Box Culverts and 03 Nos of Minor bridges drawings	
11	29.10.2018	PSCHPL/SCP/IE/2018/156	Submission of Concrete Mix Design.	
12	31.10.2018	PSCHPL/SCP/IE/2018/157	Submission of Drawings of 03 Nos. of Minor bridges	
13	31.10.2018	PSCHPL/SCP/IE/2018/158	Submission of Concrete Mix Design of Grade M40 & M45	
14	31.10.2018	PSCHPL/SCP/IE/2018/160	Proposal of Borrow Area No.06 of Ammaiappan Village and Borrow Area No.07 of Palayankottai	
15	31.10.2018	PSCHPL/SCP/IE/2018/161	Procurement of POT-PTFE Bearing from Ms BBR (India) Pvt Ltd	

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

S.No	Date	Letter No	Subject	Remarks
1	03.10.2018	TES/IE/SCP/PIL/2018/108	Submission of Revised Traffic Management Plan – for construction of proposed Grade Separator at Km 98+950	
2	04.10.2018	TES/IE/SCP/PIL/2018/109	Action taken report on preparedness on North East Monsoon 2018	
3	04.10.2018	TES/IE/SCP/PIL/2018/110	Submission of Revised Box Culverts Design and Drawings – 02 Nos. – R1	
4	04.10.2018	TES/IE/SCP/PIL/2018/111	Submission of Revised Box Culverts Design and Drawings – 09 Nos. – R1	
5	08.10.2018	TES/IE/SCP/PIL/2018/112	Submission of Revised Box Culverts Design and Drawings – 09 Nos. – R1	
6	12.10.2018	TES/IE/SCP/PIL/2018/113	Submission of drawings and commencement of piling works	
7	15.10.2018	TES/IE/SCP/PIL/2018/115	Construction of Embankment with Fly ash layers	
8	17.10.2018	TES/IE/SCP/PIL/2018/116	Submission of GFC drawings box culvert and minor bridge	
9	17.10.2018	TES/IE/SCP/PIL/2018/117	Submission of GFC Drawings Plan & profile and LVUP	
10	17.10.2018	TES/IE/SCP/PIL/2018/118	Submission of Drawings of 8 Nos of Grade Separators	
11	22.10.2018	TES/IE/SCP/PIL/2018/119	Submission of Test Reports of High Strain Dynamic Test and Pile Integrity Test on Routine pile for the proposed VUP at Km 106+320	
12	24.10.2018	TES/IE/SCP/PIL/2018/120	Submission of Structures Design and Drawings Hard Copies	
13	24.10.2018	TES/IE/SCP/PIL/2018/122	Proposal of Borrow Area No-04 at km 113+250 (LHS)	
15	31.10.2018	TES/IE/SCP/PIL/2018/123	Submission of Concrete Mix Designs for M-15,M-30,M-35,M-35 Pile and M-40 Pile	

15. Progress Photographs


Sl. No	Description	Location	Side	Remarks
1.	Existing Building Dismantling works in progress	-	-	



Sl. No	Description	Location	Side	Remarks
2.	Existing Building Dismantling works in progress	-	-	



Sl. No	Description	Location	Side	Remarks
3.	Embankment in progress	66+500	-	
				

Sl. No	Description	Location	Side	Remarks
4.	Embankment Layer In Progress	66+500	-	-
				

Sl. No	Description	Location	Side	Remarks
5.	Culvert – Wall In Progress	105+440	BHS	



Sl. No	Description	Location	Side	Remarks
6.	Minor Bridge-Wall In Progress	74+165		





Sl. No	Description	Location	Side	Remarks
7.	Minor Bridge-Wall Completed	85+435	LHS	
				

Sl. No	Description	Location	Side	Remarks
8.	Minor Bridge -Wall Completed	91+165	LHS	



Sl. No	Description	Location	Side	Remarks
9.	VUP-Pile Cap In progress	75+830	RHS	



Sl. No	Description	Location	Side	Remarks
10.	GSI-Piling In Progress	69+785	A1	



Sl. No	Description	Location	Side	Remarks
11.	GSI-110+100 Load Test Completed	110+100		



Sl. No	Description	Location	Side	Remarks
12.	Rakshtriya Ekta Diwas Celebration			

