



National Highway Authority of India
(Ministry of Road Transportation & Highway)

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 Tamilnadu under NHDP Phase-IV on Hybrid Annuity Mode.

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MONTHLY PROGRESS REPORT
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Table of Content

Table of Content	02
List of Tables	03
List of Figures	03
Executive Summary	04
Project Synopsis	04
1. Background and Project Details	10
1.1. Project Overview.....	10
1.2. Salient Project Features	11
1.3. Contractual Project Milestones	12
1.4. Payment Milestones During Construction Period.....	12
1.5. Permits & Approvals.....	12
2. Right of Way Status	14
2.1. Land Acquisition	14
2.2. Removal of Religious Structures.....	54
2.3. Shifting of Utilities and Electrical HT/LT Lines	54
2.4. Tree felling.....	55
3. Progress Briefing – Contractor Activities	56
3.1. Pre-Construction Activities	56
4. Physical Progress of Work	57
4.1 Physical Progress of Work	57
5. Financial Progress of Work	80
6. Quality Control and Quality Assurance	82
6.1 List of Lab Equipment's	82
6.2 Quality Control Test Summary	86
7. Weather Report.....	89
8. Safety	90
9. Support required from NHAI	91
10. Important Events.....	92
11. Organization Chart.....	93
12. List of Plants, Machinery and Equipments.....	96
13 Change of Scope Proposals	97
14 Details of Correspondences	98
15 Progress Photographs.....	103

List of Tables

Table 1.1: Details of Project Alignment	07
Table 2.1-1: Details of proposed ROW as per Schedule-A	14
Table 2.1-2: Status of Land Acquisition	14
Table 2.1-3: Compensation disbursement for land	15
Table 2.1-4: Compensation disbursement for Structures	15
Table 2.1-4: Compensation disbursement for Structures	15
Table 2.1-5: Details of Stretches under Hindrance	15
Table 2.1-6: Hindrance Photographs	18
Table 2.2-1: Status of Removal of Religious structures	54
Table 2.3-1: Status of sanction of Estimates-Relocation of RWS Pipe Line	54
Table 2.3-2: Status of sanction of Estimates- Electrical Lines Relocation	54
Table 2.3-3: Status of Utility Relocation	55
Table 2.4-1: Status of Tree Cutting	55
Table 3.1-1: Status of Design and Drawings -Highway	56
Table 3.1-2: Status of Design and Drawings –Structures	56
Table 4.1 : Physical Progress of Works	58
Table 4.2 : Strip Chart for Highway Works	62
Table 4.3 - 1 : Strip Chart for status of Box Culverts on Existing Road	70
Table 4.3 - 2 : Strip Chart for status of Box Culverts on Bypass	72
Table 4.3 - 3 : Strip Chart for status of MNB - Box	73
Table 4.3 - 4 : Strip Chart for status of LVUP	74
Table 4.3 - 5 : Strip Chart for status of MNB (> 15m Span)	75
Table 4.3 - 6 : Strip Chart for status of MNB	76
Table 4.3 - 7 : Strip Chart for status of FLYOVER	78
Table 4.3 - 8 : Strip Chart for status of VUP	79
Table 6.1 - 8 QA/QC Lab Equipment at Annaikarai Lab	82
Table 6.1 - 2 QA/QC Lab Equipment at Meensurity Lab	83
Table 6.2-1: Summary of Quality Control Tests	87
Table 10.1 : Details of Important Events	92
Table 12.1 - List of Plants, Machinery and Equipment's	96
Table 13.1 - Status of Change of Scope Proposals	97
Table 14.1. - Concessionaire to NHAI	99
Table 14.2. - NHAI to Concessionaire	100
Table 14.3. - Concessionaire to Independent Engineer	101
Table 14.4. - Independent Engineer to Concessionaire	102

List of Figures

Figure 1 : Project Location Map	05
Figure 2 : Project Alignment Map	06
Figure 3 : Financial Progress - Planned vs Achieved	81
Figure 4 : Organization Chart - EPC Team	94
Figure 5 : Organization Chart - SPV Team	95

Executive Summary

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 Tamilnadu 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

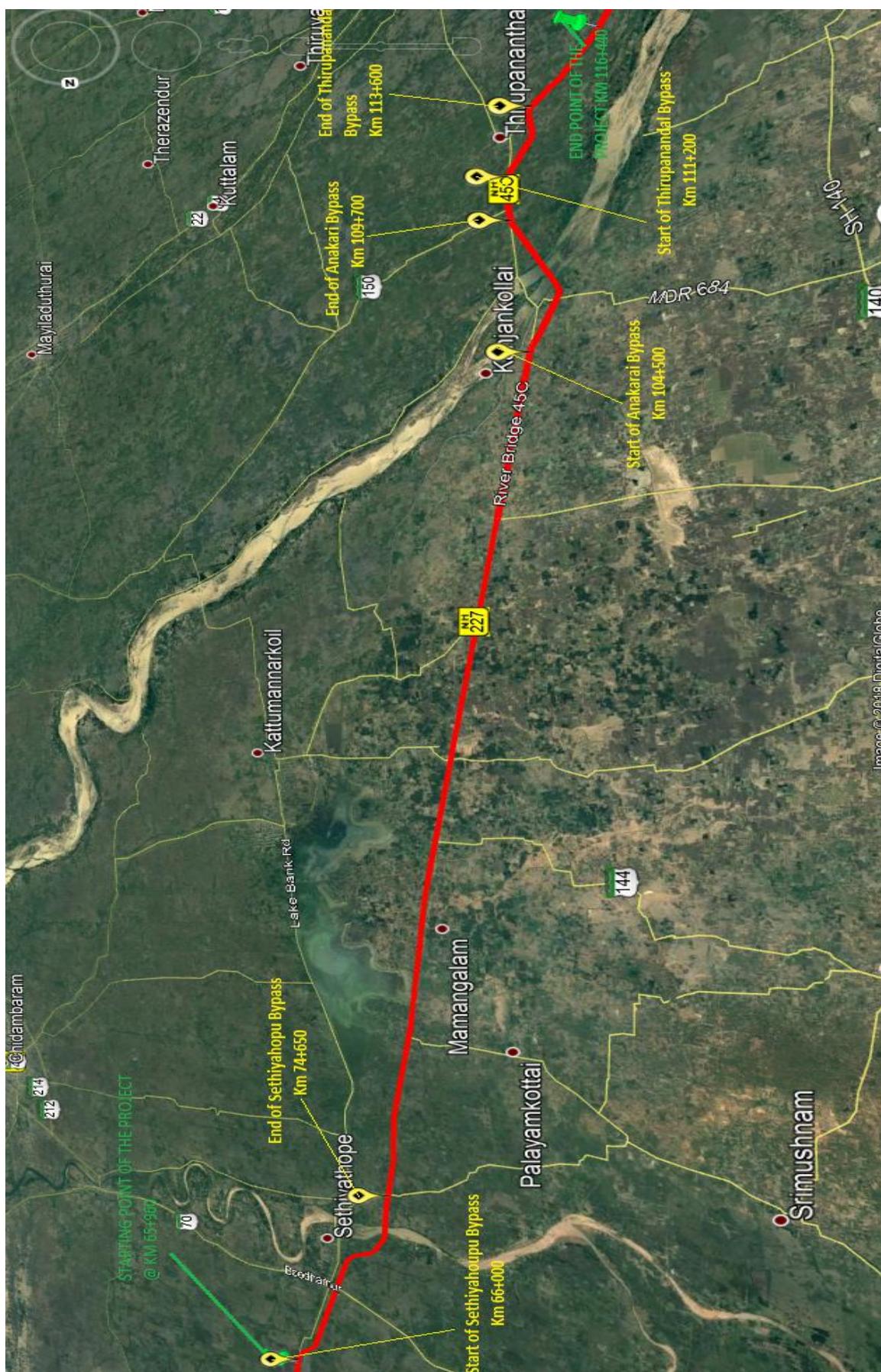


Image © 2018 DataGlobe

Figure 2: Project Alignment Map

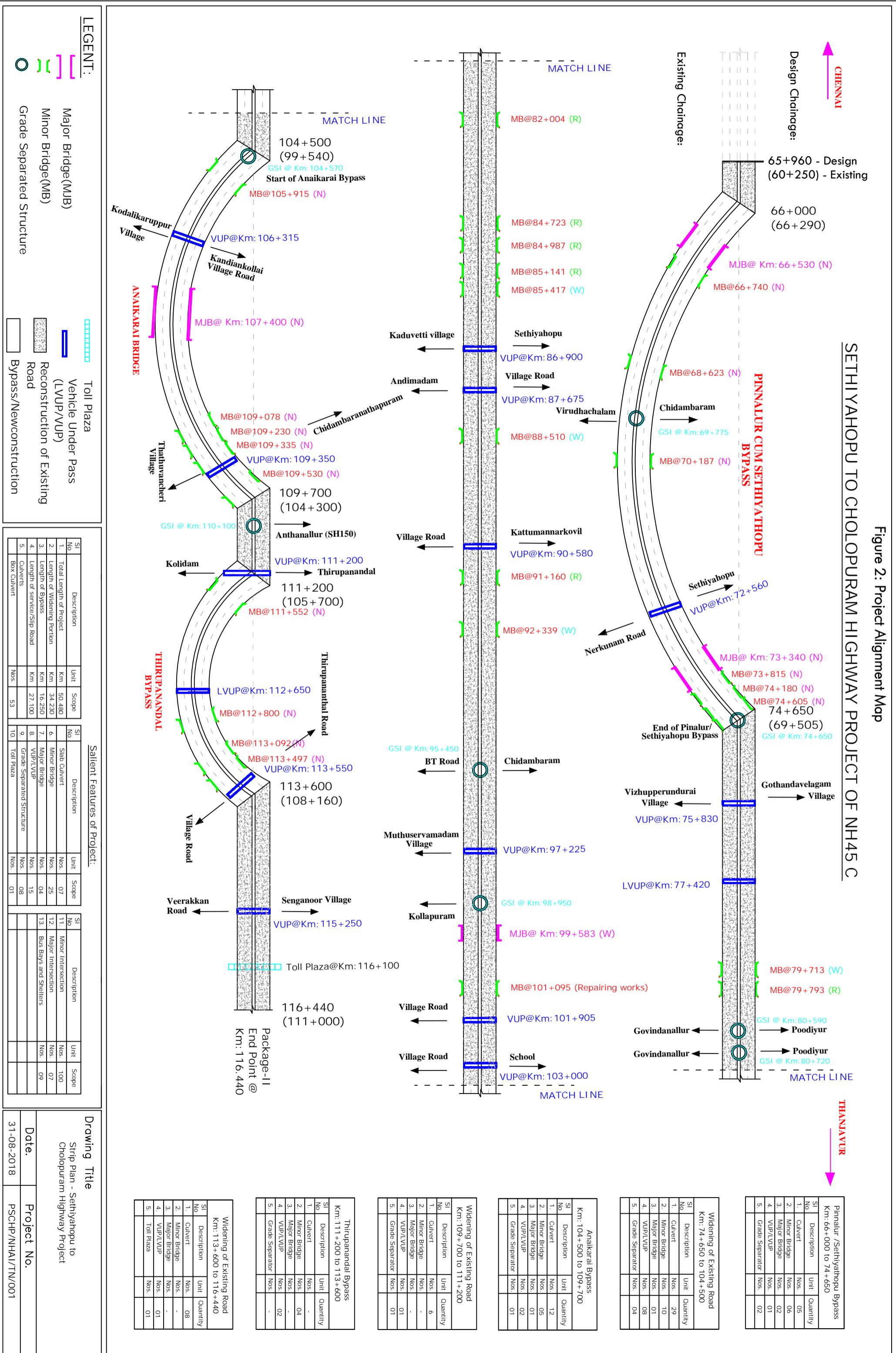


Table- 01: Details of Project Alignments

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				
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. Background and Project Details

1.1. Project Overview

Name of Work	Four Laning of Sethiyahopu-Cholopuram from km. 65.960 to Km.116.450 of NH-45C under NHDP-IV on Hybrid Annuity Mode Basis
Name of Employer	National Highways Authority of India (NHAI) G-5 & 6, Sector-10, Dwarka, New Delhi -110075
Name of Concessionaire	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
Independent Engineer	M/s. Theme Engineering Services Pvt. Ltd, S.F B1&B2, gateway Apartments, koranattu Karuppur, Kumbakonam – 612501.
EPC Contractor	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
Design Consultant	CTL Global Services Pvt. Ltd.. 101, IST Floor, Krishna Chambers, HAL, Airport Road, Bangalore-560017
Senior Lender	Punjab National Bank, Large Corporate Branch, Neelkamal Building, Opp. Sales India, Ashram Road, Ahmedabad - 380009
Lenders Independent Engineers	Sharul Techno-Financial Consultancy Services Pvt. Ltd., 403, Aspire Tower 5, Amanora Park Town, Hadapsar, Pune - 411028.
Length of Road (Design Length)	50.480 Kms
Total Bid Cost	Rs. 1461 Crores (as per concession agreement)
Date of Concession Agreement	November 9, 2017
Concession Period	17 Years (Construction Period 2 Years from Appointed date, Operation period 15 years from COD)
Appointed Date	16.08.2018
Construction Period	2 years from Appointed date
Completion Date	15.08.2020
Maintenance Period	15 years from COD

1.2. Salient Project Features

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

4 - Lane Divided Carriage Way	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 th day from the Appointed Date.	18 th 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 th day from the Appointed Date	16 th 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 th day from the Appointed Date	22 nd March 2020
Scheduled Completion	Concessionaire shall have completed Project on 730 th day from the Appointed Date	15 th 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	Distt. 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.
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	Obtained for Ariyalur District and Thanjavur, cuddalore dist in progress	a) Details of upset price for Cuddalore are awaited from Concern DFO. b) Upset price statement from concerned DFO is with PIU, Thanjavur, and the tree felling permission is awaited.
8	Electric Poles Shifting	Tamilnadu Electricity Board	In progress	Work in progress in Cuddalore & Thanjavur district, for Ariyalure district, estimate approval is in progress.
9	Water Pipes Shifting	Tamilnadu Water Supply and Drainage Board	Estimate approval in progress	
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.

Table 2.1-1: Details of proposed ROW as per Schedule-A

	Design Chainage (Km)	Design Length (Km)	Width (m)	Remarks
Full Right of Way (full width)				
Stretch	65.960 to 75.150	9.190	60.00	
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	
Total Length		50.480		

Balance Right of way (width)

	Design Chainage (Km)	Design Length (Km)	Width (m)	
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.

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

Sl. No.	Description	Unit	Present Status	Remarks
A)	Total Length of the Project Highway	Km	50.48	
i)	Use of Existing Road Portion	Km	34.23	
ii)	Proposed Bypass / Realignment portion	Km	16.25	
B)	Hindered Length			
i)	Paddy/Cotton fields	Km	6.155	
ii)	Existing Buildings	Km	8.685	
iii)	Electrical Lines	Km	5.950	
iv)	Trees	Km	9.030	
v)	Rural Water Supply lines	Km	22.350	
C)	Net Hindered Length (both Side)	Km	42.770	
D)	Total Project Length (both Side)	Km	100.96	
E)	% Hindered Length	%	42.36%	

The details of land acquisition status and available hindrances are produced on a strip chart under section 15.

The status of compensation disbursed is as below: -

Table 2.1-3: Compensation disbursement for land					
SL No.	Name of the District	Total No. of Land cases	Amount paid (in Nos.)	Balance to be Paid (in Nos.)	Remarks
1	Cuddalure	710	537	173	
2	Ariyalur	328	100	228	
3	Thanjavour	102	53	49	
	Total in Nos.	1140	690	450	
		Total in %	60.53%	39.47%	

Table 2.1-4 - Compensation disbursement for Structures					
SI 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	236	153	83	
	Total in Nos	981	443	538	
		Total in %	45.16%	54.84%	

The details of chianages under hindrance due to such balance compensation issues to their land owners, structure payment issues, standing crops, water pipe lines etc. Are as below -

Table 2.1.5 - Details of Stretches Under Hindrance						
SI 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+200	71+700	500	1000	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	73+100	500	1000	BHS	Standing Crops
8	73+400	73+500	100	200	BHS	Standing Crops
9	73+700	73+800	100	200	BHS	Standing Crops
10	74+100	74+200	100	200	BHS	Standing Crops - Payment not done
11	74+500	74+700	200	400	BHS	Water Pipe line
12	75+500	76+150	650	1300	BHS	Compensation Disbursement balance - Not allowed to work by owner

Sl No.	From	To	Length	Effective Hindered Length	Side	Remarks
13	76+300	76+500	200	400	BHS	Compensation Disbursement balance - Not allowed to work by owner
14	77+200	77+600	400	800	BHS	Village Limit - Ribbon Development- Compensation Disbursement balance - Not allowed to work by owner
15	80+100	81+150	1050	2100	BHS	Village Limit - Ribbon Development- Compensation Disbursement balance - Not allowed to work by owner
16	82+200	84+500	2300	4600	BHS	Compensation Disbursement balance - Not allowed to work by owner
17	84+700	88+200	3500	7000	BHS	Compensation Disbursement balance - Not allowed to work by owner
18	88+900	91+000	2100	4200	BHS	Compensation Disbursement balance - Not allowed to work by owner
19	95+050	95+850	800	1600	BHS	Village Limit - Ribbon Development- Compensation Disbursement balance - Not allowed to work by owner
20	98+500	99+400	900	1800	BHS	Village Limit - Ribbon Development- Compensation Disbursement balance - Not allowed to work by owner
21	99+400	99+900	500	250	RHS	Compensation Disbursement balance - Not allowed to work by owner
22	99+900	100+300	400	800	BHS	Village Limit - Ribbon Development- Compensation Disbursement balance - Not allowed to work by owner
23	100+300	101+600	1300	650	RHS	Compensation Disbursement balance - Not allowed to work by owner
24	101+600	102+230	630	1260	BHS	Village Limit - Ribbon Development- Compensation Disbursement balance - Not allowed to work by owner
25	102+230	102+700	470	940	BHS	Village Limit - Ribbon Development- Compensation Disbursement balance - Not allowed to work by owner
26	102+700	103+320	620	310	RHS	Compensation Disbursement balance - Not allowed to work by owner
27	103+320	104+200	880	440	RHS	Compensation Disbursement balance - Not allowed to work by owner
28	104+200	104+500	300	600	BHS	Compensation Disbursement balance - Not allowed to work by owner

Sl No.	From	To	Length	Effective Hindered Length	Side	Remarks
29	109+500	110+600	1100	2200	BHS	Village Limit - Ribbon Development- Compensation Disbursement balance - Not allowed to work by owner
30	110+600	110+900	300	600	BHS	Compensation Disbursement balance - Not allowed to work by owner
31	110+900	111+200	300	150	RHS	Compensation Disbursement balance - Not allowed to work by owner
32	111+515	113+850	2335	4670	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 by owner
34	115+700	116+440	740	1480	BHS	Toll Plaza Area- Land Acquisition under progress
Total Hindered Length (Km.)			42.770			
Total Project Length including both side (Km.)			100.960			
% Hindered Length			42.36%			

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		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

Table 2.2-1: Status of Removal of Religious structures				
Sl No.	Name of the District	Total No. Of structures	Removed as on Date (in Nos.)	Balance (in Nos.)
1	Cuddalore	10	0	10
2	Ariyalur	10	0	10
3	Thanjavur	2	0	2
	Total in Nos.	22	0	22

2.3. Shifting of Utilities and Electrical HT/LT Lines

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

Table 2.3-1: Status of sanction of Estimates - Relocation of RWS Pipe line						
Sl. No.	Name of the District	Chainages			Total Number of Estimates	Remarks
		From	To	Length in Km		
1	Cuddalore	65+960	86+440	20.48	25	Under Scrutiny with RO, Madurai, Supervision charges yet to be paid.
2	Ariyalur	86+440	106+860	20.42	46	
3	Thanjavur	106+860	116+440	9.58	4	

Table 2.3-2: Status of sanction of Estimates - Electrical Lines Relocation							
Sl. No	Name of the District	Chainages			Number of Estimates	Present Status	Remarks
		From	To	Length in Km			
1	Cuddalore	65+960	86+440	20.48	10	Under scrutiny at RO, Madurai.	Supervision charges paid for 09 estimates.
2	Ariyalur	86+440	106+860	20.42	5	05 estimates under scrutiny with SE ,TNEB	-
3	Thanjavur	106+860	116+440	9.58	4	02 Nos. Under scrutiny with RO, Madurai and 01 Nos. under preparation with owning department.	Supervision charges paid for 02 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 sanctions of Estimates are in progress with the RO, NHAI, Madurai. The estimated cost is approximately Rs. 16.87crores.

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	Nil	23.50	Estimate approval awaited.
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	0.88	5.95	

2.4. Tree felling**Table 2.4-1: Status of Tree felling**

Sl. No.	Name of the District	Chainages			Effected 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	0	6.535	2451	Felling permission awaited.
2	Ariyalur	86+440	106+860	20.42	8.385	8.22	0.17	78	
3	Thanjavur	106+860	116+440	9.58	2.515	0	2.515	1139	Felling permission awaited.
Total				50.48	17.65	8.22	9.216	3668	

3. Progress Briefing – Contractor Activities

3.1. Pre-Construction Activities

Detailed Design & 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	48.480
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	8	-
4	VUP/LVUP	No	15	15	14
5	Box /Slab Culvert	No	60	55	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 measurment of Physical Progress	Weightage of Total Project Work	Unit	QTY	As on 31-8-18	
					Qty.	Physical Progress (%)
Road works including culverts, minor bridges, underpasses, overpasses, approaches to ROB/RUB/ Major Bridges/ Structures (but excluding service roads)	A- Widening and strengthening of existing road					
	(1) Earthwork up to top of the sub-grade					
	(A) Carrying out Jungle Cutting/ removal of debris / dismantling of Concrete Structure / Dismantaling of existing road / Removal of any Physical item	2.10%	Sqm	1,506,681	755.55	0.0011%
	(A) Clearing & Grubbing					
	(i) LHS	0.02%	Km	33.48	9.6	0.0054%
	(ii) RHS	0.02%	Km	33.48	7.19	0.0040%
	(B) Earthwork up to Embankment Top					
	(i) LHS	0.60%	Km	24.44		
	(ii) RHS	0.60%	Km	24.44		
	(C) Earthwork up to Subgrade Top					
	(i) LHS	0.44%	Km	24.44		
	(ii) RHS	0.44%	Km	24.44		
	(E) Earthwork Filling in RE Wall Approach up to Sub Grade Top					
	(i) LHS	2.65%	Sqm	60492.38		
	(ii) RHS	2.65%	Sqm	60492.38		
	(2) Granular work (sub-base, base, shoulders)					
	(a) GSB/ Cement Treated Base		Km			
	(i) LHS	1.44%	Km	33.48		
	(ii) RHS	1.44%	Km	33.48		
	(b) WMM/ Cement Treated Base		Km			
	(i) LHS	1.77%	Km	33.48		
	(ii) RHS	1.77%	Km	33.48		
	(3) Shoulders		Km			
	(i) LHS	0.06%	Km	24.44		
	(ii) RHS	0.06%	Km	24.44		
	(4) Bituminous work					
	(a) DBM		Km			
	(i) LHS	2.68%	Km	33.48		
	(ii) RHS	2.68%	Km	33.48		
	(b) BC		Km			
	(i) LHS	1.00%	Km	33.48		
	(ii) RHS	1.00%	Km	33.48		
	(5) Rigid Pavement					
	Concrete work		Km	0		
	(6) Widening and repair of culverts		No.	16		
	(a) Pipe Culvert (Wid.)		No.	5		
	(i) PCC	0.02%	Nos.	5		
	(ii) PIPE laying	0.11%	Nos.	5		
	(iii) Head Wall	0.03%	Nos.	5		
	(iv) Protection Work	0.01%	Nos.	5		
	(b) Box Culvert/ Slab Culvert- Wid.		Nos.	11		
	(i) PCC	0.02%	Nos.	11		
	(ii) Raft (Foundation)	0.02%	Nos.	11		
	(iii) Wall (Substructure)	0.04%	Nos.	11		
	(iv) Slab	0.02%	Nos.	11		
	(v) Protection Work	0.16%	Nos.	11		
	(7) Widening and repair of minor bridges		No.	4		
	(a) Minor Bridge (Box Type)- Wid.		Nos.	4		
	(i) PCC	0.12%	Nos.	4		
	(ii) Raft	0.17%	Nos.	4		
	(iii) Wall	0.26%	Nos.	4		
	(iv) Slab	0.17%	Nos.	4		
	(v) Protection Work	0.24%	Nos.	4		
	B- New realignment/bypass					
	(1) Earthwork up to top of the sub-grade					
	(A) Carrying out Jungle Cutting/ removal of debris / dismantling of Concrete Structure / Dismantaling of existing road / Removal of any Physical item	1.07%	Sqm	764,919	1186.8	0.002%
	(A) Clearing & Grubbing					
	(i) LHS	0.01%	Km	14.34	9.86	0.006%

Item	Satage for measurment of Physical Progress	Weightage of Total Project Work	Unit	QTY	As on 31-8-18	
					Qty.	Physical Progress (%)
	(ii) RHS	0.01%	Km	14.34	9.92	0.006%
	(B) Earthwork up to Embankment Top					
	(i) LHS	1.50%	Km	10.72		
	(ii) RHS	1.50%	Km	10.72		
	(C) Earthwork up to Subgrade Top					
	(i) LHS	0.29%	Km	10.72		
	(ii) RHS	0.29%	Km	10.72		
	(E) Earthwork Filling in RE Wall Approach up to Sub Grade Top					
	(i) LHS	1.39%	Sqm	24221.71		
	(ii) RHS	1.39%	Sqm	24221.71		
	(2) Granular work (sub-base, base, shoulders)					
	(a) GSB/ Cement Treated Base					
	(i) LHS	0.81%	Km	14.34		
	(ii) RHS	0.81%	Km	14.34		
	(b) WMM/ Cement Treated Base					
	(i) LHS	0.72%	Km	14.34		
	(ii) RHS	0.72%	Km	14.34		
	(3) Shoulders					
	(i) LHS	0.06%	Km	10.72		
	(ii) RHS	0.06%	Km	10.72		
	(4) Bituminous work					
	(a) DBM					
	(i) LHS	0.83%	Km	14.34		
	(ii) RHS	0.83%	Km	14.34		
	(b) BC					
	(i) LHS	0.39%	Km	14.34		
	(ii) RHS	0.39%	Km	14.34		
C- New culverts, minor bridges, underpasses, overpasses on existing road, realignments, bypasses:						
	(1) Culverts		No.	44		
	(A) Pipe Culvert- New/ Reconstruction		Nos.	11		
	(i) PCC	0.01%	Nos.	11		
	(ii) Pipe laying	0.03%	Nos.	11		
	(iii) Head Wall	0.01%	Nos.	11		
	(iv) Protection Work	0.00%	Nos.	11		
	(B) Box Culvert/ Slab Culvert- New/ Reconstruction		Nos.	33		
	(i) PCC	0.21%	Nos.	33	5	0.03%
	(ii) Raft	0.25%	Nos.	33	2	0.02%
	(iii) Wall	0.44%	Nos.	33		
	(iv) Slab	0.29%	Nos.	33		
	(v) Protection Work	0.33%	Nos.	33		
	(2) Minor bridges					
	(A) Minor Bridge (Box Type)- New		Nos.	16		
	(i) PCC	0.38%	Nos.	16	4	0.09%
	(ii) Raft	0.79%	Nos.	16	4	0.20%
	(iii) Wall	1.87%	Nos.	16		
	(iv) Slab	0.78%	Nos.	16		
	(v) Protection Work	0.46%	Nos.	16		
	(B) Minor Bridge (Deck Type)- New		Nos.	5		
	(i) Pile	0.04%	Nos.	48		
	(ii) Pile Cap	0.03%	Nos.	8		
	(iii) PCC	0.04%	Nos.	28		
	(iv) Open Foundation	0.17%	Nos.	20		
	(v) Abutment/Pier Wall	0.32%	Nos.	28		
	(vi) Abutment/Pier Cap	0.23%	Nos.	28		
	(vii) Girder Casting	0.09%	Nos.	20		
	(viii) Girder Launching	0.04%	Nos.	20		
	(ix) Slab	0.11%	Nos.	16		
	(x) Misc	0.08%	Nos.	6		
	(3) Cattle/Pedestrian underpasses		Nos.	2		
	(i) PCC	0.007%	Nos.	2		
	(ii) Raft	0.062%	Nos.	2		

Road works including culverts, minor bridges, underpasses, overpasses, approaches to ROB/RJB/ Major Bridges/ Structures (but excluding service roads)

Item	Satage for measurement of Physical Progress	Weightage of Total Project Work	Unit	QTY	As on 31-8-18	
					Qty.	Physical Progress (%)
Road works including culverts, minor bridges, underpasses, overpasses, approaches to ROB/RUB/ Major Bridges/ Structures (but excluding service roads)	(iii) Wall	0.132%	Nos.	2		
	(iv) Slab	0.060%	Nos.	2		
	(v) Protection Work	0.028%	Nos.	2		
	(5) Grade separated structures					
	(a) Underpass		Nos.	13		
	(i) Pile	0.80%	Nos.	312	30	0.08%
	(ii) Pile Cap	0.37%	Nos.	52	2	0.01%
	(iii) PCC	0.04%	Nos.	52		
	(iv) Open Foundation	0.00%	Nos.	0		
	(v) Abutment/Pier	0.12%	Nos.	52		
	(vi) Abutment/Pier Cap	0.50%	Nos.	52		
	(vii) Girder Casting	0.60%	Nos.	130		
	(viii) Girder Launching	0.26%	Nos.	130		
	(ix) Slab	0.44%	Nos.	26		
	(x) Misc	0.20%	Nos.	13		
	(b) Overpass			0		
	(c) Flyover		Nos.	8		
	(i) Pile	0.61%	Nos.	216		
	(ii) Pile Cap	0.28%	Nos.	36		
	(iii) PCC	0.03%	Nos.	36		
	(iv) Open Foundation	0.00%	Nos.	0		
	(v) Abutment/Pier	0.10%	Nos.	36		
	(vi) Abutment/Pier Cap	0.37%	Nos.	36		
	(vii) Girder Casting	0.65%	Nos.	100		
	(viii) Girder Launching	0.28%	Nos.	100		
	(ix) Slab	0.61%	Nos.	20		
	(x) Misc	0.21%	Nos.	8		
	(d) Foot over Bridge		No.	0		
Major Bridge works and ROB/RUB	C- New Major Bridges		Nos.	4		
	(i) Pile	3.56%	Nos.	612	20	0.116%
	(ii) Pile Cap	1.63%	Nos.	92		
	(iii) PCC	0.11%	Nos.	92		
	(iv) Open Foundation	0.00%	Nos.	0		
	(v) Abutment/Pier	1.70%	Nos.	92		
	(vi) Abutment/Pier Cap	1.91%	Nos.	92		
	(vii) Girder Casting	1.74%	Nos.	861		
	(viii) Girder Launching	0.74%	Nos.	861		
	(ix) Slab	0.12%	Nos.	43		
Structures (elevated sections, reinforced earth)	(x) Misc	0.61%	Nos.	5		
	(b) RUB			0		
	(4) Reinforced earth Wall (includes Approaches of ROB, Underpasses, Overpasses,Flyover etc)					
	(a) Casting of RS Wall Facia	2.73%	Sqm	196027.20		
	(b) Erection of RS Wall Facia	6.37%	Sqm	196027.20		
Other works	(i) Service roads/ Slip Roads					
	(A) Earthwork up to Subgrade Top	0.84%	Sqm	340885		
	(B) Granular work (sub-base, base, shoulders)					
	(a) GSB/ Cement Treated Base	1.39%	Sqm	340885		
	(b) WMM/ Cement Treated Base	1.60%	Sqm	340885		
	(C) Bituminous work					
	(a) DBM/ Aggregate Layer	1.01%	Sqm	340885		
	(b) BC/ SDBC	0.86%	Sqm	340885		
	(ii) Toll Plaza					
	(a) Earthwork up to SGT	0.16%	Sqm	24616.5		
	(b) Pavement Work	0.60%	Sqm	24616.5		
	(c) Drain work with footpath	0.04%	Rmt	365.56		
	(d) Toll Building	0.10%	No.	1		
	(e) Toll Booth	0.02%	No.	11		
	(f) Toll Canopy	0.11%	Sqm	1162		
	(g) Toll Fencing	0.00%	Rmt	1200		
	(h) Toll Tunnel	0.08%	Rmt	64		
	(i) Toll System	0.59%	LS	1		

Item	Satage for measurment of Physical Progress	Weightage of Total Project Work	Unit	QTY	As on 31-8-18	
					Qty.	Physical Progress (%)
Other works	(i) Electrical Work	0.03%	LS	1		
	(k) Sign board & Other Mis. Work	0.02%	LS	1		
	(l) Medical Aid Post	0.05%	No.	1		
	(m) Traffic Aid Post	0.01%	No.	1		
	(iii) Road side drains					
	(a) PCC	0.53%	Km	28.85		
	(b) Raft	3.71%	Km	28.85		
	(c) Wall	0.82%	Km	28.85		
	(d) Slab	0.38%	Km	28.85		
	(iv) Road signs, markings, km stones, safety devices,					
	(a) Road signs, markings, km stones, ...		Km			
	(i) Road Sign except Toll Plaza	0.65%	Km	100.96		
	(ii) Road Marking	0.20%	Km	100.96		
	(iii) Km. , Hectometer, 5th Km. Stone & ROW Boundary etc.	0.01%	Km	100.96		
	(iv) Pedestrain Guard Rail	0.63%	Rmt	1,812.00		
	(v) Kerb	0.90%	Km	95.64		
	(vi) Electrical Work (Street Lighting)	0.67%	Km	34.49		
	(b) Concrete Crash Barrier/ W-Beam Crash Barrier in Road work		Km			
	(i) W-Beam Crash Barrier (MBCB)	0.79%	Km	21.77		
	(ii) Concrete Friction Slab Crash Barrier	1.68%	Km	13.54		
	(v) Project facilities					
	(a) Bus bays	0.01%	No.	18.00		
	(vii) Road side plantation		Km			
	(a) Median Plantation	0.41%	Km	36.07		
	(a) Avenue (near ROW) Plantation	0.04%	Km	21.52		
	(viii) Protection works					
	(a) Boulder pitchin on slopes	0.22%	Km	5.85		
	(x) Miscellaneous					
	(a) Diversion	0.10%	Lumpsum	1.00		
	(b) Rain water harvesting	0.07%	No.	71.00		
	(c) Assisting in the work of making the awarded stretch encumbrance free by deploying additional resources as per instruction of Project incharge.	1.72%	Km.	50.48	40.38	1.374%
	(d) Carrying out routine maintenance and repairs to potholes / patches, repair of shoulders, cleaning of drains / culverts and bridges,cleaning / clearing of roadway, clearing / removal of vegetation ,New plantation and maintance ,Sign ages reparing,metal beam crash barrier reparing ,raincut restoration,white wash,karb painting etc. as per technical specification	2.68%	Per Month Per KM	1514.40	353.36	0.626%
	(e) Detail Design & Drawing Work	1.74%	Lumsum	1	0.65	1.134%
	(f) Setup Work (Base Camp & Plant)	1.72%	Lumsum	1	0.90	1.551%
Total Physical Progress						5.253%

Table 4.2 : Strip Chart for Highway works

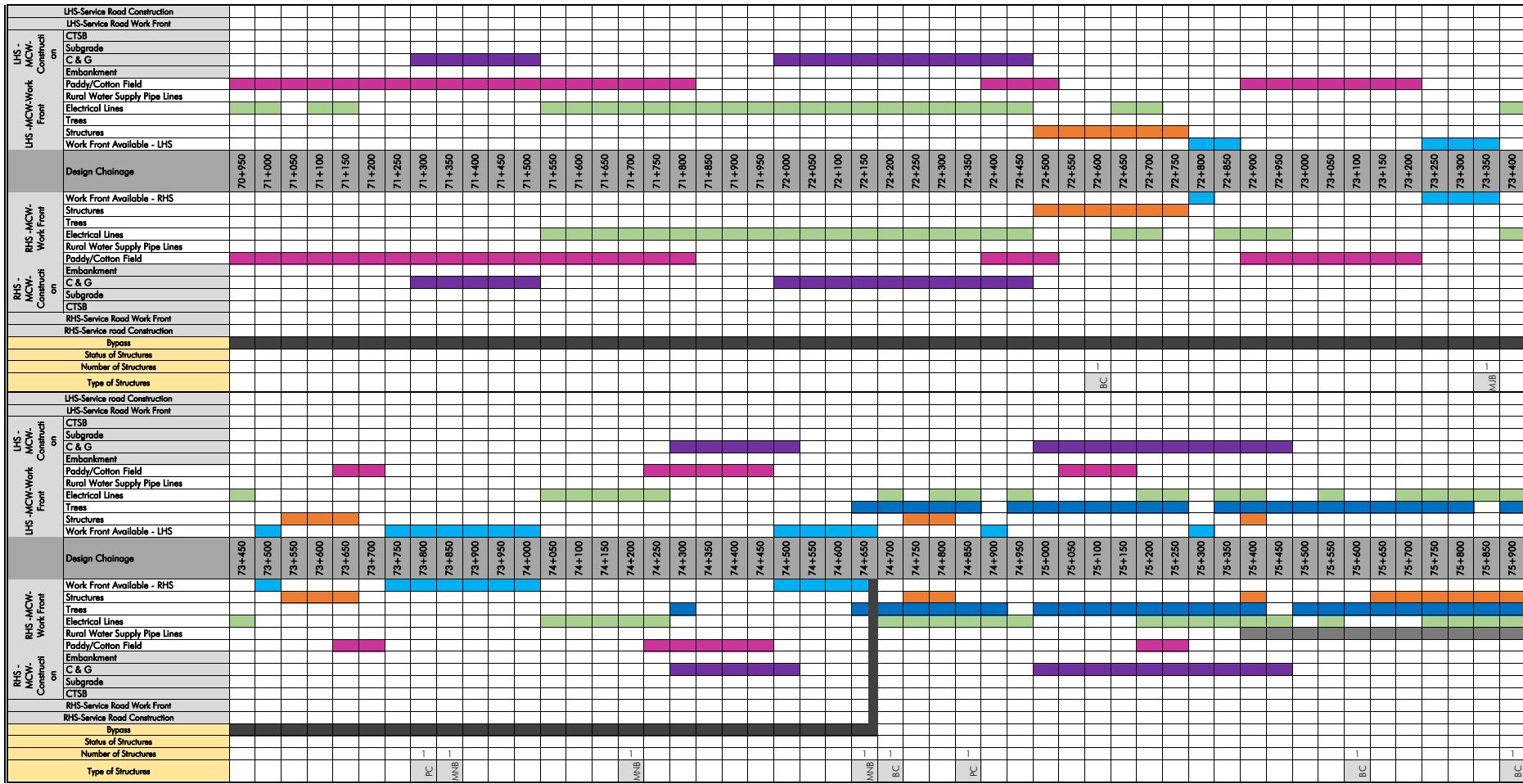


TABLE 4.3 - 1 STRIP CHART FOR STATUS OF BOX CULVERTS ON EXISTING ROAD

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
1	74+675	EXISTING	1 x 3.0m x 2.0m	BOX CULVERT						1	1				
2	74+800	EXISTING	1 x 1.20m	PIPE CULVERT											
3	75+558	EXISTING	1x3.0m	BOX CULVERT											
4	75+902	EXISTING	1 x 2.0m x 2.0m	BOX CULVERT											
5	76+390	EXISTING	1 x 3.0m	BOX CULVERT											
6	77+382	EXISTING	1 x 4.0m	BOX CULVERT											
7	77+766	EXISTING	1 x 2.0m	BOX CULVERT											
8	81+868	EXISTING	1 x 2.0m x 2.0m	BOX CULVERT											
9	81+913	EXISTING	1 x 1.95m x 1.0m	BOX CULVERT											
10	83+012	EXISTING	2 x 2.0m x 2.0m	BOX CULVERT						1	1	1	1		
11	83+065	EXISTING	1 x 2.0m x 2.0m	BOX CULVERT											
12	89+973	EXISTING	4 x 0.75m	PIPE CULVERT											
13	90+640	EXISTING	1 x 1.20m	PIPE CULVERT											
14	94+509	EXISTING	1 x 3.6m x 1.6m	BOX CULVERT											
15	95+495	EXISTING	1 x 1.2m x 0.9m	BOX CULVERT											
16	95+794	EXISTING	1 x 1.20m	PIPE CULVERT											
17	96+511	EXISTING	1 x 5.0m	BOX CULVERT											
18	97+530	EXISTING	1x2.0m	BOX CULVERT							1	1			
19	97+742	EXISTING	1 x 3.0m x 1.0m	BOX CULVERT											
20	99+471	EXISTING	1 x 3.0m x 4.0m	BOX CULVERT											
21	99+776	EXISTING	1 x 2.0m x 2.0m	BOX CULVERT											
22	99+840	EXISTING	1 x 1.5m x 1.5m	BOX CULVERT											
23	100+177	EXISTING	1 x 1m	PIPE CULVERT											
24	100+364	EXISTING	1 x 10m	BOX CULVERT											
25	100+823	EXISTING	1 x 3.5m x 2.5m	BOX CULVERT											
26	101+851	EXISTING	1 x 1.5m x 1.5m	BOX CULVERT											
27	103+220	EXISTING	1 x 4.0m x 2.5m	BOX CULVERT											
28	104+197	EXISTING	1 x 1.0m	PIPE CULVERT											

					LHS					RHS						
Sr. No.	As Approved by IE		Number and Length of Spans (m)	Type of Structure	Protection Work	Slab	Wall	Raft	PCC	Excavation	Excavation	PCC	Raft	Wall	Slab	Protection Work
29	104+215	EXISTING	1 x 1.0m	PIPE CULVERT												
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	0	1	2	3	2	0	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		
1	66+357	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT													
2	67+068	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT													
3	69+357	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT													
4	72+570	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT													
5	73+755	BYPASS	1x1.2.0mx2.0m	PIPE CULVERT													
6	104+622	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT													
7	104+998	BYPASS	1 x 4.0m x 2.0m	BOX CULVERT													
8	105+440	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT													
9	105+536	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT													
10	106+442	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT													
11	108+002	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT													
12	108+080	BYPASS	1 x 4.0m x 2.0m	BOX CULVERT													
13	108+225	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT													
14	108+345	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT													
15	108+441	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT													
16	108+540	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT													
17	108+767	BYPASS	1 x 4.0m x 2.0m	BOX CULVERT													
18	111+205	BYPASS	1 x 1.0m	PIPE CULVERT													
19	111+452	BYPASS		PIPE CULVERT													
					0	0	0	1	2	6	6	6	2	1	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	Raft	PCC	Excavation	Excavation	PCC	Raft	Wall	Slab
1	79+716	79.715	1 x 12.50m	EXISTING		0.2	1	1	1	1					
2	79+795	79.795	2 x 12.50m	EXISTING		1	1	1	1	1					
3	82+007	82.006	2 x 12.50m	EXISTING			0.5	1	1	1	1				
4	85+144	85.144	2 x 12.50m	EXISTING		1	1	1	1	1					
5	85+435	85.432	1 x 12.50m	EXISTING			1	1	1	1	1				
6	88+513	88.513	1 x 12.50m	EXISTING			1	1	1	1	1				
7	91+164	91.165	2 x 12.50m	EXISTING			1	1	1	1	1				
8	92+343	92.342	1 x 12.50m	EXISTING											
9	101+101	101.100		EXISTING											
10	109+195	109.208	2 x 12.5m	EXISTING			0	0	0.7	4	4	4	0	0	0
							0	0	4	4	4	4	0	0	0
1	66+757	66.730	2 x 12.5m	BYPASS											
2	68+644	68.650	2 x 12.5m	BYPASS											
3	74+173	74.175	2 x 12.5m	BYPASS											
4	74+605	74.600	2 x 12.5m	BYPASS											
14	105+915	105.915	2 x 12.5m	BYPASS											
15	109+090	109.088	2 x 12.5m	BYPASS											
16	109+365	109.365	2 x 12.5m	BYPASS											
17	109+540	109.540	2 x 12.5m	BYPASS											
18	111+563	111.565	2 x 12.5m	BYPASS											
19	113+100	113.100	2 x 12.5m	BYPASS											
20	113+505	113.505	2 x 12.5m	BYPASS			0	0	0	0	0	0	0	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	EXISTING	LHS					RHS					
					Protection Work	Slab	Wall	Raft	PCC	Excavation	Excavation	PCC	Raft	Wall	Slab
1	77+420	1X10.5	LVUP	EXISTING											
2	112+650	1X10.5	LVUP	BYPASS											

TABLE 4.3 - 5 STRIP CHART FOR STATUS OF MNB (>15m Span)

SR.NO.	MNB at Chainage	Span		LHS							RHS							
				Crash Barrier	Slab	Girder Launc hing	Girde r Castin g	Pierca p/Abt cap	Pier/A bt	Pile Cap	Pile	Pile	Pile Cap	Pier/A bt	Pierca p/Abt cap	Girde r Castin g	Girde r Launc hing	Slab
1	70+185	2 x 20	BYPASS	A1														
				P1														
				A2														
2	73+815	1 x 15	BYPASS	A1														
				A2														
3	84+725	1 x 15	EXISTING	A1														
				A2														
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 Barrie r	Slab	Girder Launc hing	Girder Castin g	Pier Cap/A bt Cap	Pier/A bt	Pile Cap	Pile	Pile	Pile Cap	Pier/A bt	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	0	
MJB at Chainage 73+340 (9x30) - BYPASS																
	LHS/LSR								RHS/LSR							
	Crash Barrie r	Slab	Girder Launc hing	Girder Castin g	Pier Cap/A bt Cap	Pier/A bt	Pile Cap	Pile	Pile	Pile Cap	Pier/A bt	Pier Cap/A bt Cap	Girder Castin g	Girder Launc hing	Slab	Crash Barrie r
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	0

MJB at Chainage 99+583 (3x25) - EXISTING ROAD											
	LHS/LSR						RHS/LSR				
	Crash Barrie r	Slab	Girder Launc hing	Girder Castin g	Pier Cap/A bt Cap	Pier/A bt	Pile Cap	Pile	Pile	Pile Cap	Pier/A bt
A1											
P1											
P2											
A2											
Total Completed	0	0	0	0	0	0	0	0	0	0	0
MJB at Chainage 107+400 - BYPASS											
	LHS/LSR						RHS/LSR				
	Crash Barrie r	Slab	Girder Launc hing	Girder Castin g	Pier Cap/A bt Cap	Pier/A bt	Pile Cap	Pile	Pile	Pile Cap	Pier/A bt
A1											
P1											
P2											
P3											
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	13	7	0	0

TABLE 4.3 - 7 STRIP CHART FOR STATUS OF FLYOVER

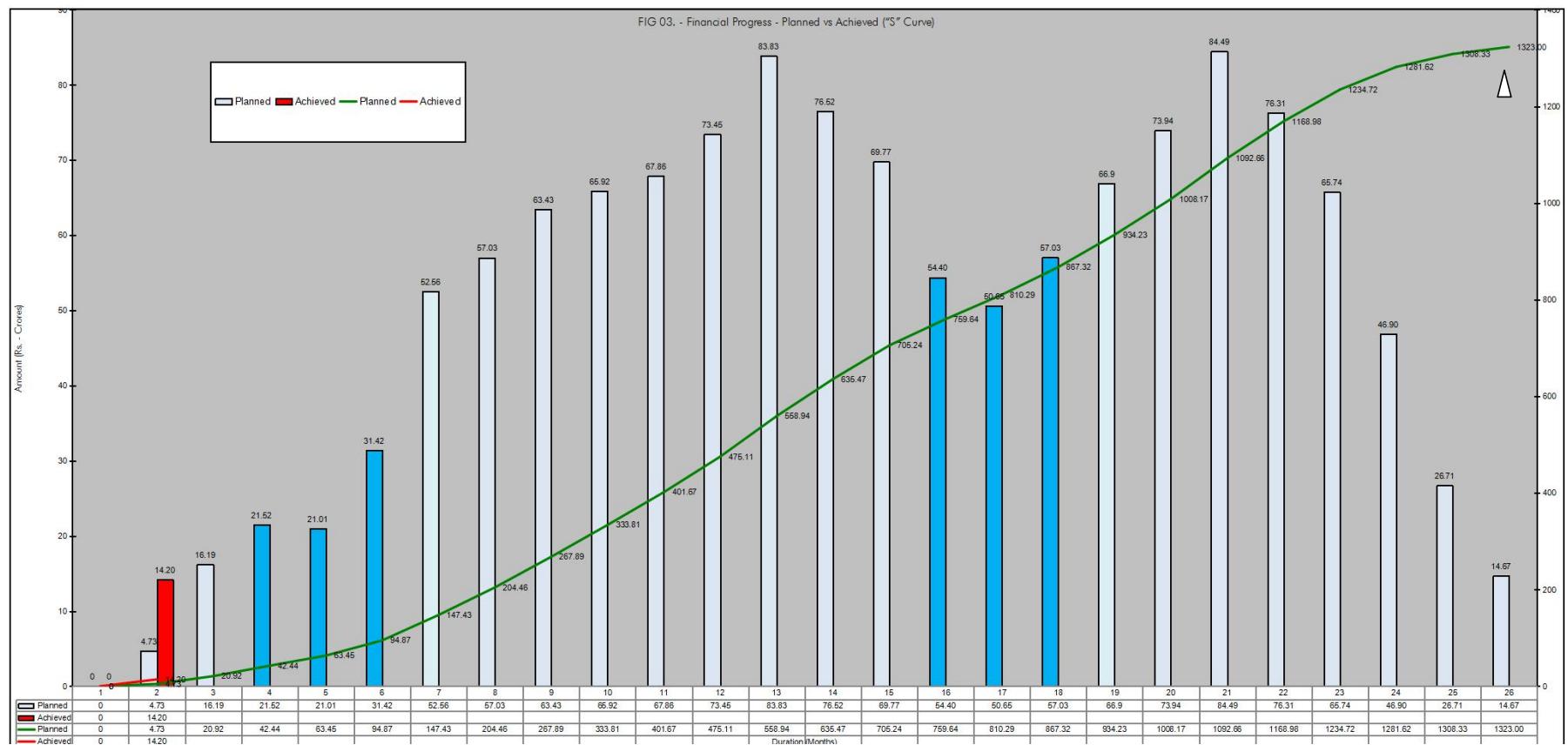
					LHS							RHS								
Sr.No.	FO at Chainage	Span			Crash Barrier	Slab	Girder Launching	Girder Casting	Piercap /Abtca	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Piercap/Abtca	Girder Casting	Girder Launching	Slab	Crash Barrier
1	69+785	1x30	BYPASS	A1																
				A2																
2	74+655	1x30	BYPASS+EXISTING	A1																
				A2																
3	80+556	1x30	EXISTING	A1																
				A2																
4	80+720	1x30	EXISTING	A1																
				A2																
5	95+455	2x30	EXISTING	A1																
				A2																
6	98+950	2x30	EXISTING	A1																
				A2																
7	104+570	1x30	BYPASS	A1																
				A2																
8	110+110	1x30	EXISTING	A1																
				A2																
					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

TABLE 4.3 - 8 STRIP CHART FOR STATUS OF VUP

SR.NO.	VUP at Chainage	Span			LHS							RHS							
					Crash Barrier	Slab	Girder Launching	Girder Casting	Piercap /Abtcap	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Piercap /Abtcap	Girder Casting	Girder Launc hing	Slab
1	72+545	1x25	BYPASS	A1															
				A2															
2	75+830	1x25	EXISTING	A1									1	1	2				
				A2															
3	86+677	1x25	EXISTING	A1															
				A2															
4	87+670	1x25	EXISTING	A1															
				A2															
5	90+580	1x25	EXISTING	A1															
				A2															
6	97+225	1x25	EXISTING	A1									1	1					
				A2															
7	101+910	1x25	EXISTING	A1															
				A2															
8	102+975	1x25	EXISTING	A1															
				A2															
9	106+318	1x25	BYPASS	A1									0	6	1				
				A2									1	6	1				
10	109+350	1x25	BYPASS	A1															
				A2															
11	111+235	1x25	BYPASS+EXISTING	A1												1	1		
				A2												6			
12	113+550	1x25	BYPASS+EXISTING	A1															
				A2															
13	115+258	1x25	EXISTING	A1															
				A2															
					0	0	0	0	0	0	0	1	9	4	21	1	0	0	0

5. Financial Progress of Work

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



6. Quality Control and Quality Assurance

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 LISTS	QUANTITY
1	compression testing machine 2000 kN	1
2	cement mortar vibrating machine	1
3	AlV Apparatus	1
4	Elecrronic weighing balance (50 kg)	1
5	Elecrronic 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 ²)	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	EQUIPMENT 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 ⁰ c to 300 ⁰ 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 piolet apparatus	1 Nos
95	Flexural strength testing machine curve	1 Nos
96	French curve	2 Nos
97	Slump test appratus with tamping rod 16mm dia *600mm long	9 Nos
98	Thermometer dial 100mm dia * 300mm long 0° - 300°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 appratus	1 Nos
106	Needle Intial setting time for vicat needle appratus	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 -

Table 6.2 - 1 - Summary of Quality Control Tests

S. No.	Description	IS Specification Clause		Previous Month			Tests conducted during July 2018 & Aug-2018						Total Tests up to Aug- 2018		
				Tested	Passed	Failed	Tested		Passed		Failed		Tested	Passed	Failed
							Concessionaire	IE	Concessionaire	IE	Concessionaire	IE			
1.0 Tests on OGL															
1.1	Grain size analysis	IS:2720 (Part4)	As required	0	0	0	146	30	146	30	0	0	146	146	0
1.2	Liquid Limit & Plastic limit	IS:2720 (Part5)	As required	0	0	0	146	30	146	30	0	0	146	146	0
1.3	Maximum Dry Density	IS:2720 (Part8)	As required	0	0	0	146	30	146	30	0	0	146	146	0
1.4	Free Swell index	IS:2720 (Part40)	As required	0	0	0	146	30	141	28	5	2	146	141	5
1.5	California bearing ratio	IS:2720 (Part16)	As required	0	0	0	0	0	0	0	0	0	0	0	0
2.0 Borrow Area for EMB/Subgrade	MORT&H 305														
2.1	Grain size analysis	IS:2720 (Part4)	1 test /1500 m ³	0	0	0	51	26	51	26	0	0	51	51	0
2.2	Liquid Limit & Plastic limit	IS:2720 (Part5)	1 test /1500 m ³	0	0	0	51	26	51	26	0	0	51	51	0
2.3	Proctor	IS:2720 (Part8)	1 test /1500 m ³	0	0	0	51	26	51	26	0	0	51	51	0
2.4	Free Swell index	IS:2720 (Part40)	As required	0	0	0	51	26	51	26	0	0	51	51	0
2.5	California bearing ratio	IS:2720 (Part16)	As required	0	0	0	0	0	0	0	0	0	0	0	0
3.0 Cutting portion & Existing for EMB/SG	MORT&H 305														
3.1	Grain size analysis	IS:2720 (Part4)	1 test /1500 m ³	0	0	0	0	0	0	0	0	0	0	0	0
3.2	Liquid Limit & Plastic limit	IS:2720 (Part5)	1 test /1500 m ³	0	0	0	0	0	0	0	0	0	0	0	0
3.3	Maximum Dry Density	IS:2720 (Part8)	1 test /1500 m ³	0	0	0	0	0	0	0	0	0	0	0	0
3.4	Free Swell index	IS:2720 (Part40)	As required	0	0	0	0	0	0	0	0	0	0	0	0
3.5	California bearing ratio	IS:2720 (Part16)	As required	0	0	0	0	0	0	0	0	0	0	0	0
4.0 FLYASH for Embankment	IRC SP58:2001														
4.1	Liquid Limit & Plastic limit	TABLE-1	1 test /1500 m ³	0	0	0	17	4	17	4	0	0	17	17	0
4.2	Maximum Dry Density	Clause 5.2	1 test /1500 m ³	0	0	0	17	4	17	4	0	0	17	17	0
5.0 Field Density Test	MORT&H 305														
5.1	Field density (OGL)	IS:2720 (Part28)	10 pnts /3000 sqm	0	0	0	410	97	400	95	10	2	410	400	10
5.2	EMB field density	IS:2720 (Part28)	10 pnts/3000 sqm	0	0	0	114	32	107	30	7	2	114	107	7
5.3	SG field density	IS:2720 (Part28)	10 pnts/ 2000 sqm	0	0	0	0	0	0	0	0	0	0	0	0
5.4	Shoulder field density	IS:2720 (Part28)	10 pnts/ 2000 sqm	0	0	0	0	0	0	0	0	0	0	0	0
6.0 Safe Bearing capacity of soil															
6.1	Free Swell index	IS:2720 (Part40)	As required	0	0	0	15	15	11	11	4	4	15	11	4
6.2	Grain size analysis	IS:2720 (Part4)	As required	0	0	0	15	15	15	15	0	0	15	15	0
6.3	Liquid Limit & Plastic limit	IS:2720 (Part5)	As required	0	0	0	15	15	15	15	0	0	15	15	0
6.4	Direct shear Test	IS:6403	As required	0	0	0	15	15	11	11	4	4	15	11	4
7.0 Fine Aggregate	MORT&H 1008														
7.1	Grad /Sieve analysis	IS:2386 (Part1)	1 test / Daily	0	0	0	20	20	20	20	0	0	20	20	0
7.2	Specific gravity	IS:2386 (Part2)	As required	0	0	0	2	2	2	2	0	0	2	2	0
7.3	Water absorbtion	IS:2386 (Part2)	As required	0	0	0	2	2	2	2	0	0	2	2	0
8.0 Coarse Aggregate	MORT&H 1007														
8.1	Gradation	IS:2386 (Part2)	1 test / Daily	0	0	0	14	14	14	14	0	0	14	14	0
8.2	Specific gravity	IS:2386 (Part3)	As required	0	0	0	2	2	2	2	0	0	2	2	0
8.3	Aggregate Impact Value	IS:2386 (Part4)	1 test / 15 days	0	0	0	2	2	2	2	0	0	2	2	0
8.4	Floकiness index	IS:2386 (Part1)	1 test / 15 days	0	0	0	2	2	2	2	0	0	2	2	0
8.5	Water absorbtion	IS:2386 (Part3)	As required	0	0	0	2	2	2	2	0	0	2	2	0

S. No.	Description	IS Specification Clause		Previous Month			Tests conducted during July 2018 & Aug-2018							Total Tests up to Aug- 2018				
				Tested	Passed	Failed	Tested			Passed			Failed			Tested	Passed	Failed
							Concessionaire	IE	Concessionaire	IE	Concessionaire	IE	Concessionaire	IE	Concessionaire	IE		
9.0 Cement	MORT&H 1006																	
9.1 Fineness	IS:4031 (Part1)	Every batch		0	0	0	14	7	14	7	0	0	14	14	14	0		
9.2 Consistency	IS:4031 (Part4)	Every batch		0	0	0	14	7	14	7	0	0	14	14	14	0		
9.3 Initial/Final setting time	IS:4031 (Part5)	Every batch		0	0	0	14	7	14	7	0	0	14	14	14	0		
9.4 Soundness of Cement	IS:4031 (Part3)	Every batch		0	0	0	14	7	14	7	0	0	14	14	14	0		
9.5 Compressive Strength-set	IS:4031 (Part6)																	
3 days		1 test per Lot		0	0	0	14	6	14	6	0	0	14	14	14	0		
7 days		1 test per Lot		0	0	0	12	5	12	5	0	0	12	12	12	0		
28 days		1 test per Lot		0	0	0	6	2	6	2	0	0	6	6	6	0		
10.0 Concrete-cube	MORT&H 1700																	
10.1 M15 PCC																		
7Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	13	4	13	4	0	0	13	13	13	0		
28Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	0	0	0	0	0	0	0	0	0	0		
10.2 M30 RCC																		
7Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	0	0	0	0	0	0	0	0	0	0		
28Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	0	0	0	0	0	0	0	0	0	0		
10.3 M35 RCC																		
7Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	10	3	10	3	0	0	10	10	10	0		
28Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	0	0	0	0	0	0	0	0	0	0		
10.4 M35 Pile																		
7Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	26	8	26	8	0	0	26	26	26	0		
28Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	0	0	0	0	0	0	0	0	0	0		
10.5 M40 Pile																		
7Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	3	1	3	1	0	0	3	3	3	0		
28Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	0	0	0	0	0	0	0	0	0	0		
11.0 Mix Design Concrete-cube	MORT&H 1700																	
11.1 M15 PCC																		
7Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	9	3	9	3	0	0	9	9	9	0		
28Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	12	4	12	4	0	0	12	12	12	0		
11.2 M30 RCC																		
7Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	9	3	9	3	0	0	9	9	9	0		
28Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	12	4	12	4	0	0	12	12	12	0		
11.3 M35 RCC																		
7Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	9	3	9	3	0	0	9	9	9	0		
28Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	12	4	12	4	0	0	12	12	12	0		
11.4 M35 Pile																		
7Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	9	3	9	3	0	0	9	9	9	0		
28Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	12	4	12	4	0	0	12	12	12	0		
11.5 M40 Pile																		
7Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	9	4	9	4	0	0	9	9	9	0		
28Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700		0	0	0	12	4	12	4	0	0	12	12	12	0		

7. Weather Report

DATE	Temperature (°C)		Rainfall in mm	Humidity in %		Remarks
	Min	Max		Min	Max	
01-08-2017	27.9	41.8	-	40	61	
02-08-2017	27.8	41.6	63.00	43	59	
03-08-2017	26.9	40.2	1.60	37	62	
04-08-2017	27.2	39.4	8.00	38	63	
05-08-2017	27.4	39.8	-	40	60	
06-08-2017	27.1	39.6	7.00	39	61	
07-08-2017	27.4	39.9	-	41	60	
08-08-2017	27.5	41.0	-	40	62	
09-08-2017	27.7	39.7	6.00	38	59	
10-08-2017	26.8	39.4	13.60	39	56	
11-08-2017	26.5	40.0	-	36	60	
12-08-2017	27.0	41.3	-	38	58	
13-08-2017	27.4	40.2	4.60	41	57	
14-08-2017	27.2	40.7	15.20	40	61	
15-08-2017	27.9	41.3	-	37	60	
16-08-2017	27.5	41.5	-	39	58	
17-08-2017	26.9	41.9	1.80	41	60	
18-08-2017	27.3	41.6	-	38	57	
19-08-2017	27.1	42.1	-	39	58	
20-08-2017	27.8	41.7	-	37	56	
21-08-2017	27.5	42.1	-	38	55	
22-08-2017	28.1	40.2	-	37	60	
23-08-2017	27.7	39.9	8.20	36	61	
24-08-2017	27.2	39.1	32.80	37	58	
25-08-2017	27.5	40.2	7.40	38	57	
26-08-2017	28.1	39.7	9.00	36	59	
27-08-2017	28.4	40.4	8.20	39	60	
28-08-2017	27.9	41.3	-	40	56	
29-08-2017	28.3	42.7	-	36	61	
30-08-2017	29.4	41.9	34.50	37	60	
31-08-2018	29.1	41.4	2.20	39	59	

8. Safety

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

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

Pending Disbursement of Payment to the beneficiaries from CALA towards Land and Buildings.

1. Tree felling permission for Cuddalore and Thanjavur District.
2. Payment of Supervision charges for TNEB for relocation of Electrical lines in Thanjavur District and Ariyalur District.
3. Payment of Supervision charges for shifting of RWS water pipe line.
4. Relocation of High Tension transmission tower lines.
5. Relocation of electrical substation of TANGENDCO at Km:85+300 to 85+400(LHS) and Km:113+700 to 113+800(RHS).
6. NOC from PWD/WRO for commencement construction activities of Irrigation Structures.
7. Permission from Local Authorities for procurement of Borrow Earth from Irrigation Tanks.
8. 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)	12.07.2018	Site Visit of Project Director, PIU, NHAI, Thanjavur	
2)	16.07.2018	Progress Review meeting held under the chairmanship of OSD to Union Minister	
3)	02.08.2018	Progress Review meeting held under the chairmanship of RO, Madurai	
4)	10.08.2018	Meeting held under the chairmanship of RO, Madurai for declaration of Appointed Date.	
5)	16.08.2018	Project Appointed Date has declared as 16.08.2018.	

11. Organization Chart

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

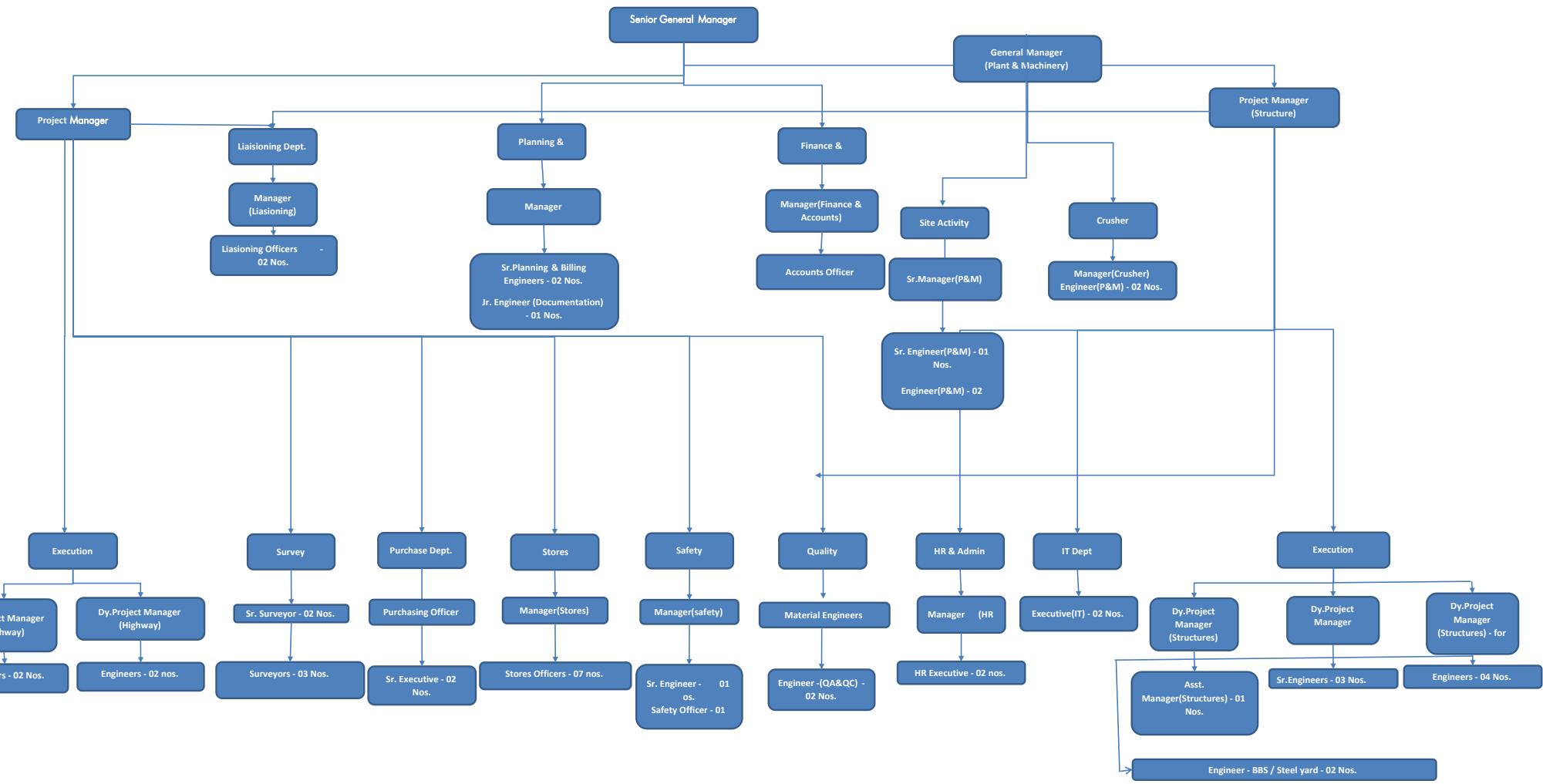
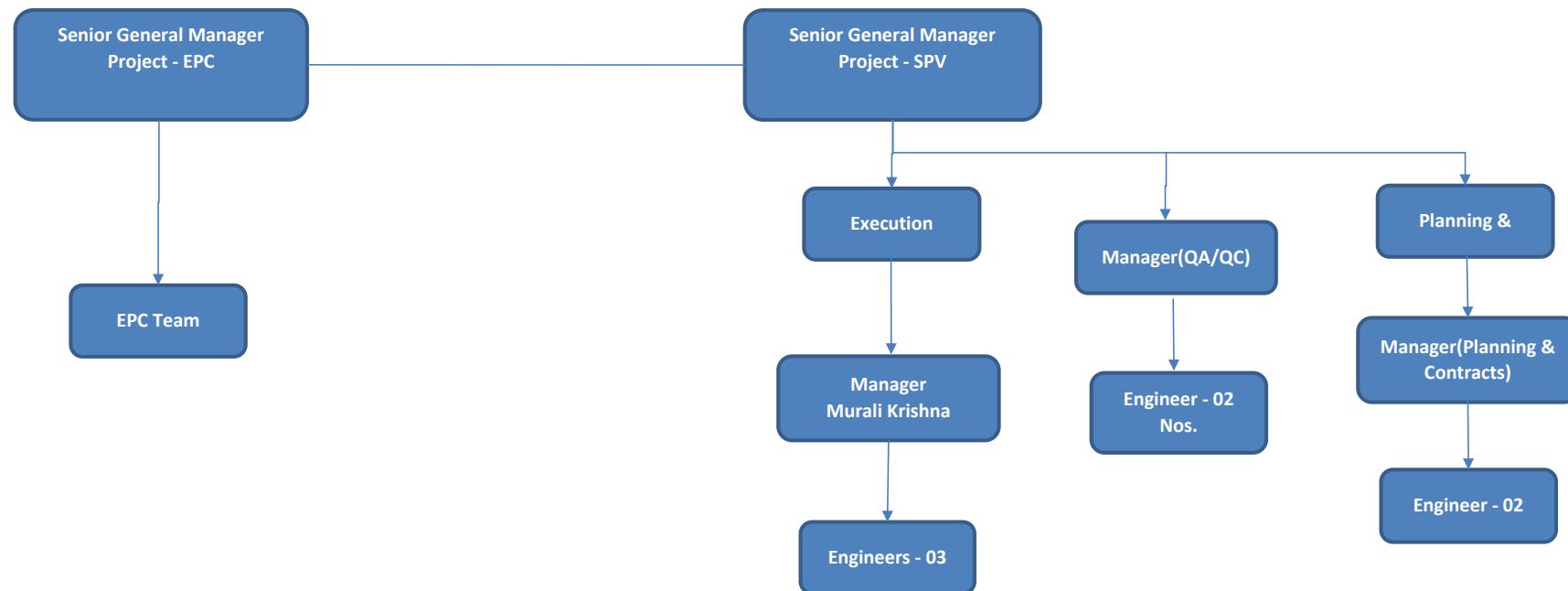


Figure 5 - ORGANIZATION CHART - SPV Team



12. List of Plants, Machinery and Equipment's**Table 12.1 - 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	6	
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

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	17.11.2017	PIPL/SC/NHAI/667/2017	Submission of video recording as per 12.4.3-reg	
2	05.12.2017	PSCP/PIU/SC/003/2017	Submission of Power of Attorney for Captioned Project.	
3	21.12.2017	PSCP/PIU/SC/006/2017	Power of attorney-(Mukesh Kumar H.Tiwary, GM)	
4	29.12.2017	PSCP/PIU/007/2017	Regarding Status of Survey & Investigation carried out for design work of the Project Highway.	
5	30.12.2017	PSCP/PIU/008/2017	Commencement of Maintenance Work of existing project highway	
6	25.01.2018	PSCP/PIU/009/2017	Traffic Survey to be Conducted as per clause 4.1 of Schedule "N"	
7	23.01.2018	PSCP/PIU/NHAI/010/2018	Regarding Status of Survey & Investigation carried out for design work of the Project Highway	
8	02.02.2018	PSCP/PIU/011/2018	submission of Draft EPC Contract Agreement as per clause 5.2.2 of CA	
9	07.02.2018	PIPL/SC/NHAI/001/2018	Tree Removal for Highway projects	
10	26.02.2018	PSCP/PIU/NHAI/2018/003	Access for conducting geotechnical investigation in river bed of Coleroon River for Major Bridge 107+400	
11	26.02.2018	PSCHPL/Kum/2018/004	Regarding Erection of Caution Boards.	
12	27.02.2018	PSCHPL/Kum/2005/2018	Communication Address for site office - reg.	
13	19.03.2018	PSCHPL/NHAI/KUM/2018/006	Request for issuing Form - V.	
14	02.04.2018	PSCHPL/PIU/021/2018	regarding Status of Condition precedent under the clause 4.1.2 & 4.1.3 of CA	
15	14.04.2018	PSCHPL/PIU/026/2018	regarding Status of Condition precedent under the clause 4.1.2 & 4.1.3 of CA	
16	03.05.2018	PSCHPL/PIU/035/2018	Regarding status of condition precedent under the clause 4.1.2 & 4.1.3 of CA	
17	16.05.2018	PSCHPL/SCP/IE/027/2018	regarding Status of Condition precedent under the clause 4.1.2 & 4.1.3 of CA	
18	18.05.2018	PSCHPL/SCP/IE/028/2018	Deposit of Upset price of effected Trees in Ariyalur Dist-Reg.	
19	19.05.2018	PSCHPL/SCP/IE/029/2018	Tree felling	
20	21.05.2018	PSCHPL/SCP/IE/031/2018	Request to provide the details of compensation made to property owner of building, structures or other immovable property within Project RoW.	
21	22.05.2018	PSCHPL/SCP/IE/2018/033	Temporary access Road formation in river bed of Coleroon River for Major Bridge 107+400- Reg	
22	23.05.2018	PSCHPL/SCP/IE/2018/034	Request to issue a letter to District Collector of Ariyalur District regarding information of applied/proposed Borrow Area - Reg	
23	30.05.2018	PSCHPL/SCP/IE/2018/036	Submission of GAD 06 Nos MNB	
24	01.06.2018	PSCHPL/SCP/IE/2018/037	Request to issue a letter to District Collector of Cuddalore District regarding information of applied proposed Borrow Area	
25	14.05.2018	PSCHPL/SCP/IE/2018/038	Submission of Power of attorney	
26	04.06.2018	PSCHPL/SCP/IE/2018/039	Submission of Compliance Report for the temporary remedial measures taken on the identified black spot of Mamangalm Road Two consecutive Bridges	
27	08.06.2018	PSCHPL/SCP/IE/2018/041	Request for L.C	
28	12.06.2018	PSCHPL/SCP/NHAI/2018/043	Maintenance of Existing project highway	
29	18.06.2018	PSCHPL/SCP/NHAI/2018/044	Procurement of Flyash from NLC, Neyveli.	
30	06.06.2018	PSCHPL/SCP/NHAI/2018/047	Submission of executed Agreement as per Clause 5.2.2	
31	07.06.2018	PSCHPL/SCP/IE/2018/048	Regarding intimation of insurance policy to be taken for the above cited project as per Clause 26.3 of CA	
32	11.06.2018	-	Memorandum of Joint inventory of site as per cl.10.3.1 of CA.	
33	19.06.2018	PSCHPL/SCP/NHAI/2018/049	Status of Conditions precedent as per cl.4.1.3 of CA.	
34	19.06.2018	PSCHPL/SCP/NHAI/2018/052	Maintenance of existing road.	
35	20.06.2018	PSCHPL/SCP/NHAI/2018/057	Regarding Status of Condition Precedent under the Clause 4.1.3 of Concession Agreement.	
36	20.06.2018	PSCHPL/SCP/NHAI/2018/058	Submission of GAD for MJB at Km: 107 + 400	
37	28.06.2018	PSCHPL/SCP/NHAI/2018/061	Request for Joint inspection by the PWD/WRO officials for issuing NOC	
38	29.06.2018	PSCHPL/SCP/NHAI/2018/064	Permission from the District Collector Ariyalur for extracting soil from the proposed Borrow Areas	
39	29.06.2018	PSCHPL/SCP/NHAI/2018/065	Permission from the District Collector Cuddalore for extracting soil from the proposed Borrow Areas	
40	28.06.2018	PSCHPL/SCP/NHAI/2018/066	Request for Joint inspection by the PWD/WRO officials for issuing NOC	
41	02.07.2018	PSCHPL/SCP/NHAI/2018/067	Request for Joint inspection by the PWD/WRO officials for issuing NOC in connection with the proposals cover under Marudaiyaru Basin Division	
42	02.07.2018	PSCHPL/SCP/NHAI/2018/068	Request for Joint inspection by the PWD/WRO officials for issuing NOC in connection with the proposals cover under Cauvery Basin Division	
43	06.07.2018	PSCHPL/SCP/CE/2018/070	Disruption of Construction activities by formers in the Thirupanandal Bypass.	
44	23.07.2018	PSCHPL/SCP/CE/2018/080	Hindrance of Existing pond within Proposed carraigeway	
45	23.07.2018	PSCHPL/SCP/CE/2018/081	Hindrance of Irrigation structures within Proposed carraigeway	
46	25.07.2018	PSCHPL/SCP/CE/2018/082	Removal/Raising of High voltage Transmission lines of TANGEDCO	
47	27.07.2018	PSCHPL/NHAI/SC/072/2018	Submission of undertaking for waiver of damages	
48	28.07.2018	PSCHPL/SCP/CE/2018/087	Removal/Raising of High voltage Transmission lines of TANGEDCO	
49	07.08.2018	PSCHPL/PIU/SCP/079/2018	Discussion held during 2/08/2018 at Regional office	
50	17.08.2018	PSCHPL/PIU/SC/080/2018	Request to furnish SFMS details of the designated bank of NHAI	
51	20.08.2018	PSCHPL/PIU/SC/081/2018	Submission of ESCROW Account Details	
52	20.08.2018	PSCHPL/SCP/NHAI/2018/97	Video Recording as per the clause 13.6 of Concession Agreement	
53	29.08.2018	PSCHPL/PIU/SC/082/2019	Deposit of Upset Price of effected Trees in Cuddalore & Thanjavur District-Reg.	

TABLE 14.2 - CORRESPONDANCE - NHAI TO CONCESSIONAIRE

S.No	Date	Letter No	Subject	Remarks
1	21.11.2017	NHAI/PIU/Thanjavur/11019/21/2013/2017	Hydraulic particulars including HFL for Major and Minor bridges for package II-Requested	
2	21.11.2017	NHAI/PIU/Thanjavur/11019/21/2013/2018	Hydraulic particulars including HFL for Major and Minor bridges for package II-Requested	
3	21.11.2017	NHAI/PIU/Thanjavur/11019/21/2013/2019	Hydraulic particulars including HFL for Major and Minor bridges for package II-Requested	
4	28.11.2017	NHAI/PIU/Thanjavur/11019/27/2013/2054	Shifting of Water Supply pipelines-Preparation of estimates	
5	28.11.2017	NHAI/PIU/Thanjavur/11019/27/2013/2062	Shifting of Water Supply pipelines-Preparation of estimates	
6	28.11.2017	NHAI/PIU/Thanjavur/11019/27/2013/2063	Shifting of Water Supply pipelines-Preparation of estimates	
7	28.11.2017	NHAI/PIU/Thanjavur/11019/27/2013/2065	Shifting of Water Supply pipelines-Preparation of estimates	
8	28.11.2017	NHAI/PIU/Thanjavur/11019/27/2013/2066	Shifting of Water Supply pipelines-Preparation of estimates	
9	28.11.2017	NHAI/PIU/Thanjavur/11019/27/2013/2067	Shifting of Water Supply pipelines-Preparation of estimates	
10	03.02.2018	NHAI/PIU/Thanjavur/11019/21/2013/203	Hydraulic particulars including HFL for Major and Minor bridges for package II-Requested	
11	15.02.2018	NHAI/PIU/Thanjavur/11019/21/2013/289	Hydraulic particulars including HFL for Major and Minor bridges for package II-Requested	
12	19.02.2018	NHAI/PIU/Thanj/11019/03/2009/329	Link between the existing Anakarai Bridge and the proposed new bridge requested	
13	24.03.2018	NHAI/PIU/Thanj/11019/52/2017/592	Status of Condition precedents by the Authority(Pkg-II)	
14	07.04.2018	NHAI/PIU/Thanj/11019/52/2017/697	Status of Condition Precedents by the Authority	
15	01.05.2018	NHAI/PIU/Thanj/11019/25/2012/870	Valuation of Trees	
16	05.05.2018	NHAI/PIU/Thanjavur/11019/21/2013/909	Access permission requested	
17	09.05.2018	NHAI/PIU/Thanj/11025/11/2018/936	Status of Condition precedents under the clause 4.1.2 & 4.3 of the concession Agreement	
18	11.05.2018	NHAI/PIU/Thanj/11025/11/2018/944	Joint Memorandum of Site Inventories requested	
19	19.05.2018	NHAI/PIU/Thanj/11019/25/2012/980	Felling of Transisting trees	
20	02.05.2018	NHAI/PIU/Thanj/11019/04/2009/886	Guidelines issued by Supreme court committee on Road Safety-Mamangalam Road Two Consecutive Bridges-Identified as Black spot -Action Requested	
21	10.05.2018	NHAI/PIU/Thanj/11019/52/2017/938	LPS for additional land acquisition for amenities as per Concession Agreement	
22	11.05.2018	NHAI/PIU/Thanj/11025/11/2018/944	Joint Memorandum of Site Inventories requested	
23	12.05.2018	NHAI/PIU/Thanj/11019/52/2017/960	Independent Engineer Consultancy Services for the Month of Feb & Mar'18 -50% claim	
24	23.05.2018	NHAI/PIU/Thanjavur/11019/21/2013/1026	Access permission requested	
25	24.05.2018	NHAI/PIU/Thanj/11025/11/2018/1034	Status of Condition precedents under the clause 4.1.2 & 4.3 of the concession Agreement	
26	24.05.2018	NHAI/PIU/Thanj/11025/15/2017/1038	Details of Compensation made to the property owners of building, Structures or other immovable property	
27	29.05.2018	NHAI/PIU/Thanj/11025/11/2018/1055	Maintenanace of the existing Project highway-Requested	
28	29.05.2018	NHAI/PIU/Thanj/11025/11/2018/1055	Maintenanace of the existing Project highway-Requested	
29	02.06.2018	NHAI/PIU/Thanj/11025/17/2018/1085	Permission to ertract soil from the proposed borrow areas-requested	
30	30.05.2018	NHAI/PIU/Thanj/11025/04/2018/1078	Road safety 2nd meeting held on 20.04.2018-Decesion taken-action requested	
31	02.06.2018	NHAI/PIU/Thanj/11025/17/2018/1086	Permission to ertract soil from the proposed borrow areas-requested	
32	04.06.2018	NHAI/PIU/Thanj/11019/04/2009/1099	Request to maintain the road streh between Thanjavur and Kumbakonam-representation Made-Reply Sent	
33	08.06.2018	NHAI/PIU/Thanjavur/11025/18/2018/1112	Submission of GAD for review-NOC requested	
34	08.06.2018	NHAI/PIU/Thanj/11019/52/2017/1123	Independent Engineer Consultancy Services for the Month of Feb & Apr'18 -50% claim	
35	14.06.2018	NHAI/PIU/Thanj/11025/18/2018/1154	Hydraulic particulars- Communicated	
36	14.06.2018	NHAI/PIU/Thanj/11025/11/2017/1155	Execution of EPC Agreement as per clause 5.2.2 of CA-Remarks Called for	
37	19.06.2018	NHAI/PIU/Thanj/11025/17/2018/1184	Request for the procurement of Flyash from M/s Neyveli lignite Corporation	
38	20.06.2018	NHAI/PIU/Thanj/11025/11/2018/1191	Status of condition precedents-Submitted	
39	25.06.2018	NHAI/PIU/Thanjavur/11025/18/2018/1202	Submission of GAD for review-NOC requested	
40	25.06.2018	NHAI/PIU/Thanj/11019/52/2017/1204	Independent Engineer Consultancy Services for the Month of May'2018 -50% claim	
41	26.06.2018	NHAI/PIU/Thanjavur/11025/18/2018/1225	Submission of GAD for review-NOC requested	
42	28.06.2018	NHAI/PIU/Thanjavur/11025/18/2018/1236	Submission of GAD for review-NOC requested	
43	03.07.2018	NHAI/PIU/Thanjavur/11025/18/2018/1272	NOC Requested	
44	04.07.2018	NHAI/PIU/Thanjavur/11025/04/2018/1294	Requested to fit cautionary signage boards in the proper places-Instructions issued by District Collector	
45	04.07.2018	NHAI/PIU/Thanjavur/11025/04/2018/1315	Road safety 2nd meeting held on 20.04.2018-Decesion taken-action requested	
46	14.07.2018	NHAI/PIU/Thanj/11025/30/2018/1359	Permission to extract soil from the proposed borrow areas	
47	14.07.2018	NHAI/PIU/Thanj/11025/30/2018/1361	Permission to extract soil from the proposed borrow areas	
48	06.08.2018	NHAI/PIU/Thanj/11025/08/2018/1525	Shifting & Raising of HV-T Towers 65.960 to 116.440	
49	06.08.2018	NHAI/PIU/Thanj/11026/08/2018/1527	Shifting & Raising of HV-T Towers 65.960 to 116.440	
50	08.08.2018	NHAI/PIU/Thanj/11019/52/2017/1563	Independent Engineer Consultancy Services for the Month of Feb & June'18	
51	11.08.2018	NHAI/PIU/Thanj/11025/07/2017/1557	Valuation of Trees from sethiyahopu to Agaraputhur	
52	16.08.2018	NHAI/HAM/SC/11012/03/2017/743	Declaration of Appointed date	
53	25.08.2018	NHAI/PIU/Thanj/11025/07/2018/1635	Felling & Transisting of Trees	

TABLE 14.3 - CORRESPONDANCE - CONCESSIONAIRE TO INDEPENDENT ENGINEER

S.No	Date	Letter No	Subject	Remarks
1	17.03.2018	PCTHPL/CTP/IE/018/2018	Regarding Submission of Traffic Study & Analysis Report	
2	20.03.2018	PSCHPL/NHAI/KUM/2018/007	Request for Source Approval of Hume pipe.	
3	20.03.2018	PSCHPL/NHAI/KUM/2018/008	Request for Source Approval of Admixtures.	
4	20.03.2018	PSCHPL/NHAI/KUM/2018/009	Request for Source Approval of Cement	
5	21.03.2018	PSCHPL/NHAI/KUM/2018/010	Request for Source Approval of Steel	
6	27.03.2018	PSCHPL/NHAI/KUM/2018/011	Submission of Mix Design of concrete	
7	27.03.2018	PSCHPL/SCP/IE/012/2018	Request for Source Approval of Cement	
8	28.03.2018	PSCHPL/SCP/IE/013/2018	Factory Visit for source approval.	
9	29.03.2018	PSCHPL/SCP/IE/014/2018	Request for approval of NABL accredited labs for third party testing	
10	03.04.2018	PSCHPL/SCP/IE/015/2018	Submission of CA to Team Leader IE	
11	12.03.2018	PSCHPL/SCP/IE/015/2018	Submission of Pavement design reports	
12	12.06.2018	PSCHPL/SCP/IE/016/2018	Submission of Pavement design reports	
13	12.03.2018	PSCHPL/SCP/IE/017/2018	Submission of Plan & Profile drawings	
14	07.04.2018	PSCHPL/SCP/IE/018/2018	Request for source approval of Mechanical couplers.	
15	22.03.2018	PSCHPL/SCP/IE/018/2018	Submission of Power of attorney	
16	07.04.2018	PSCHPL/SCP/IE/019/2018	Submission of Quality Assurance Plan	
17	10.04.2018	PSCHPL/SCP/IE/020/2018	Regarding request for source approval after factory visit.	
18	17.04.2018	PSCHPL/SCP/IE/021/2018	Felling of Trees as per clause 11.4 of concession Agreement.	
19	18.04.2018	PSCHPL/SCP/IE/022/2018	Request for Source Approval of SRMB Steel	
20	30.04.2018	PSCHPL/SCP/IE/023/2018	Submission of credential report for approval	
21	07.05.2018	PSCHPL/SCP/IE/026/2018	Submission of mix design for M35 piling concrete.	
22	20.04.2018	PSCHPL/SCP/IE/028/2018	Design and Drawings of 13 VUP's	
23	21.05.2018	PSCHPL/SCP/IE/030/2018	Proposal of shyam Steel.	
24	22.05.2018	PSCHPL/SCP/IE/2018/032	Link between the existing Anaikkarai Bridge and the proposed new bridge	
25	05.05.2018	PSCHPL/SCP/IE/2018/032	Test pile details drawings of for Grade separator at Km:110+100	
26	01.05.2018	PSCHPL/SCP/IE/2018/033	Structure design and drawings of 9 box culverts	
27	29.05.2018	PSCHPL/SCP/IE/2018/035	SUBMISSION OF POWER OF Attorney for Captioned Project. (PRAKASH Rao)	
28	05.05.2018	PSCHPL/SCP/IE/2018/036	revised Plan and profile drawings of Project Highway	
29		PSCHPL/SCP/IE/2018/039	Submission of Design and drawings of 107+400 MJB	
30	21.05.2018	PSCHPL/SCP/IE/2018/040	Submission of structure design and drawings of 6 MNB's of SC Project	
31	04.06.2018	PSCHPL/SCP/IE/2018/040	Submission of Concrete Mix Design of RCC Grade M40 for Piling works	
32		PSCHPL/SCP/IE/2018/044	Submission of 13 nos pf VUP drawings.	
33	18.06.2018	PSCHPL/SCP/IE/2018/045	Procurement of HT strands from M/s Usha Martin Limited and M/s D.P.Wires Limited	
34	04.06.2018	PSCHPL/SCP/IE/2018/046	Submission of structure design and drawings of 73+340 Major bridge PSC girders	
35	13.06.2018	PSCHPL/SCP/IE/52/2018	Submission of revised Design and Drawings of 5 Box Culverts (R1)	
36	14.06.2018	PSCHPL/SCP/IE/2018/053	Submission of Compliance and revised design and drawing of major bridge at Km:107+400Major bridge.	
37	20.06.2018	PSCHPL/SCP/IE/2018/056	Submission of revised Plan & Profile (R3)	
38	23.06.2018	PSCHPL/SCP/NHAI/2018/059	Submission of credential of M/s Dynamic Prestressing India Pvt. Ltd	
39	20.06.2018	PSCHPL/SCP/NHAI/2018/060	Submission of credential of M/s Sree Balaji Test House Pvt. Ltd. & M/s Anu Lab – for conducting the third party testing	
40	23.06.2018	PSCHPL/SCP/NHAI/2018/062	Procurement of Bitumen Emulsion (SS1 & RS1)from M/s Hindustan Colas Private Limited	
41	03.07.2018	PSCHPL/SCP/IE/2018/063	Submission of Revised Plan & Profile (R4)	
42	27.06.2018	PSCHPL/SCP/IE/2018/063	Procurement of Cement from M/s India Cement Limited	
43	05.07.2018	PSCHPL/SCP/IE/2018/063	Regarding submission of reply/compliance of comments for Pavement design report	
44	02.07.2018	PSCHPL/SCP/IE/2018/69	Submission of GAD for NOC	
45	03.07.2018	PSCHPL/SCP/IE/62/2018	Submission of Revised Plan & profile Drawings	
46	05.07.2018	PSCHPL/SCP/IE/63/2018	Submission of reply for pavement design report for project highway	
47	07.07.2018	PSCHPL/SCP/CE/2018/071	Proposal of Shyam Steel.	
48	07.07.2018	PSCHPL/SCP/CE/2018/072	Procurement of Admixture from M/s BASF India Limited.	
49	07.07.2018	PSCHPL/SCP/CE/2018/073	Procurement of construction materials from M/s IWL India Limited.	
50	10.07.2018	PSCHPL/SCP/IE/2018/074	Regarding submission of Compliances of comments of IE on submitted revised Plan & Profile drawings (R4) of Project Highway.	
51	13.07.2018	PSCHPL/SCP/IE/2018/075	Proposal of STRATA Geosystems (I) Pvt. Ltd. - System supplier for Reinforced Earth wall	
52	14.07.2018	PSCHPL/SCP/IE/2018/076	Construction Methodology of Embankment fill using for Fly-Ash as fill material – Sethiyahopu bypass	
53	17.07.2018	PSCHPL/SCP/IE/2018/077	Methodology for Initial Load test on Piles	
54	19.07.2018	PSCHPL/SCP/IE/2018/078	Submission of Drawings	
55	20.07.2018	PSCHPL/SCP/IE/2018/079	Submission of Concrete Mix Design - Ms Selva Ready Mix Concrete & Construction	
56	27.07.2018	PSCHPL/SCP/IE/2018/083	Procurement of reinforcement steel from M/s Kamatchi Industries Ltd	
57	28.07.2018	PSCHPL/SCP/IE/2018/084	Submission of Plan and Profile drawing (Revision 4) of Project Highway	
58	28.07.2018	PSCHPL/SCP/IE/2018/085	Proposal of borrow area No.2 of kodali village	
59	01.08.2018	PSCHPL/SCP/IE/2018/086	Method Statement for ground improvement of weak soils	
60	03.08.2018	PSCHPL/SCP/IE/2018/088	Proposal of stone quarry for production of construction materials to the project	
61	03.08.2018	PSCHPL/SCP/IE/2018/089	Submission of Concrete Mix Designs	
62	03.08.2018	PSCHPL/SCP/IE/2018/090	Procurement of cement M/s Ultratech cement Ltd.	
63	11.08.2018	PSCHPL/SCP/IE/2018/091	Submission of Pile load test report of MJB 107.400	
64	16.08.2018	PSCHPL/SCP/IE/2018/092	Submission of safe bearing capacity test reports for CD Structures	
65	16.08.2018	PSCHPL/SCP/IE/2018/093	Proposal of Borrow area No.1 of maruvay village	
66	18.08.2018	PSCHPL/SCP/IE/2018/094	Procurement of curing compound from M/s Kunal Conchem Pvt Ltd	
67	20.08.2018	PSCHPL/SCP/IE/2018/098	Procurement of Admixture from M/s Rhenoplast Tech.Pvt Ltd	
68	20.08.2018	PSCHPL/SCP/IE/2018/099	Submission of Quality Assurance Plan	
69	20.08.2018	PSCHPL/SCP/IE/2018/100	Proposed of RE Wall of Earthcon Systems Pvt Ltd	
70	29.08.2018	PSCHPL/SCP/IE/2018/101	Proposal of Borrow area	

TABLE 14.3 - CORRESPONDANCE - INDEPENDENT ENGINEER TO CONCESSIONAIRE / NHAI

S.No	Date	Letter No	Subject	Remarks
1	27.04.2018	TES/IE-Sethiyathopu to Cholapuram/PIL/2018/001	Link between the existing anakarai Bridge and the proposed new bridge requested	
2	28.04.2018	TES/IE-Sethiyathopu to Cholapuram/PIL/2018/002	Replacement of Pipe culverts with Box Culverts-In principle approval-Change of Scope Notice Issued	
3	28.04.2018	TES/IE-Sethiyathopu to Cholapuram/PIL/2018/003	Request for source approval of Admixtures	
4	05.05.2018	TES/IE-Sethiyathopu to Cholapuram/PIL/2018/004	Observations regarding the submission of Test Pile details & Drawing for the Grade Seperator at Ch 110+100	
5	08.05.2018	TES/IE/SCP/PIL/2018/005	Source Approval for Ramco Cements Limited, Chennai-OPC 43 Grade	
6	08.05.2018	TES/IE/SCP/PIL/2018/006	Source Approval for Dalmia Bharat Cement, Ariyalur Chennai-OPC 43 Grade	
7	08.05.2018	TES/IE/SCP/PIL/2018/007	Submission of Drawings for Replacement of Pipe Culvert with Box Culvert	
8	08.05.2018	TES/IE/SCP/PIL/2018/008	Submission of Structure Design and Drawing for 13 VUPs	
9	12.05.2018	TES/IE/SCP/PIL/2018/009	Request for source approval of M/s Unitech Mechanical Couplers, Coimbatore	
10	17.05.2018	TES/IE/SCP/PIL/2018/010	Source Approval for M/s Jindal Steel & Power Limited, New Delhi	
11	18.05.2018	TES/IE/SCP/PIL/2018/011	Link between the existing anakarai Bridge and the proposed new bridge requested	
12	18.05.2018	TES/IE/SCP/PIL/2018/012	Submission of Structure Design and Drawing for 09 Box Culverts	
13	18.05.2018	TES/IE/SCP/PIL/2018/013	Submission of Mix Design for M-35 Piling Concrete	
14	19.05.2018	TES/IE/SCP/PIL/2018/014	Hard Copies for Structures Design & Drawings	
15	19.05.2018	TES/IE/SCP/PIL/2018/015	Pavement Design Report	
16	28.05.2018	TES/IE/SCP/PIL/2018/016	Source approval for M/s Shyam Steel Industries Limited	
17	04.06.2018	TES/IE/SCP/PIL/2018/017	Submission of Structure Design & drawings of 6 MNBs	
18	06.06.2018	TES/IE/SCP/PIL/2018/018	Pavement Design Report	
19	07.06.2018	TES/IE/SCP/PIL/2018/019	Submission of Structure Design & drawings of 5 Box culverts	
20	07.06.2018	TES/IE/SCP/PIL/2018/020	Submission of Structure Design & drawings of MJB at Ch 107+400 over kollidam river	
21	13.06.2018	TES/IE/SCP/PIL/2018/021	Submission of compliance report for the temporay remedial measures taken on the identified black spot of mangalam Road Two Consecutive Bridges	
22	14.06.2018	TES/IE/SCP/PIL/2018/022	Maintenance of Existing Project Highway	
23	6/15/2018	TES/IE/SCP/PIL/2018/023	Submission of revised drawing of VUPa (13 Nos)-R1	
24	6/16/2018	TES/IE/SCP/PIL/2018/024	Road Safety 2nd meeting held on 20.04.2018-Decision taken-Action requested	
25	6/18/2018	TES/IE/SCP/PIL/2018/025	Submission of revised Structure design and drawing of 05 Box culverts(R1)	
26	6/18/2018	TES/IE/SCP/PIL/2018/026	Submission of Structure Design and Drawings of 08 Nos of Grade Separators	
27	6/18/2018	TES/IE/SCP/PIL/2018/027	Pavement Design Report	
28	6/20/2018	TES/IE/SCP/PIL/2018/028	Source approval of HT strand from M/s usha Martin Limited and M/s DP wires Limited	
29	6/20/2018	TES/IE/SCP/PIL/2018/029	Submission of Structure Design & drawings of PSC Girder of MJB at Ch.73+340	
30	6/20/2018	TES/IE/SCP/PIL/2018/030	Submission of Structure Design and Drawing of 04 MNBs	
31	6/21/2018	TES/IE/SCP/PIL/2018/031	Submission of revised Structure design and drawing of 06 Nos of Minor Bridges	
32	6/21/2018	TES/IE/SCP/PIL/2018/032	Submission of revised Structure design and drawing of 09 Nos of Box Culverts	
33	6/21/2018	TES/IE/SCP/PIL/2018/033	Submission of Mix Designs-M/s SSA Ready Mix Concrete	
34	6/22/2018	TES/IE/SCP/PIL/2018/034	Submission of Quality Assurance plan	
35	6/25/2018	TES/IE/SCP/PIL/2018/035	Source Approval for procurement of Bitumen Emulsion (SS1 & RS1) from M/s Hindustan Colas Private Limited	
36	6/28/2018	TES/IE/SCP/PIL/2018/036	Submission of Structure Design and Drawing of 2 Nos of LVUP	
37	6/29/2018	TES/IE/SCP/PIL/2018/037	Submission of Credentials of M/s Dynamic prestressing India Pvt.Ltd	
38	7/5/2018	TES/IE/SCP/PIL/2018/038	Stacking of Reinforcement Steel	
39	7/5/2018	TES/IE/SCP/PIL/2018/039	Source Approval for Procurement of Bitumen & Bitumen Emulsion (SS1 & RS1) from M/s Indian Oil Corporation Limited	
40	7/7/2018	TES/IE/SCP/PIL/2018/040	Source approval for M/s India Cement Limited	
41	7/12/2018	TES/IE/SCP/PIL/2018/042	Procurement of Admixture from M/s BASF India Limited	
42	7/13/2018	TES/IE/SCP/PIL/2018/043	Proposal of M/s Shyam Steel Industries Limited	
43	7/17/2018	TES/IE/SCP/PIL/2018/045	Test Piles for Major Bridge at Km 107+400	
44	7/18/2018	TES/IE/SCP/PIL/2018/046	Methodology for Initial Load Test on Piles	
45	7/23/2018	TES/IE/SCP/PIL/2018/047	Submission of LVUP Drawings-02 Nos	
46	7/23/2018	TES/IE/SCP/PIL/2018/048	Submission of Revised Drawing for Major Bridge at Km 107+400 over Kollidam River	
47	7/25/2018	TES/IE/SCP/PIL/2018/049	Submission of Revised Box Culverts Drawings-14 Nos	
48	7/25/2018	TES/IE/SCP/PIL/2018/050	Submission of revised Minor Bridges Drawings-10 Nos	
49	7/25/2018	TES/IE/SCP/PIL/2018/051	Checking of Traverse Points and TBM	
50	7/28/2018	TES/IE/SCP/PIL/2018/052	Source Approv for Dalmia Bharat Cement, Ariyalur and Chettinad Cement	
51	7/27/2018	TES/IE/SCP/PIL/2018/053	Source approval for Hyper polyester Meberance-Mastic asphalt-IWL India Ltd.	
52	7/27/2018	TES/IE/SCP/PIL/2018/054	Source approval for procurement of Emulsion-IWL India Ltd.	
53	7/27/2018	TES/IE/SCP/PIL/2018/055	Submission of Concrete Mix Design- Selva Ready Mix Concrete	
54	7/27/2018	TES/IE/SCP/PIL/2018/056	Procurement of steel from JSW and Kamatchi Ltd.	
55	7/28/2018	TES/IE/SCP/PIL/2018/057	Submission of Plan & Profile Drawing of Project Hlghway	
56	30/07/2018	TES/IE/SCP/PIL/2018/058	Method Statement for Ground Improvement of Weak Soils (CD Works)	
57	07/08/2018	TES/IE/SCP/PIL/2018/059	Proposal of Borrow Area No.01 of Maruvay Village at Km 61+090 LHS	
58	07/08/2018	TES/IE/SCP/PIL/2018/060	Procurement of Cement from Ultratech Cement Limited - OPC53 Grade	
59	07/08/2018	TES/IE/SCP/PIL/2018/061	Proposal of Borrow Area No.02 of Kodali Village at Km 106+350 RHS	
60	8/20/2018	TES/IE/SCP/PIL/2018/062	Submission of Revised Structure Design and Drawing (R1 – Revision) of 08 Nos. of Grade Separators	
61	8/20/2018	TES/IE/SCP/PIL/2018/063	Submission of Revised VUP Drawings (R2)	
62	8/21/2018	TES/IE/SCP/PIL/2018/064	Stacking of Reinforcement Steel at Yard and at Site	
63	8/21/2018	TES/IE/SCP/PIL/2018/065	Submission of Quality Assurance Plan - R1	
64	8/21/2018	TES/IE/SCP/PIL/2018/066	Source Approval for Admixture - Rheoplast Technology Pvt Ltd	
65	8/21/2018	TES/IE/SCP/PIL/2018/067	Source Approval for Curing Compound - Kunal Conchem Pvt Ltd	
66	8/23/2018	TES/IE/SCP/PIL/2018/068	Submission of Structure Design and Drawing of 3 Nos. of Minor Bridges at Ch.74+605, Ch.79+716, Ch.85+435	
67	8/23/2018	TES/IE/SCP/PIL/2018/069	Submission of Test Report of Initial Vertical Pile load test for the proposed MJB at Km 107+400	
68	8/31/2018	TES/IE/SCP/PIL/2018/070	Submission of Alternate Proposal for VUP at KM 113+550	

15. Progress Photographs

Sl. No	Description	Location	Side	Remarks
1.	Base camp completed view in Meensuriti	92+500	RHS	



Sl. No	Description	Location	Side	Remarks
2.	Base camp completed view in Meensuriti	92+500	RHS	



Sl. No	Description	Location	Side	Remarks
3.	Mobilized Machineries	92+500	RHS	
				
Sl. No	Description	Location	Side	Remarks
4.	Mobilized Machineries	92+500	RHS	
				

Sl. No	Description	Location	Side	Remarks
5.	RMC plant at Base camp, Meensuriti	92+500	RHS	



Sl. No	Description	Location	Side	Remarks
6.	RMC Plant at Anaikarai Camp			



Sl. No	Description	Location	Side	Remarks
7.	Site Clearing works in progress			



Sl. No	Description	Location	Side	Remarks
8.	OGL FDD checking	88+500		



Sl. No	Description	Location	Side	Remarks
9.	Piling work at VUP	106+320		



Sl. No	Description	Location	Side	Remarks
10.	Piling work at VUP	106+320		



Sl. No	Description	Location	Side	Remarks
11.	PCC for Raft - Minor bridge	88+513	LHS	



Sl. No	Description	Location	Side	Remarks
12.	Raft Reinforcement - Minor bridge	88+513		



Sl. No	Description	Location	Side	Remarks
13.	Safety Tool Box Meeting	92+500		
				
14.	Patch works in Existing Road		LHS	
				