



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

PATEL SETHIYAHOPU - CHOLOPURAM HIGHWAY PRIVATE LIMITED

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

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

MONTHLY PROGRESS REPORT
NOVEMBER 2019

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Executive Summary

The old National Highway (NH -45C) 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 45C (NH-45C). 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 36. 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. The Project stretches passing through the 03 nos. of districts of Cuddalore, Ariyalur and Thanjavur.

Project Synopsis

The Government of India had entrusted to the National Highway Authority of India (NHAI) the development, maintenance and management of National Highway No. 45C including the section from km 65.960 to Km 116.440 (approx. 50.480 Km). The Authority had resolved to augment for four Laning of Sethiyahopu - Cholopuram from Km 65.960 to Km 116.440 section of NH - 45C in the State of Tamil Nadu under NHDP Phase-IV on design, build, operate and transfer (the "DBOT Annuity" or "Hybrid Annuity") basis.

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

Figure 1: Project Location Map

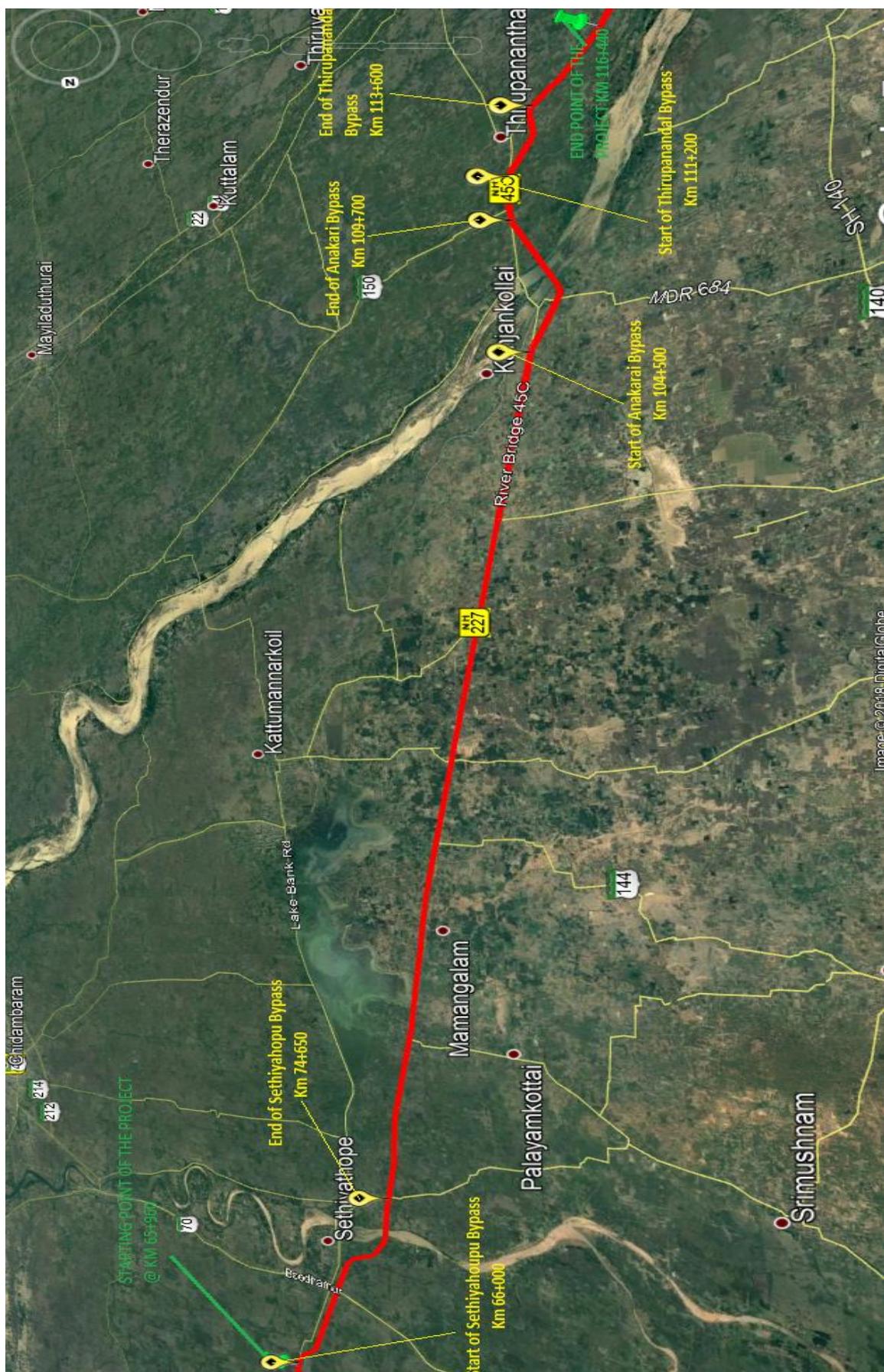
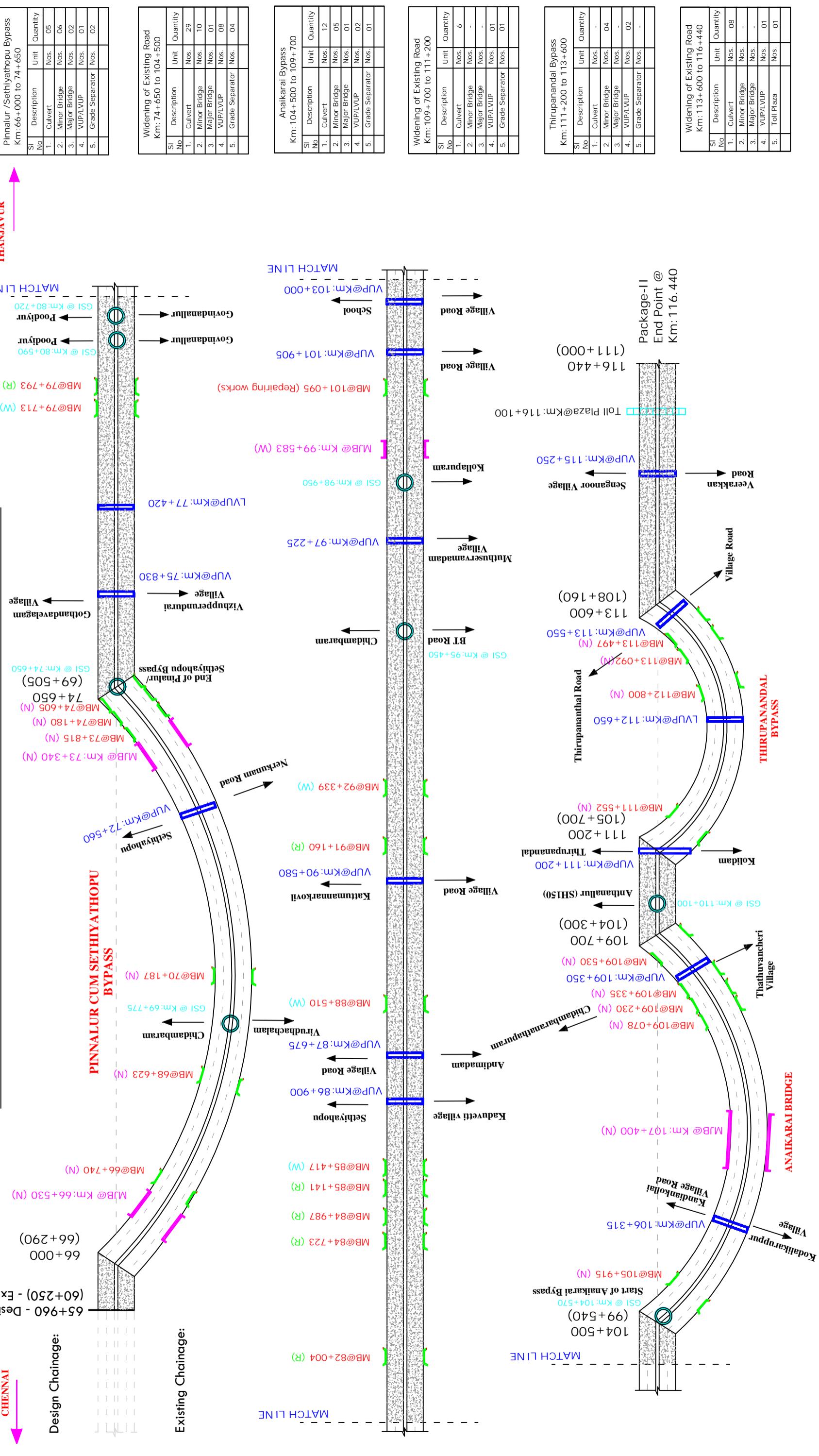


Figure 2: Project Alignment Map

SETHIYAHOPU TO CHOLOPURAM HIGHWAY PROJECT OF NH45 C



Drawing Title	Project No.
Strip Plan - Sethiyahopu to Cholopuram Highway Project	PSCHP/NHAI/TN/001
Date.	31-08-2018

Sl No	Description	Unit	Scope	Sl No	Description	Unit	Scope
1.	Total Length of Project	Km	50.480	11.	Minor Intersection	Nos.	07
2.	Length of Widening Portion	Km	34.230	12.	Major Intersection	Nos.	07
3.	Length of Bypass	Km	16.250	13.	Bus Bays and Shelters	Nos.	09
4.	Length of service/Slip Road	Km	27.100	8.	VUP/LVUP	Nos.	15
5.	Culverts			9.	Grade Separated Structure	Nos.	08
	Box Culvert			10.	Toll Plaza	Nos.	01

Table - 1.1 : Details of Project Alignments

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

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

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

1.1. Project Overview

Name of Work	Four Laning of Sethiyahopu-Cholopuram from km. 65.960 to Km.116.440 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, Channi 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, Channi Road,Vadodara Gujarat– 391740, Tel: +91-265 277 6678 Fax: +91-265 277 7878
Design Consultant	CTL Global Services Pvt. Ltd. 101, 1st 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. 1461.00 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	26.595 Km
Major Bridge	04 Nos.
Minor Bridge	25 Nos.
Grade Separate Intersection	08 Nos.
Vehicular Underpass	13 Nos.
Light Vehicular Underpass	2 Nos.
Culverts	60 Nos.
Major Intersections	07 Nos.
Minor Intersections	100 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	Revised Target date as per recommended IEOT
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	22 th Sep 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	20 th Jan 2020
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	26 th Sep 2020
Scheduled Completion	Concessionaire shall have completed Project on 730 th day from the Appointed Date.	15 th August 2020	18 th Feb 2021

1.4. Payment milestone during Construction Period

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

1.5. Permits & Approvals

Sr. No.	Details	Authority	Current Status	Remarks
1	Extraction of Boulders from Quarries	Dist. Mining Officer	Obtained	PIL (EPC Contractor) have executed an agreement with Mr. Thiru V. Sekar for supply of boulders that is having a valid license for extraction of boulders for the quarry at Padalur Village, Perambalur District.
2	Installation of Crusher	Village Panchayat Head	Obtained	
3	-----D O-----	Pollution Control Board	Obtained	
4	Use of Explosives	District 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	Work in Progress
8	Electric Poles Shifting	Tamil Nadu Electricity Board	Obtained	Work in Progress
9	Water Pipes Shifting	Tamilnadu Water Supply and Drainage Board	Obtained	Work 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	
1	Use of Existing Road Portion	Km	34.23	
2	Proposed Bypass / Realignment portion	Km	16.25	
B)	Hindered Length			
1.	LA pending	Km	7.56	
2.	Payment Pending	Km	8.430	
3.	Existing Buildings	Km	4.015	
4.	Temple & Bus stand	Km	0.100	
5.	Electrical Lines	Km	1.650	
6.	Rural Water Supply lines	Km	19.84	
7.	NOC Irrigation Dept.	Km	0.960	
8.	Paddy/Cotton fields	Km	0	
9.	Trees	Km	0.736	
10.	Net Hindered Length (both Side)	Km	41.685	
C)	Total Project Length (both Side)	Km	100.96	
D)	% Hindered Length	%	41.288%	

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

The status of compensation disbursed is as below: -

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	Cuddalore	710	591	119	
2	Ariyalur	355	302	53	
3	Thanjavur	102	94	8	
	Total in Nos.	1167	987	180	
		Total in %	84.57%	15.43%	

Table 2.1-4 - Compensation disbursement for Structures					
Sl. No.	Name of the District	Total No. of structures	Amount paid (in Nos.)	Balance to be Paid (in Nos.)	Remarks
1	Cuddalore	383	323	60	
2	Ariyalur	359	325	34	
3	Thanjavur	153	65	88	
	Total in Nos.	895	713	182	
		Total in %	79.66%	20.34%	

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

Details of Stretches Under Hindrance (RHS):-

Sr. No.	From	To	Length	Effective Hindered Length	Side	Remarks
1	066+100	066+260	160	160	RHS	Veeranam Pipe Line
2	066+700	067+300	600	600	RHS	Giri Land - Compensation Disbursement balance - Not allowed to work by the Land owner
3	068+550	068+620	70	70	RHS	Compensation Disbursement balance - Not allowed to work by owner
4	072+540	072+600	60	60	RHS	Compensation Disbursement balance - Not allowed to work by owner
5	072+600	072+700	100	100	RHS	Compensation Disbursement balance - Not allowed to work by owner
6	072+800	073+100	300	300	RHS	Compensation Disbursement balance - Not allowed to work by owner
7	073+700	073+800	100	100	RHS	Compensation Disbursement balance - Not allowed to work by owner
8	073+900	074+200	300	300	RHS	Compensation Disbursement balance - Not allowed to work by owner
9	074+680	074+930	250	250	RHS	RE Wall Location: RE wall A2/RHS side WIP, LHS side school compund wall payment pending.
10	075+500	075+550	50	50	RHS	EB & Water Tap
11	075+550	076+120	570	570	RHS	RE Wall Location: RHS - 02 Building unpaid, 01 nos under revaluation & 01 nos paid and to be removed. LHS - 03 building under revaluation, 01nos unpaid, EP Lines & Trnasformer.
12	076+120	076+150	30	30	RHS	EB, Water Tap & House

Sr. No.	From	To	Length	Effective Hindered Length	Side	Remarks
13	077+200	077+250	50	50	RHS	EB, Water Tap & House
14	077+250	077+590	340	340	RHS	RE Wall Location: RHS - Unauthorised 10 nos, EP Lines & 03 nos of Trees to be removed. LHS - 02 nos of unauthorised building Structure works not started.
15	077+590	077+800	210	210	RHS	EB, Water Tap & House
16	078+550	078+760	210	210	RHS	EB & Tree
17	079+700	080+180	480	480	RHS	Land, EB & House
18	080+180	081+090	910	910	RHS	RE Wall Location: Fully build-up area, payment made to all owners and not accepting to vacate. Need police force and requested DRO in this regards. Structure work not started.
19	081+090	081+120	30	30	RHS	Land, EB & House
20	083+400	084+200	800	800	RHS	Land, EB & House
21	085+800	086+200	400	400	RHS	Land, EB & House
22	086+400	086+610	210	210	RHS	Land, EB & House
23	086+610	087+180	570	570	RHS	RE Wall Location: RHS - 01 unauthorised building, 01 trees to be removed. LHS - 01 building unpaid and EP lines to be removed. Structure works not started.
24	087+390	087+960	570	570	RHS	RE Wall Location: RHS - 01 OHT, 01 unauthorised building, 01 Temple., LHS - EP Lines to be removed. Structure works not started.
25	088+150	088+220	70	70	RHS	EB & Transfomer
26	088+870				RHS	Temple
27	089+930	090+265	335	335	RHS	EB, Temple & Transfomer
28	090+265	090+865	600	600	RHS	RE Wall Location
29	091+120	091+170	50	50	RHS	Power Grid Main Gate
30	091+580	091+780	200	200	RHS	House, EB & Water Tap
31	092+750	093+750	1000	1000	RHS	House, EB & Water Tap
32	095+050	095+065	15	15	RHS	House, EB & Fencing Wire
33	095+065	095+835	770	770	RHS	RE Wall Location: RHS - Police station arch, House compound wall, 01 building, 01 Temple, LHS - School compound wall, 02 building under revaluation, 01 trees and 14 nos. of commercial building(shops) & EP poles to be removed.
34	095+835	096+400	565	565	RHS	House, EB & Water Tap
35	096+940	097+505	565	565	RHS	RE Wall Location: RHS - 02 nos of Building unpaid, 04 nos under revaluation, 01 shop buildings to be removed. LHS - 01 building under revaluation & 01 building paid to be dismantled.
36	097+950	098+200	250	250	RHS	Land, EB & House
37	098+500	098+565	65	65	RHS	Land, EB & House
38	098+565	099+305	740	740	RHS	RE Wall Location: RHS - 01 transformer, 01 Temple, 02 unpaid building, 07 shops to be removed. EP lines to be removed. LHS - 02 building compound wall, school compound wall, 02 shops to be removed and OHT to be removed.
39	099+305	099+400	95	95	RHS	Land, EB, Water Tap & House
40	099+500	099+900	400	400	RHS	Land, EB, Water Tap & House

Sr. No.	From	To	Length	Effective Hindered Length	Side	Remarks
41	099+900	100+300	400	400	RHS	Land, EB, Water Tap & House
42	100+300	101+600	1300	1300	RHS	Land, EB, Water Tap & House
43	101+600	101+620	20	20	RHS	Land, EB, Water Tap & House
44	101+620	102+195	575	575	RHS	RE Wall Location: Fully unpaid buildup area, 3D completed recently and payment was not made to the owners.
45	102+195	102+230	35	35	RHS	Land, EB, Water Tap & House
46	102+230	102+700	470	470	RHS	Land, EB, Water Tap & House
47	102+700	102+715	15	15	RHS	Land, EB, Water Tap & House
48	102+715	103+285	570	570	RHS	RE Wall Location: Fully unpaid buildup area, 3D completed recently and payment was not made to the owners.
49	103+285	103+320	35	35	RHS	Land, EB, Water Tap & House
50	103+320	104+190	870	870	RHS	Land, EB, Water Tap & House
51	104+190	104+500	310	310	RHS	RE Wall Location: A1/LHS - Marriage hall to be removed(under revaluation) & EP lines to be removed.
52	109+500	109+700	200	200	RHS	Compensation Disbursement balance - Not allowed to work by owner
53	109+700	110+485	785	785	RHS	RE Wall Location: RHS - 01 Temple, 02 building & 01 shops to be removed - Police force requested. LHS - 04 unpaid buildings
54	110+485	110+920	435	435	RHS	Land, EB, Water Tap & House
55	110+920	111+200	280	280	RHS	RE Wall Location: RHS - 02 nos. of buildings to be removed - Police force requested. LHS - Land & borewell payment pending, bus stop to be removed.
56	113+250	113+450	200	200	RHS	Temple Land, Local not allowing to Work
57	113+600	113+820	220	220	RHS	RE Wall Location: Under relocation proposal due to hindrance of substation.
58	113+820	114+650	830	830	RHS	Power Sub Station, Land, Water Tap & EB
59	114+865	115+630	765	765	RHS	RE Wall Location: Electrical poles to be removed
60	115+630	116+440	810	810	RHS	OHT, Shop, Light Pole, Houses
Total Hindered Length RHS (Km.)			22.215			

Details of Stretches Under Hindrance (LHS):-

Sr. No.	From	To	Length	Effective Hindered Length	Side	Remarks
1	066+100	066+260	160	160	LHS	Veeranam Pipe Line
2	066+700	067+300	600	600	LHS	Giri Land - Compensation Disbursement balance - Not allowed to work by the Land owner
3	068+550	068+620	70	70	LHS	Compensation Disbursement balance - Not allowed to work by owner
4	072+540	072+600	60	60	LHS	Compensation Disbursement balance - Not allowed to work by owner
5	072+600	072+700	100	100	LHS	Compensation Disbursement balance - Not allowed to work by owner
6	072+800	073+100	300	300	LHS	Compensation Disbursement balance - Not allowed to work by owner
7	073+700	073+800	100	100	LHS	Compensation Disbursement balance - Not allowed to work by owner

Sr. No.	From	To	Length	Effective Hindered Length	Side	Remarks
8	073+900	074+200	300	300	LHS	Compensation Disbursement balance - Not allowed to work by owner
9	074+680	074+930	250	250	LHS	RE Wall Location: RE wall A2/RHS side WIP, LHS side school compound wall payment pending to be removed.
10	075+500	075+550	50	50	LHS	EB, Water Tap & Pond
11	075+550	076+120	570	570	LHS	RE Wall Location: RHS - 02 Building unpaid, 01 nos under revaluation & 01 nos paid and to be removed. LHS - 03 building under revaluation, 01nos unpaid, EP Lines & Transformer.
12	076+120	076+150	30	30	LHS	EB, Water Tap & House
13	077+000	077+250	250	250	LHS	EB, Water Tap & House
14	077+250	077+590	340	340	LHS	RE Wall Location: RHS - Unauthorised 10 nos, EP Lines & 03 nos of Trees to be removed. LHS - 02 nos of unauthorised building. Structure works not started.
15	077+590	077+800	210	210	LHS	EB, Water Tap & House
16	078+600	078+700	100	100	LHS	House & EB
17	079+700	080+180	480	480	LHS	Land, EB & House
18	080+180	081+090	910	910	LHS	RE Wall Location: Fully buildup area, payment made to all owners and not accepting to vacate. Need police force and requested DRO in this regards. Structure work not started.
19	081+090	081+200	110	110	LHS	Land, EB & House
20	083+400	084+200	800	800	LHS	Land, EB & House
21	084+450	084+550	100	100	LHS	Land, EB & House
22	085+800	086+610	810	810	LHS	Land, EB & House
23	086+610	087+180	570	570	LHS	RE Wall Location: RHS - 01 unauthorised building, 01 trees to be removed. LHS - 01 building unpaid and EP lines to be removed. Structure works not started.
24	087+390	087+960	570	570	LHS	RE Wall Location: RHS - 01 OHT, 01 unauthorised building, 01 Temple., LHS - EP Lines to be removed. Structure works not started.
25	089+000	090+000	1000	1000	LHS	Land, EB & House
26	090+220	090+265	45	45	LHS	House & Hut
27	090+265	090+865	600	600	LHS	RE Wall Location
28	091+640	091+860	220	220	LHS	House, EB & Water Tap
29	092+750	093+400	650	650	LHS	House, EB & Water Tap
30	094+650	094+800	150	150	LHS	House, EB & Fencing Wire
31	095+050	095+065	15	15	LHS	House, EB & Fencing Wire
32	095+065	095+835	770	770	LHS	RE Wall Location: RHS - Police station arch, House compound wall, 01 building, 01 Temple, LHS - School compound wall, 02 building under revaluation, 01 trees and 14 nos o commerical building(shops) & EP poles to be removed.

Sr. No.	From	To	Length	Effective Hindered Length	Side	Remarks
33	096+940	097+505	565	250	LHS	RE Wall Location: RHS - 02 nos of Building unpaid, 04 nos under revaluation, 01 shop buldings to be removed. LHS - 01 building under revaluation & 01 building paid to be dismantled.
34	097+900	098+100	200	200	LHS	Land, EB & House
35	098+500	098+565	65	65	LHS	Land, EB & House
36	098+565	099+305	740	250	LHS	RE Wall Location: RHS - 01 transformer, 01 Temple, 02 unpaid building, 07 shops to be removed. EP lines to be removed. LHS - 02 building compound wall, school compound wall, 02 shops to be removed and OHT to be removed.
37	099+305	099+400	95	95	LHS	Land, EB, Water Tap & House
38	099+500	099+900	400	400	LHS	Land, EB, Water Tap & House
39	099+900	100+300	400	400	LHS	Land, EB, Water Tap & House
40	100+300	101+600	1300	1300	LHS	Land, EB, Water Tap & House
41	101+600	101+620	20	20	LHS	Land, EB, Water Tap & House
42	101+620	102+195	575	250	LHS	RE Wall Location: Fully unpaid buildup area, 3D completed recently and payment was not made to the owners.
43	102+195	102+230	35	35	LHS	Land, EB, Water Tap & House
44	102+230	102+700	470	470	LHS	Land, EB, Water Tap & House
45	102+700	102+715	15	15	LHS	Land, EB, Water Tap & House
46	102+715	103+285	570	250	LHS	RE Wall Location: Fully unpaid buildup area, 3D completed recently and payment was not made to the owners.
47	103+285	103+320	35	35	LHS	Land, EB, Water Tap & House
48	103+320	104+190	870	870	LHS	Land, EB, Water Tap & House
49	104+190	104+500	310	250	LHS	RE Wall Location: A1/LHS - Marriage hall to be removed(under revaluation) & EP lines to be removed.
50	109+500	109+700	200	200	LHS	Compensation Disbursement balance - Not allowed to work by owner
51	109+700	110+485	785	250	LHS	RE Wall Location: RHS - 01 Temple, 02 building & 01 shops to be removed - Police force requested. LHS - 04 unpaid buildings
52	110+485	110+920	435	435	LHS	Land, EB, Water Tap & House
53	110+920	111+200	280	250	LHS	RE Wall Location: RHS - 02 nos. of buildings to be removed - Police force requested. LHS - Land & bore well payment-pending, bus stop to be removed.
54	113+250	113+450	200	200	LHS	Temple Land, Local not allowing to Work
55	113+570	113+820	250	250	LHS	RE Wall Location: Under relocation proposal due to hindrance of substation.
56	113+820	114+000	180	180	LHS	Land, EB, Water Tap & House
57	114+450	114+650	200	200	LHS	OHT, Shop, Light Pole, Houses
58	114+865	115+630	765	250	LHS	RE Wall Location: Electrical poles to be removed
59	115+630	116+440	810	810	LHS	OHT, Shop, Light Pole, Houses
Total Hindered Length LHS (Km.)			19.470			

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				
	240	Veeranam Pipe Line	65+960	66+200	Veeranam Pipe Line	240		
			68+600		Sluice Gate (2 Nos)	40		
	150	HT Line Crossing	70+030	70+200				
			70+700		Building			
	550	Agriculture Land & Trees	71+000	71+550				
		Teek Farm, Pump Set & 5 Poles	71+250					
		Bore Well	71+300					
		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	Pump Set & Trees	72+700					
			72+850		Pump Set, Bore Well & Trees			
			72+900		Bore & Pump Set			

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Bore & Pump Set	72+950					
			73+400		HT Line Tower	20		
			73+450		Bore Well, Pump Set & Tree EB Pole	50		
			74+500		Bore Well			
		Telephone Poles	74+710	74+850	Telephone Poles			2 - Telephone Pole
		Temple, Hand Pump,	74+710					
		Hut	75+210					
		Huts	75+270	75+350	Huts			
		Flag Poles	75+390					
			75+520		Huts			
			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					
		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					
		Bore Well & Water Tank	76+025					
		Pump Set	76+260					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			76+600		Temple			
			76+695		OFC & Compound Wall			
			76+800	77+300	Telephone Pole			3 nos
			76+850		OFC			
			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		

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Flag Pole	77+390	77+420				4 Nos
		Hand Pump	77+505					
		Telephone Pole	77+390	77+510				3 Nos
		Hand Pump	77+590					
			77+700		OFC			
		Building	77+730					
			77+760		Water Tank & Motor Room			
		Water Tap	77+975					
			78+120		OFC			
			78+390		EB Pole, Bore Well			
			78+725		Transformer			
			79+080		OFC			
		Hand Pump	79+105					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Existing Culvert	79+110					
			79+220		Flag Pole			
		Water Tank & Motor Room	79+240					
			79+260		OFC			
			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		
		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					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Flag Poles	80+530	80+570	Flag Poles			6nos
			80+710		Existing Culvert			
		Bore Well	80+740					
			80+900		OFC			
			81+325	81+360	Existing Culvert & Compound Wall			
		Pond	81+360	81+460				
		OFC & Temple	81+445					
			81+585		OFC			
		Transformer	81+715					
			82+875		Existing Culvert			
			82+890		OFC			
		Existing Culvert	82+975					
	450	Water Tap	83+000	83+500	Water Tap	450		Tap - 6

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			83+060		OFC			
		Existing Culvert	83+205					
		OFC	83+265					
			83+310		OFC			
		Flag Post	83+385					
			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			

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Temple & Well	84+070					
			84+110		OFC & Flag Pole			
			84+280		Transformer			
		Transformer	84+480					
			84+560		Flag & Ex Culvert			Pole 2 Nos
			84+650		OFC			
			84+920		OFC			
		Building	84+930	84+980				
		Hut	85+045					
			85+060		EB, Transformer			
			85+090		OFC			
		Transformer	85+865					
		Building	85+910					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Hut	85+930					
			85+955		Temple			
			86+280		Temple			
			86+350		Bore Well			
		Temple	86+390					
			86+585		Motor Room			
		Buildings	86+000	86+700	Buildings			
	700	Building & Huts	86+700	87+500	Building & Huts	700		
			86+720		Flag Pole			
			86+830		OFC, Transformer			
		Transformer	86+915					
			86+985		OFC			
		Existing Culvert	87+080					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			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			
			87+690		Temple			
			87+735		Flag Pole			
			87+835		Water Tank			
			87+990		OFC			
			88+225		Transformer			

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		House	88+500	89+000	House			
			88+910		Temple			
		Existing Culvert	88+965					
	450	water Tap, Telephone Pole	89+000	89+500	water Tap, Telephone Pole	450		Tap - 15, T Pole - 5, Tree - 195
		Flag Post Pedestal	89+110					
			89+355		Temple			
		Water Tank	89+515					
	400	EB Pole, Water Tap, House	90+000	90+500	EB Pole, Water Tap, House	400		EB - 34, Tap - 4
			90+180		Transformer			
			90+195		OFC			
			90+230		Transformer			
			90+325		Temple			
			90+375		Existing Culvert			

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	400	EB Pole, Telephone Pole, Water Tap	90+500	91+000	EB Pole, Telephone Pole, Water Tap	400		EB - 14, Tap - 5, T. Pole 7
			90+560		OFC			
			90+610		Water Tank			
			90+830	90+860	Pond			
			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				
	700	EB Pole, Water Tap, Telephone Pole	92+000	93+000	EB Pole, Water Tap, Telephone Pole	700		EB - 16, Tap - 10, T. T Pole - 7
		Temple	92+135					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			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					
	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			

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			93+930		Hand Pump			
			93+975		OFC			
		TEMPLE	94+440					
			94+530		OFC			
			94+780		OFC, Transformer			
		Pond, Pipe Line	94+830	94+900				
	450	EB Pole, Tape, Telephone Pole	95+000	95+500	EB Pole, Tape, Telephone Pole	450		EB - 16, T Pole - , Tap 5
			95+130	95+230	Compound Wall			
			95+210		Telephone Panel, Water Tank With Well			
			95+255		Police Station Arch			
			95+290		OFC			
			95+435		Street Light			
	400	EB Pole, Tape, Telephone Pole	95+500	96+000	EB Pole, Tape, Telephone Pole	400		EB - 25, T Pole - 7, Tap - 6,

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			95+570		Temple			
		Pond	95+950					
	400	EB Pole, Tape, Telephone Pole	96+000	96+500	EB Pole, Tape, Telephone Pole	400		EB - 39, T Pole - 5,Tap - 6,
			96+120		OFC			
			96+150		Transformer			
			96+480		Transformer			
	450	EB Pole, Tape, Telephone Pole	96+500	97+000	EB Pole, Tape, Telephone Pole	450		EB - 16, T Pole - 3,
			97+195		OFC			
			97+395		OFC			
			97+390	97+500	Pond			
	300	EB Pole, Tape, Telephone Pole	97+500	98+000	EB Pole, Tape, Telephone Pole	300		EB - 16,Tap - 5,
		Temple	97+520					
			97+600		OFC			

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			97+680		Motor Room With Bore			
	350	EB Pole, Tape, Telephone Pole	98+500	99+000	EB Pole, Tape, Telephone Pole	350		EB - 19, T Pole - 3
			98+620		Transformer			
		OFC	98+635		Temple			
		Water Tank with Bore	98+735					
		OFC	98+825					
	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			
			99+195		Temple With Water Tank			
		OFC	99+300					
		OFC	99+490					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	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					
		OFC	100+720					
		OFC	100+740					
		Pond	100+740	100+820				

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	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					
			102+240		Temple			
			102+365		Transformer			
		OFC	102+390					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		OFC	102+435					
		OFC	102+575					
		OFC	102+730					
		Schooh Arch	102+960					
	800	Tape, Telephone Pole	103+000	104+000	Tape, Telephone Pole	800		T Pole - 2, Tap - 13
		OFC	103+025					
		Pond	103+090	103+300				
		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				

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		Existing Irrigation Sluice	103+990					
	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
			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	Tape	109+700	111+200	Tape	1350		Tap - 18
		OFC	109+705					
		OFC	109+710					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			109+720		Motor Room			
			109+985		Water Pipe			
		OFC	110+330					
		Water Tank	110+450					
			110+725		OFC			
			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					

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			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			
	750	EB Pole, Telephone Pole, Tape	113+500	114+600	EB Pole, Telephone Pole, 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					

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

Photo	Obstruction Length (m)	LHS -Type of Hindrance	Chainage		RHS -Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
		OFC	116+170					
		Hand Pump	116+200					
		Water Tank & Motor Room	116+210					
		OFC	116+275					
		OFC	116+410					
			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	3	7
2	Ariyalur	10	1	9
3	Thanjavur	2	1	1
	Total in Nos.	22	5	17

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

Table 2.3-2: Status of sanction of Estimates - Electrical Lines Relocation							
Sr. No	Name of the District	Chainages			Number of Estimates	Present Status	Remarks
		From	To	Length in Km			
1	Cuddalore	65+960	86+440	20.48	10	Estimate Approved	Supervision charges are paid and work in progress
2	Ariyalur	86+440	106+860	20.42	5	Estimate Approved	
3	Thanjavur	106+860	116+440	9.58	5	Estimate Approved	
4	Cuddalore& Thanjavur	Km:70+020, Km:73+470 and Km:113+720			3	Estimate Approved	Supervision Charges paid

Estimates for shifting of the above Electric lines have been prepared. The estimated cost is Rs. 17.45 Crores.

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

Table 2.3-3: Status of Utility Relocation								
Sl. No.	Authority	Description		Unit	Total Length/ Nos.	Work done	Balance	Remarks
1	BDO & EE,TWAD	Water Supply Pipe Line		Kms.	72.695	17.092	55.603	Work in progress
2	BDO of Concern Union	Hand Pump/Pump Room with Bore well		Nos.	24	11	13	
3	BDO of Concern Union	Over Head Tank		Nos.	15	9 Nos Completed	6	
4	TNEB	Electrical Lines		Kms.	6.83	5.180	1.650	

2.4. Tree felling

Table 2.4-1: Status of Tree felling									
Sl.N o.	Name of the District	Chainages			Effectuated Length in Kms.	Completed as on Date	Balance as on Date	Balance no. of Trees	Remarks
		From	To	Length in Km					
1	Cuddalore	65+960	86+440	20.48	6.535	6.299	0.236	10	In addition of 123 nos of teak wood trees to be removed and Permission of the same is awaited from DFO, Cuddalore.
2	Ariyalur	86+440	106+860	20.42	8.385	8.225	0.160	9	
3	Thanjavur	106+860	116+440	9.58	2.515	2.515	0	0	
Total			50.48	17.435	17.039	0.396	19		

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	50.48
2	Plan & Profile	Km	50.480	50.48	48.48
3	Typical Cross Sections	Type	7	7	7
4	Major Intersections	No	07	-	-
5	Minor Intersections	No	100	-	-
6	Toll Plaza (Typical Details)	No	01	-	-
7	Service Roads	No	26.595	26.595	26.595

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	04	1
2	Minor Bridges	No	25	25	22
3	Grade Separated Intersection	No	08	08	8
4	VUP/LVUP	No	15	15	12
5	Box /Slab Culvert	No	60	60	53

4.1. Physical Progress of Work

The Progress of the Major Works carried out at the Site in the Month of November 2019 is as follows.

CUMMULATIVE STATEMENT

For Main Carriageway

Sr. No.	Description	Total Length of Highway Excluding Toll Plaza (in. Km.)	Progress up to Previous Month (in Km)	Progress during this Month (In Km.)	Cumulative Progress Achieved up to this Month (In Km)	In Progress (In Km.)	Balance Length to be Completed	Cumulative % of Progress Achieved
1	Clearing and Grubbing							
	LHS	47.28	32.47	0.60	33.07	0	14.21	69.95%
	RHS	47.28	30.615	0.74	31.355	0	15.925	66.32%
2	Embankment							
	LHS	47.28	11.50	0.00	11.50	9.11	35.78	24.32%
	RHS	47.28	6.90	0.98	7.88	9.45	39.40	16.67%
3	Sub grade							
	LHS	47.28	10.02	0.00	10.02	0.76	37.26	21.19%
	RHS	47.28	5.99	0.00	5.99	0.82	41.29	12.67%
4	GSB/ Cement Treated Base							
	LHS	47.28	7.05	2.14	9.19	0.36	38.09	19.43%
	RHS	47.28	3.12	0.00	3.12	0.28	44.16	6.60%
5	Wet Mix Macadam							
	LHS	47.28	4.95	3.70	8.65	0	38.63	18.29%
	RHS	47.28	2.03	1.12	3.15	0	44.13	6.66 %
6	Dense Bitumen Macadam							
	LHS	47.28	4.31	0.00	4.31	0	42.97	9.12%
	RHS	47.28	1.27	0.56	1.83	0	45.45	3.87%
7	Bituminous Concrete							
	LHS	47.28	0	0	0	0	47.28	0.00%
	RHS	47.28	0	0	0	0	47.28	0.00%

For Service Road

Sr. No.	Description	Total Length of Service Road (Km.)	Progress up to Previous Month (in Km)	Progress during this Month (In Km.)	Cumulative Progress Achieved up to this Month (In Km)	In Progress (In Km.)	Balance Length to be Completed	Cumulative % of Progress Achieved
1	Embankment	53.19	4.30	0.708	5.008	1.23	48.182	9.42%
2	Sub grade	53.19	3.50	0	3.50	0.60	49.69	6.58%
3	GSB/ Cement Treated Base	53.19	0.50	0	0.50	0.20	52.69	0.94%
4	Wet Mix Macadam	53.19	0.00	0	0.00	0.00	53.19	0.00%
5	Dense Bitumen Macadam	53.19	0.00	0	0.00	0.00	53.19	0.00%
6	Bituminous Concrete	53.19	0.00	0	0.00	0.00	53.19	0.00%

<u>Structure Work</u>					
Sr. No.	Type of Structure	Total No. of Structures	Nos. of Structures		
			Completed	In Progress	Balance to be taken up
1	Culvert	60	11	23	26
2	Light Vehicular Underpass	2	0	1	1
3	Vehicular Underpass	13	0	10	3
4	Minor Bridges	25	7	13	5
5	Major Bridge	4	0	4	0
6	Flyover	8	0	5	3

The Physical Progress of the Project up to November 2019 as per Approved Schedule G is as follows:-

Component	Item Description	Unit	Planned in Scope (As per Scope of Work)	Cost Weightage in Component (%)	Progress till Date	% Physical Progress
1	2	3	4	5	6	7
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	Km	66.96	9.517%	15.01	2.133%
	(2) Granular work (sub-base, base, shoulders)	Km				
	(a) GSB/ Cement Treated Base	Km	65.52	3.373%	12.31	0.634%
	(b) WMM/ Cement Treated Base	Km	65.52	4.046%	11.80	0.729%
	(3) Shoulders	Km	17.65	0.112%		
	(4) Bituminous work	Km				
	(a) DBM	Km	65.52	3.344%	6.14	0.313%
	(b) BC	Km	65.52	3.023%		
	(5) Rigid Pavement					
	(6) Widening and repair of culverts	Nos.	16	0.440%	1.00	0.028%
	(7) Widening and repair of minor bridges	Nos.	4	0.959%	1.00	0.240%
	B- New realignment/bypass					
	(1) Earthwork up to top of the sub-grade	Km	28.68	6.437%	1.00	0.224%
	(2) Granular work (sub-base, base, shoulders)					
	(a) GSB/ Cement Treated Base	Km	28.68	1.615%		
	(b) WMM/ Cement Treated Base	Km	28.68	1.436%		
	(3) Shoulders	Km	24.63	0.112%		
	(4) Bituminous work					
	(a) DBM	Km	28.68	1.279%		
	(b) BC	Km	28.68	1.158%		
	(5) Rigid Pavement					

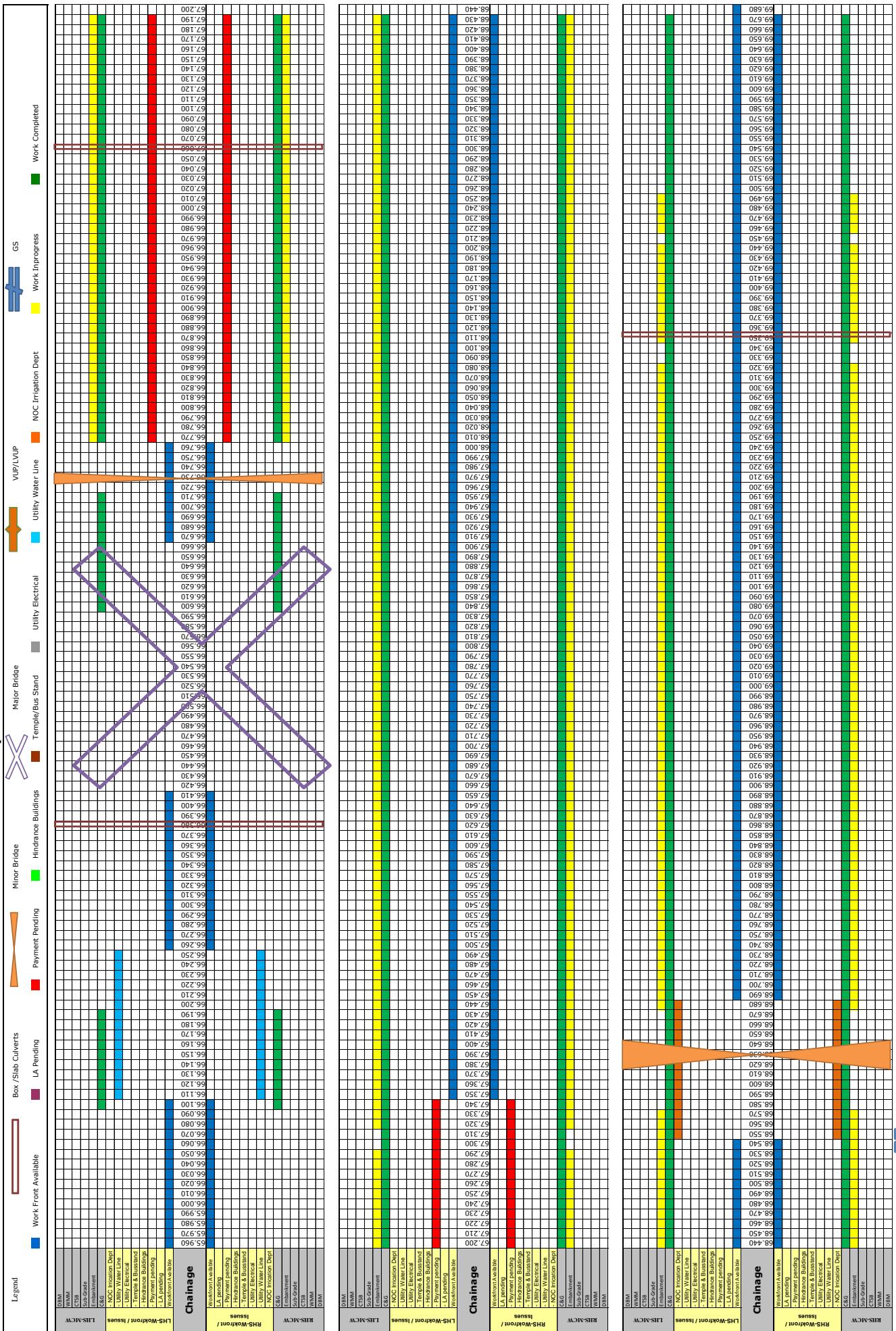
	C- New culverts, minor bridges, underpasses, overpasses on existing road, realignments, bypasses:				
	(1) Culverts	Nos.	44	2.070%	12.00
	(2) Minor bridges				
	(a) Foundation	Nos.	58	3.953%	28.00
	(b) Substructure	Nos.	134	2.623%	49.00
	(c) Superstructure (including crash barrier etc. complete)	Nos.	50	1.559%	14.25
	(3) Cattle/Pedestrian underpasses				
	(a) Foundation	Nos.			
	(b) Substructure	Nos.			
	(c) Superstructure (including crash barrier etc. complete)	Nos.			
	(4) Pedestrian overpasses				
	(a) Foundation	Nos.			
	(b) Substructure	Nos.			
	(c) Superstructure (including crash barrier etc. complete)	Nos.			
	(5) Grade separated structures				
	(a) Underpass (13 VUP, 2 LVUP)				
	(i) Foundation	Nos.	56	2.574%	23.00
	(ii) Substructure	Nos.	60	0.751%	14.00
	(iii) Superstructure (including crash barrier etc. complete)	Nos.	30	1.289%	
	(b) Overpass				
	(i) Foundation				
	(ii) Substructure				
	(iii) Superstructure (including crash barrier etc. complete)				
	(c) Flyover				
	(i) Foundation	Nos.	36	2.426%	17.00
	(ii) Substructure	Nos.	36	0.470%	5.00
	(iii) Superstructure (including crash barrier etc. complete)	Nos.	20	1.244%	
	(d) Foot over Bridge				
Major Bridge works and ROB/RUB	A- Widening and repairs of Major Bridges				
	(1) Foundation				
	(a) Open Foundation				
	(b) Pile Foundation/ Well Foundation				
	(2) Sub-structure				
	(3) Super-structure (including crash barriers etc. complete)				
	C- New Major Bridges				
	(1) Foundation				
	(a) Open Foundation				
	(b) Pile Foundation/ Well Foundation	Nos.			
	(i) Piles	Nos.	556	7.018%	475.00
	(ii) Pile Cap	Nos.	84	2.681%	24.00
					0.766%

(2) Sub-structure	Nos.	84	4.576%	24.00	1.307%	
(3) Super-structure (including crash barriers etc. complete)	Nos.	0	0.00%			
(i) For MJB at Km. 107+400						
(a) Casting of Superstructure (Box Segement)	Nos.	666	1.450%	107.00	0.233%	
(b) Erection of Superstructure (Box Segement)	Nos.	666	1.050%			
(i) For other Major Bridges						
(a) Super-structure (including crash barriers etc. complete)	Nos.	37	2.500%			
D- New rail-road bridges						
(a) ROB						
(1) Foundation	Nos.					
(2) Sub-structure	Nos.					
(3) Super-structure (including crash barriers etc. complete)	Nos.					
(b) RUB						
(1) Foundation	Nos.					
(2) Sub-structure	Nos.					
(3) Super-structure (including crash barriers etc. complete)	Nos.					
Structures (elevated sections, reinforced earth)	A- Elevated Structures					
	(1) Foundation	Nos.				
	(2) Sub-structure	Nos.				
	(3) Super-structure (including crash barriers etc.)	Nos.				
	B- Reinforced earth Wall (includes Approaches of ROB, Underpasses, Overpasses,Flyover etc)	Sqm	196027	7.604%	20400	0.791%
Other Works	(i) Service roads/ Slip Roads	Km	53.19	4.690%		
	(ii) Toll Plaza	Nos.	1	1.821%		
	(iii) Road side drains	Km	28.85	5.429%	3.03	0.570%
	(iv) Road signs, markings, km stones, safety devices,					
	(a) Road signs, markings, km stones, ...	Km	100.96	2.558%		
	(b) Concrete Crash Barrier/ W-Beam Crash Barrier in Road work	Km				
	(i) Concrete Crash Barrier	Km	26.5	1.179%		
	(ii) W-Beam Crash Barrier	Km	10.03	0.788%		
	(v) Project facilities					
	(a) Bus Bays	No.	18	0.009%		
	(b) Truck Lay-byes	No.				
	(c) Rest areas	No.				
	(vi)Repairs to bridges/structures	Nos.				
	(vii) Road side plantation	Km	23.66	0.451%		
	(viii) Protection works					
	(a) Boulder pitching on slopes	Km	10.03	0.218%		
	(b) Toe/Retaining wall	Km	10.03			
	(x) Miscellaneous	Ls.	100%	0.164%		
	Total			100.00%		20.284%

Four Laning of Sethiyahopu - Cholopuram from Km.65.960 to Km.116.440 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Sethiyahopu - Cholopuram Road Projects

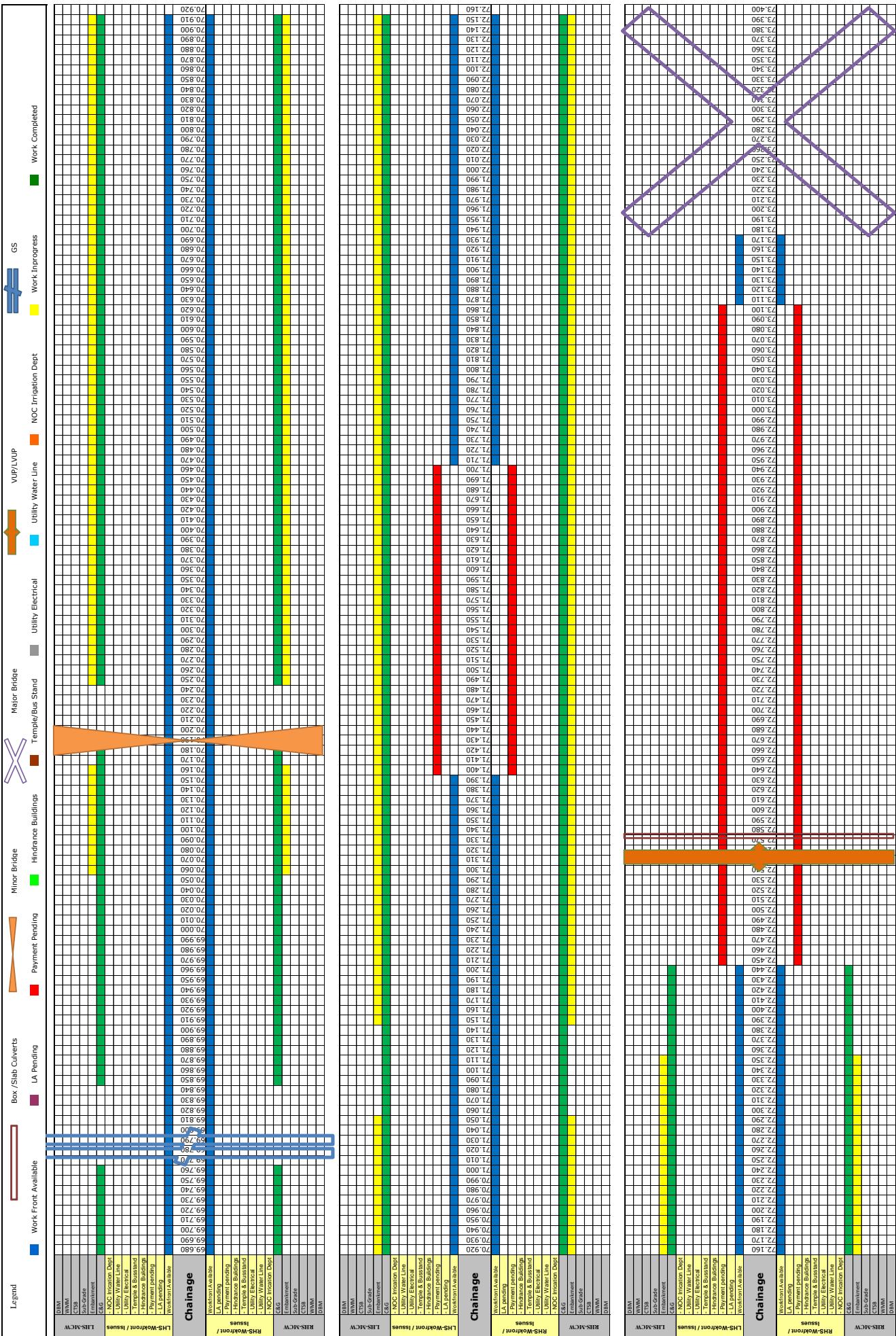
Strip Plan for MCW on 30-11-2019



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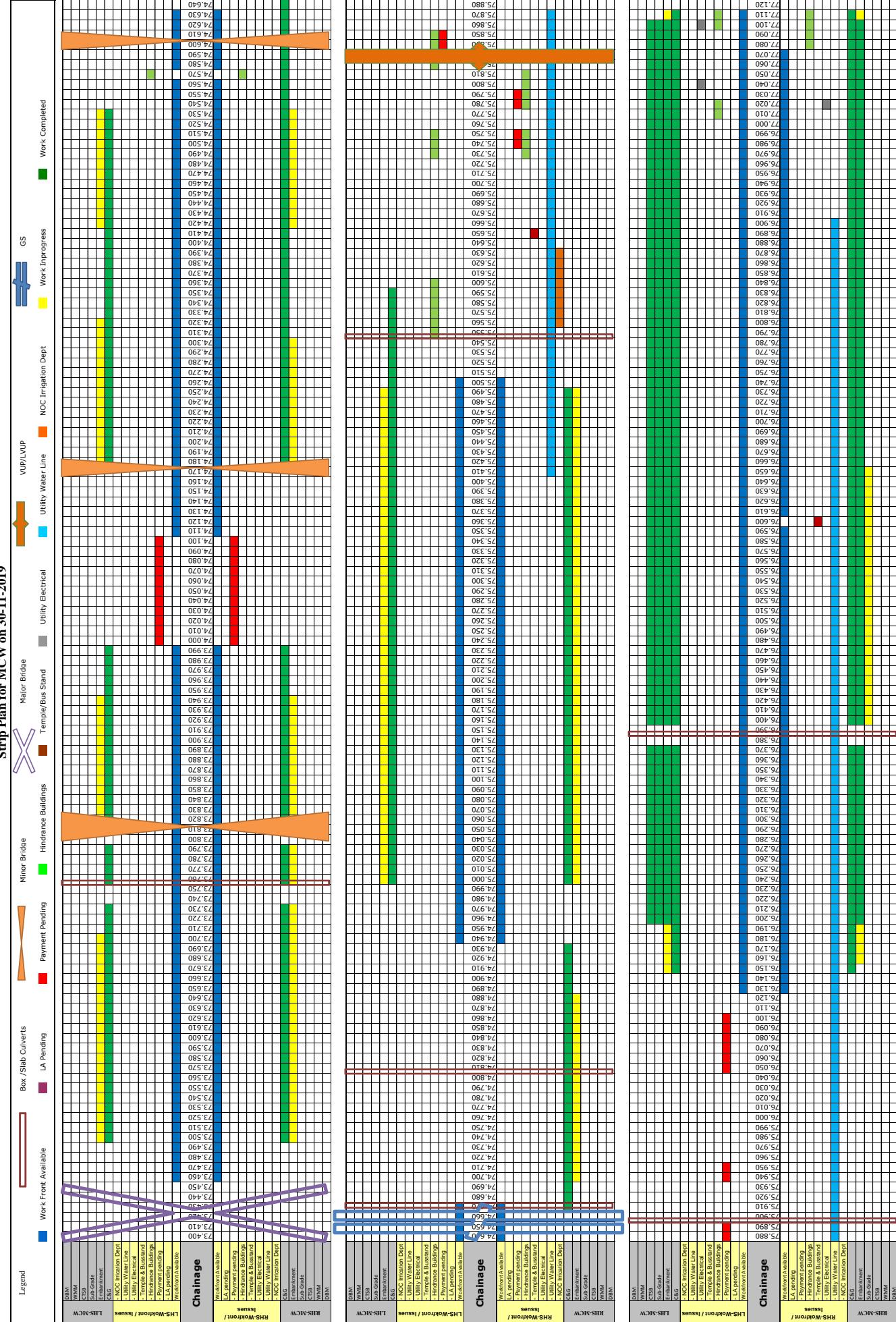
Sethiyahopu - Cholopuram Road Projects

Strip Plan for MCW on 30-11-2019



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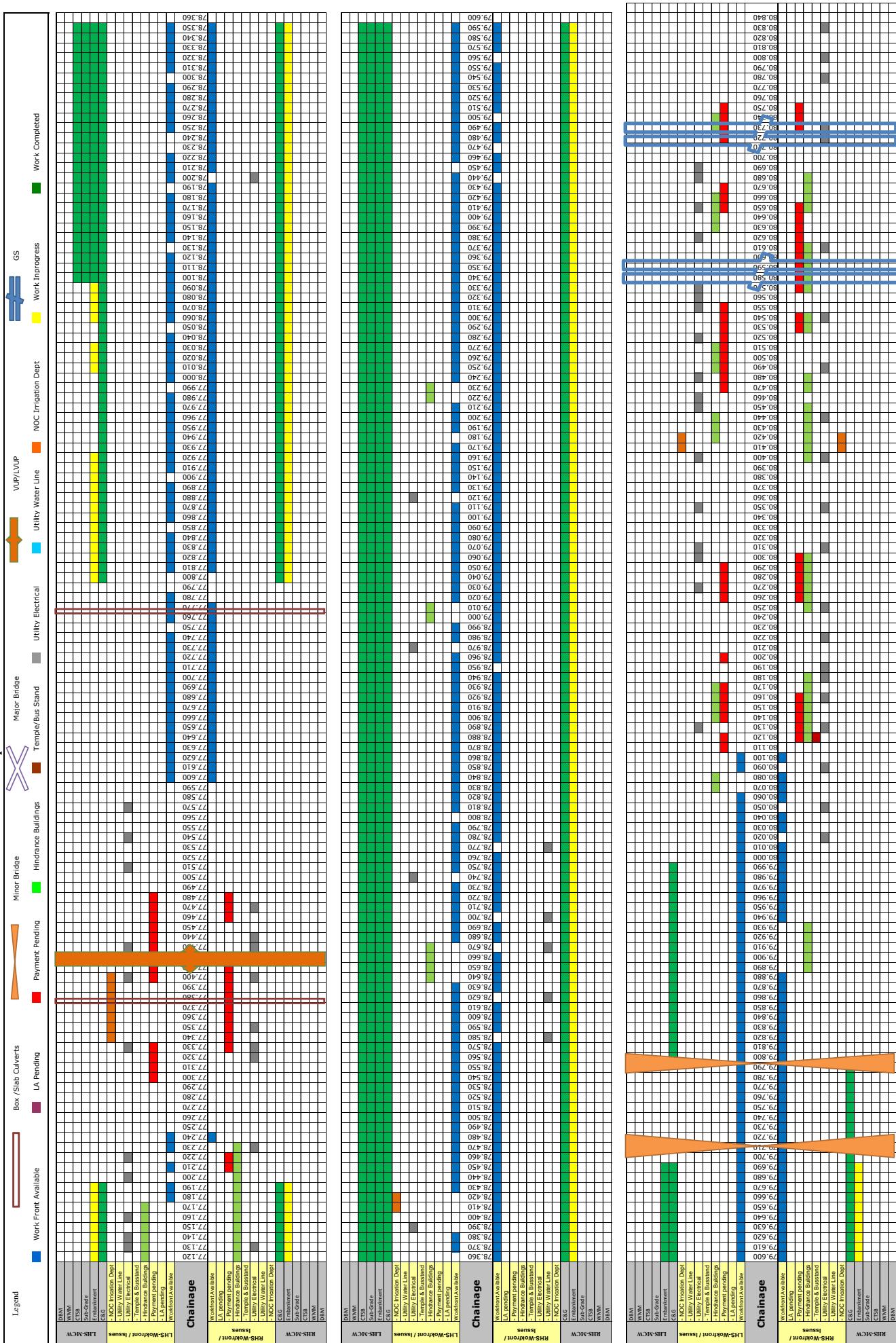
Sethiyahopu - Cholopuram Road Projects



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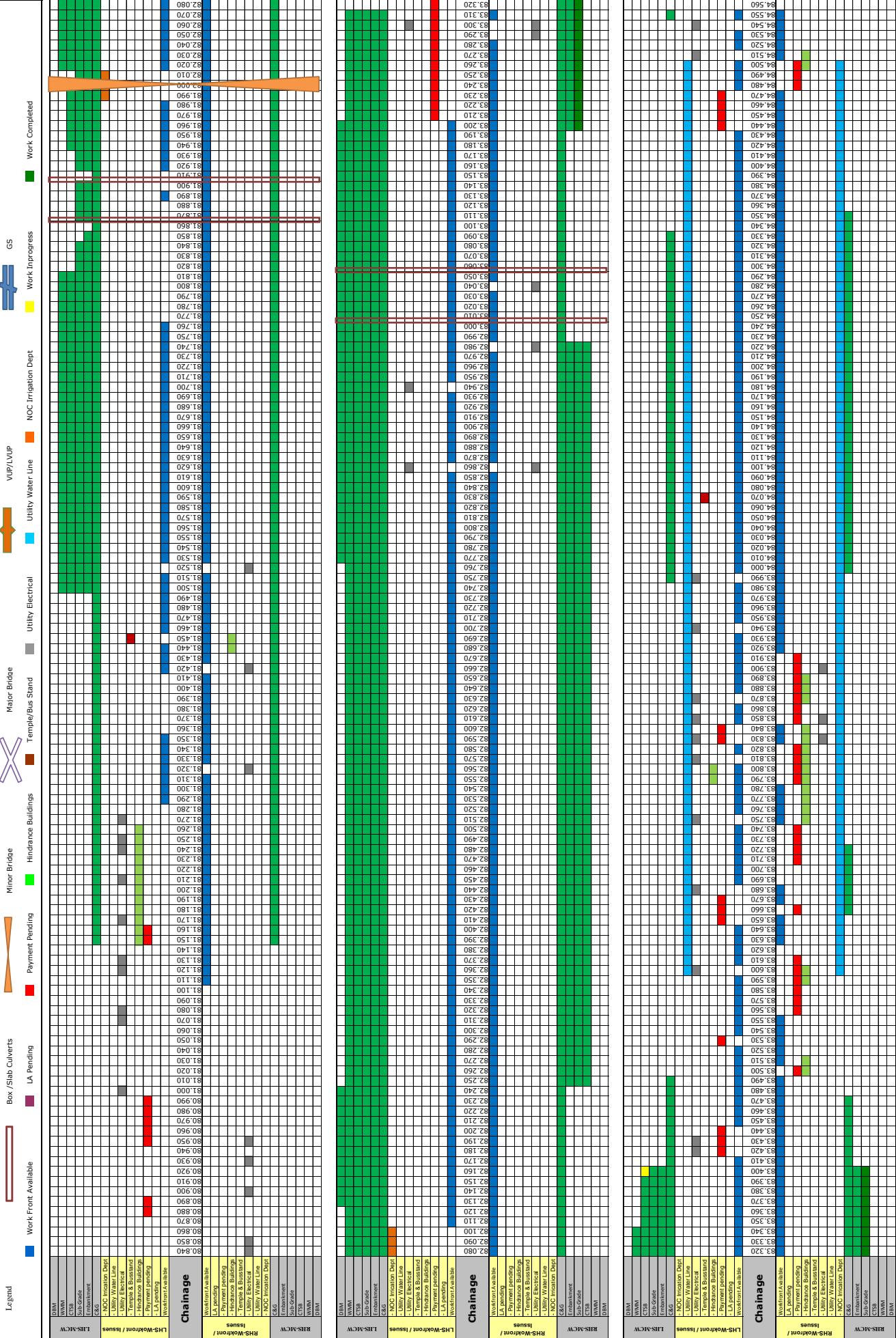
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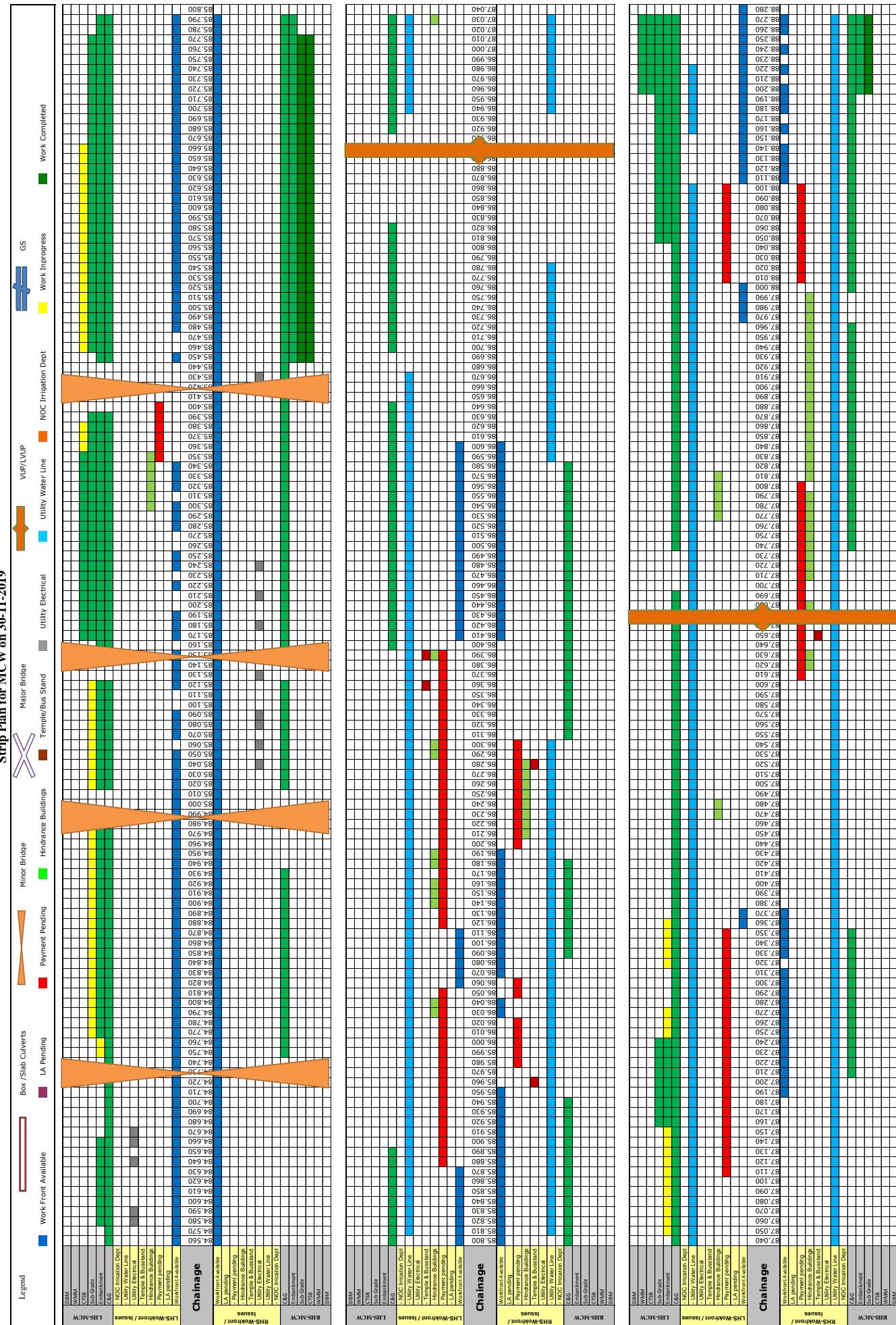
Sethiyahopu - Cholopuram Road Projects

Strip Plan for MCW on 30-11-2019



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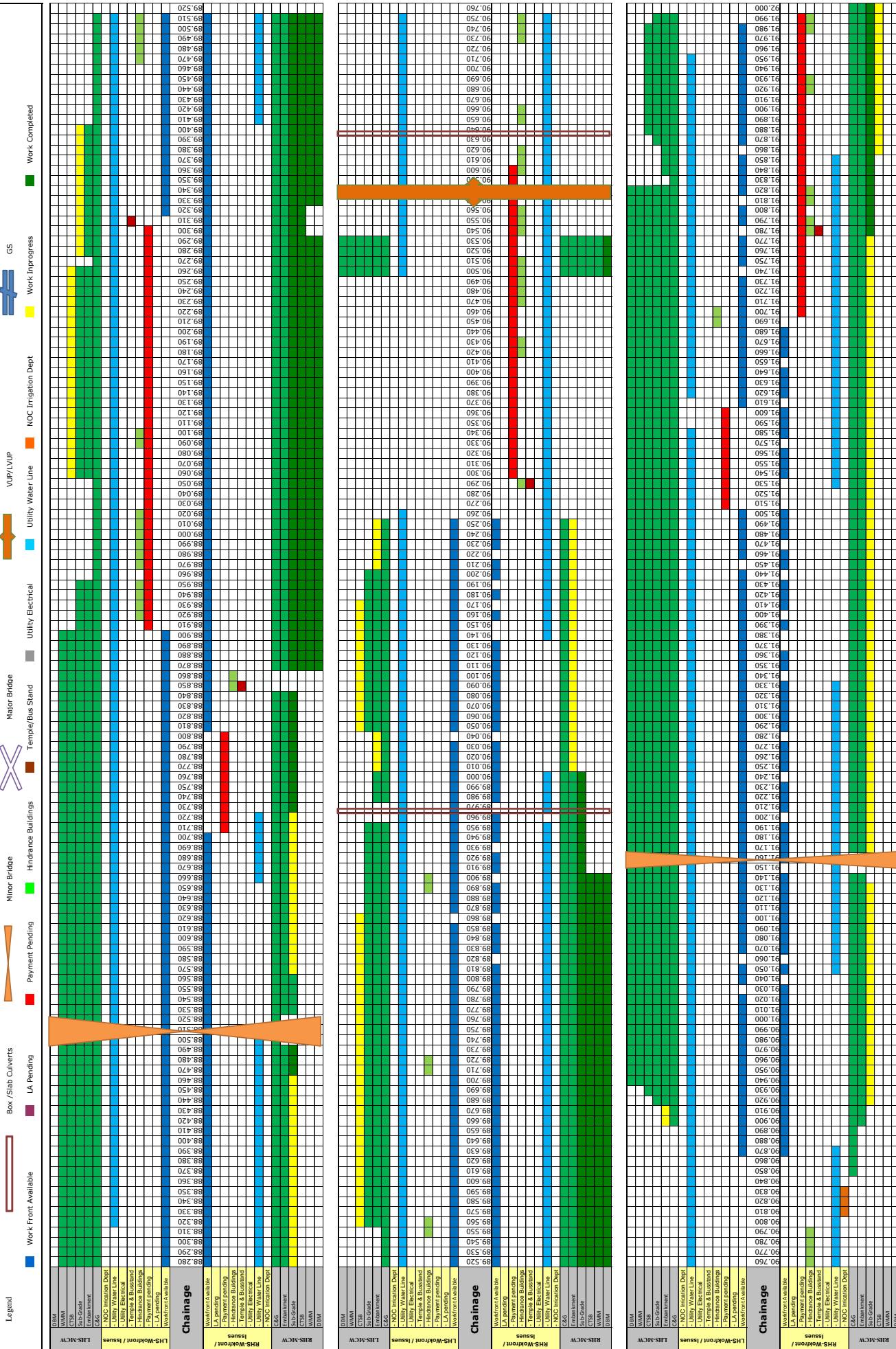
Sethiyahopu - Cholopuram Road Projects



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Sethiyahopu - Cholopuram Road Projects

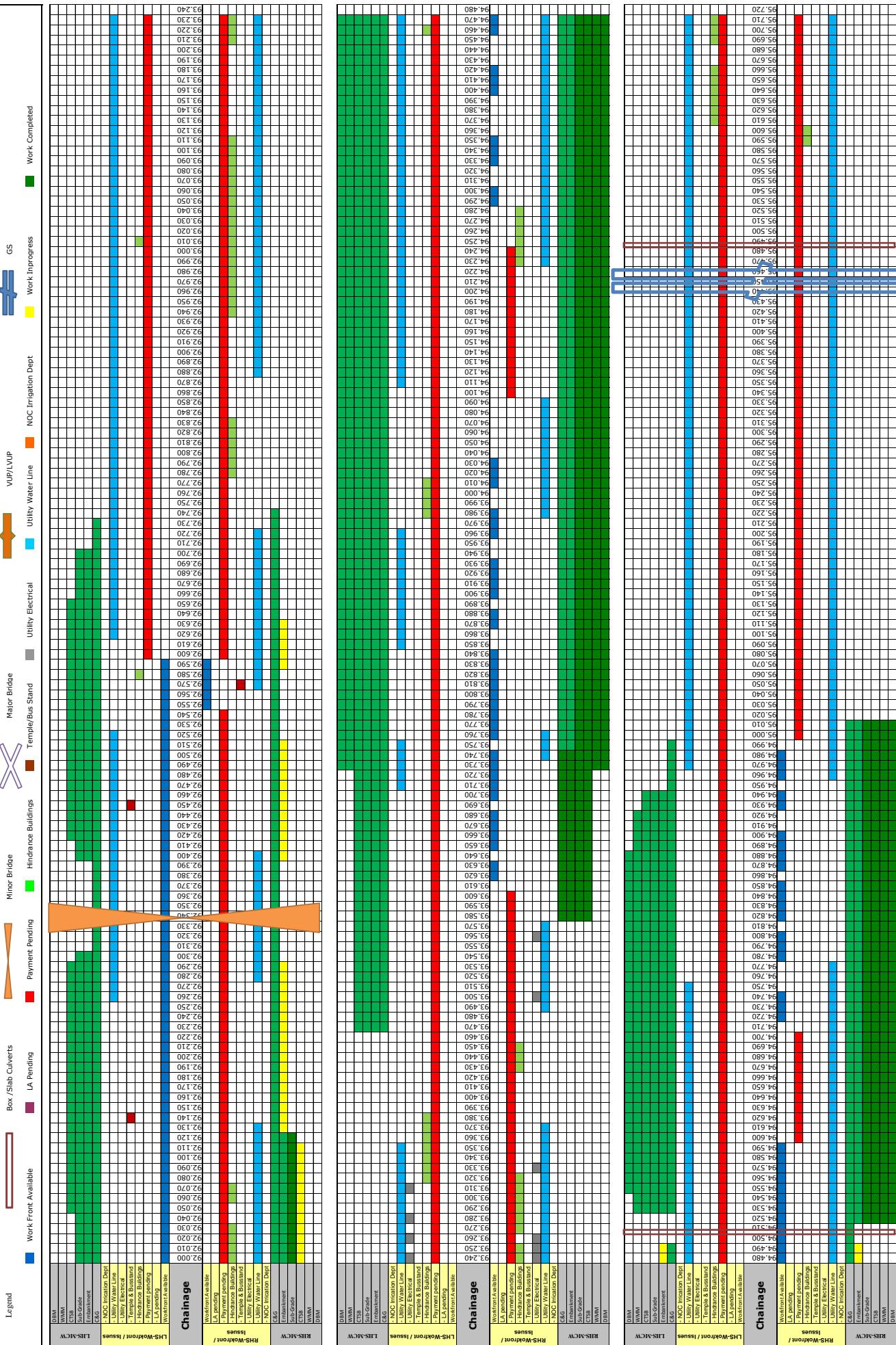
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Four Laning of Sethiyahopu - Cholopuram from Km.65.960 to Km.116.440 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Sethiyahopu - Cholopuram Road Projects

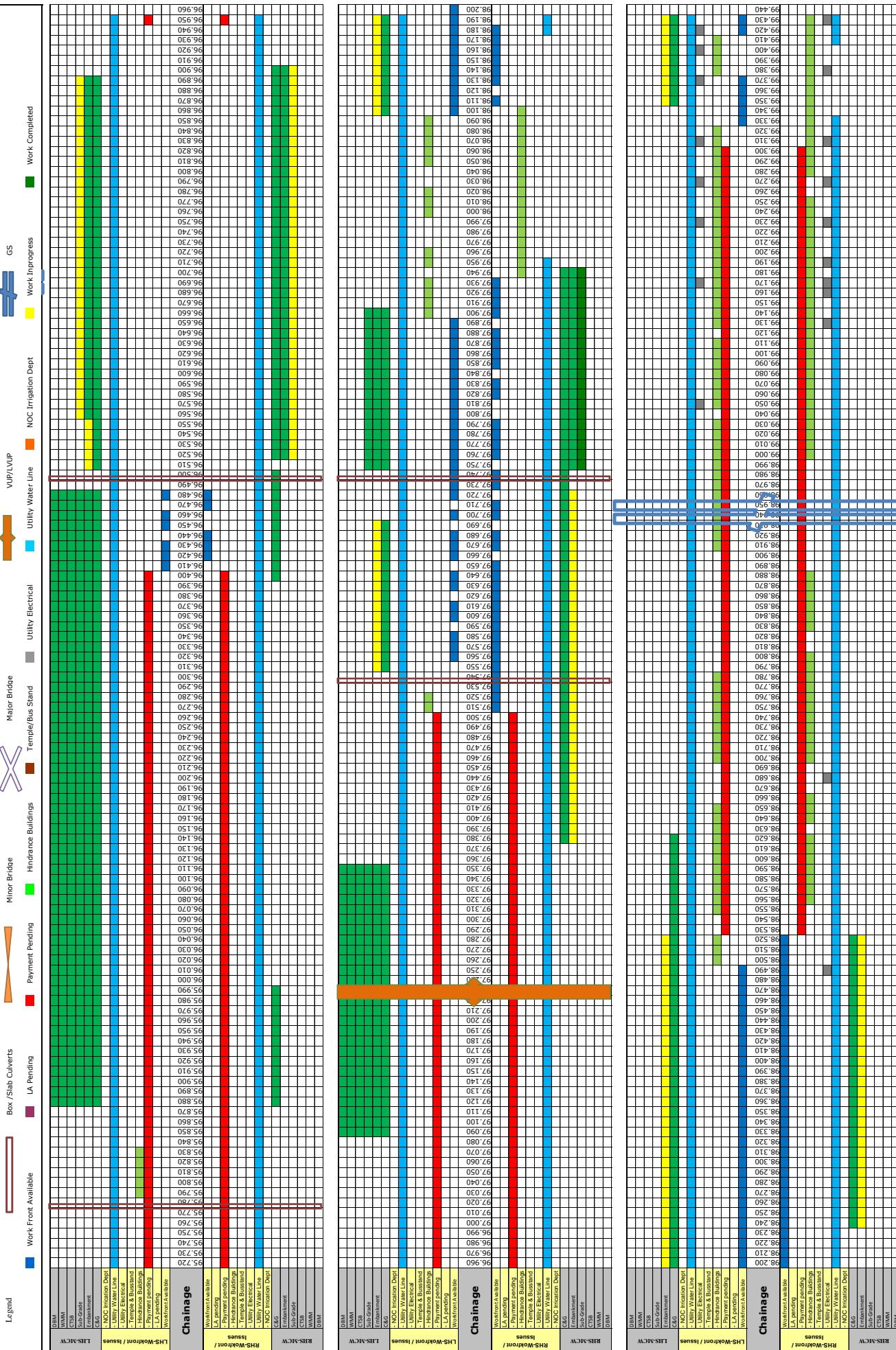
Strip Plan for MCW on 30-11-2019



Four Laning of Sethiyahopu - Cholopuram from Km.65.960 to Km.116.440 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Sethiyahopu - Cholopuram Road Projects

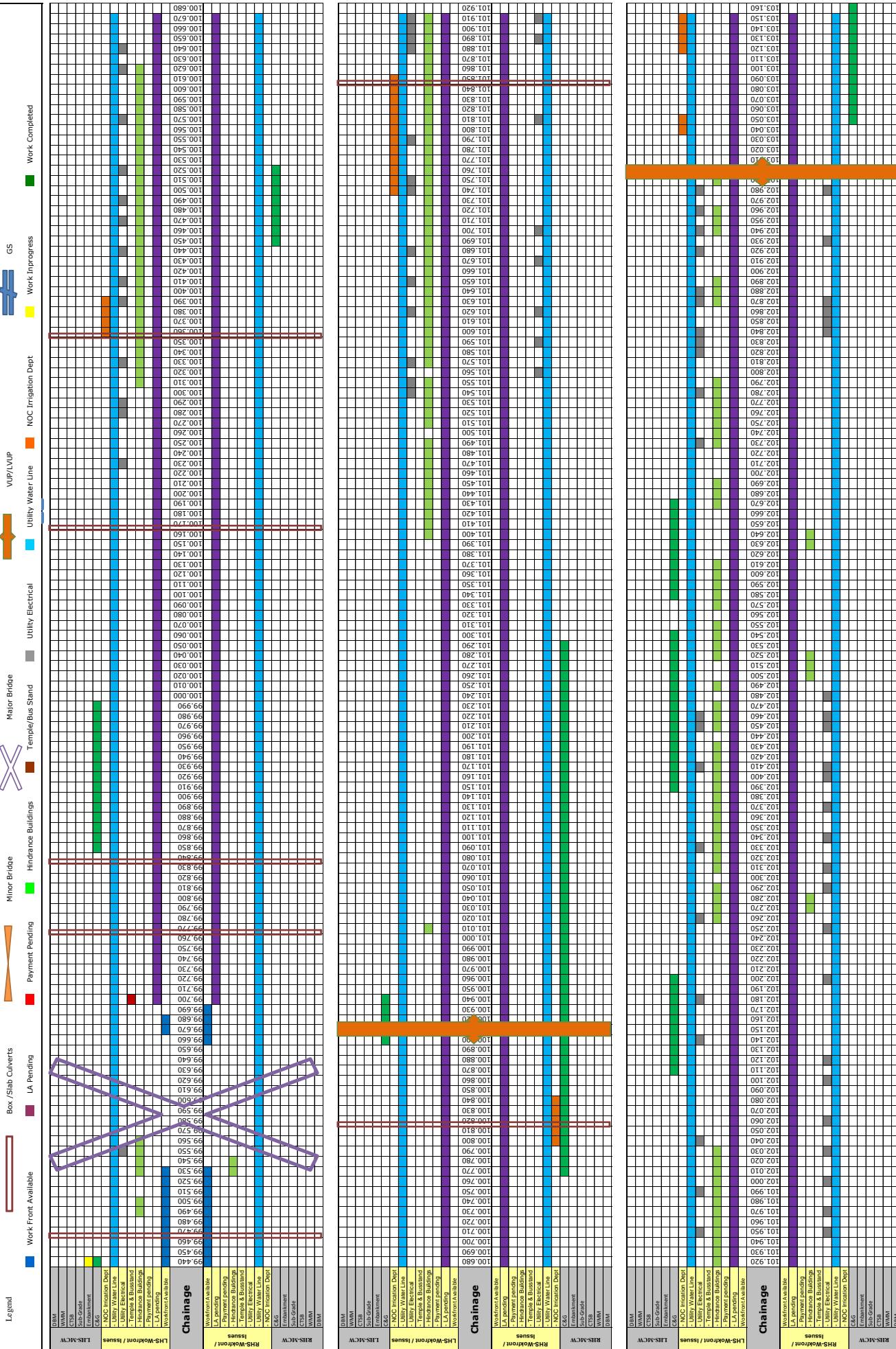
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Sethiyahopu - Cholopuram Road Projects

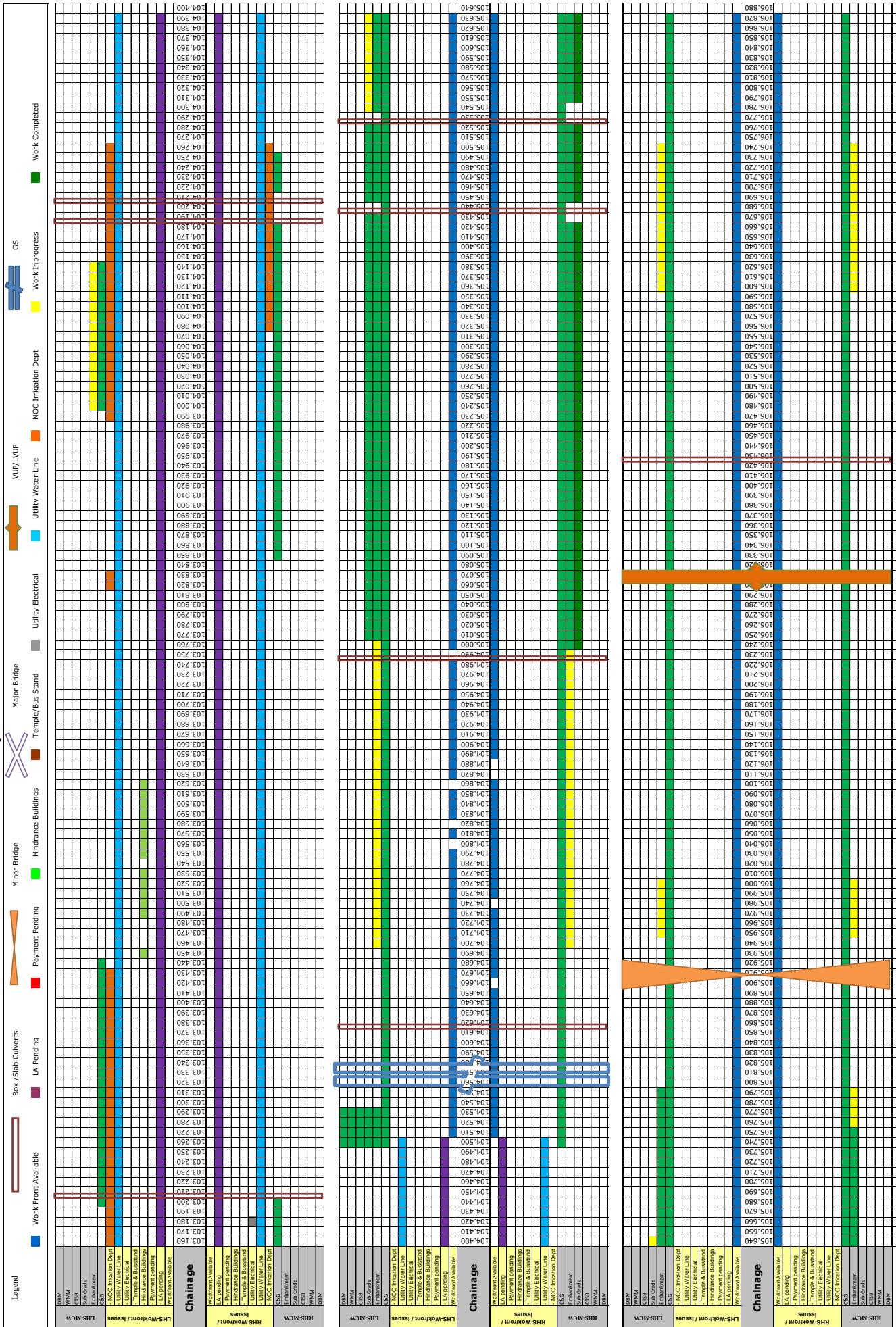
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Four Laning of Sethiyahopu - Cholopuram from Km.65.960 to Km.116.440 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Sethiyahopu - Cholopuram Road Projects

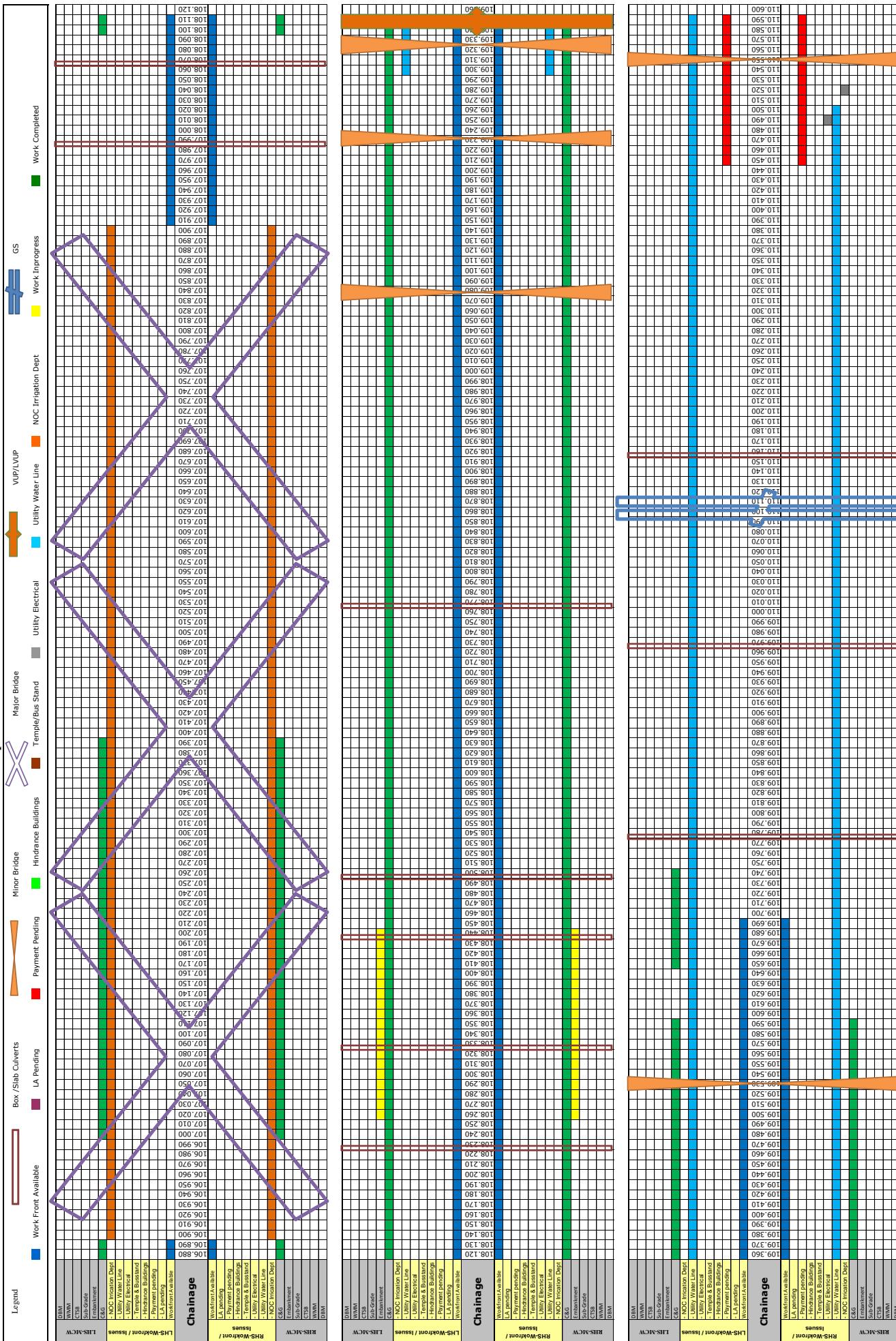
Strip Plan for MCW on 30-11-2019



Four Laning of Sethiyahopu - Cholopuram from Km.65.960 to Km.116.440 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

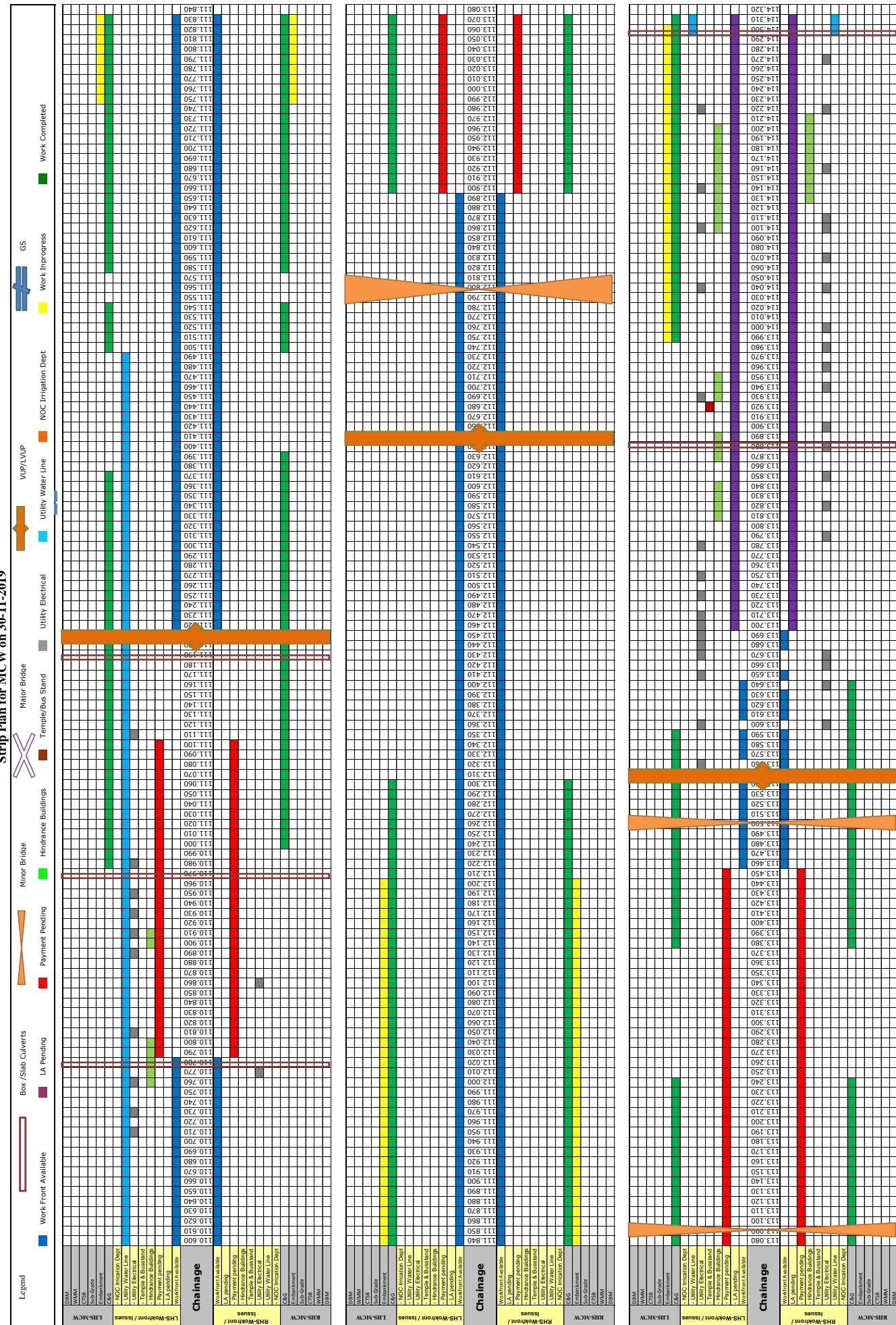
Sethiyahopu - Cholopuram Road Projects

Strip Plan for MCW on 30-11-2019



Four Laning of Sethiyahopu - Cholopuram from Km.65.960 to Km.116.440 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

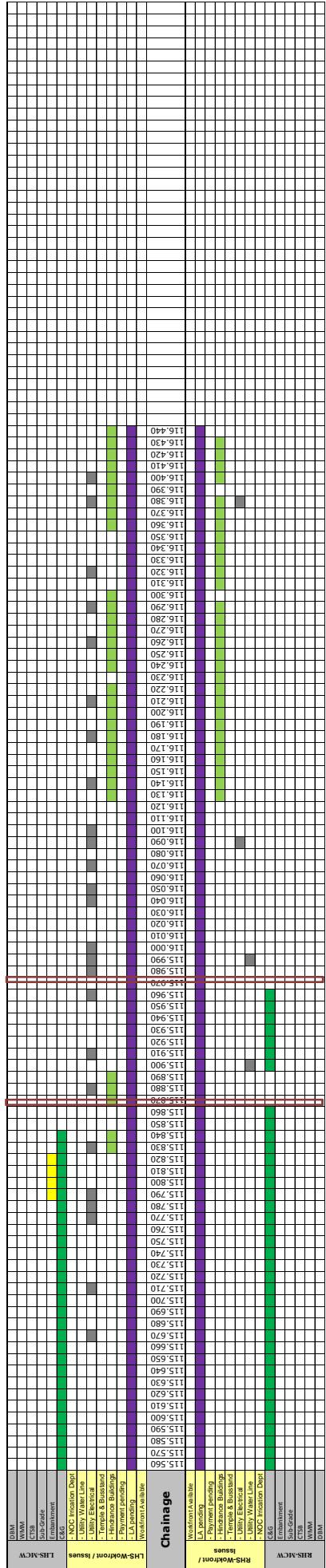
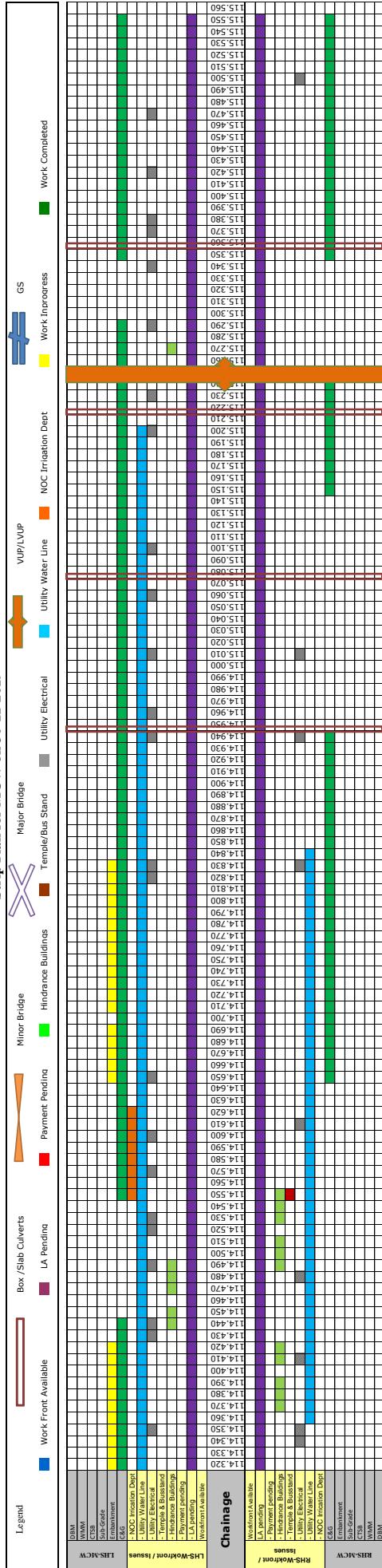
Sethiyahopu - Cholopuram Road Projects



Four Laning of Sethiyahopu - Cholopuram from Km.65.960 to Km.116.440 Section of NH45C in the state of Tamil Nadu Under NHDPL Phase-IV on Hybrid Annuity Mode

Sethiyahopu - Cholopuram Road Projects

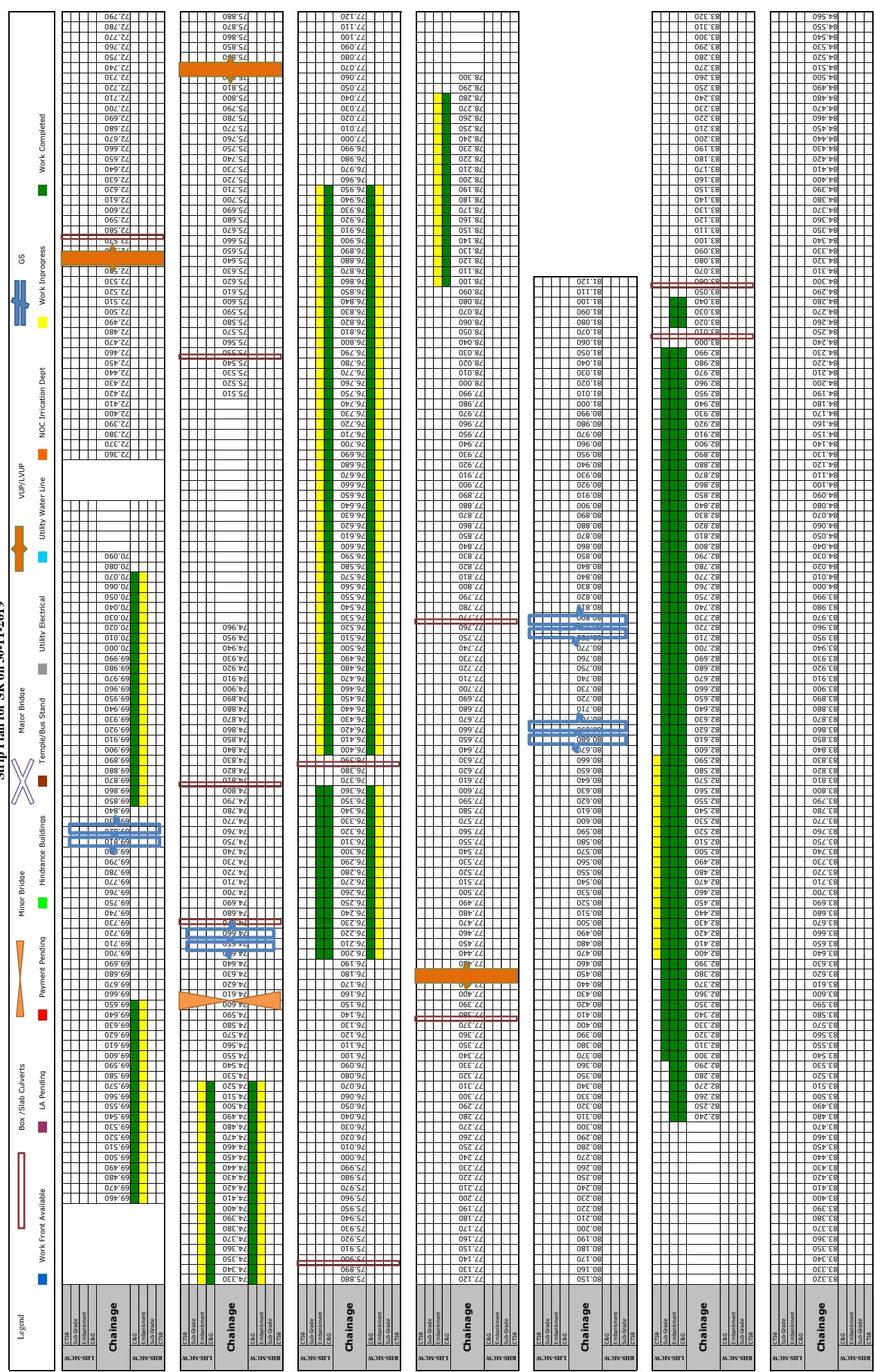
Strip Plan for MCW on 30-11-2019



Four Laning of Sethiyahopu - Cholopuram from Km.65.960 to Km.116.440 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Sethiyahopu - Cholopuram Road Projects

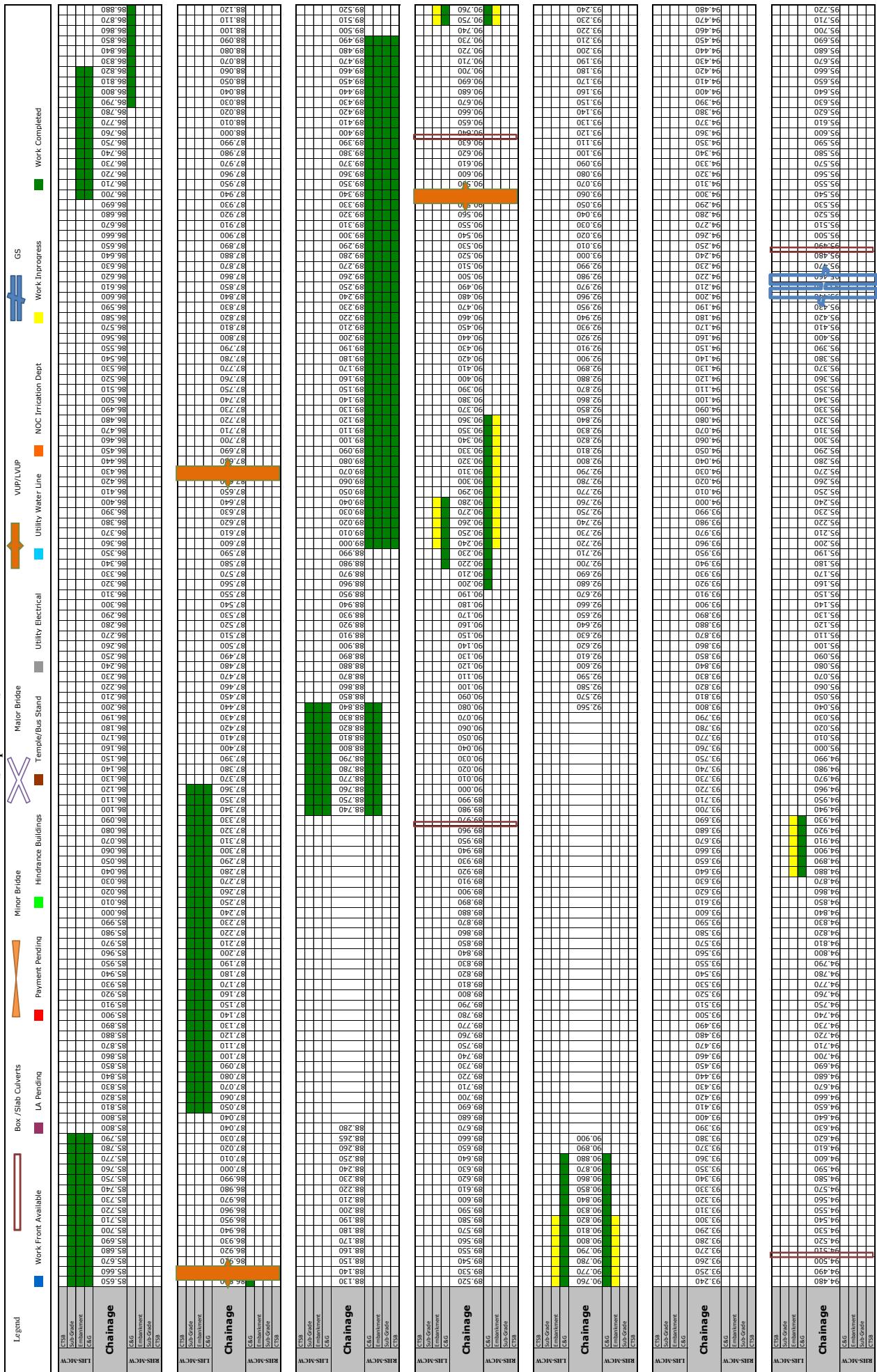
Strip Plan for SR on 30-11-2019



Four Laning of Sethiyahopu - Cholopuram from Km.65.960 to Km.116.440 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Sethiyahopu - Cholopuram Road Projects

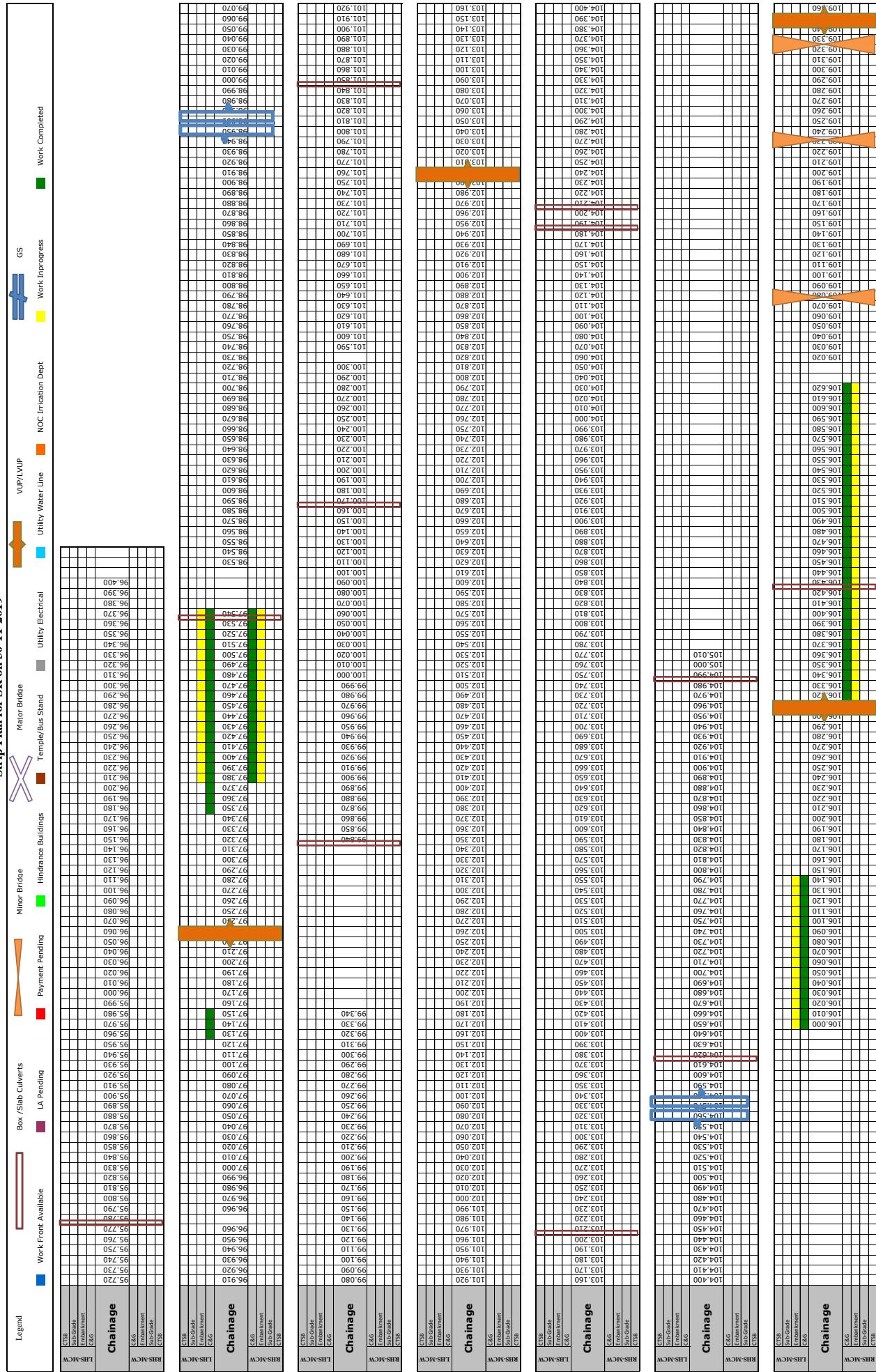
Strip Plan for SR on 30-11-2019



Four Laning of Sethiyahopu - Cholopuram from Km.65.960 to Km.116.440 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Sethiyahopu - Cholopuram Road Projects

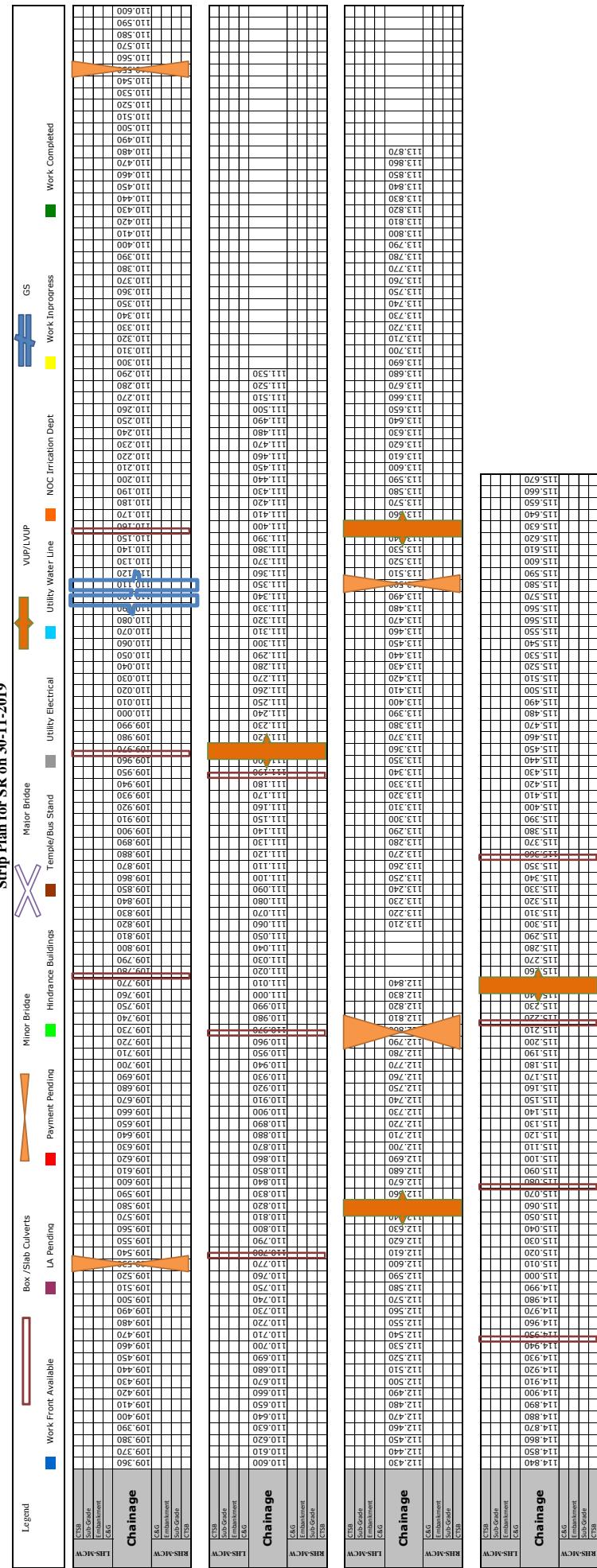
Strip Plan for SR on 30-11-2019



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

Sethiyahopu - Cholapuram Road Projects

Strip Plan for SR on 30-11-2019



**SETHIYAHOPU CHOLOPURAM PROJECT -
STATUS OF BOX CULVERTS ON EXISTING ROAD - SERVICE ROAD**

Status Upto	Completed			In Progress			
	Sr. No.	As Approved by IE	Design Chainage As per CA	Number and Length of Spans (m)	Remarks	Type of Structure	Protection Work
	1	74+675	74.670	EXISTING	1 x 3.0m x 2.0m	New Construction	BOX CULVERT
	2	74+800	74.808	EXISTING	1 x 1.20m	Reconstruction	PIPE CULVERT
	3	75+558	75.555	EXISTING	1x3.0m	Reconstruction	BOX CULVERT
	4	75+802	75.897	EXISTING	1 x 2.0m x 2.0m	Reconstruction	BOX CULVERT
	5	76+390	76.387	EXISTING	1 x 3.0m	Reconstruction	BOX CULVERT
	6	77+382	77.379	EXISTING	1 x 4.0m	Reconstruction	BOX CULVERT
	7	77+466	77.764	EXISTING	1 x 2.0m	Widening	BOX CULVERT
	8	83+012	83.007	EXISTING	2 x 2.0m x 2.0m	Reconstruction	BOX CULVERT
	9	83+065	83.062	EXISTING	1 x 2.0m x 2.0m	Reconstruction	BOX CULVERT
	10	89+473	89.969	EXISTING	4 x 0.75m	Widening	PIPE CULVERT
	11	90+640	90.637	EXISTING	1 x 1.20m	Reconstruction	PIPE CULVERT
	12	94+509	94.509	EXISTING	1 x 3.6m x 1.6m	Widening	BOX CULVERT
	13	95+495	95.490	EXISTING	1 x 1.2m x 0.9m	Reconstruction	BOX CULVERT
	14	95+794	95.787	EXISTING	1 x 1.20m	Reconstruction	PIPE CULVERT
	15	96+511	96.505	EXISTING	1 x 5.0m	Reconstruction	BOX CULVERT
	16	97+530	97.534	EXISTING	1x2.0m	Reconstruction	BOX CULVERT
	17	99+776	99.769	EXISTING	1 x 2.0m x 2.0m	Repair & Widening	BOX CULVERT
	18	99+840	99.838	EXISTING	1 x 1.5m x 1.5m	Repair & Widening	BOX CULVERT
	19	100+177	100.173	EXISTING	1 x 1m	Repair & Widening	PIPE CULVERT
	20	100+364	100.358	EXISTING	1 x 10m	Repair & Widening	BOX CULVERT
	21	101+851	101.851	EXISTING	1 x 1.5m x 1.5m	Repair & Reconstruction	BOX CULVERT
	22	103+220	103.214	EXISTING	1 x 4.0m x 2.5m	Repair & Reconstruction	BOX CULVERT
	23	104+197	104.190	EXISTING	1 x 1.0m	Repair & Reconstruction	PIPE CULVERT
	24	104+215	104.208	EXISTING	1 x 1.0m	Reconstruction	PIPE CULVERT
	25	109+786	109.779	EXISTING	1 x 1.0m	Repair & Reconstruction	PIPE CULVERT
	26	109+975	109.967	EXISTING	1 x 2.0m x 1.7m	Repair & Reconstruction	BOX CULVERT
	27	110+167	110.160	EXISTING	2 x 1.0m	Repair & Reconstruction	PIPE CULVERT
	28	110+795	110.785	EXISTING	1 x 1.2m x 2.0m	Repair & Widening	BOX CULVERT
	29	110+980	110.971	EXISTING	1 x 1.5m x 2.0m	Repair & Reconstruction	BOX CULVERT
	30	113+897	113.885	EXISTING	1 x 1.0m	Repair & Widening	PIPE CULVERT
	31	114+313	114.300	EXISTING	1 x 1.0m	Repair & Widening	PIPE CULVERT
	32	114+954	114.952	EXISTING	1 x 1.0m	Repair & Reconstruction	PIPE CULVERT
	33	115+097	115.087	EXISTING	2 x 1.0m	Repair & Reconstruction	PIPE CULVERT
	34	115+232	115.221	EXISTING	1 x 2.0m x 2.0m	Repair & Reconstruction	BOX CULVERT
	35	115+381	115.368	EXISTING	1 x 2.0m	Repair & Reconstruction	BOX CULVERT
	36	115+884	115.872	EXISTING	2 x 1.0m	Repair & Widening	PIPE CULVERT
	37	115+978	115.978	EXISTING	1 x 2.0m x 2.0m	Repair & Widening	BOX CULVERT

SETHIYAHOPU CHOLOPURAM PROJECT -				STATUS OF BOX CULVERTS ON BYPASS - MCW				Completed		In Progress	
Status Upto	30.11.2019	LHS	RHS	Excavation		Granular Filling		Excavation		Granular Filling	
Sr. No.	As Approved by IE	Design Chainage As per CA	Number and Length of Spans (m)	Type of Structure				PCC	Raft	Wall	Slab
1	66+357	66.383	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT						
2	67+068	67.068	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT						
3	69+357	69.357	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT						
4	72+570	72.578	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT						
5	73+755	73.755	BYPASS	1x1.2.0mx2.0m	PIPE CULVERT						
6	104+622	104.618	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT						
7	104+998	104.992	BYPASS	1 x 4.0m x 2.0m	BOX CULVERT						
8	105+440	105.440	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT						
9	105+536	105.525	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT						
10	106+442	106.432	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT						
11	108+002	107.984	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT						
12	108+080	108.070	BYPASS	1 x 4.0m x 2.0m	BOX CULVERT						
13	108+225	108.225	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT						
14	108+345	108.334	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT						
15	108+441	108.441	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT						
16	108+540	108.500	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT						
17	108+767	108.767	BYPASS	1 x 4.0m x 2.0m	BOX CULVERT						
18	111+205	111.196	BYPASS	1 x 1.0m	PIPE CULVERT						
19	111+452	111.452	BYPASS		PIPE CULVERT						

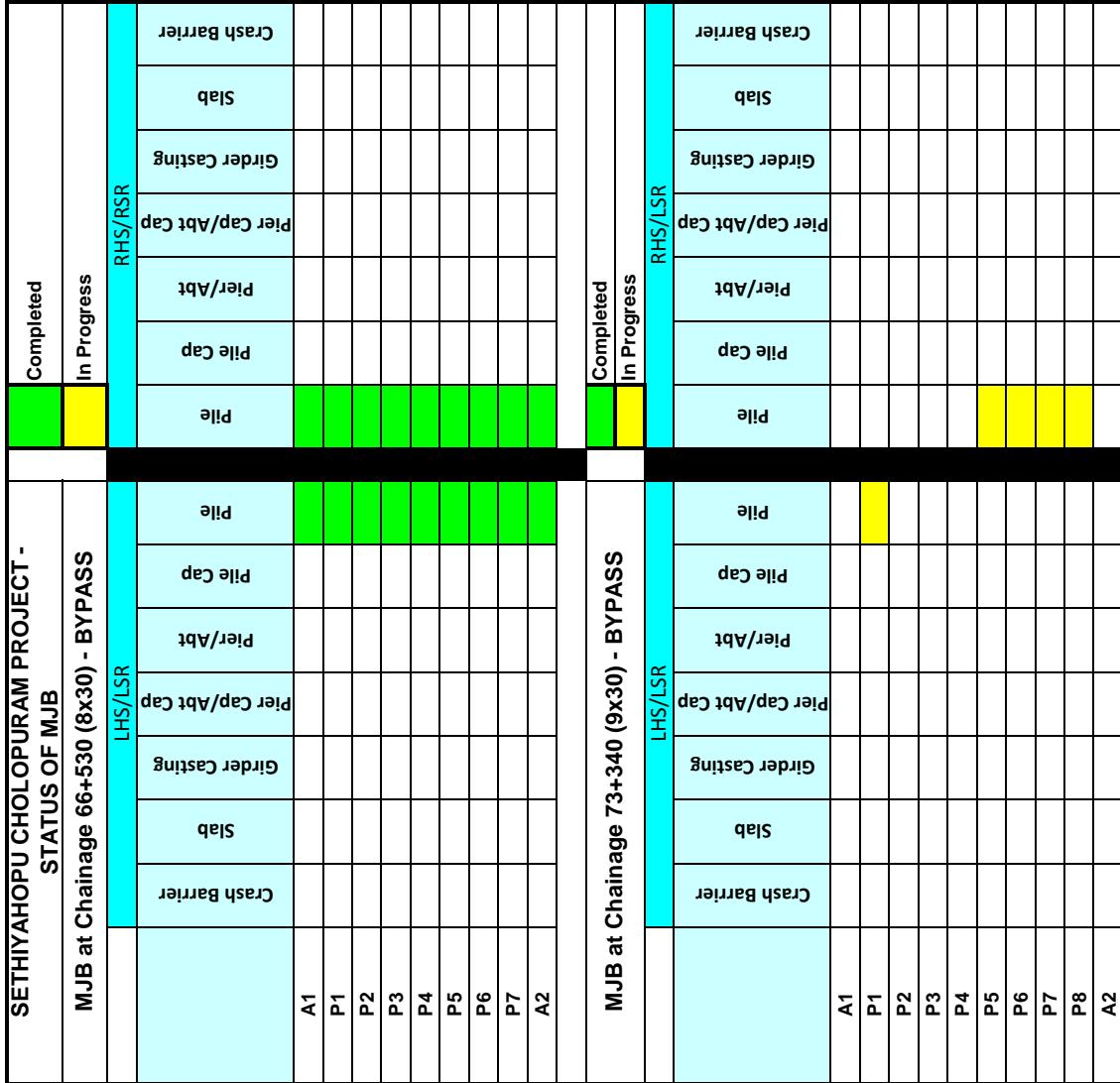
SETHIYAHOPU CHOLOPURAM PROJECT - STATUS OF BOX CULVERTS ON BYPASS - SERVICE ROAD					
Status Upto	Completed		In Progress		
Sr. No.	As Approved by IE	Design Chainage As per CA	Number and Length of Spans (m)	Type of Structure	LHS RHS
1	72+570	72.578	BYPASS	1 x 3.0m x 2.0m	BOX CULVERT
2	104+622	104.618	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT
3	104+998	104.992	BYPASS	1 x 4.0m x 2.0m	BOX CULVERT
4	106+442	106.432	BYPASS	1 x 2.0m x 2.0m	BOX CULVERT
5	111+205	111.196	BYPASS	1 x 1.0m	PIPE CULVERT

SETHIYAHOPU CHOLOPURAM PROJECT - STATUS OF MNB-BOX - MCW				Completed		In Progress		RHS	
Status Upto	As Approved by IE	Design Chainage As per CA	Number and Length of Spans (m)	Type of Structure	LHS	RHS	Protection Work	Slab	Wall
30.11.2019									
Sr. No.	As Approved by IE	Design Chainage As per CA	Number and Length of Spans (m)	Type of Structure					
1	79+716	79.715	1 x 12.50m	MNBB	Widening				
2	79+795	79.795	2 x 12.50m	MNBB	Re-Const.				
3	82+007	82.006	2 x 12.50m	MNBB	Widening				
4	85+144	85.144	2 x 12.50m	MNBB	Re-Const.				
5	85+435	85.432	1 x 12.50m	MNBB	Widening				
6	88+513	88.513	1 x 12.50m	MNBB	Widening				
7	91+164	91.165	2 x 12.50m	MNBB	Re-Const.				
8	92+343	92.342	1 x 12.50m	MNBB	Widening				
9	101+101	101.100		MNBB	EXISTING				
10	66+757	66.730	2 x 12.5m	MNBB	BYPASS				
11	68+644	68.650	2 x 12.5m	MNBB	BYPASS				
12	74+173	74.175	2 x 12.5m	MNBB	BYPASS				
13	74+605	74.600	2 x 12.5m	MNBB	BYPASS				
14	105+915	105.915	2 x 12.5m	MNBB	BYPASS				
15	109+090	109.088	2 x 12.5m	MNBB	BYPASS				
16	109+195	109.208	2 x 12.5m	MNBB	BYPASS				
17	109+365	109.365	2 x 12.5m	MNBB	BYPASS				
18	109+540	109.540	2 x 12.5m	MNBB	BYPASS				
19	111+563	111.565	2 x 12.5m	MNBB	BYPASS				
20	112+807	112.807	1 x 25m	MNBB	BYPASS				
21	113+100	113.100	2 x 12.5m	MNBB	BYPASS				
22	113+505	113.505	2 x 12.5m	MNBB	BYPASS				

SETHIYAHOPU CHOLOPURAM PROJECT - STATUS OF MNB-BOX - SERVICE ROAD			Completed		In Progress		LHS		RHS		Protection Work	
Status Upto	As Approved by IE	Design Chainage As per CA	Number and Length of Spans (m)	Type of Structure								
30.11.2019												
Sr. No.												
1	74+605	74.600	2 x 12.5m	MNBB	BYPASS							
2	105+915	105.915	2 x 12.5m	MNBB	BYPASS							
3	109+090	109.098	2 x 12.5m	MNBB	BYPASS							
4	109+195	109.208	2 x 12.5m	MNBB	BYPASS							
5	109+365	109.365	2 x 12.5m	MNBB	BYPASS							
6	109+540	109.540	2 x 12.5m	MNBB	BYPASS							
7	111+563	111.565	2 x 12.5m	MNBB	BYPASS							
8	112+807	112.807	1 x 25m	MNBB	BYPASS							
9	113+100	113.100	2 x 12.5m	MNBB	BYPASS							
10	113+505	113.505	2 x 12.5m	MNBB	BYPASS							

SETHIYAHOPU CHOLOPURAM PROJECT - STATUS OF LVUP		Completed		In Progress		RHS		Protection Work	
Sr. No.	As Approved by IE	Number and Length of Spans (m)	Type of Structure	LHS					
1	77+420	1X10.5	LVUP	EXISTING					
2	112+643	1X10.5	LVUP	BYPASS					

SETHIYAHOPU CHOLOPURAM PROJECT - STATUS OF MNB (>15m Span)		Completed		In Progress									
Status	Updtn	LHS		RHS									
SR.NO.	MNB at Chainage	Span											
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	P1 A2									



MJB at Chainage 99+583 (3x25) - EXISTING ROAD			MJB at Chainage 107+400 - BYPASS		
	Completed	In Progress		Completed	In Progress
	LHS/LSR	RHS/LSR		LHS/LSR	RHS/LSR
A1				A1	
P1				P1	
P2				P2	
A2				P3	
				P4	
				P5	
				P6	
				P7	
				P8	
				P9	
				P10	
				P11	
				P12	
				P13	
				P14	
				P15	
				P16	
				P17	
				P18	
				P19	
				A2	

SETHIYAHOPU CHOLOPURAM PROJECT - STATUS OF FLYOVER		Completed		In Progress		RHS		LHS		Status upto 30.11.2019	
Sr.No.	FO at Chainage	Span									
1	69+785	1x30	BYPASS	A1							
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	P1						
7	104+570	1x30	BYPASS	A1	A2						
8	110+110	1x30	EXISTING	A1	A2						

SETHIYAHOPU CHOLOPURAM PROJECT - STATUS OF VUP			Completed		In Progress		RHS	
Status upto	30.11.2019		LHS					
SR.NO.	VUP at Chainage	Span			Slab	Crash Barrier	Girder Casting	Piercap /Abtcap
1	72+545	1x25	BYPASS	A1 A2				
2	75+830	1x25	EXISTING	A1 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 A2				
7	101+910	1x25	EXISTING	A1 A2				
8	102+975	1x25	EXISTING	A1 A2				
9	106+318	1x25	BYPASS	A1 A2				
10	109+350	1x25	BYPASS	A1 A2				
11	111+235	1x25	BYPASS+E EXISTING	A1 A2				
12	113+550	1x25	BYPASS+E EXISTING	A1 A2				
13	115+258	1x25	EXISTING	A1 A2				

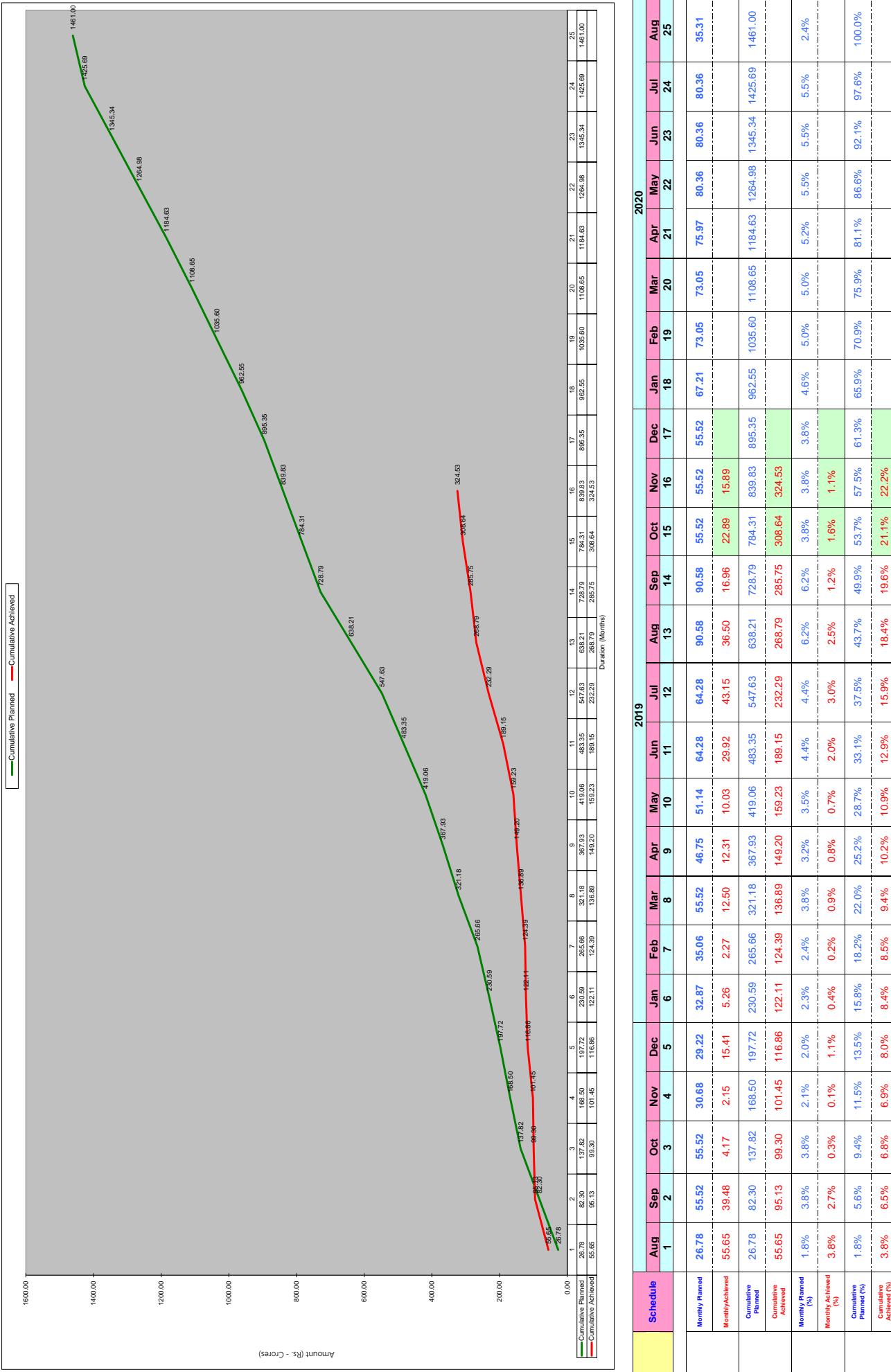
5. Financial & Physical Progress of Work

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

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

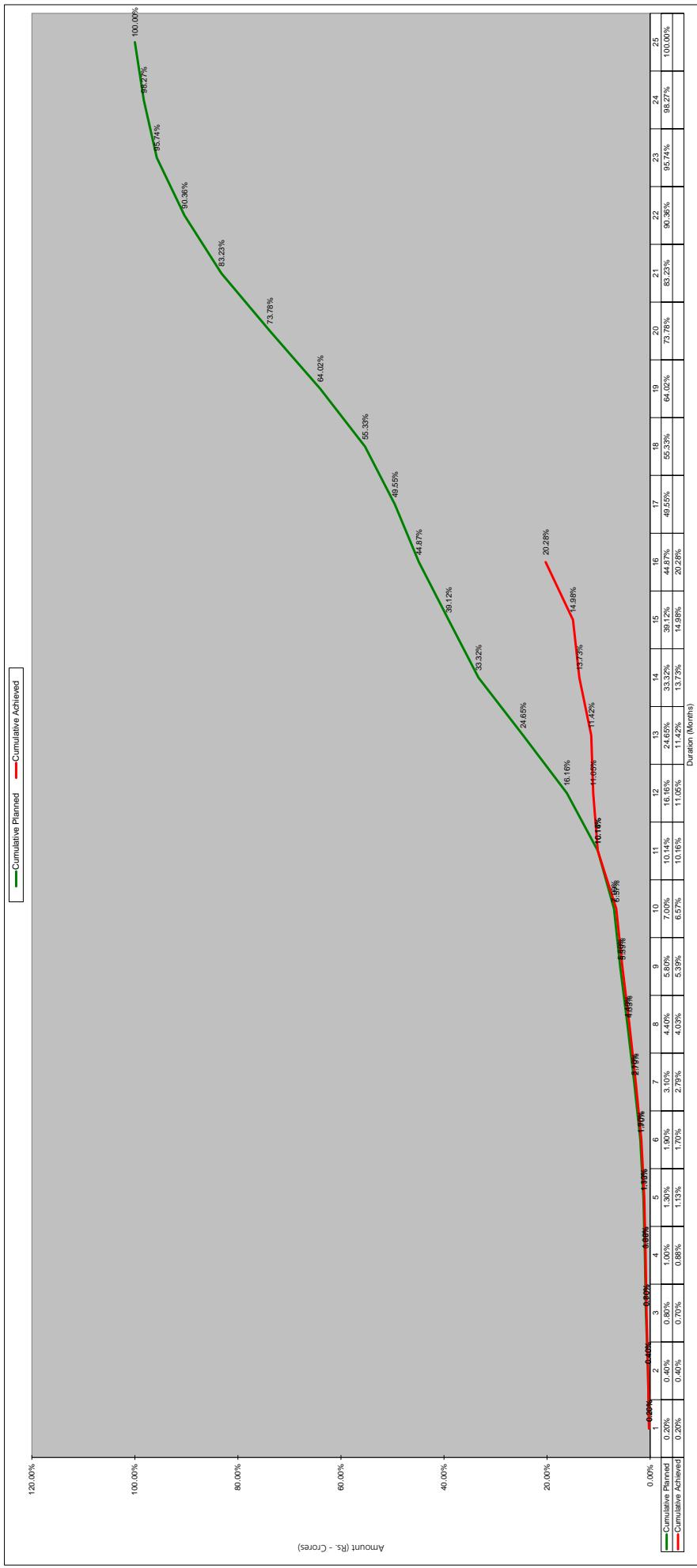
Four Lining of Sethiyahopu - Cholopuram from Km. 65.960 to 116.440 Section of NH45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode

Fig. 03a- Financial Progress (S-Curve)



Four Laning of Sethiyahopu - Cholopuram from Km. 65.960 to 116.440 Section of NH45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode

Fig. 03b- Physical Progress (S-Curve)



Schedule	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Monthly Planned	0.20%	0.20%	0.40%	0.40%	0.30%	0.30%	0.60%	1.20%	1.30%	1.40%	1.20%	3.14%	8.49%	8.67%	5.80%	5.75%	4.68%	5.78%	8.69%	9.76%	9.45%	7.13%	5.38%	2.63%	1.73%	
Monthly Achieved	0.20%	0.20%	0.30%	0.30%	0.18%	0.18%	0.25%	0.57%	1.09%	1.24%	1.36%	1.18%	3.59%	0.89%	0.37%	2.31%	1.25%	5.30%								
Cumulative Planned	0.20%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	
Cumulative Achieved	0.20%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	

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 LIST'S	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	EQUIPEMENT LISTS	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 LISTS	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 00c to 3000c	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 LISTS	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 LISTS	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 00 - 3000c	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 November - 2019 are tabulated below -

S. No.	Description	IS Specification Clause	Frequency of Tests	Test conducted upto Previous(OCT) month			Tests conducted during reporting month upto 30 th Nov-19			Test conducted upto this month					
				No. of test Conducted EPC/ Concessionaire	Passed	Failed	No. of test witnessed by IE	Conducted EPC/ Concessionaire	Passed	Failed	No. of test Conducted EPC/ Concessionaire	Passed	Failed		
17.0 Fine Aggregate MORT&H 1008															
17.1	Grade / Sieve analysis	IS:2386 (Part1)	1 test per day	603	603	0	223	51	51	0	17	654	0	240	
17.2	Specific gravity& Water absorption	IS:2386 (Part2)	As required	16	16	0	15	0	0	0	0	16	0	15	
17.3	Fineness Modulus	MORT&H Sec. 1008&383	1 test per day	461	461	0	151	51	51	0	17	512	0	168	
17.4	Alkali aggregate reactivity test	IS:2386 (Part-7)IS : 456	1 test per source	0	0	0	0	0	0	0	0	0	0	0	
17.5	Deleterious material/silt	IS:2386 (Part2)	1 test per source	0	0	0	0	0	0	0	0	0	0	0	
18.0 Coarse Aggregate MORT&H 1007															
18.1	Gradation	IS:2386 (Part2)	1 test per day	603	603	0	238	51	51	0	17	654	0	255	
18.2	Specific gravity& Water absorption	IS:2386 (Part3)	As required	18	18	0	15	0	0	0	0	18	0	15	
18.3	Aggregate Impact Value	IS:2386 (Part4)	1 test / each source & monthly	198	198	0	100	12	12	0	4	210	0	104	
18.4	Friability index	IS:2386 (Part1)	1 test / each source & monthly	168	168	0	87	12	12	0	4	180	0	91	
18.5	Soundness	IS:2386 (Part5)	As required	0	0	0	0	0	0	0	0	0	0	0	
18.6	Alkali aggregate reactivity test	IS:2386 (Part-7)IS : 456	1 test per source	0	0	0	0	0	0	0	0	0	0	0	
18.7	Deleterious constituents	IS:2386 (Part2)	1 test per source	0	0	0	0	0	0	0	0	0	0	0	
18.8	Petrographic Examination	IS:2386 (Part8)	1 test per source	0	0	0	0	0	0	0	0	0	0	0	
19.0 Cement MORT&H 1006															
19.1	Chemical test / Physical test	IS:4031,4032	1 test per source	6	15	0	6	0	0	0	0	6	15	0	6
19.2	Fineness	IS:4031 (Part1)	Every batch	244	244	0	132	8	8	0	2	252	0	134	
19.3	Normal Consistency	IS:4031 (Part4)	Every batch	216	216	0	132	8	8	0	2	224	0	134	
19.4	Initial/Final setting time	IS:4031 (Part5)	Every batch	216	216	0	132	8	8	0	2	224	0	134	
19.5	Soundness of Cement	IS:4031 (Part3)	Every batch	178	178	0	106	0	0	0	0	178	0	106	
19.6	Compressive Strength set	IS:4031 (Part6)													
	3 days		1 test per Lot	175	0	98	7	7	0	2	182	0	100		
	7 days		1 test per Lot	172	0	97	7	7	0	1	179	0	98		
	28 days		1 test per Lot	159	0	85	9	9	0	2	168	0	87		

S. No.	Description	IS Specification Clause	Frequency of Tests	Test conducted upto Previous(OCT) month			Tests conducted during reporting month upto 30 th Nov-19			Test conducted upto this month			
				No. of test Conducted EPC/ Concessionaire	Passed	Failed	No. of test witnessed by IE	Conducted EPC/ Concessionaire	Passed	Failed	No. of test witnessed by IE	Conducted EPC/ Concessionaire	Passed
20.0. (A) Concrete Cube Strength													
M15 PCC	7/28 Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	233 415	0	116 0	13	13 16	0	8 0	246	243	0
M20 KERB	7/28 Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	51 53	0	19 0	15	15 0	0	8 0	66	66	0
M20 RCC	7/28 Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	93 176	0	28 82	7	7 34	0	5 13	100	100	0
M30 RCC	7/28 Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	123 252	0	84 143	33	33 13	0	8 0	156	156	0
M30 RCC PUMPABLE	7/28 Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	10 14	0	8 10	3	3 6	0	3 6	20	20	0
M35 RCC	7/28 Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	145 312	0	113 216	3	3 6	0	3 6	13	13	0
M35 PILING	7/28 Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	511 1275	0	284 746	21	21 251	0	15 161	148	148	0
M35 RE BLOCK	7/28 Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	179 460	0	81 251	21	21 41	0	8 24	318	318	0
M40 PUMP	7/28 Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	416 1047	0	152 444	24	24 90	0	8 11	1137	1137	0
M40 PILE	7/28 Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	58 120	0	27 32	2	2 17	0	2 6	137	137	0
M45 PUMP	7/28 Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	306 997	0	92 0	0	0 0	0	0 0	306	306	0
M50 RCC	7/28 Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	26 69	0	5 11	5	5 4	0	1 0	31	31	0
											6	6	6
											12	12	0

S. No.	Description	IS Specification Clause	Frequency of Tests	Test conducted upto Previous(OCT) month			Test conducted during reporting month upto 30 th NOV-19			Test conducted upto this month		
				No. of test Conducted EPC/ Concessionaire	Passed	Failed	Nos.of test witnessed by IE	No. of test Conducted EPC/ Concessionaire	Passed	Failed	Nos.of test witnessed by IE	No. of test Conducted EPC/ Concessionaire
M60 PUMP												
70Days Compressive Strength	MORT&H Sec. 1700	MORT&H Sec. 1700 No of sets	85 216	0 216	21 57	25 35	0 35	25 0	0 6	5 251	110 251	110 0
28Days Compressive Strength												26 63

7. Weather Report

DATE	Temperature (°C)		Rainfall in mm	Humidity in %		Remarks
	Min	Max		Min	Max	
11/1/2019	25.80	30.1	55	93	0.00	Sunny
11/2/2019	26.90	31.2	56	92	0.00	Sunny
11/3/2019	26.80	31.2	62	96	0.00	Sunny
11/4/2019	26.20	31.2	70	89	0.00	Sunny
11/5/2019	25.10	31.9	60	90	0.00	Sunny
11/6/2019	26.40	32.4	57	88	0.00	Sunny
11/7/2019	26.60	30.2	45	89	0.00	Sunny
11/8/2019	26.80	30.2	45	83	0.00	Sunny
11/9/2019	27.30	33.2	45	80	0.00	Sunny
11/10/2019	28.80	33.4	45	85	0.00	Sunny
11/11/2019	27.20	31.9	52	88	0.00	Sunny
11/12/2019	26.50	32.1	62	85	0.00	Sunny
11/13/2019	26.40	31.9	60	82	0.00	Sunny
11/14/2019	26.50	32.1	62	84	0.00	Sunny
11/15/2019	27.10	32.1	62	84	3.00	Rainfall
11/16/2019	26.20	32.1	62	95	7.00	Rainfall
11/17/2019	26.70	32.1	62	94	3.50	Rainfall
11/18/2019	26.10	32.1	62	97	3.50	Rainfall
11/19/2019	26.90	32.1	62	96	2.00	Rainfall
11/20/2019	26.50	32.1	62	89	1.00	Rainfall
11/21/2019	26.30	32.1	62	91	27.00	Rainfall
11/22/2019	26.10	32.1	62	96	23.00	Rainfall
11/23/2019	24.40	29.4	73	91	1.00	Rainfall
11/24/2019	25.40	29.4	73	89	0.00	Sunny
11/25/2019	25.20	30.1	68	81	0.00	Sunny
11/26/2019	25.10	30.2	65	86	3.00	Rainfall
11/27/2019	26.60	30.2	65	95	75.00	Rainfall
11/28/2019	26.40	30.2	68	97	130.00	Rainfall
11/29/2019	26.20	30.2	67	98	96.00	Rainfall
11/30/2019	25.50	30.5	65	96	56.00	Rainfall

- Various issues related to environment and safety, such as traffic management, safety signage, 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 photographs 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:

1. Pending Disbursement of Payment to the beneficiaries from CALA towards Land and Buildings in Cuddalore, Ariyalur & Thanjavur District. – Request Authority to advise/instruct the Competent Authority of Land Acquisition to speed up the process of disbursement of pending payment. Total affected length due to issues in Land acquisition is 20.84 Km out of 50.48 Km.
2. Additional land acquisition for toll plaza, bus bays, turning radius of major junctions along the project highways.
3. Permission from Local Authorities for procurement of Borrow Earth from Irrigation Tanks/Pond.
4. Change of Scope notice required for relocation of VUP @ Km 113+500 due to existence of electrical substation of TANGENDCO at Km:113+700 to 113+800(RHS).
5. Change of Scope notice required for widening of Existing Minor Bridge @ Km 101+095 from two lane to four-lane carriageway.
6. Change of Scope notice required for reconstruction of Existing Box Culvert @ Km 110+785 because the existing structure of said location at site is a Pipe Culvert, which has been mentioned as Box type in the concession agreement.
7. Removal of Electrical substation 85+300 to 85+400, which is obstructing the project highways.
8. NOC from PWD/WRO, Govt of Tamil Nadu for construction of Minor Bridge (13 Nos) and Major Bridge (3 Nos) as per below

SI No	Description	Total scope (Nos.)	Submitted as on date (Nos.)	Approved as on date (Nos.)	Balance (Nos.)	Present Status
1	MNB	26	26	13	13	Under Processing with Engineer In Chief, Chennai
2	MJB	4	4	2	2	
	Total	30	30	14	16	

9. 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. Payment disbursement and necessary clearances required for removal of religious and Govt. buildings.
11. NOC from PWD/WRO, Govt. of Tamil Nadu for construction of project highways in the existing ponds (in a length of 1.702 Kms).

SI No	Chainage		Length Affected (M)	Side	AVG Toe Width from CL "A"	Width/distance of Pond Edge from CL "C"
	From	To				
1	75+557	75+632	74.75	RHS	32.50	7.00
2	77+330	77+400	70.00	LHS	28.16	3.00
3	78+404	78+422	17.90	LHS	16.00	9.50
4	80+396	80+415	19.00	LHS	27.00	7.00
5	80+400	80+423	23.00	RHS	24.00	6.50

14. Removal of Religious structures of 17 Nos. and Bus stand from the proposed ROW.

SL No	Chainage	Type of Structure	Side	Distance from PCL (M)	TCS Type	Formation Width Required from PCL	ROW From PCL	Remarks
Priority I – Obstruction of Main Carriage way & Service Road :-								
1.	86+350	Temple	LHS	7	Type - B with SR 7.5	21.25	26.10	
2.	87+500	Temple	LHS	13	Fig -7.8 with SR 5.5	22.75	26.80	
3.	92+455	Temple	LHS	14	Type - A3	18.80	23.70	
4.	92+570	Temple	RHS	12	Type - B with SR 7.5	21.25	28.80	
Priority II – Obstruction of Service Road :-								
1.	75+650	Temple	RHS	15	Fig -7.8 with SR 5.5	22.75	25.50	
2.	80+125	Temple	RHS	16	Type -A3	20.80	23.50	
3.	83+615	Temple	RHS	16	Type - B with SR 7.5	21.25	21.25	
4.	84+070	Temple	LHS	16	Type - B with SR 7.5	21.25	29.00	
5.	86+280	Temple	RHS	23	Type - B with SR 7.5	21.25	30.00	
6.	86+390	Temple	LHS	18	Type - B with SR 7.5	21.25	26.10	
7.	89+310	Temple	RHS	16	Type - B with SR 7.5	21.25	22.50	
8.	90+325	Temple	RHS	14	Fig -7.8 with SR 5.5	22.75	23.00	
Priority III – Falling Within ROW and effecting the Utility shifting works:-								
1.	76+600	Temple	RHS	24.5	Type - B with SR 7.5	21.25	31.10	
2.	91+780	Temple	RHS	22	TCS - 1	14.00	26.00	
3.	92+135	Temple	LHS	22	Type - A3	15.65	26.00	
4.	99+710	Temple	LHS	20	Type - A3	17.95	25.00	
5.	114+550	Temple	RHS	17	Type - A3	18.00	22.70	

15. Removal of Government Buildings like VAO office, School, Post Office & Ration Shop etc.

16. Removal of unauthorized occupations in 38 nos. in Cuddalore dist. & 32 nos. in Ariyalur dist. in the project highways,

17. Removal/relocation of Veeranam Pipes between Km: 65+960 to 66+200 causing material adverse effect on construction, Authority requested to take up the matter with Concern Department for early removal of the same.

18. Providing/finalization of land by the concern owning department for construction of Over Head Tank in the following locations:

S. No	Name of the Village	Location/ Chainage	Capacity of OHT	Remarks
1	Vanamadevi	86+310	30 KL	Land yet to be finalized

10. Important Events

Table 10.1. Details of Important Events			
Sl. No	Date of Events	Description of Events	Remarks
1.			
2.			

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

ORGANIZATION CHART – EPC TEAM

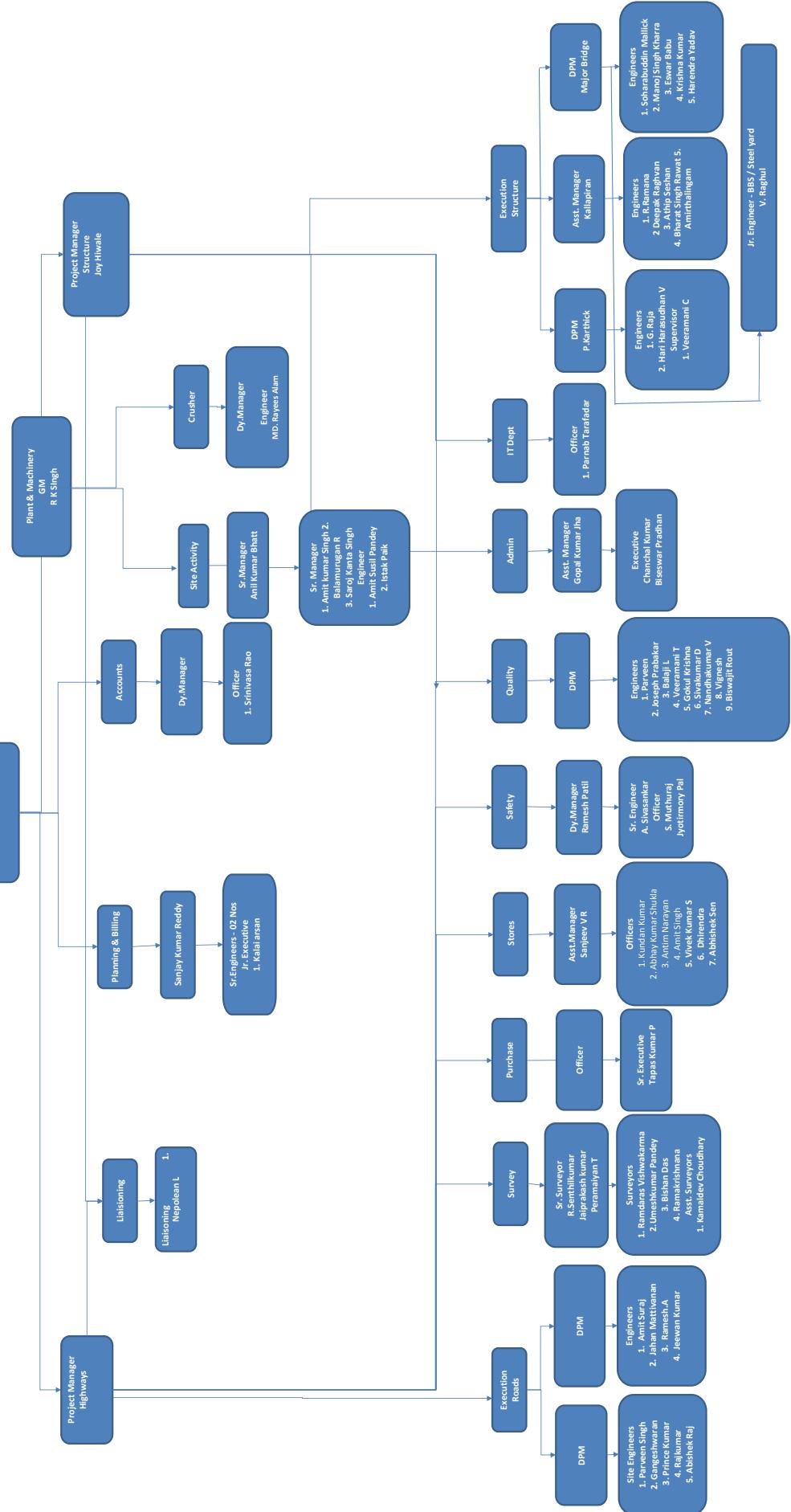
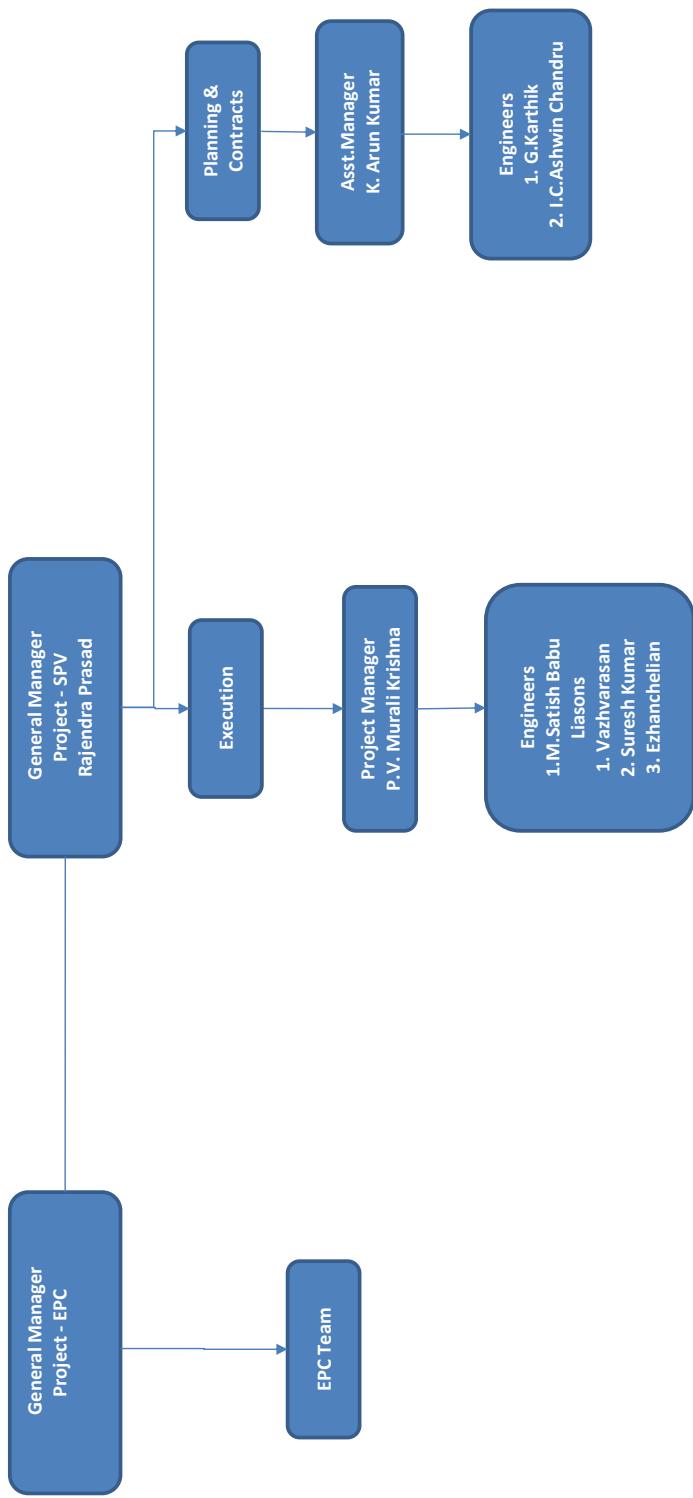


Figure 5 - ORGANIZATION CHART - SPV TEAM



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	73	
7	Transit Mixture	2523C	8	
8	Loader	455 ZX	4	
9	Trailer		2	
10	Water Tanker		5	
11	Boom Placer	S-36	1	
12	Tractor	5036 D V-2	2	
13	Mobile Service Van		1	
14	Tower Light	AJASKY	3	
11	Hydra Crane		2	
12	Asphalt Batch Mix Plant		1	
13	Wet Mix Plant	250 TPH	1	
14	Concrete Batch Mix Plant	45 cum	1	
15	Concrete Batch Mix Plant	60 cum	2	
16	Crusher Plant (3 Stage)	250 TPH	2	
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	
25	Gantry at Box Segment Casting Yard	100 MT	2	

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
2	Strengthening/up grade the incident Management Service	10.05.2019	Required COS notice for Strengthening/upgrade the incident Management Service.	NA	NA
3	Relocation of VUP from Km. 113+550 to Km. 113+273	13.11.2018	The proposal for Shifting of VUP at Km. 113+550 had been submitted to IE/Authority through letter no. PSCHPL/HO/IE/101/2018 dated 13.11.2018.	NA	NA
4	Widening of existing Box Culvert at Km 110+ 785	25.01.2019	NHAI vide letter no. NHAI/PIU/Thanj./11019/59/2017 /913 dated 17.05.2019 advised the IE to submit the comprehensive statement in this regards.	NA	NA
5	Widening of Existing MNB at Km. 101+095	29.05.2019	The proposal for Widening of Existing MNB at Km. 101+095 had been submitted to IE/Authority through letter no. PSCHPL/HO/SCP/IE/008/2019 dated 29.05.2019.	NA	NA
6	COS proposal for 09 nos of Box culvert and 01 MNB under +ve COS and 01 nos of Box culvert under -ve COS.	07.06.2019	IE had submitted the COS proposal to Authority vide Lr.No.TES/IE/SCP/NHAI/2019/087 dated 07.06.2019 for 09 nos of Box culvert and 01 MNB under +ve COS and 01 nos of Box culvert under -ve COS.	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	12. 11. 2019	PSCHPL/SCP/NHAI/2019/545	Utilities shifting works (Over Head Tank) hampered due to non-providing of land by the owning Department	
2	13. 11. 2019	PSCHPL/SCP/NHAI/2019/547	Integrity -A Way of life -Observation of vigilance awareness week 2019	
3	14. 11. 2019	PSCHPL/SCP/NHAI/2019/548	Removal of existing structures in cholatharam village- Protection requested	
4	15. 11. 2019	PSCHPL/SCP/NHAI/2019/549	Hindrance obstruction for construction of proposed VUP & GSI in the project	

TABLE 14.2 - CORRESPONDANCE - NHAI TO CONCESSIONAIRE

S. No	Date	Letter No	Subject	Remarks
1	01.11.2019	NHAI/PIU/Thanj/11020/36/2018/2158	Provisional submitted-Inprinciple Approval accorded-Communication of Approval.	
2	02.11.2019	NHAI/PIU/Thanj/11025/11/2018/2162	Extension of Time	
3	09.11.2019	NHAI/PIU/Thanj/11025/18/2018/2190	Request to clear the working site	
4	12.11.2019	NHAI/PIU/Thanj/11025/10/2019/2219	Shifting of electrical motor and electrical connetion -requested	
5	12.11.2019	NHAI/PIU/Thanj/11027/06/2007/2221	Video conference review meeting of chairman communicated	
6	12.11.2019	NHAI/PIU/Thanj/11027/01/2009/2224	Badly damaged of road stretch between vadular and sethiyathope - Restoration requested by VIP -report called for	
7	16.11.2019	NHAI/PIU/Thanj/11025/09/2018/2270	Providing bituminous topping in lower anicut and north branch using vibro max roller for compaction permission request	
8	23.11.2019	NHAI/PIU/Thanj/11027/01/2009/2329	Road safety cell -Constitution of chief ministers award- to the best district for the best performance on road safety criteria for selection -report called for	
9	23.11.2019	NHAI/PIU/Thanj/11019/25/2018/2324	Hindrance and obstructions of proposed VUP & GSI in the project	
10	23.11.2019	NHAI/PIU/Thanj/11025/09/2018/2328	Shifting of Electrical Utilities of HT LT Lines & Structures	

TABLE 14.3 – CORRESPONDANCE – CONCESSIONNAIRE TO INDEPENDENT ENGINEER

S. No	Date	Letter No	Subject	Remarks
1	06. 11. 2019	PSCHPL/SCP/IE/2019/538	Submission of concrete mix design reports for (M-15) PCC, (M-20, M-30) RCC (M-30, M-35) Pumpable-Reg	
2	06. 11. 2019	PSCHPL/SCP/IE/2019/539	Submission of concrete mix design reports for M-35 & M-40 (Pile Concrete)	
3	06. 11. 2019	PSCHPL/SCP/IE/2019/540	Submission of Monthly Progress Report for the Month of October 2019	
4	08. 11. 2019	PSCHPL/SCP/IE/2019/541	Submission of revised plan & Profile Drawings for Service road (R3)	
5	08. 11. 2019	PSCHPL/SCP/IE/2019/542	Submission of revised Plan & Profile Drawings from km 72+800 to Km 73+820 of the project Highway (R6)	
6	08. 11. 2019	PSCHPL/SCP/IE/2019/543	Submission of revised Design & Drawing for VLP at Ch.72+545 & at Ch.109 345	
7	12. 11. 2019	PSCHPL/SCP/IE/2019/544	Hindrance obstruction of Religious Structures along the Project Highway	
8	13. 11. 2019	PSCHPL/SCP/IE/2019/546	Submission of drawings of 01 Nos of Minor Bridges & 03 Nos of Box Culverts	
9	15. 11. 2019	PSCHPL/SCP/IE/2019/550	Submission of job mix design report for WMM	
10	16. 11. 2019	PSCHPL/SCP/IE/2019/551	Submission of revised Design & Drawings of Major bridge at Ch. 66+543 of the project highway	
11	18. 11. 2019	PSCHPL/SCP/IE/2019/552	Proposal for use of plastic waste in DBM in the project highway	
12	18. 11. 2019	PSCHPL/SCP/IE/2019/553	Submission of Concrete Mix design report for M-60 RCC (Pumpable)	
13	18. 11. 2019	PSCHPL/SCP/IE/2019/554	Submission of Concrete mix design reports for (M-15) PCC, (M-20) Kerb, (M-20, M-25, M-30, M-35) RCC (M-35) Pile concrete , (m-35) Pumpable	
14	18. 11. 2019	PSCHPL/SCP/IE/2019/555	Submission of Concrete mix design reports for (M-30, M-35) Pumpable & (M-35, M-40) pile	
15	18. 11. 2019	PSCHPL/SCP/IE/2019/556	Submission of SBC Test Report for a Box Culvert at Ch. 95+495	
15	18. 11. 2019	PSCHPL/SCP/IE/2019/557	Submission of Mix Design Report for Cement Grout	
15	18. 11. 2019	PSCHPL/SCP/IE/2019/558	Submission of Concrete Mix Design Report for M-35 RE Block	
15	18. 11. 2019	PSCHPL/SCP/IE/2019/559	Submission of Job Mix Formula for DBM (Grading-II)	
15	23. 11. 2019	PSCHPL/SCP/IE/2019/560	Submission of RF Wall Drawings & SBC Reports for 2 Nos of GS1s	
15	23. 11. 2019	PSCHPL/SCP/IE/2019/561	Submission of Soil Test Reports for the Borrow Area No.23	

TABLE 14. 4 – CORRESPONDANCE – INDEPENDENT ENGINEER TO CONCESSIONAIRE / NHAI

S. No	Date	Letter No	Subject	Remarks
1	01.11.2019	TES/IE/SC/PIL/2019/397	Rain cuts at Embankment slope	
2	06.11.2019	TES/IE/SC/NHAI/2019/117	Electrical Motor and Electrical Connection–Requested	
3	11.11.2019	TES/IE/SC/PIL/2019/398	Slow Progress of work	
4	11.11.2019	TES/IE/SC/PIL/2019/399	Concrete Mix Designs M-35 & M-40 Pile	
5	11.11.2019	TES/IE/SC/PIL/2019/400	Fly Ash 05 (Exin)	
6	11.11.2019	TES/IE/SC/PIL/2019/401	Submission of concrete mix design reports for (M-15) PCC, (M-20, M-30) RCC (M-30, M-35) Pumpable	
7	14.11.2019	TES/IE/SC/PIL/2019/402	Source approval of M/s Agarwala foundries Pvt Ltd	
8	15.11.2019	TES/IE/SC/PIL/2019/403	NCR 05 Kerb laying	
9	18.11.2019	TES/IE/SC/PIL/2019/404	Existing road maintenance	
10	18.11.2019	TES/IE/SC/PIL/2019/405	Hindrance List	
11	20.11.2019	TES/IE/SC/PIL/2019/406	Mix Design No. 02 of WMM	
12	20.11.2019	TES/IE/SC/PIL/2019/407	Mix Design No. 02 of WMM	
13	20.11.2019	TES/IE/SC/PIL/2019/408	Existing Road Maintenance	
14	20.11.2019	TES/IE/SC/PIL/2019/409	Request to clear the working site at Km 82+010	
15	20.11.2019	TES/IE/SC/PIL/2019/410	Submission of Concrete mix design reports for (M-15) PCC, (M-20) Kerb, (M-20, M-25, M-30, M-35) RCC (M-35) Pile concrete , (m-35) Pumpable	
16	22.11.2019	TES/IE/SC/PIL/2019/411	Mix Design of DBM	
17	22.11.2019	TES/IE/SC/PIL/2019/412	Submission of Concrete Mix Design Report for M-35 RE Block	
18	22.11.2019	TES/IE/SC/PIL/2019/413	M-60 Concrete Mix Designs-2	
19	22.11.2019	TES/IE/SC/PIL/2019/414	Submission of Concrete mix design reports for (M-30, M-35) Pumpable & (M-35, M-40) pile using SIKA5202 NS Admixture	
20	23.11.2019	TES/IE/SC/PIL/2019/415	Waiver of damages to the concessionaires for delay in submission of performance security BG or achieving the financial close for the cases where the authority was no in a position to hand over ROW	
21	25.11.2019	TES/IE/SC/PIL/2019/416	Submission of design and drawings for 10 Nos of Box culverts at service Road of the project Highways	
22	27.11.2019	TES/IE/SC/NHAI/2019/119	Road Safety meeting at Tanjavur suggestions made by superintendent of police	
23	27.11.2019	TES/IE/SC/NHAI/2019/120	Issue of No Objection Certificate and access permission for approach road to the existing fuel station abutting on the RHS of NH-45C in Km 68/359 to Km 68/400 of kattumannarkoil village in kattumannarkoil Taluk & Cuddalore District	
24	27.11.2018	TES/IE/SC/PIL/2019/417	Submission of 7 days strength report for cement grout	
25	28.11.2019	TES/IE/SC/NHAI/2019/121	Enumeration of teak wood trees in Chidambaram region	
26	28.11.2019	TES/IE/SC/NHAI/2019/122	Shifting of existing drainage inlet sluice Gate in foreshore bund of Veeranam Tank	

15. Progress Photographs

Sl. No	Description	Location	Side	Remarks
1.	BOX CULVERT – WALL IN PROGRESS	69+357	RHS	
2.	BOX CULVERT - SLAB IN PROGRESS	100+177	RHS	
				
Sl. No	Description	Location	Side	Remarks
3.	MINOR BRIDGE - SLAB COMPLETED	74+173	BHS	
4.	MINOR BRIDGE- R/W COMPLETED	88+513	LHS	
				

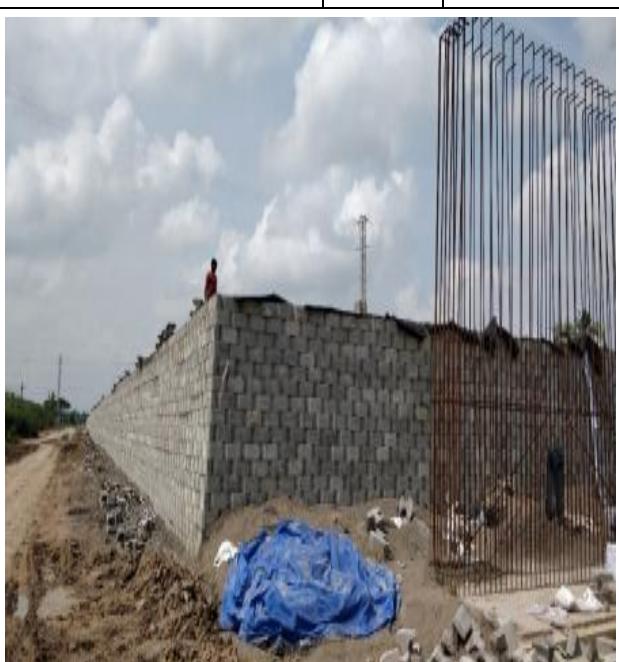
Sl. No	Description	Location	Side	Remarks
5	MJB - PILE WORK IN PROGRESS	66+547	-	
6	MJB - PILE WORK IN PROGRESS	99+595	-	
				
Sl. No	Description	Location	Side	Remarks
7	MJB – A1 ABUTMENT CAP COMPLETED	107+400	-	
8	MJB – A2 ABUTMENT CAP IN PROGRESS	107+400	-	
				

Sl. No	Description	Location	Side	Remarks
9	MJB - SEGMENT CASTING IN PROGRESS	107+400	-	
				
				

Sl. No	Description	Location	Side	Remarks
10	SUBGRADE IN PROGRESS	92+400 to 92+700	LHS	
11	EARTHWORK IN PROGRESS	94260 to 94+540	LHS	
				
Sl. No	Description	Location	Side	Remarks
12	SUBGRADE IN PROGRESS	105+300 to 105+500	RHS	
13	SUBGRADE IN PROGRESS	105+000 to 105+300	RHS	
				

Sl. No	Description	Location	Side	Remarks
14	KERB IN PROGRESS	88+600	LHS	
15	WMM IN PROGRESS	82+800	RHS	
				
Sl. No	Description	Location	Side	Remarks
16	DRAIN IN PROGRESS	88+300	RHS	
17	WMM IN PROGRESS	94+00 TO 94+320		
				

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Sl. No	Description	Location	Side	Remarks
18	RE WALL IN PROGRESS	69+675	-	
19	RE WALL IN PROGRESS	74+400	-	
				
Sl. No	Description	Location	Side	Remarks
20	GSI - ABUTMENT CAP COMPLETED	104+560	BHS	
21	GSI – ABUTMENT SHUTTERING IN PROGRESS	104+570	BHS	
				

Sl. No	Description	Location	Side	Remarks
22	VUP Abutment Completed	115+250	RHS	
23	VUP Abutment Completed	111+205	RHS	
 				

Sl. No	Description	Location	Side	Remarks
24	DBM IN PROGRESS	91+560 to 91+820	LHS	
25	DBM IN PROGRESS	90+950 to 91+050	LHS	
 				