

GOVERNMENT OF KERALA PUBLIC WORKS DEPARTMENT



MONTHLY PROGRESS REPORT (AUGUST) -2020

KERALA STATE TRANSPORT PROJECT –II UNDER WORLD BANK ASSISTANCE-LOAN NO 8254



PROJECT MANAGEMENT TEAM

KERALA STATE TRANSPORT PROJECT

T.C.11/339, SREE BALA BUILDING, KESTON ROAD, KOWDIAR P.O

THIRUVANANTHAPURAM-6295003

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1 Executive Summary

1.1 Introduction

The government of Kerala has decided to take up the Phase-II up-gradation component of KSTP as a standalone project vide the "KSTP-II" with assistance from World Bank. The project envisages the up-gradation of 363 km of SH and MDR, Road Safety Management, and Institutional Strengthening of PWD. The total project cost is 445 million USD out of which 216 million USD is loan assistance from the World Bank. The project loan agreement was signed on June 19, 2013, at the DEA Office, New Delhi. The loan effectiveness date is September 6, 2013. The project implementation period was five years, up to 31st December 2018, but now stands extended to April 2021 and the expected loan closing date 30.04.2021.

1.2 Project Development Objectives

The Project Development objective under the initial stage was to improve road conditions, traffic flow, and road safety with a focus on vulnerable road users on Kerala State Core road Networks comprising of about 450.00 Km of major roads and state highways. The main beneficiaries of the Project will be the users living along the Project corridors mainly the pedestrians, motorists, agricultural and industrial producers, consumers, and the local community. The main benefits under this implementation would be in the form of reduced transport bottlenecks, lower passenger freight transport costs, reduced travel time, and improved road safety in terms of reducing severe crashes and injury.

1.3 Project Components

It was decided jointly by World Bank and KSTP to divide the entire project into the following main components under KSTP-II

1.3.1 Road Upgrading Works:

These works named Component A1 and A 2 will include upgrading of about 363 km of strategically important State Highways to complete network connectivity in the state to reduce travel time between key socio-economic centres.

1.3.2 Road Safety Management:

This component named Component B & C will support the strengthening of the road safety management systems in Kerala to arrest the increase of crash fatalities in the state. This component will finance various initiatives on capacity building including a **Safe Corridor Demonstration Project**, *implementation of local-level programs utilizing the challenge fund, and advisory support for road safety activities.*

1.3.3 Institutional Strengthening

The objective of this component is to improve the sustainability of Kerala's state road network concerning its functional adequacy, financial viability, and capacity of key state road sector institutions to deliver road infrastructure and services that are responsive to road user needs. The major initiatives include the Modernization of the Road Sector and improving Public Communication and User Engagement in Road Development.

1.3.4 RKI Flood works

These works named as Component D will include upgrading of about 800kms due to rehabilitation of affected road infrastructure in 2018 floods in Kerala under the Rebuild Kerala Initiative, of strategically important State Highways to complete network connectivity in the state to reduce travel time between key socio-economic centres.

2 Planning & Overall Implementation:

2.1 Project Staffing:

KSTP is managed by a Project Director, in the Rank of a senior level Chief Engineer assisted by one Chief Engineer, a Superintending Engineer, and other engineers and officers. The Technical Wing headed by the Chief Engineer is responsible for activities related to engineering, environment, social, and contract management. Further, the legal contract management cell is headed by a legal professional. KSTP has qualified and experienced Social and Environmental Experts and a Project Consultant. The Finance Wing headed by a Finance Controller (deputed from the Secretariat) has a qualified Finance Manager with support staff. On the field, the KSTP has Two Superintending Engineers, Five Divisions located at Kottarakkara, Muvattupuzha, Kuttippuram, Kannur, Ponkunnam each headed by an Executive Engineer to monitor project progress.

2.2 Project co-ordination:

Govt. of Kerala has established two committees to monitor, coordinate, and expedite project activities. The **Project Steering Committee** chaired by the Chief Secretary has its main functions to review and approval of recommendations regarding acceptance of tenders and taking the final decisions on all matters concerning procurement and monitoring of project activities. The members of the committee are Principal Secretary (Finance), Secretaries to Government, PWD, Law Department, Revenue, Chief Engineer, R&B, Project Director, KSTP, Chief Engineer (Projects) KSTP. The second is an **Evaluation Committee** headed by the Principal Secretary PWD and comprising the Project Director, KSTP, and Chief Engineer (Projects), to make recommendations on any issues on procurement as may require approval of the Steering Committee.

2.3 Component A 1 implementation

Under this component, 2 supervision consultancies CSC1 and CSC 2, Independent engineering services, and Transaction Advisory Service for EPC are included. Contract Agreement for Consultancy for CSC 1 for 190 Km of up-gradation road was executed with M/s Egis International in JV with Egis India Consulting Engineers Pvt. Ltd on 28.02.2013 and mobilized and in place. Egis has established a rented office for Team Leader at Thiruvananthapuram near to Client's Office and started functioning from April 2013. Also, the RE office is functioning for Package 3A & 3B at Kuttuparamba in Kannur District for package – III, Thiruvalla Town in Pathanamthitta District for Package 4A & 4B.

2.4 Sub Component A2 implementation

Ground Truthing and updation of DPR for this sub-component (Punalur – Ponkunnam – 82 Km under EPC) was carried out by M/s L&T Infrastructure. The bids invited were split into three packages and tender notification issued. Clearance has been received from World Bank for the bid documents. Contract Agreement for Consultancy for CSC for 82.17 Km of up-gradation road was executed with M/s Consulting Engineers Group Ltd on 01.11.2019 and mobilized and in place. Work under this is in progress and a more detailed description of each package is listed further in this document.

2.5 Component B – Road Safety Management implementation

Under this component following works were initiated:

1. Strengthening of KRSA is completed
2. Challenge fund proposal received from Kozhikode DRSC through KRSA
3. Safe Corridor Demonstration Project (SCDP)
4. Implement Five other roads as SCDP on the guidelines of the SCDP road

Activity 1 & 2 are completed while 3 is almost on the completion stage. Activity 4 is in progress wherein DPR preparation by the Consultant is in the advanced stage of submission. These works are proposed to be tendered by the end of May 2020.

2.6 Component C – Institutional strengthening implementation.

2.6.1 Consultancy Services

The following Consultancy services are completed.

1. Consultancy for Road User Perception Survey has been completed for 363 Km of Project Roads through M/s Sherwood Consultants and report shared with Bank.
2. Consultancy for Prioritization and DPR Preparation for 1000 Km of Improvement of State roads was entrusted with M/s Egis India Consulting Engineers Pvt. Ltd and final report submitted. DPR for the first 439 km roads has been completed. The preliminary project report for 1106 km was submitted to Government for posing for External Financial Assistance.
3. Consultancy for Strategic Option Study (SOS) for 8570 Km newly declared MDR was completed by M/s CDM Smith Associates Pvt. Ltd. The study report has been handed over to PWD, R&B, and further action to improve these roads will be taken by them using their funds.
4. Consultancy service for Developing Multi-Model Integrated Transport Hub at 3 cities, Trivandrum, Kozhikode, and Kochi was completed and the report forwarded to Government. This report was also shared with NATPAC for consideration while preparing Comprehensive City Development Projects.
5. Preparation of design under the Green Building concept for PWD, Head Quarters Building. This was completed and forwarded to Chief Engineer, Buildings for obtaining AS
6. The Strategic Road Network Program was replaced with the following proposals as per the current priorities of the new Government
 - *Development of KHRI into Centre of Excellence on Road Safety and Asset Management*
 - *Development of Public Information Management System integrating the existing Public Information Cell, the WINGS portal of PWD, the GIS, etc – undertaken by PWD*
 - *Consultancy Services for Project Management of PMT*
 - *Consultancy for Post Construction road audit of works*
 - *Integration of labor laws and compliance in the World Bank-funded Project*
 - *Appointing Probity Advisor in PMT*
7. The Public Information Management System will be developed by the Chief Engineer Road and Bridges, Public Works Department.

8. The Project Management Software has been installed and training given to CSC and KSTP Engineers. The PMS is operationalized.
9. A Community liaison officer was appointed in PMT to assist in the implementation of SCDP.
10. The periodical Road User Satisfaction Survey is arranged and in progress.

2.7 Component D – RKI Flood work implementation by KfW& World Bank

After the assessment of flood damages of August 2018, Gok decided to rebuild these damaged roads from the assistance of the World Bank and KfW Bank. Accordingly, a new Component as “**Component D**” was formalized in June 2019 to take up these flood-damaged roads. PWD is now considering developing a more sustainable and climate-resilient asset stock in the medium to long term (especially during the planned rehabilitation of affected road infrastructure in the 2018 floods in Kerala). The Government of Germany pledged to support the Governments Kerala in its rebuilding efforts with due attention to “building back better” principles, by providing via KfW Loan. Around 700km of roads has been finalized by DPR Consultants. More details are further described in the following chapters elsewhere in this document.

2.8 Six Point Action Plan and Action Taken– Implementation

A six-point action plan and governance improvement action plan for strengthening fiduciary arrangements, quality assurance, and contract management was drawn and agreed during the Interim Mission held in August 2017. It was then agreed that the plan be fully complied by January 2018. Although late, the action plan has now been fully complied and continues to comply, as mentioned below

Sl. No.	Details of the Action Plan agreed with GoK	Assessment during mission
1	Develop a mutually agreed Governance Improvement Action Plan including Strengthening Fiduciary Arrangements, Quality Assurance and Contract Management by the end of September 2017 and fully comply with the plan by January 2018	Complied. PMC fully mobilized.
2	Ensure continuity of Project Director and key project staff till the end of the project	Complied. PMU staffing, however, needs enhancement in view of an expanded mandate.
3	Engage experienced contract management specialist and quality assurance specialist in the PMT	Complied. Engaged through PMC consultants. M/s Eptisa Servicios Ingenieros S. L appointed on 5 th March 2019 for 15 months and functional. However, in the light of the World Bank closer date being extended, the PMC services has been extended till April 2021.
4	Take final decision on way forward for Component A2	Award of works for Package 8 A, B, and C completed in November 2019. Works are in progress in these packages under EPC

Sl. No.	Details of the Action Plan agreed with GoK	Assessment during mission
		Mode of Contract. Completion time for these works are 24 months.
5	Ensure full commitment of Component B and at least 80% for Component C	Complied for Component C. For Component B, however, 100% compliance can be achieved after the remaining 10% commitment (Challenge Fund). DPR Consultants awarded & DPR preparation is in Progress. and work expected to commence from September 2020
6	Sustain the progress in Component A1 and reach overall progress of 89.48 % contributing to at least 20 % project disbursements in the next 3 months	Complied. Current physical progress is 89.48% and disbursement is 88.81%.

2.9 Quality Assurance:

The KSTP had engaged a Construction Supervision Consultant for quality certification at the primary level. Their functions on quality assurance will be monitored by deepening the involvement of the KSTP Divisional Engineers. At the second level of quality monitoring, KSTP had engaged an Independent Quality Monitoring Consultant. The final quality monitoring including a review of all quality monitoring activities, KSTP has formed a Quality Review Committee chaired by the Chief Engineer KSTP, who is arranging reviews. Further, actions to appoint a Consultant for closure audit of the roads before taking over is in progress.

Bill Processing and Variation Management:

The bills for works certified by the Supervision Consultants are processed through the KSTP field Divisions as envisioned in the Finance Manual. Also, variations approval procedure has been outlined and the approvals are put through this protocol. Further, to improve the cash flow conditions of the contractors to speed up the pace of implementation an Accelerated Payment System was introduced by which 75% of the amount due will be paid as soon as the bill is received at PMT before detailed scrutiny.

Project Management Consultant (PMC) and Probity Advisor:

To augment the capabilities of the existing staff to effectively manage the Project activities, including implementing the Governance Improvement Action Plan, the KSTP had initiated the selection process for the Project Management Consultant. M/s Eptisa finalized and appointed and was on board from 5th March 2019.

1. Ensure continuity of Project Director and key Project staff till the end of the Project.

The State has posted a full-time officer from the Indian Administrative Service as Project Director and the positions of Social, Environmental, and other positions are also filled.

2. Engage experienced professional in Quality Management and Contract Management Specialists in the PMT and organize monthly management meetings on Quality Assurance and Contract Management

The Quality Management and Contract Management Specialists are included in the PMC team and were mobilized by 1st week of March 2019. The quality review committee with Chief Engineer KSTP as Chairperson has been reviewing Quality and Organization meetings regularly in the PMT Head Quarters. An independent Technical Auditor was also appointed to carry out Quality Audit. A Consultant for Post Construction Technical has been selected.

3. Sustain Progress in Component A1 and reach overall progress of 89.48% to at least 40% Project Disbursement.

As of the end of August 2020, the physical progress is 89.48 % on Sub Component A1 (Road up gradation in 4 Packages). The financial progress is 88.81%. The overall disbursement as of August 2020 is 107.62 Million USD which is 88.94 % of the overall loan amount of US\$ 121 million committed in component A1.

4. Sustain Progress in Component A2, including preparation of revised engineering design.

Due to time constraints to complete the formalities like financial closure and then implement the Project (Punalur – Ponkunnam road) before the loan closure period, the Government of Kerala decided to change the mode of procurement to EPC in Consultation with the Bank. The State has also recommended an extension of the loan period. The bidding documents are prepared by M/s L&T and tenders have been floated which ends April (mid) 2019. Bids have been received for all these packages, evaluation done, and have been awarded in July & August -2019 except One package and mobilized on-site in the month of December-2019. Details of these packages are explained more in detail in the following chapter of the document.

Commitment of Component B and at least 80% for Component C:

Component B

Out of US\$ 22 million (Rs. 12 crore) allocated so far, KSTP has arranged works on SCDP, (Road Safety Interventions), the Capacity Building, and the proposals of the Challenge Fund program are under scrutiny. 100 % has been committed and DPR consultants for Challenge Fund work have been finalized & others such as Trauma Care, Road Safety Enforcement, etc has been initiated.

Component – C: Institutional Strengthening

Under the Road Sector Modernization, KSTP had already arranged a few Consultancy assignments such as Design of Green Building for PWD Head Quarter and others. Further to this, KSTP has initiated procurement for the assignments in consultation with the Bank.

In the Sub Component Active User Engagement in Project Design, implementation, Screening, and Asset Management, the KSTP has arranged the Periodic Road User Satisfaction Surveys, another assignment for Community Participatory Road Safety and User Management Program was dropped as individual experts have been engaged for CommunityLaiison works.

Component – D: Flood Control works

Under this component US\$ 26 million(out of 216) due to time constraints to complete the formalities like financial closure and then implement the three RKI Roads Package, Project before the loan closure period, the Government of Kerala decided to change the mode of procurement to EPC in Consultation with the Bank. The State has also recommended an extension of the loan period. Bids have been received for all these packages, evaluation done, and has been awarded in January -2020 mobilized on-site in the month of April-2020 except One package which was awarded in the month of April-2020. Details of these packages are explained more in detail in the following chapter of the document.

2.10 Compliance of legal covenants

Sl. No.	LEGAL COVENANTS	COMPLIANCE STATUS
A. Institutional Arrangements		
1.	<p>The Project Implementing Entity shall maintain, throughout the period of implementation of the Project:</p> <p>a. A Project Steering Committee (“the PSC”): (i) headed by Chief Secretary of Kerala, and comprised of representatives of Project Stakeholders and line department of the Government of Kerala, in numbers, manner, and substance acceptable to the Bank</p> <p>b. A Project Management Team (the “KSTP”) within the PWD: (i) headed by a Project Director in the rank of a senior level Chief Engineer and assisted by competent staff</p> <p>c. An Evaluation Committee (“the Evaluation Committee”) within the PWD</p> <p>d. An Environmental and Social Management Cell (the “ESMC”) within the PWD with competent, experienced, and qualified staff in sufficient numbers and under terms of reference satisfactory to the Bank, vested with powers, financial resources, functions, and competencies, acceptable to the Bank. Monitor and evaluate contractors’ and consultants’ compliance therewith; and carry out any necessary updates thereto</p>	<p>a. Steering Committee in place</p> <p>b. Project Management Team in place</p> <p>c. The Evaluation Committee in place</p> <p>d. Environmental and Social Management Cell in place</p>
2.	<p>The Project Implementation Entity shall throughout the period of implementation of the Project the services of a supervision consultant (the</p>	<p>- Construction Supervision Consultant in place</p>

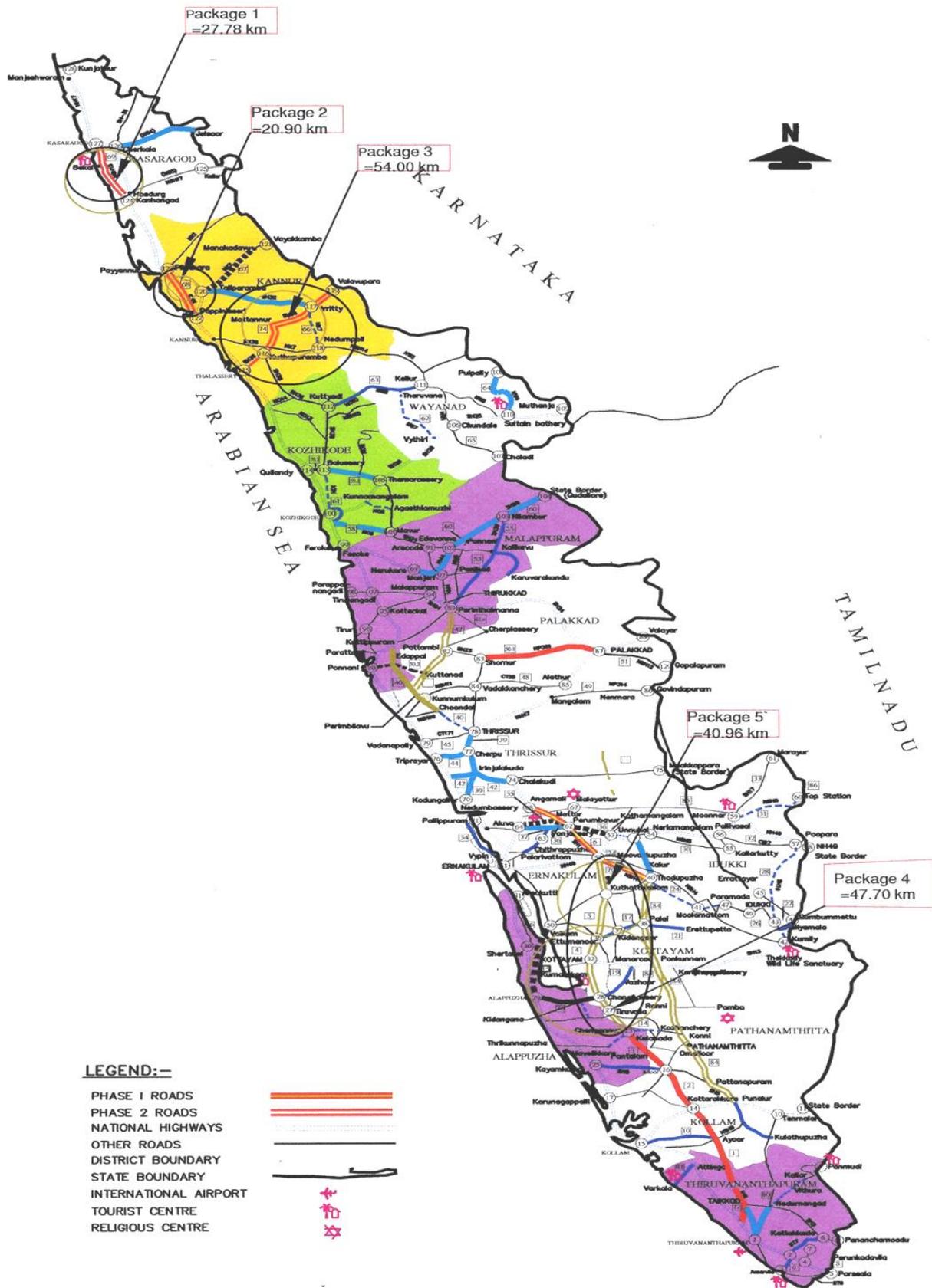
Sl. No.	LEGAL COVENANTS	COMPLIANCE STATUS
	"Construction Supervision Consultant"), with qualifications and experience and under terms of reference acceptable to the Bank.	
3.	<p>The Project Implementation Entity shall engage:</p> <p>a. by no later than twelve (12) months after the effective date, and thereafter maintain throughout the period of implementation of the Project, the service of an independent engineer (the "Independent Engineer")</p> <p>b. By no later than six (6) months after the effective date, and thereafter maintain throughout the period of implementation of the Project, the services of a firm of Chartered Accountant with qualification and experience, and under terms of reference, acceptable to the Bank</p>	<p>a. It is proposed to convert PPP mode to EPC / Item rate Authority Engineer will be appointed</p> <p>b. Internal Audit firm appointed for audit of accounts</p>
B. Project Document		
	<p>The Project Implementation Entity shall:</p> <p>a. Implement the Project in accordance with the Project Implementation Plan, the FM Manuel, the GAAP, and the Safeguard documents</p>	This is complied
C. Anti-corruption		
	The Project Implementation Entity shall ensure that the Project is carried out in accordance with the provisions of the anti-corruption guidelines and the GAAP	Complied
D. Challenge Fund		
1.	For purposes of carrying out under Component B2 of the Project, the Project Implementing Entity shall, through the coordinated and cooperative effort of the PWD and the RSA, mobilize local stakeholders, including District Road Safety Councils, GramaPanchyats, and/or non-governmental organizations	The Challenge Fund proposal for Kozhikode has been awarded.
E. Safeguards		
1.	<p>The Project Implementing Entity shall:</p> <ul style="list-style-type: none"> Carryout the Project in accordance/ compliance with the Environmental Impact Assessment ("EIAs"), the Environmental Management Plans ("EMPs"), the Environmental Management Framework 	This is complied

Sl. No.	LEGAL COVENANTS	COMPLIANCE STATUS
	("EMF"), the Resettlement Action Plan ("RAP"), and the instruments	
3.	The Project Implementing Entity shall ensure that, prior to commencing any civil works on a particular road, or section thereof, under the Project: (i) All necessary governmental permits and clearances for such civil work in the relevant road, or section, shall have been obtained from the competent governmental authority/ies and submitted to the Bank	All permits from statutory authorities obtained
4.	The Project Implementing Entity shall ensure that each contract for civil works under the Project includes the obligation of the relevant contractor to comply with the relevant Safeguard Document applicable to such civil work commissioned/ awarded pursuant to said contract.	EMP followed during construction
5.	<p>The Project Implementing Entity shall:</p> <ul style="list-style-type: none"> a. Furnish to the Bank, throughout the period of Project implementation: <ul style="list-style-type: none"> i. Quarterly reports prepared by KSTP, with the assistance of the ESMC, on the general compliance with the Safeguard Documents, the Social and Environmental Impact of Project activities, and the results of the mitigation or benefit-enhancing measures applied thereto, during the period preceding the date of each such report ii. Quarterly reports prepared by (A) the Construction Supervision Consultant in respect of Sub-Component A1 of the Project; and (B) the Independent Engineers, in respect of Component A2 of the Project, said reports to assess the respective contractor's general compliance with the Safeguard Documents, the Social and Environmental Impact of Project activities, and the results of the mitigation or benefit-enhancing measures applied thereto, with particular emphasis on the implementation and results of 	Complied with

Sl. No.	LEGAL COVENANTS	COMPLIANCE STATUS
	resettlement activities, during the period preceding the date of each such report.	
F. Suggestion and Complaint Mechanism		
	The Project Implementing Entity shall maintain and operate throughout the period of implementation of Project activities, a district-level grievance redressal mechanism for resettlement and rehabilitation and a State level grievance redressal mechanism for all other aspects of the Project, which systems shall be subject to guidelines and procedure, acceptable to the Bank.	District level GRC of KSTP meetings are held once a month chaired by District Collector. State-level GRC is included in the SLEC chaired by Chief Secretary once a month. The status of GRC is attached to the report under Social Safeguard Management.
G. Project Surveys		
	The Project Implementing Entity shall carry out at least two (2) Road User Surveys with scope, methodologies, and terms of reference satisfactory to the Bank, to assess road user’s satisfaction with Project results and its implementation, their opinions regarding current and potential sector targets, and their behavioral/ attitudinal changes.	Baseline RUSS done and next survey arrangement completed Survey on completed roads in progress.
SECTION II PROJECT MONITORING, REPORTING, AND EVALUATION		
A. Project Reports		
1.	The Project Implementing Entity shall monitor and evaluate the progress of the Project and prepare Project Reports for the Project in accordance with the provisions of Section 5.08(b) of the General Conditions and based on indicators as agreed with the Bank. Each such Project Report shall cover the period of one calendar quarters	The monthly and quarterly Projects Reports are submitted regularly with details
B. Financial Management, Financial Reports, and Audits		
1.	The Project Implementation Entity shall maintain a Financial Management System and prepare financial statements in accordance with consistently applied accounting standards acceptable to the Bank	Complied
2.	The Project Implementing Entity shall prepare and furnish to the Bank, by not later than forty-five (45) days after the end of each calendar quarter, interim financial reports for the Project covering the calendar quarter, inform and substance satisfactory to the Bank	Complied
3.	The Project Implementing Entity shall ensure that the Audited Financial Statements for each period shall be:	Complied

SI. No.	LEGAL COVENANTS	COMPLIANCE STATUS
	a. Furnished to the Borrower and the Bank not later than ten (10) months after the end of the period, and	
	b. made publicly available in a timely fashion and a manner acceptable to the Bank.	Document is open to public

3 Project Key Map



4 Funding & Disbursement

The total disbursement at the end of August-2020 from the World Bank was 128.32 USD Millions

KSTP-II commenced operations in the year 2013 and funding details are as below

Project appraisal	- April 2013
Loan agreement signed	- 19 June 2013
Loan Effectiveness date	- Sept 6, 2013
Project cost approved by the World Bank	- US\$445 ml
World Bank (IBRD) Loan Assistance	- US\$216 ml
Project implementation period	- 30 th Oct 2013 to April 30.2021
Expected closing date (Loan)	- 30.04.2020

4.1 Current Disbursement Status

SI No	Claim	Date	EXPENDITURE in Lakh	AMOUNT CLAIMED in Lakh	DISBURSED	BALANCED FUNDS AVAILABLE FOR CLAIM (MUSD)
					USD in millions	TOTAL
						216.00
	Front end fee				0.54	215.46
1	Retroactive	15.06.12 to 15.06.13	1,863.95	1,043.00	1.69	213.77
2	1 st Quarter					213.77
3	2 nd Quarter	01.07.13 to 30.9.13	1,355.79	764.00	1.23	212.54
4	3 rd quarter	01.10.13 to 31.12.13	1,906.01	1,071.00	1.71	210.82
5	4 th quarter	01.01.14 to 20.03.14	2,696.00	1,510.00	2.50	208.32
6		21.03.14 to 31.03.14	53.79	30.00	0.05	208.27
7	1 st Quarter	01.04.14 to 18.06.14	1,826.41	1,023.00	1.70	206.57
8		19.06.14 to 30.06.14	14.69	8.00	0.02	206.55
9	2 nd Quarter	01.07.14 to 30.09.14	1,405.61	787.00	1.27	205.28
10	3 rd quarter	01.10.14 to 31.12.14	3,790.21	2,124.00	3.44	201.84
11	4 th quarter	01.01.15 to 28.02.15	3,706.35	2,076.00	3.32	198.52
12	4 th quarter	01.03.15 to 31.03.15	3,704.89	2,076.00	3.32	195.20
13	1 st Quarter	01.04.15 to 16.06.15	3,534.14	1,992.00	3.14	192.06
14		17.06.15 to 30.06.15	154.40	86.00	0.14	191.92
15	2 nd Quarter	01.07.15 to 30.09.15	3,527.06	1,977.00	3.04	188.89

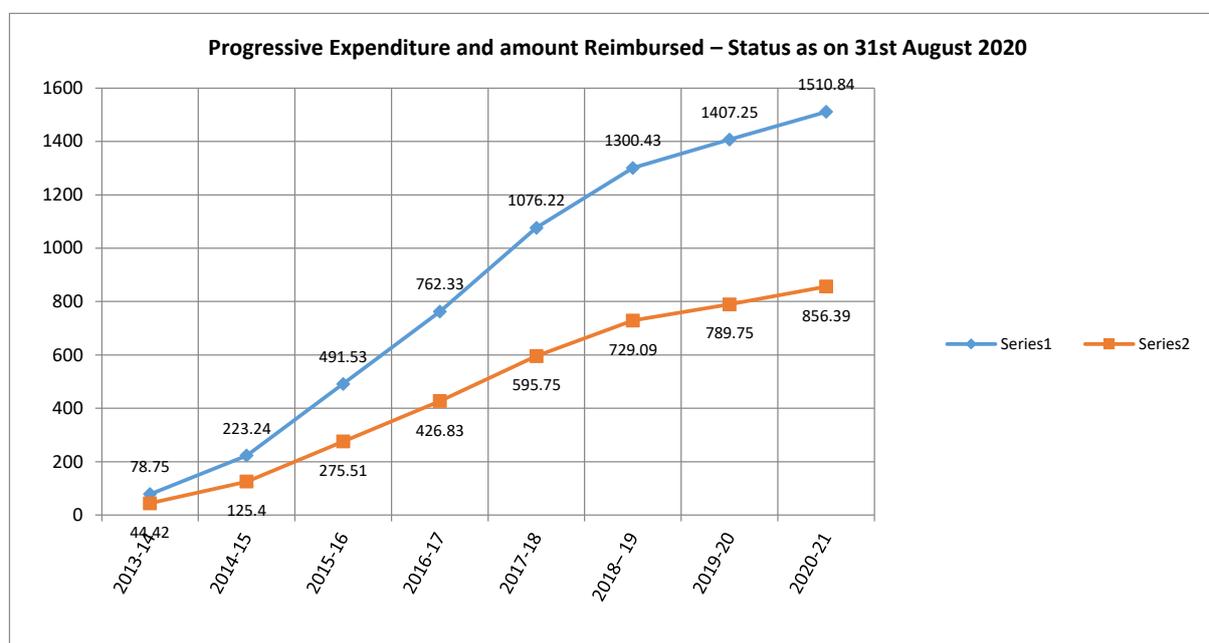
16	3 rd quarter	01.10.15 to 31.12.15	10,338.17	5,790.00	8.51	180.38
17	4 th quarter	01.01.16 to 31.03.16	6,413.18	3,592.00	5.38	175.00
18	quarter	14.03.16 to 31.03.16	2,861.91	1,603.00	2.41	172.59
19	1 st Quarter	01.04.16 to 10.06.16	2,037.40	1,141.00	1.69	170.90
20		11.06.16 to 22.06.16	2,957.89	1,657.00	2.45	168.45
21	2 nd Quarter	23.06.16 to 31.08.16	4,786.10	2,680.00	4.01	164.44
22		01.09.16 to 30.09.16	3,981.82	2,230.00	3.26	161.18
23	3 rd quarter	01.10.16 to 31.12.16	4,079.22	2,284.00	3.40	157.78
24	4 th quarter	01.01.17 to 31.03.17	9,237.79	5,173.00	8.04	149.74
25	1 st Quarter	01.04.17 to 31.05.17	4,292.74	2,404.00	3.72	146.02
26		01.06.17 to 30.06.17	3,933.36	2,203.00	3.44	142.58
27	2 nd Quarter	01.07.17 to 30.09.17	5,897.52	3,303.00	5.10	137.48
28	3 rd quarter	01.10.17 to 31.12.17	5,319.40	2,987.00	4.69	132.79
29	4 th quarter	01.01.18 to 28.02.18	6,770.27	3,791.00	5.82	126.97
30	quarter	01.03.18 to 22.03.18	3,935.30	2,204.00	3.39	123.58
31		23.03.18 to 31.03.18	1,241.57	695.00	1.04	122.54
32	1 st Quarter	01.04.18 to 31.05.18	1,925.29	1,086.00	1.61	120.93
33		01.06.18 to 20.06.18	1,114.33	627.00	2.02	118.91
34		21.06.18 to 22.06.18	1,344.42	753.00		118.91
35		23.06.18 to 30.06.18	89.25	50.00	0.07	118.84
36	2 nd Quarter	01.07.18 to 18.09.18	7,104.38	3,982.00	5.49	113.35
37	3 rd quarter	19.09.18 to 31.12.18	5,817.34	3,258.00	4.59	108.76
38	4 th quarter	01.01.19 to 28.02.19	3,075.19	1,722.11	2.49	106.27
39		01.03.19 to 31.03.19	1,950.03	1,127.00	1.63	104.64
40	1 st Quarter	01.04.19 to 30.04.19	2,420.03	1,355.22	1.93	102.71
41		01.05.19 to 20.06.19	1,522.48	853.00	1.23	101.48
42		21.06.19 to 27.06.19	2,247.92	1,303.00	1.89	99.59
43	2 nd Quarter	28.06.19 to 30.09.19	2,961.19	1,689.00	2.35	97.24
44	3 rd Quarter	01.10.19 to 31.12.19	1530.80	865.00	1.22	96.01
45		01.12.19 to 31.12.19	1513.75	875.00	1.23	94.79
46	4 th Quarter	01.01.20 to 31.03.20	5038.19	3086.00	4.07	90.72
47	1 st Quarter	01.04.20 to 30.06.20	3805.99-	2703.00	3.58	87.14
						87.14
			151,033.52	85.638.56	128.32*	

*excluding front end fee

4.2 Progressive Expenditure and amount Reimbursed – Status as on 31st Aug 2020

Year	Cumulative Expenditure (INR Crores)	Progressive Amount Reimbursed (INR Crores)
2013-14	78.76	44.18
2014-15	223.24	125.12

2015-16	491.53	275.52
2016-17	805.26	451.21
2017-18	1076.23	603.04
2018- 19	1300.43	729.09
2019-20	1407.25	789.75
2020-21	1510.84	856.39



**Estimated Actual loan allocation and disbursement received
(Bank’s Financial Year (July to June) (US\$ million)**

Fiscal Year	2014	2015	2016	2017	2018	2019	2020	2021
	July 2013- June 2014	July 2014- June 2015	July 2015- June 2016	July 2016- June 2017	July 2017- June 2018	July 2018- June 2019	July 2019- June 2020	July 2020- June 2021
Annual	22	43	45	54	32	20		
Cumulative	22	65	110	164	196	216		
Actual	8.92	14.62	23.48	25.86	23.75	19.25	12.44	0.11*
Cumulative	8.92	23.54	47.02	72.88	96.63	115.88	128.32	128.43*

*excluding front end fee

4.3 RESTRUCTURING

Through their letter dated May 11, 2018, the Department of Economic Affairs, Ministry of Finance, and Government of India had submitted a request for restructuring of the loan.

Considering the floods and damages witnessed by the state in August 2018, through their letter dated November 15, 2018, the DEA submitted a revised request for utilizing the savings (USD 45 million) from KSTP II Loan for rebuilding the Kerala initiative

A new Component “D” was introduced, the funds of which were to be utilized for PWD /LSGD and RKI roads. Under this component, roads affected during the floods of Aug 2018 identified by PWD and further prioritized by Transaction Advisors M/s LNTIEL, based on World Bank suggestions shall be taken up for DPR preparation. The details are more fully described in this report in the following chapters.

No.	Activity	Cost (in Million \$ By Gok)	Bank financing (in Million\$)
1	PWD roads	40.00	23.00
2	LSGI roads and other Infrastructure	33.00	19.00
3	Support to RKI	6.00	3.00
	TOTAL	80.00	45.00

However, Gok decided to remove LSGI roads under this and instructed that this be used by KSTP only. Hence 19 Million USD is added in Component A2 taking that to a total of 33 M USD + 19 M USD = 52 M USD under RKI roads of PWD, the funds of 23 M USD + 3 M USD = 26.0 M USD for Component D is proposed.

Component	Original Loan Allocation (Million USD)	Revised Loan Allocation (Million USD)	Completed Loan in (Million USD) till August-2020
Component A1: Road Network Upgrading and Safety Improvement (282 Kms Upgrading)	166	121	107.62*
Component A2: Road upgrading and safety Improvement (EPC) (82.04 Kms)	33	52	3.65*
Component B: Road Safety Management	12	12	10.25*
Component C: Institutional Strengthening	5	5	6.03*
Component D: RKI Roads		26	0.88
Total	216.0	216.0	128.43*

5 Current Project Status

5.1 Component A1:

The upgrading works under the initial stage hereinafter referred to as **Component A1** for seven roads were identified and taken up under the KSTP-II. The major items of works included were an improvement to the gradient, widening, and strengthening the roads including minor realignments wherever essential, reconstruction of narrow bridges and culverts, and improvements to the drainage system. The carriageways proposed are generally 2 lane roads with a width of 7.0 m and hard shoulders of 1.50 m. on either side. The Right of Way is generally 15.0 Meters and required acquisitions at some locations. The specification adopted for civil works is as per MORTH-Rev 5 & IRC standards. All these seven packages were tendered under World Bank Procurement guidelines and as Item Rate Contracts. The details of these roads are summarized in table 1. The land acquisition for the project roads is almost completed except in the Perimbilavu- Pattambi- Perinthalmanna Road. Package 3 was further split into two packages and accordingly Package 3A and 3B were tendered. Two additional stretches of Thiruvalla Town and Bypass were taken up as Package 4A and 4 B. In total there are 10 Packages under Component A1 as shown in the table covering a total length of **285.01** km. Out of these, Packages 4, 5, 6 & 7 are completed while six are in progress. Packages 1 and 2 are almost completed and in the “defect liability period” with ongoing pending works under road furniture items, snag list, and additional junction improvement work. These works were undertaken as there were savings in the estimated tendered cost.

Table 1

Sl.No	Package No	Stretch of the Project Road	Type of Contract	Length (Km.)
1	KSTP-2/UG/1	Kasargod-kanhangad	Item Rate BOQ	27.78
2	KSTP-2/UG/2	Pilathara-Pappinssery	Item Rate BOQ	20.90
3	KSTP-2/UG/3A	Thalassery-Kalaroad	Item Rate BOQ	28.80
4	KSTP-2/UG/3B	Kalaroad-Valavupara	Item Rate BOQ	25.20
5	KSTP-2/UG/4	Chennaganoor-Ettamannoor	Item Rate BOQ	47.70
6	KSTP-2/UG/4A	Thiruvalla by pass (rearranged from Package 4)	Item Rate BOQ	2.30
7	KSTP-2/UG/4B	Thiruvalla town (rearranged from Package 4)	Item Rate BOQ	2.00
8	KSTP-2/UG/5	Ettamannoor-Muvattupuzha	Item Rate BOQ	40.96
9	KSTP-2/UG/6	Ponkunnam-Thodupuzha	Item Rate BOQ	50.00
10	KSTP-2/OL/7	Perimpilavu-Perintalamanna	Item Rate BOQ	39.37
Total Length under this Component in Km is				285.01

All the works are being executed under FIDIC (5th edition) Conditions of Contract. The work involves improvement of State Highways including geometrical improvements and realignments to standard 2 lanes of 7 m carriageway and 1.5 m paved shoulders. The Construction Works include:

- Widening the existing pavement where it is less than design width;
- Scarification, clearance, earthworks,
- Granular sub-base, wet mix macadam base course, bituminous mix surfacing,
- Construction of overlays to the existing pavement, inclusive of regarding to a designed vertical profile;
- Geometrical realignments at specific locations;
- Construction of paved shoulders.
- Construction and maintenance of diversion roads
- Construction of lined and unlined longitudinal drains covered drains and footpaths in urban areas.
- New culverts, new bridges, and rehabilitation of existing bridges/culverts and protective works
- Provision of road signs and markings.
- Provision of traffic safety features - road furniture and other road safety appurtenances,
- Routine maintenance and maintenance during the Defects Rectification Period.
- Environmental protection measures and Social enhancement works/ landscaping works etc.

5.2 Detail of the Supervision Consultants for the Packages under this component is as below

Name of consultant	Contract signed	Contract Period	Commence ment Date	Contract Amount (Rs.) revised amount as per Variation 4	Work Package
CSC-1 – M/s Egis International in JV with M/s Egis India Pvt. Ltd.	28.02.2013	42 months	04.04.2013	54,18,21,349/-	IIIA , III B , IVA, &IVB (137.07km)

Package VII is under KSTP and supervision monitoring was done by Divisional Office PWD SE

M/s Egis International in JV with M/s Egis India Pvt. Ltd has been given an extension of time up to 31-12-2020 to facilitate the completion of works under Component A 1.

5.3 SUMMARY AND STATUS OF THE WORKS UNDER COMPONENT A 1, A 2, B & C

Project Details of KSTP-2 under Sub Component A 1 Date: (31.08.2020)																									
Package No	Stretch of the Project State Highway / Road Number	Type of Contract	KSTP Incharge	Contractor's Name	Supervision Consultant	Proposed Length (Km.)	Cost /km	In Million Rs	In US Million	InEuro Million	In Euros	Date of Commencement	Original Completion date	EOT Date	EOT-2 (Date)	EOT-3 (Date)	Extended Completion date (Latest)	DLP	Awarded Cost of the Project (Cr.)	Value upto IPC submitted /Final Payment done as on date in Crores	Additional Works	Saving / Overbudget/ Running Bills	Status of the project	Remarks	Remarks / Reasons
KSTP-2/UG/1	Kasargod-kanhangad-SH-57	Item Rate BOQ	Shyamial	M/s.RDS Projects Limited	EGIS India	27.78	4.79	478.94	0.68	0.61		01.04.2013	23.04.2015	28.02.2018			31-07-2020	31-07-2021	133.05	122.86	6.15	4.04	Completed	Section 1 : 0+000 to 23+180 & 23+350 to 27+780 (TOC 01-04-2018)	Additional work is in progress in DLP period of Bakal road
KSTP-2/UG/2	Pilathara-Pappinssery-SH-67	Item Rate BOQ	Rujesh	M/s.RDS Projects Limited	EGIS India	20.90	5.66	565.98	0.81	0.73		01.04.2013	22.04.2015	31.03.2018			31-07-2020	31-07-2021	118.29	101.62		16.67	Completed	Section 1 : Except Ramapuram bridge and Thavam ROB (01-04-2018)	Additional work is in progress in DLP period of Oxbow land & Ramapuram bridge
KSTP-2/UG/3A	Thalassery-Kalaroad-SH-30	Item Rate BOQ	Rujesh	M/s.Dinesh chandra R.Agarwal Pvt.Ltd.,	EGIS India	28.80	5.43	542.81	0.78	0.70		27.06.2016	26.06.2018		31.03.2019	31.10.2020	31.10.2020	31.10.2021	156.33	104.81		51.52	Physical progress : 65.24 % Financial progress : 65.025%	Section 1 : Road works other than Eranholi Bridge	IPC-23 Certified by Employer
KSTP-2/UG/3B	Kalaroad-Valavupara-SH-30	Item Rate BOQ	Shyamial	M/s.GHV-EKK Infrastructure & Co.	EGIS India	25.20	8.32	832.06	1.19	1.07		26.09.2016	25.09.2018	31.01.2019	15.05.2019		31.07.2020		209.68	191.46	5.06	13.16	Physical progress : 87.47 % Financial progress : 87.24%	Section 1 : Except Iritty Bridge and Kootupuzha Bridge	IPC-36 is submitted by Contractor
KSTP-2/UG/4	Chennaganoor-Ettamanoor-SH-1	Item Rate BOQ	Chandu	M/s Delma Sreedhanya Jv.	EGIS India	47.70	6.15	615.47	0.88	0.79		15.09.2014	24.11.2017	31.03.2018			31-03-2018	31-03-2019	293.58	278.18		15.40	Completed	TOC issued 01.04.2018	
KSTP-2/UG/4A	Thiruvalla by pass (rearranged from Package 4)	Item Rate BOQ	Sonu	M/s.GHV India Pvt Ltd	EGIS India	2.30	16.10	1610.00	2.30	2.06		07.01.2019	06.10.2019	NIL	NIL		30-09-2020	30-09-2021	37.03	16.56		20.47	Physical progress : 55.72 % Financial progress : 46.03%	EOT Proposed	IPC-07 Certified by Employer
KSTP-2/UG/4B	Thiruvalla town (rearranged from Package 4)	Item Rate BOQ	Sonu	M/s.EKK Infrastructure Ltd.,	EGIS India	2.00	3.89	388.50	0.56	0.50		07.01.2019	06.10.2019	NIL	NIL	15-12-2019	15-06-2020	15-06-2021	7.77	4.83	0.93	2.94	Physical progress : 90.0 % Financial progress : 63.06 %	EOT Proposed	DLP from 15th June
KSTP-2/UG/5	Ettamanoor-Muvattupuzha	Item Rate BOQ	Sonu	M/s.NAPC Ltd.,	EGIS India	40.96	4.19	418.68	0.60	0.54		30.12.2013	03.08.2016	25.02.2018			25-02-2018	25-02-2019	171.49	163.68		7.81	Completed	Performance certificate issued Section 1 : 06.02.2019 Section 2 : 25.02.2019	
KSTP-2/UG/6	Ponkunnam-Thodupuzha	Item Rate BOQ	Rujesh	M/s.GHV-EKK Infrastructure & Co.	M/s MSV International USA	50.00	4.54	454.26	0.65	0.58		05.05.2014	09.12.2016	28.03.2017			28-03-2017	28-03-2018	227.13	223.25		3.88	Completed		
KSTP-2/OL/7	Perimpilavu-Perintalamanna	Item Rate BOQ	XXXX NA	M/s Nath constructions	Under KSTP	39.37	0.21	20.60	0.03	0.03		19.02.2016	02.03.2017				02-03-2017	02-03-2018	8.11	8.11		0.00	Completed		
Total Length under this Component in Km is						285.01	4.78	478.04	0.68	0.61									1362.46	1215.36		135.89			

Project Details of KSTP-2 under Sub Component A 2																		
Sl.No	Package No	Stretch of the Project Road	Type of Contract	Contractor's Name	Supervision Consultant	Length (Km.)	Estimated Cost	Original completion Date	Appointed date	Revised Appointed date	Awarded Cost of the Project (Cr.)	Actual Unt Cost /km in Crores	Additional Works	Saving / Overbudget/ Running Bills	Status of the project	TOC /Completion certificate issued	Remarks / Reasons	Variation Order/ Supplementary Agreement Status
1	KSTP-2/OL/8A	Punalur-Konni	Engineering Procurement Construction (EPC)	To be decided by Steering Committee	M/s Consulting Engineering Services	29.84	226.61				237.94							
2	KSTP-2/OL/8B	Konni - Placherry	Engineering Procurement Construction (EPC)	M/s.EKK Infrastructure Ltd.,	M/s Consulting Engineering Services	30.16	274.74	29-10-2021	09-10-2019	01-11-2019	279.00	13.85			Physical progress : 4.38% Financial progress : 3.53%	Mobilisation advance taken		
3	KSTP-2/OL/8C	Placherry -Ponkunnam	Engineering Procurement Construction (EPC)	J V of M/s Sreedhanyaand Nath Constructions	M/s Consulting Engineering Services	22.17	236.79	21-12-2021	06-09-2019	23-12-2019	248.5	12.43			Physical progress : 14.70 % Financial progress : 11.911%	Mobilisation advance taken		
						82.17	738.14				765.4405							

Safe Corridor Demonstration Project (Under Component B & C)																			
Sl. No	Package No	Stretch of the Project Road	Type of Contract	Contractor's Name	Supervision Consultant	Length (Km.)	Original Completion date	EOT		DLP		Awarded Cost of the Project (Cr.)	Revised cost of the Project (Cr)	IPC Payment in Cr	Saving / Overbudget/ Running Bills /Balance	Status of the project	Completion certificate issued	Remarks / Reasons	
								Completion date	Completion date	Duration from Completion date									
4	KSTP-2/OL/8	Kazhakuttom-Adoor	Item Rate BOQ	M/s.GHV-EKK Infrastructure & Co.	under KSTP (AEE/AE/EE)	78.65	27.04.2018	31.12.2019	30.09.2020			146.67	138.23	122.51	8.44	Physical progress :93.99% Financial progress: 88.81%	EOT proposed upto 30-09-2020	SCDP project under Component of B & C	Revised cost is 138.23 Cr
Overall Length inKm						445.83													

Challenge Fund of KSTP																			
Sl. No	Package No	Stretch of the Project Road	Type of Contract	Contractor's Name	DPR Consultant	Length (Km.)	Date of Commencement	Completion date	DL P		Estimated Cost of the Project (Cr.)	Awarded Cost in Lakhs	Revised Cost of the Project (Cr)		Status of the project	Completion certificate issued	Remarks / Reasons		
									Completion date	Duration from Completion date									
1	Single Package for DPR's	Vypin-Munambam	Item Rate Contract or EPC to be Decided	M/sEGISIndia PvtLtd		25.00	CF-02, CF-03 & CF-04 are Tendered on 24-08-2020 Prebid Meeting is on 08-09-2020 and Last Bid Submission date is on 23-09-2020			10.02		37.11		Other Roads are in final stage for tendering					
2		Medical College-Kannamoola-Pallimukku-Pettah				5.00				7.50		7.74							
3		Thrissur-Kunnamkulam State Highway				24.30				4.00		39.08							
4		Kottiyam-Kundara Road				11.600				5.00		23.55							
5		Pavangad-Korapuzha				5.500				10.00		5.65							
						71.40			36.52			113.13							

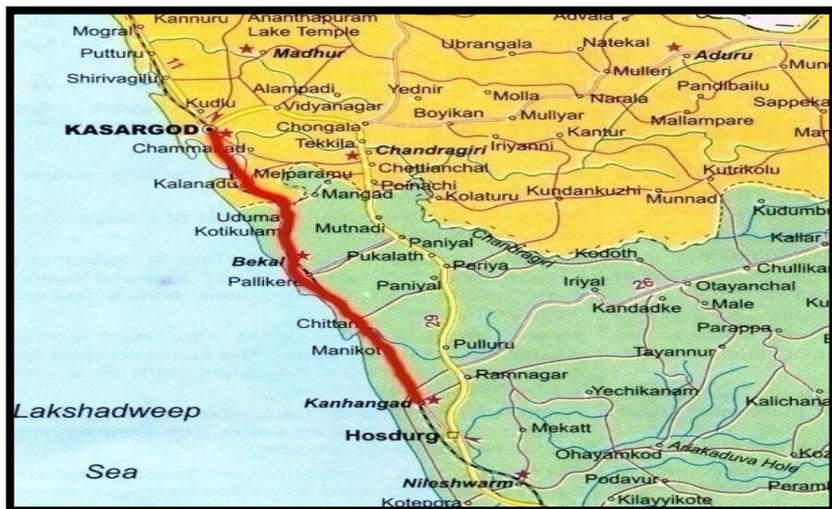
Component D (RKI Roads Flood control)																		
Sl. No	Package No/Type	Stretch of the Project Road	Type of Contract	Contractor's Name	Supervision Consultant	Length (Km.)	Estimated Cost	Original completion Date	Appointed date	Duration of the Project	Awarded Cost of the Project (Cr.)	Actual Unit Cost /km in Crores	Addition al Works	Saving / Overbudget/ Running Bills	Status of the project	TOC /Completion certificate issued	Remarks / Reasons	Variation Order/ Supplementary Agreement Status
1		Chemmannar Gap road Km.0/00to31/500(except km.10.650)	Engineering Procurement Construction (EPC)	M/s DRAIPL – GREENWORTH (JV)	M/s Consulting Engineering Services	29.94	127.55	LoA Issued on 7 th May		12 Months	146.67	4.90			Agreement done on 3 rd Aug			
2		Painavu-Thannikandom	Engineering Procurement Construction (EPC)	M/s.EKK Infrastructure Ltd.,	M/s Consulting Engineering Services	21.00	86.82	29.04.2021	30.04.2020	12 Months	95.40	4.54			Survey work is in progress			
3		Adoor- Chenganoor	Engineering Procurement Construction (EPC)	M/s.EKK Infrastructure Ltd.,	M/s Consulting Engineering Services	23.8	93.59	29.03.2021	30.03.2020	12 Months	98.1	4.12			Survey work and mobilisation of machineries & man power deploying			
						74.74	301.39				193.5							

Details below as per MPR submitted by EGIS -August- 2020

5.4 Packages under Component A1 Status

5.4.1 Kasargod to Kanhangod Road –SH-57

This stretch of Length - 27.76 km. Covers Kasargod, Pallikkara, Manikoth, and Kanhangad areas and Tourist destinations at Bakel Fort and Ezhimala come under this stretch.



Name of Contractor	Original date of completion	Contract Value in Crores	Physical Progress in % (Up to August-2020)	Financial Progress in % (Up to August-2020)
M/s RDS Projects Pvt Ltd	23-04-2015	133.05	99 %	99%
EOT Date	DLP completion date	Variation Order Value in crores	Anticipated Revised Project Cost	Billed Amount made till the end of August-2020 in Crores
28-02-2018	27-02-2019	21.66	121.99	122.86

The Taking-Over Certificate issued for Sections:

- Except for Kanhangad town w. ef 01st April 2018
- For Kanhangad town w.e.f 01st July 2018
- Performance Certificate has been issued on 25.02.2020

Work as per the Snag list has been completed. However, since the as-built drawings, PAP works & additional works proposed have not been completed, the Defect Liability Period has been extended.

Initial Contract Value (Rs.)	-	1,33,05,79,485/-
Contract value of works executed (Rs.)	-	92,86,10,752/-
Value of works as per VOs (Rs.)	-	21,66,82,406/-
Price adjustment as finalized (Rs.)	-	2,57,41,802/-
Additional works proposed	-	4,88,93,909/-

Total Value including Price Adjustment	-	1,21,99,35,883/-
Saving in Project Cost	-	Rs. 11,06,43,602/-

Construction Activities

Works as per the Snag list completed. Based on the instructions from the Employer, the Contractor has performed certain additional works during DLP. Additional works proposed for Kanhangad town, Palakkunnu widening work have been completed. The status of additional works for Bekkal Road is furnished below:

Due to Elec. Pole, not Shifted, the balance work has been pending from 14+ 550 to 14+590 LHS. Performance Certificate issued. As-built drawings submitted are under review and reconciliation of quantities is in progress. Draft Final Statement has to be submitted.

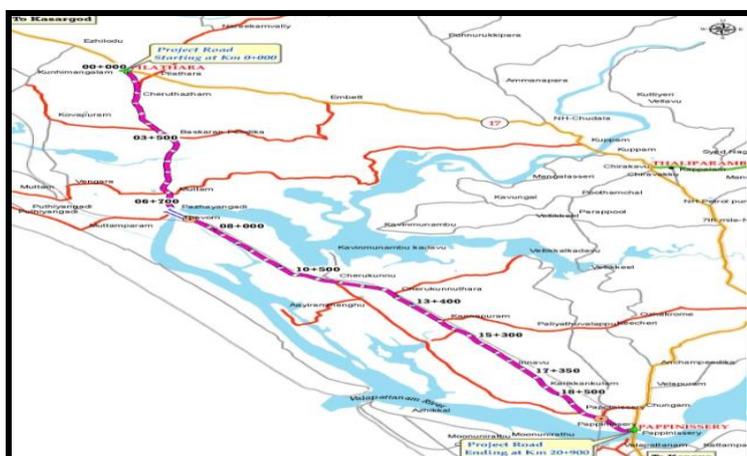
Additional Works

Additional works entrusted to the Contractor during DLP is completed except the hindered location of Km. 14+800. The works remaining is the one-way road on the western side of Pallikkara ROB and the proposed drain for this road. The land issue has been cleared and shifting of electric cable and setting the electric post to the extreme edge of ROW is pending to be completed for taking up this additional work.

5.4.2 Key Issues /Delays in August-2020

- Contract for Rehabilitation of existing Bridges at “Bakal” and “Chandragiri” on KK road through E-tendering has been awarded to M/s PADMAJA SPECIALITIES, Kochi and Agreement executed. Rehabilitation Works about Chandragiri Bridge have been completed and the works for Bakal Bridge are in progress.
- The progress of Works is very slow, and the Employer has extended the time of completion till July 2020 with the imposition of Liquidated damages for this work.

5.5 Package 2 -Pilathara -Pappinissery-SH-67



Name of Contractor	Original date of completion	Contract Value in Crores	Physical Progress in %	Financial Progress in %
--------------------	-----------------------------	--------------------------	------------------------	-------------------------

			(Upto August-2020)	(Up to August-2020)
M/s RDS Projects Pvt Ltd	22-04-2015	118.29	99 %	99 %
EOT Date	DLP completion date	Variation Order Value in crores	Anticipated Revised Project Cost	Billed Amount made till the end of August-2020 in Crores
31-03-2018	31-03-2019	15.96	98.330	101.62

The Taking-Over Certificate issued for Sections:

- Except Ramapuram Bridge and Thavam ROB w.e.f 01st April 2018
- For Ramapuram Bridge and Thavam ROB w.e.f 01st September 2018

Since the work as per Snag List has not been completed, the Defect Liability Period has been extended for Section – 1.

Summary of Project Cost

Initial Contract Value (Rs.)	-	1,18,29,77,833/-
Contract value of works executed (Rs.)	-	82,36,71,794/-
Value of works as per VOs (Rs.)	-	15,96,32,324/-
Price adjustment as finalized (Rs.)	-	22,68,74,96/-
Additional Works proposed	-	1,56,78,061/-
Total Value including Price Adjustment	-	98,33,04,118/-
Saving in Project Cost	-	Rs. 19,96,73,715/-

Construction Activities

During DLP, instructions were issued by KSTP and Supplementary Agreement executed to carry out certain additional works like reconstruction of the Old Ramapuram Bridge Approach and development of Oxbow land at Ramapuram as proposed by the MLA. Later, certain modifications again suggested by MLA, and accordingly, the Contractor submitted the revised design and Cost Estimate. This has been forwarded to the Employer for approval. The employer has awarded an extension of time for completion for Oxbow land development and construction of Approaches to the old Ramapuram bridge up to 31.10.2020.

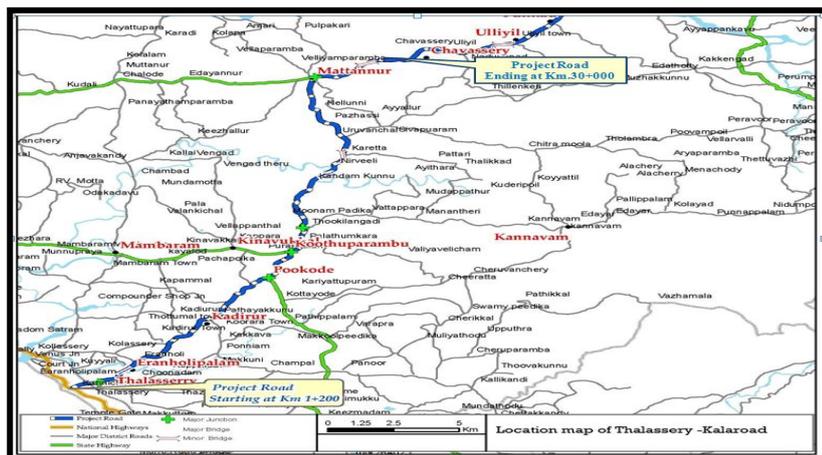
PROJECT	Upgradation of the Road from Pilathara (Km 0+000) to Pappinissery (Km 20+900) of SH-67				
CLIENT	Project Director Kerala State Transport Project Phase II				
CONSULTANT	M/s Egis International SA IN JV with Egis India Consulting Engineers Pvt Ltd				
CONTRACTOR	M/s RDS Project Ltd				
Proposed cellular type Approach at Ramapuram Old River Bridge (4+260)					
STAUTS OF WORK AS on 31.08.2020					
Item	Cost of Works	%	Works completed	% Completion	Remarks
Foundation	45,80,395	43%	43,84,981	41%	Pile cap PCC (4 nos completed) - 1 No Pile cap completed at A1 side
Substructure	26,00,481	24%		0%	
Superstructure	26,87,716	25%		0%	
Highways	8,64,269	8%		0%	
Total	1,07,32,861	100%	43,84,981	41%	
Pile completed	14		14	100%	
PILE CAP		Completed	In progress		
A1 SIDE					
P1-P2	1	1			
P3-P4	1		1		
P5-P6	1		1		
A2 SIDE					
P7-P8	1				
P9-P10	1				
P11-P12	1				
P13-P14	1				
	7	1	2		

PROJECT	Upgradation of the Road from Pilathara (Km 0+000) to Pappinissery (Km 20+900) of SH-67						
CLIENT	Project Director Kerala State Transport Project Phase II						
CONSULTANT	M/s Egis International SA IN JV with Egis India Consulting Engineers Pvt Ltd						
CONTRACTOR	M/s RDS Project Ltd						
Proposed Development of Oxbow land							
STAUTS OF WORK AS ON 31.08.2020							
Project cost	Cost of Work	% of BOQ	Works completed	% Completion (BOQ)	% Completion individual	Remarks	
Landscape+ Green Room+ Retaining wall	46,20,419	43%	36,13,999	34%	78%		
Café (Restaurant)	37,30,487	35%	15,30,230	14%	41%		
Entracne Arch+ Ticket Counter	5,68,470	5%	3,17,130	3%	56%		
Compound wall	11,97,595	11%	9,28,486	9%	78%		
Open Theatre	6,43,721	6%	3,98,167	4%	62%		
	1,07,60,693	100%	67,88,012	63%	63%		
Physical Status	Foundation	Substructure	Superstructure	Electrical & Plumbing	Flooring	Finishing	Remarks
Landscape+ Green Room+ Retaining wall	Completed	Completed	Roof Truss & Mangalore Tile Work completed	Conduit completd + Underground cable laying Completed+ Garden light fixed (29 Nos)	Vitrified tile works for Floor & wall (toilet complex) completed	(Interlock works for foot path and sitting arrangement completed)	Planting of trees 30 Nos, Planting of hedges (border plant- 202 mtr completed) turfing (800 Sqm) completed and balance in progress + Laying of UG Cables for electrification Completed+ Fixing of Garden lights Completed + interlock tile works completed
Café (Restaurant)	Completed	Completed	Roof Truss works in progress	Conduit completed	CC flooring completed+ Wall tiles (vitrified) for wash room completed	Balance Plastering in progress	
Entracne Arch+ Ticket Counter	Completed	Completed	Roof Truss & mangalore Tile	Conduit completed		Balance Plastering in progress	
Compound wall	Completed	Completed	Completed	Conduit completed	Nil	Painting in Progress	
Open Theatre	Completed	Completed	Completed	Conduit completed	Vitrified tile work completed	Cladding tile work	

Key Issues/ Delays in August-2020

- Contract for Réhabilitation of existing Bridges at Pazhayangadi on PP road through E-tendering has been awarded to M/s PADMAJA SPECIALITIES, Kochi and Agreement executed.
- Rehabilitation Works pertaining to Pazhayangadi Bridge is in progress. The progress of Works is very slow and the Employer has extended the time of completion till July 2020 with the imposition of Liquidated damages.

5.6 Package 3A– Thalassery to Kalaroad -SH-30



Name of Contractor	Original date of completion	Contract Value in Crores	Physical Progress in % (Upto August-2020)	Financial Progress in % (Upton August-2020)
M/s.DineshChandra R Agrawal Pvt.Ltd	26-06-2018	156.33	65.24	65.025
EOT-03 (For Road Work & Eranholi Bridge - Approved)	EOT-04 (Approved)	Variation Order Value in crores (VO-01 to VO-09)	Anticipated Revised Project Cost	Billed Amount made till the end of August-2020 (Net Amount)
31 st October-2019 31 st Dec-2019	31 st March - 2020	19.96 Cr	152.29	104.81 Cr

The Contract for the Upgradation of Road from Thalassery (Km.1+200) to Kalarode (Km.30+000) has been awarded to M/s Dinesh Chandra R Agrawal Infracon (P) Ltd. The date of commencement of the Project was 27th June 2016 and the stipulated time of completion for completion of Milestone-I was 26th September 2017 and for Milestone-II was 26th June 2018. However, EOT-01 to EOT-05 has been granted by the Employer.

- EOT-01 - Milestone-I merging with Milestone-II Completion date of 26th June 2018
- EOT-02 - Completion of Whole of Works by 31st March 2019

- EOT-03 - a. Eranholi Bridge Approaches and Service Road and whole project road from Km 1+200 to Km 30+000 by 31st October 2019
- b. Commissioning of Eranholi Bridge -31st December 2019
- EOT-04 - Completion of Whole of Works by 31st March 2020
- EOT-05 - Extension of Time for the whole project including Ernholi Bridge and approaches up to 30.10.2020.

Work Progress

Cumulative Physical progress achieved is 65.24% as per original contract value and 66.97% with respect to assessed revised estimate of 152.29 Crores

SI No.	Item	Monthly Progress	Cumulative Progress	Balance Work
	Main Carriageway			
1.	Exc up to SG	0.120Km	26.990 Km	1.810 Km
2.	GSB	0.100 Km	26.950 Km	1.850 Km
3.	WMM	-	26.805 Km	1.995 Km
4.	DBM	-	26.780 Km	2.020 Km
5.	BC	-	21.153 Km	7.648 Km
	Structures			
6.	Major Bridge @ 2+910	Decks slab concrete completed between Pier P2-P3	The bridge has been redesigned by giving 5m vertical clearance conforming to the standards of the Inland Navigation Department and the drawings approved by the Client. The design has been proof checked by IIT, Palakkad. Pier work completed at P1, P2 & P3. Pedestal concrete and Fixing of Elastomeric Bearing on Pier P2 & P3. Girder Launching and deck slab concreting completed between Pier P2 & P3. Piling work completed at Abutment A1 &A2 location. 3Nos out of 3Nos of PSC Girder casting completed. A pile load test was completed at both Abutments. Pile cap bottom PCC completed at Abutment A2.	
7.	Minor Bridge @ 21+162		Bridge completed and opened for traffic.	
8.	Major Bridge @19+758		Bridge completed and opened for traffic.	

SI No.	Item	Monthly Progress	Cumulative Progress	Balance Work
9.	Minor Bridge @ 29+570		Bridge completed and opened for traffic.	
	Culverts			
10.	Pipe Culvert		Pipe Culverts - 6 Completed out of 6 Nos	
11.	Box Culvert		Box Culverts –30 Completed out of 30 Nos	
12.	Slab Culvert	-	Slab Culverts – 29 Completed out of 30 Nos.	
13.	Drain- Placing	330 Lm	22813 m Completed out of 23890 m	
14.	Gabion Wall	271.5 Cum	4770.9cum Completed out of 4995 Cum	

Financial Progress

Up to end of previous Month		This Month		Cumulative to end of this Month	
Target	Achieved	Target (as per Rev. Wp)	Achieved	Target	Achieved
74.057%	64.464%	10.666%	0.561%	84.723%	65.025%**

*As per the revised program Revised work program after incorporating the CSC’s observation is yet to be submitted by the Contractor.

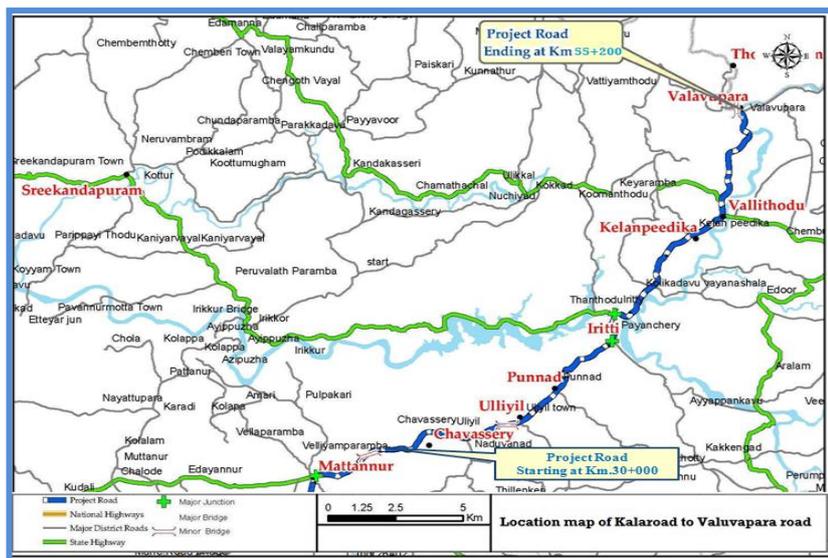
**Cumulative Financial progress achieved is 65.025 %. The assessed revised cost of the project is Rs.152.29 crores and based on this, the financial progress will be 66.17%.

- Further details may be found in Annexure - 5.4, 5.5, 5.6, 5.7 & 5.8 are enclosed for details regarding Progress of Work.

5.6.1 Key Issues in August-2020

- Due to the COVID-19 outbreak, the migrant laborers were returned to their home, an acute shortage of laborers is being by the Contractor.
- Delay in Acquisition of Additional Land for Eranholi Bridge due to the Revision of Design.
- Delay in shifting of BSNL & Electric poles due to shortage of BSNL staff to supervise the works and delay in getting permission for shut down.
- About 35% of works are remaining. Progress of works are slow and the Contractor to deploy more workforce for achieving completion by the stipulated time of 31st October 2020.

5.7 Package 3B – Kalaroad –valavupara



Name of Contractor	Original date of completion	Contract Value in Crores	Physical Progress in % (August-2020)	Financial Progress in %(August-2020)
M/s.GHV-EKK Infrastructure & Co	25-09-2018	209.68	87.47	86.27
EOT-04- for Road Works & Major Bridges (Approved)	TOC Issued for Road works	Variation Order Value in crores (V0-1 to V0-19)	Anticipated Revised Project Cost	Billed Amount made till end of August-2020 (Net Amount)
15 th July-2019 31 st Dec-2019	16 th July-2019	9.242	205.22	191.46Cr

EOT-04 has been granted to complete the works on 15th July 2019 and award the time of completion for Iritty and Koottupuzha Bridges along with approaches as 31.12.2019.

Taking over certificates have been issued for a) Km. 30+000 to Km.40+000 with effect from 16th March 2019 and b) Km. 40+000 to Km.55 +200 (except Bridges & its Approaches of Iritty and Koottupuzha) from 16th July 2019. The contractor has submitted an application for a Performance Certificate. However, certain works as per the Snag list and defects notified are remaining to be completed and therefore, DLP has been extended.

Extension time has been granted for completion of the Iritty Bridge up to 31.07.2020 & Koottupuzha Bridge and their approaches up to 30.04.2021 have been approved by Employer in 111th Steering Committee Meeting On 29th April-2020.

Work Progress

Cumulative Physical progress achieved is 87.47%

Sl. No.	Item	Monthly Progress	Cumulative Progress
1	GSB	-	23.60 Km
2	WMM	-	23.56 Km
3	DBM	-	23.56 Km
4	BC	-	23.56 Km
Structures			
5	Minor Bridge Ch. 35+405 Uliyil bridge.		completed
6	Major Bridge Ch. 42+198 Rarity bridge.	Dirt wall reinforcement work at A2 side and Shuttering work is in progress for the P1-P2 span	Revised drawing for piles (6nos), Pile cap, and piers for piers P1 and P2 approved. Foundation & Substructure – Completed. A1-P1 and A2-P2 superstructure work completed except crash barrier and wearing coat. N truss erection/shifting work completed, and shuttering work is in progress for P1-P2 span
7	Major Bridge ch. 53+865 Kootupuzha bridge		Deck slab of A1-P1 & P1-P2 span completed. Crash barrier and kerb for A1-P1 and P1-P2 were completed. Works of P3, P4, A2 stopped by Karnataka Forest Department. The case has been resolved and the contractor was asked to restart the work.
8	Culverts	Nil	Box culvert- 49 Nos completed out of 50 nos. Pipe Culvert- 22 Nos completed out of 22 nos. Widening/slab culvert – 14 Nos completed out of 14 nos.
9	Precast Drain - Casting		29842 m out of 30922 m.
10	Drain (Precast + Cast in situ) placing	Nil	33380 m out of 36730m.
11	LED Solar Street Lighting	Nil	247Nos.
12	OV Road		
	DLC		806 m
	PQC		806 m
	Drain		1256 m
	DBM & BC		200 m
	Paver Block		2045 Sqm
	Pazhassi Park		Work in progress

Financial Progress

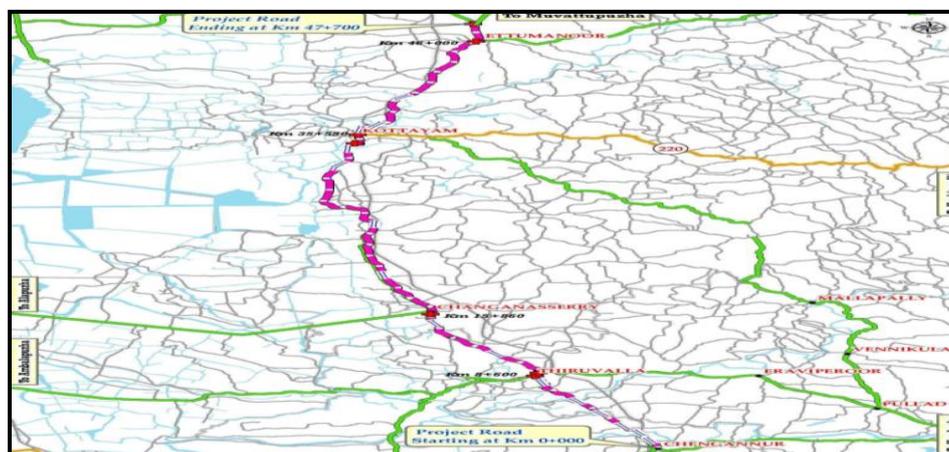
Up to end of previous Month		This Month		Cumulative to end of this Month	
Target	Achieved	Target	Achieved	Target	Achieved
100.00%	87.20%*	*	0.04%	100.00%	87.24%**

***Cumulative Financial progress with respect to the revised Estimate cost of Rs. 205.22 crore is 88.15 % Contractor has stopped the work on 23rd March 2020 due to Covid-19 Lockdown announced by Government.*

Key Issues August-2020

- Stockyard for excess earth stacking to be finalized.
- In the heavy rains during the first week of August, a landslide occurred and the high laying portion adjacent to the roadway at Km. 42+660 LHS has slide down for a length of 30 m from a height of 12-15 m. Proposal submitted to KSTP for the construction of a gabion wall for this location.

5.8 Package 4– Chengannur - Ettumanoor – Muvattupuzha – SH1



Chengannur Ettumanoor Muvattupuzha stretch of SH-1, MC (Main Central) Road, one of the most important and oldest roads in Kerala, passing through Thiruvalla, Changanassery, Kottayam, Ettumanoor, Kuravilangad, Kuttathukulam. The total length covered is 88 km.

The road portion from Thiruvananthapuram (Venjaramoodu) to Chengannur was taken up under Phase I. Bypass at Thiruvalla also forms part of this stretch. The road passes through the plantation areas and provides access to the tourist centers of Kumarakom and Thekkady. 13 bridges will be constructed in this stretch.

The improvement for this road portion is proposed in three construction packages, Chengannor-Ettumanoor (41km), Ettumanoor-Muvattupuzha (47km), and Thiruvalla Bypass (2.30 km). Reconstruction of three Major Bridges and Nine Minor Bridges are included in this stretch.

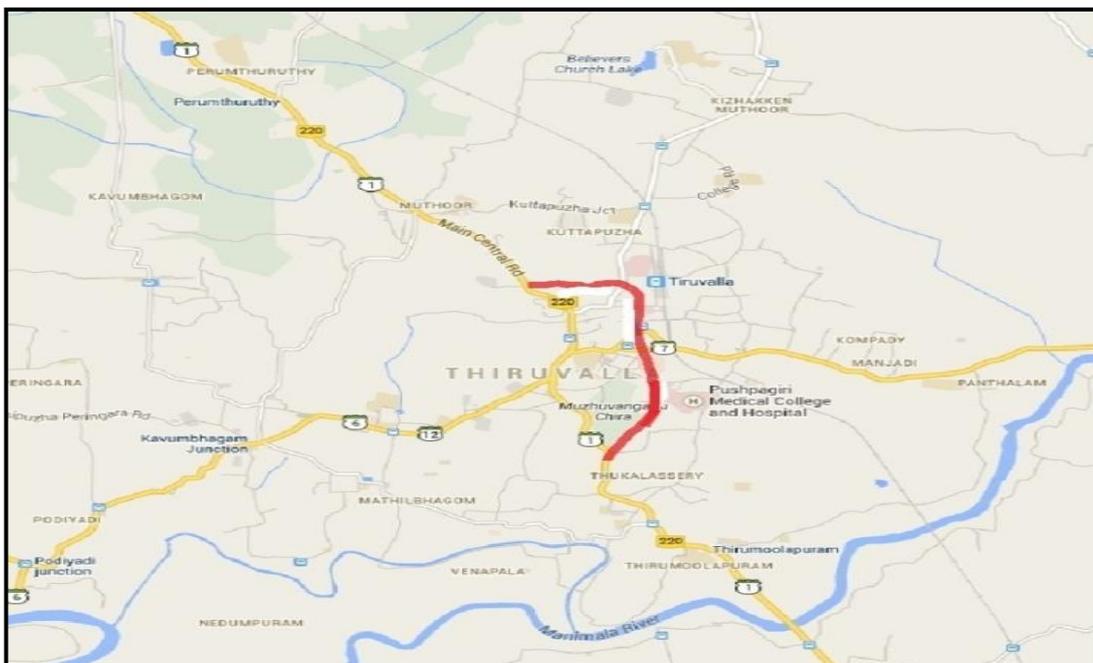
Name of Contractor	Original date of completion	Contract Value in Crores	Physical Progress in %	Financial Progress in %
M/s Delma Sreedhanya Jv	24-11-2017	293.58	completed	completed
EOT Date (Approved)	TOC Issued date	Variation Order Value in crores	Anticipated Revised Project Cost	Billed Amount made till date
31-03-2018	01.04.2019			

Salient Features of this Package

Scope of Works (45.40 Km):

- Construction of Major Bridges - 3
- Construction of Minor Bridge - 5
- New Box culverts - 9
- Widening Slab culverts - 8
- Reconstruction of Culverts - 59
- Footpath, solar lights

5.9 Package 4A – Thiruvalla bypass



Name of Contractor	Original date of completion	Contract Value in Crores	Physical Progress in % (August-2020)	Financial Progress in % (August-2020)
M/s.GHV-EKK Infrastructure & Co	06-10-2019	37.03	55.24	46.03
Date of commencement	EOT-01 – Approved	Variation Order Value in crores	Anticipated Revised Project Cost	Billed Amount made till end of August-2020 (Net Amount)
07.01.2019	31.12.2019	1.80 Cr		16.55 Cr

The date of commencement of this project is 07th January 2019 and the date of completion is 6th October 2019. Works are not completed, and EOT-1 is issued by the Employer for the whole project up to 30-04-2020. Further EOT-02 recommended to the Employer for approval till 30 September 2020.

Work Progress

Cumulative Physical progress achieved is 55.24%

Sl. No.	Item	Monthly Progress	Cumulative Progress
1	GSB	0.00 km	1.630 Km
2	WMM	0.00 km	1.490 Km
3	DBM	0.00 km	1.490 Km
4	BC	0.00 km	1.700Km
5	Roadwork Details		<ul style="list-style-type: none"> BC work from Km:0+000 to Km:1+710 has been completed. Construction of islands of the road junction at the start point (0+000) of the bypass is partially completed. Work stopped due to public protest. GSB Work completed from Km:2+150 to Km:2+220.
	Structures		
6	Minor Bridge at km 0+390		<ul style="list-style-type: none"> Minor bridge structure was completed by the previous contractor. All the remaining works completed and opened to traffic

Sl. No.	Item	Monthly Progress	Cumulative Progress
7	Viaduct from km 1+780 to km 2+016	<ul style="list-style-type: none"> • Pier cap completed at P3 • 7 Nos of PSC girders has been cast • Reinforcement work for the P2 pier cap and Reinforcement work for 2 girder is in progress. 	<ul style="list-style-type: none"> • Piling works completed. Total 60 Nos Done. • Pile caps were completed at all locations. • Pier completed at all locations and pier cap completed at P1, P3, P4, P5, P6, P7, P8, and abutment cap completed at A1 & A2. • 27 Nos of PSC girder has been cast out of 36 Nos required for the superstructure and 12 Nos has been launched. Pre-stressing work has been completed on 15 Nos of girders. • Reinforcement work for the P2 pier cap and Reinforcement work for 2 girder is in progress.
8	Flyover at 1+300		<ul style="list-style-type: none"> • Bridge properly completed by the previous contractor. • Work on RE wall and friction slab over RE wall at A1 side approach of flyover and BC laying work on both approaches has been completed. • Wearing coarse over Bridge, crash barrier, expansion joint works, and crash barrier painting work completed on the flyover. • Opened to traffic
Drain and Protective Works			
9		<ul style="list-style-type: none"> • Connection drain work from Km:2+300 to Km:2+350 is in progress. • Widening of Culvert at Km:2+300, RHS is in progress. wall work in progress. 	<ul style="list-style-type: none"> • RCC Breast wall completed from Km:1+460 to Km:1+480 • Stone Masonry Retaining wall Completed from Km:1+393 to Km:1+402, Flyover A2 side. • Gabion wall works completed from Km 0+050 to Km:0+700 B/s. 1100m has been completed.

Sl. No.	Item	Monthly Progress	Cumulative Progress
		<ul style="list-style-type: none"> L wall 2nd lift at Km:1+780 RHS has been completed. 	<ul style="list-style-type: none"> PCC Retaining wall Work completed at Km:1+120(B1-B1 Jn) RCC drain work completed at Km:0+000 (towards Chengannoor) for a length of 87.5m and from Km: 0+000 to Km:0+012 for a length of 11.5m. Turfing work from Km: 0+080 to Km:0+600 B/S has been completed and from Km0+600 to Km:0+800 it is partially completed. Metal Beam Crash Barrier fixing work from Km:0+050 to Km:0+800 B/S has been partially completed.1200mdone. Cross Culvert works completed at 1+420 Footpath & handrail fixing work partially completed at 0+100 and flares of B1-B1 Junction V drain work completed from Km:1+410 to Km:1+500 B/s RCC drain work is partially completed at 1+410, LHS(A2 side approach to municipal road connection under bridge). Work stopped. RR Masonry work under flyover is partially completed. Reinforced earth wall casting for Viaduct A2 approach is completed for 300 sqm out of 364 sqm RCC Deep drain work completed from Km:2+250 to Km:2+300, RHS. Widening of Culvert at 2+300, RHS is in progress. wall work in progress. L wall 2nd lift at Km:1+780 RHS has been completed.

Progress achieved up to 31st August 2020 in comparison with the original programme is given in the table below:

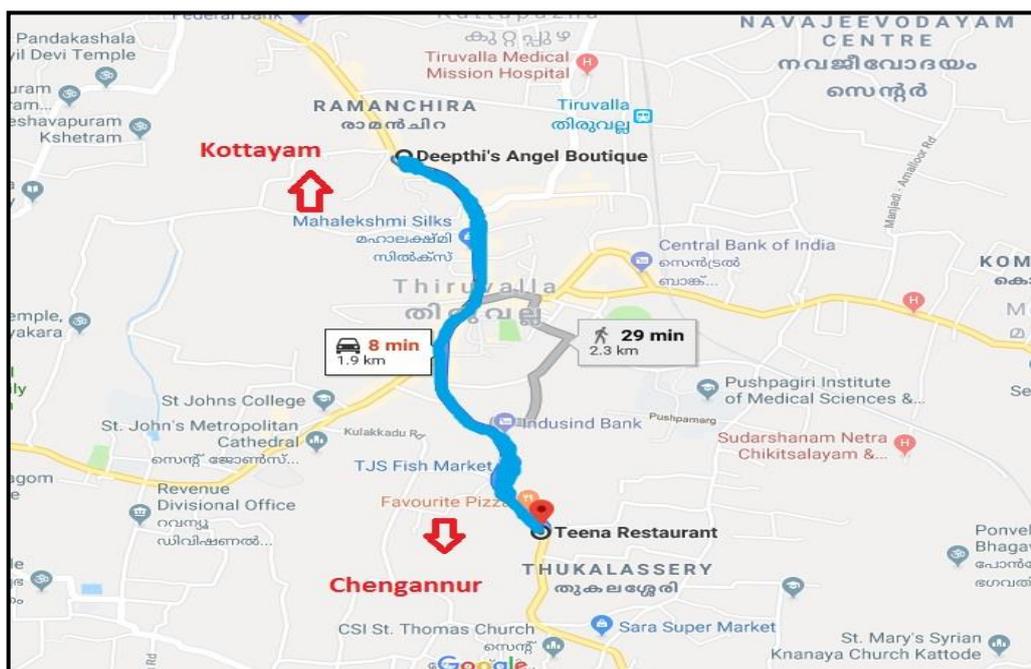
Financial Progress

Up to Previous Month		This Month		Cumulative upto end of this Month	
Target	Achieved	Target	Achieved	Target	Achieved
100%	41.33 %	-	0.00%	100%	46.03%

Key Issues/ Delays in August-2020

- Construction of islands of the road junction at the start point (0+000) of the bypass is partially completed. Work stopped due to public protest.
- The work on precasting of PSC girders is very slow and this would prolong the time required for the completion of the viaduct. So far, only 27 Nos of PSC girder has been cast out of 36 Nos required for the superstructure.
- Due to public protest, gaps left on the Metal Beam crash barrier as they have approached the court for providing individual access to their properties. Considering the road safety aspect gaps to be completed.
- As per the schedule, the Viaduct can be completed only by January 2021.

5.10 Package 4B– Thiruvalla town



Name of Contractor	Original date of completion	Contract Value in Crores	Physical Progress in % (August-2020)	Financial Progress in % (August-2020)
M/s.GHV-EKK Infrastructure & Co	06-10-2019	7.77	90.00	63.06
Date of commencement	EOT-01 – Approved	Variation Order Value in crores VO-01	Anticipated Revised Project Cost	Billed Amount made till end of August-20 (Net Amount)
07.01.2019	15 th Dec-2019	0.202 Cr		4.84 Cr

The date of commencement of this project is 07th January 2019 and the date of completion is 6th October 2019. Works are not completed, and the Contractor has requested for EOT-01.

The work has been provisionally completed on 15th December 2019 and the certificate of completion has been issued on 29th May 2020. The balance work as per the snag list to be completed during the early part of DLP, by 15th August 2020.

The contractor has stopped the work on 23rd March 2020 due to Covid-19 issues. The work has been restarted on 13th May 2020.

5.10.1 Work Progress

Physical progress achieved is about 90.00% and financial progress achieved is 63.06% against 100% as per the original program.

Sl. No.	Item	Monthly Progress	Cumulative Progress
1	Roadwork (Total Length 2.010 Km)		<ul style="list-style-type: none"> BC works completed from 7+440 to 9+230. Balance 50m of interlock tile laid area will be relayed under Pkg-4A. Kerb Fixing work for footpath completed. 3200m completed. Interlock Footpath Laying work completed. 4200Sqm completed. Road marking and stud fixing and signboard fixing works completed PCC Retaining wall completed at 7+600 (22m done)
	Structures		

Sl. No.	Item	Monthly Progress	Cumulative Progress
2	Culverts		<ul style="list-style-type: none"> New RCC Box Culvert work Completed at Rejinamundi.
3	Drain		<ul style="list-style-type: none"> Cast-in-situ drain work completed for 372m Drain cleaning works completed at the site. Total 1124m done. Cover slab replacement work completed.

Progress achieved up to 31st August- 2020 in comparison with the original programs given above.

Financial Progress

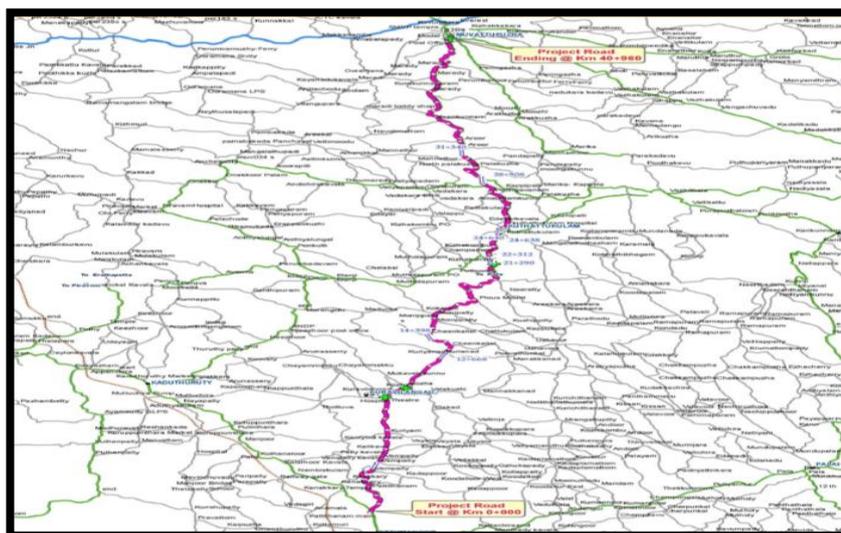
Up to Previous Month		This Month		Cumulative up to end of this Month	
Target	Achieved	Target	Achieved	Target	Achieved
100%	63.06%	*	0 %	100%	63.06%

*Revised program yet to be submitted by the Contractor.

Key Issues/Delays in August-2020

Nil

5.11 Package 5– Ettamanoor- Muvattupuzha

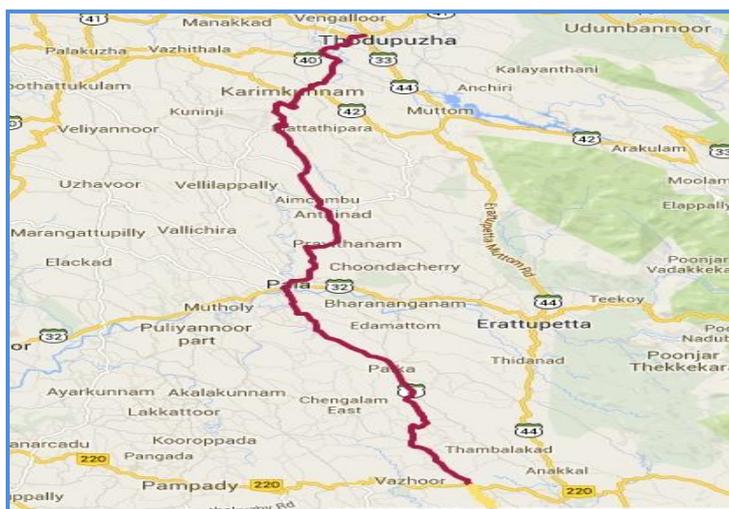


Name of Contractor	Original date of completion	Contract Value in Crores	Physical Progress in %	Financial Progress in %
M/s.NAPC Ltd	03-08-2016	171.49	100%	100%
EOT Date	DLP completion date	TOC Issued date	Savings in Crores	Billed Amount made till date in Crores
25-02-2018	25-02-2019	NA	15.28	156.21

This work was completed including the DLP which ended on 25-02-2019. The closure report was resubmitted by CSC and is under review by PMC for further submission to World Bank for compliance.

5.12 Package 6-Ponkunnam – Thodupuzha – SH 8

Punaloor - Ponkunnam, and Ponkunnam - Thodupuzha stretches of SH 8 are the two stretches. The total road length is 132 km.



Name of Contractor	Original date of completion	Contract Value in Crores	Physical Progress in %	Financial Progress in %
M/s.GHV-EKK Infrastructure & Co	09-12-2016	227.13	Completed	Completed
EOT Date	DLP completion date	Variation Order Value in crores	Savings in Crores	Billed Amount made till date in Crores
28-03-2018	28-03-2019	NA	15.90	211.23

Salient Features

Scope of work (46.363 km)

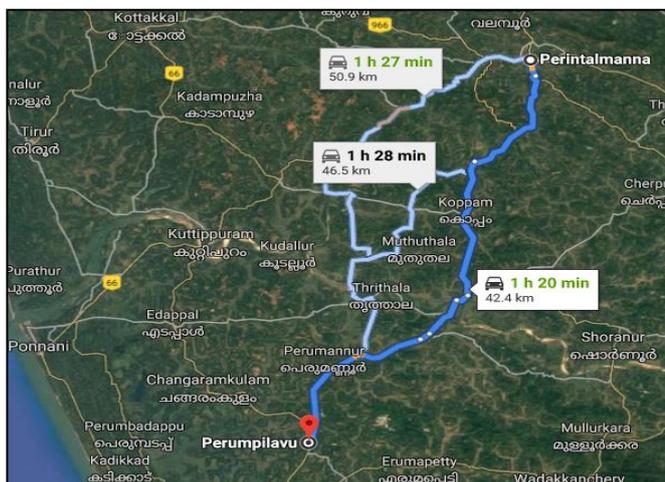
Minor Bridge reconstruction - 1 no.

Culvert:

- Reconstruction - 109 nos.
- Widening - 44nos.
- New Construction - 7 nos.
- Drain - 65 km

This work was completed including the DLP which ended on 28-03-2018. The closure report submitted by CSC was not in accordance with the World Bank requirement. The same is being resubmitted.

5.13 Package 7 -Perimpilavu -Perinthalmanna



Name of Contractor	Original date of completion	Contract Value in Crores	Physical Progress in %	Financial Progress in %
M/s Nath constructions	02-03-2017	8.11	100 %	100 %
EOT Date	DLP completion date	Variation Order Value in crores	Savings in Crores	Billed Amount made till date in Crores
NA	02-03-2018	NA	NIL	8.11

This work was completed including the DLP which ended on 02-03-2018. The closure report submitted by CSC was not in accordance with World Bank requirements and hence needs to be resubmitted with all data.

5.14 Component A 2:

5.14.1 Authority Engineers for Packages 8 A, B, and C & Three RKI Roads

The RFP for appointing **Authority Engineers** for Packages 8 A, B, and C are also uploaded and bids called for. In addition to these three roads, three additional roads from the “Rebuild Kerala Initiative “(RKI)

have also been added in the scope of works for the AE role. The additional three roads are complimented under **Component D** which is a newly added component under World Bank funding and are a part of the 59 roads identified by PWD under the Rebuild Kerala Initiative.

Steering Committee has given approval in their 108 MOMS dated 17-09-2019 for awarding to M/s CEG Ltd and accordingly the agreement between KSTP and CEG Ltd was signed on the 16th of October 2019. The consultants were instructed to mobilize and commence their services as per the Contract Agreement.

5.14.2 Upgradation of Road from Punalur to Ponkunnam (82.17 km)

The Component A2 of the KSTP –II was proposed between Punalur and Ponkunnam roads as PPP hybrid annuity model. For this purpose, the KSTP had appointed a Transaction Advisor (TA) M/s L&T Infrastructure Engineering Ltd, Chennai to assist in designing the annuity concession.

Government of has obtained a loan of 33 USD millions in this component from the International Bank for Reconstruction & Development as financial assistance for the construction cost of the KSTP-II, which aims at Upgrading Punalur to Ponkunnam road (SH 8) from Km 0+000 to Km 82+173 (Package 8A, Package 8B & Package 8C) of State Highway. The Construction Supervision and contract administration of the contracts being procured under EPC modality in three packages is the subject of this Terms of Reference (ToR). In addition to the above, the Government of Kerala has proposed for the rehabilitation of many roads under ‘Rebuilt Kerala Initiatives’.

Works: The EPC Contract works in KSTP-II are procured/ being procured in 3 packages along with Three RKI Roads. These packages are as below:

Sl. No.	Category	Contract Package	Name of Work	Length (Km)	Construction Period	Maintenance Period
1.	Category A	KSTPII/PMT/UG 8A	Punalur to Konni	29.840	24 Months	60 Months
		KSTPII/PMT/UG 8B	Konni to Placherry	30.160		
		KSTPII/PMT/UG 8C	Placherry to Ponkunnam	22.173		

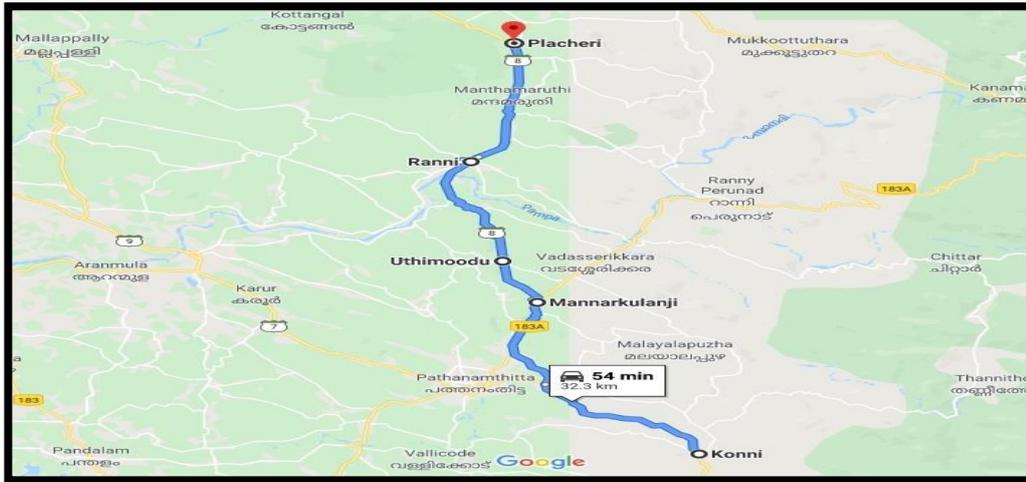
5.14.3 Package 8 B - Konni – Placherry

This road is proposed to be taken up as Package 8 B with a project length of 30.16 km. The DPR for this was prepared by M/s LNTIEL with an estimated cost of 274.24 Crores. The Bid process was done under NCB, Single Stage, and Two-envelope Bidding Process using E-procurement.

Approval from World Bank was received for this Package 8 B work on 01-07-2019. LOI to M/s EKK Infrastructure Limited on 08-07-2019. On submission of the performance security Environmental, Social, Health, and Safety (ESHS) performance security by the contractor in accordance with the bidding document, agreement was signed with the contractor on 22.08.2019. The duration of the construction works is 24 months with a maintenance period of 5

Years. Initial preparatory work on this stretch has been commenced by the Contractor and work is in progress on 01.11.2019.

5.14.4 Package 8B Status –Konni to Plachery



Project Name	Upgrading Punalur to Ponkunnam road (SH 8)) Package 8B: Km 29+840 (Konni) to Km 60+000 (Placherry)
Length of the Road	30.160 Km
Name of Contractor	M/s EKK Infrastructure Limited
Type of Contract	Engineering, Procurement, Construction (“EPC”)
Agreement No & Date	22.08.2019
Date of Award (LOA Date)	03.07.2019
Appointed Date	06.09-2019
Reappointed Date	01.11.2019
Construction Period (in Days)	730
Maintenance Period (in Months)	60
Scheduled Date of Completion	29.10.2021
Authority Engineer	Consulting Engineers Group Ltd, Jaipur
AE Agreement Date	16-10-2019
AE Mobilization Date	04-11-2019
Chainage of the Project (in Km)	km 29.840 to 60.000
Total Project Cost (in Cr)	279.00

Project	Description	Planned	Actual	Delay	Current
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Milestone	(Days from Appointed Date)	Physical Progress (%)	Scheduled Date	Physical Progress (%)	Revised Date	(No. of months)	Status
Milestone I	290	20%	15.08.2020	Nil			
Milestone II	440.	55%	12.01.2021				
Milestone III	585	75%	06.06.2021				
Scheduled Completion	730	100%	29.10.2021				

Physical Progress

Physical Progress till August-2020 is 3.52%

Description of Work	Unit	Length (in KM)		Remarks
		Completed	In Progress	
Highway Works				
TBM Traversing& OGL Recording	KM	30.160	-	Completed
Clearing &Grubbing	KM	7.790	0.500	
Embankment Top	KM	0.00	0.710m	In Progress
Subgrade to BC	KM	-	-	Not yet Started
RCC Drain (Pre-Cast &Cast-in situ)	RM	1370	852	In Progress
Structure Works				
Pre-cast Box Culverts (Casting)	Nos	18	02	In Progress
Box Culverts (Laying +Cast-in situ)	Nos	1	6	In progress
Pipe Culverts	Nos	-	-	Not yet Started
Slab Culverts	Nos	-	-	Not yet Started
Toe wall	RM	60	120	In Progress
Gabion wall	RM	-	160	In Progress
Retaining wall	RM	-	-	Not yet Started
Minor Bridges	Nos	-	-	Not yet Started
Major Bridges	Nos	-	-	Not yet Started

Component	% Weightage	Sub Component wise progress during the month			Component wise -Physical Progress (%)		
		Sub Component	%weightage	%Progress	During Current Month	Up to previous month	Cumulative, Up to Current Month
Road Work	45.18%	Up to Subgrade	2.08%		1.083	1.127	2.201
		Rock cutting	5.90%				
		GSB (subbase, base, shoulders)	40.59%				
		Bituminous work	26.61%				
		Paver block	5.90%				
		Widening and repair of culverts	2.04%				
		Widening and repair of minor bridges	0.76%				
		New culverts	1.06%				
		Reconstruction of culverts	13.08%	2.201%			
		Reconstruction of minor bridges	1.98%				
Major Bridgewor ks, underpasses, overpasses, and ROB/RUB	0.77%	Foundation	19.03%				
		sub structure	14.47%				
		Super structure (including crash barrier etc. Complete)	66.51%				
Other Works	54.05%	Road Side Drain	36.36%	4.330	2.851	1.828	4.679
		Road signs, markings, km stones, safety devices, road appurtenances	2.24%				
		Bus bays	1.23%				
		Bus shelters	0.53%				
		Turfing, kerb, W-metal beam	7.42%				

Component	% Weightage	Sub Component wise progress during the month			Component wise -Physical Progress (%)		
		Sub Component	%weightage	%Progress	During Current Month	Up to previous month	Cumulative, Up to Current Month
		crash barrier, pedestrian guard rails					
		Safety & Traffic Management During construction	0.01%				
		Junctions	2.21%				
		Retaining wall	36.19%	0.349			
		Footpath, utility culverts, utility ducts, roadside lighting, site clearance, and general items	13.72%				
		EMP works and monitoring of environment attributes, ESHS requirement	0.09%				
Total	100%						

Some of the details of the current work front available (As per Authority Engineer’s Report) is as below

Current issues

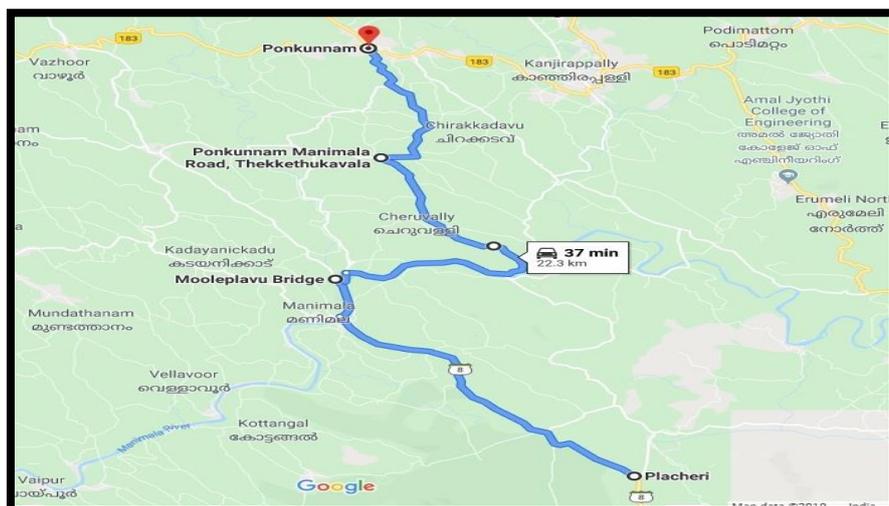
1. The process for utility shifting needs to be done expeditiously so that works are not be hindered for want of shifting of utilities.
2. Commencement of Construction Activities delayed due to COVID 19 Lockdown.
3. Slow Progress of works due to Poor & Improper Planning and Programme.
4. Revised Work program & EOT Not submitted by the contractor
5. Slow work progress
6. Delay in Mix Design for GSB, WMM, DBM&BC.
7. Contractor’s Material Engineer poor performance
8. Delay in submission of GAD/Working Drawings
9. Feasibility report for structures not submitted

10. ROW & Chainage pillars erection
11. Delay in Establishment of WMM&HM Plants
12. Only Four Precast moulds are available for Box Culvert at the precast yard, instructed to increase the moulds to get the better progress.
13. Only Twenty-two Precast moulds are available for RCC Drain casting at the precast yard.
14. The inventory of PAP issues is not completed.

5.14.5 Package 8 C- Punalur to Ponkunnam

Three bids were received against this tender as per the table below. Accordingly, a revised Bid price of Rs 248.62, crores vide their letter to Chief Engineer KSTP dated 07-08-2019 was submitted by the Contractor. This offer was accepted by KSTP and LOI was issued to the Contractor on 13-08-2019. Due to Election and Moral Code of Conduct, the Agreement was signed with the Contractor on 24.09.19. Initial preparatory work on this stretch has been commenced by the Contractor and work is in progress since December-2019.

5.14.6 Package 8 C Status –Punalur-PonKunnum



Project Name	Upgrading Punalur to Ponkunnam road (SH 8) Package 8C: Km 60+000 (Plachery) to Km 82+170 (Ponkunnam)
Length of the Road	22.170 Km
Name of Contractor	M/s Sreedhanya Construction Company and M/s Nath Infrastructures
Type of Contract	Engineering, Procurement, Construction (“EPC”)
Agreement No & Date	24.09.2019
Date of Award (LOA Date)	13.08.2019
Appointed Date	09.10-2019
Reappointed Date	23.12.2021

Construction Period (in Days)	730
Maintenance Period (in Months)	60
Scheduled Date of Completion	21.12.2021
Authority Engineer	Consulting Engineers Group Ltd, Jaipur
AE Agreement Date	16-10-2019
AE Mobilization Date	04-11-2019
Chainage of the Project (in Km)	km 60.000 to 82.173
Total Project Cost (in Cr)	248.630

Project Milestone	Description (Days from Appointed Date)	Planned		Actual		Delay (No. of months)	Current Status	Remarks
		Physical Progress (%)	Scheduled Date	Physical Progress (%)	Revised Date			
Milestone I	290	20%	07.10.2020	Nil				
Milestone II	440.	55%	06.03.2021					
Milestone III	585	75%	29.07.2021					
Scheduled Completion	730	100%	21.12.2021					

Physical Progress

Physical Progress till August-2020 is 10.84 %

Description of Work	Unit	Length (in KM)		Remarks
		Completed	In Progress	
Highway Works				
TBM Traversing & OGL Recording	KM	22.173	-	Completed
Embankment Top	KM	-	0.560	In Progress
Sub-grade	KM	-	0.170	In Progress
GSB to BC	KM	-	-	Not yet started
RCC Drain (Laying)	RM	180	60	In Progress
RCC Drain (Pre-casting)	RM	3750	60	In Progress

Structure Works				
Box culverts	NOs	19	15	In progress
Pipe culverts	NOs	10	6	In progress
Toe wall	RM	60	305	In progress
Gabion wall	RM	940	1680	In progress
RCC Retaining wall	RM	50	20	In progress
Minor Bridge	NOs	-	-	Not yet started
Major Bridge (Pedestrian)	NOs	-	-	Not yet started

Component	% Weightage	Sub Component wise progress during the month			Component wise -Physical Progress		
		Sub Component	%weightage	%Progress	During Current Month	Up to previous month	Cumulative, Up to Current Month
Road Work	40.30%	Earth work Up to Subgrade	1.10%		1.91%	4.018 %	5.278%
		Rock cutting	10.74%	1.273			
		GSB (subbase, base, shoulders)	28.92%				
		Bituminous work	19.81%				
		Paver block	4.07%				
		Widening and repair of culverts	0.68%				
		Widening and repair of minor bridges	2.02%				
		B. New 2 lane realignment/bypass					
		Earth work Up to Subgrade	0.77%				
		Rock cutting	3.01%				
		GSB (subbase, base, shoulders)	9.62%				
		Bituminous work	4.95%				
		Paver block	1.54%				
		New culverts	0.80%	0.200			
Reconstruction of culverts	9.47%	4.255%					

Component	% Weightage	Sub Component wise progress during the month			Component wise -Physical Progress		
		Sub Component	%weightage	%Progress	During Current Month	Up to previous month	Cumulative, Up to Current Month
		Reconstruction of minor bridges	2.51%				
Major Bridgeworks, underpasses, overpasses, and ROB/RUB	1.16%	Foundation	19.01%				
		Sub structure	14.50%				
		Super structure (incl. crash barrier etc. Complete)	66.49%				
Other Works	58.54%	Road Side Drain	20.99%	6.37%	9.60%	6.807	16.402%
		Road signs, markings, km stones, safety devices, road appurtenances	1.99%				
		Bus bays	0.77%				
		Bus shelters	0.33%				
		Turfing, kerb, W-metal beam crash barrier, pedestrian guard rails	5.68%				
		Safety & Traffic Management During construction	0.02%				
		Junctions	2.13%				
		Retaining wall	59.05%	10.033			
		Footpath, utility culverts, utility ducts, roadside lighting, site clearance, and general items	9.02%				
		EMP works and monitoring of environment	0.03%				

Component	% Weightage	Sub Component wise progress during the month			Component wise -Physical Progress		
		Sub Component	%weightage	%Progress	During Current Month	Up to previous month	Cumulative, Up to Current Month
		attributes, ESHS requirement					
Total	100%						

Some of the details of the current work front available (As per Authority Engineer’s Report) is as below

1.Work front Unavailable & reason for Unavailability			2.Length completed by layer (MCW)			3.Length completed by layer (RCC drain and Footpath cum Drain)		
	Length (km)	% Total Length		Length (km)	% Total Length		Length (km)	% Total Length
Total Length	22.173	100%	Total Length	22.173	100%	Total Length	7.398 (BS)	100%
Total Work front available	22.173	100%	Total Length Completed (Till Date)	Nil	Nil	Total Length Completed (Till Date)	Nil	Nil
Pending Land Acquisition	Nil	Nil	BC	Nil	Nil			
			DGBM	Nil	Nil			
Pending Clearances			WMM	Nil	Nil			
Encumbrance			GSB	Nil	Nil			
Forest Area			Sub-Grade	Nil	Nil			
			Embankment	Nil	Nil			

Current issues

1. The process for utility shifting needs to be expeditiously so that works are not hindered for want of shifting of utilities.
2. Slow Progress of works due to Poor & Improper Planning and Programme.
3. Contractor not providing proper safety at work locations.
4. The contractor Not submitted the Revised Work program & EOT for approval
5. Slow Progress of works due to Poor & Improper Planning and Programme.

6. Mix Design for WMM, DBM&BC not finalized.
7. GAD/Working Drawings Not submitting.
8. PAP Issues & their proposals
9. ROW &Chainage pillars erection Not done by the contractor.
10. The establishment of WMM&HM Plants has not started.
11. Need to improve safety arrangements at the construction zone.
12. Poor workmanship was observed at Gabion wall construction locations.
13. Instructed to the Contractor to rectify the Geotextile work, Boulders sizes and
 - Line and level.
14. Only 40 No. Precast moulds are available for RCC Drain casting at
 - precast yard.
15. Poor Workmanship observed at structural Works locations.
16. Inventory of PAP completed, Proposal for PAP need to submit
17. Need to expedite the Utility shifting works.

5.14.7 Package 8 A Status

Five Bids were received for this package from Bidders as per the table below

Sl. No.	Name of Bidder	Nationality	Whether technical bid opened/ not opened	Remarks
1	M/s RDS Project Limited and M/s Cherian Varkey Construction Co. Pvt. Ltd. (Joint Venture)	Indian	Opened	JV with M/s RDS Project Limited as lead member
2	M/s. EKK Infrastructure Limited	Indian	Opened	Single Entity
3	M/s Sreedhanya Construction Company and M/s Rudranee Infrastructure Ltd. (Joint Venture)	Indian	Opened	JV with M/s Sreedhanya Construction Company as lead member
4	M/s Dinesh Chandra R. Agrawal Infracon Private Limited	Indian	Opened	Single Entity
5	M/s Ranjit Buildcon Limited	Indian	Opened	Single Entity

After technical evaluation of the bids received, it is concluded that Turnover requirement for M/s. EKK Infrastructure Limited is Rs. 520 Cr as per Clause 2.3.2 (Average Annual Construction Turnover) of Section III: Evaluation and Qualification Criteria of RFP, since M/s. EKK Infrastructure Limited has awarded with Package 8B. But the average annual turnover of M/s. EKK Infrastructure Limited is Rs. 287.52 Cr only. As per the letter received from M/s. EKK Infrastructure Limited vide letter no. EKK/TNDR/2019/330 dated 07/05/19; they are not eligible for Package 8 C if Package 8 B is awarded to them. Hence, the bid of M/s. EKK Infrastructure Limited shall be rejected as per Clause 32.3of Instruction to Bidders as Non-responsive

While M/s. Sreedhanya Construction Company and M/s Nath Infrastructures (Joint Venture – 80%:20%) who are the only qualified bidders for Package 8 C and likely to be awarded this work. For Package 8 A, M/s. Sreedhanya Construction Company has submitted its bid along with M/s Rudranee Infrastructure Limited as Joint Venture (51%:49%), in which Sreedhanya Construction Company is the lead member. M/s. Sreedhanya being a lead member for both packages, their eligibility criteria to meet the turnover requirement is 60% of aggregate turnover i.e., Rs. 282 Cr (60% of Rs. 470 Cr), whereas the turnover of M/s. Sreedhanya Construction Company is Rs. 96.48 Cr., hence they are not eligible for Package 8 A. So, bid of M/s. Sreedhanya Construction Company and M/s Nath Infrastructures (Joint Venture) shall be rejected as per Clause 32.3 of Instruction to Bidders (Non-responsive)

Accordingly, the Evaluation Committee reviewed the technical bids and recommends financial bid opening of the remaining three bidders only I; e

- 1) M/s RDS Project Limited and M/s Cherian Varkey Construction Co. Pvt. Ltd. (Joint Venture)
- 2) M/s Dinesh Chandra R. Agrawal Infracon Private Limited and
- 3) M/s Ranjit Buildcon Limited as technically responsive for opening of their price bid

Accordingly, the Financial Bids of these three firms were opened and scrutinized.

The Bid Price quoted by M/s RDS Project Limited in JV with M/s Cherian Varkey Construction Co. Pvt. Ltd., was Rs 221.04crores, M/s DineshchandraRAgrawalInfracon Private Limited was Rs. 225.50 crores and RanjitBuildcon Limited was Rs. 240.14 crore against the estimated price of 226.61 crores. The Final Evaluation report was submitted to World Bank recommending rejection of M/s RDS Project Limited in JV with M/s Cherian Varkey Construction Co. Pvt. Ltd. by stating the FIR filed against the company by Vigilance and Anti-Corruption Bureau on 21st August 2019. But World Bank vide the replied dated 27th August 2019 has informed that the Bank would not accept blacklisting/debarment based on State rules/procedures even if the case is concluded. As such the Bank returned the Final Evaluation Report to review the decision of The Evaluation Committee and to consider the offer of M/s RDS Project Limited in JV with M/s Cherian Varkey Construction Co. Pvt. Ltd.

The matter was placed before the Steering Committee on the 4th Of Septemeber 2019 and the steering committee decided to award the work to L2 - M/s Dinesh Chandra .R. Agrawal infraction Private Limited, using state share of KSTP since they are willing to take up the work at the quoted rate of L1 amounting to Rs.221.04crores. Since the Appeal has now shifted to Court, the decision from the Court has waited for further necessary action.

In addition to these three roads, the following three roads under Rebuild Kerala Initiative were taken up under Component A 2.

5.15 Component B: Road Safety Component

The focus of the Road Safety Program Comprises of the following tasks:

- a. To strengthen the capacity of the Kerala Road Safety Authority and Road Safety Cell of PWD to introduce Sustainable International Best Practice in designing, implementing, and Evaluation on Road Safety.
- b. Development of Safe Corridor Demonstration Project (SCDP) by implementing the Multi-sectoral interventions to demonstrate the effectiveness of Road Safety Best Practices. The Kazhakkootam – Thaikod – Kottarakara – Adoor Corridor (80 km) improved during KSTP-I is identified for this purpose having a high density of traffic. This work is in progress and is further detailed in the following chapter under 16 further.

c. Road Safety Capacity Building of the institutions responsible for managing Road Safety in the State.

d. To replicate the lessons learned from the Safe Corridor Demonstration Project to develop another 10 safe corridors across the State through local partnerships using the challenge fund and the matching fund from the KRSA

KSTP appointed M/s VicRoads, Australia, an internationally experienced consultant to support in implementing the above programs. The consultant has conducted stakeholders' meetings and trained the Engineers and others in designing various Road Safety interventions in the SCDP. The bid has been approved by the Steering Committee and the works awarded. The overlay works and Road Safety interventions are clubbed. Work commenced and in progress. The proposals for enhancing the existing facilities in the Kottarakara, Adoor, Kesavapuram, and Government Medical College, Trivandrum are under consideration now.

The proposal for strengthening the Kerala Road Safety Authority has been accepted by the Executive Committee and the actions for procuring specialists, to various positions was completed. Appointment orders were issued by the Transport Department through a Government order and the incumbents have formed. The remuneration of the specialist for the project period is to be paid from the KSTP funds. The TSG is now examining the Challenge Fund proposals and coordinating activities of SCDP.

Traffic counters were procured and installed at five locations, one in NH and four in location in the project roads. These counters shall be utilized for planning future road geometrics requirements, capacity analysis, seasonal variations, and daily variations of traffic volume during festivals, etc.

KSTP has entrusted the consultant to take action for the procurement of Market Research firms. The market research would support the Development of the publicity and education programs, including future campaigns. Establishing benchmarks on knowledge, attitudes, perception of road safety issues, and self-reported behaviors of road users for monitoring the impact of future road safety activities and to effectively support the task of the Road Safety Capacity Building and Program Management Consultant. The activities were completed.

The procurement of consultancy services for appointment of firms for Traffic Safety Enforcement and Post Crash Training (trauma care) for the Safe Corridor are in progress aimed at training the Police personnel and for enhancing trauma care facilities in hospitals in the nearby areas of the SCDP.

This was agreed in a meeting held in the room of the Secretary to Government, Transport. Since the progress of activities was slow, KSTP had earlier decided to terminate the services of M/s VicRoads, but as the consultant had further agreed to speed up the activities, revocation of the decision to terminate was reconsidered. This was revoked and the mobilization of key professionals continued. However, as their term of service is over, alternate arrangements are made through M/s NATPAC. NATPAC has submitted their report for Road Safety treatments (interventions) and are being implemented.

To validate the effectiveness of road safety improvements and under Component B, KSTP decided to implement a project exclusively as a "Safe Corridor Demonstration Project" hereinafter referred to as SCDP. The stretch selected was the Khazakuttom- Adoor Section running a length of 78.65 km. This work involved resurfacing of the pavement to acceptable standards with DBM /BC layers,

drainage improvements, road markings, street lightings, crash barriers road studs, footpaths, and many other safety-related items. This work was scheduled to be completed by 2018. It includes a five-year maintenance period in the awarded Contract which will be ending in the year 2024 along with a Defects Liability period of 1 year. This work is being executed under “Item Rate Contract” and is supervised by the SE Divisional Office.

5.15.1 Under Road Safety Capacity Building of the institutions responsible for managing Road Safety in the State

Kerala State Transport Project intends to develop post-crash care, which includes both medical emergency services and crash victim extraction as a pilot initiative in the Safe corridor Demonstration Project from Kazhakoottam to Adoor stretch of MC road (80 km). For which, KSTP is developing the hospitals in the geographical proximity to the demonstration corridor as resourced trauma care facility and procuring ALS ambulances. The development of Level I and Level II hospital includes both infrastructure development and procurement equipment’s while in Level III hospital, only procurement of equipment’s is included. The Department of Health and Family Welfare, Government of Kerala prepared the proposal of Strengthening Trauma Care Services as part of the Safe Corridor Demonstration Project.

Accordingly, the proposal received through Health and Family Welfare as below is under implementation by KSTP.

Proposal from the Health and Family Welfare Department				
Sl. No	Name of the Institution	Infrastructure cost (in lakhs)	Additional Equipment cost (in lakh)	Total (Activity)
Equipment				
Level I				
1	Govt. Medical College, Trivandrum	-	1877	18.77 Cr.
Level II & Level III				
2	Taluk Headquarters Hospital, Kottarakara	25	168	6.306 Cr.
3	General Hospital, Adoor	25	418	
4	Community Health Centre, Kanyakulangara	-	22.3	
5	Block Primary Health Centre Vamanapuram	-	22.3	
6	ALS Ambulances		63.9	63.9 lakhs
7	Comprehensive stroke Centre at Govt. Medical College, Thiruvananthapuram	200		
	Total	250		2.5 Cr.
Total Budget proposal (in Lakh)				28.21. Cr.

The proposal is taken up as four activities as follows and approved by the World Bank.

1. *Strengthening Trauma Care Services in Level I and Level II hospitals along SCDP* – Procurement of equipment like Ventilator, Centralized Medical Gas System, Anesthesia Work Station, CT Scan, Ultrasound with Colour Doppler, Flash Autoclave, etc. -Rs 18.77 Cr
2. *Upgradation of Emergency Trauma Care in Medical College, Thiruvananthapuram*
Procurement of equipment like Neuro Navigation System, CT Scanner, Operating microscope, High and Ultrasound, Surgical Instruments, and 30 other medical equipment - Rs 6.306Cr
3. *Procurement of Advanced Life Support Ambulances* (2 nos.) equipped with multiple state of the art lifesaving equipment for General Hospital, Poor and Taluk Head Quarters Hospital, Kottarakara - Rs63.9 Lakhs
4. *Strengthening Trauma Care Infrastructure* (SCDP) – Developing Infrastructure for Comprehensive Trauma Care Centre at Govt. Medical College, Trivandrum, Trauma area modification at THQH, Kottarakara in the existing casualty at GH, Adoor–Rs.2.50cr

All the activities are coming under the Post Review Threshold of the World Bank.

The current status of the proposal is shown in the table below:

	Medical Equipments for Level I, II, and III hospitals	Cost in Lakhs	Status as on May -2020
1	High-end equipments	1487.81	<ul style="list-style-type: none"> • Bid opened on 28-10-2019 byKMSCL. • Evaluation Completed and KMSCL submitted the evaluation report. • 1 item needed retender as not meeting criteria. KMSCL retendered the work.
2	Other items	292.52	<ul style="list-style-type: none"> • Bid opened on 16-10-19 by KMSCL. • Evaluation Completed and KMSCL submitted the evaluation report. • 20 items got zero response. Retenderrequired. • KMSCL retenderdthework.
3	Procurement of ALS Ambulances	63.9	<ul style="list-style-type: none"> • Entrusted KMSCL for procurement throughGEM.

INFRASTRUCTURE:

SI No	Work	Estimate amount (L) excluding	Status

		taxes	
1	Infrastructure development at Govt. Medical College, Thiruvananthapuram		
i	Civil Works-Providing False Ceiling and aluminum windows in the Trauma Care wards 7 & 8 of Medical College Hospital	59.8 2	<ul style="list-style-type: none"> Agreement executed on 07.01.2020
	Electrical works		
ii	Providing AC in trauma care	38.4 4	<ul style="list-style-type: none"> Tender opened on 18- 1019. Exorbitantly rate quoted. Retendered three times. No response
iii	Electrification works of trauma care	48.4 2	<ul style="list-style-type: none"> Agreement executed on 07.01.2020
iv	Works related to Biomedical equipments	32.1 1	<ul style="list-style-type: none"> Entrusted KMSCL for procurement.
2	Infrastructure development of Taluk Headquarters Hospital Kottarakkara		

i	Civil Works	13.9 2	<ul style="list-style-type: none"> Bid opened on 1/1/2020.9% above rate quoted. LoA to be issued.
	Electrical works		
ii	Providing AC in trauma care	4.30	<ul style="list-style-type: none"> Agreement executed on 07.01.2020
iii	Electrification works of trauma care	3.20	<ul style="list-style-type: none"> The agreement was executed on 07.01.2020.
3	Infrastructure development of General Hospital Adoor		
i	Civil Works	25.0 0	<ul style="list-style-type: none"> Agreement executed on 03.02.2020

As part of the Strengthening of the Trauma care facility at General Hospital, Kottarakkara renovation of the Trauma care building of the hospital is proposed for an estimated amount of Rs.13,92,798/-. The work was tendered on 08.08.2019 and since there was no response, the work was re-tendered on 27.09.2019. The bids were opened on 11.10.2019. Since the bidders have quoted exorbitantly high

rates, the work was again retendered on 21/12/2019 and was opened on 01.01.2020. The evaluation details are as follows :

SI No	Name of Bidder	Quoted Amount in Rs	Estimate PAC	% above/below
1	Bid No: 818116 KS Chandralal, Karthika Ezhukone PO, Kollam	15,28,267.30	13,92,798.00	9.73% above
2	Bid No: PC Saji MadathilPadikkal (H), KS Mangalam PO, Vaikkom, Kottayam	19,01,210.75	13,92,798.00	36.50% above

As the bidders have quoted higher rates than the estimated rate, a comparative statement with Local market rate is prepared and found that, the lowest bidder Sri. KS Chandralal, Karthika, Ezhukone PO, Kollam has quoted a rate of 6.63% below LMR.

1. Package 1 to 3 to be awarded by KMSCL after following their procedures.
2. The work - Providing False Ceiling and aluminum windows in the Trauma Care wards 7 & 8 of Medical College Hospital, Thiruvananthapuram to be awarded to Sri. JABEER.U, the L1 - bidder for an amount of Rs. 51,57,703/- excluding taxes.
3. The work - Electrification in Trauma Care units Ward No 7 and 8 at MC Tvpm -Part-I- Strengthening of Existing Panel Boards to be awarded to DSK Electric Power, the L1 -bidder for an amount of Rs. 45,81,430/- excluding taxes.
4. The work - Electrification of Trauma Care ICU and Oxygen Gas Plant at THQ- Hospital, Kottarakkara - Part 1 Electrical work to be awarded to N Siva Prasad, the L1 –bidder for an amount of Rs3,18,775/- excluding taxes.
5. The work - Electrification of Trauma Care ICU and Oxygen Gas Plant at THQ- Hospital, Kottarakkara - Part II- SITC of 3 Tr Verticool Air Conditioner to be awarded to M/s Maxwell Agencies, the L1 -bidder for an amount of Rs. 4,16,792/- excluding taxes.

5.15.2 Traffic Enforcement & Crash Data Management System

5.15.2.1 Traffic Enforcement:

The Safe Demonstration Corridor Project (SCDP) from Vettu road Junction near Kazhakoottam to Adoor on MC Road (SH1) is identified as a high risk and high volume corridor for implementing the program. It envisages a number of road safety interventions and countermeasures to reduce fatalities and injuries due to road crashes in “4E” concepts i.e., Engineering, Enforcement, Education, and Emergency Trauma Care. The program will implement multi-sectoral road safety initiatives by associating with other stakeholders departments like Police, MVD, PWD, and Health in establishing a sustainable road safety model that can be replicated elsewhere in the state with the view of achieving a reduction in number and trauma severity of road crashes.

For developing an efficient Enforcement strategy, analysis of statistical data collected from the actual incidents recorded from each scene is inevitable. A reliable crash data is necessary for implementing

target-oriented multi-sectoral interventions. The information derived from the crash data analysis will enable a data-led approach to Road safety Enforcement.

With the objective to reduce the road crash, KSTP has appointed an international consultant M/s TRL-JP Research JV to develop and implement an evidence-based road safety enforcement strategy.

The consultant had reviewed various available reports such as the iRAP study, baseline study conducted by NATPAC, seatbelt, and helmet study by Vic Roads, overtaking study, etc. The consultant had also visited the police stations in the vicinity of the corridor to gather information on crash locations and profiles of blackspot and vulnerable locations, road user category, enforcement programs, equipments, etc. Based on the baseline study and observation of current road use practices, an enforcement strategy plan was prepared by the consultant. For this purpose, a focus group discussion was held with the various stakeholders.

In order to manage and control traffic in the safest and most effective manner in the corridor through the scientific application of systems and techniques, a two-day training for 27 Police officers and 7 MVD officers as trainers from the southern range was given by M/s TRL on 7th and 8th May at Police Training college Trivandrum and 2-day training for selected 151 Police officers and 21 officers from MV department respectively from 9 Police stations and 5 MVD offices having jurisdiction over the project area was given by TRL from 13th May to 18th June (9batches) at Jubilee Mandiram, Kottarakkara.

5.15.3 Crash Data Management System:

For developing an efficient Enforcement strategy, analysis of statistical data collected from the actual incidents recorded from each scene is inevitable. A reliable crash data is necessary for implementing target-oriented multi-sectoral interventions. The information derived from the crash data analysis will enable a data-led approach to Road safety Enforcement.

With the objective to reduce the road crash, KSTP has appointed M/s TRL to develop and implement an evidence-based road safety enforcement strategy. The police department has informed that as part of the outcomes related to the Safe Corridor Demonstration Project, M/s TRL has provided two software licenses for the State Police to access the Crash Data Analysis and road safety management solution (iMAAP) for the 85km stretch from Kazhakoottam to Adoor. The crash data collected from the 9 police stations along the corridor has already been exported to the iMAAP. The crash data management system provided for SCDP has been deployed across the State of Himachal Pradesh for over 3 years now by TRL.

It is also informed by the Police department that, M/s TRL has offered unlimited license for multiple stakeholders in Kerala to access the software at an annual fee to the State Government (the SAAS model) and host the iMAAP solution on the Ministry of Electronics and Information Technology approved cloud server. The Police department would like to have a modern Road Accident Data Management System to enable robust data analysis and data-led and targeted interventions to reduce road accidents and improving road safety. For that, the Police department has forwarded the details of iMAAP solution received from M/s TRL to consider under KSTP II.

M/s TRL has offered a proposal for iMAAPcloud based solution on a Software-as-a-Service (SAAS) model which is having the key elements as follows.

- I. The iMAAP solution would be hosted on a Ministry of Electronics and Information Technology (MEITY) certified cloud server by TRL.
- II. The maintenance and upkeep of the software for the smooth functioning of the software will be provided by TRL, along with any updates to the software.

- III. License and access to the product will be provided for up to 1000 users amongst authorized employees of the Government of Kerala subject to standard log-in credentials.

The SAAS package is being offered to the Government of Kerala at an Annual Subscription Fee. The expected fee, subjected to confirmation through our Techno-Commercial offer expected to be less than or equal to Rs 40 Lakhs per annum to the Government of Kerala.

Whether the proposal one-year subscription may be considered as a variation to the existing contract of M/s TRL for Consulting Services for Traffic Management and Road Safety Enforcement Program on Safe Corridor Demonstration Project-Engaging Traffic and Road Safety Enforcement Specialists.

Staus: TRL has submitted the draft final report with crash data analysis, Traffic enforcement plan, and specifications for enforcement equipments. KRSA has to review this draft and revert.

Purchase of enforcement equipments:

Procurement of Enforcement Equipments for police on SCDP-Electrical to submit through tender notice such as Light Baton Signal, LED Portable Flood Lights & Traffic Signs Collapsible.

5.15.4 Road Safety Education, Community Awareness and Training Programme and Outdoor campaign on the Safe Conidor Demonstration Project (SCDP)

This supplementary agreement is executed on this the day 28th of June 2019 BETWEEN the Project Director, Kerala State Transport Project, PMT, Thiruvananthapuram, and the Director, KSCSTE, National Transportation Planning, and Research Centre - A unit of Kerala State Council for Science, Technology, and Environment (KSCSTE), Government of Kerala.

SCDP envisages a number of road safety interventions and countermeasures to reduce fatalities and injuries due to road traffic crashes. One of the sub-components of the project would be to impart knowledge in Traffic rules Road Safety and basics of First aid and Life support among local community School Children, Drivers, and youth within and outside the protected area. This Programme is expected to bring about good road sense and qualitative changes in road user behaviour of different categories of road users and their attitude towards the accident victims in helping them giving First aid and transportation to the hospital in time.

It is proposed to carry out six Programmes one each at the following six police stations with 50 participants per Programme : (i) Pothencode, ii) Venjaramoodu, iii) Kilimanooriv) Chadayarmangalarnv) Kottarakkar. & vi) Adoor

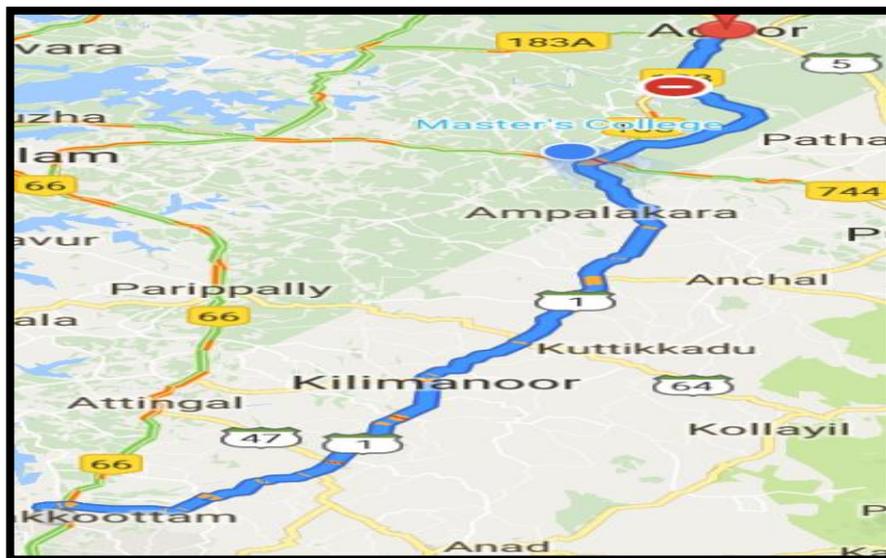
The objective of the program is:

- a) To provide road major safety education/awareness by film shows, stickers, and distributions of pamphlets at major junctions.
- b) To organize public meetings in association with LSGD and police and NGOs in the respective area/ task/audio-visual shows on road safety and safety measures/traffic control devices in major junctions, accident-prone areas, and townships in road stretch.
- c)To display banners /wall posters depicting road safety slogans in public places, offices, educational institutional and bus stands.

The total duration project is 12 months as per ToR which is estimated cost around 32 lakhs.

KSCSTE-NATPAC has expertise in providing road safety education to various categories of road users. As part of the present assignment, it is decided to conduct 40 Programmes covering four inputs groups. The monthly report needs to submit the following programs in 2 months and Review and Draft final report of all programs in category wise should be submitted on /before on 28th May 2020. The final report should be submitted on/before 27th June-2020 as per ToR.

5.16 MC ROAD - KAZHAKKOOTTAM – ADOOR 78.65 KM



Project Name	KSTP-II – MC Road - Safe Corridor Demonstration Project – BC- Overlay & Road Safety Works from Kazhakoottam to Adoor (0/000 to 12/600 (Bye pass) and from 25/250 to 93/000)
Name of Contractor	M/s GHV-EKK (JV), Second Floor, Municipal building, Perumbavoor, Ernakulam, Kerala
Agreement No & Date	Agreement. No. 276/KSTP/PMT/PWD/2016 dated 05/12/2016 (Contract. No. KSTP/PMT/BCO&RS)
Date of Commencement	28 th December 2016
Time of Completion as per agreement	16 months from the date of commencement – 27.04.2018
Extended Time of Completion	Up to 30.09.2020 with LD
Contract Amount	Rs 146,67,38,745/-
Revised Project Cost	Rs .137,88,30,271/-

5.16.1 Financial Progress.

The Financial progress is 88.81% as on 31-08-2020.in respect to the Revised Estimate of 137.82 Cr. As Per Original Contract Price Financial Progress is 83.49%. It is expected to close at around 137.82 crores after the final completion of the project. The total amount paid to the Contractor till August 2020 is 122.51 Cr.

SCDP - PHYSICAL PROGRESS OF MAJOR CIVIL WORKS -AUGUST-2020									
SI No	Item	Unit	Quantity					Balance	Remarks
			As per BoQ	As per variation	Anticipated Qty	Completed	Ongoing		
1	Drain	m	6274	14488	15100	15760		-660	On going Quantity Increase
2	Culvert	No							
	New- Box		10	14	14	14	0	0	
	Hume Pipe			1	1	1	0	0	
	Widening			3	5	5	0	0	
	Minor Bridge			1	1	1	0	0	
	Total			19	21	21	0	0	
3	Retaining Wall	m ³							
	R R		8847	1543	2847	2663	0	184	
	Gabion		0	6085	6085	5890	0	195	
4	DBM	m ³	9524	9818	11100	11225	0	-125	
5	BC	m ³	39396	39396	42000	42734	0	-734	
6	Interlocking blocks	m ²	58988	16723	13707	11490	0	2217	On going Quantity Increase

SCDP - PHYSICAL PROGRESS OF MAJOR ROAD SAFETY WORKS - AUGUST- 2020									
SI No	Item	Unit	Quantity				Balance	Remarks	
			As per BoQ	As per variation	Anticipate d Qty	Completed			
1	Drain cover slab	m ³	49478		54469	54469	0		
2	W Beam Crash barrier	m	15015	8295	9141	9019	122		
3	Road Marking	m ²	81726	70523	57061	51212	5849	On going	
4	Road Studs	E	56437	56654	68950	71950	-3000	On going Quantity Increase	
5	Sign Boards	E	9873	9873	3931	2940	991	On going	
6	LED Solar Street light	E	2000	1127	890	844	46	On going	
7	Kerb 250 mm	m	211052	16747	31000	26036	4964	Ongoing at junctions	
8	Kerb 100 mm	m	42211	46775	12500	11491	1009	Ongoing at junctions	
9	Antifungal Designer T	m ²	23610	68420	43000	43141	-141	Ongoing at junctions	
10	Hand Rail	m	21400	20900	19328	20023	1377	Ongoing at junctions	

5.16.2 Physical Status:

The Physical Progress is 93.98% as of 31.08. 2020 as per Revised Estimate of 137.82 Cr. Progress is 88.31 % as per Original Contract Price of 146.67. EOT has been approved up to 30-09-2020 with LD to complete all the balance works.

5.16.3 Key Issues in August-2020

Nil

5.17 Road safety Challenge Fund

In continuation with the Safe corridor Development Project, and under 5.16 d, where in the lessons learned from SCDP will further be replicated and additional 10 roads will be developed as safe corridors. Currently, under the Road Challenge Fund, five roads as identified by KRSA (Kerala Road Safety Authority) vide letter No A2/283/KRSA/2018 Dated 08.03.2019 a field visit to all these roads was conducted by the PMC along with the Traffic Safety Group as desired by World Bank in their Minutes of Meeting held on 12th April 2019 to further reconfirm the adequacy of the proposals submitted and finalize the TOR for DPR's.

Three roads were visited on the 25th and 26th April 2019 and the balance two road visits were completed on the 6th of May 2019. List of roads selected, and their costs are mentioned in Draft DPR By Egis India Pvt Ltd tabulated in Table 4 below.

Table 4

Road no	Name of Road	Estimated Cost in Crores	Revised Cost in Crores	Length in Km	District
KSTP-II/CF-1	Pavangad-Korapuzha	10.02	5.65	25	Korapuzha
KSTP-II/CF-2	Safe Road Project-Trivandrum Medical college -Kannamoola, Pallimukku-Pettah	7.5	7.88	5	Trivandrum
KSTP-II/CF-3	Kottiyam-Kundara Road	4	24.56	24.3	Kollam
KSTP-II/CF-4	Vypin-Mannambam	5	38.48	11.6	Ernakulam
KSTP-II/CF-5	Thrissur-Kunnamkulam State Highway	10	39.09	5.5	Thrissur
	Total	36.52	115.66	71.4	

In this Circumstances, it was awarded “**Preparation of Detailed Project Report (DPR) for safe corridor projects in different regions of Kerala under the world bank assisted Challenge Fund of KSTP-II**” to the H1 firm i.e. M/s EGIS India Consulting Engineers Pvt Ltd for an amount excluding tax for Rs. INR 58,95,795/-.

The matter placed before the Steering committee for approval and the same has been approved by the Steering committee in the 109th meeting. The agreement was signed on 2nd Dec-19.

The Consultants M/s EGIS India Pvt Ltd submitted the Inception Report on 24 -12-2019. It was reviewed and comments issued by PMC and Kerala Road Safety Authority which again was incorporated.

Status of the project for the month of August-2020

- Field investigation completed
- Topographic survey for 25 major junctions.
- Road Inventory survey
- Turning Movement Count surveys for 25 major junctions.

- Speed and Delay survey for all the five corridors.
- Parking survey for all the five corridors.
- LUX meter survey for all the five corridors.
- Accident data for all the five corridors.
- Strip Plan preparation was completed for all the Five Corridors.
- Improvement Proposals as per the scope of work completed for two roads.
- Field Study Report – will be submitted on 05.03.2020
- Draft DPR – was submitted on 18.03.2020
- PMC has reviewed and passed comments on Draft DPR on 30.04.2020.
- The Final DPR was submitted.
- Bid Document preparation is under progress.
- CF-02, CF-03 & CF-04 are Tendered on **etender kerala portal** on 24-08-2020 with Last Bid Submission is 23-09-2020.

5.18 Component C: Institutional Strengthening Component – Current Status

5.18.1 Road Sector Modernization

Under this Component, KSTP has already arranged and completed studies and DPR preparation for Road Rehabilitation Projects, Strategic Option Studies for improving MDRs (newly taken over from Panchyat), and Design of Green Building for KSTP and PWD Head Quarters, Review of IT system in PWD and other small studies with Bank's approval. The amount spent is Rs. 4.70 crore.

Further, KSTP has streamlined the activities under the Road Sector Modernization in the Institutional Strengthening component considering, the current priorities of the State, in lieu of the Strategic Road Network Program which include:

Consultancy services for Institutional Strategy and Action Plan for Centre of Excellence for Kerala Road Sector across five identified Thematic areas.

5.18.2 Institutional Strategy and Action Plan for Centre/s of Excellence/s for Kerala Road Sector across five identified thematic areas (KSTP – II)

Accordingly, KSTP, under PWD, GoK has appointed Deloitte Touche Tohmatsu India LLP, in joint venture with Consulting Engineers Group Ltd., to provide consultancy services for developing an Institutional Strategy and Action Plan for the creation of "Centre/s of Excellence/s" for the Kerala Road Sector across five identified thematic areas. The five thematic areas are as follows:

1. Innovation in design/ construction practices
2. Road asset management
3. Road safety management
4. Quality assurance & contract management.
5. Promoting indigenous research and development.

This report is the final report of this engagement and it consolidates all aspects of this study.
Overall Approach and Methodology

A multidimensional, consultative approach was adopted during the execution of this study. As part of this study, the steps carried out were a) a detailed diagnostic of the processes of PWD and the associated entities, b) an in-depth study of KHRI and NATPAC, c) a benchmarking study across national and international Centres of Excellence in the related sector and d) consultations with stakeholders during the course of the study. Based on all inputs obtained, recommendations have been made on the proposed Centre of Excellence.

As part of this study, eight reports (including this report) have been submitted and these are as summarised below:

S.N.	Deliverables
1	Inception Report
2	Report on Diagnostic Review
3	Draft Report on Institutional Options
4	Report on Institutional Review –KHRI & NATPAC
5	Report on 1st Stakeholder Workshop
6	Report with recommendations on the proposed CoE
7	Report on 2nd Stakeholder Workshop
8	Final Report on Institutional Framework & Action Plan for COE
9	Preparation of Cabinet Note and presentation to PWD/ GoK – to be submitted based on final discussions with the KSTP team.

The Contract Agreement was signed on 16th February 2019 and the Consultant’s Team was mobilized on 1st March 2019.

The Consultancy services shall be provided in two phases:

Phase I: Institutional Review and COE/s Conceptualization Phase	06 Months
Phase II: Implementation Support	12 Months

In between Phase I & II, a transition phase of 1-2 Months is expected for decision making/processing on COE by GoK.

The consultant has submitted the following reports.

- 1) Inception Report-The Report covers the understanding of the envisaged scope of work, the methodology for undertaking the specific activities under the engagement, the progress of preparatory work undertaken, and the way forward to successfully execute the assignment.
- 2) Report on Review of Sector Themes and Institutional Arrangement.
- 3) An assessment of existing knowledge and capabilities, the detailed processes that pertain to each of the themes, and the institutions that are involved in executing these processes have been captured.
- 4) Based on the study of the as-is processes and the ideal state scenario, gaps have been identified.
- 5) The need for the CoE(s) and the possible roles that the CoE(s) can play in each of the themes has been discussed.

6) The consultant has to submit the deliverables from S.No 3to 9 as per the time frame mentioned in the above table.

A review of the policies pertaining to Kerala PWD has been provided. Subsequently, a discussion on the institutional arrangements that exist in Kerala, that are carrying out functions pertaining to the five themes of this project has been provided

They were also asked to prepare a concept note on Core Road Network Authority or State Highway Authority of Kerala (SHAK) and roadmap for planning & execution of climate-resilient Road infrastructure as these are prior and post-action points agreed to by the PWD as part of Programme under loan of Resilient Kerala Initiative (RKI). A presentation of the same was done by Deloitte Touché Tohmatsu India LLP in JV with Consulting Engineers Group Limited on the 11th of Nov 2019. The proposal to implement their strategic plan is to be put up to GoK for approval as Maturity Level 1 inducting a Task Force.

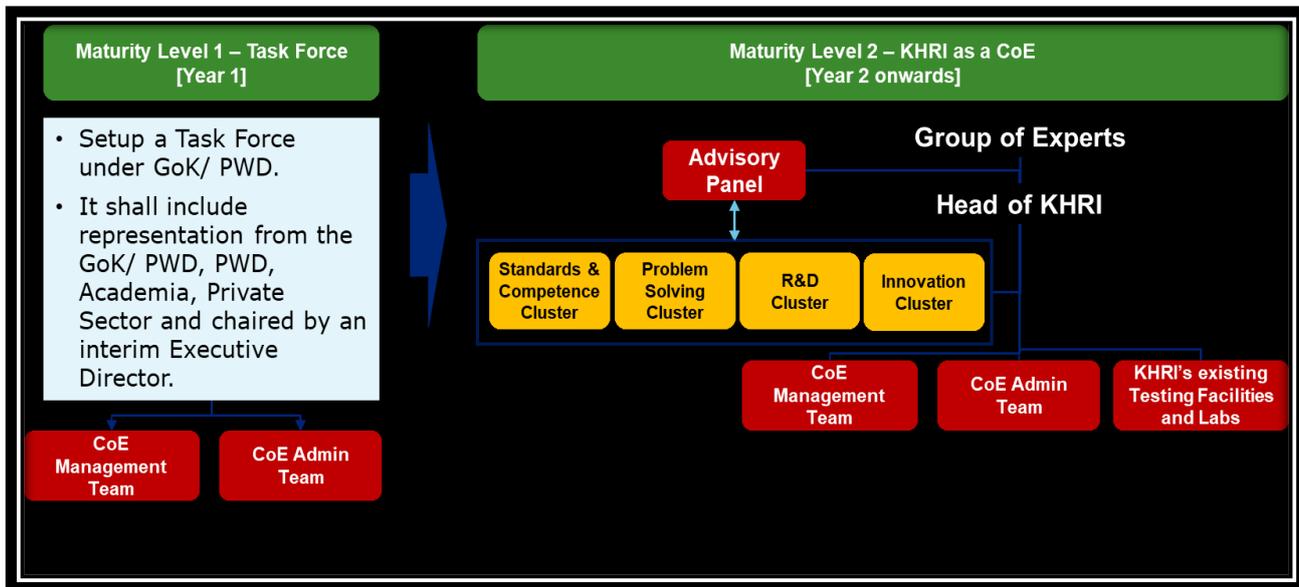
Generic Activities of CoE

- Mapping of emerging issues and requirements
- Developing a Foresight & Vision
- Identification of Strategic Research Agenda [continual]
- Implementation Plan [from time to time]
- Developing and promoting researchers
- Facilitation technological innovation system to apply research results into applications
- Dissemination of Research & Innovation Results [manual, periodic updates through publications]
- Creating Knowledge Sharing Platform
- Ensuring Stakeholders Participation

It is recommended that the entity be established in phases – i.e. it first begins as a Task Force and then over time evolve into a full-fledged autonomous entity. The governance model of the CoE also would therefore follow this maturity model. In the exhibit below, a two-level maturity setup is shown. It is to be noted that the two levels are not time-dependent but are dependent on the success of the CoE and decision by the Government of Kerala with recommendation from Task Force

Structure of CoE

The CoE is proposed to be a lean, thin, and almost virtual entity, to be developed and expanded in phases of maturity, the first being as a Task Force, which will run over the first one year³. The composition of this Task Force is depicted in the chart at Annex 1.



The setting up of CoE involves expenditure of fixed and variable nature; the fixed cost will remain almost fixed subject to normal annual increase, while variable expenses will be related to the volume and nature of works undertaken by CoE. The total expenditure envisaged over a period of 5 years is Rs. 31 Crore. This includes a research fund of Rs. 7 Crore that is also envisaged.

8th deliverable & 9th deliverable sent to GoK on 15.05.2020

5.18.3 Road Maintenance & Management Services

Under the Institutional Strengthening Component C, a proposal to implement RMMS was considered Objective: The overall objective of the proposal was to establish an enhanced and user-friendly Web-based Road Information System and Road maintenance management system for the State PWD roads and to ensure that PWD is able to effectively plan and prioritize its road improvement and maintenance works and to prepare realistic proposals for budgetary allocations. This will improve the quality and delivery of PWD services in the maintenance of road networks. To implement this, it was decided to get the Detailed Project Report done through Central Road Research Institute (CSIR-CRRI) New Delhi.

The contract with CRRI was signed vide Contract No 305/KSTP/PMT/PWD/2019-20 Dated 19.06.2019.

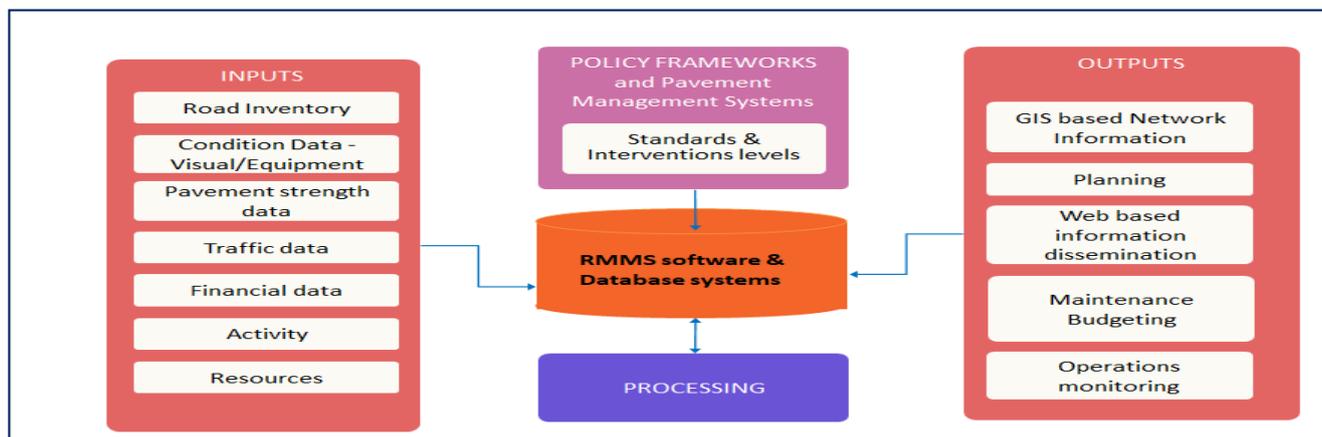
The entire task will be completed in 18 months.

Even though Kerala PWD has established a GIS-based Road Information system and HDM-4 based Road Maintenance Management System (RMMS) way back in 2007, the same could not be used as it was envisaged due to various reasons and are now outdated and redundant. Apart from this, there was no established framework and expertise in the Department to have a sustained data collection of the inventory and condition data of road assets in a systematic manner. Hence, as part of the revival and up-gradation of the existing RMMS systems, the Department approached the Central Road Research Institute New Delhi to explore the possibility of setting up a working Road Asset Information and Management System with an initial data collection of condition and inventory data for a selected road length using the advanced network survey vehicle of CRRI. Based on the detailed discussions and deliberations the CRRI has given a proposal for setting up a working RMMS for the Department with data collection of 4000 KM of selected roads using the network survey vehicle along with technical assistance for establishing related software requisites and trainings.

E-Governance wing of Kerala PWD has proposed to have an effective working **Web and GIS-based** Road Information and Road Maintenance management System capable of delivering all required asset management information and analysis and outputs suitable for use in the Pavement Management

Systems like HDM-4 thereby Public Works Department would be able to generate realistic road maintenance plans and budget. It is also envisaged that after establishing such a system in PWD, the concerned Field engineers of the Road Maintenance Wing and Engineers in charge of the Central RMMS unit would be trained in data collection and inputting, usage of the RMMS system and HDM-4 software so that the Department would be able to sustain and scale the RMMS system for all PWD roads in the State.

RMMS- GENERAL ARCHITECTURE:



The procurement of this was hosted on the E –portal of the Kerala Government as a single-stage Bid document On 19-10-2019 and subsequently a pre-bid meeting was held on 5th Nov 2019. Queries were received from various prospective bidders and replies to these are currently being finalized. **The proposed submission date is on 30th Nov 2019 for which requests for extension have been sought.** This is under consideration and shall be communicated soon to the prospective bidders. The bids for the Supply, Installation, Testing, and Commissioning of a Web-based Software for Road Maintenance Management System for the Kerala Public Works Department were published in the dailies The Hindu and Malayala Manorama on 20.10.2019.

The period of assignment is 8 years and 6 months (6 months implementation, 5 years warranty period, and 3 years extended period of service). The bids were opened on 23.12.2019. The bids were invited on a single-stage system. Three bidders responded to the tender. The details are as follows:

TRL Professional JV with Experian Technologies (India) Pvt Ltd has been awarded a contract. Letter of Award has been issued to Bidder on 07.05. 2020. The agreement was signed on June 5th with Bidder with an Estimated price of 4.54 Cr.

TRL was Mobilised on 1st August-2020. Consultant submitted Draft PMP on 03-08-2020. Committee has reviewed PMP and comments on PMP. Revised PMP submitted on 20-08-2020.

5.18.4 E.Governances support for prices 2.0 Implementation:

The Chief Engineer, Roads & Bridges, and the Chief Engineer, Road Maintenance have submitted a note to KSTP for inclusion of e-Governance activities under ISAP (Institutional Strengthening Action Plan) of KSTP (Annexure 1)

PWD has over 500 Section Offices, 190 Sub Division Offices, 50 Division Offices, 12 Circle Offices, and 7 Chief Engineer Offices State-wide. Even though computers and peripherals were supplied to these offices over the last 10 years, the number of computers provided was restricted due to budgetary

constraints. There sent status fo IT infrastructure available at various PWD offices from Section office level to Circle office-level state-wide are listed below:

SL.No	No. of offices	No. of staff using e-Governance Applications	Avg. No of Computers available per office	Multi-function printers	Laptops
Sections	495	4	1 no. issued in 2011 (Mostly dysfunctional)	1 no. issued in 2011 (Mostly dysfunctional)	One laptop issued to all office heads as part of PRICE software implementation
Sub Divisions	???	9	4	1 no. issued in 2010 (Mostly dysfunctional)	
Divisions	54	22	10 to 12	1 no. issued in 2010 (Mostly dysfunctional)	
Circles	12	25	15	1 no. issued in 2010 (Mostly dysfunctional)	

As evident from the above table, the IT infrastructures at various PWD offices are highly inadequate to cope up with the requirements for the implementation of the total e-Governance System.

In a PWD Division office where about 20 staff are required to work using a computer, we have provided only 10 to 12 computers on an average and many of them are in non-working condition now. The multifunction printer devices are allotted to Subdivision, Division, and Circle offices in the year 2010. PWD IT Cell has arranged an annual maintenance contract for these devices until December 2016. After that, the manufacturers have informed their inability to provide AMC support as the model is outdated. The Section offices of PWD are the most important unit of PWD in which all the projects are initiated and are executed. On an average, infrastructure projects costing over 10 to 15 crores are executed through each Section office in every financial year. This is expected to increase further when the execution of KIIFB projects starts in full swing.

Apart from this, on the spot, M-Book preparation is envisaged in PRICE software which requires the provision of handheld tablets with internet connection facilities, one each for each Section Office of PWD. It is also proposed the online Rest house reservation and management software as part of WINGS up-gradation, which also requires providing necessary computer allied infrastructure in each rest house. The PRICE-2.0 and online Rest house reservations are proposed to be implemented from 1st April 2019.

Under KSTP-II, there is an allocation of US \$10 million (Rs. 70 Crores) in Component C (Institutional Strengthening) out of which Rs. 30.80 Crores is the State share. The World Bank’s procurement procedure takes much time. When discussed with the World Bank, they informed that sole-sourcing KELTRON using Bank finance is not possible. As per the Government, order vide G.O.(Rt) No.25/2018/ITD dated, Thiruvananthapuram,01/02/2018, the Government accorded sanction for implementing a Centralized Procurement System in Government for the purchase of commonly used hardware items such as desktops, laptops, printers, scanners, etc. through an online Government portal (<http://cprcs.kerala.gov.in/>) developed for

this (Annexure - 4).M/s KELTRON is entrusted as the serviceprovider, who will derive rates for the commonly used IT equipments, through a competitive bidding process. As World Bank has expressed its unwillingness for single-source funding, it is proposed to procure the hardware using State funds as per the centralized procurement system of the Government of Kerala. The Budget estimate 2019-2020 has an allocation of Rs.2.70 Crores under the head of account 5054-80-80-82 for e-Governance in PWD (Annexure -3). Its estimated cost of around 18.5 Cr is approved in the 106th Steering committee.

5.18.5 Post-Construction Technical Audit for Ongoing Work (A1 & B Component)

The government of Kerala'intendsto constitutes a "Technical Audit Committee" for reviewing the Output Deliverables of the Audit or sand determine necessary actions, as may be required thereof, The need for further technical inspections and quality tests, if any, required and recommended by the Auditor shall be considered along with suitable funding arrangements made for the same either from the KSTP budget or elsewhere. These reports shall be made available 10th Aud (or The Technical Audit Committee" shall be headed by Secretary-PwD, KSTP-PD, and a senior-level representative from Finance Department The committee shall be staffed with technical specialists either from Research or Academic Institution 1 Bridge Expert 2. Pavement Expert and 3 a representative from KSDMA or Revenue Department Involved in the 2018 flood disaster assessment for Roads. Their remuneration of these experts shall be borne by KSTP

This Final Technical Audit Report under Section-IV Scope of Services as defined in TOR; to review the road sections or work packages which are yet to be taken over by the client. The technical audit is to determine the work packages have constructed as per employer design & specifications, with suitable and approved materials during construction and necessary quality control procedures and workmanship have been ensured or not. And also to critically analyse the construction macheneries, laboratory arrangements, Caliberation, test results and their trends also be made on a sample basis.The technical audit findings are furnished below roads as explained in Section-I.2 of TOR.

SI. No.	CONTRACT PACKAGE	NAME OF WORK	LENGTH (KM)	EXPECTED DATE OF COMPLETION/ STATUS
1.	KSTP II/UG-1	Kasaragod – Kanhangad Road	27.78	March 2018
2.	KSTP II/UG-2	Pilathara – Pappinisery Road	20.90	March 2018
3.	KSTP II/UG-3A	Thalassery – Kalaroad	30.00	March 2019
4.	KSTP II/UG-3B	Kalaroad to Valavupara	24.00	March 2019
5.	KSTP II/UG-4	Chengannur – Eattumanoor Road	47.70	Completed (Under Defect Liability Period)
6.	KSTP II/UG-5	Eattumanoor – Muvattupuzha Road	40.96	Completed (Under Defect Liability Period)

A copy of each report deliverable of Technical Audit along with Records of Discussions of "Technical Audit Committee" meetings shall be made available to the World Bank's TTL for review, as soon as it is received.

M/s HAKS Engineers, Architects & Land Surveyors PC in JV with M/s Info Trans Engineers Pvt Ltd and M./s ECORYS NEDERLANDS Bv has been awarded a contract on 07.03.2019.

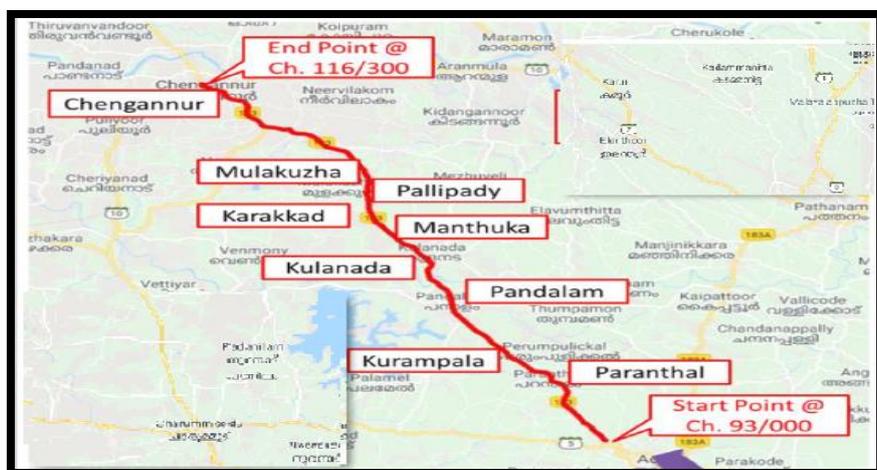
The Cost of Tender is 1.64 cr in 2 Phases.

Status: HAKS Engineer has submitted the Draft Interim report Technical Audit Report- 2.

5.19 Component D: Rebuild Kerala Initiative (Flood Control)

Sl. No	Category	Contract Package	Name of Work	Length (Km)	Construction Period	Maintenance Period
1	Category B	KSTP-II/PMT/RKI-4	Adoor- Chengannur	23.23	12 Months	60 Months
		KSTP-II/PMT/RKI-3	Painavu- Thannikandom- Asoakkavala road	21.0		
		KSTP-II/PMT/RKI-2	Chemmannar Gap road	19.45		

5.19.1 Adoor – Chengannur Road Status



The bid invitation was published on 15.08.19 with the date of the bid submission date as 17.09.19 which was extended up to 04.10.19. Only one bid received for this package from bidders, the details are as per below.

On the evaluation of the technical bids by the evaluation committee, the above Single bid received from M/s EKK Infrastructure limited were found responsive to the requirements of the bidding documents and were recommended to be invited for the opening of their price bids for further evaluation. Accordingly, the Financial Bids of these one firm were opened on 25.10.19 and scrutinized. The Bid price quoted by M/s EKK Infrastructure ltd was Rs.98.10 Cr. The price quoted by the bidder is Rs.98.10 Cr against the estimated cost of Rs.93.59 Cr. This is 4.82% above the estimated amount. The evaluation report was placed before the Steering committee approval and the same has been approved by the

committee. LOA Issued to the contractor. The agreement signed on 24-01-2020 and the construction period is 12 months from the Appointed date. LoA has been issued to the Contractor on 07.05.2020.

Progress of The Work

Project Name	Upgrading Adoor- Chenganoorroad (RKI 4)) Package: Km 0+000 (Adoor) to Km 23+800 (Chenganoor)
Length of the Road	23.800 Km
Name of Contractor	M/s EKK Infrastructure Ltd
Type of Contract	Engineering, Procurement, Construction (“EPC”)
Agreement No & Date	24.01.2020
Date of Award (LOA Date)	22.11.2019
Appointed Date	30.03-2020
Construction Period (in Months)	12 Months
Maintenance Period (in Months)	60
Scheduled Date of Completion	29.03.2021
Authority Engineer	Consulting Engineers Group Ltd, Jaipur
Chainage of the Project (in Km)	km 0.000 to 23.800
Total Project Cost (in Cr)	98.10

Project Milestone	Description (Days from Appointed Date)	Planned		Actual		Delay (No. of months)	Current Status	Remarks
		Financial Progress (%)	Scheduled Date	Financial Progress (%)	Revised Date			
Milestone I	145	20%	22.08.2020	Nil				
Milestone II	220.	55%	05.11.2020					
Milestone III	295	75%	19.01.2021					
Scheduled Completion	365	100%	29.03.2021					

Physical Progress

- The contractor started pre-monsoon activities i.e., Cleaning of Drains & Culverts and Road Maintenance works in progress.
- Repair and Rehabilitation of Existing Culverts: 3 Nos Locations in progress
- Box Culverts construction work in progress: 2 Nos (Pre-cast Box culverts) and casting of Box segments work in progress at camp.
- Footpath construction work: 120 m completed (CH: 97170 To 97290 RHS, 97180 To 97330 LHS work in progress for remaining length.
- RCC Drain construction work in progress. (CH: 99280 To 99323)
- Casting of Kerb, Boundary stones, Drain Slabs work in progress.
- 1st Instalment of mobilization advance recommended authority Engineer (Pending with authority)

The Contractor has not yet started major road activities up to date.

Construction Activities

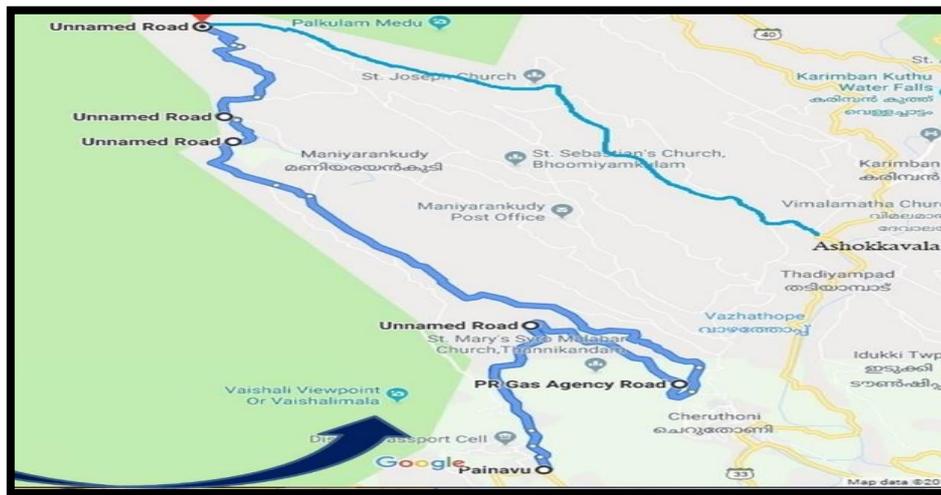
1. **Site Inventory Memorandum**-Joint Inventory conducted along with Authority, Site Inventory Memorandum has been finalized and signed on 07.02.2020.
2. **Mobilization of Manpower & Machinery**: Due to COVID-19 Lockdown, the Contractor not mobilized Man Power & Machinery as per the Agreement.
3. **Base Camp Construction**: The Contractor identified 2.7-acre land for Base camp construction at location Km.103.500 LHS adjacent to our project road. The Construction of the Base camp work in progress.
4. **Laboratory Constructions**: Laboratory established at the Base camp location.
5. **Survey works**: Centreline marking, TBM Traversing, OGL Recording completed
 - a) Topo survey for Design purpose completed.
 - b) Centreline marking was completed in the month of March-2020.
6. **Utility Shifting Status**: Estimation of Water & Electrical Utility shifting not received by the Contractor from the concern Authority.
7. **Status of Applicable permits**: Not submitted.
8. **Verification of Existing crust thickness**: Completed

Key Issues

1. Work Programme for Mobilization and Pre-Construction activities not submitted by the Contractor.
2. The contractor has not informed about his planning for mobilization of the Manpower and Machinery.
3. Some of the Applicable permits are not yet submitted by the contractor till date.
4. The contractor needs to expedite the approval of designs and drawings duly proof checked and safety audited by timely submissions and quickly compliance to the observations of the AE so that works can be commenced early on all fronts.
5. Slow progress of work due to poor planning.

6. Delay in Mix Design for GSB, WMM, DBM&BC.
7. Delay in Mix Design for Concrete works
8. Contractor not mobilized Material Engineer
9. Contractor not submitting the GAD/Working Drawings
10. Contractor not finalized the Feasibility report of Culverts
11. ROW & Chainage pillars erection not done at site.
12. Delay in Establishment of WMM&HM Plants

5.19.2 Painavu-Thannikandom-Asoakkavala Status



The bid invitation was published on 15.08.19 with the date of the bid submission date as 17.09.19 which was extended up to 04.10.19. Only one bid received for this package from bidders, the details are as per below.

On the evaluation of the technical bids by the evaluation committee, the above Single bid received from M/s EKK Infrastructure limited were found responsive to the requirements of the bidding documents and were recommended to be invited for the opening of their price bids for further evaluation. Accordingly, the Financial Bids of this one firm were opened on 25.10.19 and scrutinized. The Bid price quoted by M/s EKK Infrastructure Ltd was Rs.95.40 Cr. The price quoted by the bidder is Rs.95.40 Cr against the estimated cost of Rs.86.82 Cr. This is 9.88% above the estimated amount. The evaluation report was sent to the Steering committee approval and the same has been approved by the committee. LOA Issued to the contractor. The agreement signed on 24-01-2020 and the construction period is 12 months from the Appointed date.

Progress of The Work

Project Name	Upgrading Painavu –Asokawalaroad (RKI 3)) Package: Km 0+000 (Painavu) to Km 21+000 (Asokawala)
Length of the Road	21.000 Km
Name of Contractor	M/s EKK Infrastructure Ltd
Type of Contract	Engineering, Procurement, Construction (“EPC”)

Agreement No & Date	24.01.2020
Date of Award (LOA Date)	22.11.2019
Appointed Date	30.04-2020
Construction Period (in Months)	12 Months
Maintenance Period (in Months)	60
Scheduled Date of Completion	29.04.2021
Authority Engineer	Consulting Engineers Group Ltd, Jaipur
Chainage of the Project (in Km)	km 0.000 to 21.000
Total Project Cost (in Cr)	95.40

Project Milestone	Description (Days from Appointed Date)	Planned		Actual		Delay (No. of months)	Current Status	Remarks
		Financial Progress (%)	Scheduled Date	Financial Progress (%)	Revised Date			
Milestone I	145	20%	22.09.2020	Nil				
Milestone II	220.	55%	06.12.2020					
Milestone III	295	75%	19.02.2021					
Scheduled Completion	365	100%	29.04.2021					

Physical Progress

1. Horizontal alignment is fixed and marked at the site. Levels are being taken to finalize the vertical profile. Contractor Planning to complete both Horizontal & Vertical profile by 15/09/2020
2. OGL Soil sampling was completed.
3. Existing Pavement Crust thickness checking completed.
4. Survey work in progress.
5. Monsoon maintenance work in progress

Key Issues

1. Work Programme for Mobilization and Pre-Construction activities not submitted by the Contractor.
2. The Contractor has submitted a Traffic Management Plan (TMP), the shortfalls are communicated to the contractor. contractor needs to resubmit TMP with duly incorporating the shortfalls.
3. The contractor has not informed about his planning for mobilization of the Manpower and Machinery.
4. The contractor has not Identified the location for Base camp construction and Plant setup.
5. Applicable permits are also not submitted by the contractor to date.
6. Slow Progress of works due to poor planning.
7. Delay in submission of Design & Drawings

5.19.3 Chemmanar Gap Road Status

The bids were called for the above project on 09.08.19 and the pre-bid meeting held on 26.08.19 and the last date of submission of bids was 09.10.19. No bids received and called for retendering on 10.10.19 and the last date of bid submission is 11.11.19.

Accordingly, the Contractor has submitted an undertaking stating that M/s Cherian Varkey Construction Company Pvt. Ltd. would deploy the key personnel and the key equipments as per clause 2.6 and 2.7 of Section III, Evaluation & Qualification Criteria respectively in accordance with the requirements as per the RFB before executing the agreement if the work is awarded to them. Considering the fact that this is a re-tender and that too a single response, this is being accepted. Now the Committee recommends M/s Cherian Varkey Construction Co. Pvt. Ltd. as technically responsive for opening of their price bid. After opening the financial bid, the contractor's quote was 24.00 % higher than the estimate and hence committee recommended for re-tendering. This has been retendered and the bid opening date is on 13-03-2020 and the Deadline for submission of original documents like bid security, cost of bid document, etc. was 23.03.2020. Due to the Pandemic situation and Lockdown being announced, the bid opening date was changed to 27-04-2020.

The clearance from the World Bank for the opening of financial bids of the above work was received on 24.04.2020. The bidders whose Technical Parts have been evaluated as substantially responsive were notified regarding the responsiveness and invited them for the opening of the financial part. The Financial part of the bids were opened on 27.04.2020. The details are as follows:

The price quoted by the lowest evaluated responsive bidder, M/s DRAIPL – Greenworth (JV) is Rs.146.67 Cr, which is 14.99% more than the estimated cost of Rs. 127.55 Cr may be accepted & awarded considering the fact that this is a 2nd re-tender, and the work being an EPC contract, to be executed in a **hilly terrain** with five years maintenance period, retendering again may not yield a better offer. LoA was issued to the Contractor on 07-05-2020 but the Contractor has asked for EOT for the Appointed date. Agreement was executed on 3rd Aug-2020.

5.19.4 Other Procurement Details in Progress as:

SNo	Details of Others Procurement Details	Status
1	OPBRC Works	SBD has finalized & DPR Under Progress by KSTP Division for cost of 84.83 Cr Package I Chengannur-Angamaly of 122.07 Km. Maintenance work period of 7 years. Funded by GoK. It was tendered on 27-07-2020. The bid opening date is 27-08-2020, only 2 Bids were received M/s Shreedanya & M/s Nath Infrastructures and are in under evaluation stage
2	Long Term PMC Evaluation KfW (RFP to be sent to Shortlisted Consultants)	LoA was issued on 29.07.2020 and expected Agreement in 2 nd week of August-2020. Agreement was executed on 14-08-2020.
3	Four CSC to be selected for RKI Supervision works. EOI for shortlisting in progress.	AE-1 Consist of 4 roads of Pkg-II was tendered for selected Consultants & Received 5 Bids is under evaluation stage, AE-2 consists of 6 roads of Pkg-I & Pkg-II has been Tendered expecting in 2 nd week of Aug-2020
4	SKYWALK: PROPOSED TIMELINE FOR DEVELOPMENT OF SKY WALK-IN THIRUVANANTHAPURAM	ARKITECHNO in JV with DESIGN FORUM has been Awarded with the highest score. LoA has been issued to Bidder on 28.07. 2020. Executed Agreement on 28-08-2020 Aug-2020.
5	Vulnaribility Assessment	EOI bids Received & REP to prepare and Final ToR under progress.
6	AC road/Upgradation of Alappuzha-Changanssery road into Semi Elevated Highway	It was Tendered on 24-06-2020 but Bid submission date is 07-09-2020. Under procurement stage

5.20 RKI FLOOD WORKS KFW LOAN & WORLD BANK LOAN

During the 2018 natural disaster, most of the roads built under the World Bank-funded KSTP Phase I and II (Kerala State Transport Project) performed well and suffered only limited damage. Engineers of the Public Works Division (PWD) believe that this is primarily due to the enhanced design standards, climate-proofing specifications, and enhanced supervision developed and implemented within the Project. Hence, PWD is now considering developing a more sustainable and climate-resilient asset stock in the medium to long term (especially during the planned rehabilitation of affected road infrastructure). The Government of Germany pledged to support the Governments Kerala in its rebuilding efforts with due attention to “building back better” principles, by providing via KfW: a) Two interest-reduced loans of up to EUR 170 million for climate-resilient reconstruction of flood-affected roads and bridges; and b) A grant of EUR 3 million for an accompanying measure to provide project-related capacity building and institutional strengthening. The GoK has committed to provide an own contribution of 30 % (EUR 51 million) of the total costs of the project, raising the total financing volume of this Project to EUR 221 million. Loan agreements were signed in November 2019 by KfW and the GoK. In addition, the World Bank sanctioned two Development Policy Operations (DPOs) totaling to US\$250 million in May 2019 with an objective to mainstream disaster risks and climate change impacts information across the State’s key areas of development including the roads sector. Part of this budget will finance the present program.

The approval was given by the Steering Committee in the 108th MOM dated 17-09-2019. KSTP has hired 4 consultancy firms, one for each cluster, to produce Detailed Project Reports (DPR) including detailed designs, draft tender documents, and Environmental and Social Impact Assessment (ESIA). Reports are expected to be finalized in April 2020. Based on the DPR a final list of roads will be drawn up to be financed by the KfW programme for Central and South areas and by KSTP for the North area.

Package -01, 02 & 03 Agreement signed on 17.10.19 and Package-04 signed on 30.10.19.

Deliverables

The study will come up with Detailed Project Report and Drawings for the redevelopment of the road under the item rate contract. The following will be the deliverables for the proposed assignment

- Submission of Inception Report – within 15 days of receipt of work order.
- Submission of Survey and Investigation Report – within 2 months of receipt of work order.
- Submission of pilot DPR (incl. ESIA and ESMP) and Bidding Documents – for one road within 3 months of receipt of work order.
- Submission of Draft DPR (incl. ESIA and ESMP) and Bidding Documents– within 5 months of receipt of work order
- Submission of Final DPR (incl. ESIA and ESMP) and Bidding Documents – Within 6months of receipt of work order.

The formal submissions will be reviewed and commented by KSPT together with PMC and KfW. Consultants shall in addition generally keep KSTP/PMC informed on and seek approvals for any specific design recommendations to be incorporated in the final detailed designs. KSTP shall also be informed immediately of any new data, factors, or events which might significantly affect the viability or selection of a particular project road.

5.20.1 RKI Package 1

M/s Feedback Infra Pvt Ltd has submitted the Inception report as per deliverables schedules and the same has been checked and comments given for necessary improvements. The Status of RKI roads mentioned below:

- They have Submitted the Survey & Investigation Report of all Roads on 23.03.2020.PMC has reviewed & Comments on 11.04.2020.
- They have submitted Draft DPR for 2 roads i.e (20.04.2020). Resubmission of the DPR's after compiling all the individual chapters has waited for further review.
- Consultant resubmitted with compliance of all Survey & Investigation Report on 21.05.202 & 30.05.2020.
- More Details mentioned in Below Table of Status of Package 1

5.20.2 RKI Package 2

M/s LNTIEL has submitted the Inception report as per the deliverables schedule. It has been agreed to standardize the submissions of all the DPR's to avoid differences in implementation. PMC will be coordinating these Consultants and prepare a **DBR (Design Basis Report)** to World Bank and on further concurrence, the same shall be communicated to the DPR consultants. Emphasis on Climate Resilient Roads incorporating Geo Tech and Hydrology will be a crucial part of the reports to ensure durability and connectivity in severe conditions. The Status of RKI roads mentioned below.

- They have Submitted the Survey & Investigation Report of all Roads on 28.02.2020.PMC has reviewed & Comments on 20.03.2020.
- They have submitted Pilot DPR for 1 road i.e (30.04.2020) &PMC has reviewed& Comments on 24.04.2020.
- They have submitted Draft DPR for all 5 roads i.e (07.03.2020) &PMC has reviewed& Comments on 03.04.2020.
- They have submitted Final DPR for all 5 roads i.e (15.03.2020) & PMC has reviewed & Comments on 29.04.2020.
- Revised Final DPR submitted on 05.05.2020 for Reducing the Cost of utilities.
- 4 Roads has been Tendered on 16-05-2020
- Bids Received for Road 1 was 3 Bids, Road 2 was 2 Bids, Road 3 was 2 bids and Road 4 was 5 bids on 06-07-2020.
- 1 The road has been Tendered on 17-07-2020.
- More Details mentioned in Below Table of Status of Package 2

5.20.3 RKI Package 3

M/s Louis Berger Consulting Pvt Ltd has submitted the Inception report as per deliverables schedules and the same has been checked and comments given for necessary improvements. The Status of RKI roads mentioned below:

LBI has submitted DDPR's of all the roads. However, since these roads are co-financed by KfW. Pilot DPR's of two roads has been reviewed by KfW and resubmission based on these Comments are expected shortly. The other DPR's shall follow pilot DPR's and hence minimize reviewing all DPR's for the same issues.

- More Details mentioned in Below Table of Status of Package 3

5.20.4 RKI Package 4

M/s Egis India Consulting Engineers Pvt Ltd has submitted the Inception report as per deliverables schedules and the same has been checked and comments given for necessary improvements. The Status of RKI roads mentioned below.

EGIS has submitted DDPR's of all the roads except one road in Ranni District, which was awarded as an additional work in January 2020. However, since these roads are co-financed by KfW Pilot DPR's of Road No 4, has been reviewed by KfW, and resubmission based on these comments is expected shortly. The other DPR's shall follow pilot DPR's and hence minimize reviewing all DPR's for the same issues.

- More Details mentioned in Below Table of Status of Package 4

Status of Roads under Package 1

PKG -I, M/s FEEDBACK						
Road No.	RKI-10	RKI-11	RKI-12	RKI-13	RKI-14	
Road Name	Edoor – Companynirath - Anapanthy - Angadikkadavu– Vaniyappara - Charal - Valavupara - Kacherikkadavu - Palathumkadav road in Peravoor constituency	Uruvachal Manakkayi valayal -Keezhallur Therur Palayod-Vellaparamba Karimbala Colony Maruthaayi Road	Kumbla- Badiadka-Mulleria road	Koyilandy Thamrassery Mukkam Areekode Edavanna	Vythiri-Tharuvana road	
District	Kannur	Kannur	Kasargod	Kozhikode	Wayanad	
Length as per ToR (km)	24.45	20.43	29.55	52.50	20.75	147.675
Length of Road as per actual site (km)	24.40	18.46	29.135	46.32	13.32	131.635
Category of Road	MDR	MDR	MDR	SH-34	MDR	
Status						
Submitted	✓	✓	✓	✓	✓	
Estimated Cost in Cr	127.35	96.31	151.74	212.74	61.15	649.29
NIT Date	✓ 16-07-2020	✓ 24-08-2020	✓ 22-08-2020	Not Yet	Not yet	
Bids uploaded Date	✓ 27-07-2020	✓ 27-08-2020	✓ 24-08-2020	Not Yet	Not yet	
Pre Bid date	11-08-2020	15-09-2020	14-09-2020	Not Yet	Not Yet	
Last date of receiving bids	11-09-2020	12-10-2020	08-10-2020	Not Yet	Not Yet	
opening Date	11-09-2020	12-10-2020	08-10-2020	Not Yet	Not Yet	

Status of Roads under Package 2

PKG -II, M/s L & T						
Road No.	RKI-05	RKI-06	RKI-07	RKI-08	RKI-10	
Road Name	Perumbilavu-Nilambur Road	Quilandy - Edavanna road	Palakkad - Perinthalmanna Road	Thavalam Mully Road	Mananthavady - Vimalanagar -	
District	Malappuram	Malappuram	Palakkad	Palakkad	Wayanad	
Length as per ToR (km)	24.4	32.5	36.8	28.8	24.8	147.30
Length of Road as per actual site (km)	30.88	31.53	37.38	28.50	27.00	155.294
Category of Road	SH-39	SH-34/MDR	SH-53	MDR	MDR	
Status						
Submitted	✓	✓	✓	✓	✓	
Estimated Cost in Cr	132.76	157.40	355.68	116.11	88.59	850.5448
NIT	✓ 16-05-2020	✓ 16-05-2020	✓ 16-05-2020	✓ 16-05-2020	✓	
Bids uploaded	✓ 05-06-2020	✓ 05-06-2020	✓ 05-06-2020	✓ 05-06-2020	✓	
Pre Bid	15-06-2020	15-06-2020	15-06-2020	15-06-2020	27-07-2020	
Last date of receiving bids	16-07-2020	16-07-2020	16-07-2020	27-08-2020	24-08-2020	
Opening Date	16-07-2020	16-07-2020	16-07-2020	27-08-2020	24-08-2020	
Awarded Cost in Cr						
Awarded	M/s KMC Constructions	M/ s Shreedanya Construction Company	M/s KMC Constructions	Under Evaluation stage	Under Evaluation stage	

Status of Roads under Package 3

PKG -III, M/s LBI											
	Pilot DPR						Pilot DPR				
Road No.	1	2	3	4	5	6	7	8	9	10, Additional scope	
Road Name	Mookannoor Ezhattumugham road and Blachippara Palissery road	Kakkadasery - Kaliyar road	Muvattupuzha - Theni (SH-43) road	Kumarakom-Nedumbasery road (proposed SH)	Neyyassery-Thokkumbansadde road	Nenmara - Nelliampathy road	Kodungallur-shornur (SH-22) road	Vazhakkodu-Plazhy (SH-74) road	Thrissur Kuttippuram road (SH 69)	Arakunnam-Amballoor-Poothatta-Piravam Road	
District	Ernakulam	Ernakulam	Ernakulam	Ernakulam	Idukki	Palakkad	Thrissur	Thrissur	Thrissur	Thrissur	
Length as per ToR (km)	20.30	20.60	15.75	21.03	28.50	30.71	34.00	22.64	29.98	7.00	230.51
Length of Road as per actual site (km)	19.95	20.176	16.18	21.40	31.916	30.47	34.35	22.72	33.00	7.98	238.142
Category of Road	MDR	MDR	SH	MDR	MDR	MDR	SH	SH	SH	MDR	
Status											
Estimated Cost in Cr	94.16	68.1	80.16	95.20	136.04	92.01	198.2	95.60	212.38	27.74	
Submitted / mailed to KfW	✓		✓			✓	✓				
Date	15.08.20		04.09.20			04.09.20	15.08.20				
NO from KfW	✓						✓				
Date NO received from KfW	28.08.20						28.08.20				

	NIT										
	Date	Planned for 07.09.20	Planned for 14.09.20	10.09.20	Planned for 12.09.20	Planned for 14.09.20	10.09.20	Planned for 07.09.20		Planned for 12.09.20	Planned for 14.09.20
Bids uploaded											
	Date	08.09.20						08.09.20			
	Pre Bid Date	Scheduled for 06.10.20						Scheduled for 06.10.20			
	Last date of receiving bids										
	Date	Scheduled for 22.10.20						Scheduled for 22.10.20			

Status of Roads under Package 4

PKG -IV, M/s EGIS									
		Pilot DPR			Pilot DPR				
Road No.	1	2	3	4	5	6	7, Additional Scope	8, Additional Scope	9, Additional Scope
Road Name	Gandhinagar-Medical College-Babu Chazhikadan road-Kottayam-Parippu road-Athirampuzha Liessue-Kaippuzha - Mannanam-Pulikkuttisery-Parolickal-Muttappally road	Vadayar Chandappalam-Mulakkulam Road and Vadayar Kallattippalam Muttuchira road	Pathanamthitta Ayroor-Muttukudukkaillathupadi - Muttukudukka Prakkanam-Prakkanam Elavumthittakulanada Ramanchira-Thannikkuzhy Thonnamal road	Mallapally-Komalam Paduthodu Kalloopara Chengaroor Komalam Kavungumpayar Pattakala, TMV road	Malamekkara Kunnathukala Chala Puthenchanda factory Junction Azad Junction road	Trivandrum Ponmudi road (From Nedumangad to Ponmudi)	Thattararnbam-Michael Junction-Kochalummood-Mangankuzhy-Pandalam	Veeyapuram-Edathua-Puthukarry-Marnbuzhakary-Kidangara-Kunnamgary - Kumarangary-Valady-Mullakarthurthy	Vayuttupuzha-Potheppad Road
District	Kottayam	Kottayam	Pathanamthitta	Pathanamthitta	Pathanamthitta	Thiruvananthapuram	Allapuzha	Allapuzha	Ranni
Length as per ToR (km)	21.95	24.7	28.12	22.65	8.6	41	21.8	21.35	35.00
Length of Road as per actual site (km)	20.197	22.476	28.204	23.129	7.866	41.75	18.657	21.45	
Category of Road	MDR	MDR	MDR	MDR	MDR	SH			

Status										
Estimated Cost in Cr	106.94	98.96	99.82	101.82	27.67	203.42	113.19	94.6	Not Yet	
Submitted / mailed to KfW	✓	✓	✓	✓	✓		✓		Survey to be done	
Date	27.08.20		27.08.20	21.08.20			21.08.20			
NO from KfW		✓			✓					
Date NO received from KfW		13.08.20			13.08.20					
NIT		✓		✓	✓		✓			
	Planned for 12.09.20	15.08.20	Planned for 12.09.20	10.09.20	15.08.20		10.09.20	Planned for 14.09.20		
Bids uploaded		✓			✓					
		21.08.20			21.08.20					
Pre Bid										
		Scheduled for 22.09.20			Scheduled for 22.09.20					
Last date of receiving bids										
		Scheduled for 05.10.20			Scheduled for 05.10.20					

Note: * denotes Changes in Future

6 Project Development Indicators – Results Framework

SI. NO		INDICATORS	UNIT	BASELINE		CUMULATIVE ACHIEVEMENT				END TARGET	SOURCE	
						YR-1	YR-2	YR-3	YR-4			
1	2	3	4	5		6	7	8	9	10	11	
A		UPGRADATION										
	1	Direct Project Beneficiaries of which female	NOS.	13.4 million			1.1	13.90 million 7.10 million	14.15 million 7.35 million	14.80 million 7.7 million	CSC	
	2	Reduction in Travel Time	MINUTES	CAR							CSC	
				1	Kasaragod – Kanhangad road	19 45			Ch: 0-14 Car: 33%	Ch: 0.000 to 23.185 Time- 30'7"-31%		
				2	Pilathara – Pappinissery road	21			Only very limited length done	Ch: 0+000 to 17+900 (3 stretch), 16+290 km Car-Time- 19'13"-10%		
				3	Thalassery – Valavupara road	58						

SI. NO		INDICATORS	UNIT	BASELINE		CUMULATIVE ACHIEVEMENT				END TARGET	SOURCE	
						YR-1	YR-2	YR-3	YR-4			
1	2	3	4	5		6	7	8	9	10	11	
				4	Chengannur – Ettumanoor road	95			Ch: 20-45 Car: 35%	Ch: 0.0-47.0 Car:78'0"-17.8%	Increase traffic	
				5	Ettumanoor – Muvattupuzha road	60			Car: 33%	Ch: 0 to 30 Car: 39'0"-35%		

SI. NO		INDICATORS	UNIT	BASELINE		CUMULATIVE ACHIEVEMENT				END TARGET	SOURCE
						YR-1	YR-2	YR-3	YR-4		
1	2	3	4	5		6	7	8	9	10	11
				6	Thiruvalla Bypass						
				7	Ponkunnam – Thodupuzha road	90		(37 km) Car: 20%	48 km Car 25%		

SI. NO		INDICATORS	UNIT	BASELINE		CUMULATIVE ACHIEVEMENT				END TARGET	SOURCE	
						YR-1	YR-2	YR-3	YR-4			
1	2	3	4	5		6	7	8	9	10	11	
				8	Punalur – Ponkunnam road							
				9	Perumpilavu – Perintalmanna road							
	3	Improved Riding Quality of Project Road	KM		No. of km with IRI < 4	363		20	68	224	340	CSC
	4	Reduction in Annual Fatality (Details for the			No. of fatalities/ year	80					56	CSC

SI. NO		INDICATORS	UNIT	BASELINE		CUMULATIVE ACHIEVEMENT				END TARGET	SOURCE
						YR-1	YR-2	YR-3	YR-4		
1	2	3	4	5		6	7	8	9	10	11
		last 6 months. Fatal)		Venerable -	49					34	
			1	UG-1 Kasaragod – Kanhangad road (27+80)					6		
			2	UG-2 Pilathara – Pappinissery road (20+900)					9		
			3	UG-3A, 3B Thalassery – Valavupararoa d (54+000)		Work not progressed for assessment					
			4	UG-4 Chengannur – Ettumanoor road (47+700)					13		
			5	UG-5 Ettumanoor – Muvattupuzha road (40+960)					6		
COMPONENT -A – ROAD UP GRADATION											
	5	State Highways upgraded		Km	-	-			216 km	340	CSC

SI. NO	INDICATORS	UNIT	BASELINE		CUMULATIVE ACHIEVEMENT				END TARGET	SOURCE	
					YR-1	YR-2	YR-3	YR-4			
1	2	3	4	5		6	7	8	9	10	11
	6	Financial closure achieved on PPP project		Y / N	-	-	-		N		
COMPONENT -B - ROAD SAFETY											
	1	Pilot Safety Corridors Developed		Km improved	0	-	-		Work in progress	80	KSTP (work started)
	2	Number of District Level Road Safety Improvement Schemes implemented through challenge funds		Number	1	-	-	-	1	10	Road Safety Consultant
COMPONENT -C - INSTITUTIONAL STRENGTHENING											

SI. NO		INDICATORS	UNIT	BASELINE		CUMULATIVE ACHIEVEMENT				END TARGET	SOURCE	
						YR-1	YR-2	YR-3	YR-4			
1	2	3	4	5		6	7	8	9	10	11	
	1	Modernization of PWD			Y / N	No	Review of existing IT system undertaken and recommendations adopted			Decided to take up other assignments under this program and arrangements are in progress. -Establishing a Centre of Excellence in Road Safety and Asset Management		KSTP CoE in place
	2	Functioning Road Asset Management System			Y / N	No	-	-	-	Annual Maintenance Plans disclosed		PWD reports

SI. NO		INDICATORS	UNIT	BASELINE		CUMULATIVE ACHIEVEMENT				END TARGET	SOURCE	
						YR-1	YR-2	YR-3	YR-4			
1	2	3	4	5		6	7	8	9	10	11	
	3	Communications Strategy and Interfaces for Public Engagement Implemented			Y / N	No		PI Cell functioning		-PIMS being arranged -Community Participatory Road Safety & Asset Safeguard Program	At least 2 consultants/ stakeholder forums held	PWD/ KSTP
	4.	Regular Road User Surveys conducted			Y / N		Baseline survey undertaken			Mid-term survey conducted	Final survey under progress	KSTP

7 Social Safeguard

Acquisition of 121.5 Ha of land for up-gradation of 7 roads covering 322 km which affected 20696 households including titleholders and non-titleholders. As per the R&R policy of KSTP, entitlements of all PAPs have been disbursed as part of pre-construction activities linked with land acquisition, rehabilitation, and resettlement. As construction works started, 61 missing properties were identified in different packages most of which are required to link the two new bridges at Eranholi and Iritty. Action is being taken for the acquisition of those properties under the LA process and through negotiated purchase and rehabilitation of the affected PAPs.

7.1 Land Acquisition Status (LA) pending issues to be resolved

7.1.1 Package UG-III-A – Thalassery - Kalarode road:

Sl. No.	Chainages of the road where LA required		The officer at whose level case is pending	Date since when such case is pending	Targeted date of finalization	How much land area is to be acquired (Ha)
	From	To				
1.	2.950	3.230	KSTP Kannur and LA Tahsildar, LAO Thalassery	Nov 2017	SIA conducted. An expert review was completed. Award by 31.06.2019	0.7100

7.1.2 Package UG-III-B – Kalarode – Valavupara road:

Chainages of the road where LA required		The officer at whose level case is pending	Date since when such case is pending	Targeted date of finalization	How much land area is to be acquired (Ha)
From	To				
42.300	42.660	KSTP Kannur & LAO, Thalassery	Oct 2017	SIA conducted Experts' review completed. Valuation in progress. Award by 31.12.2018	0.5500
Total					0.5500

7.2 Tree Cutting

The total number of trees to be cut combining the Packages VIII B and C is 1486 Numbers and currently 250 under Progress

7.3 Management of Construction induced Issues

Grievance Redressal Committees (GRC) constituted at the district level are functioning effectively under the Chairmanship of the District Collector. All grievances that cannot be resolved locally or at the site are referred to as the GRC which meets once a month making effective decisions followed by actions in the field. Loss of access, protection of wells and houses abutting the road, retaining walls to prevent landslide, prevention of waterlogging, and provision of drainage are the most common issues during the construction phase. These are included in the BOQ and PAP works for implementation. Those issues concerning land value or higher compensation are referred to as the State level Committee.

8 Grievance Management Report

(1st Jan 2013 – 30th April 2018) *

Sl. No	Nature of Grievance	Total no. of petitions	Total No. of cases settled	Remarks
		01.01.2013 to 30.04.2018	30.04.2018	
1	2	3	4	5
1	Land Acquisition/ Alignment change	13	13	10 settled through participatory interaction between KSTP officials and PAPs. Three cases were settled by the High Court.
2	Inadequate compensation of land/ Category change of the land	4	4	Category changes effected after re-examination by the Revenue authorities and payments made accordingly. .
3	LAR Cases	323	312	11 Cases pending in the Sub Courts
4	Variation in the extent of land	12	12	Resurvey done in all cases and 2 were compensated by enhanced award.
5	Acquisition of missed structure/ Part/Full	12	12	Valuation of 12 missed out structures taken, and compensation paid.
6	Inadequate compensation for structure	3	3	Rechecked the valuation at site in the presence of the PAP and convinced the veracity.
7	Provision of retaining wall to protect structure	144	144	Retaining wall provided to protect structures/ properties.
8	Protection of well	83	83	All wells have been protected by diverting drains and by providing concrete slabs/covers/ side walls as required at each site.
9	Conversion of part valuation of structure to full or vice versa	4	4	Changes effected as requested by the PAP and payment released
10	Inadequacy of R&R assistance	201	201	All cases settled in GRC and payment was released.
11	Extension of time limit for demolition	12	12	Stay vacated and all structures demolished
12	Restoration of access to property	523	5965	The total number of access restored is 5965 including 523 who

Sl. No	Nature of Grievance	Total no. of petitions	Total No. of cases settled	Remarks
		01.01.2013 to 30.04.2018	30.04.2018	
1	2	3	4	5
				presented their grievance on the subject.
13	Providing new access	45	45	Provided access to all
14	Water logging issues	44	44	All cases settled
15	Drainage	156	156	All cases settled
16	Encroachment by contractor	18	18	Encroachment evicted and sites cleared restoring the condition as before
17	Damage to adjacent property	83	83	Damages in all 83 cases repaired and rectified
18	Shifting Transformer	1	1	Resettled
19	Non-payment of compensation	25	7	G.O. withdrawn and settled the issue
20	Reconstruction of cross drainage	10	10	Provided cross drainage in all 10 cases

**Data from 1st May 2018 to August 31st, 2019 is being sought from division offices and will be updated shortly.*

8.1 Compliance of Mission Recommendation

8.1.1 Responsibilities of Sociologist in the Division

The role and responsibilities of sociologist in the division is to implement a resettlement action plan (RAP) – ensuring that the affected person/family gets the right information about land acquisition, process and procedures, compensation details and date of payment, persons responsible for grievance redress and counselling when rehabilitation required. S/he should ensure that PAP gets all entitlements/benefits in due time and without delay, refer all grievances to the Grievance Redressal Committee (GRC), and see that those are brought to the notice of the GRC within 15 days and resolved in one month. Disbursement should be made in each village and not in the KSTP office. If any payment pending analyse factors preventing and search for solutions and report facts and figures to EE and PMT. Regarding the pending land acquisition, the sociologist should function as a strategic planner, advise EE on the nature and process of different types of acquisition and monitoring; suggest measures in the form of notes, to speed up. If there is a lack of knowledge, get it through reading and consultations with the right persons. Case studies of each affected individual/family complete with socio-demographic and economic backgrounds should be readily available and presented when called for.

Wherever construction is in progress, the sociologist must focus his/her attention on the mitigation of construction induced negative impacts. Identification and reporting of loss of access from the road to

homes, establishments, and properties, dangerous excavations without protective measures and barricades, threat or damage to adjacent properties, encroachment by contractor, waste dump in adjacent land, a threat to buildings and wells, and other utilities (water, electricity, telecom & cable services requiring protection from damages, prevention of flooding, waterlogging in front of habitations and establishments, and any activity that can cause harm to human beings and animals. Should ensure that no excavation or demolition is done without reasonable advance notice and without providing temporary measures to provide access. Temporary measures should be replaced by a permanent solution within a couple of weeks or at least in one month. Daily and weekly reports in writing should be given to the appropriate forum for necessary action based on the urgency.

A third angle of sociologist's responsibility is to monitor the welfare of the workers in camps and worksite. Living conditions in the camp should be hygienic, working conditions secure, with proper gears and tools, availability of toilets, and safe drinking water at work site. If anything is lacking it should be brought to the EE immediately and to PMT in the monthly report.

Responsibilities remain incomplete without monthly reporting which should be comprehensive and regular. The report and case studies should be substantiated well with the details of the subject matter with the date and time of each activity spliced with relevant photos. The project is time-bound. The Action Plan should specify dates for each of the activities. The statement commonly used, such as, "Action being taken or attended to" does not mean anything. It should be specific, what activity will start, and when – it should begin on a day and end on a particular date. The proforma for social audit circulated a month ago must be completed and returned to PMT for analysis and final reporting before taking over roads from contractors. It should include all mitigation measures done at the site for each PAP. Hence verification at the site is necessary.

8.2 Payment to the consultants and Contractors as on end of August- 2020:

Sl. No	Firm/Organisation	Works Services	Amount in INR
1	M/s Egis India JV -	CSC For Packages I, II, IIIA, III B, IVA, IV B, V,	54,18,21,349/-
2	M/s MSV International	CSC for Package VI	4,67,41,766 /-
3	M/s VicRoads		11,07,89,698 /-
4	M/s L&T Ramboll	Transaction Advisors	4,22,10,480 /-
5	M/s Eptisa Servicious De Ingeneiria	PMC for KSTP-II Project	1,99,45,736 /-

Contractors

Sl. No	Name of Contractor	Project/Pkg No	Amount in INR
1	M/s.RDSProjects Limited	Kasargod-kanhangad-SH-57 KSTP-2/UG/1	1,22,85,65,038 /-
2	M/s.RDS Projects Limited	Pilathara-Pappinssery-SH-67 KSTP-2/UG/2	101,62,22,268 /-
3	M/s.Dinesh Chandra R. AgarwalPvt.Ltd.,	Thalassery-Kalaroad-SH-30 KSTP-2/UG/3A	102,81,00,911 /-
4	M/s.GHV-EKK Infrastructure & Co.	Kalaroad-Valavupara-SH-30 KSTP-2/UG/3B	1,91,46,23,541 /-
5	M/s.GHV-EKK Infrastructure & Co.	Thiruvalla bypass KSTP-2/UG/4A	16,55,18,684 /-
6	M/s.EKK Infrastructure Ltd.,	Thiruvalla town KSTP-2/UG/4B	4,83,87,988/-
7	M/s.GHV-EKK Infrastructure & Co.	Kazhakuttom-Adoor KSTP-2/OL/8	122,51,26,101 /-

9 Compliance Governance Improvement Action Plan

9.1 (Micro level implementation will be done with help of PMC)

1. Take Swift Punitive Action		
<ul style="list-style-type: none"> Blacklist relevant companies and terminate officials per government rules have engaged in misconduct 	:	Will be done on receipt of evidence
<ul style="list-style-type: none"> Address any performance issues among PMT officials and consultants 	:	Will be addressed
2. Address outstanding contractor Related Matters		
<ul style="list-style-type: none"> Clear the backlog of payments and variation order requests 	:	Cleared except disputed variation in Package VI
<ul style="list-style-type: none"> Follow-up on quality issues and conduct tests where relevant 	:	Being followed up. Arrangement for verification of all newly constructed bridges done
<ul style="list-style-type: none"> Exercise where warranted contractual remedies vis-à-vis contractors, design and supervision consultants 	:	This will be exercised when required
3. Build a New Foundation		
<ul style="list-style-type: none"> Develop an action plan to strengthen integrity risk management w/oversight by a stable management team 	:	All managerial positions filled
<ul style="list-style-type: none"> Clearly delineate PWD's role (also make the KSTP the incubator of new approaches) 	:	This will be done. Already directions towards PWD role is given
<ul style="list-style-type: none"> Augment as required the PMT staffing 	:	<ul style="list-style-type: none"> i. Project Management Consultant being engaged– bidding in progress ii. Probity Advisor being posted iii. Community liaison officer being posted
<ul style="list-style-type: none"> Communicate GoK's zero-tolerance vis-avis PMT and PWD officials as well as contractors and the public 	:	This will be done

9.2 Key controls as part of the Action Plan:

A. Approval of variation orders and payments		
B.		
<ul style="list-style-type: none"> Reduce the number of officials involved in assessing and signing off on IPCs and variation orders 	:	This was done
<ul style="list-style-type: none"> "Force" contractors and supervision consultants to explicitly certify 	:	Orders issued

compliance with contractual obligations		
<ul style="list-style-type: none"> Revise the Financial Management manual to detail the process and individual accountabilities 	:	This is being done
<ul style="list-style-type: none"> Consolidate in a decision memo to the Project Director the view of engineers and finance staff 	:	This is being arranged
<ul style="list-style-type: none"> Establish a service standard for the timeliness of approvals 	:	This is already in place
<ul style="list-style-type: none"> Don't allow consultants and contractors to take advantage of savings by adding what is not truly needed 	:	This will be followed strictly
<ul style="list-style-type: none"> Update regularly an "exception report" with all outstanding payment requests and variation orders; identified quality issues; planned and how tests; unavailability of machinery and of PMT, SC and contractor staff; any shortfall in PMT liquidity compared to received and expected payment before next tranche; and revised cost estimate compared to the contract price and original estimate 	:	Will be done
<i>C. Procurement of Goods, Works, and Services</i>		
<ul style="list-style-type: none"> Undertake a market survey of road contractors to improve competition and reduce collusion risks 	:	This is being arranged through experts being mobilized – bidding is on
<ul style="list-style-type: none"> Develop more precise cost estimate so you can gauge if collusion risks are elevated 	:	This will be done
<ul style="list-style-type: none"> Require independent bid certificates 	:	This is being insisted
<ul style="list-style-type: none"> Institute a code of conduct for PMT and PWD officials re-reporting of misconduct, conflicts of interest, etc., 	:	Will be instituted
<ul style="list-style-type: none"> Apply an integrity due diligence checklist to spot in bids red flags of fraud, collusion, and unbalanced bidding 	:	This will be followed
<i>D. Quality Assurance</i>		
<ul style="list-style-type: none"> Operationalize the committee recently constituted to review compliance with quality control 	:	The committee chaired by the Chief Engineer, KSTP is reviewing the quality of works periodically

<ul style="list-style-type: none"> • Create a quality assurance protocol with a clear escalation mechanism with a specific focus on structural/ bridge works 	:	This has been developed and passed on to the Field Engineers. Quality audit as per the Quality Assurance protocol is underway
<ul style="list-style-type: none"> • Organize monthly review meetings and quality clinics and discuss the exception report and assess compliance 	:	This is arranged
<ul style="list-style-type: none"> • Make full use of the existing IT-based quality assurance system to enhance transparency on the quality assurance system 	:	The quality Specialist position is included in the PMC. This will be developed with the help of PMC
<ul style="list-style-type: none"> • Manage carefully integrity risks associated with failed tests 	:	Non conformance are recorded and re-tests arranged after rectification
E. Performance Management		
<ul style="list-style-type: none"> • Develop a scorecard to track the quality, timeliness, and price of the PMT's work, and make it public – significant fraud and corruption always impact these indicators 	:	This is being arranged

9.2.1 SUMMARY OF ACTIONS SINCE WB MISSION IN March 2020

Action	By whom	By when	Status/Action taken
Component A1-Road Network Upgrading and Safety Improvement			
<ul style="list-style-type: none"> • LA for Eranholi and Iritty Bridge approach • Forest and Wildlife Clearance for Kootupuzha Bridge 	GOK, contractor	<ul style="list-style-type: none"> • April 31, 2020 • • • • • April 30, 2020 	<p>Eranholi Bridge – Land to be acquired after disbursements. Under Revenue department final stage.</p> <p>Iritty Bridge –To complete the entire structure by June 2020.</p> <p>Kootupuzha bridge – forest clearance given by Karnataka Govt. Final clearance from the Centre to be taken.</p>
<ul style="list-style-type: none"> • Completion of all works in Pkg 4 A. 	Contractor, CSC, GoK	Designs finalized and handed over on June 30, 2019. Completion by June 2020.	All Piles completed till date and Substructure up to 90 % completed. EOT up to 30-04-2020 (approaches including Km 7+390 to 9+400 given). Superstructure erection and girder casting in

			progress.6 Girders cast out of 36 totals required.
<ul style="list-style-type: none"> • Complete Slope protection works for contract 3B 	Contractor, CSC, GoK	Protection works Completed in Jan 2020. Iritty Bridge and Kootupuzha Bridge to be completed. All civil works were completed.	Clearance for Kootupuzha Bridge from Centre to be pursued and cleared. Before April 30 anticipated.
<ul style="list-style-type: none"> • Finalize monitoring arrangement for two Integral Bridges and Neelimangala Bridge in package 4 	GoK	July 31, 2019	CSC started monitoring (Tell plates) and recording of reading from 1st Aug 2019 and as such no settlement has been observed. Monitoring in progress.
Component A2-Road Network Upgrading and Safety Improvement (EPC)			
<ul style="list-style-type: none"> • Award contracts for packages 8A 	Gok, consultant	June 30, 2019	Under High Court decision for further action by KSTP. Awaiting the court's decision.
<ul style="list-style-type: none"> • Award contracts for packages 8B 	Gok, consultant	June 30, 2019	Package 8B- Agreement with M/s EKK Infrastructure Ltd on 22-08-2019 and preliminary works in progress.
<ul style="list-style-type: none"> • Award contracts for packages 8C 	Gok, consultant	June 30, 2019	Package 8B- Agreement with M/s J V of M/s Sreedhanya and Nath Constructions on 24-09-2019 and preliminary works in progress.
<ul style="list-style-type: none"> • Award contract for Independent Engineer 	CSC, GoK	September 15, 2019	Work awarded to M/s CEG Engineering Services Ltd and agreement signed on 16-10-2019 Consultants Mobilized.
Component B- Road Safety			
<ul style="list-style-type: none"> • Issue all remaining drawings (4 Junctions) to contractor for SCDP 	Gok, NATPAC	June 30, 2019	All Short-term drawings for implementation are given to the Contractor in Jan 2019. Base map of 3 junctions for long term

			forwarded to NATPAC and Drawings will be submitted by the first week of Aug 2019. Implementation at site is Short term In Improvements.
<ul style="list-style-type: none"> • Submit ToR for M&E consultant for SCDP 	Gok	June 30, 2019	Draft Report on M & E on SCDP prepared by KRSA and submitted.
<ul style="list-style-type: none"> • Submit ToR for DPR consultant for Challenge Fund 	Gok	June 7, 2019	TOR Finalized and Work awarded to M/s EGIS India Pvt Ltd and draft DPR expected by March 31, 2020.
Component C- Institutional Strengthening			
<ul style="list-style-type: none"> • Share final RUSS report with the Bank 	Gok	June 7, 2019	The report was submitted to Bank on 06.07.19 and found satisfactory.
Component D- Flood Damage Rehabilitation			
<ul style="list-style-type: none"> • Finalize the RPF-TDF, disclose and organize public consultation 	Gok	September 15 th	RFP's finalized and Issued. Bidding Process completed for 800 Kms of DPR under Package 1 2 3 and 4. agreement signed on 17-10-2019. All Works of DPR preparation in Progress and expected by April 31-2020.
<ul style="list-style-type: none"> • Finalize Bid Document for 3 PWD Roads 	Gok	July 15, 2019	Bidding completed and two works awarded to M/s EKK Infrastructure Ltd. Third Bid retendered and received. Technical Evacuation in process.
<ul style="list-style-type: none"> • Award DPR consultancy for LSGD Roads 	Gok	August 15, 2019	LSGD Dropped from KSTP And informed World Bank.
<ul style="list-style-type: none"> • Award PMC for RKI 	Gok	July 31, 2019	Bids were received and evaluation done and submitted to KfW / WB for final approval.
Financial Management			
<ul style="list-style-type: none"> • Submit Statutory Audit Report for FY 18-19 	Gok	September 30, 2019	Audit report submitted to WB in the last week of September 2019.

<ul style="list-style-type: none"> • Submit Internal Audit Report for Second half of FY 18-19 	Gok	June 30, 2019	The report is expected to be submitted by 10-12-2019 as discussed by FM with WB on 21 st Nov 2019.
Safeguards			
<ul style="list-style-type: none"> • Submit revised and updated RAP for 8A, B, C, and Idukki and Eranholi Bridge 	GoK	July 15, 2019	Updated RAP uploaded and updated in the Bid Documents tendered and awarded.

10 ACCIDENT REPORT

World Bank expressed the necessity to analyse the accident database with respect to the database before the up gradation of these roads. CSC has been instructed to collect the data from Police stations for these roads before implementing the up-gradation and compare this with the same after the roads are opened for road users.

The monthly accident report for the Period of August-2020 is as below for Package III A and III B. Since work is not going due to the Covid-19 pandemic in the Packages IV A and IV B, no accident data is provided as of now. However, after completion of these two roads and allowing the road users, the past and present data shall be collected and analysed. There were no accidents data August-2020 in Pkg 3A & 3B was available.

10.1 Accident Report Pkg-3A

Nil

10.2 Accident Report of Pkg-3B

Nil

10.3 Accident Report Pkg-8B

Contractor has Submitted

10.4 Accident Report Pkg-8C

Contractor has Submitted

11 Site Work Progress Photographs

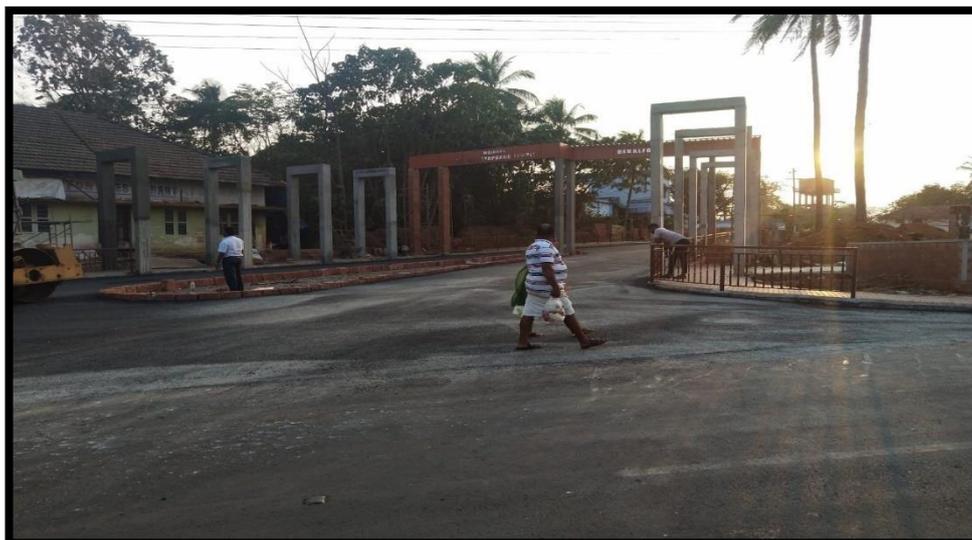
11.1 Package -1 –Photographs



Chandrigiri Bridge Expansion Joint



Bekal Port Auto parking



Bekal fort Road

11.2 Package -2 –Photographs



Oxbow land



Ramapuram Existing bridge approach

11.3 Package -3A –Photographs



SG WORK 26+530 – 26+570 RHS



DECK SLAB P2-P3 @ 2+910 ERANHOLI BRIDGE



DRAIN LAYING @ CH: 24+917 -24+940 RHS



GABION 2nd LAYER @ CH: 29+708 -29+720 RHS



GSB WORK 26+570 – 26+650 RHS



DECK SLAB P2-P3 @ 2+910 ERANHOLI BRIDGE

11.4 Package -3B –Photographs



Iritty Bridge at km 42+198 SPAN P1-P2 shuttering work in progress



Iritty Bridge at km 42+198 Dirt wall A2 side reinforcement work in progress



50+740 RHS retaining wall work in progress



50+750 RHS retaining wall work in progress.



Iritty Bridge at km 42+198 A1 side (RHS) approach filter media laying for stone pitching



Pazhassi Park at Thalassery- work in progress.

11.5 Package -4A –Photographs



Piercap concrete work on P3, Viaduct



Piercap Reinforcement work on P2, Viaduct

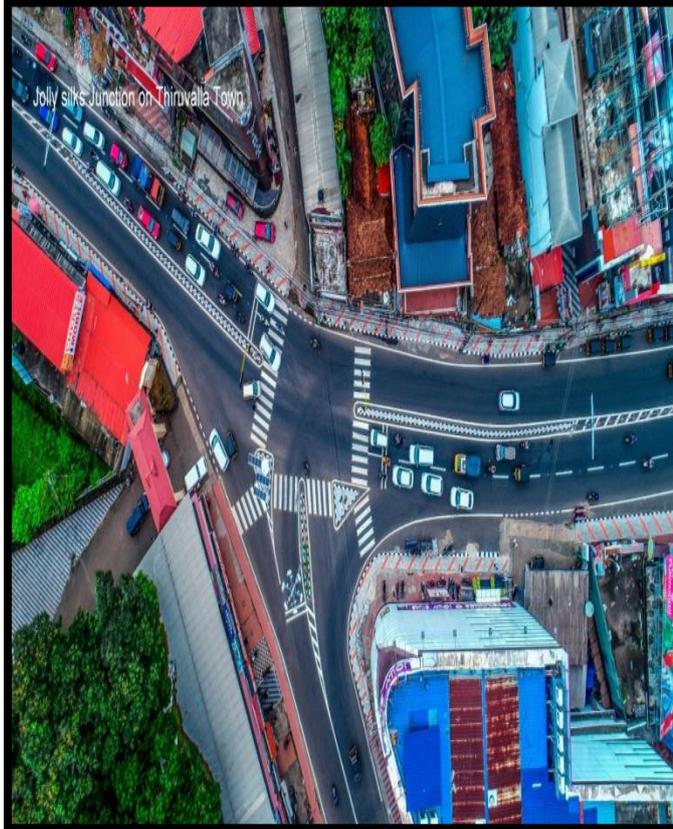


L wall completed up to 2nd Lift

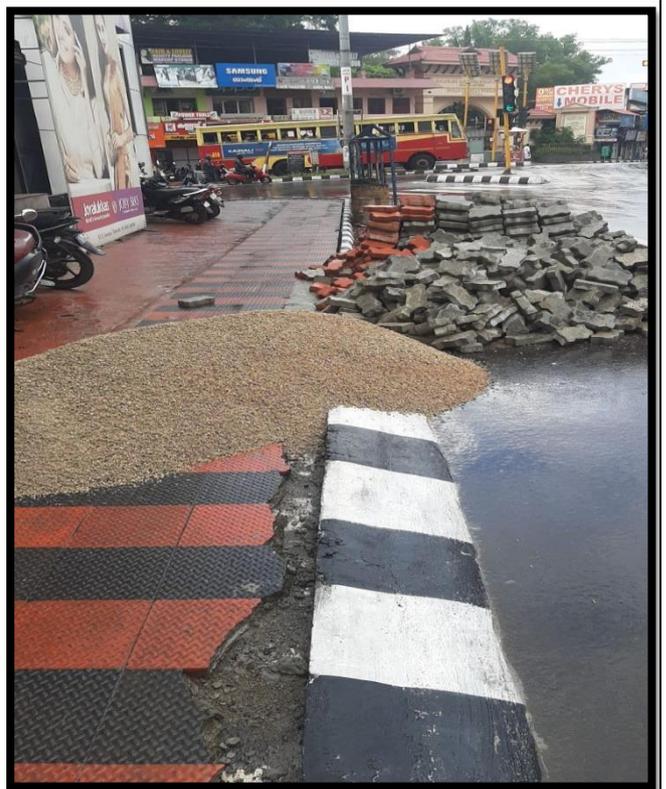


Connection drain work at 2+350

11.6 Package -4B –Photographs



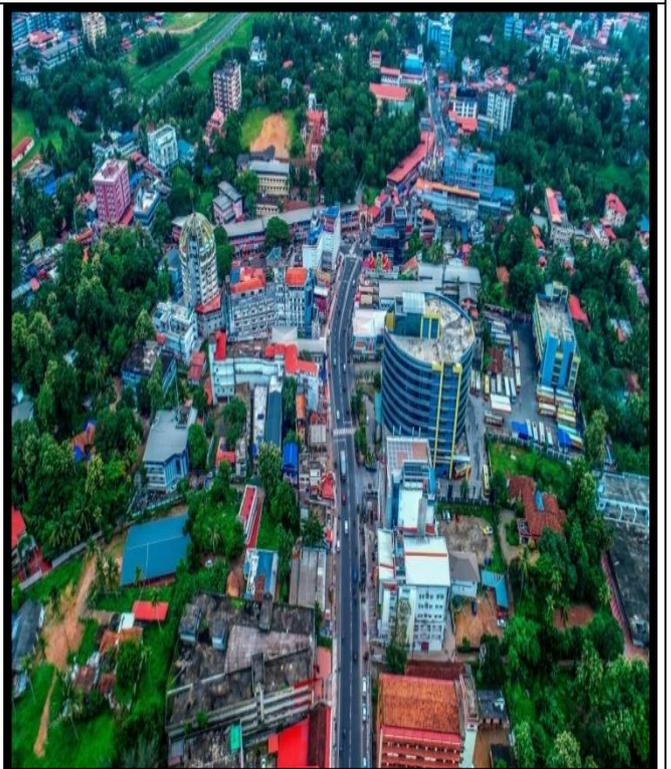
Jolly Silks Junction, Thiruvalla Town



Footpath work in progress at 1+180



Mavelikkara Junction, Thiruvalla Town



View of Thiruvalla Town

11.7 Packages-8B-Photographs



CE, KSTP Visited the site on 14.08.2020



Toe wall WORK IN PROGRESS



Drain WORK IN PROGRESS

11.8 Package -8C-Photographs



Box culvert Raft work in progress



Toe wall concreted work in progress



Excavation work in progress



Excavation work in progress



Box culvert work in progress



Pipe laying work in progress

11.9 RKI 4 Road –(Adoor to Chengannur) Photos

11.10



Survey work in progress



Dismantling of existing road cross structure work is in progress at Km 111+800.



Dismantling of existing culvert work is in progress at Km 111/800,LHS

11.11 RKI 3 Road –(Painavu-Ashokakaval road) Photos



OGL Sampling work in progress



OGL Sampling work in progress



Survey work in progress



Survey work in progress



Site visit with AE KSTP



Site visit with AE KSTP

11.12 SCDP Road –Component B –Photographs



Ladder hatching & hatch marking



School Zone Treatment

-----End of Report-----