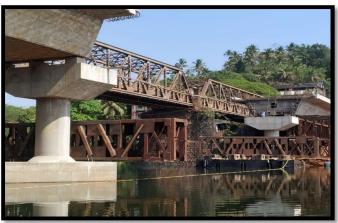
## GOVERNMENT OF KERALA PUBLIC WORKS DEPARTMENT











# QUARTERLY PROGRESS REPORT JANUARY to MARCH -2020

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



### PROJECT MANAGEMENT TEAM

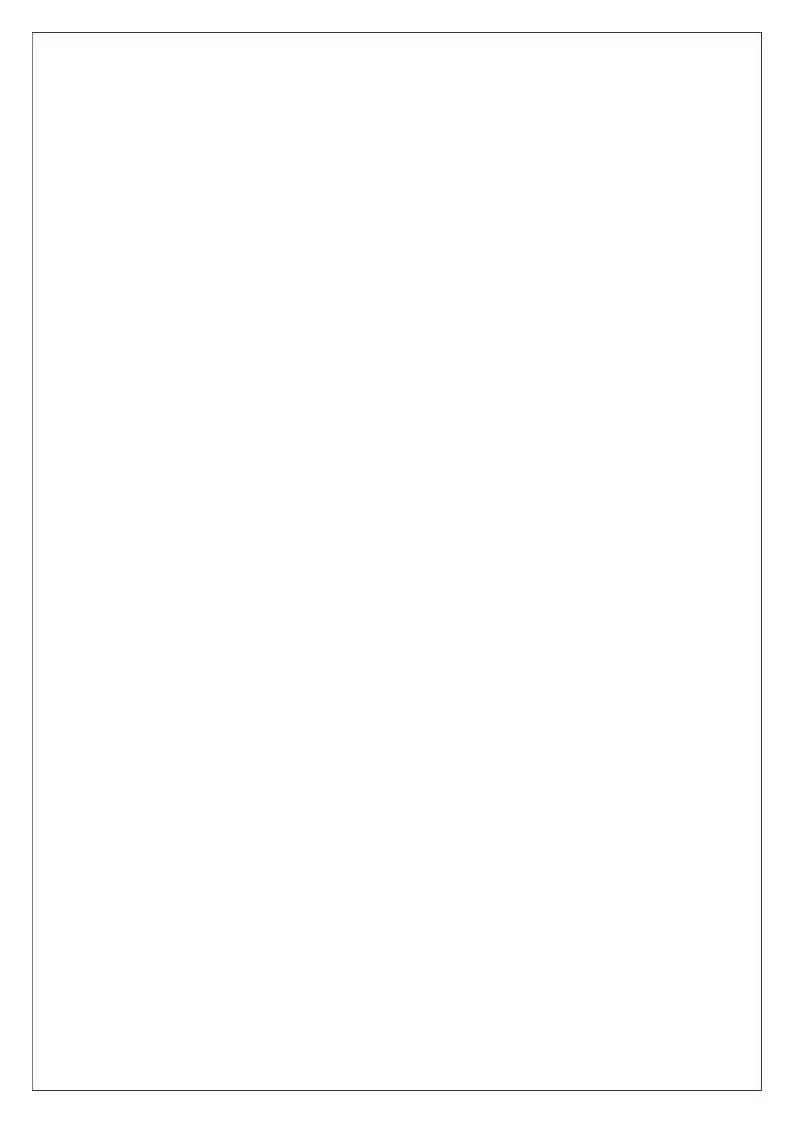
KERALA STATE TRANSPORT PROJECT T.C.11/339, SREE BALA BUILDING, KESTON ROAD, KOWDIAR P.O THER PROPERTY OF THE P

Prep By:

PROJECT MANAGEMENT CONSULTANTS



EPTISA SERVICIOS DE INGENIERIA.S.L. II floor, T.C.11/339, SREE BALA BUILDING, KESTON ROAD, KOWDIAR P.O THIRUVANANTHAPURAM-6295003



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## 1 Executive Summary

#### 1.1 Introduction

Government of Kerala has decided to take up Phase-II upgradation component of KSTP as a standalone project vide the "KSTP-II" with assistance from World Bank. The project envisages the upgradation 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 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, upto 31December 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 initial stage was to improve road condition, traffic flow and road safety with a focus on vulnerable road user 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, motorist, agricultural and industrial producers, consumers and local community. The main benefitsunder 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 componenents under KSTP-II

## 1.4 Road Upgrading Works:

These works named as Component A1 and A 2 will include upgrading of about 363 kms of strategically important State Highways to complete network connectivity in the state with the objective of reducing travel time between key socio-economic centers.

## 1.4.1 Road Safety Management:

This component named Component B & C will support the strengthening of the road safety management systems in Kerala with the objective of arresting 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.

### 1.4.2 Institutional Strengthening

The objective of this component is to improve the sustainability of Kerala's state road network with respect to 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 Modernization of Road Sector and improving Public Communication and User Engagement in Road Development.

## **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 upgradation 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 rented office for Team Leader at Thiruvananthapuram near to Client's Office and started functioning from April 2013. Also, RE officeis functioning for Package 3A & 3B at Uliyil near Mattannur in Kannur District for package – III, Pallam in Kottayam for Package IV, for Package V at Koothattukulam.

M/s MSV International USA was the selected consultant for Construction Supervision for the Ponkunnam – Thodupuzha stretch (50 km) CSC-2. The length of road covered is 50 km and the assignment commenced on 15 May 2014 and is completed.

### 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 bidswere invited split into three packages and tender notification issued. Clearance has been received from World Bank for the bid documents. Recommendation for extending the loan period up to April 2021 has been sent to DEA.

## 2.5 ComponentB & C - Road Safety Managementimplementation

The baseline survey for the proposed safe demonstration corridor has been completed by 'NATPAC' and report shared with Bank. The design activities on the Safe Corridor Demonstration Project (SCDP) by NATPAC are done, Civil works and Road Safety works are in progress. The strengthening of KRSA is completed. The challenge fund proposal received from Kozhikode DRSC through KRSA has been tendered and work awarded to M/s NATH Constructions. This work is completed including the defects libility period.

## 2.6 Component – Institutional Strengtheningimplementation.

## 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.
- 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 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. Study report has been handed over to PWD, R&B and further action to improve these roads will be taken by them using their own funds.
- 4. Consultancy service for Developing Multi Model Integrated Transport Hub at 3 cities, Trivandrum, Kozhikode and Kochi was completed and report forwarded to Government. This report was also shared with NATPAC for consideration while preparing Comprehensive City Development Projects.
- 5. Preparation of design under 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 in to 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 labour laws and compliance in 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 laiaison 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 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 be in compliance, as mentioned below

Sl.	Details of the Action Plan agreed with GoK	Assessment during mission
No.		
1	Develop a mutually agreed Governance Improvement Action Plan including Strengthening Fiduciary Arrangements, Quality Assurance and Contract Management by end 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 end of the project	Complied. PMU staffing, however, needs enhancement in view of expanded mandate.
3	Engage experienced contract management specialist and quality assurance specialist in the PMT	Complied. Engaged through PMC consultants. M/s EptisaServiciousIngeniera S.L appointed on 5 <sup>th</sup> March 2019 and fuctional.
4	Take final decision on way forward for Component A2	Complied. Procurement initiated. Award of works for Package 8 A, B and C in final stage for 82.17 Km road upgradation work as EPC.
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 remaining 10% commitment (Challenge Fund). Bids to be received by 27 <sup>th</sup> Aug 2019 and work expected to commence from October 2019.
6	Sustain the progress in Component A1 and reach overall progress of 75% contributing to at least 40% project disbursements in the next 4 months	Complied. Current physical progress is 92% and disbursement 53%.

### 2.8 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 review of all quality monitoring activities, KSTP has formed a Quality Review Committee chaired by the Chief Engineer KSTP, who is arranging reviews. Further, acations 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, in order 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 prior to 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 5<sup>th</sup> March 2019.

#### 1. Ensure continuity of Project Director and key Project staff till 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 experinced 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 wasmobilzed by 1st week of March 2019. The quality review committee with Chief Engineer KSTP as Chair Person has been reviewing Quality and Organization meetings regularly in the PMT Head Quarters. An independent Technial Auditor was also appointed to carryout Quality Audit. A Consultant for Post Construction Technical has been selected.

## 3. Sustain Progress in Component A1 and reach overall progress of 75% to at least 40% Project Disbursement.

As on end of July 2019 the physical progress is 94.0 % on Sub Component A1 (Road up gradation in nine Packages). The financial progress is 73.0 %. The overall disbursement as on April 2019 is 115.87 Million USD which is 54.00 % of the overall loan amount of US\$ 215 million committed. A total of 316.00 km has been paved to Bituminous Concrete road out of 360.00 kms.

## 4. Take final decision on 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 extension of 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 soon to be awarded. Details of these packages are explained more in detail in following chapter of the document. This Package of 82 km is split in to three smaller Packages to ensure early completion

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

#### Component B

Out of US\$ 22 million (Rs. 143 crore) allocated so far, KSTP has arranged works on SCDP, (Road Safety Interventions), the Capacity Building and the proposals of Challenge Fund program are under scrutiny. 100 % has been committed and DPR consultants for Challenge Fund work has been finalised.

#### 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. The procurement to be completed, 1st week of March 2019.

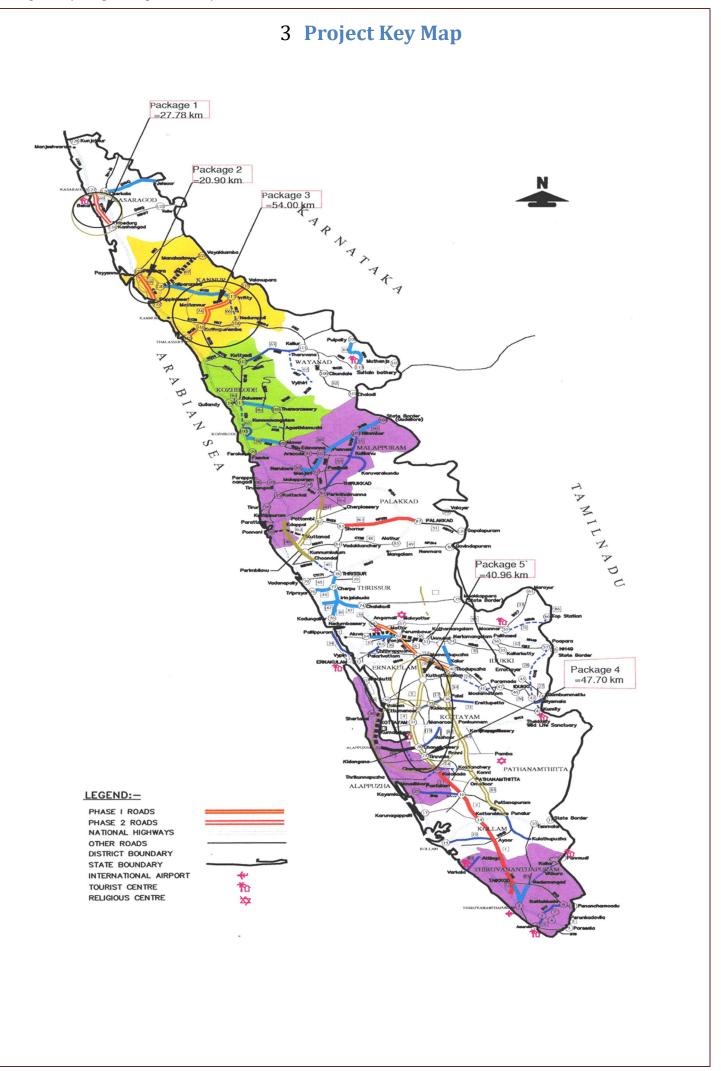
In the Sub Component Active User Engagement in Project Design, implementation, Screening and Asset Management, the KSTP has arranged the Periodic Road User Satisfaction Surveys, another assignment for Community Participatory Road Safety and User Management Program was dropped as individual experts have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

## 2.9 Compliance of legal covenants

SI. No.	LEGAL COVENANTS		COMPLIANCE STATUS
A. Ins	stitutional Arrangements		
1.	The Project Implementing Entity shall maintain, throughout the period of implementation of the Project:		
	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		a. Steering Committee in place
	<ul> <li>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</li> </ul>		b. Project Management Team in place
	c. An Evaluation Committee ("the Evaluation Committee") within the PWD		c. The Evaluation Committee in place
	d. An Environmental and Social Management Cell (the "ESMC") within the PWD with competent, experienced and qualified staffed 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' an consultants' compliance therewith; and carryout any necessary updates thereto		d. Environmental and Social Management Cell in place
2.	The Project Implementation Entity shall throughout the period of implementation of the Project the services of a supervision consultant (the "Construction Supervision Consultant"), with qualifications and experience and under terms of reference acceptable to the Bank.	-	Construction Supervision Consultant in place
3.	The Project Implementation Entity shall engages:  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")		a. It is proposed to convert PPP mode     to EPC / Item rate Authority     Enigneer will be appointed
	<ul> <li>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</li> </ul>		b. Internal Audit firm appointed for audit of accounts
B. Pro	ject Document		
	The Project Implementation Entity shall:  a. Implement the Project in accordance with the Project Implementation Plan, the FM Manuel, the GAAP and the Safeguard documents		This is complied
C. Ant	i-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. <b>Cha</b>	allenge Fund		

SI. No.	LEGAL COVENANTS	COMPLIANCE STATUS		
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. Safe	eguards			
1.	The Project Implementing Entity shall:  • Carryout the Project in accordance/ compliance with the Environmental Impact Assessment ("EIAs"), the Environmental Management Plans ("EMPs"), the Environmental Management Framework ("EMF"), the Resettlement Action Plan ("RAP"), and the instruments	This is complied		
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.	The Project Implementing Entity shall:  a. Furnish to the Bank, throughout the period of Project implementation:  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 resettlement activities, during the period preceding the date of each such report.	Complied with		
r. Sug	gestion and Complaint Mechanism  The Project Implementing Entity shall maintain and	District level CPC of KSTD mostings are		
	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. Status of GRC is attached to the report under Social Safeguard Management.		
G. <b>Pro</b>	The Desired Insulant aution Entitle shall community at least	ı		
	The Project Implementing Entity shall carryout at least two (2) Road User Surveys with scope, methodologies, and terms of reference satisfactory to the Bank, in order to assess road user's satisfaction with Project results and	Baseline RUSS done and next survey arrangement completed Survey on completed roads in progress.		

SI.			1
No.	LEGAL COVENANTS		COMPLIANCE STATUS
	its implementation, their opinions regarding current and potential sector targets, and their behavioral/ attitudinal changes.		
	SECTION II PROJECT MONITORING, REPOR	TIN	IG AND EVALUATION
A. Pr	oject 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 on the basis of 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. <b>Fi</b> i	nancial 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 fortyfive (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:  a. Furnished to the Borrower and the Bank not later than ten (10) months after the end of the period, and		Complied
	<ul> <li>b. made publicly available in a timely fashion and in a manner acceptable to the Bank.</li> </ul>		Document is open to public



## 4 Funding & Disbursement

The total disbursement at the end of June 2019 from World Bank was 115.87 USD Million

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 World Bank - US\$445 ml

World Bank (IBRD) Loan Assistance - US\$216 ml

Project implementation period - 30<sup>th</sup> Oct 2013 to April 30.2021

Expected closing date (Loan) - 30.04.2020

## 4.1 Current Disbursement Status

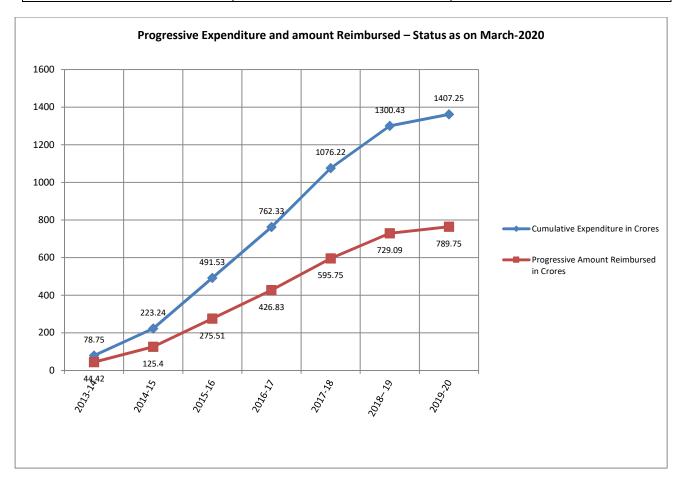
	Claim			AMOUNT	DISBURSED	BALANCE
SI No		Date	EXPENDITURE in Lakh	AMOUNT CLAIMED in Lakh	USD in millions	FUNDS AVAILABLE FOR CLAIM (MUSD)
			TOTAL	TOTAL	TOTAL	TOTAL
						216.00
	Front end fee				0.54	215.46
1	Retroactive	15.06.12 to 15.06.13	1,863.95	1,043.00	1.69	213.77
2	1st Quarter					213.7
3	2nd Quarter	01.07.13 to 30.9.13	1,355.79	764.00	1.23	212.54
4	3rd quarter	01.10.13 to 31.12.13	1,906.01	1,071.00	1.71	210.82
5	4th 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	208.2
7	1st Quarter	01.04.14 to 18.06.14	1,826.41	1,023.00	1.70	206.5
8		19.06.14 to 30.06.14	14.69	8.00	0.02	206.55
9	2nd Quarter	01.07.14 to 30.09.14	1,405.61	787.00	1.27	205.28
10	3rd quarter	01.10.14 to 31.12.14	3,790.21	2,124.00	3.44	201.84
11	4rth quarter	01.01.15 to 28.02.15	3,706.35	2,076.00	3.32	198.5
12	4rth quarter	01.03.15 to 31.03.15	3,704.89	2,076.00	3.32	195.20
13	1st Quarter	01.04.15 to 16.06.15	3,534.14	1,992.00	3.14	192.0
14		17.06.15 to 30.06.15	154.40	86.00	0.14	191.9
15	2nd Quarter	01.07.15 to 30.09.15	3,527.06	1,977.00	3.04	188.89
16	3rd quarter	01.10.15 to 31.12.15	10,338.17	5,790.00	8.51	180.3
17	4rth quarter	01.01.16 to 13.03.16	6,413.18	3,592.00	5.38	175.0
18		14.03.16 to 31.03.16	2,861.91	1,603.00	2.41	172.5
19	1st Quarter	01.04.16 to 10.06.16	2,037.40	1,141.00	1.69	170.9
20		11.06.16 to 22.06.16	2,957.89	1,657.00	2.45	168.4
21	2nd Quarter	23.06.16 to 31.08.16	4,786.10	2,680.00	4.01	164.4
22		01.09.16 to 30.09.16	3,981.82	2,230.00	3.26	161.1
23	3rd quarter	01.10.16 to 31.12.16	4,079.22	2,284.00	3.40	157.73
24	4rth quarter	01.01.17 to 31.03.17	9,237.79	5,173.00	8.04	149.7
25	1st 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	142.5
27	2nd Quarter	01.07.17 to 30.09.17	5,897.52	3,303.00	5.10	137.4
28	3rd quarter	01.10.17 to 31.12.17	5,319.40	2,987.00	4.69	132.7
29	4rth quarter	01.01.18 to 28.02.18	6,770.27	3,791.00	5.82	126.9
30		01.03.18 to 22.03.18	3,935.30	2,204.00	3.39	123.5
31		23.03.18 to 31.03.18	1,241.57	695.00	1.04	122.5
32	1st Quarter	01.04.18 to 31.05.18	1,925.29	1,086.00	1.61	120.9
33		01.06.18 to 20.06.18	1,114.33	627.00	2.02	118.9
34		21.06.18 to 22.06.18	1,344.42	753.00		118.9
35		23.06.18 to 30.06.18	89.25	50.00	0.07	118.8
36	2nd Quarter	01.07.18 to 18.09.18	7,104.38	3,982.00	5.49	113.3
37	3rd quarter	19.09.18 to 31.12.18	5,817.34	3,258.00	4.59	108.76

			140,725.59	78,974.56	118.75	
44	3 <sup>rd</sup> Quarter	01.10.19 to 31.12.19	1530.80	865.00	1.19	96.06
43	2 <sup>nd</sup> Quarter	28.06.19 to 30.09.19	2,961.19	1,689.00	2.34	97.25
42		21.06.19 to 27.06.19	2,247.92	1,303.00	1.89	99.59
41		01.05.19 to 20.06.19	1,522.48	853.00	1.23	101.48
40	1st Quarter	01.04.19 to 30.04.19	2,420.03	1,355.22	1.93	102.71
39		01.03.19 to 31.03.19	1,950.03	1,127.00	1.63	104.64
38	4th quarter	01.01.19 to 28.02.19	3,075.19	1,722.11	2.49	106.27

<sup>\*</sup>excluding front end fee

## 4.2 Progressive Expenditure and amount Reimbursed – Status as on 31st March- 2020

Year	Cumulative Expenditure (INR	Progressive Amount Reimbursed
real	Crores)	(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



## 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
	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
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	4.79
							*120.67 (Dec-
Cumulative	8.92	23.54	47.02	72.88	96.63	115.88	19)

<sup>\*</sup>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 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 DPRpreparation. The details are more fully described in this report in following chapters.

Component	Original Loan Allocation (Million USD)	Revised Loan Allocation (Million USD)
A1	167.0	125.0
A2	33.0	33.0
В	10.0	10.0
С	5.0	2.0
D PWD Roads,LSGD Roads and Support to RKI	0.0	45.0
Total	215.0	215.0

The details of expenditure of Component D was originally as shown in the table below.

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)
Component A1: Road Network Upgrading and Safety Improvement( 282 Kms Upgrading)	166	121
Component A2: Road upgrading and safety Improvement(EPC)(82.04 Kms)	33	52
Component B: Road Safety Management	12	12
Component C: Institutional Strengthening	5	5
Component D: RKI Roads		26
Total	216.0	216.0

## **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 improvement to gradient, widening and strengthening the roads including minor realignments wherever essential, reconstruction of narrow bridges and culverts and improvements to drainage system. The carriageway proposed are generally 2 lane roads with width of 7.0 m and hard shoulders of 1.50 mts. on either side. The Right ofWay is generally 15.0 Meters and required aquisitions 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 under table 1

The land acquisition for the project roads are almost completed except in the Perimbilavu- Pattambi-Perinthalmanna Road.

Package 3 was further split it 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** kms. Out of these, Packages 4, 5, 6& 7 are completed while six are in progress. Package 1 and 2 are almost completed and in "defect libility period" with ongoing pending works under road furniture items, snag list and additional junction improvement works. These works were undertaken as there was 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 beingexecuted under FIDIC (5th edition) Conditions of Contract. The work involves improvement of State Highways including geometrical improvements and realignments to standard 2 lane 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 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	Commencem ent 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	38,48,80,907	I, II, IIA , III B ,IV, IVA, IVB & V (190 km)
CSC-2 – M/s MSV International USA	14.05.2014	30 months	14.05.2014	4,41,88200	VI (50 km)

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 have been given Extension of time up to 31-12-2019 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: (31.03.2020)																	
SI.No	Package No	Stretch of the Project State Highway / Road Number	Type of Contract	Cotractor's Name	Supervision Consultant	Proposed Length (Km.)	Original Completion date	EOT-3 (Date)	Extended Completion date (Latest)	DLP	Awarded Cost of the Project (Cr.)	submitted /Final	dditional Works	Saving / Overbudget/ Running Bills	Status of the project	TOC /Completion certificate issued	Remarks / Reasons	Variation Order/ Supplementary Agreement Status
1	KSTP-2/UG/1	Kasargod-kanhangad-SH-57	Item Rate BOQ	M/s.RDS Projects Limited	EGIS India	27.78	23.04.2015	31.01.2020	31-03-2020	31-03-2021	133.05	122.58	6.15	4.32	Physical progress :99.00 %	Section 1 : 0+000 to 23+180 & 23+350 to 27+780 (TOC 01-04-2018)	Numbering of culverts in progress (Under DLP	6.15 Cr additional works Variation in progress
															Financial progress :99.00 %	Section 2 :23+180 to 23+350 (01-07- 2018)	period)	w.r.t. to IPC 34
2	KSTP-2/UG/2	Pilathara-Pappinssery-SH-67	Item Rate BOQ	M/s.RDS Projects Limited	EGIS India	20.90	22.04.2015		31-03-2020	31-03-2021	118.29	101.24		17.05	Physical progress :99.00 % Financial progress :99.00 %	Section 1 : Except Ramapuram bridge and Thavam ROB (01-04-2018)	DLP extension given (15-06- 2019	VO-(1-11)+ VO-12 _7.05 Cr to be approved (vide EP/18/PJ/1875 Dated 30-08- 2016) Plus VO -12 to Vo 21
															rmanciai progress :55.00 7	Section 2 :Ramapuram Bridge and Thavam ROB (01-09-2018)	DLP extension given (30-06- 2019	Contractor has started the work on Oxbow land as approved.
3	KSTP-2/UG/3A	Thalassery-Kalaroad-SH-30	Item Rate BOQ	M/s.Dinesh chandra R.Agarwal Pvt.Ltd.,	EGIS India	28.80	26.06.2018	31-10-2019	31-03-2020	31-03-2021	156.33	92.32		64.01	Physical progress : 62.71 %	Section 1 : Road works other than Eranholi Bridge	In progress	VO 8 & VO 9 submitted for approval
								31-12-2019							Financial progress : 62.52%	Section 2 :Eranholi Bridge Work	In progress	IPC 20 in process. EOT-4 Submitted till 30.06.2020
4	KSTP-2/UG/3B	Kalaroad-Valavupara-SH-30	Item Rate BOQ	M/s.GHV-EKK Infrastructure & Co.	EGIS India	25.20	25.09.2018	15-07-2019	31.03.2020		209.68	184.41	5.06	20.21	Physical progress :86.35 %	Section 1 : Except Iritty Bridge and Kootupuzha Bridge		EOT need to approval till 30.6.2020
								31-12-2019							Financial progress : 85.46 %	Section 2 :Iritty Bridge & Kootupuzha Bridge	In Progress (Kootupuzha Bridge held up due to forest clearance)	IPC 32 approved & IPC 33 in process. And VO 19 submited for approval
5	KSTP-2/UG/4	Chennaganoor-Ettamannoor- SH-1	Item Rate BOQ	M/s Delma Sreedhanya Jv.	EGIS India	47.70	24.11.2017		31-03-2018	31-03-2019	293.58	278.18		15.40	Completed	TOC issued 01.04.2018	Closure reports to amend an Report pending )	nd resubmit by EGIS . (Accident
6	KSTP-2/UG/4A	Thiruvalla by pass (rearranged from Package 4)	Item Rate BOQ	M/s.GHV India Pvt Ltd	EGIS India	2.30	06.10.2019		30-04-2020		37.03	10.58		26.45	Physical progress : 48.13 % Financial progress :41.33 %	EOT Proposed	Extra claim for PSC Girder with Semi Integral design in dispute	IPC-5 submitted
7	KSTP-2/UG/4B	Thiruvalla town (rearranged from Package 4)	Item Rate BOQ	M/s.EKK Infrastructure Ltd.,	EGIS India	2.00	06.10.2019	15-12-2019	15-01-2020		7.77	4.37	0.93	3.40	Physical progress : 86.62 % Financial progress : 57.40%	EOT Proposed		VO-2 submitted for approval of additional work of MC road
8	KSTP-2/UG/5	Ettamannoor-Muvattupuzha	Item Rate BOQ	M/s.NAPC Ltd.,	EGIS India	40.96	03.08.2016		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	Closure reports to amend ar soil issue to be resolved	nd resubmit by EGIS / Excess
9	KSTP-2/UG/6	Ponkunnam-Thodupuzha	Item Rate BOQ	M/s.GHV-EKK Infrastructure & Co.	M/s MSV International USA	50.00	09.12.2016		28-03-2017	28-03-2018	227.13	223.25		3.88	Completed		Closure Report to be prepare	ed
10	KSTP-2/OL/7	Perimpilavu-Perintalamanna	Item Rate BOQ	M/s Nath constructions	Under KSTP	39.37	02.03.2017		02-03-2017	02-03-2018	8.11	8.11		0.00	Completed		Closure Report to be prepare	ed
		Total Length	under this Component i	n Km is		285.01					1362.46	1188.72		162.53				

		Project Details of KSTP-2 under Sub Component A 2																	
SI.	No	Package No	Stretch of the Project Road	Type of Contract	Cotractor's Name	Supervision Consultant	Length (Km.)	Estimated Cost	Orginal completion  Date	Appointed date	Revised Appointed date	Awarded Cost of the Project (Cr.)	Actual Unt Cost /km in Crores	Additional Works	Saving / Overbudget/ RunningBills	Status of the project	TOC /Completion certificate issued	Remarks / Reasons	Variation Order/ Supplementary Agreement Status
1	. KS	STP-2/OL/8A	Punalur-Konni	Engineering Procurement Construction (EPC)	Steering Committee	M/s CunsultingEng ineering Services	29.84	226.61				237.94	7.97						
2	KS	STP-2/OL/8B	Konni - Placherry	Engineering Procurement Construction (EPC)	Lta.,	M/s CunsultingEng ineering Services	30.16	274.74	29-10-2021	09-10-2019	01-11-2019	279.00	9.25			Not Yet Started			
\$	KS	STP-2/OL/8C	Placherry -Ponkunnam	Engineering Procurement Construction (EPC)	I Langtriictions	M/s CunsultingEng ineering Services	22.17	236.79	21-12-2021	06-09-2019	23-12-2019	248.5	11.21			Not Yet Started			
							82.17	738.14				765.4405							

SI.No PackageNo/Type	Stretch of the Project Road	Type of Contract	Cotractor's Name	Supervision Consultant	Length (Km.)	Estimated Cost	Orginal completion Date	Appointed date	Others	of the Project	Actual Unt Cost	Additional Works	Saving / Overbudget/ Running Bills	Status of the project	TOC /Completion certificate issued	Remarks / Reasons	Variation Order/ Supplementary Agreement Status
1	Km.0/00to31/500(except	Engineering Procurement Construction (EPC)	(SingleBidfrom	M/s Cunsulting Engineering Services	29.94	120.98	Re-ten	der and Bid openi	ng on 23.03.2020	123	4.04						
2	Painavu-Thannikandom	Engineering Procurement Construction (EPC)	M/s.EKK Intrastructure	M/s Cunsulting Engineering Services	21.00	86.82				95.40	4.54			Not Yet Started			
3	Adoor- Chenganoor	Engineering Procurement Construction (EPC)	M/S.EKK Intrastructure	M/s Cunsulting Engineering Services	23.8	93.59				98.1	4.12			Not Yet Started			
					74.74	301.39				193.5							

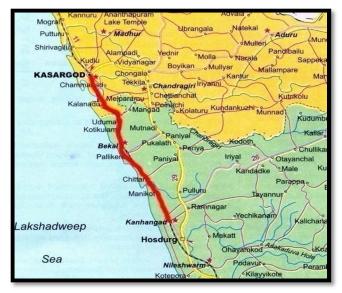
								Safe Cor	ridor Demonst	ration Project (Unde	r Componen	t B & C)						
							Orignal	EOT		DLP				Saving /				
SI.No	Package No	Stretch of the Project Road	Type of Contract	Cotractor's Name	Supervision Consultant	Length (Km.)	Completion date		Completion date	Duration from Completion date	Awarded Cost of the Project (Cr.)	RevisedcostofthP roject(Cr)	IPCPaymentinCr	Overbudget/ Running Bills /Balance	Status of the project	Completion certificate issued	Remarks / Reasons	
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	27-04-19		146.67	138.23	113.21	8.44	Physical progress :94.0% Financial progress: 87.33 %	EOT proposed upto 31-12-2019	SCDP project under Component of B & C	Revised cost is 138.23 Cr
		Overall	Length inKm			445.83												
				1	1		Challenge Fund of KSTP  DLP  DLP											
SI.No	Package No	Stretch of the Project Road	Type of Contract	Cotractor's Name	DPR Consultant	Length (Km.)	Date of Commencement	Completion date	e Completion date	Duration from Completion	EstimatedCostof theProject(Cr.)	Awarded Cost in Lakhs			Status of the project	Completion certificate issued	Remarks / Reasons	
1		Vypin-Munambam				25.00			l		10.02				DraftDPRtobesubmitted on			
2		Medical College-Kannamoola- Pallimukku-Pettah				5.00					7.50				18/03/20			
3	Single Package for		Item F Decxid	Rate Contract Or EPC to be ced	M/sEGISIndiaPvtLtd		Cost	estimates nr	epared by Distric	t Authorities					RFP is in Progress			
4	DPR's	Thrissur-Kunnamkulam State Highway			, secisinalar field	24.30	Cosi	. cominates pri	cpared by bistill	a Audionnies	4.00							
5		Kottiyam-Kundara Road				11.600					5.00							
6		Pavangad-Korapuzha				5.500					10.00							
						71.40					36.52							

#### Details below as per MPR submitted by EGIS -February- 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 Conttractor	Original date of completion	Contract Value in Crores	Physical Progress in % (UptoMarc-2020)	Financial Progres in % (UptoMarch- 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 Mar- 2020 in Crores
28-02-2018	27-02-2019	21.66	121.99	122.57

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

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

#### SUMMARY OF PROJECT COST

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

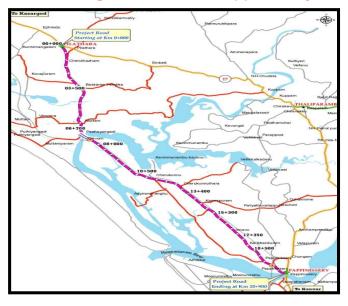
	Additional Work Status													
	KANHA	NGAD TOV	VN ADDI	TIONAL WORK (CHAIN	NAGE :- 24+870 TO 26+4	400 BHS)								
Sl	Chainage		Side	Description of Work	Status	Remarks								
	From	То	-											
1	24+870	26+400	BHS	Interlocking Tiles	Completed									
PAI	LAKUNNU	WIDENIN	G WORK	(CHAINAGE :- 10+310	ΓΟ 10+610 BHS)									
1	10+300	10+610	RHS	BC	Completed									
2	10+300	10+635	LHS	BC	Completed									
BEK	AL FORT	WORK (CI	HAINAGE	:- 14+220 RHS)		•								
1	00+020	00+295	BHS	GSB & WMM	Completed									
2	00+060	00+295	BHS	DBM & BC	Completed									
3	00+000	00+280	BHS	Drain Work +Cover Slab	Completed									
4	00+030	00+280	BHS	Foot Path Kerb	Completed									
5	00+000	00+230	BHS	Water pipe line relaying	Completed									
6	00+000	00+230	BHS	Electrical Utility	Completed									
PAL	LIKKARA	ROB SERV	TCE ROA	D WORK (CHAINAGE :	- 14+600 RHS)	1								
1	14+600	Service Road	RHS	Embankment Filling, SG, GSB & WMM, DBM & BC	Embankment filling Completed and stopped	Stopped due to Public against petition filed against KSTP (Case registered)								
Bus	Shelter near	Pallikkara	Toll Boot	th 14+500 RHS										
1	14+500		RHS	Bus Shelter Fixing	Completed									
Cast	Insitu Drain	n near Pall	ikkara To	ll Booth 14+400 TO 14+5	30 LHS	1								
1	14+240	14+545	RHS	Drain Excavation	Completed									
2	14+240	14+545	RHS	PCC	Completed									
3	14+240	14+545	RHS	Raft	Completed									
4	14+240	14+545	RHS	Wall	Completed									
5	14+240	14+545	RHS	Cover Slab	Completed									
6	14+430	14+590	LHS	Water Utility Work	Completed									
7	14+430	14+590	LHS	Excavation for Cast Insitu Drain Laying	Completed	Due to Elec. Pole not								
8	14+430	14+550	LHS	Raft	Completed	Shifited, the								
9	14+430	14+550	LHS	Wall	Completed	balance work								
10	10 14+430 14+550		LHS	Cover Slab	Completed	has been pending from 14+ 550 to 14+590 LHS								

Due to Elec. Pole not Shifited, 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 are in progress. Draft Final Statement has to be submitted.

## 5.4.2 Key Issues /Delays

- Employer has requested to carry out some additional works in Kanhangad town, Palakkunnu town and Bakal Fort Approach Road and Supplementary Agreement signed with Contractor for carrying out these additional works. Some works pending for Bakal Road due to public objection and hinderences. Encumbrance on 60m length of road under upgradation was removed by DTPC, Bekkal on 22<sup>nd</sup> December 2019.
- Contract for Rehabilitation of existing Bridges at "Bakal" and "Chandragiri" through Etendering has been awarded to M/s PADMAJA SPECIALITIES, Kochi and Agreement executed. Contractor yet to commence the works pertaining to Bakal Bridge.EOT issued by Employer to complete the works by 31<sup>st</sup> March 2020. Also a VO has been initiated. Contractor further submitted application for EOT and same is forwarded to Employer to complete whole of the works by 31<sup>st</sup> May 2020.
- ATL has inspected the works on project road and additional works on Bekkal on January and March 2020.

## 5.5 Package 2 -Pilathara -Pappinissery-SH-67



Name of Conttractor	Original date of completion	Contract Value in Crores	Physical Progress in % (UptoMarch-2020)	Financial Progres in % (UptoMarch-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 Mar- 2020 in Crores
31-03-2018	31-03-2019	15.96	98.330	101.24

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, Defect Liability Period has been extended for Section -1.

#### SUMMARY OF PROJECT COST

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

## **Construction Activities**

Works as per Snag list like providing precast drain cover slab, Painting of stair case No.2 of Thavam ROB and plumbing work on Pappinissery ROB for taking town the drainage water to ground level with out splashing on to the shops existing on both sides are in progress. List of Balance Works are shown in Annexure.

In addition to the works as per Snag List, instructions were issued from KSTP during the DLP to carry out certain additional works like reconstruction of Old Ramapuram Bridge Approach and development of Oxbow land at Ramapuram. Supplementary Agreement has been executed and the works are in progress below table

#### Table

PROJECT		Upgradat	ion of the Road from Pilathara	(Km 0+000) to	Pappinis	sery (Km	20+900) of SH-67			
CLIENT		Project Director Kerala State Transport Project Phase II								
CONSULT	ANT Ms I	EGIS Intern	tional SAIN jv WITH egis India Co	nsulting Engine	ers Pvt Lt	d				
Contractor:-	M/s RDS F	Project Ltd								
				SNAG L	IST FO	R BALA	NCE WORK			•
SL.NO.	Descri	ption of								
SL.NU.		ork	Balance work as on 21.3.2020	Location	QTY	Unit	Rate	Amount of work	Proposed Date of	Remarks/Balance
SI		inage		2000.011	٠	VIII		to be done	Completion	work
	From	То			<u> </u>					
PART (A)			Project corr	ridor ( except	Thavam F	ROB & Rai	mapuram bridge)			
1	0+000	20+900	Precast Drain coverslabs (Balanc	ce Work)	100	lm				Completed
PART (B)			Th	navam ROB &	Ramapu	ram River	Bridge		I	
1	4+050	LHS	Oxbow land	Ramapruam	1	No				Resturant work in progress
			Down taking pipes			lm	1021896	2,51,000.00	27.3.2020	work in progress
			Stair Case		1	Lms		-		Completed
								2,51,000.00		
		•	TOT	AL				2,51,000.00		

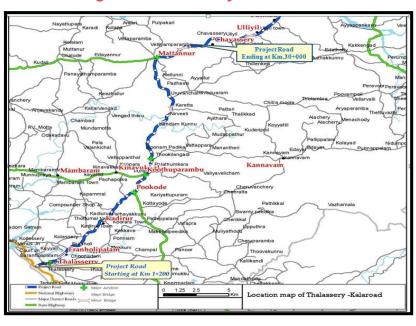
PROJECT	Upgradation	of the Road from	n Pilathara (Km 0-	+000) to Pappinisse	ry (Km 20+900) o	f SH-67	
CLIENT	Project Direct	tor Kerala State	Transport Project	t Phase II			
CONSULTANT	M/s Egis Intern	itional SAIN JV w	ith Egis India Cons	ulting Engineers Pvt L	td		
CONTRACTOR	1/s RDS Project L	td					
	•	Pro	posed Developn	nent of Oxbow land	•	•	
STAUTS OF WORK							
Project cost		1,07,60,693	% of BOQ	Works completed	% Completion (BOQ)	% Completion individual	Remarks
Landscape+ Green Room+ Retainir	ng wall	46,20,419	43%	14,75,722.48	14%	32%	
Café ( Restaurant)		37,30,487	35%	9,81,936.23	9%	26%	
Entracne Arch+ Ticket Counter		5,68,470	5%	1,29,909.59	1%	23%	
Compound wall		11,97,595	11%	9,12,906.02	8%	76%	
Open Theatre		6,43,721	6%	68,371.46	1%	11%	
		1,07,60,693	100%	35,68,845.78	33%		
Physical Status	Foundation	Substructure	Superstructure	Eelectrical & Plumbing	Flooring	Finishing	Remarks
Landscape+ Green Room+ Retainir	Completed	Completed	Upto Roof bottom	Conduit completd			Stopped w.e.f 10.03.2020 for want of change as per MLA's demand
Café ( Restaurant)	Completed	Completed	Upto Roof bottom	Conduit completd			
Entracne Arch+ Ticket Counter	Completed	Completed	Upto Roof bottom				
Compound wall	Completed	Completed	Completed				
Open Theatre	Completed	Completed					

PROJECT	Upgradation of	the Road fro	m Pilathara (Km 0+0	000) to Pappiniss	sery (Km 20+900)	of SH-67				
CLIENT	Project Director	Project Director Kerala State Transport Project Phase II								
CONSULTANT	M/s Egis Interntion	onal SA IN JV v	vith Egis India Consul	t Ltd						
CONTRACTOR	M/s RDS Project Ltd									
	•	Proposed c	elluar type Aproach	at Ramapuram (	Old River Bridge	(4+260)				
STAUTS OF WORK	<u>(</u>									
Project cost	1,07,32,861	%	Works completed	% Completion		Remakrs				
Foundation	45,80,395	43%	14,71,486.87	14%		Stopped since 20.03.2020				
Substructure	26,00,481	24%								
Superstructure	26,87,716	25%								
Highways	8,64,269	8%								
Total	1,07,32,861	100%		14%						
Pile completed										
A1 SIDE										
SI No		Completed	In progress	Dia	Depth	Remarks				
1	P1	1		0.75	17.708	Completed				
2	P2		1	0.75		Boring in progrees Stopped since 20.03.2020				
3	P3									
4	P4									
5	P5									
6	P6									
-										
A2 SIDE										
7	P7	1		0.75	14.652	Completed				
8	P8	1		0.75	15.083	Completed				
9	P9	1		0.75	16.432	Completed				
10	P10	1		0.75	15.533	Completed				
11	P11		1	0.75		Boring in progrees Stopped since 20.03.2020				
12	P12									
13	P13									
14	P14									
TOTAL	14	5	2							

## **Key Issues/ Delays**

- Employer has requested to carry out some additional works for reconstruction of the Old Ramapuram Bridge approach and oxbow land development. Contractor has started the work on Oxbow land as approved.
- Works on Rehabilitation of existing Bridge at "Pazhayangadi" has been awarded through Etendering to M/s PADMAJA SPECIALITIES, Kochi. Works are in progress. EOT issued by Employer to complete the works by 31<sup>st</sup> January 2020. Also, a VO has been initiated which is pending to be approved. Contractor further submitted application for EOT and same has beenforwarded to Employer, completion of whole of the works by 31<sup>st</sup> May 2020.
- The expansion joints of Chandragiri bridge have been reconstructed.
- The ATL has inspected the works on project road on January & March 2020.
- Contractor has stopped the work on 23<sup>rd</sup> March 2020 due to Covid-19 Lockdown announced by Government

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



Name of Conttractor	Original date of completion	Contract Value in Crores	Physical Progress in % (UptoMar-2020)	Financial Progress in % (UptoMar-2020)
M/s.DineshChandra R Agrawal Pvt.Ltd	26-06-2018	156.33	62.71	62.52
EOT-03	F07.04	Variation Order Value	Anticipated	Billed Amount made

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 Mar- 2020(Net Amount)
31st October-2019				
31st Dec-2019	31 <sup>st</sup> March -2020	19.96 Cr	152.29	92.32Cr

#### EOT-03 forExtension of time:

- a) Eranholi Bridge Approaches and Service Road and whole project road from Km 1+200 to Km 30+000 31.10.2019
- b) Commissioning of Eranholi Bridge 31.12.2019,

has been approved by the Employer. Further to that Extension of Time upto 31<sup>st</sup> March 2020 has been issued based on the application of the Contractor. Engineer has recommended and submitted EOT-05 for Extension of Time up to 30.06.2020 for Road works except Ernholi Bridge and approaches and for whole project including Ernholi Bridge and approaches 31.10.2020.

## **Work Progress**

Cumulative Physical progress achieved is 62.71% as per original contract value and 62.82 % was achieved in Dec -19 to March -20 with 64.38% with respect to assessed revised estimate of 152.29 Crores

Sl No.	Item	Quarterly Progress	Cumulative Progress	Balance Work	
	Main Carriageway				
1.	Exc up to SG 1.268 Km		26.130 Km	2.670 Km	
2.	GSB 1.348 Km		26.100 Km	2.700 Km	
3.	WMM	2.070 Km	26.010 Km	2.790 Km	
4.	DBM	2.055 Km	25.985 Km	2.815 Km	
5.	BC	4.582 Km	21.153 Km	7.648 Km	
	Stru	ctures			
6.	Major Bridge @ 2+910	1 pile completed at A1 abutment location. Pedestal concrete and Fixing of Elastomeric Bearing on Pier P2 & P3. Girder Launching completed between Pier P2 & P3. One girder casting completed at A1 side yard.	standards of Inland Navigation De and the drawings approved by Clied design has been proof checked by Palakkad.  P2 Pier work completed at P1, P2 & F Pedestal concrete and Fixing of El Bearing on Pier P2 & P3. Girder L completed between Pier P2 & P3. Piling work completed at Abutmen & A2 location		
7.	Minor Bridge @ 21+162	PCC retaining wall at LHS A2 side completed.	Progress at A1 side yard.  Bridge completed and opened for Traffic.		

Sl	Item	Quarterly	Cumulative		
No.	Item	Progress	Progress	Balance Work	
8.	Major Bridge @19+758		Bridge completed and opened for Traffic.		
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 Con	npleted out of 30 Nos	
12.	Slab Culvert	2 slab culverts completed.	Slab Culverts – 28 Completed out of 30 No. and 1 culvert work is in progress.		
13.	Drain- Placing	205 m	21209 m Complet	ed out of 23890 m	
14.	Gabion Wall	955.4 Cum	4281.4 cum Completed out of 4995 Cum		

## **Financial Progress**

Up to end of previous Quarter (Dec-19)		This Qu	ıarter	Cumulative to end of this Quarter		
Target	Achieved Target (as per Rev. Wp-5) Achieved		Target	Achieved		
56.85%*	56.85%	25.48%	5.67%	82.32%	62.52%**	

<sup>\*</sup>As per the revised programme WP-5 submitted by the Contractor.

o 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

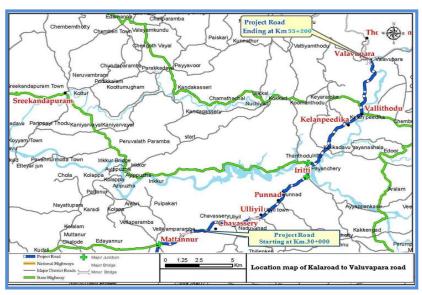
Contractor has stopped the work on 23<sup>rd</sup> March 2020 due to Covid-19 Lockdown announced by Government.

## 5.6.1 **Key Issues**

- Delay in Acquisition of Additional Land for Eranholi Bridge due to 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.

<sup>\*\*</sup>Cumulative Financial progress achieved is 60.95%. The assessed revised cost of project is Rs.152.29 crores and based on this, the financial progress will be 64.175%.

## 5.7 Package 3B - Kalaroad -valavupara



Name of Conttractor	Original date of completion	Contract Value in Crores	Physical Progress in % (Mar-2020)	Financial Progres in %(Mar-2020)
M/s.GHV-EKK Infrastructure & Co	25-09-2018	209.68	86.35	85.46

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 Mar-2020 (Net Amount)
15 <sup>th</sup> July-2019				
31 <sup>st</sup> Dec-2019	16 <sup>th</sup> July-2019	9.242	205.22	184.41 Cr

EOT-04 has been granted to complete the works on 15<sup>th</sup> July 2019 and 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 16<sup>th</sup> March 2019 and b) Km. 40+000 to Km.55 +200 (except Bridges & its Approaches of Iritty and Koottupuzha) from 16<sup>th</sup> July 2019.

Contractor has requested extention of time up to 30<sup>th</sup> June 2020 for the completion of Iritty, Kootupuzha Bridges and its approaches. Recommendation of CSC submitted to the Employer and the approval is awaited.

## **Work Progress**

## Cumulative Physical progress achieved is 86.35% till March-2020 & 85.35% in Dec-19

SI. No.	Item	Quarterly Progress	Cumulative Progress
1	GSB	0.580 km	23.60 Km
2	WMM	0.440 km	23.56 Km
3	DBM	0.440 km	23.56 Km

SI.	_				
No.	Item	Quarterly Progress	Cumulative Progress		
4	BC 0.460 km		23.56 Km		
	Structures				
5	Minor Bridge Ch.	35+405	Completed		
	Uliyil bridge.				
		Box girder			
		with Deck	Revised drawing for piles (6nos), Pile cap and piers		
	Major Bridge	slab of A2-P2	for piers P1 and P2 approved.		
6	Ch. 42+198	span	Foundation & Substructure – Completed.		
	Irrity bridge.	concreting	A1-P1 and A2-P2 superstructure work completed		
		completed	except crash barrier and wearing coat. N truss		
		during this	erection work is in progress for P1-P2 span		
		month			
			Deck slab of A1-P1 & P1-P2 span completed.		
	Major Bridge		Crash barrier and kerb for A1-P1 and P1-P2		
	ch. 53+865	_	completed.		
7	Kootupuzha	Nil	Works of P3, P4, A2 stopped by Karnataka Forest		
	bridge		Department. The case has been resubmitted to the		
			Principal Chief Conservator of Forest on 1st April		
			2019. Decision awaited.		
	Culverts		Box culvert- 49 Nos completed out of 50 nos.		
8		Nil.	Pipe Culvert- 22 Nos completed out of 22 nos.		
			Widening / slab culvert – 14 Nos completed out of		
			14 nos.		
9	Pre cast Drain -	Nil	29842m out of 30922 m.		
	Casting				
_	Drain (Precast +				
10	Cast in situ)				
	placing	250	33350 m out of 36730m.		
11	LED Solar Street				
	Lighting	Nil	247Nos.		
	OV Road	A III	l noc		
	DLC	Nil	806 m		
	PQC	Nil	806 m		
	Drain	Nil	1256 m		
12	DBM & BC	200 m	200 m		
	Paver Block	300 Sqm	2045 Sqm		
		Compound			
	Pazhassi Park	wall			
		construction	l		
		started	Work in progress		

## **Financial Progress**

Up to end of previous Quarter		This Quarter		Cumulative to end of this Quarter	
Target	Achieved	Target	Achieved	Target	Achieved
100.00%	81.98%	*	3.48%	100.00%	85.46%**

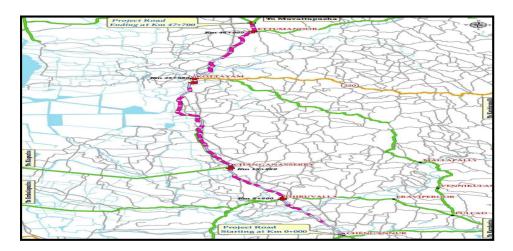
<sup>\*</sup> Revised programme not submitted by the Contractor, therefore revised target not available.

Contractor has stopped the work on  $23^{rd}$  March 2020 due to Covid-19 Lockdown announced by Government

## **Key Issues**

- The works on Karnataka side of Koottupuzha Bridge on the Kerala-Karnataka border was stopped due to objection from Karnataka forest department.
- Stock yard for excess earth stacking to be finalised.

## 5.8 Package4- Chengannur - Ettumanoor - Muvattupuzha - SH1



ChengannurEttumanoorMuvattupuzha stretch of SH-1, MC (Main Central) Road, one of the most important and oldest roads in Kerala, passing through Thiruvalla, Changanasserry, Kottayam, Ettumannor, Kuravilangad, Kuttathukulam.Total length covered is 88 kms.

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

<sup>\*\*</sup>Cumulative Financial progress with respect to the revised Estimate cost of Rs. 205.22 crore is 87.32%.

provides access to the tourist centres 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-Ettumannor (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 Conttractor	Original date of completion	Contract Value in Crores	Physical Progress in %	Financial Progres in %
M/s Delma SreedhanyaJv	24-11-2017	293.58	completed	completed
			Anticipated	

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

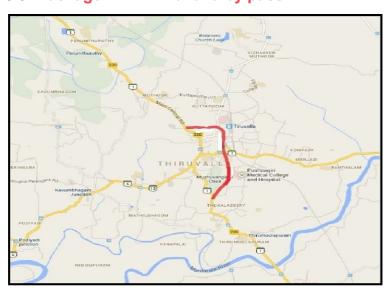
New Box culverts - 9

Widening Slab culverts - 8

Reconstruction of Culverts - 59

Foot path, solar lights

## 5.9 Package 4A - Thiruvalla by pass



Name of Conttractor	Original date of completion	Contract Value in Crores	Physical Progress in % (Mar-2020)	Financial Progres in %(Mar-2020)
M/s.GHV-EKK Infrastructure & Co	06-10-2019	37.03	48.13	41.33
			-	

Date of commencement	EOT-01 – Approved	Variation Order Value in crores	Anticipated Revised Project Cost	Billed Amount made till end of Mar-2020 (Net Amount)	
07.01.2019 31.12.2019 1.80 C		1.80 Cr		10.58Cr	

The date of commencement of this project is 07<sup>th</sup>January 2019 and date of completion is 6<sup>th</sup> October 2019. Works are not completed and EOT-1 issued by Employer for the whole project upto 30-04-2020.

Contractor has stopped the work on 23<sup>rd</sup> March 2020 due to Covid-19 Lockdown announced by Government.

## **Work Progress**

## Cumulative Physical progress achieved is 48.13% & 10.58 % achieved in this Quarter (Jan-Mar - 20)

Sl.	Item	Quarterly Progress	Cumulative Progress
1 2 2	GSB WMM	0.050 km 0.050 km 0.070 km	1.490 Km 1.440 Km
3	DBM BC	1.15 km	1.650 Km
5	Roadwork Details	<ul> <li>BC completed from Km:0+270 to Km:0+900 and Km:1+450 to km:1+700</li> <li>Subgrade work completed from Km:2+150 to Km:2+220, LHS.</li> <li>GSB work in progress from Km:2+150 to Km:2+200, LHS.</li> </ul>	<ul> <li>BC work from Km:0+000 to Km:1+410 and Km: 1+450 to Km:1+700 has been completed.</li> <li>Construction of islands of road junction at start point (0+000) of bypass is partially completed. Work stopped due to public protest.</li> <li>Subgrade work completed from Km:2+150 to Km:2+220, LHS.</li> <li>GSB work in progress from Km:2+150 to Km:2+200, LHS.</li> <li>Road marking work in progress.</li> </ul>

Sl. No.	Item	Quarterly Progress	<b>Cumulative Progress</b>
		Road marking work in progress.	
	Structures		
6	Minor Bridge at km 0+390		<ul> <li>Minor bridge structure completed by the previous contractor.</li> <li>Construction of cellular box approaches on both sides of the minor bridge has been completed.</li> <li>BC completed over the bridge and both approaches</li> <li>Quartering work by providing gabion walls completed.</li> <li>Footpath tiling work completed over the bridge.</li> </ul>
7	Viaduct from km 1+780 to km 2+016	<ul> <li>1 Nos of Piles completed</li> <li>Pilecap and Pier 1st lift at P1completed,</li> <li>Pier 2nd lift completed at P2 &amp; P3 and pier cap completed at P5, P6,P7&amp;A2</li> <li>9 Nos of PSC girderes has been cast</li> <li>Routine Vertical load test at P1 locations completed</li> </ul>	<ul> <li>Piling works completed. Total 60 Nos Done.</li> <li>Pile caps completed at all locations except A1</li> <li>Pier completed at A2, P8, P7, P6, P5, P4, P3, P2 &amp; P1 and pier cap completed at P5, P6, P7 &amp; P8 and abutment cap completed at A2.</li> <li>The work on precasting of PSC girders is very slow and this would prolong the time required for completion of viaduct. So far, only 9 Nos of PSC girder has been cast out of 36 Nos required for the superstructure.</li> <li>Preparations for Routine Vertical load test at P1 locations is in progress.</li> </ul>
8	Flyover at 1+300	<ul> <li>crash barrier,</li> <li>expansion joint</li> <li>works and crash</li> <li>barrier painting</li> </ul>	<ul> <li>Bridge proper completed by previous contractor.</li> <li>Work on RE wall and friction slab over RE wall at A1 side approach of flyover and BC</li> </ul>

Sl. No.	Item	Quarterly Progress	Cumulative Progress
		works completed on flyover.	laying work on A1 approach has been completed.
		Gap slab Casting work completed at A1 side of Flyover.	Wearing coarse over Bridge, crash barrier, expansion joint works and crash barrier painting works completed on flyover.
		Work on RE wall and friction slab over RE wall at A1 side approach of flyover and BC laying work on A1 approach has been completed.	
	Drain and	<b>Protective Works</b>	
9		<ul> <li>RCC Breast wall Final Lift completed from Km:1+460 to Km:1+480</li> <li>Gabion wall works completed from Km:0+460 to Km:0+700 B/s. 550m has been completed.</li> <li>Turfing work from Km: 0+080 to Km:0+600 B/S has been completed and from Km0+600 to Km:0+800 is in progress.</li> </ul>	<ul> <li>RCC Breast wall completed from Km:1+460 to Km:1+480</li> <li>Stone Masonry Retaining wall Completed from Km:1+393 to Km:1+402, Flyover A2 side.</li> <li>Gabion wall works completed from Km 0+050 to Km 0+460 B/S and from Km:0+460 to Km:0+700 B/s. 1100m has been completed.</li> <li>PCC Retaining wall Work completed at Km:1+120(B1-B1 Jn)</li> <li>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.</li> <li>Turfing work from Km: 0+080 to Km:0+600 B/S has been completed and from Km0+600</li> </ul>
		Metal Beam crash     Barrier fixing     work from     Km:0+050 to     Km:0+800 B/S     has been partially	<ul> <li>to Km:0+800 is in progress.</li> <li>Metal Beam crash Barrier fixing work from Km:0+050 to Km:0+800 B/S has been partially completed.1200m done.</li> <li>Cross Culvert works upto slab completed at 1+420</li> </ul>

Sl. No.	Item	Quarterly Progress	Cumulative Progress
		completed.1200m done.	• Footpath work completed at 0+100 and is in progress at flares of B1-B1 Junction.
		• Cross Culvert works upto slab completed at 1+420	• Chute drain work completed at 1+450
		• Footpath work completed at 0+100 and is in progress at flares of B1-B1 Junction.	
		• Chute drain work completed at 1+450	

Progress achieved up to 31st March- 2020 in comparison with original programmeas given.

### **Financial Progress**

Up to Previous Quarter (Dec-19)		This Quarter		Cumulative upto end of this Month	
Target	Achieved	Target	Achieved	Target	Achieved
100%	26.05%	100%	15.28%	100%	41.33%

<sup>\*</sup> Revised programme yet to be submitted by the Contractor.

## **Key Issues/ Delays**

- Construction of islands of road junction at start point (0+000) of 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 completion of viaduct. So far, only 6 Nos of PSC girder has been cast out of 36 Nos required for the superstructure.
- Due to public protest, gaps left on crash barrier. However, this to be completed considering the road safety.
- Contractor needs to deploy adequate resources for execution of balance road works and the work on viaduct with in the Time extension granted.

#### 5.10 Package4B- Thiruvalla town



Name of Conttractor	Original date of completion	Contract Value in Crores	Physical Progress in % (Mar-2020)	Financial Progres in %(Mar-2020)
M/s.GHV-EKK Infrastructure & Co	06-10-2019	7.77	86.62	57.40

Date of commencement	EOT-01 – Approved	Variation Order Value in crores VO-01	Anticipated Revised Project Cost	Billed Amount made till end of Mar-19 (Net Amount)
07.01.2019	15 <sup>th</sup> Dec-2019	0.202 Cr		4.37 Cr

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

Contractor has stopped the work on 23<sup>rd</sup>March 2020 due to Covid-19 issues.

World Bank Team Visited the site on 03-03-2020

#### 5.10.1. Work Progress

Cumulative Physical progress achieved is 86.62% &11.34% achieved in this Quarter (Jan-Mar - 20)

Sl. No.	Item	Monthly Progress	Cumulative Progress
1	Roadwork (Total Length 2.010 Km)	<ul> <li>Interlock Footpath Laying work in progress 3650Sqm Completed in this quarter.</li> <li>PCC Retaining wall completed at 7+600 (22m done).</li> </ul>	<ul> <li>BC works completed from 7+440 to 9+230. Balance 50m of interlock tile laid area will be relayed under Pkg-4A.</li> <li>Kerb Fixing work for footpath is in progress. 3200m completed.</li> <li>Interlock Footpath Laying work in progress 4050Sqm completed.</li> <li>Road marking and stud fixing and sign board fixing works completed by 90%.</li> <li>PCC Retaining wall completed at 7+600 (22m done)</li> </ul>
Sl. No.	Item	Monthly Progress	Cumulative Progress
1	Roadwork (Total Length 2.010 Km)	<ul> <li>Interlock Footpath Laying work in progress 3650Sqm Completed in this quarter.</li> <li>PCC Retaining wall completed at 7+600 (22m done).</li> </ul>	<ul> <li>BC works completed from 7+440 to 9+230. Balance 50m of interlock tile laid area will be relayed under Pkg-4A.</li> <li>Kerb Fixing work for footpath is in progress. 3200m completed.</li> <li>Interlock Footpath Laying work in progress 4050Sqm completed.</li> <li>Road marking and stud fixing and sign board fixing works completed by 90%.</li> <li>PCC Retaining wall completed at 7+600 (22m done)</li> </ul>
	Structures		
2	Culverts	Culvert Extension work Completed.	Culvert Extension work to RHS Completed.
3	Drain	<ul> <li>Cast-in-situ drain work completed from Km:7+624         (LHS)(Connection to culvert</li> <li>Coverslab replacement work completed.</li> <li>Drain cleaning work completed for a length of 1124m</li> </ul>	• Cast-in-situ drain work completed for 342m, from Km:7+393 to towards Chengannoor (LHS)(15m), from Km:7+393 to Km:7+505 (LHS), from Km:7+600 to Km:7+668(LHS) from Km:7+778 to Km:7+835(LHS) and from Km:7+873 to Km:7+965 (LHS).

Sl. No.	Item	Monthly Progress	<b>Cumulative Progress</b>
			<ul> <li>Drain cleaning works completed at site. Total 1124m done.</li> <li>Cover slab replacement work completed.</li> </ul>
4	Utility Shifting Works		<ul> <li>Laying of 507m of 300 DI pipe has been done and the work has been completed.</li> <li>Laying of 2520m of 160 PVC pipe has been done and the work has been completed.</li> <li>Laying of 212m of 500 DI pipe has been done and the work has been completed.</li> <li>Laying of 250m of 700 DI pipe has been done and the work has been done and the work has been completed.</li> </ul>

Progress achieved up to 31st March 2020 in comparison with original programmeas given above.

## **Financial Progress**

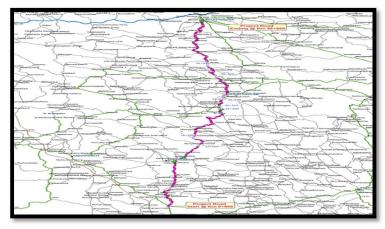
Up to previous Quarter		This Quarter		Cumulative upto end of this  Month	
Target	Achieved	Target	Achieved	Target	Achieved
100%	51.22%	*	6.18 %	100%	57.40%

<sup>\*</sup>Revised programme yet to be submitted by the Contractor.

## **Key Issues/Delays**

• Completion of water utility shifting has been delayed.

#### 5.11 Package5- Ettamanoor- Muvattupuzha



Name of Conttractor	Original date of completion	Contract Value in Crores	Physical Progress in %	Financial Progres 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. Closure report was re-submitted by CSC and is under review by PMC for further submission to World Bank for compliance.

#### 5.12 Package6-Ponkunnam – Thodupuzha – SH 8

Punaloor - Ponkunnam and Ponkunnam - Thodupuzha stretches of SH 8 are the two stretches. Total road length is 132 kms.



Name of	Original date of	Contract Value in	Physical	Financial Progres in
Conttractor	completion	Crores	Progress in %	%
M/s.GHV-EKK				
Infrastructure &	09-12-2016	227.13	Completed	Completed
Со				
EOT Date	DLP completion	Variation Order	Savings in Crores	Billed Amount made till
	date	Value in crores		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:

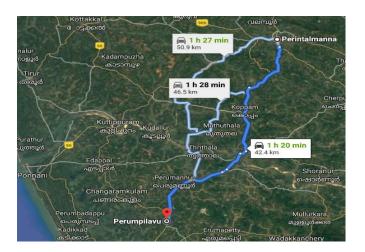
Reconstruction - 109 nos.
Widening - 44nos.
New Construction - 7 nos.
Drain - 65 km

Foot Path -

Solar Street Light

This work was completed including the DLP which ended on 28-03-2018. Closure report submitted by CSC was not inaccordance to Worl Bank requirement. The same is being re submitted.

#### 5.13 Package 7 -Perimpilavu -Perinthalmanna



Name of	Original date of	Contract Value in	Physical	Financial Progres in
Conttractor	completion	Crores	Progress in %	%
M/sNathconstructions	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. Closure report submitted by CSC was not inaccordance to World Bank requirements and hence needs to be re submitted with all data.

#### 5.14 Component A 2:

#### 5.14.1 Upgradation of Road from Punalur to Ponkunnam (82.17 km)

The Component A2 of the KSTP –II was proposed between Punalurand Ponkunnam road as PPP hybrid annuity mode. 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.

Since the World Bank had not cleared the RFP documents to continue the PPP procurement, it was decided by the 97<sup>th</sup> Steering Committee to annul the PPP procurement process and adopt EPC mode due to time constraints and also to entrust the task of updating of design and DPR to the Transaction Advisor.

The Transaction Advisor M/s. LNTIEL has updated the DPR'S prepared earlier by M/s CDM Smith and also Tender Documents for these construction packages, the details of packages which are below.

Government of Kerala through Government of India is in the process of obtaining a loan 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, 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	Maintena nce Period	
		KSTPII/PMT/UG 8A	Punalur to Konni	29.840			
1.	1. Category A	KSTPII/PMT/UG 8B	Konni to Placherry	30.160 24 Months			
		KSTPII/PMT/UG 8C	Placherry to Ponkunnam	22.173		60 Months	
		KSTP-II/PMT/RKI-	Adoor- Chengannur	23.23			
2	Category B	KSTP-II/PMT/RKI-3	Painavu-Thannikandom- Asoakkavala road	21	12 Months		
		KSTP-II/PMT/RKI- 2	Chemmannar Gap road	19.45			

The tender documents were uploaded in the Kerala Govt e tender Portal after obtaining No objection from World Bank and the proposals of the bids were received as per the table 2 below. Total 10 EPC bids were received combining all the packages and are currently under various stages of finalization and evaluation described in detail further in the chapter elsewhere.

Table 2

SI.No	Package	Stretch of	Type of Contract	Bid	Status	Length	
	No	the Project		opening		(Km.)	Tendered
		Road		date			Price in Cr
1			Engineering				
	KSTP-	Punalur-	Procurement	12-04-19		29.84	226.61
	2/OL/8A	Konni	Construction (EPC)				
2			Engineering				
	KSTP-	Konni -	Procurement	19-03-19		30.16	274.24
	2/OL/8B	Placherry	Construction (EPC)				
3			Engineering				
	KSTP-	Placherry -	Procurement	27-03-19		22.17	236.79
	2/OL/8C	Ponkunnam	Construction (EPC)				
Total		82.17	737.64				

#### 5.14.2 Package 8 B - Konni – Placherry

This road is proposed to be taken up as Package 8 B with a project length of 30.16 kms. 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.

SI. No.	Name of Contractor	Nationality	Remarks
1	M/s. EKK Infrastructure Limited	Indian	Single Entity

Upon evaluation of the technical bids, it was noticed that one of the Bidders M/s RDS Project Limited in JV with M/s Cherian Varkey Construction Co. Pvt. Ltd has provided BG no. 39670IGL0000619 dated 07/03/19 with validity up to 06/06/19 instead of 30/09/19, as per Clause 19.3 of Instruction to Bidders. Hence, Bid of M/s RDS Project Limited and M/s Cherian Varkey Construction Co. Pvt. Ltd. (Joint Venture) is treated as non-responsive, as per Clause 19.4 of Instruction to Bidders (Non-responsive).

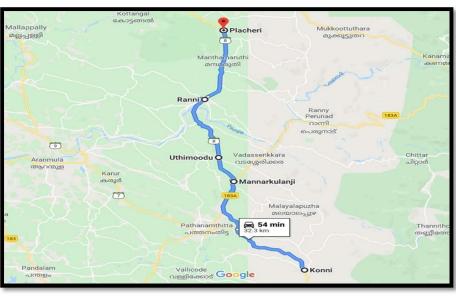
The Technical Evaluation Report was approved by the World Bank on 27-05-2019 after which the financial Bid was to be opened on 21-06-2019. However, an appeal was received from M/s RDS Project Limited in JV with M/s Cherian Varkey Construction Co. Pvt. Ltd vide his "Writ Appeal" W.P.(C) No.12480 dated 20-06-2019 to keep the financial opening of Bid in abeyance

till judgement date comes for consideration. The Writ Appeal filed by the bidder was rejected on 20.06.2019 by the court.

Financial Bid of M/s EKK Infrastructure Limited only was opened 21-06-2019 and the quoted amount of M/s EKK is Rs. 279.00 Crores against the estimated cost of Rs 274.24 crores which is 1.74% above the estimate amount. The quoted amount is acceptable since the estimate was prepared as per SOR for 2017-18 applicable as on February 2018.

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 maintenance period of 5 Years. Initial preparatory work on this stretch has been commenced by the Contractor and work is in progress.

#### 5.14.3 Package 8 B 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

	Description	Pla	nned	Act	tual	Delay		
Project Milestone	(Days from Appointed Date)	Physical Progress (%)	Scheduled Date	Physical Progress (%)	Revised Date	(No. of months)	Current 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**

- BM traversing completed, verified by AE.
- Centre line marking completed up to 51km. And 51 to 60 under progress.
- OGL recording completed up to 49km. And 51 to 60 under progress.
- Traffic survey, Axle load survey, FWD completed.
- Bore logs/ Geo technical investigation completed.
- Road Inventory highways in progress, completed up to 51.0 km and further
   Chainage marking under progress.
- Verification of Existing crust thickness completed.
- TCS Validation done at site.
- Structure inventory under progress
- Plan & Profile preparation under progress.
- Contractor not started Road works in this reporting month of March-2020.

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

1. Work fro	1. Work front			Length completed by layer (MCW)			Length completed by layer     (RCC drain and Foot path     cum Drain )			
	Length (km)	% Total Length		Length (km)	% Total Length		Length (km)	% Total Length		
<b>Total Length</b>	30.160	100%	<b>Total Length</b>	30.160	100%	Total Length	19.70 BS	100%		
Total Work front available	29.585	98.09%	Total Length Completed (Till Date)	Nil	Nil	Total Length Completed (Till Date)	Nil	Nil		
Pending Land Acquisition	0.575	1.91%	ВС	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 and recommended actions by AE

- 1. The Contractor has submitted CESMP, the shortfalls are communicted to the contractor needs to resubmit C-ESMP with duly incorpating the shortfalls.
- 2. The Contractor has submitted QAP, the shortfalls are communicted to the contractor needs to resubmit QAP with duly incorpating the shortfalls.
- 3. The Contractor has submitted Taraffic Management Paln (TMP), the shortfalls are communicted to the contractor needs to resubmit TMP with duly incorpating the shortfalls.
- **4.** The contraactor needs to expidate the approval of design and drawings duly proof cheked and safety audeited, quickly, so that works can be commnece early
- **5.** The process for utility shifting needs to be expediciously so that works are not hindered for want of shifting of utilities.
- **6.** Man power should be deployed as per the agreement.still the key persons of the man power not deployed.
- 7. Applicable permits not submitted till date.

#### 5.14.4 Package 8 C- Placherry to Ponkunnam

Three bids were received against this tender as per table below.

SI. No.	Name of Bidder	Nationality	Whether technical bid opened/ not opened	Remarks	
3	M/s Sreedhanya Construction Company and M/s Nath Infrastructures (Joint Venture)	Indian	Awarded	JV with M/s Sreedhanya Construction Company as lead member	

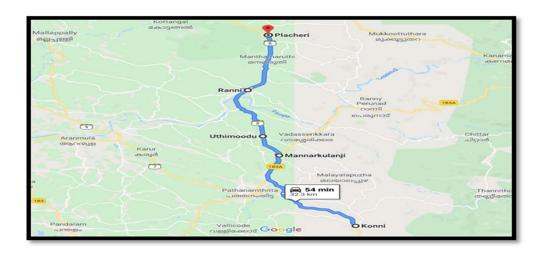
After technical evaluation it is seen that Bidders of SI. No 1 and 2 shall be treated as non-responsive due to the conditions stated below as a and b respectively.

- a) M/s RDS Project Limited and M/s Cherian Varkey Construction Co. Pvt. Ltd. (Joint Venture) has provided BG no. 39670IGL0001019 dated 26/03/19 with validity upto25/06/19 instead of 8/10/19, as per Clause 19.3 of Instruction to Bidders. Hence, Bid of M/s RDS Project Limited and M/s Cherian Varkey Construction Co. Pvt. Ltd. (Joint Venture) shall be treated as non-responsive, as per Clause 19.4 of Instruction to Bidders (Non-responsive).
- b) 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 is L1 for Packages 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 8C as in Package 8 B they are L1. So, bid of M/s. EKK Infrastructure Limited shall be rejected as per Clause 32.3 of Instruction to Bidders (Non-responsive)

Hence Price bid submitted by M/s Sreedhanya Construction Company and M/s Nath Infrastructures (Joint Venture) was considered for opening.

After receiving confirmation from WB to proceed with the award of Work for Package 8 B on 01-07-2019, the financial JV Bid of M/s Sreedhanya Construction Company and M/s Nath Infrastructures was opened and evaluated on 15-07-2019. The price quoted by this bidder was Rs 279.99 crores against the tendered cost of 236.79 crores. This being on the higher side, and with World Bank and Steering Committee concurrence, the Contractor was requested to review his quote with regards to GST and re submit. 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.

## 5.14.5 Package 8 C Status - Plachery-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

Description Project (Days from	Pla	nned	Act	ual	Delay			
Project Milestone	(Days from Appointed Date)	Physical Progress (%)	Scheduled Date	Physical Progress (%)	Revised Date	(No. of months)	Current Status	Remarks

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**

- TBM traversing completed, verified by AE.
- Centre line marking under progress.
- OGL Recording under progress.
- Traffic survey, Axle load survey, BBD completed.
- Bore logs/ Geo technical investigation under progress.
- Verification of Existing crust thickness completed.
- TCS Validation done at site.
- Verification of Existing crust thickness completed.
- Road Inventory highways in progress.
- Structure inventory completed.
- Plan & Profile preparation under progress.
- Contractor not started Road works in this reporting month of March-2020

.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 Foot path cum Drain)			
	Length (km)	% Total Length		Length (km)	% Total Length		Length (km)	% Total Length	
Total Length	22.173	100%	Total Length	22.173	100%	<b>Total Length</b>	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	ВС	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 and recommended actions by AE

- 1. The Contractor has submitted CESMP, the shortfalls are communicted to the contractor needs to resubmit C-ESMP with duly incorpating the shortfalls.
- 2. The Contractor has submitted Traffic Management Plan (TMP), the shortfalls are communicted to the contractor needs to resubmit TMP with duly incorpating the shortfalls.
- **3.** The contraactor needs to expidate the approval of designs and drawings duly proof cheked and safety audeited, quickly, so that works can be commece early
- **4.** The process for utility shifting needs to be expediciously so that works are not hindered for want of shifting of utilities.
- 5. Man power should be deployed as per the agreement still the key persons of the man power not deployed.
- **6.** Some of the Applicable permits is not yet submitted.

#### 5.14.6 Package 8 A Status

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

SI. 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 their 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 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 withM/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 croresagainst 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 Infracon 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 is 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 and status is as below:

#### 5.14.7 (1) Painavu Ashokakavala Road Status

The bid invitation was published on 15.08.19 with the date of 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.

SI.No	Name of Bidder	Nationality	Remarks
1	M/s EKK Infrastructure Ltd.	Indian	Single Entity

On 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 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 Itd 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 sent to Steering committee approval and the same has been approved by committee. LOA Issued to the contractor. The agreement signed on 24-01-2020 and construction period is 12 months from the Appointed date.

#### 5.14.8 (2) Adoor – Chengannur Road Status

The bid invitation was published on 15.08.19 with the date of 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.

SI.	Name of Bidder	Nationality	Remarks
No			
1	M/s EKK Infrastructure Ltd.	Indian	Single Entity

On 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 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 Itd 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 wasplaced before Steering committee approval and the same has been approved by committee. LOA Issued to the contractor. The agreement signed on 24-01-2020 and construction period is 12 months from the Appointed date

#### 5.14.9 (3) Chemmanar Gap Road Status

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

The following bids were received by closing date and time for submission of bids.

SI. No.	Name of Bidder (including list of all members in case of JV	Nationality	Lots (individual or combinations) for which considered technically responsive	
1	M/s. Cherian Varkey Construction Co. Pvt. Ltd.	Indian	Individual	Single
2	M/s. EKK-KNM (JV)	Indian	Individual	JV
3	M/s. DRAIPL-GREENWORTH (JV)	Indian	Individual	JV

The Evaluation Committee reviewed the technical bid. Even though shortcomings exist as far as key personnel and equipment are concerned, the Contractor was asked to submit an undertaking to rectify the shortcomings before the execution of the agreement if the work is awarded to them. 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 contractors quote was 24.00 % higher than the estimate and hence committee recommended for re tendering. This has been retendered and bid opening date is on 13-03-2020 and Deadline for submission of original documents like bid security, cost of bid document etc. was 23.03.2020. Due to Pandemic situation and Lockdown being aanounced, the bid opening date was changed to 27-04-2020.

#### 5.14.10 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 "Rebuild Kerala Initiative "(RKI) have also been added in the scope of works for the AE role. The additional three roadsare 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 Rebuild Kerala

lintiative. The details of these three PWD roads identified under "Rebuild Kerala Initiative "for Component D are as below as per Table 3

Table 3

Sr. No.	Name of road	District	Category of Road SH/MDR	Length of road Proposed in km	Estimated Cost in Crores
1	Chemmannar Gap road Km. 0/00 to 31/500 (except km. 10.650)	Idukki	MDR	29.94	120.98
2	PainavuThannikandom Asoakkavala road	Idukki	SH	21.00	86.82
3	AdoorChenganoor	Alappuzha Pattanamth		23.80	93.59
				74.74	301.39

Bids for Authority Engineers were received on 17<sup>th</sup> July 2019 from the following Shortlisted Consultants who were given the RFP.

- 1. M/s Consulting Engineers Group Ltd.
- 2. M/s Egis India Consulting Engineer Pvt Ltd
- 3. M/s Infra Support Eng. Consultants Pvt Lt. In J.V. with iDECK Ltd
- 4. M/s SA Infrastructure Consultants Pvt Ltd in J.V. with Cos Consultancy Services
- 5. M/s Sai Consulting Engineers Private Limited, Ahmedabad, India.
- 6. SOWiL Limited in J.V., with Esteem Developers Pvt Ltd.

After technical evaluation, only three firms as below are considered responsive.

- 1. M/s Consulting Engineers Group Ltd.
- 2. M/s Egis India Consulting Engineer Pvt Ltd.
- 3. M/s Sai Consulting Engineers Private Limited, Ahmedabad, India.

The technical proposals were opened on 17.07.2019 at 16:30hours local time. The technical proposals were evaluated by the evaluation committee consisting of Secretary, PWD and Project Director KSTP and Chief Engineer, KSTP and the following scores are allotted.

Sl. No	Firm Name	Technical Scores
1	M/s.Consulting Engineers Group Ltd.	88.40
2	M/s.Sai Consulting Engineers Private Limited, Ahmedabad, India	83.92
3	M/s.Egis India Consulting Engineer Pvt. Ltd.	81.21
4	M/s.SA Infrastructure Consultants Pvt. Ltd. in J.V. with Cos Consultancy Services	66.19

The Evaluation Committee examined the Technical Proposals and decided that the following three firms are qualified for their financial proposal opening, who scored above 70 points. They are,

- 1. M/s. Consulting Engineers Group Ltd.
- 2. M/s. Sai Consulting Engineers Private Limited, Ahmedabad, India
- 3. M/s. Egis India Consulting Engineer Pvt. Ltd.

The financial proposal of M/s.SA Infrastructure Consultants Pvt. Ltd. in J.V. with Cos Consultancy Services was not opened as they had not obtained minimum qualifying 70 marks in their technical appraisal.

The detailed Technical Evaluation report was submitted to the World Bank for approval on09/08/2019 and NOC received on 27.08.2019

Accordingly, the financial Bids of these three firms were opened on 29<sup>th</sup> August 2019 15.00 hours. The combined technical and financial Scores obtained are as tabulated below:

SI. No	Consultant's Name	Technical Scores	Financial Scores	Final Scores	Quoted Price (Exclusive of taxes) INR	Rank
1	M/s. Consulting Engineers Group Ltd.	88.40	88.61	88.45	12,28,46,400	1
2	M/s. Egis India Consulting Engineer Pvt. Ltd.	81.21	100	85.91	10,88,56,541	2
3	M/s. Sai Consulting Engineers Private Limited, Ahmedabad, India	83.92	73.50	81.31	14,80,9,7000	3

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

#### 5.15 Component B: Road Safety Component

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

- a. To strengthen the capacity of 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 Multisectoral interventions to demonstrate the effectiveness of Road Safety Best Practices. The Kazhakkoottam – Thaikod – Kottarakara – Adoor Corridor (80 km) improved during KSTP-I is

identified for this purpose having high density of traffic. This work is in progress and is further detailed in 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 stake holders' 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 Collage, 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 complted. 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 examing the Challenge Fund proposals and co-ordinating 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 of future road geometrics requirements, capacity analysis, seasonal variations, and daily variations of traffic volume during festivals etc.

KSTP has entrusted the consultant to take actions for the procurement of Market Research firms. The market research would support 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 completed.

The procurement of consultancy services for appointment of firms for Traffic Safety Enforcement and Post Crash Training (truuma care) for the Safe Corridor are in progress aimed at training the Police personnel and for enhancing trauma care facilities inHospitals in the near by areas of the SCDP. These are expected to be completed by end August 2018.

The project proposals fixing the last date of submission on 13.11.2018 under the challenge fund program received from Kozhikode District has been tendered initiating bidding. This was agreed in a meeting held in the room of the Secretary to Government, Transport. Since the progress of activities were 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 "Safe Corridor Demonstration Project" here in after referred as SCDP. The stretch selected was Khazakuttom- Adoor Section running a length of 78.65 kms. 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 Libaility 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 equipments while in Level III hospital, only procurement of equipments is included. The Department of Health and Family Welfare, Government of Kerala prepared the proposal of Strengthening Trauma Care Services as part of Safe Corridor Demonstration Project.

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

Proposal from Health and Family welfare Department					
SI. No	SI. No Name of the Institution Infrastructure cost (in lakhs) Additional Equipment cost (in lakh)				
Equipment					

Level I				
1	Govt. Medical College,	-	1877	18.77 Cr.
•	Trivandrum			
Level II 8	Level III			
2	Taluk Headquarters Hospital,	25	168	
	Kottarakara			
3	General Hospital, Adoor	25	418	
4	Community Health Centre,	-	22.3	6.306 Cr.
4	Kanyakulangara			
5	Block Primary Health Centre	-	22.3	
5	Vamanapuram			
6	ALS Ambulances		63.9	63.9 lakhs
	Comprehensive stroke	200		
7	Centre at Govt. Medical			
<i>'</i>	College,			
	Thiruvananthapuram			
	Total	250		2.5 Cr.
Total Bud	dget proposal (in Lakh)	1	•	28.21. Cr.

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

- 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
- 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, Aoor and Taluk Head Quarters Hospital, Kottarakara Rs63.9 Lakhs
- 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 Post Review Threshold of World Bank.

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

ı	Medical Equipments for Level I, II and III hospitals	Cost in	Status as on March 10-03-2020
		Lakhs	

1	High end equipments	1487.81	<ul> <li>Bid opened on 28-10-2019 byKMSCL.</li> <li>Evaluation Completed and KMSCL submitted the evaluationreport.</li> <li>1 item needed retender as not meeting criteria. KMSCL retendered the work. Opening on 23.03.2020</li> </ul>
2	Other items	292.52	<ul> <li>Bid opened on 16-10-19 by KMSCL.</li> <li>Evaluation Completed and KMSCL submitted the evaluationreport.</li> <li>20 items got zeroresponse. Retenderrequired.</li> <li>KMSCL retenderd thework.</li> <li>Openingon23.03.2020</li> </ul>
3	Procurement of ALS Ambulances	63.9	Entrusted KMSCL for procurement throughGEM.

#### INFRASTRUCTURE:

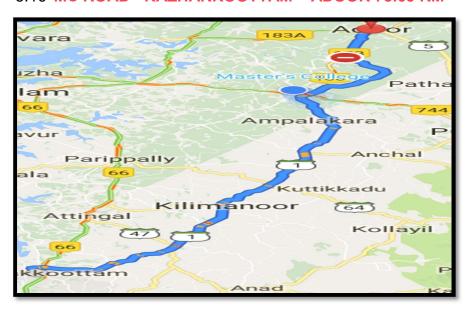
SI No	Work	Estimate amount (L) excluding taxes	Status
1	Infrastructure development at Govt. Medical College, Thiruvananthapuram		
i	Civil Works-Providing False Ceiling and aluminium windows in the Trauma Care wards 7 & 8of Medical College Hospital	59.82	Agreement executedon     07.01.2020
	Electrical works		
ii	Providing AC in trauma care	38.44	<ul> <li>Tender opened on 18- 1019.Exorbitantly rate quoted.</li> <li>Retendered three times. No response</li> </ul>
iii	Electrification works of trauma care	48.42	Agreement executed on 07.01.2020
iv	Works related to Biomedical equipments	32.11	Entrusted KMSCLfor procurement.
2	Infrastructure development of Taluk Headquarters Hospital Kottarakkara		

i	Civil Works	13.92	Bid opened on     1/1/2020.9% above rate     quoted.     LoA to be issued.
	Electrical works		
ii	Providing AC in trauma care	4.30	Agreement executed on 07.01.2020
iii	Electrification works of trauma care	3.20	Agreement executed on 07.01.2020.
3	Infrastructure development of General Hospital Adoor		

i	Civil Works	25.00	Agreement executed on 03.02.2020
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- 1. Package 1 to 3 to be awarded by KMSCL after following theirprocedures.
- 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/- excludingtaxes.
- 3. The work Electrification in Trauma Care units Ward No 7 and 8 at MC Tvpm -Part-I-StrengtheningofExistingPanelBoardstobeawardedtoDSKElectricPower,theL1 -bidder for an amount of Rs. 45,81,430/- excludingtaxes.
- 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/- excludingtaxes.
- 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 Maxsel Agencies, the L1 -bidder for an amount of Rs. 4,16,792/- excluding taxes.

#### 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			
Agreement No & Date	(Contract. No. KSTP/PMT/BCO&RS)			
DateofCommencement	28 <sup>th</sup> December 2016			
Time of Completion as per agreement	16 months from the date of commencement – 27.04.2018			
Extended Time of Completion	Up to 31.12.2019			
Contract Amount	Rs 146,67,38,745/-			
<b>Revised Project Cost</b>	Rs .137,88,30,271/-			

## 5.16.1 **Financial Progress.**

The payment of 113.21 Crpaid in month of Marchon basis of that, the Financial progress is 87.33% as on 31-03-2020. The Contractor has submitted IPC-25 & Total paid Bill Amount is Rs 115.99Cr. It is expected to close at around 138.23 crores after final completion.

	SCDP - PHYSICAL PROGRESS OF MAJOR CIVIL WORKS -MARCH 2020								
			Quantity						Remarks
SI No	ltem	Unit	As per BoQ	As per variation	Anticipated Qty	Completed	Ongoing	Balance	
1	Drain	m	6274	14488	15100	14760	40	300	200 m drain at Venjaramoo
	Culvert	No							
	New- Box		10	14	14	14	0	0	
2	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	
	Retaining Wall	$m^3$							
3	R R		8847	1543	2847	2654	0	193	
	Gabion		0	6085	6085	5844	0	241	
4	DBM	m <sup>3</sup>	9524	9818	11100	10928	0	172	
5	BC	m <sup>3</sup>	39396	39396	42000	41700	0	300	
6	Interlocking blocks	m <sup>2</sup>	58988	16723	13707	12989	0	718	

	SCDP - PHYSICAL PROGRESS OF MAJOR ROAD SAFETY WORKS - MARCH 2020								
SI				Quantity					
No	ltem	Unit	As per BoQ	As per variation	Anticipate d Qty	Completed	Balance	Remarks	
1	Drain cover slab	$m^3$	7141	6791	8414	8248	166		
2	W Beam Crash barrie	m	15015	8295	9141	9019	122		
3	Road Marking	m <sup>2</sup>	81726	70523	57061	47126	9935	On going	
4	Road Studs	E	56437	56654	68950	63950	5000	On going	
5	Sign Boards	E	9873	9873	3931	2870	1061	On going	
6	LED Solar Street light	Е	2000	1127	890	839	51		
7	Kerb 250 mm	m	211052	16747	31000	25662	5338	Ongoing at iunctions	
8	Kerb 100 mm	m	42211	46775	12500	11391	1109	Ongoing at junctions	
9	Antifungal Designer T	m <sup>2</sup>	23610	68420	43000	42197	803	Ongoing at junctions	
10	Hand Rail	m	21400	20900	19328	19125	203	Ongoing at iunctions	

#### 5.16.2 **Physical Status:**

The Physical Progress is 94.0% % as on 31.03. 2020. Due to delay in Junction drawing submission by NATPAC, improvements of junction works are delayed. As informed, four junction drawings are yet to be surveyed and drawings prepared by NATPAC out of 26 junctions in total. Also, additional loop of 0.5. Km has been proposed to be added (pothencode market area) to decongest the present onewaytraffic. The stretch from Vanjaramoodu to Kazakhootam asphalting was not considered in the original BOQ since surfacing was not due. However, this has become due now and is proposed to be done under this works contract as a

variation item. Due to monsoon period from June to August, asphalting is not recommended and can be taken up after monsoons only.

Contractor has given application for EOT upto 31-12-2019 to complete all the balance works. The same has been finalized under the 110<sup>th</sup> Steering Committee approval on 20-12-2019.

#### **5.16.3 Key Issues**

- ROW to be demarcated for Junctionimprovement works at pothenkode, and Venjaramood.
- SCDP- areas were evicted except dispute locations.
- Compensation for denial of Excise duty exemption due to Implementation of GST.
- Contractor has stopped the work on 23rd March 2020 due to Covid-19 Lockdown announced by Government.

#### 5.17 Road safety Challenge Fund

In continuation with Safe corridor Development Project, and under 5.16 d, where in the lessons learnt 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 reconform the adequacy of the proposals submitted and finalise 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 6th of May 2019. List of roads selected and their tentative costs are tabulated in Table 4 below.

Table 4

SI. No	Name of Road	Estimated Cost in Crores	Length in Kms	District
1	e-Yatra Project -corridor between Vypin-Mannambam	10.02	25.0	Ernakulam
2	Safe Road Project-Trivandrum Medical college -Kannamoola, Pallimukku-Pettah	7.50	5.0	Trivandrum
3	Safe Road Project-Trivandrum Vellayambalam-Thycaud Road Thampanoor	7.0	3.0	Trivandrum
4	Safe Road Project-Thrissur Thrissur- Kunnamkulam State Highway	4.0	24.3	Thrissur
5	Safe Corridor Project-Kollam- Kottiyam-Kundara Road	5.0	11.60	Kollam

The TOR received from TSG has been reviewed by PMC and is proposed for inviting DPR Consultants bids on QCBS policy of the World Bank.It was decided to issue RFP's to the already Shortlisted Consultants of KSTP for DPR of RKI roads and hence the RFP's were issued to the following Shortlisted Consultants

- 1. M/s Louis Berger Consulting Pvt Ltd
- 2. M/s Feedback Infra Pvt Ltd
- 3. M/s SATRA Infrastructure Management Services Pvt Ltd
- 4. M/s STUP Consultants Pvt Ltd
- 5. M/s Egis India Consulting Engineers Pvt Ltd
- 6. M/s L & T Infrastructure Engineering Ltd.
- 7. M/s Infrastructure Development Corporation Limited (iDECK)

A PreBid meeting was held on 01.08.2019 and the last date for submission of Bids is 27.08.2019.

Bids were received from the Follwing Consultants for Preparation of DPR for the Road safety chalange fund projects.

- M/s Feedback Infra Pvt Ltd
- 2. M/s STUP Consultants Pvt Ltd
- 3. M/s Egis India Consulting Engineers Pvt Ltd
- 4. M/s L & T Infrastructure Engineering Ltd.
- 5. M/s Infrastructure Development Corporation Limited (iDECK)

The technical proposals were opened on 27.08.2019 at 16:30hours local time.

It is noted that four (out of five) bidders have shown deliverance of desired services in four months period against three months period communicated vide pre-bid replies the bidders seem somewhat not very clear about the desired delivery period. As such, all five bids have been evaluated to avoid lone bid selection and during bid negotiation stage, if the most preferred (H1) bidder refuses to deliver the services in three months period, the bid shall be offered to the next preferred bidder, upon three months delivery period confirmation, till selection process completes.

Accordingly, technical proposals were evaluated by the evaluation committee consisting of the Secretary to Government PWD& Project Director KSTP and Chief Engineer, KSTP and the following technical scores are allotted.

SI No	Consultants' names	Technical scores
1	M/s L & T Infra Engg Ltd	79.19
2	M/s EGIS India Consulting Engineers Pvt Ltd	74.98
3	M/s Feedback Infra Pvt Ltd	80.28
4	M/s STUP Consultants Pvt Ltd.	73.53
5	M/s Infrastructure Development Corporation (Karnataka) Ltd	72.89

FinancialBids were opened on 10<sup>th</sup> Oct-19.

C1 NT

Technical & Financial Evaluation of the Bids received for the Road safety chalange fund projectswere completed and their combined scores are tabulated as below.

Sl. No	Consultant's Name	Technical Scores	Financial Scores	Final Scores	Rank
1	M/s EGIS India Consulting Engineers Pvt Ltd	74.98	100	85.38	1
2	M/s Feedback Infra Pvt Ltd	80.28	68.89	83.78	2
3	M/s L & T Infra Engg Ltd	79.19	61.60	81.38	3
4	M/s Infrastructure Development Corporation (Karnataka) Ltd	72.89	68.60	77.28	4
5	M/s STUP Consultants Pvt Ltd.	73.53	45.70	73.30	5

In this Circumstances, it is recommended to award the contract "**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 Steering committee for approval and the same has been approved by Steering committee in the 109<sup>th</sup> meeting. The agreement was signed on 2<sup>nd</sup> 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 month of February-20

- 1. Field investigation completed
- a. Topographic survey for 25 major junctions.
- b. Road Inventory survey
- c. Turning Movement Count surveys for 25 major junctions.
- d. Speed and Delay survey for all the five corridors.
- e. Parking survey for all the five corridors.
- f. LUX meter survey for all the five corridors.
- g. Accident data for all the five corridors.
- 2. Strip Plan preparation completed for all the Five Corridors.
- 3. Improvement Proposals as per the scope of work completed for Two roads.
- 4. Field Study Report will be submitted on 05.03.2020
- 5. Draft DPR was submitted on 18.03.2020
- 6. Final DPR Upon approval of Draft DPR.

#### 5.18 Component C: Institutional Strengthening Component - Current Status

#### 5.18.1 Road Sector Modernization

Under this Component, KSTP have 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 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)

The study has been awarded to Deloitte Touché Tohmatsu India LLP in JV with Consulting Engineers Group Limited

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.

Consultant have submitted the following reports.

#### 1) Inception Report

The Report covers the understanding of 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) 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 11<sup>th</sup> 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.

#### 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 have 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 were no established frame work 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 the 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. The procurement of this was hosted on E –portal of Kerala Government as single stage Bid document 0n 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.

## 5.18.4 The RUSS has already been arranged. CPRSAP Technical Proposal are under evaluation.

■ Selection of consultant for Community Participatory Road Safety and User Engagement (CPRSAP) – Pre-proposal meeting was completed and clarification finalized. As per Bank's suggestion revised RFP was prepared incorporating the changes in length and other queries received in the pre-bid meeting over. The proposals are received. However the consultants do not possess any expereince in theis kind of assignments. Hence it was

decided to get this type of activities through the community laiaison officer of PMT. It was proposed to appoint another CLO for this purpose and has been done.

#### 5.18.5 Traffic Enforcement & Crash Data Management Sysytem

#### 5.18.5.1 Traffic Enforcement:

The Safe Demonstration Corridor Project (SCDP) from Vetturoad Junction near Kazhakoottam to Adoor on MC Road (SH1) is identified as high risk and highvolume corridor for implementing the programme. It envisages a number of road safety interventions and counter-measures to reduce fatalities and injuries due to road crashes in "4E" concepts i.e., Engineering, Enforcement, Education and Emergency Trauma Care. The programme will implement multisectoral road safety initiatives by associating with other stake holding departments like Police, MVD, PWD and Health in establishing a sustainable road safety model which can be replicated elsewhere in the state with the view of achieving 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 evidencebased road safety enforcement strategies.

The consultant had reviewed various available reports such as 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 of crash locations and profile of blackspot and vulnerable locations, road user category, enforcement programs, equipment's 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 scientific application of systems and techniques, a two day training for 27 Police officers and 7 MVD officers as trainers from 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.

#### 5.18.6 Crash Data Management Sysytem:

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-secotral 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 evidencebased road safety enforcement strategies. The police department has informed that as part of the outcomes related to 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, Police department has forwarded the details of iMAAP solution received form 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 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.

#### 5.19 Component D: Rebuil Kerala Initiative

KSTP has entrusted the Prioritization of the roads to be taken up under RKI to M/s LNTIEL, who are the Transaction Advisors for KSTP. Fifty nineroads were identified under the RKI component by the PWD Divisions based on the flood damage and severity.

The list of roads with rankings, districts and lengths are enclosed as Annexure II for reference. The total length of roads identified under RKI flood damge is approximately 1600 kms.

DPR for three roads are already completed and the roads are as under:

Sr. No.	Name of road	District	Category of Road SH/MD R	Length of road Proposed in km	Estimated Cost in Crores
1	Chemmannar Gap road Km. 0/00 to 31/500 (except km. 10.650)	Idukki	MDR	29.94	120.98
2	PainavuThannikandom Asoakkavala road	Idukki	SH	21.00	86.82
3	AdoorChenganoor	Alappuzha -Patt	tanamthita	23.80	93.59
				74.74	301.39

The balance fifty six roads are to be taken up for which DPR's need to be prepared.

Under this component of funding, 300 kms of road length is proposed to be taken up under World Bank funding, while another 500 kms is being taken up under KfW bank funding. RFP's for preparation of DPR's for these roads have been issued to the following consultants shortlisted.

- M/s Louis Berger Consulting Pvt Ltd
- M/s Feedback Infra Pvt Ltd
- 3. M/s SATRA Infrastructure Management Services Pvt Ltd
- M/s STUP Consultants Pvt Ltd
- 5. M/s Egis India Consulting Engineers Pvt Ltd
- 6. M/s L & T Infrastructure Engineering Ltd.
- 7. M/s Infrastructure Development Corporation Limited (iDECK).

A total of four pacakes classified as Package 1, 2 3, and 4 are being taken up and the roads are as below Package wise. Bids were received for these four packages. It is proposed to award One Package only to One Consultant to ensure the DPR's are completed without delay.

The participation for these works by the Consultants is indicated in the Matrix table below.

#### **RKI Roads Bid submitted by Consultants**

Consultant	Package-1	Package-2	Package-3	Package-4
Egis India Consulting Engineers Pvt Ltd	✓	✓	✓	✓
Feedback Infra Pvt Ltd	✓		✓	
Infrastructure Development		./		./
Corporation Ltd iDECK	•	•	•	•
L&T Infrastructure Engineering Ltd	✓	✓	✓	✓
Louis Berger Consulting Pvt Ltd			✓	✓
STUP Consultants Pvt Ltd			✓	✓
Total	4	3	6	5

Package No	To be awarded Consultant's Name	Technical Scores	Financial Scores	Final Scores	Rank
1	M/s Feedback Infra P Ltd	76.55	78.37	76.91	H2
2	M/s L & T Infra Engg Ltd	81.01	49.22	74.65	H2
3	M/s Louis Berger Consulting P Ltd	90.57	53.99	83.25	H1
4	M/s EGIS India Consulting Engineers P Ltd	75.16	100	80.13	H1

Technical & Financial Evaluation of the Bids received for the RKI Roads were completed and their combined scores are tabulated as above.

As per the Bid condition, only one package to be awarded to one consultant. So, the Consultant participating in all packages and with highest score amongst them shall be awarded that package.

Accordingly, M/s Egis India Consulting Engineers Pvt Ltd being H 1 in three packages and scoring highest in Package 4 to be awarded for an amount of Rs 4,36,94,891 excluding taxes which is 46.46% below the estimated amount.

M/s Louis Berger Consulting Pvt Ltd being H 1 in Package 3 to be awarded Package 3 for an amount of Rs 8,09,26,163 excluding taxes which is 0.40% below the estimated amount.

M/s L&T Infrastructure Engineering Ltd being H 2 in Package 2 to be awarded Package 2 for an amount of Rs 5,99,56,500 excluding taxes which is 25.50% above the estimated amount as H1 is already awarded Package 4.

M/s Feedback Infra Pvt Ltd being H 2 in Package 1 to be awarded Package 1 for an amount of Rs 3,78,48,274 excluding taxes which is 21.31% below the estimated amount as H1 is already awarded Package 4.

The approval was given by steering Committee in the 108th MOM dated 17-09-2019.

Package -01, 02 & 03 Aggrement 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 road under 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
   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.

#### 5.19.1 **RKI Package 1**

**M/s Feedback Infra Pvt Ltd**has submitted the Inception report as per delivarables schedules and the same has been checked and comments given for necessary improvements.

#### 5.19.2 **RKI Package 2**

**M/s LNTIEL** has submitted the Inception report as per delivarables schedule. It has been agreed to standardize the submissions of all the DPR's to avoid differences in implementation. PMC will be co ordinating withese 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 in particular will be a crucial part of the reports to ensure durability and connectivity in severe conditions.

#### 5.19.3 **RKI Package 3**

**M/s Louis Berger Consulting Pvt Ltd** has submitted the Inception report as per delivarables schedules and the same has been checked and comments given for necessary improvements.

Quarterly 1 rogress Report-January -March- 2020
5.19.4 RKI Package 4  M/s Egis India Consulting Engineers Pvt Ltd has submitted the Inception report as per delivarables schedules and the same has been checked and comments given for necessary improvements.
The Status of RKI roads mentioned below:
The Status of RRI roads mentioned below.

## Status of RKI 4 Roads Upto March-20

Consultant's Name	Service Commencement Date	As Per Deliverables	Inception Report submitted Date	Revised Inception Report submitted Date	As Per Deliverables	Submission of Survey and Investigation Report	Pilot DPR Submission	As Per Deliverables	Draft DPR Submission	As Per Deliverable	s
M/s Feedback Infra P Ltd	01.11.19		15.11.2019	04.12.2019		2 roads submitted on 13.03.2020	Not Yet Submitted		Not Yet Submitted		
M/s L & T Infra Engg Ltd	01.11.19	Within 15 days of work	06.11.2019	07.12.2019	Within 2 months of work order (31.12.2019)	28.02.20	30.01.20	30.01.2020	07.03.20	Within 5 months of work order(31.03.2020)	
M/s Louis Berger Consulting P Ltd	01.11.19	order	15.11.2019	February		07.01.2020	04.02.2020				
M/s EGIS India Consulting Engineers P Ltd	14.11.19		22.11.2019	18.02.20	13.01.2020	12.03.20	Not Yet Submitted	13.02.2020		13.04.2020	

Roads under Package 1

Package 1 (Northern Cluster -RKI)

Sr. No.	Agency	Name of road	District	Category of Road SH/MDR	Length of road Proposed in km
1		Kumbla- Badiadka-Mulleria road	Kasargod	MDR	29.55
2		KoyilandyThamrasseryMukkamAreekodeEdavanna	Kozhikode	SH -34	52.50
3	M/s FEEDBACK INFRA	UruvachalManakkayivalayal (including bridge parellel to aqueduct at valayal)-KeezhallurTherurPalayod-VellaparambaKarimbala Colony Maruthaayi Road	Kannur		20.43
4	M/s FEI	Edoor – Companynirath - Anapanthy- Angadikkadavu– Vaniyappara - Charal - Valavupara - Kacherikkadavu- Palathumkadav road in Peravoor constituency	Kannur	MDR	24.45
5		Vythiri-Tharuvana road	Wayanad	MDR	20.75
					147.68

# Roads under Package 2

	Package 2 (Northern Cluster -RKI)										
Sr. No.	Agenc y	Name of road	District	Category of Road SH/MDR	Length of road Proposed in km	Actual Length as per Site					
1		Quilandy - Edavanna road between Km 51/200 to 69/700 &Areekode - Manjeri road Km 0/000 to 13/600	Malappuram	SH/MDR	32.50	32.50					
2	LNTIEL	Perumbilavu-Nilambur Road B/W Km30/700 to 42/780 and 50/000 to 62/320 including upgradation of 53/000 to 54/000, 54/000 to 54/800 and 56/000 to 57/200.	Malappuram	SH	24.40	31.78					
3	M/s I	Palakkad -Perinthalmanna Road	Palakkad	SH	36.80	37.38					
4	_ 2	Mananthavady - Vimalanagar - Kulathada - Valad HS - Periya road between km2/500 to 27/300 in Wayanad District	Wayanad	MDR	24.80	27.00					
5		ThavalamMully Road CH 0/000 to 28/800	Palakkad	MDR	28.80	28.50					
					147.30	157.16					

# Roads under Package 3

		Package 3 (Central Cluster -RKI)		1		
Sr. No.	DPR Consultant	Name of roads/ Package No 3	District	Category of Road SH/MDR	Length of road Proposed in km as p TOR	
1		Kodungallur- shornur SH (SH 22)	Thrissur	SH	34.00	
2	P Ltd	Thrissur Kuttippuram Road (SH 69) 4 stretches (Many stretches inbetween in progress by other agency KIIFB )	Thrissur	SH	29.98	
3		Vazhakkodu Plazhy road Km.0/000 to 22/642	Thrissur	SH	22.642	
4	Consu	Kakkadassery - Kaliyar road Ch. 0/000 to 20/000	Ernakulam	MDR	20.60	
5	rger	Muvattupuzha - Theni SH (Ch. 0/000 to 15/750)	Ernakulam	SH	15.75	
6	M/s Louis Berger Consulting	Mookannoor Ezhattumugham Rd ch 0/000 to 14/200 and Blachippara Palissery Rd ch 0/000 to 6/000	Ernakulam	MDR	20.30	
7	M/s Lo	Kumarakom Nedumbassery (proposed SH) from Peruva to Peruvammuzhi	Ernakulam	MDR	21.03	
8		Neyyassery Thokkumbansaddle road		MDR	28.50	
9		Nenmara - Nelliyampathy road km 0/00 to 30/714	Palakkad	MDR	30.71	
		Additional Road added				
10		Arakunnam-Amballoor-Poothatta-Piravam Road		MDR	7.00	
					230.51	

# Roads under Package 4

## **Southern Cluster**

Sr. No.	DPR Consultant	Name of road	District	Submitted on	Category of Road SH/MDR	Length of road Proposed in km
1		Mallapally, Komalam Paduthodu Kalloopara Chengaroor Komalam Kavungumprayar Pattakala, TMV road	Pathanamthitta	As pilot DPR	MDR	22.65
2	T LTD	Gandhinagar-Medical College-Babu Chazhikadan Road-Kottayam-Parippu Road- Athirampuzha Liessue-Kaippuzha-Mannanam- Pulikkuttissery-Parolickal-Muttappally Road	Kottayam	03-04-20	MDR	21.95
3	M/s EGIS INDIA PVT LTD	Pathanamthitta Ayroor-Muttukudukka illathupadi - Muttukudukka prakkanam - Parakkanam Elavumathitta - Kulanada Ramanchira - Thanikkuzhy Thonniamala	Pathanamthitta		MDR	28.12
4	M/s EG	Vadayar Chandappalam- Mulakkulam Road and Vadayar Kallattippalam Muttuchira Road	Kottayam		MDR	24.70
5		Malamekkara Kunnathukala Chala Puthenchanda factory Jn Azad Jn road 0/00 to 8/600	Pathanamthitta		MDR	8.60
6		Thiruvananthapuram Ponmudi road (From Nedumangad to Ponmudi)	Thiruvananthapuram		SH	41.00
		Sub Total as per TOR				147.02
7	onal lotted	Thattararnbalam-Michael Junction- Kochalummood-Mangankuzhy-Pandalam	Allapuzha			21.10
8	Additi Roads a	Thattararnbalam-Michael Junction-Kochalummood-Mangankuzhy-Pandalam  Veeyapuram-Edathua-Puthukarry-Marnbuzhakkary-Kidangara-Kunnamgary-Kumarangary-Valady-Mullakarnthuruthy  Allapuzha				21.35

9	Vayuttupuzha-Potheeppad Road	Ranni		35.00
	Sub Total Extra Roads added			77.45
	Total in Km			224.47

			Pı	roje	ect Roads under (RKI) Resilie	ent Kerala Ini	tiative (Annex	ure II)		
Sr. No.	Ranking	N	С	s	Name of road	District	Constituency	Catego ry of Road SH/M DR	Length of road Proposed in km	Package No.
1	1	0	0	34	Thrikkunnappuzha - Nangiarkulangara- Thattarambalam- Michel Junction- Kochalummoodu- Mangankuzhy - Pandalam road	Alappuzha,Path anamthitta	Haripad, Kayamkulam, Mavelikkara	MDR, SH	34.47	Pkg-IV
2	2				Kodungallur- shornur SH (SH 22)	Thrissur	Kodungallur,Irinj alakuda,Nattika,T hrissur	SH	34.00	Pkg-III
3	3	0	30	0	Thrissur Kuttippuram Road (SH 69)	Thrissur	Thrissur, Wadakkanchery, Manalur,Kunnam kulam,Ponnani& Thavanoor	SH	29.98	Pkg-III
4	4	30	0	0	Kumbla- badiadka-Mulleria road	Kasargod	Kasargod,Manjes waram	MDR	29.55	Pkg-I
5	5	0	16	0	Muvattupuzha - Theni SH (Ch. 0/000 to 15/750)	Ernakulam	Mvattupuzha	SH	15.75	Pkg-III
6	6	0	0	24	Kuppappuram - Nedumudy - Karuvatta Road	Alappuzha	Kuttanad	MDR	24.45	Pkg-IV
7	7	0	0	23	Mallapally, KomalamPaduthoduKallooparaChenga roorKomalamKavungumprayarPattakal a, TMV road	Pathanamthitta	Thiruvalla	MDR	22.65	Pkg-IV

8	8	0	0	22	Gandhinagar-Medical College-Babu Chazhikadan Road-Kottayam-Parippu Road-Athirampuzha Liessue- Kaippuzha-Mannanam-Pulikkuttissery- Parolickal-Muttappally Road	Kottayam	Ettumanoor	MDR	21.95	Pkg-IV
9	9	33	0	0	Quilandy - Edavanna road between Km 51/200 to 69/700 & Areekode - Manjeri road Km 0/000 to 13/600	Malappuram	Ernad, Malappuram, Manjeri	SH/M DR	32.50	Pkg-II
10	10	0	29	0	NeyyasseryThokkumbansaddle road	Idukki	Thodupuzha	MDR	28.50	Pkg-III
11	12				Cherthala Thekketheruvuroad, VallayilChambakk adu Road, KalavamkodamShaktheeswaramroad, V ayalarOlathalaKavilValamangalam road, ValamangalamKuthiyathoduRoad, Old NH Kuthiyathodu	Alappuzha	Cherthala	MDR	20.55	
12	13	0	0	28	PathanamthittaAyroor- Muttukudukkaillathupadi- Muttukudukkaprakkanam - ParakkanamElavumathitta - KulanadaRamanchira - ThanikkuzhyThonniamala	Pathanamthitta	Aranmula	MDR	28.115	Pkg-IV
13	14	0	26	0	Kanjiramattom Road (Ch.0/000 to 6/100),KanjiramattomPoothotta Road(Ch.0/000 to 1/980,Poothotta Piravom Road (Ch.0/000 to 2/800),ArakunnamAmballoor Road(Ch.0/000 to 5/.030),ArakunnamOllipuram Road (Ch.0/000 to1/950)PoothottaPiravom Road 2nd reach(Ch.2/600 to 4/250),	Ernakulam	Piravom	MDR	25.87	Pkg-III

					Erathadam -Cherukara Ch.0/000 to 6/360)					
14	15	53	0	0	KoyilandyThamrasseryMukkamAreeko deEdavanna	Kozhikode	Koyilandy ,Balussery, Koduvally, Thiruvambady,	SH -34	52.50	Pkg-l
15	17				UruvachalManakkayivalayal (including bridge parellel to aqueduct at valayal)- KeezhallurTherurPalayod- VellaparambaKarimbala Colony Maruthaayi Road	Kannur	Mattannur		20.43	Pkg-I
16	18	0	20	0	Mookannoorezhattumugham Rd ch 0/000 to 14/200 and BlachipparaPalissery Rd ch 0/000 to 6/000	Ernakulam	Angamaly	MDR	20.30	Pkg-III
17	19	0	31	0	Nenmara - Nelliyampathy road km 0/00 to 30/714	Palakkad	Nenmara	MDR	30.71	Pkg-III
18	20	0	0	2 5	Harippad - Veeyapuram - Edathua - Puthukkary - Mampuzhakkary - Kidangara - Kunnamgari - Kumarangari - Valady - Mulakkamthuruthy Road	Alappuzha	Kuttanad	MDR	24.77	Pkg-IV
19	21	24	0	0	Edoor – Companynirath - Anapanthy- Angadikkadavu – Vaniyappara - Charal - Valavupara - Kacherikkadavu - Palathumkadav road in Peravoor constituency	Kannur	Peravoor	MDR	24.45	Pkg-I
20	22	0	0	2 5	VadayarChandappalam- Mulakkulam Road and VadayarKallattippalamMuttuchira Road	Kottayam	Vaikom&Kaduth uruthy	MDR	24.70	Pkg-IV

21	23				Oachira - Ayiramthengu - Vallikkavu - Vavvakkavu, Vallikkavu - Changankulangara, Vallikkavu- Alumkadavu	Kollam	Karunagapaly	MDR	20.00	
22	24	24	0	0	Perumbilavu-Nilambur Road B/W Km30/700 to 42/780 and 50/000 to 62/320 including upgradation of 53/000 to 54/000, 54/000 to 54/800 and 56/000 to 57/200.	Malappuram	Perinthalmanna	SH	24.40	Pkg-II
23	25	37	0	0	Palakkad -Perinthalmanna Road	Palakkad	Malampuzha, Kongad&Ottapp alam	SH	36.80	Pkg-II
24	26	0	0	9	MalamekkaraKunnathukalaChalaPuthen chanda factory Jn Azad Jn road 0/00 to 8/600	Pathanamthitta	Adoor	MDR	8.60	Pkg-IV
25	27				Alappuzha SL Puram road ,MangalapuramLutheranceAyyappanche ry Road ,KalikulamMuttathipparambu Road	Alappuzha	Cherthala	MDR	20.10	
26	28				Ramamangalam - Thodupuzha (Ch. 0/000 to 18/700) and Arakkuzha to Marika (Ch.0/000 to 3/400).	Ernakulam	Piravom	MDR	22.10	Pkg-III
27	29	21	0		0 Vythiri-Tharuvana road	Wayanad	Kalpetta	MDR	20.75	Pkg-I
28	30	0	2	1	0 KumarakomNedumbassery (proposed SH) from Peruva to Peruvammuzhi	Ernakulam	Piravom	MDR	21.03	Pkg-III
29	31	25	0		0 Mananthavady - Vimalanagar - Kulathada - Valad HS - Periyaroad between km2/500 to 27/300 in Wayanad District	Wayanad	Mananthavady	MDR	24.80	Pkg-II

30	32				Cherthala Arookutty Road from ch 0/000 to 24/590	Alappuzha	Cherthala	MDR	24.59	
31	33				0/500 ST road to Chenganda road Road connecting ST road to Chenganda via Varanad,3/1 SA road to muttomlake,PoothottaNedumbrakka duroad,ChengandaThrichattukulamr oad,ThrichattukulamVaduthala road	Alappuzha	Cherthala	MDR	26.05	
32	34				Nedumangad - Puthenpalam – venjaramood	Thiruvanantha puram	Nedumagad, Vamanapuram	MDR	20.00	
33	35				Thodupuzha - Piravom road SH (Ch. 0000 to 33400).	Ernakulam, Idukki	Piravom, Thodupuzha, Muvattupuzha	SH	33.20	
34	36				Cherkkala - Jalsoor Road	Kasargod	Kasargod ,Uduma	SH	38.95	
35	37				ThadiyampaduvimalagiriSanthigra m road	Idukki	Idukki. Udumbanchola	MDR	21.00	
36	38	0	21	0	Kakkadassery - Kaliyar road Ch. 0/000 to 20/000	Ernakulam	Muvattupuzha	MDR	20.60	Pkg-III
37	39	0	23	0	VazhakkoduPlazhy road Km.0/000 to 22/642	Thrissur	Chelakkara	SH	22.642	Pkg-III
38	40				Kunnamvahamukkku, VenkurinjiMukkottutara, Chathanthara Ring Road, Kollamula 70 Acre, Puthamonanthyalumkavu, KilliyonikalKannanmukku, ThekkepuramPamthalamMukku, PoovanmalaVaroor, ChakkapalamKadamminatta, DippopadiChengaramukku,	Pathanamthitt a	Konni		45.00	

47	51				Navaikulam - Pallikal Madavoor link roads under Varkala LAC	Thiruvanantha puram	Varkala	MDR	42.00	
46	50	0	0	41	Thiruvananthapuram Ponmudi road (From Nedumangad to Ponmudi)	Thiruvanantha puram	Nedumangad, Aruvikkara&Vam anapuram	SH	41.00	Pkg-IV
45	49				KavungumpalamNaiplavuChuvann aplavupaduva and MundankunnuTodanal road	kottayam	puthuppally and Kanjirappally	MDR	25.00	
44	48				Chandanappally-Konni Vattakavu- Njakkukavu-Jolly jn- Chappathupadi road	Pathnamthitta	Konni	MDR	21.50	
43	46				PulimathKilimanoorPazhayakumm ummel link roads under Attingal LAC	Thiruvanantha puram	Attingal	MDR	35.50	
42	44				Kaithode - Poredam - Poonkkodu, Edakkodu - Vettuvazhy - Ganapathinada – Arkannoor	Kollam	Chadayamangala m	MDR	25.10	
41	43				PayyavoorKunnathurpadiPadankav alaKanjirakkolliManakkadavunuch yad road km 0/000 to 27/980	Kannur	Iriikur	MDR	27.98	
40	42				prakasVettikkamattom road Nagaroor - Karavaram link roads under Attingal LAC	Thiruvanantha puram	Attingal	MDR	26.40	
39	41				thulappallyKisumom, PuthukkadaChittar, ChethakkalEdamuri, ChethakkalKoothattukulam, AnchukuzhyMukkam, Manoramamukku, Chengaramukku, MaramkulamChennikkara, AlapraAlaparakkadu road. KarimbanMurikkasseryThopramku dy	Idukki	Idukki	SH	30.00	

48	52				Manjappara - Vayala - Kuttikkal - Pandalamukku - Chariparambu - Puthayam - Thottamukku - Filigri road	Kollam	Chadayamangala m	MDR	22.95	
49	53				Vandiperiyar- Moozhiyar Road	Idukki	Peermade	MDR	20.12	
50	54	29	0	0	ThavalamMully Road CH 0/000 to 28/800	Palakkad	Mannarkkad	MDR	28.80	Pkg-II
51	55				AravanchalPurakkunnuKanayinaree kkamvalliPilathara road km 0/000 to 21/000	Kannur	Payyanur	MDR	21.00	
52	56				Thazhamel - Anchal Market Jn. Sabarigiri School - Agasthyacode - Alencherry - Onthupacha road	Kollam	Punalpur&Chada yamangalam	MDR	25.22	
53	57				Kumaramputhur - Olippuzha road km. 0/000 - 19/390	Palakkad	Mannarkkad	MDR	19.39	
54	58				Vettikkavala - Sadananthapuram - Umannoor- Chepra - Nellikunnam - Veliyam – Kottarakkara	Kollam	Kottarakkar	MDR	37.32	
55	59				Enikkaara - Kallayam - Seemavila - Thekkada - Panavoor - Attukal - Panayamuttom - Perayam road	Thiruvanantha puram	Nedumagad, Vamanapuram	MDR	32.00	
							Total length in Km.	1478.08		
						Roads for wh	ich DPR's are complete	ed		
56	16				Chemmannar Gap road Km. 0/00 to 31/500 (except km. 10.650)	Idukki		MDR	20.00	
57	47				PainavuThannikandom Asoakkavala road	Idukki		SH	20.80	
58	11				AdoorChenganoor	Alappuzha - Pattanamthita		SH	23.80	

I	ı		T	1	1	(1.6)
						64.60
					1542.68	
			•		<u>.</u>	

# **6 Project Development Indicators - Results Framework**

SI.			_				CUMULATIVE	ACHIEVEMENT		END TARGET	SOURCE
NO.		INDICATORS	TIND	BASELINE		YR-1	YR-2	YR-3	YR-4		
1	2	3	4	5		6	7	8	9	10	11
Α		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
				CAR							
				1. Kasaragod – Kanhangad road	19 45			Ch: 0-14 Car: 33%	Ch: 0.000 to 23.185 Time- 30'7"-31%		
	2	Reduction in Travel Time	MINUTES	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%		CSC
				3. Thalassery – Valavupara road	58						
				4. Chengannur – Ettumanoor road	95			Ch: 20-45 Car: 35%	Ch: 0.0-47.0 Car:78'0"-17.8%	Increase traffic	

SI.			_					CUMULATIVE A	CHIEVEMENT		END TARGET	SOURCE
NO.		INDICATORS	TIN		BASELINE		YR-1	YR-2	YR-3	YR-4		
1	2	3	4		5	I	6	7	8	9	10	11
				5.	Ettumanoor – Muvattupuzha road	60			Car: 33%	Ch: 0 to 30 Car: 39'0"-35%		
				6.	Thiruvalla Bypass							
				7.	Ponkunnam – Thodupuzha road	90			(37 km) Car: 20%	48 km Car 25%		

SI.			_					CUMULATIVE A	CHIEVEMENT		END TARGET	SOURCE
NO.		INDICATORS	TINU		BASELINE		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 <	363		20	68	224	340	CSC
					No. of fatalities/ year	80					56	CSC
					Venerable -	49					34	]
				1	UG-1 Kasaragod – Kanhangad road (27+80)					6		
	4	Reduction in Annual Fatality (Details for the		2	(27+80) UG-2 Pilathara – Pappinissery road (20+900)					9		
		last 6 months. Fatal)		3	UG-3A, 3B Thalassery – Valavupararoad(54+ 000)		W	ork not progresse	ed for assessment			
				4	UG-4 Chengannur – Ettumanoor road (47+700)					13		

SI.			_					CUMULATIVE A	ACHIEVEMENT		END TARGET	SOURCE
NO.		INDICATORS	TIN		BASELINE		YR-1	YR-2	YR-3	YR-4		
1	2	3	4		5		6	7	8	9	10	11
				5	UG-5 Ettumanoor – Muvattupuzha road (40+960)					6		
COMF	PONE	NT -A – ROAD UP GRADA	NOITA									
	5	State Highways upgraded			Km	-	-			216 km	340	CSC
	6	Financial closure achieved on PPP project			Y/N	-	-	-		N		
COMF	ONE	NT -B - ROAD SAFETY	ı	1		- I						
	1	Pilot Safety Corridors Developed			Km improved	0	-	-		Work in progress	80	KSTP (work started)
COMIC	2	Number of District Level Road Safety Improvement Schemes implemented through challenge funds NT -C - INSTITUTIONAL S	PTDENC	THE	Number	1	-	-	-	1	10	Road Safety Consultant
	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 progressEstablishing Centre of Excellence in Road Safety and Asset		KSTP CoE in place
	2	Functioning Road Asset Management System			Y/N	No	-	-		Management -	Annul Maintenance Plans disclosed	PWD reports

SI.			U				<b>CUMULATIVE A</b>	CHIEVEMENT		END TARGET	SOURCE
NO.		INDICATORS	UNIT	BASELINE		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 under taken			Mid-term survey conducted	Final survey under progress	KSTP

## 7 Social Safeguard

Acquisition of 121.5 Ha of land for upgradation of 7 roads covering 322 km which affected 20696 households including titleholders and non-titleholders. As per 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 is required to link the two new bridges at Eranholi and Iritty. Action is being taken for acquisition of those properties under 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:

		of the road required	The officer at	Date since		How much land area
SI. No.	From	То	whose level case is pending	when such case is pending	Targeted date of finalization	is to be acquired (Ha)
1.	2.950	3.230	KSTP Kannur and LA Tahsildar, LAO Thalassery	Nov 2017	SIA conducted. Experts' review 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	Date since when such	Targeted date of	How much land	
From	case is		case is pending	finalization	area is to be acquired (Ha)	
42.300	42.660	KSTP Kannur & LAO, Thalassery	Oct 2017	SIA conducted Experts' review completed. Valuation in progress. Award by31.12.2018	0.5500	
Total					0.5500	

#### 7.1.3 Package UG-IVA – Thiruvalla Bypass road:

SI. No.		of the road A required	The officer at	Date since	Targeted date	How much land area		
	From	То	whose level case is pending	when such case is pending	Targeted date of finalization	is to be acquired (Ha)		
1.	1.588	1.680	LAO Ranni& KSTP Muvattupuzha	June 2016	31.12.2018	0.2703		

#### 7.2 Tree Cutting

Total number of trees to be cut combining the Packages VIII A, B and C is 4000 Numbers and currently 95 % of these are cut.

#### 7.3 Management of Construction induced Issues

Grievance Redressal Committees (GRC) constituted at the district level is functioning effectively under the Chairmanship of the District Collector. All grievances that cannot be resolved locally or at the site are referred to 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 land slide, prevention of water logging and provision of drainage are the most common issues during construction phase. These are included in the BOQ and in PAP works for implementation. Those issues concerning land value or higher compensation are referred to the State level Committee.

# **8 Grievance Management Report**

(1st Jan 2013 – 30th April2018) \*

SI.	Natura of Orienza	Total no. of petetions	Total No. of cases settled	Barranta
No	Nature of Grievance	01.01.2013 to 30.04.2018	30.04.2018	- Remarks
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 released.
11	Extension of time limit for demolition	12	12	Stay vacated and all structures demolished
12	Restoration of access to property	523	5965	Total number of access restored is 5965 including 523 who precented their griecance 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

<sup>\*</sup>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 division is to implement resettlement action plan (RAP) – ensuring that affected person/family gets 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 pending land acquisition, 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 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 mitigation of construction induced negative impacts. Identification and reporting of loss of access from 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, threat to buildings and wells and other utilities (water, electricity, telecom & cable services requiring protection from damages, prevention of flooding, water logging 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 done without reasonable advance notice and without providing temporary measures to provide access. Temporary measures should be replaced by 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 subject matter with date and time of each activity spliced with relevant photos. The project is time bound. 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 site for each PAP. Hence verification at site is necessary.

#### 8.2 Payment to the consultants and Contractors as on end of March2020:

SI. No	Firm/Organisation	Works Services	Amount in INR
1	M/s Egis India JV -	CSC For Packages I, II, IIIA, III B, Iv A, IV B,V,	52,15,40,774/-
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 EptisaServicious De Ingeneiria	PMC for KSTP-II Project	1,39,23,311 /-

#### **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	1,22,57,61,710 /-
2	M/s.RDS Projects Limited	Pilathara-Pappinssery-SH-67 KSTP-2/UG/2	101,24,00,325 /-
3	M/s.DineshchandraR. AgarwalPvt.Ltd.,	Thalassery-Kalaroad-SH-30 KSTP-2/UG/3A	92,32,54,551 /-
4	M/s.GHV-EKK Infrastructure & Co.	Kalaroad-Valavupara-SH-30 KSTP-2/UG/3B	1,84,41,43,067 /-
5	M/s.GHV-EKK Infrastructure & Co.	Thiruvalla by pass KSTP-2/UG/4A	10,57,61,001 /-
6	M/s.EKK Infrastructure Ltd.,	Thiruvalla town KSTP-2/UG/4B	4,37,35,994/-
7	M/s.GHV-EKK Infrastructure & Co.	Kazhakuttom-Adoor KSTP-2/OL/8	113,20,92,702 /-

# **9 Compliance Governance Improvement Action Plan**

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

1. Take Swift Punitive Action		
Blacklist relevant companies and terminate officials per government rules have engaged in misconduct	:	Will be done on receipt of evidence
Address any performance issues among     PMT officials and consultants	:	Will be addressed
2. Address outstanding contractor Related Matter	S	
Clear the backlog of payments and variation order requests		Cleared except disputed variation in Package VI
Follow-up on quality issues and conduct tests where relevant	:	Being followed up. Arrangement for verification of all newly constructed bridges done
Exercise where warranted contractual remedies vis-à-vis contractors, design and supervision consultants	:	This will be exercised when required
3. Build a New Foundation		
Develop an action plan to strengthen integrity risk management w/oversight by stable management team	:	All managerial positions filled
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
Augment as required the PMT staffing	:	<ul> <li>i. Project Management Consultant being engaged– bidding in progress</li> <li>ii. Probity Advisor being posted</li> <li>iii. Community liaison officer being posted</li> </ul>
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		
Reduce the number of officials involved in	:	This was done
assessing and signing off on IPCs and		
variation orders		
"Force" contractors and supervision	:	Orders issued
consultants to explicitly certify compliance		
with contractual obligations		

•	Revise the Financial Management manual	1:	This is being done
	to detail the process and individual		
	accountabilities		
•	Consolidate in a decision memo to the	:	
	Project Director the view of engineers and		This is being arranged
	finance staff		This is boing arranged
		ļ.	This is alwaydy in whose
•	Establish a service standard for the		This is already in place
	timeliness of approvals		
•	Don't allow consultants and contractors to	:	This will be followed strictly
	take advantage of savings by adding what		
	is not truly needed		
•	Update regularly an "exception report"	:	Will be done
	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		
B. F	Procurement of Goods, Works and Services		
•	Undertake a market survey of road	:	This is being arranged through experts being mobilized
	contractors to improve competition and		– bidding is on
	reduce collusion risks		
•	Develop more precise cost estimate so	1:	This will be done
	you can gauge if collusion risks are		
	elevated		
•	Require independent bid certificates	-	This is being insisted
	<u> </u>	· ·	
•	Institute a code of conduct for PMT and	•	Will be instituted
	PWD officials re-reporting of misconduct,		
	conflicts of interest etc.,		
•	Apply an integrity due diligence checklist	:	This will be followed
	to spot in bids red flags of fraud, collusion		
	and unbalanced bidding		
C. C	Quality Assurance		
•	Operationalize the committee recently	:	The committee chaired by the Chief Engineer, KSTP is
	constituted to review compliance with		reviewing the quality of works periodically
	quality control		
•	Create a quality assurance protocol with	:	This has been developed and passed on to the field
	clear escalation mechanism with specific		Engineers. Quality audit as per the Quality Assurance
	focus on structural/ bridge works		protocol is underway
	<del>-</del>	1	

Organize monthly review meetings and	:	This is arranged
quality clinics and discuss the exception		
report and assess compliance		
Make full use of the existing IT based	:	Quality Specialists position is included in the PMC.
quality assurance system to enhance		This will be developed with the help of PMC
system to enhance transparency on		
quality assurance system		
Manage carefully integrity risks associated	:	Non conformanceare recorded and
with failed tests		re-tests arranged after rectification
D. Performance Management		
Develop a scorecard to track the quality,	:	This is being arranged
timeliness, and price of the PMT's work,		
and make it public –significant fraud and		
corruption always impact these indicators		

## 9.2.1 SUMMARY OF ACTIONS SINCE WB MISSION IN March 2020

Action	By whom	By when	Status/Action taken
Component A1-Road Network Upgradi	ng and Safety Im	provement	
LA for Eranholi and     Iritty Bridge approach        Forest and Wildlife     Clearance for     Kootupuzha Bridge	GOK, contractor	<ul> <li>April 310 2020</li> <li>April 30, 2020</li> </ul>	Eranholi Bridge – Land to be acquired after disbursements. Under Revenue department final stage. Iritty Bridge –To complete the entire structure by June 2020. Kootupuzha bridge – forest clearance given by Karnataka Govt. Final clearance from Centre to be taken.
Completion of all works in Pkg 4 A.	Contractor, CSC, GoK	Designs finalized and handed over in June 30, 2019. Completion by June 2020.	All Piles completed till date and Sub structure 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 total required.
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 completed.	Clearance for Kootupuzha Bridge from Centre to be pursued and cleared. Before April 30 anticipated.
<ul> <li>Finalize monitoring arrangement for two Integral Bridges and Neelimangala Bridge in package 4</li> </ul>	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 Upgradi	ng and Safety $\overline{\text{Im}}$	provement (EPC)	
Award contracts for packages 8A	Gok, consultant	June 30, 2019	Under High Court decision for further action by KSTP. Awaiting court's decision.

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.
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.
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			
Issue all remaining drawings (4 Junctions) to contractor for SCDP	Gok, NATPAC	June 30, 2019	All Short term drawings for implementation given to Contractor in Jan 2019. Base map of 3 junctions for long term forwarded to NATPAC and Drawings will be submitted by first week of Aug, 2019.Implementation at site is Short term Jn Improvements.
Submit ToR for M&E consultant for SCDP	Gok	June 30, 2019	Draft Report on M & E on SCDP prepared by KRSA and submitted.
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 Strengthen	ing		
Share final RUSS report with the Bank	Gok	June 7, 2019	Report submitted to Bank on 06.07.19 and found satisfactory.
Component D- Flood Damage Rehabili	tation		
Finalize the RPF-TDF, disclose and organize public consultation	Gok	September 15 <sup>th</sup>	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.
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.
Award DPR consultancy for LSGD Roads	Gok	August 15, 2019	LSGD Dropped from KSTP And informed World Bank.
Award PMC for RKI	Gok	July 31, 2019	Bids received and evaluation done and submitted to KfW / WB for final approval.
Financial Management			TO 101 Imai appioval.
Submit Statutory Audit     Report for FY 18-19	Gok	September 30,2019	Audit report submitted to WB in the last week of September 2019.
Submit Internal Audit     Report for Second half     of FY 18-19	Gok	June 30, 2019	Report expected to be submitted by 10-12-2019 as discussed by FM with WB on 21st Nov 2019.
Safeguards			
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 necessasity to analyse the accident database with respect to the data base before upgradation of these roads. CSC has been instructed to collect the data from Police stations for these roads before implementing the upgradation and compare this with the same after the roads are opened for road users.

Monthly accident report for the Period of February-2020 is as below for Package III A and III B . Since work is going on 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.

#### 10.1 Accident Report Pkg-3A

	Annex 5.18 Accident Data For 1 MARCH- 2020 to 29 - MARCH- 2020																	
Project					KST	P IIIA (1	Thalasser	y (km 01	+200) to	Kalarod	e (km 30+0	)00)-SH	-30					
			A	В	С	D	E	F	G	Н			No of affect	ed persons	;			
S.NO	Operational Date	Time of Accident	Accident Location	Nature of Accident	Classifatio n of Accident	Causes	Road Feature	Road condition	Intersectio n Type And Control	Weather Condition	Vehicle Responsible	Fatal	Grievous	Minor	Non injured	No of animals Killed of Any	Help Provided by Ambulance/P atroling	Remarks
1	3-Feb-20	7.15 PM	Nirmalagiri	8 (Auto hit toMedian)	2	4	2	2	-	1	Auto	-	1	-	-	-	-	-
2	10-Feb-20	7.45 PM	Meruvambai	8 (Van hit pedestrian and car)	1	4	2	2	-	1	Van	1	-	-	-	-	-	-
3	18-Feb-20	8.30 AM	Paral Petrol Pump	3	2	4	2	1	-	1	Bolero hit Auto	-	-	-	-	-	-	-
4	25-Feb-20	4.12 AM	Moonampeedi ka	8 (Vehicle hit Electric Post)	4	4	2	1	-	1	Unknown			•	-	-	-	-
	A	Urban/Rural	l and details of si	urronding land use						E	1-Single lane, 2-Two lane, 3-Three Lanes or more without central divider(Median), 4- Four Lanes or n with central divider(Median)					nes or more		
				collision, 3-Rear End Collisi t Turn Collision, 8-Others(		n Brush/Side	Wipe, 5- Rigl	ht Turn		F	1-Straight road, 2-Slight curve, 3-Sharp curve, 4- Flat road, 5-Gentle incline, 6-Steep incline, 7- h Dip 9) T/Y Junction				7- Hump, 8-			
	С	1 Fatal, 2-G	Grievious injury ,3	3- Minor injury 4- Non inju	ry													
	D	1-Druken driving, 2- Over speeding, 3- Vehicle out of control 4- Fault of driver of motor vehicle/driver of other vehicle/cyclist/pedestrian/passenger 5-Defect in mechanical condition of motor vehicle/road condition.			(	ŝ	1- T-Junction, 2- Y-Junction, 3- Four arm junction, 4- Staggered junction, 5- Junction four arms, 6- Round about junction, 7- Manned Rail crossing, 8- Unmanned Rail											
							H	1-Fine, 2-Mist/Fog,3-Cloudy,4-Light rain,5-Heavy rain, 6-Hail/Sleet, 7-Snow storm, 10-very hot,11-very cold, 12-other extraordinary weath				d, 9-Dust						

## 10.2 Accident Report Pkg-3B

						Accid	ent data	for 1S7	MAR(	CH to 31	MARCH-2020							
Proje	ect	KSTP 3E	3 Upgradatio	n of the road f	rom Kal	arode	to Valav	upara fr	om Ch 3	0+000 t	o 55+200 of SH 30	Balanc	e works					
			A	В	С	D	Е	F	G	Н		No of affected persons						
S.NO	Operational Date	Time of Accident	Accident Location	Nature of Accident	Classifati on of Accident	Causes	Road Feature	Road condition	Intersecti on Type And Control	Weather Condition	Vehicle Responsible	Fatal	Grievous	Minor	Non injured	No of animals Killed of Any	Help Provided by Ambulance /Patroling Vehicle	Remarks/Crime No.
1	03-02-2020	11.56 AM	Kelanpeedika	Car hit on a pedestrain	3	2	2	1	1	1	KL-59 D 1551	0	0	1	0	0	Yes	56/20
2	11-02-2020	1.30 PM	Kizhoor	Car hit on a bike	3	2	2	1	1	1	KL-11 L 8041	0	1	0	0	0	Yes	69/20
3	11-02-2020	6.15 PM	Kallummootti	Bike hit on a bike	2	2	2	1	1	1	KL-35 B 7933	0	1	0	0	0	Yes	70/20
4	11-02-2020	6.40 PM	Kunnoth	Car hit on a pedestrain	2	2	2	1	1	1	KL-58 C 2341	0	1	0	0	0	Yes	71/20
5	16-02-2020	9.30 PM	Kolichembra (39+)	Tipper hit on a bike	2	2	2	1	1	1	KL-78 1483	0	0	1	0	0	Yes	78/20
6	18-02-2020	7.30 PM	Kizhur	Car hit on a pedestrain	3	2	2	1	1	1	KL-58 X 9342	0	1	0	0	0	Yes	84/20
7	26-02-2020	11.50 AM	CMS School	Bus hit on a bike	2	2	2	1	1	1	KL-58 B 8280	0	1	0	0	0	Yes	104/20
A		Urban/Rural and details of surronding land use								Е	1-Single lane, 2-Two lane, 3-Three Lanes or more without central divider(Median), 4- Four Lanes or more with central divider(Median)							
В		1- Overturning,2- Head on collision, 3-Rear End Collision, 4-Collision Brush/Side Wipe, 5- Right Turn Collision, 6-Skidding, 7-Right Turn Collision, 8-Others(Pl.Specific)							]	F	1-Straight road, 2-Slight curve, 3-Sharp curve, 4- Flat road, 5-Gentle incline, 6-Steep incline, 7- Hump, 8-Dip 9) T/Y Junction							
	С	1 Fatal, 2-Grievious injury ,3- Minor injury 4- Non injury																
	D	1-Druken driving, 2- Over speeding, 3- Vehicle out of control 4- Fault of driver of motor vehicle/driver of other vehicle/cyclist/pedestrian/passenger 5-Defect in mechanical condition of motor vehicle/road condition.							(	G	1- T-Junction, 2- Y-Juncction, 3- Four arm junction, 4- Staggered junction, 5- Junction with more than four arms, 6- Round about junction, 7- Manned Rail crossing, 8- Unmanned Rail Crossing							
									]	Н	1-Fine, 2-Mist/Fog,3-Cloudy,4-Light rain,5-Heavy rain, 6-Hail/Sleet, 7-Snow, 8- Strong Wind, 9- Dust storm, 10-very hot,11-very cold, 12-other extraordinary weather condition.							

# 11 Site Work Progress Photographs

## 11.1 Package -1 -Photographs



Chandrigiri Bridge Expnasion Joint

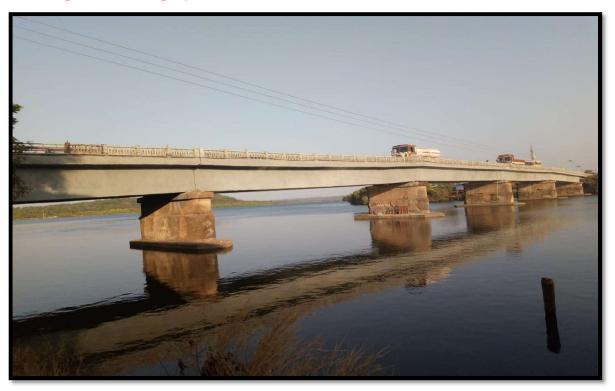


Bekal Port Auto parking



Bekal fort Road

# 11.2 Package -2 -Photographs



Pazhayangadi Rehabilitation work span



RamapuramOxbow land

## 11.3 Package -3A —Photographs



**DBM** @ **CH** 27+700 - 28+100 LHS



**GSB IN PROGRESS AT 21+710 – 21+790 RHS** 



GIRDER CASTING @ CH 2+910



GIRDER LAUNCHING COMPLETED Betwen PIER P2-P3 @ Km 2+910



GABION IN PROGRESS AT CH 21+135-21+180 RHS

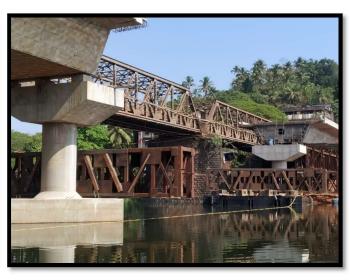


DRAIN LAYING @ 21+430LHS

## 11.4 Package -3B -Photographs



Iritty Bus stand junction



Iritty Bridge work is in progress



Drain Work in progress 2 A2 ide approach of Iritty bridge.



Oxbow land at 39+350 RHS.



GSB in progress A2 side approach of Iritty Bridge



Footpath work in progress.

# 11.5 Package -4A —Photographs



World bank visit on 03-03-2020

V drain concreting work at 1+450 LHS







Subgrade work from Km:2+150 to km:2+200

### 11.6 Package -4B -Photographs





Coverslab fixing work

Coverslab fixing work





Footpath Laying work

Road Marking works completed at BC completed areas

## 11.7 Packages-8B-Photographs





Staff quarters are in process

Culvert moulds preparing in progress



Laboratory consturction completed and equipemnt fixing in progress



World Bank Mission Team Visited the Site

## 11.8 Package -8C-Photographs





World Bank Mission team Visited the Site

RMC Plant erection work in progress





Rock breaking work in progress

C & G Work in Progress

## 11.9 SCDP Road -Component B -Photographs



Road Marking @ Mercy



Culvert extension @ Adoor

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