

# PROJECT MANAGEMENT FOR CLIMATE-RESILIENT RECONSTRUCTION AFTER FLOODING IN KERALA




**MONTHLY PROGRESS REPORT DECEMBER 2020**

## Monthly Progress Report – December 2020

<b>Project Name</b>	Consulting Services for Project Management of Climate-Resilient Reconstruction after Flooding in Kerala	
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<b>Prepared by</b>	Mohan K. Krishnan Poduval Shalini Thomas A. Madhava Reddy Dilkush Haridas Srikanth Yenika Konal Dewan	
<b>Reviewed by</b>	M H Patil	

### ISSUE LOG/SIGNATURE PAGE

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# 1. Introduction

## 1.1. Project Background

Kerala, a coastal State in the south of India, was inundated with a once in 100-year state-wide flood in 2018, by way of unusually high rainfall, that led to damages of nearly USD 5.6 billion, affected 5.4 million people, and left 483 people dead.<sup>1</sup> This disaster, which affected thirteen out of the fourteen districts, led to the Government of Kerala launching a comprehensive rebuild framework and emergency action plan, under the umbrella scheme of the Rebuild Kerala Programme, that is being directed by the Kerala Public Works Department (PWD), with the core vision, strategy and way forward being articulated in the Government document titled “Rebuild Kerala Development Programme: A Resilient Recovery Policy Framework and Action Plan for Shaping Kerala’s Resilient, Risk-Informed Development and Recovery from 2018 Floods”.

It is with this background, that the Kerala State Transport Project (KSTP), an extension of the PWD of the Government of Kerala, and hereafter referred to as the PEA/ Client, was tasked with the development of a more sustainable and climate resilient reconstruction of flood damaged roads and bridges in Kerala. The mission of the Climate-Resilient Reconstruction Project is profound; increase the usability of rehabilitated road infrastructure in Kerala and reduce its vulnerability towards future climate-related damages.

Globally, there is a growing conjuncture from Scientists and Climate Change Experts<sup>2,3,4,5</sup> that due to the effects of Global Warming and the subsequent rise in average temperatures, the occurrence of extreme weather and climate events has increased in recent decades. Specifically, for wet and maritime tropical climate regions located close to the equator, such as Kerala, the rise in temperatures are resulting in extreme swings in weather, from droughts in the summer months to an increase in extreme rainfall during the monsoon. Thus, going forward, the State must be adequately prepared for an increased frequency of such calamitic events such as the 2018 floods and must strengthen its Institutional Capacity, Sectoral and Urban Planning, Disaster Financing, Building Standards, Data Analysis and Infrastructure Quality.

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<sup>1</sup> Indian Express, “483 dead in Kerala floods and landslides, losses more than annual plan outlay: Pinarayi Vijayan”, retrieved September 1, 2020

<sup>2</sup> Carbon Brief, “How climate change affects extreme weather around the world”, retrieved May 11, 2020

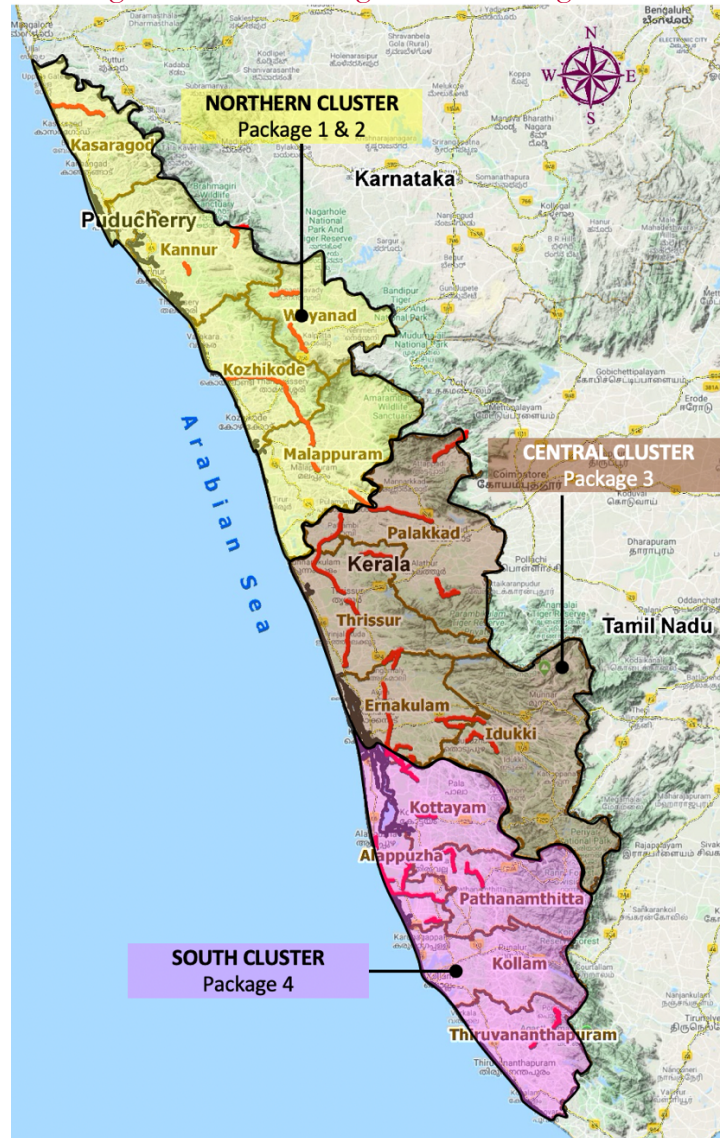
<sup>3</sup> National Climate Assessment, Report 2014 with updates, retrieved May 11, 2020

<sup>4</sup> Environmental Defense Fund, Climate Impact, retrieved May 15, 2020

<sup>5</sup> Mongabay, KA Shaji, August 2019, “As floods repeat this year in Kerala, experts point to climate change”, retrieved May 15, 2020

To tackle the tremendous task of rebuilding the State, the Government of Kerala reached out to multilateral funding agencies, such as the World Bank and the Kreditanstalt für Wiederaufbau Bank (KfW), for development loans. For ease of coordination, the Government split the works for the flood damaged roads into four packages, with two located in the north of Kerala, one in central and one in south Kerala, as shown in Figure 1 below:

**Figure 1 List of Packages for RKI Programme**



Source: Government of Kerala

In this regard, the Government of Kerala, and the KfW, formerly KfW Bankengruppe, based in Frankfurt, Germany, signed two Loan Agreements in November 2019, totalling EUR 170 million, with an additional Loan of EUR 3 million, for the rebuilding of the State’s road infrastructure.



Parallely, the Government also entered into a Loan Agreement of USD 250 million with the World Bank Group, to enhance the State's resilience against the impacts of natural disasters and climate change.

Thus, under the ambit of the KSTP-II initiative, the Government, as a first step, undertook the prioritization of the roads to be rebuilt in 2019, through a study conducted by M/s L&T Infrastructure Engineering Limited (LNTIEL)<sup>6</sup>. The list of roads to be funded were approved in July 2019, at the 5<sup>th</sup> Meeting of the High-Level Empowered Committee (HLEC) of the Rebuild Kerala Initiative. The meeting further decided that the two clusters in the north would be financed through the World Bank, while the southern and central cluster would be financed through the KfW Development Bank. On this basis, the KSTP bifurcated the roads into their respective clusters and appointed Detailed Project Report (DPR) Consultants. The main objective of the DPR Consultants were to design roads that would be resilient to adverse climatic elements and that would be safer, and more robust than the existing infrastructure.

## 1.2. Project Objective

The mission of the Climate-Resilient Reconstruction Project is to increase the usability of rehabilitated road infrastructure in Kerala and reduce its vulnerability towards future climate-related damages.

## 1.3. Project Components

The overall Project Objective would be achieved through the following Project Cluster Packages:

- (1) North Cluster Package 01
- (2) North Cluster Package 02
- (3) Central Cluster Package 03
- (4) South Cluster Package 04

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<sup>6</sup> The Times of India, Jisha Surya, “Key roads to be developed under ‘rebuild Kerala’ plan”, retrieved September 1 2020



### 1.3.1. North Cluster Package 01

Financed by the World Bank, under Engineering, Procurement and Construction (EPC) Mode, with M/s Feedback Infrastructure Services Pvt. Ltd. being appointed as the DPR Consultant:

Table 1 Roads in North Cluster Package One

No	Reference	District	Category	Road Name	Total Length (Kms)
1	RKI-11	Kannur	Major District Road (MDR)	Edoor - Companynirath - Anapanthy - Angadikkadavu-Vaniyappara - Charal - Valavupara - Kacherikkadavu Palathumkadav road	24.45
2	RKI-12	Kannur		Uruvachal Manakkayi valayal (including bridge parallel to aqueduct at valayal)- Keezhallur Therur Palayod-Vellaparamba Karimbala Colony Maruthaayi road	20.90
3	RKI-13	Kasaragod	Major District Road (MDR)	Kumbla- badiadka-Mulleria road	29.14
4	RKI-14	Kozhikode	State Highway SH -34	Koyilandy Thamrassery Mukkam Areekode Edavanna road: 1. km 0.00 to 25.00-Koyilandy to Poonoor: 2. km:25.00 to 37.500-Poonoor- Omassery 3. km 37.500 to 51.200 Omassery to Eranhimav	51.02
5	RKI-15	Wayanad	Major District Road (MDR)	Vythiri-Tharuvana road	21.84
<b>Total Length of Roads (Kms)</b>					<b>147.34</b>

Source: Government of Kerala

### 1.3.2. North Cluster Package 02

Financed by the World Bank, under Engineering, Procurement and Construction (EPC) Mode, with M/s L&T Infrastructure Engineering Limited (LNTIEL) being appointed as the DPR Consultant:

Table 2 Roads in North Cluster Package Two

No	Reference	District	Category	Road Name	Total Length (Kms)
1	RKI-5	Malappuram	State Highway SH -39	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.	30.88
2	RKI-6	Malappuram	SH-34/MDR	Koyilandy - Edavanna road between Km 51/200 to 69/700 & Areekode - Manjeri road Km 0/000 to 13/600	31.53
3	RKI-7	Palakkad	SH-53	Palakkad -Perinthalmanna Road (Mundur Junction to Thootha Junction of SH-53 from Km 12/800 to Km 49/600)	37.38
4	RKI-8	Palakkad	Major District Road (MDR)	Thavalam Mully Road CH 0/000 to 28/800	28.50
5	RKI-10	Wayanad	Major District Road (MDR)	Mananthavady - Vimalanagar - Kulathada - Valad HS - Periya road between km2/500 to 27/300 in Wayanad District	27.3
<b>Total Length of Roads (Kms)</b>					<b>155.59</b>

Source: Government of Kerala

### 1.3.3. Central Cluster Package 03

Financed by the KfW Development Bank, under Item Rate Contract Mode, with M/s Louis Berger Consulting Pvt. Ltd. being appointed as the DPR Consultant:

Table 3 Roads in Central Cluster Package Three

No	Reference	District	Category	Road Name	Total Length (Kms)
1	Rd-1	Ernakulam	MDR	Mookannoor Ezhattumugham Rd ch 0/000 to 14/200 and Blachippara Palissery Rd ch 0/000 to 6/000 (Model/ Pilot Road)	19.95
2	Rd-2	Ernakulam	MDR	Kakkadassery - Kaliyar road Ch. 0/000 to 20/000	20.18
3	Rd-3	Ernakulam	SH-43	Muvattupuzha - Theni SH (Ch. 0/000 to 15/750)	16.18
4	Rd-4	Ernakulam	MDR	Kumarakom Nedumbassery (proposed SH) from Peruva to Peruvammuzhi	21.4
5	Rd-5	Idukki	MDR	Neyyassery Thokkumbansaddle road	31.92
6	Rd-6	Palakkad	MDR	Nenmara - Nellyampathy road km 0/00 to 30/714	30.47
7	Rd-7	Thrissur	SH-22	Kodungallur- shornur SH (SH 22) (Model/ Pilot Road)	34.35

No	Reference	District	Category	Road Name	Total Length (Kms)
8	Rd-8	Thrissur	SH-74	Vazhakkodu Plazhy road Km.0/000 to 22/642	22.72
9	Rd-9	Thrissur	SH-69	Thrissur Kuttippuram Road (SH 69) 4 stretches (Many stretches in between in progress by other agency KIIFB)	33
10	Rd-10	Ernakulam	MDR	Arakunnam-Amballoor-Poothatta-Piravam Road (Additional Road Added)	7.98
<b>Total Length of Roads (Kms)</b>					<b>238.14</b>

Source: Government of Kerala

### 1.3.4. South Cluster Package 04

Financed by the KfW Development Bank, under Item Rate Contract Mode, with M/s Egis India Consulting Engineers Pvt. Ltd. being appointed as the DPR Consultant:

Table 4 Roads in South Cluster Package Four

No	Reference	District	Category	Road Name	Total Length (Kms)
1	Rd-1	Kottayam	MDR	Gandhinagar-Medical College-Babu Chazhikadan Road- Kottayam-Parippu Road- Athirampuzha Liessue-Kaippuzha- Mannanam-Pulikkuttissery-Parolickal-Muttappally Road	20.20



No	Reference	District	Category	Road Name	Total Length (Kms)
2	Rd-2	Kottayam	MDR	Vadayar Chandappalam- Mulakkulam Road and Vadayar Kallattippalam Muttuchira Road (Model/ Pilot Road)	22.48
3	Rd-3	Pathanamthitta	MDR	Pathanamthitta Ayroor-Muttukudukka illathupadi - Muttukudukka prakkanam - Parakkanam Elavumathitta - Kulanada Ramanchira - Thanikkuzhy Thonnamala	28.20
4	Rd-4	Pathanamthitta	MDR	Mallapally, Komalam Paduthodu Kalloopara Chengaroor Komalam Kavungumprayar Pattakala, TMV road (Road 4)	23.13
5	Rd-5	Pathanamthitta	MDR	Malamekkara Kunnathukala Chala Puthenchanda factory Jn Azad Jn road 0/00 to 8/600 (Model/ Pilot Road)	7.87
6	Rd-6	Thiruvananthapuram	SH	Thiruvananthapuram Ponmudi road (From Nedumangad to Ponmudi)	41.75
7	Rd-7	Alappuzha		Thattararnbalam-Michael Junction-Kochalumood-Mangankuzhy-Pandalam (Additional Road Added) (Road 7)	18.66
8	Rd-8	Alappuzha		Veeyapuram-Edathua-Puthukarry-Marnbuzhakkary-Kidangara- Kunnamgary- Kumarangary-Valady-Mullakarthuruthy (Additional Road Added)	21.45
9	Rd-9	Ranni		Vayuttupuzha-Potheppad Road (Additional Road Added)	38.50
<b>Total Length of Roads (Kms)</b>					<b>222.23</b>

Source: Government of Kerala

### 1.3.5. Supervision Consultants/ Authority’s Engineer

In addition to the total 29 road contracts for these aforementioned packages, the Government of Kerala has also initiated the procurement for Authority’s Engineers for the northern packages (as the contracts for the road contractors are on EPC Mode), as well as Supervision Consultants for the central and south packages (as the contracts for the road contractors are on Item Rate Mode), as per the following:

Table 5 Supervision Consultants and Authority’s Engineer

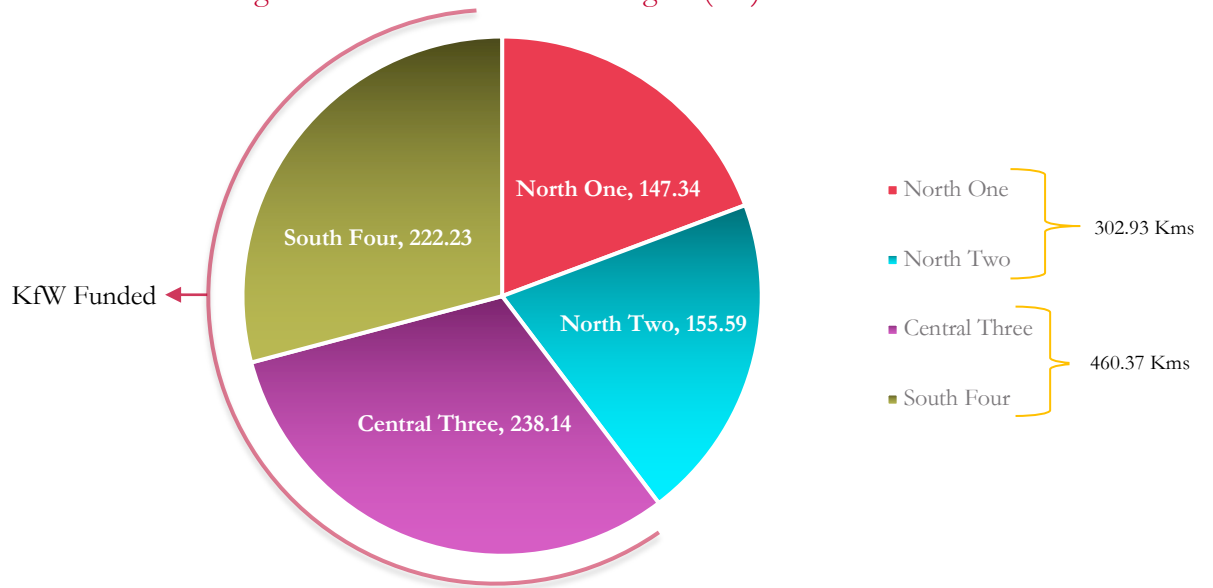
No	Contract Name	Length (km)
1	Expression of Interest Pre- Qualification for Consulting Services for Construction Supervision for Climate Resilient Reconstruction after Flooding in Kerala	
2	Consultancy Services For Authority’s Engineer For Supervision Of ‘Rehabilitation &Upgrading the State Highways & Major District Roads, having varying width, by Climatic Resilient Reconstruction, 6 roads in the Northern Districts of Kannur, Kasaragod, Kozhikode & Wayanad of Kerala State (Package – 1 & 2)under Rebuild Kerala Initiative’ on EPC.	146.815
3	Selection of Consulting Services for Authority’s Engineer for Supervision of ‘Rehabilitation &Upgrading the State Highways & Major District Roads, having varying width, by Climatic Resilient Reconstruction, 4 roads in the Northern Districts of Malappuram & Palakkad of Kerala State (Package -2) under Rebuild Kerala Initiative’	128.290

Source: Government of Kerala

### 1.3.6. Overall Package Specifics at Bid Stage

With total road contracts numbering 29 (10 north, 10 central and 9 south), with 763.301 km (KfW 460.37 and World Bank 302.93), an overview of the roads from a pan Kerala perspective is provided below as part of Figure 2. These numbers are provisional, and subject to be updated, as the contracts for these road packages are awarded.:

Figure 2 Bifurcation of Road Lengths (km)



Source: Government of Kerala, Louis Berger Analysis



## 2. Key Data Page

Client	Project Executing Agency – PWD of Kerala Project Management Unit- Kerala State Transport Project	
External Financier 01	World Bank	
External Financier 02	Kfw (Germany)	
Long Term Consultant	Louis Berger Consulting Pvt. Ltd., India JV with The Louis Berger Group, Inc., USA”	
Report Title & No.	Monthly Progress Report	No: 3
Report Duration	1-Dec-2020 to 31-Dec-2020	
Date of Agreement	14-Aug-2020	
Date of Commencement	18-Aug-2020	
Duration of Contract	42 Months	

## 3. Project Cockpit

### 3.1. Objectives of Project Partners

The project Cockpit aims at improving the management of construction processes and at supporting the communication among its various participants. The method is based on the minimization of waste during the whole process. The result will be a methodology integrated into an IT solution, with the aim of:

Allowing for real-time progress monitoring, used to update process modelling and scheduling, so as to meet real conditions on-site which is divided into three matrices, namely:

1. Modelling
2. Scheduling
3. Monitoring

### 3.2. Project Context

The construction industry comprises of one of the biggest shares of the market for Small and Medium Enterprises (SMEs) in the region. Unfortunately, it is generally plagued by a low productivity rate, bad resource management, frequent delays and cost overruns.

The main reasons are:

- High fragmentation of the sector, mostly consisting of professional individuals or SMEs.
- High complexity of the final product and high unpredictability of the work environment on a construction site, characterized by unforeseen circumstances and subject to uncontrollable external factors.

These aspects make activity planning difficult, also due to the low degree of digitalization and IT-support in the construction sector. In this setting, a flexible activity planning together with a high level of communication between the stakeholders are needed to promptly adjust the building process, so as to react to possible causes of delays and cost increases.

### **3.3. Goals**

#### **3.3.1. Collaborative Process Modelling**

Participation of all the different players involved in the construction project from the very beginning of the planning stage, in order to achieve a more reliable construction process model. The model is supposed to be comprehensive of all relevant process information for execution.

#### **3.3.2. Short-time Scheduling:**

Construction schedule for short period of time and periodically revised based on the actual results achieved on the construction site. The schedule is thus flexible and tailored to counteract potential changes of plan or delays due to unforeseeable circumstances.

#### **3.3.3. Real-time Progress Monitoring:**

Real-time monitoring aimed to have a constant, instant comparison with the process as planned. The schedule can be then revised based on the progress data, thus allowing an interactive optimization of the construction process.

The following sub chapters relating to the Real Time Progress Monitoring is tabled below and will be updated in the forthcoming Progress Reports since no construction activities has commenced during the reporting month:

- 3.4. Forward Schedule**
- 3.5. Current and Projected Costs**
- 3.6. Overall Construction Progress**
- 3.7. Risk Exposure**
- 3.8. Open Changes and Claims**
- 3.9. Health and Safety Statistics**
- 3.10. Staff Deployment**

## 4. Consultant’s Activities, Staffing and Time Schedule

### 4.1. Project Scope

A list of Tasks to be performed by Louis Berger as part of the Project Long Term Consultancy Services is provided below:

Table 6 Consultant’s Project Scope

No	Task List
1	<b>PM01</b> Bid Evaluation Process, Contract Negotiations and Award
2	<b>PM02</b> Quality Assurance and Control Monitoring
3	<b>PM03</b> Liaison with Client and Governmental Agencies
4	<b>PM04</b> Public Information
5	<b>PM05</b> Project Controls
6	<b>PM06</b> Contract Management
7	<b>PM07</b> Financial Management
8	<b>PM08</b> Claims Management
9	<b>PM09</b> Change/Variation Management
10	<b>PM10</b> Risk Management
11	<b>PM11</b> Document Control
12	<b>PM12</b> Environmental, Social, Health and Safety Management and Monitoring
13	<b>PM13</b> Assistance during Defect Liability Period
14	<b>PM14</b> Steering Accompanying Measures

Source: Louis Berger Analysis, Government of Kerala

## 4.2. Team Composition

The PMC Project Team led by Mr. Mohan K. Krishnan Poduval is being supported by Key Project Staff and Support Staff as illustrated in the table below:

Table 7 Status of Mobilization

No	Position	Name	Date of Joining	Date of Leaving	Total Planned Man months	Utilized Man months	Balance Man months
Key Experts							
1	Team Leader	Mohan K. Krishnan Poduval	18-Aug-2020	-	33	4.5	28.50
2	Senior Cost Surveyor	Shalini Thomas	20-Aug-2020	-	30	4.4	25.57
3	Contract/Procurement Expert	Sanjeev Agarwal	18-Aug-20	08-Sep-2020	30	0.70	29.30
4	Environmental & Social Specialist	AM Reddy	29-Oct-2020	-	30	2.10	27.90
5	Community Liason Officer	Dilkush K	16-Sep-2020	-	30	3.53	26.47
Non-Key Expert							
6	Planning Engineer	Amrutha	18-Aug-2020	07-Nov-2020	30	2.70	25.54
		Y. Srikanth	8-Nov-2020	-		1.76	
Supporting Staff							
7	Document Controller	Kishore Nair	24-Sep-2020	-	30	3.26	26.74
8	Accountant	Balu V	23-Nov-2020	-	30	1.26	28.74

Source: Louis Berger Analysis

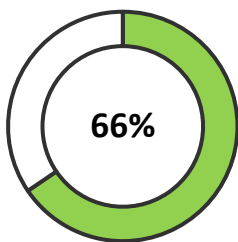
The following sub chapters form part of this report: will be updated in the forthcoming progress reports since no construction activities has commenced during the reporting month:

- 4.3. Main Activities
- 4.4. Target/Actual Comparison of activities
- 4.5. Time
- 4.6. Preparation of documents and approvals
- 4.7. Organization of meetings
- 4.8. Table of Correspondences
- 4.9. Audit

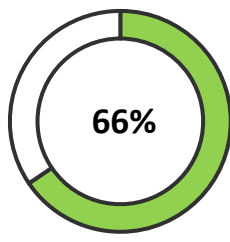
## 5. Progress of Construction

List of the Consultant(s) and Contractors incl. brief description of each Contractor’s tasks, contract volume and results, appendices:

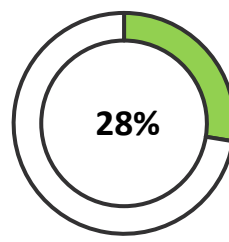
- Status of tenders published, Contractors finalized and Construction progress of all the packages are Shown below:



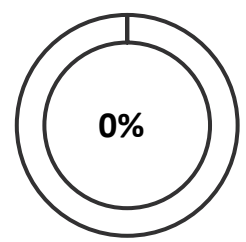
**Tenders Published**



**Tenders Opened**



**Contracts Awarded**



**Construction Progress**



## 5.1. North Package 01

Table 8 Status of North Package 01

Procurement Status of North Package 01 funded by World bank under EPC Mode															
S.No	Package	Road Ref No	Description	District	Length (Kms)	Duration	Maintenance Period	Tender Submission Date	Technical bid Opening	Financial Bid Opening	Agreement Date	Contract Cost in INR Crores (with GST, exclusive of Maint.)	Appointed Date	Contractor	Status
1	Package 01	RKI-10 RKI-11 RKI-12 RKI-13 RKI-14 RKI-15	Authority Engineer 02	Kannur, Kasargod, Kozikode, Wayanad	174.65	18/24	60	23-Sep-20	23-Sep-20	23-Oct-20		11.1	TBN	M/s. MSV International Inc. JV M/s.JSV Associates Engineers Pvt.Ltd	
2		RKI-10	Mananthavady - Vimalanagar - Kulathada - Valad HS - Periya road between km2/500 to 27/300 in Wayanad District	Wayanad	27.3	18	60	24-Aug-20	24-Aug-20	11-Sep-20	28-Oct-20	102.83	TBN	M/s ULCCS	Inventory survey and design works are in progress. Agreement executed on 28/10/2020
3		RKI-11	Edoor – Companynirath - Anapanthy - Angadikkadavu- Vaniyappara - Charal - Valavupara - Kacherikkadavu - Palathumkadav road	Kannur	24.45	18	60	7-Sep-20	7-Sep-20	18-Sep-20	28-Oct-20	136.2	TBN	M/s RDS Projects	Inventory survey and design works are in progress. Agreement executed on 28/10/2020
4		RKI-12	Uruvachal Manakkayi valayal (including bridge pallellel to aqueduct at valayal)- Keezhallur Therur Palayod-Vellaparamba Karimbala Colony Maruthaayi Road	Kannur	20.9	18	60	12-Oct-20	12-Oct-20	23-Oct-20	14-Dec-20	106.94	TBN	M/s EPIL	Agreement executed on 14/12/2020
5		RKI-13	Kumbala- Badiadka-Mulleria Road	Kasargod	29.14	24	60	12-Oct-20	12-Oct-20	21-Oct-20	14-Dec-20	167.99	TBN	M/s RDS Projects	Agreement executed on 14/12/2020
6		RKI-14	Koyilandy Thamrassery Mukkam Areekode Edavanna road: 1) km 0.00 to 25.31-Koyilandy to Poonoor: 2) km 25.31 to 37.93-Poonoor- Omassery 3) km 37.93 to 51.02Omassery to Eranhimav	Kozikode	51.02	24	60	27-Oct-20	27-Oct-20	12-Nov-20		235.01			LOA to be Issued
7		RKI-15	Vythiri-Tharuvana road	Wayanad	21.84	18	60	27-Oct-20	27-Oct-20	10-Nov-20		68.27			LOA to be Issued
Total Length of North Package 01 (Kms)					174.65							828.3			

## 5.2. North Package 02

Table 9 North package 02 Status

Procurement Status of North Package 02 funded by World bank under EPC Mode															
S.No	Package	Road Ref No	Description	District	Length (Kms)	Duration	Maintenance Period	Tender Submission Date	Technical bid Opening	Financial Bid Opening	Agreement Date	Contract Cost in INR Crores (with GST, exclusive of Maint.)	Appointed Date	Contractor	Status
1	Package 02	AE 01	Authority Engineer 01	Mallapuram, Palakkad	128.29	18/24	60	20-Aug-20	20-Aug-20	24-Sep-20	27-Oct-20	14.0	TBN	M/s Egis India Consulting Engineer Pvt.Ltd. In JV with Orion Infra consulting Pvt.Ltd	
2		RKI-5	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.	Mallapuram	30.88	18	60	16-Jul-20	16-Jul-20	7-Sep-20	7-Oct-20	144	TBN	M/s KMC Constructions	Inventory survey and design works are in progress.Agreement executed on 07/10/2020
3		RKI-6	Koyilandy - Edavanna road between Km 51/200 to 69/700 & Areekode - Manjeri road Km 0/000 to 13/600	Mallapuram	31.53	18	60	16-Jul-20	16-Jul-20	7-Sep-20	8-Oct-20	189.76	TBN	M/s Shreedanya Construction Company	Inventory survey and design works are in progress.Agreement executed on 08/10/2020
4		RKI-7	Palakkad -Perinthalmanna Road (Mundur Junction to Thootha Junction of SH-53 from Km 12/800 to Km 49/600)	Palakkad	37.38	24	60	16-Jul-20	16-Jul-20	7-Sep-20	13-Nov-20	323.1	TBN	M/s KMC Constructions	Inventory survey and design works are in progress.Agreement executed on 13/11/2020
5		RKI-8	Thavalam Mully Road CH 0/000 to 28/800	Palakkad	28.5	18	60	27-Aug-20	27-Aug-20	9-Sep-20	28-Oct-20	132.81	TBN	M/s Akshya Builder JV EKK	Inventory survey and design works are in progress.Agreement executed on 28/10/2020
<b>Total Length of North Package 02 (Kms)</b>					<b>128.29</b>							<b>803.7</b>			



### 5.3. Central Package 03

Table 10 Central Package 03 Status

Status of Central Package 03 funded by Kfw															
S.No	Package	Road Name	Road Ref No	District	Length (Kms)	Duration	Maintenance Period	Tender Submission Date	Technical bid Opening	Financial Bid Opening	Work Award Date	Est. Contract Amount INR Cr (*)	Appointed Date	Contractor	Status
1	Package 03	Mookannoor Ezhattumugham Rd ch 0/000 to 14/200 and Blachippara Palissery Rd ch 0/000 to 6/000 (Model/ Pilot Road)	RD -1	Ernakulam	19.95	18	60	22-Oct-20	22-Oct-20			93.23			*Technical evaluation R0 Submitted to KSTP on 03-12-2020. *Technical Evaluation R1 submitted to KSTP on 10-12-2020
2		Kakkadassery - Kaliyar road Ch. 0/000 to 20/000	RD-02	Ernakulam	20.18	18	60					69.15			*ESIA observations received from Kfw on 14-12-2020
3		Muvattupuzha - Theni SH (Ch. 0/000 to 15/750)	RD-03	Ernakulam	16.18	18	60					79.56			*Noc for tendering received on 3-12-2020
4		Kumarakom Nedumbassery (proposed SH) from Peruva to Peruvammuzhi	RD-04	Ernakulam	21.40	18	60					93.46			* Bid docs and revised ESIA submitted to Kfw for NO on 09-12-2020
5		Neyyassery Thokkumbansaddle road	RD-05	Idukki	31.92	24	60					144.3			*ESIA observations received from Kfw on 14-12-2020
6		Nenmara - Nelliampathy road km 0/00 to 30/714	RD-06	Palakkad	30.47	24	60					95.72			*ESIA observations received from Kfw on 07-12-2020
7		Kodungallur- shomur SH (SH 22) (Model/ Pilot Road)	RD-07	Thrissur	34.35	24	60	2-Nov-20	2-Nov-20			205.13			*No Obejection for technical evaluation from Kfw received on 29-12-2020
8		Vazhakkodu Plazhy road Km.0/000 to 22/642	RD-08	Thrissur	22.72	18	60					93.68			* Bid docs and revised ESIA submitted to Kfw for NO on 10-12-2020
9		Thrissur Kuttippuram Road (SH 69) 4 stretches (Many stretches in between in progress by other agency KIIFB )	RD-09	Thrissur	33.00	24	60					220.32			* Bid docs and revised ESIA submitted to Kfw for NO on 10-12-2020
10		Arakunnam-Amballoor-Poothatta-Piravam Road (Additional Road Added)	RD-10	Ernakulam	7.98	12	60					27.36			* Bid docs and revised ESIA submitted to Kfw for NO on 10-12-2020
<b>Total Length of Central Package 03 (Kms)</b>					<b>238.14</b>							<b>1121.91</b>			

Note: \* Estimated contract amount has been taken from FDPFRs with the following consideration: Inclusion of Civil Construction Works with GST @ 12%, Utility Shifting Cost, Compensatory Plantation, Social Awareness Program. Excludes Maintenance and GST on Maintenance. Subject to change post signing of Letter of Award and finalization of Contract amount.

## 5.4. South Package 04

Table 11 South Package 04 Status

Status of South Package 04 funded by KfW

S.No	Package	Road Name	Road Ref No	District	Length (Kms)	Duration	Maintenance Period	Tender Submission Last Date	Technical bid Opening	Financial Bid Opening	Work Award Date	Est. Contract Amount INR Cr (*)	Appointed Date	Contractor	Status	
1	Package 04	Gandhinagar-Medical College-Babu Chazhikadan Road- Kottayam-Parippu Road-Athirampuzha Liessue-Kaippuzha- Mannanam-Pulikkuttissery-Parolickal-Muttappally Road	Rd-1	Kottayam	20.20	18	60	18-Dec-20	18-Dec-20			112.45				*Bid opened on 18th Dec'20 .Technical evaluation submitted to KSTP on 24-12-2020
2		Vadayar Chandappalam- Mulakkulam Road and Vadayar Kallattippalam Muttuchira Road (Model/ Pilot Road)	Rd-2	Kottayam	22.48	18	60	5-Oct-20	5-Oct-20	1-Dec-20			104.55			*The quote is 29.70% above. Negotiation meeting conducted on 16-12-2020. Response from the bidder is awaited.
3		Pathanamthitta Ayroor-Muttukudukka illathupadi - Muttukudukka prakkanam - Parakkanam Elavumathitta - Kulanada Ramanchira - Thanikkuzhy Thonnamala	Rd-3	Pathanamthitta	28.20	18	60	18-Dec-20	18-Dec-20				106.91			Bid opened on 18th Dec'20.TTtechnical evaluation submitted to KSTP on 29-12-2020
4		Mallapally, Komalam Paduthodu Kalloopara Chengaroor Komalam Kavungumprayar Pattakala, TMV road (Road 4)	Rd-4	Pathanamthitta	23.13	18	60	30-Nov-20	30-Nov-20				104.71			* Technical Evaluation submitted to KSTP on 15-12-2020
5		Malamekkara Kunnathukala Chala Puthenchanda factory Jn Azad Jn road 0/00 to 8/600 (Model/ Pilot Road)	Rd-5	Pathanamthitta	7.87	18	60	5-Oct-20	5-Oct-20				28.24			*Technical Evalaution submitted on 20-11-2020
6		Thiruvananthapuram Ponmudi road (From Nedumangad to Ponmudi)	Rd-6	Thiruvananthapuram	41.75	24	60						203.42			* DPR Approval pending and not in KfW scope
7		Thattararnbalam-Michael Junction-Kochalumood-Mangankuzhy-Pandalam (Additional Road Added) (Road 7)	Rd-7	Allapuzha	18.66	18	60	30-Nov-20	30-Nov-20				114.21			* Technical Evaluation submitted to KSTP on 16-12-2020
8		Veeyapuram-Edathua-Puthukarry-Marnbuzhakkary-Kidangara-Kunnamgary-Kumarangary-Valady-Mullakarnthuruthy (Additional Road Added)	Rd-8	Allapuzha	21.45	18	60	18-Dec-20	18-Dec-20				111.87			*Bid opened on 18th Dec'20 .Technical Evaluation submitted to KSTP on 23-12-2020
9		Vayuttupuzha-Potheppad Road (Additional Road Added)	Rd-9	Ranni	38.50	18	60									*DPR to be finalized
Total Length of South Package 04 (Kms)					222.23							886.36				

Note: \* Estimated contract amount has been taken from F DPRs with the following consideration: Inclusion of Civil Construction Works with GST @ 12%, Utility Shifting Cost, Compensatory Plantation, Social Awareness Program. Excludes Maintenance and GST on Maintenance. Subject to change post signing of Letter of Awred and finalization of Contract amount.

## 5.5. Activities Completed in the month of Dec'2020

The following Table provides a brief snapshot of the bid evaluations that has been taken up and completed in the month of December 2020:

**Table 12 Activities Completed for December 2020**

Task	Description	Status
Evaluation of RD 01 (Pkg 03)	<p><b>Mookanoor Ezhattumugham Rd ch 0/000 to 14/200 and Blachippara Palissery Rd ch 0/000 to 6/000 (Model/ Pilot Road)</b></p> <ul style="list-style-type: none"> <li>Bidders for Rd-01 (Package 03) include               <ol style="list-style-type: none"> <li>M/s. SPL – AF JV</li> <li>M/s. Marymatha-Akshaya JV</li> <li>M/s Tarmat Ltd</li> <li>M/s Antech- RBL JV</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Bid was opened on</li> <li>Technical Evaluation has been completed and submitted to KSTP on 2<sup>nd</sup> Dec'2020</li> </ul>
Evaluation of RD 01 (Pkg 04)	<p><b>Gandhinagar-Medical College-Babu Chazhikadan Road- Kottayam-Parippu Road- Athirampuzha Liessue-Kaippuzha- Mannanam-Pulikkuttissery-Parolickal- Muttappally Road</b></p> <ul style="list-style-type: none"> <li>Bidders for Rd-01 (Package 04) include               <ol style="list-style-type: none"> <li>M/s Sreedhanya Construction Company</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Bid was opened on 18<sup>th</sup> Dec'2020</li> <li>Technical Evaluation has been completed and submitted to KSTP on 24<sup>th</sup> Dec'2020.</li> </ul>
Evaluation of RD 02 (Pkg 04)	<p><b>Vadayar Chandappalam- Mulakkulam Road and Vadayar Kallattippalam Muttuchira Road (Model/ Pilot Road)</b></p> <ul style="list-style-type: none"> <li>Bidders for Rd-01 (Package 04) include               <ol style="list-style-type: none"> <li>M/s. Begorra – PRL JV</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Financial bid was opened on 1<sup>st</sup> Dec'2020.</li> <li>Since the prices quoted are very high with the total amount 30% above the Tender Price, and this being a sole bidder, it is recommended by LT PMC for retender of the project.</li> </ul>
Evaluation of RD 3 (Pkg 04)	<p><b>Pathanamthitta Ayroor-Muttukudukka illathupadi - Muttukudukka prakkanam -</b></p>	<ul style="list-style-type: none"> <li>Bid was opened on 18<sup>th</sup> Dec'2020</li> </ul>

Task	Description	Status
	<p><b>Parakkanam Elavumathitta - Kulanada Ramanchira - Thanikkuzhy Thonnamala</b></p> <ul style="list-style-type: none"> <li>Bidders for Rd-03 (Package 04) include               <ol style="list-style-type: none"> <li>M/s Theruvath – PRL JV</li> <li>M/s EKK Infrastructure Ltd</li> <li>M/s Sreedhanya Construction Company</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Technical Evaluation has been completed and submitted to KSTP on 29<sup>th</sup> Dec'2020.</li> </ul>
Evaluation of RD 4 (Pkg 04)	<p><b>Mallapally, Komalam Paduthodu Kalloopara Chengaroor Komalam Kavungumprayar Pattakala, TMV road</b></p> <ul style="list-style-type: none"> <li>Bidders for Rd-04 (Package 04) include               <ol style="list-style-type: none"> <li>M/s. PCPL – SM JV</li> <li>M/s. SPL – RM JV</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Bid was opened on 30<sup>th</sup> Nov'2020</li> <li>Technical Evaluation has been completed and submitted to KSTP on 15<sup>th</sup> Dec'2020.</li> </ul>
Evaluation of RD 7 (Pkg 04)	<p><b>Thattarambalam-Michael Junction-Kochalummood-Mangankuzhy-Pandalam</b></p> <ul style="list-style-type: none"> <li>Bidders for Rd-07 (Package 04) include               <ol style="list-style-type: none"> <li>M/s. Begorra – PRL JV</li> <li>M/s Tarmat Ltd</li> <li>M/s Sreedhanya Construction Company</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Bid was opened on 30<sup>th</sup> Nov'2020</li> <li>Technical Evaluation has been completed and submitted to KSTP on 11<sup>th</sup> Dec'2020.</li> </ul>
Evaluation of RD 8 (Pkg 04)	<p><b>Veeyapuram-Edathua-Puthukarry-Marnbuzhakkary-Kidangara- Kunnamgary-Kumarangary-Valady-Mullakarthuruthy</b></p> <ul style="list-style-type: none"> <li>Bidders for Rd-08 (Package 04) include               <ol style="list-style-type: none"> <li>M/s. PCPL – SM JV</li> <li>M/s Tarmat Ltd</li> <li>M/s Sreedhanya Construction Company</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Bid was opened on 18<sup>th</sup> Dec'2020</li> <li>Technical Evaluation has been completed and submitted to KSTP on 23<sup>rd</sup> Dec'2020.</li> </ul>

Source: Louis Berger Analysis

## 6. Conclusion

The intent of this Report has been to give a brief overview about the project along with the status of works that has been completed in Dec'2020. Since there is no construction activity that has been executed in the reporting period, construction progress is not covered in this report and it will be reported in the fourth coming reports once the construction activities execution starts. This document is dynamic and will be revised on the basis of initial comments from KSTP.