

PROJECT MANAGEMENT FOR CLIMATE-RESILIENT RECONSTRUCTION AFTER FLOODING IN KERALA



MONTHLY PROGRESS REPORT FOR THE MONTH OF JANUARY 2021



Monthly Progress Report – January 2021

Project Name	Consulting Services for Project Management of Climate-Resilient Reconstruction after Flooding in Kerala				
Document Name	Monthly Progress Report -	January 2021			
Document No.	4800221-PMC-07	Issue No. 1.0			
Prepared by	Mohan K. Krishnan Poduval Shalini Thomas A. Madhava Reddy Dilkush Haridas Srikanth Yenika Konal Dewan				
Reviewed by	M H Patil				

ISSUE LOG/SIGNATURE PAGE

Issue	Submission	Remark	Approved By		
No	Date		Name/Position	Signature	
1.0	12-Feb-2021	Monthly Submission	Mohan K. Krishnan Poduval Authorized Signatory	000	

Table of Contents

1. l	INTRODUCTION	6
1.1.	Project Background	6
1.2.	Project Objective	8
1.3.	Project Components	8
1.3	, <u> </u>	
1.3	9	
1.3	O	
1.3	O	
1.3	, , ,	
1.3	3.6. Overall Package Specifics at Bid Stage	14
2.	KEY DATA PAGE	15
3.	PROJECT COCKPIT	16
3.1.	Objectives of Project Partners	16
3.2.	Project Context	16
3.3.	Goals	17
3.3		
3.3	e	
3.3	e	
3.4.	Forward Schedule	17
3.5.	Current and Projected Costs	17
3.6.	Overall Construction Progress	17
3.7.	Risk Exposure	17
3.8.	Open Changes and Claims	17
3.9.	Health and Safety Statistics	17
3.10.	Staff Deployment	17
4.	CONSULTANT'S ACTIVITIES, STAFFING AND TIME SCHEDULE	18
4.1.	Project Scope	18
4.2.	Team Composition	19
4.3.	Main Activities	20
4.4.	Target/Actual Comparison of activities	20



Time	20
Preparation of documents and approvals	20
Organization of meetings	20
Table of Correspondences	21
Audit	21
PROGRESS OF CONSTRUCTION	21
North Package 01	22
North Package 02	23
Central Package 03	24
South Package 04	25
Activities Completed in the month of Jan'2021	26
CONCLUSION	29
ANNEXURES	29
	Preparation of documents and approvals Organization of meetings



Table of Figures

Figure 1 List of Packages for RKI Programme	7
Figure 2 Bifurcation of Road Lengths (km)	14



Table of Tables

Table 1 Roads in North Cluster Package One	9
Table 2 Roads in North Cluster Package Two	
Table 3 Roads in Central Cluster Package Three	11
Table 4 Roads in South Cluster Package Four	
Table 5 Supervision Consultants and Authority's Engineer	13
Table 6 Consultant's Project Scope	18
Table 7 Status of Mobilization	
Table 8 Event Dairy	20
Table 9 Status of North Package 01	22
Table 10 Status of North package 02	23
Table 11 Status of Central Package 03	24
Table 12 Status of South Package 04	25
Table13 Activities completed in January 2021	26



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. 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 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.

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.

Parallelly, 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). The list of roads to be funded were approved in July 2019, at the 5th 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





1.3.1. North Cluster Package 01

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	Major District Road (MDR)	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	46.32
5	RKI-15	Wayanad	Major District Road (MDR)		
6	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
	Total Length of Roads (Kms)				



1.3.2. North Cluster Package 02

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)	36.8
4	RKI-8	Palakkad	Major District Road (MDR)	Thavalam Mully Road CH 0/000 to 28/800	28.50
Total Length of Roads (Kms)				127.71	





1.3.3. Central Cluster Package 03

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 - Nelliyampathy 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
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
Total Length of Roads (Kms)					238.14



1.3.4. South Cluster Package 04

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
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 Thonniamala	28.20
4	Rd-4	Pathanamthitta	MDR	Mallapally, Komalam Paduthodu Kalloopara Chengaroor Komalam Kavungumprayar Pattakala, TMV road	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	Thiruvanantha puram	SH	Thiruvananthapuram Ponmudi road (From Nedumangad to Ponmudi)	41.75
7	Rd-7	Alappuzha	SH/MD R	Thattararnbalam-Michael Junction-Kochalummood-Mangankuzhy-Pandalam (Additional Road Added)	18.66
8	Rd-8	Alappuzha	MDR	Veeyapuram-Edathua-Puthukarry-Marnbuzhakkary-Kidangara- Kunnamgary- Kumarangary-Valady-Mullakarnthuruthy (Additional Road Added)	21.45
9	Rd-9	Ranni	MDR	Vayuttupuzha-Potheeppad Road (Additional Road Added)	38.50
				Total Length of Roads (Kms)	222.23



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:

- For North Package 01, M/s. MSV International Inc. JV M/s.JSV Associates Engineers
 Pvt.Ltd is the successful bidder. Observations on financial proposal with amendment to cost
 schedules and advice for negotiation meeting submitted on 29-10-2020
- For North Package 02, M/s Egis India Consulting Engineer Pvt.Ltd. In JV with Orion Infra consulting Pvt.Ltd has been selected as AE 01
- Supervision Consultants for Central package 03 and South Package 04 are in procurement stage

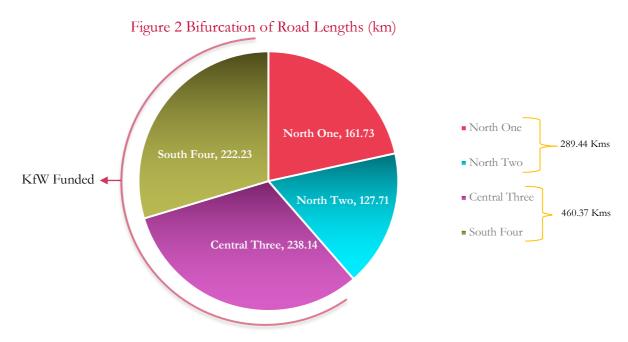
Table 5 Supervision Consultants and Authority's Engineer

No	Contract Name	Package	Awarded to
1	Consulting Services for Construction Supervision for Climate	2 9 4	Tender opening on
	Resilient Reconstruction after Flooding in Kerala	3 & 4	19-02-2021
2	Consultancy Services For Authority's Engineer For Supervision Of		M/s. MSV
	'Rehabilitation & Upgrading the State Highways & Major District		International Inc.
	Roads, having varying width, by Climatic Resilient Reconstruction,	1	JV M/s.JSV
	6 roads in the Northern Districts of Kannur, Kasaragod,	1	Associates
	Kozhikode & Wayanad of Kerala State under Rebuild Kerala		Engineers Pvt.Ltd
	Initiative' on EPC.		is Successful bidder
3	Selection of Consulting Services for Authority's Engineer for		M/s Egis India
	Supervision of 'Rehabilitation & Upgrading the State Highways &		Consulting
	Major District Roads, having varying width, by Climatic Resilient	2	Engineer Pvt.Ltd.
	Reconstruction, 4 roads in the Northern Districts of Malappuram	2	In JV with Orion
	& Palakkad of Kerala State) under Rebuild Kerala Initiative'		Infra consulting
			Pvt.Ltd



1.3.6. Overall Package Specifics at Bid Stage

With total road contracts numbering 29 (10 north, 10 central and 9 south), with 749.81 km (KfW 460.37 and World Bank 289.44Kms), 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.:



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 :4					
Report Duration	1-Jan-2021 to 31-Jan-2021					
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	PM01 Bid Evaluation Process, Contract Negotiations and Award
2	PM02 Quality Assurance and Control Monitoring
3	PM03 Liaison with Client and Governmental Agencies
4	PM04 Public Information
5	PM05 Project Controls
6	PM06 Contract Management
7	PM07 Financial Management
8	PM08 Claims Management
9	PM09 Change/Variation Management
10	PM10 Risk Management
11	PM11 Document Control
12	PM12 Environmental, Social, Health and Safety Management and Monitoring
13	PM13 Assistance during Defect Liability Period
14	PM14 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

			Table / Status Of								
No	Position	Name	Date of Joining	Date of	Total Planned	Utilized Man	Balance Man				
110	rosition	Name	Date of Johning	Leaving	Man months	months	months				
	Key Experts										
1	Team Leader	Mohan K. Krishnan Poduval	18-Aug-2020	-	33	5.5	27.54				
2	Senior Cost Surveyor	Shalini Thomas	20-Aug-2020	-	30	5.4	24.61				
3	Contract/Procurement Expert	Sanjeev Agarwal	18-Aug-20	08-Sep-2020	30	0.69	29.31				
4	Environmental & Social Specialist	AM Reddy	29-Oct-2020	-	30	3.09	26.91				
5	Community Liaison Officer	Dilkush K	16-Sep-2020	-	30	4.50	25.50				
			Non-Key	Expert							
6	Planning Engineer	Amrutha	18-Aug-2020	07-Nov-2020	30	2.66	24.58				
O	Thanning Engineer	Y. Srikanth	8-Nov-2020	-	. 30	2.76	24.50				
	Supporting Staff										
7	Document Controller	Kishore Nair	24-Sep-2020	-	30	4.24	25.76				
8	Accountant	Balu V	23-Nov-2020	-	30	2.27	27.73				

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

Meetings organized and attended by Long term PMC is listed below

Table 8 Event Dairy

S.No	Event	Date & Location	Agenda
1	Kick-off Meeting for projects under Package 2 of KSTP-RKI funded by World Bank (MOM attached as Annexure 01)	Date :4 th Jan'21 Location :KSTP office	Principal agenda of the meeting was to have a formal introduction between client KSTP. Long-term PMC (LTPMC) Louis Berger, Authority Engineer (AE02) Egis-Orion and respective package 2 contractors.
2	Meeting with Project Director	Date: 12 th Jan'2021 Location: KSTP office	LTPMC Introductory meeting with the Project Director Sh. Pranabjyothi Nath IAS at KSTP office
3	LTPMC Site visit RKI -8 (Thavalam Mully Road)	Date: 18 th Jan'21 Location: RKI-8	M : 1 (d : : : : :
4	LTPMC Site Visit RKI -7 (Mundoor- Thootha Junction)	Date: 19 th Jan'21 Location: RKI-7	Main agenda of the site visit was conducting training sessions on initial activities and to address project site
5	LTPMC Site Visit RKI -6 (Koyilandy - Edavanna road)	Date : 20 th Jan'21 Location: RKI-6	specific issues (Site Visit Photographs attached as annexure 02)
6	LTPMC Site Visit RKI -5 (Perumbilavu-Nilambur Road)	Date : 21 st Jan'21 Location: RKI-5	attached as annexure 02)
7	LTPMC Site Visit Pckg 3 Rd-7 (Kodungallur- shornur SH (SH 22)	Date: 22 nd Jan'21 Location: Pkg 3 Rd7	Main agenda is to look at practical
8	LTPMC Site Visit Pckg 3 Rd-10 (Arakunnam-Amballoor- Poothatta-Piravam Road)	Date: 23 rd Jan'21 Location: Pkg 3 Rd10	condition of the project site

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:

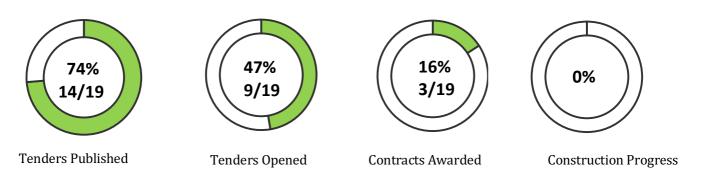
 Status of tenders published, Contractors finalized and Construction progress of all the packages are Shown below:

North Package 01 & 02 (Funded by World Bank)



• In North Package 01 & 02 ,10 roads (RKI-5,RKI-6,RKI-7,RKI-8,RKI-10,RKI-11,RKI-12,RKI-13,RKI-14 & RKI-15) has been awarded .

Central Package 03 & South Package 04 (Funded by KfW)



- In Central Package 03, 1 road (Rd-7) LOA has been issued, 6 roads (Rd-1,Rd-2,Rd-3,Rd-4,Rd-9,Rd-10) are in procurement stage and 3 roads (Rd-5,Rd-6 and Rd-8) are in DPR approval stage.
- In South Package 04, 2 roads (Rd-5 & Rd-8) LOA has been issued, 4 roads(Rd-1,Rd-3,Rd-4,Rd-7) financial evaluation had been completed, 1 road (Rd-2) to be retendered(NO awaited from KfW) and 2 road (Rd-6 & Rd-9) are in DPR approval stage.

5.1. North Package 01

Table 9 Status of North Package 01

	Procurement Status of North Package 01 funded by World bank under EPC Mode														
S.No	Packa ge	Road Ref No	Description	District	Length (Kms)	Duration	Maintena nce Period	Tender Submission Date	Technical bid Opening	Financial Bid Opening	Agreement Date	Contract Amount in INR Crores	Appointed Date	Contractor	Status
1		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	29-Dec-20	M/s ULCCS	Design works in progress
2		KKI-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	21-Dec-20	M/s RDS Projects	Design works in progress
3	Packa ge 01	RKI-12	Uruvachal Manakkayi valayal (including bridge parellel 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	Inventory Survey in Progress
4		RKI-13	Kumbla- 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	Inventory Survey in Progress
5		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	46.32	24	60	27-Oct-20	27-Oct-20	12-Nov-20		235.01	TBN	M/s. Sreedhanya Construction Company	LOA Issued
6		RKI-15	Vythiri-Tharuvana road	Wayanad	13.62	16	60	27-Oct-20	27-Oct-20	10-Nov-20		68.27	TBN	M/s. Midland Engineering and Contracting Company	LOA Issued
			Total Length of North Package 01 (Kms)		161.73										

5.2. North Package 02

Table 10 Status of North package 02

		Procurement Status of North Package 02 funded by World bank under EPC Mode														
S.1	No F	Packa ge	Road Ref No	Description	District	Length (Kms)	Duration	Maintena nce Period	Tender Submission Date	Technical bid Opening	Financial Bid Opening	Agreement Date	Contract Amount in INR Crores	Appointed Date	Contractor	Status
:	ı		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 in Progress
2		Packa ge 02	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	23-Nov-20	M/s Shreedanya Construction Company	Plan & Profile for 10Kms submitted by the contractor
3	3		RKI-7	Palakkad -Perinthalmanna Road (Mundur Junction to Thootha Junction of SH-53 from Km 12/800 to Km 49/600)	Palakkad	36.8	24	60	16-Jul-20	16-Jul-20	7-Sep-20	13-Nov-20	323.10	TBN	M/s KMC Constructions	Inventory Survey in Progress
4	1		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	132.8	23-Nov-20	M/s Akshya Builder JV EKK	Design works in progress
				Total Length of North Package 02 (Kms)		127.71										



5.3. Central Package 03

Table 11 Status of Central Package 03

	Status of Central Package 03 funded by Kfw														
S.No	Package	Road Name	Road Ref No	District	Length (Kms)	Duration	Maintenan ce Period	Tender Submission Date	Technical bid Opening	Financial Bid Opening	LOA Issued	*Bid Price in Crs	Agreement Date	Contractor	Status
1		Mookannoor Ezhattumugham Rd ch 0/000 to 14/200 and Blachippara Palissery Rd ch 0/000 to 6/000	RD -1	Ernakulam	19.95	18	60	22-Oct-20	22-Oct-20	12-Jan-21		91.88			*NOC for technical evaluation received on 7- 01-2021. *Financial evaluation was submitted on 20-Jan- 2021
2		Kakkadassery - Kaliyar road Ch. 0/000 to 20/000	RD-02	Ernakulam	20.18	18	60	15-Mar-21	15-Mar-21			67.74			*Tendered with last date of submission of bids as on 15-03-2021
3		Muvattupuzha - Theni SH (Ch. 0/000 to 15/750)	RD-03	Ernakulam	16.18	18	60	8-Feb-21	8-Feb-21			80.91			*Tendered with last date of submission of bids as on 08-02-2021
4		Kumarakom Nedumbassery (proposed SH) from Peruva to Peruvammuzhi	RD-04	Ernakulam	21.40	18	60	26-Feb-21	26-Feb-21			96.85			*Tendered with last date of submission of bids as on 26-02-2021
5	Package 03	Neyyassery Thokkumbansaddle road	RD-05	Idukki	31.92	24	60					144.3			*Waiting for clearance from KfW, German Bank
6		Nenmara - Nelliyampathy road km 0/00 to 30/714	RD-06	Palakkad	30.47	24	60					95.72			*Waiting for clearance from KfW, German Bank
7		Kodungallur- shomur SH (SH 22)	RD-07	Thrissur	34.35	24	60	2-Nov-20	2-Nov-20	1-Jan-21	22-Jan-21	203.22		M/s. Gawar Construction Ltd. ATCON India Ltd. (JV)	LOA Issued
8		Vazhakkodu Plazhy road Km.0/000 to 22/642	RD-08	Thrissur	22.72	18	60					93.68			• Waiting for clearance from KfW, German Bank
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	26-Feb-21	26-Feb-21			212.82			*Tendered with last date of submission of bids as on 26-02-2021
10		Arakunnam-Amballoor-Poothatta-Piravam Road	RD-10	Ernakulam	7.98	12	60	18-Mar-21	18-Mar-21			27.94			*Tendered with last date of submission of bids as on 18-03-2021
	Note:	Total Length of Central Package 03 (Kms) Bid Price is including GST and maintenace cost for 5 years			238										
$\overline{}$	HOLE	years													





Table 12 South Package 04 Status

						Status o	f South Pack	age 04 funded l	by Kfw						
S.No Pa	ickage	Road Name	Road Ref No	District	Length (Kms)	Duration	Maintenance Period	Tender Submission Last Date	Technical bid Opening	Financial Bid Opening	LOA Issued	*Bid Price in Crs	Agreement Date	Contractor	Status
1		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	11-Jan-21	-	104.3	-		*NOC for technical evaluation received on 7: 01-2021. *Financial evaluation was submitted on 20- Jan-2021
2		Vadayar Chandappalam- Mulakkulam Road and Vadayar Kallattippalam Muttuchira Road	Rd-2	Kottayam	22.48	18	60	5-Oct-20	5-Oct-20	1-Dec-20	-	98.96	-		Since the prices quoted are very high with the total amount 30% above the Tender Price, Deviation analysis as requested by KfW on 11th Jan 2021 has been submitted to KSTP on 13-Jan-2021 NO to retender is awaited from KfW
3		Pathanamthitta Ayroor-Muttukudukka illathupadi - Muttukudukka prakkanam - Parakkanam Elavumathitta - Kulanada Ramanchira - Thanikkuzhy Thonniamala	Rd-3	Pathanamt hitta	28.20	18	60	18-Dec-20	18-Dec-20	21-Jan-21	-	97.12	-		*L1 quoted amount is Rs. 107.52 Crore, which is 10.71 % above tender value
4 Pa		Maliapally, Komalam Paduthodu Kalloopara Chengaroor Komalam Kavungumprayar Pattakala, TMV road (Road 4)	Rd-4	Pathanamt hitta	23.13	18	60	30-Nov-20	30-Nov-20	18-Jan-21	-	98.98	-		* Financial Bid evalaution was submitted on 28-Jan-2021 *Lowest bid is 3.95% above tender value
5		Malamekkara Kunnathukala Chala Puthenchanda factory Jn Azad Jn road 0/00 to 8/600	Rd-5	Pathanamt hitta	7.87	18	60	5-Oct-20	5-Oct-20	13-Jan-21	22-Jan-21	28.80	-	M/s. KNM- EKK JV	LOA Issued on 22-01-2021
6		Thiruvananthapuram Ponmudi road (From Nedumangad to Ponmudi)	Rd-6	Thiruvana nthapuram	41.75	24	60				-	203.42	-		* DPR Approval pending
7		Thattarambalam-Michael Junction-Kochalummood-Mangankuzhy- Pandalam	Rd-7	Allapuzha	18.66	18	60	30-Nov-20	30-Nov-20	18-Jan-21	-	110.38	-		* Financial Bid evaluation was submitted on 27-Jan-2021 *Lowest bid is 9% above the tendered value
8		Vecyapuram-Edathua-Puthukarry-Marnbuzhakkary-Kidangara- Kunnamgary-Kumarangary-Valady-Mullakarnthuruthy	Rd-8	Allapuzha	21.45	18	60	18-Dec-20	18-Dec-20	11-Jan-21	22-Jan-21	108.9	-	M/s Sreedhanya Construction Company	LOA Issued on 22-01-2021
9		Vayuttupuzha-Potheeppad Road	Rd-9	Ranni	38.50	18	60	-	-	-	-	-	-		*DPR to be finalized
No	te:	Total Length of South Package 04 (Kms) Bid Price is including GST and maintenace cost for 5 years			222.23										





5.5. Activities Completed in the month of Jan'2021

The following Table provides a brief snapshot of the bid evaluations that has been taken up and completed in the month of January 2021:

Table 13 Activities Completed in Jan'2021

Task	Description	Status
Evaluation of RD 01 (Pkg 03) Evaluation of RD 01 (Pkg 04)	Mookannoor Ezhattumugham Rd ch 0/000 to 14/200 and Blachippara Palissery Rd ch 0/000 to 6/000 (Model/ Pilot Road) Bidders for Rd-01 (Package 03) include 1) M/s. SPL – AF JV 2) M/s. Marymatha-Akshaya JV 3) M/s Tarmat Ltd 4) M/s Antech- RBL JV Gandhinagar-Medical College-Babu Chazhikadan Road- Kottayam-Parippu Road-Athirampuzha Liessue-Kaippuzha- Mannanam-Pulikkuttissery-Parolickal- Muttappally Road Bidders for Rd-01 (Package 04) include	NOC from KfW for Technical bid Evaluation was received on 7th-Jan-2021 Financial Evaluation has been completed and submitted to KSTP on 25th Jan-2021. Lowest bid is from M/s Marymatha-Akshaya JV which is 0.01% above the estimated tendered price NOC from KfW for Technical bid Evaluation was received on 7th-Jan-2021 Financial evaluation has
Evaluation of RD 02 (Pkg 04)	1) M/s Sreedhanya Construction Company Vadayar Chandappalam- Mulakkulam Road and Vadayar Kallattippalam Muttuchira Road (Model/ Pilot Road) • Bidders for Rd-01 (Package 04) include	been completed and submitted to KSTP on 19th Jan'21. • Financial bid was opened on 1st Dec'2020. • Since the prices quoted are very high with the
	1) M/s. Begorra – PRL JV	above the Tender Price, and this being a sole



Task	Description	Status	
		•	bidder, it is recommended by LT PMC for retender of the project. Deviation analysis as requested by KfW on 11th Jan'2021 has been submitted to KSTP on 13th Jan'2021 Conditional NO has
Evaluation of RD 3 (Pkg 04)	Pathanamthitta Ayroor-Muttukudukka illathupadi - Muttukudukka prakkanam - Parakkanam Elavumathitta - Kulanada Ramanchira - Thanikkuzhy Thonniamala • Bidders for Rd-03 (Package 04) include 1) M/s Theruvath – PRL JV 2) M/s EKK Infrastructure Ltd 3) M/s Sreedhanya Construction Company	•	been received for technical bid evaluation report from KfW on 20th Jan'21 Revised technical bid evaluation report has been submitted to KSTP on 25th Jan'21 complying to the conditions noted by KfW .
Evaluation of RD 4 (Pkg 04)	Mallapally, Komalam Paduthodu Kalloopara Chengaroor Komalam Kavungumprayar Pattakala, TMV road Bidders for Rd-04 (Package 04) include 1) M/s. PCPL – SM JV 2) M/s. SPL – RM JV	•	NOC from KfW for technical bid evaluation report was received on 12th Jan'2021 and financial bid was opened on 18th Jan'21 Financial bid evaluation report was submitted to KSTP on 28th Jan'21 Financial bid submitted by M/s SPL-RM JV is the lowest with 3.95% above the tendered price



Task	Description	Status
Evaluation of RD 5 (Pkg 04)	Upgrading Malamekkara - Kunnanthukala - Chala - Puthenchantha FactoryJunction- Azad lunction Road • Bidders for Rd-05 (Package 04) include 1) M/s K.N. Madhusoodanan in V with M/s. EKK Infrastructure Ltd 2) M/s Raji Mathew & Co	 Conditional NO for the technical bid evaluation from KfW was received on 5th Jan'2021. Financial bid evaluation was submitted to KSTP on 16th Jan'2021 LOA issued to M/s KNN EKK JV
Evaluation of RD 7 (Pkg 04)	Thattararnbalam-Michael Junction- Kochalummood-Mangankuzhy-Pandalam 3) Bidders for Rd-07 (Package 04) include 1) M/s. Begorra – PRL JV 2) M/s Tarmat Ltd 3) M/s Sreedhanya Construction Company	 NOC for technical bid evaluation from KfW was received on 12th Jan'2021. Financial bid opened on 18th Jan'21 Financial bid evaluation report has been submitted to KSTP on 27th Jan'21 Bid submitted by M/s Begorra -PRL JV is the lowest which is 9% above tendered value
Evaluation of RD 8 (Pkg 04)	Veeyapuram-Edathua-Puthukarry- Marnbuzhakkary-Kidangara-Kunnamgary- Kumarangary-Valady-Mullakarnthuruthy • Bidders for Rd-08 (Package 04) include 1) M/s. PCPL – SM JV 2) M/s Tarmat Ltd 3) M/s Sreedhanya Construction Company	 NOC for technical bid evaluation from KfW was received on 7th Jan'2021. Financial bid opened on 11th Jan'2021 Financial evaluation report has been completed and submitted to KSTP on 15th Jan'2021



Task	Description	Status
		• LOA issued to M/s
		Sreedhanya
		Construction Company

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 Jan'2021. 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 forth coming reports

7. Annexures

Annexure 01: Minutes of Kick-off meeting held on 4th Jan'2021

Annexure 02 : Site Visit (18th Jan'2021-23rd Jan'2021) Photographs



Annexure 01

Minutes of Kick Off Meeting

PROJECT: Climate - Resilient Reconstruction after Flooding in Kerala - PKG II

EMPLOYER: KERALA STATE TRANSPORT PROJECTS(KSTP)

PROJECT MANAGEMENT CONSULTANT :M/s. LOUIS BERGER CONSULTING PVT LTD

The Kick Off Meeting chaired by the Hon'ble Chief Engineer, KSTP, was scheduled at KSTP Conference Hall on the 4th of January 2021 at 11.30 am. for the Projects under Package II of the KSTP — Rebuild Kerala Initiative, that are being funded by the World Bank.

RKI Package II comprises of four Road Projects under EPC mode of Contract supervised by an Authority's Engineer

Authority's Engineer : M/s EGIS-ORION JV

Contractors : KSTP - RKI-05 - M/s KMC Constructions

: KSTP - RKI-06 - M/s. Sreedhanya Construction Company

: KSTP - RKI-07 - M/s KMC Constructions

: KSTP - RKI-08 - M/s Akshaya - EKK JV

List of Participants:

No	Name	Designation	Representing	Email
1	Darlene D'Cruz	Chief Engineer	KSTP,PMT	
2	RAJI SIVADAS	Superintending Engineer	KSTP,PMT	
3	JAYAKRISHNAN.M	Executive Engineer	KSTP,PMT	
4	C.S ARUN KARMA	Asst. Executive Engineer	KSTP,PMT	
5	ARYA SJ	Asst Engineer	KSTP,PMT	
6	MOHAN KRISHNAN	Team Leader & Project Manager	LBC,PMC	Mohankkrishnan.poduval@wsp.com
7	SHALINI THOMAS	Sr.Cost Surveyor	LBC,PMC	shalini.thomas@wsp.com
8	DILKUSH H	Community Liaison officer	LBC, PMC	dilkushster@gmail.com
9	KONAL DIWAN	Project Co-ordinator	LBC, PMC	Konal.Diwan@wsp.com
10	RMV SUBRAHMANYAM	General Manager	EGIS,AE	Subrahmanyam.r@egis-india.com



No	Name	Designation	Representing	Email
11	SASIKUMAR PN	Resident Engineer	EGIS,AE	Sasipn666@gmail.com
12	G.KARTHIK	Project Co-ordinator	PKG 5&7 - KMC	
13	VP ARUN	Project Manager	PKG 5&7 - KMC	
14	VASANTH KUMAR	Design Consultant	PKG 5&7 - KMC	vasanth@PCIPL.india.com
15	SREEDHANYA BABU	Executive Director	Pkg-6 SreeDhanya	Sreedhanya.babu@gmail.com
16	JOSEPH MATHEW K	Design Director	Pkg-6 SreeDhanya	Josephmathewk13@gmail.com
17	ANJU JS	Junior Engineer	Pkg-6 SreeDhanya	anju@sreedhanyahomes.com
18	REGHUNATHAN	Project Manager	Akshaya Bulders	Buildersakshaya.p1@gmail.com

The principal agenda of this Meeting was to have a formal introduction between the Client KSTP, the Long Term Project Management Consultant (LTPMC) Louis Berger, the Authority's Engineer (AE) EGIS- Orion & respective Package II Contractors.

The meeting commenced at 11.45 AM and ended at 1.00 PM local time.

No	Salient Features			
1	The Chief Engineer, Hon'ble Darlene D'Çruz formally welcomed all to the meeting and requested for a brief introduction from the present Project Stakeholders.			
	The CE further enquired about the status of the Road Inventory Survey and the status on the agreement on the Appointed Date between the Contractors and KSTP.			
2	RKI-08— M/s Akshaya-EKK JV stated that their appointed Date had been fixed as the 22 nd November 2020 and they were in receipt of the first instalment of the mobilization advance.			
	RKI-06— It was stated by M/s Sreedhanya they have not agreed on the Appointed Date despite completing the Road Inventory due to the presence of encumbrances.			
3	It was further observed by the Contractor that the Kerala Water Authority (KWA) has proposed to lay pipelines under the carriageway of the road in question, for about 1.7km where the Right of Way (RoW) is minimal.			
	Thus, the Contractor has requested the exclusion of the encumbered stretch from the initial handover and has requested the Client KSTP to select the Appointed Date accordingly. In reply to the above, KSTP responded that the total road length handed over for execution of the works is 31,53Km. Major portion of this road is hindrance free and sufficient work front is already there. Hence Appointed Date onec fixed cannot be changed.			
	It was further submitted that the Contractor's design consultant, proof consultant and safety consultant			



KSTP

No	Salient Features				
	had been approved by KSTP and that the Contractor has submitted the plan and profile for 10 kms already.				
	RKI-05 and RKI-07— M/s KMC Constructions stated that they have submitted their Road Inventory on the 24 th of Dec 2020.				
4	The Chief Engineer further enquired about the status of the Performance Security to which the Contractor requested the reduction of the Performance Guarantee to 3% as advised by the Ministry of Road Transport & Highways (MoRTH) as part of relief measures in the wake of the COVID-19 Pandemic. To this, the Chief Engineer told the contractor that the decision will be reverted soon.				
5	The Contractors present, requested for the confirmation of their respective roads ROW for which the Chief Engineer has agreed to share the information on the road co-ordinates. Accordingly, the Contractors may collect this aforementioned data from KSTP.				
6	Another impediment that the Contractors raised was the presence of trees within the ROW which was potentially hindering their work. The Team Leader, LTPMC explained that being a Climate Resilient Project, the overall approach should be on the conservation of the environment along with due consideration to safety. All possibilities shall be considered to preserve trees during the design phase itself.				
7	The LTPMC stressed on the importance of correspondence in a well co-ordinated and transparent manner between all Stakeholders so as to efficiently streamline the review and approval process. For the avoidance of doubt and to elaborate further, the Contractors shall submit their deliverables such as Plan and Profile, Working Drawings/Designs, Material Sources, etc., to the Authority's Engineer who in turn shall check and approve/ advise the Contractor directly (in case of any required revisions). The final approved document shall be sent to the Contractor for implementation with a copy to KSTP and LTPMC for record and audit.				
	In the same vein, all Contractual and Financial correspondence to KSTP shall be copied to the LTPMC, who's role is that of an Employer's Representative. The adherence of this correspondence procedure would ensure that the LTPMC is able to take timely and proactive decisions in consultation with KSTP and Proejct Stakeholders.				
8	The Team Leader, LTPMC informed the Consultant and Contractors present that the LTPMC would conduct a Site Visit to each of the Projects during the following week with the intention of conducting a Training session on initial activities and to address Project Site specific issues.				

The meeting adjourned at 01.00 PM with a vote of thanks by the Team Leader, LTPMC.

LTPMC

Team Leader



Kick Off Meeting Photographs

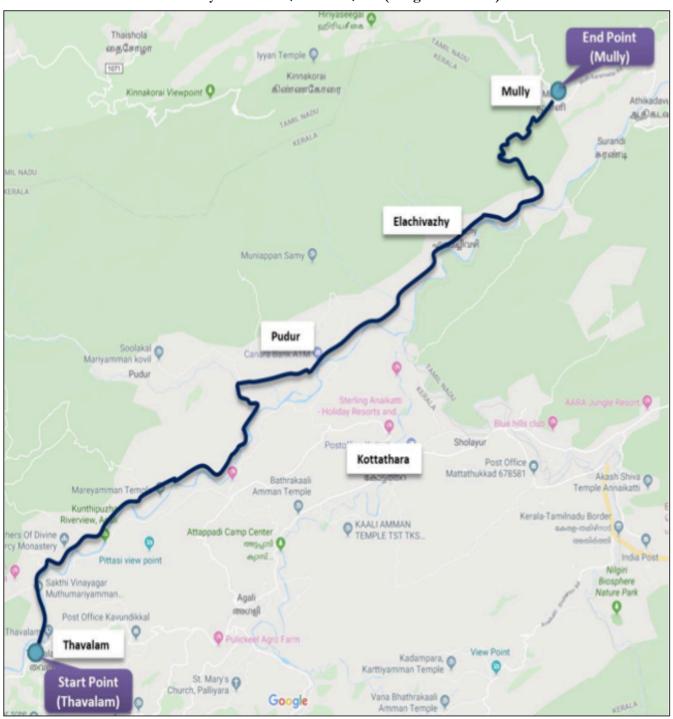




Annexure 02

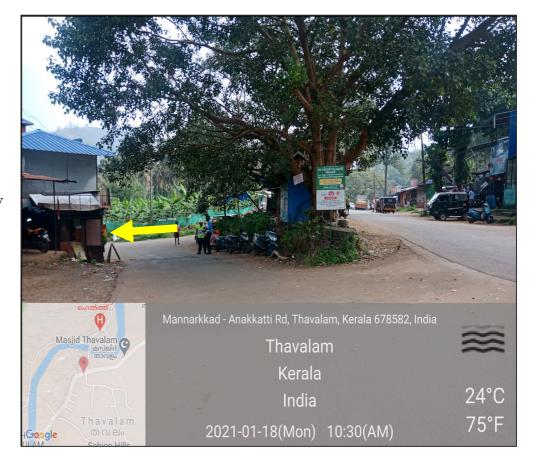
Site Visit Photographs of North Package 2

1. RKI-8 – Thavalam Mully Road CH 0/000 to 28/800 (Length -28.5Kms)



Key Map





 Starting point at Thavalam (chainage km 0.000) (Arrow showing direction of road)



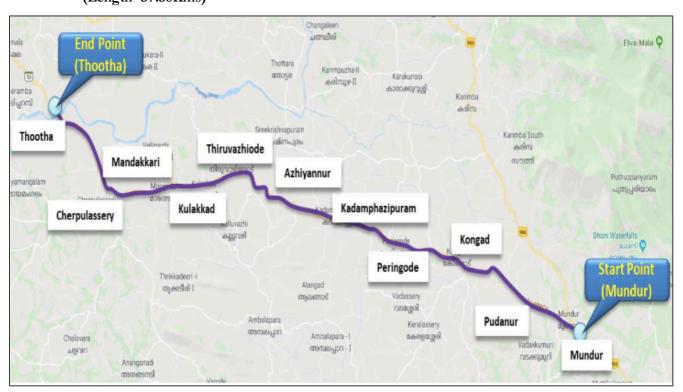
- Long term PMC Team leader along with Sr.Cost Surveyor, Environmental expert and Community Liasoning officer visited RKI-8 Thavalam Mully road on 18th Jan'2021.
- Representatives from AE 02 (Egis Orion JV) and EPC contractor Akshya Builder JV EKK were also present





 Thavalam Bridge at Chainage Km O.150

2. RKI -7 : Palakkad -Perinthalmanna Road (Mundur Junction to Thootha Junction of SH-53 (Length -37.38Kms)



Key Map





Start Chainage of Project Road at Mundur Junction (Arrow mark showing the direction of the road)

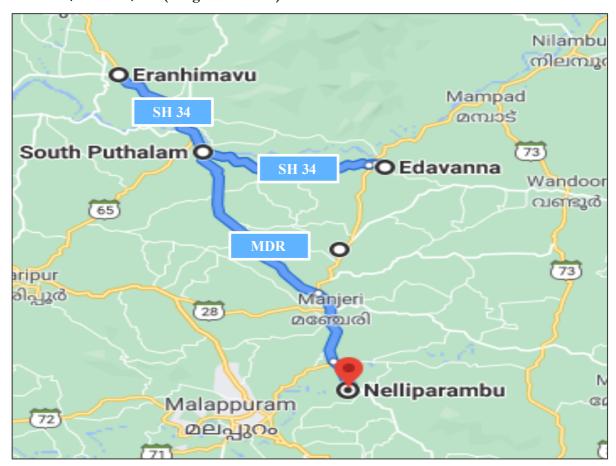




Long term PMC Team leader along with Sr.Cost Surveyor, Environmental expert and Community Liasoning officer visited RKI-7 Mundur Junction to Thootha Junction road on 19th Jan'2021 and conducted interactive meeting with AE 02 M/s Egis Orion JV and Contractor M/s KMC Constructions



3. RKI-6: Koyilandy - Edavanna road between Km 51/200 to 69/700 & Areekode - Manjeri road Km 0/000 to 13/600 (Length 31.53Kms)



Key Map

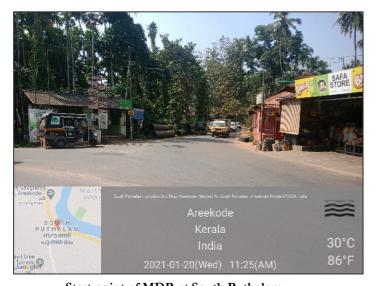


Start point of the SH road at Eranhimavu

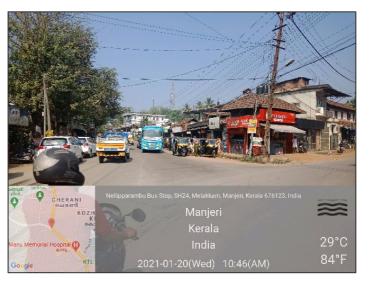


End point of SH road at Edvanna





Start point of MDR at South Puthalam



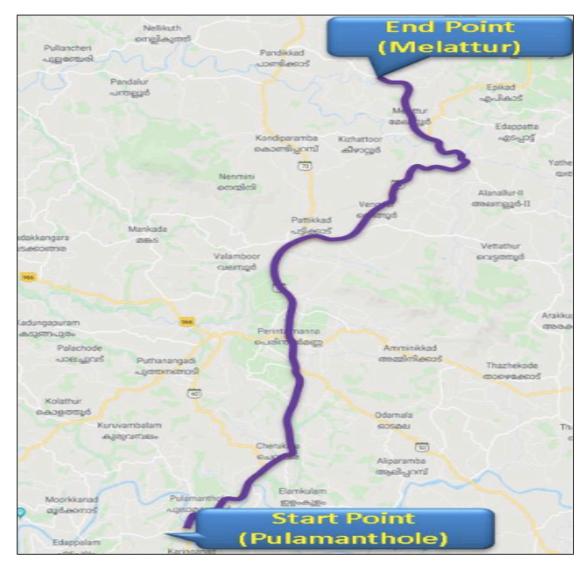
End Point of MDR at Nelliparambu



Long term PMC Team leader along with Sr.Cost Surveyor, Environmental expert and Community Liasoning officer visited RKI-7 Koyilandy edvanna road on 20th Jan'2021 and conducted interactive meeting with AE 02 M/s Egis Orion JV and Contractor M/s Sreedhanya Construction company



4. RKI-5: Perumbilavu-Nilambur Road (Length 30.88)



Key Map



Manjeri-Melattur Rd, Kerala 676522, India

Kerala
India
32°C
90°F

Start point at Pulamanthole

End Point at Olipuzha





Long term PMC Team leader along with Sr.Cost Surveyor, Environmental expert and Community Liasoning officer visited RKI-7 Perumbilav-Nilambur road on 21st Jan'2021 and conducted interactive meeting with AE 02 M/s Egis Orion JV and Contractor M/s KMC Construction company

5. Package 03 – Rd 10 Arakunnam-Amballoor-Poothatta-Piravam Road

Besides North package 02, LT PMC visited Package 03 Road No 10 which is in procurement stage









