# No. P-17024/4(5)/2017-RC (FMS No 358389)

Government of India Ministry of Rural Development Department of Rural Development Rural Connectivity Division

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Krishi Bhavan, New Delhi Dated the 3<sup>rd</sup> January, 2022

#### **Minutes**

Sub: Minutes of Meeting of Pre-Empowered Committee, dated 20<sup>th</sup> December, 2021, to discuss the project proposals submitted by the State Government of Bihar for Road Connectivity Project under Left Wing Extremism Area (RCPLWEA) (Batch-II, 2021-22)-reg.

A copy of the Minutes of the Meeting of the Pre-Empowered Committee held on 20th December, 2021 at 03:00 PM through Video Conferencing, to discuss the project proposals submitted by the State Government of Bihar for Road Connectivity Project under Left Wing Extremism Area (RCPLWEA) (Batch-II, 2021-22) is forwarded herewith for information and necessary action.

2. This issues with the approval of the competent authority.

Deputy Secretary to the Govt. of India Tel. No: 011-23070308

# Distribution:

- i. The Principal Secretary, Road Construction Department, Government of Bihar, Vishveshwaraiya Bhavan, Bailey Road, Patna- 800015.
- ii. The Nodal Officer (RCPLWEA), Road Construction Department, Govt. of Bihar, Vishveshwaraiya Bhavan, Bailey Road, Patna- 800015.
- iii. Director (LWE), Ministry of Home Affairs, North Block, New Delhi
- iv. All Directors in NRIDA.

# Copy to:-

Sr. PPS to Secretary (RD)/ PPS to AS& FA/PPS to AS (RD)

# MINUTES OF THE MEETING OF THE PRE-EMPOWERED COMMITTEE HELD ON 20<sup>TH</sup> DECEMBER, 2021 AT 3:00 PM TO CONSIDER THE PROJECT PROPOSALS SUBMITTED BY GOVERNMENT OF BIHAR UNDER RCPLWEA, BATCH II, 2021-22

A Meeting of the Pre-Empowered Committee (RC) was held through Video Conference on 20<sup>th</sup> December, 2021 at 3:00 p.m. under the Chairmanship of Additional Secretary (RD) & DG, NRIDA to consider the project proposals submitted by the State of Bihar under Road Connectivity Project for Left Wing Extremism Areas (RCPLWEA) (Batch-II) of 2021-22. Following officials were present in the meeting.

MoRD/ NRIDA Representatives				
Dr. Ashish Kumar Goel	Additional Secretary (RD) & DG NRIDA			
Shri K.M. Singh	Deputy Secretary (RC), MoRD			
Ms. Anjali Yadav	Assistant Director (RC), MoRD			
Shri. B C Pradhan	Consultant (Tech), NRIDA			
Shri Deepak Ashish Kaul	Director (F&A), NRIDA			
Dr. I.K.Pateriya	Director (P-III), NRIDA			
Shri Rajendra Goel	Director (P-II), NRIDA			
Shri Pradeep Agarwal	Director (P.I), NRIDA			
State Govt. Representatives				
Shri Birendra Kumar Chief Engineer				
Dr. Alok Kumar Joint Secretary (MC)- cum-Nodal Officer, RC				
Shri Madhurendra Kumar	State Quality Co-ordinator, RCPLWEA			
Shri Sanjeev Kumar Sinha	Executive Engineer (Finance)			
Shri Umesh Kumar Rai	Executive Engineer			
Shri Indradev Pandit	Assistant Engineer			

#### 2. Details of Current Proposal

	As per OMMAS dated 18.12.2021				
Item	No	Length (in km/m)	Cost (Rs in Crores)	Avg. Cost per km (Lakhs)	
Roads	28	163.98	152.63	93.08	
LSBs	16	1099.24	62.93	5.72	
Total	28 roads + 16 LSBs	163.98 km roads + 1099.24 m LSBs	215.56		
*MoRD Share : Rs. 119.71 Crore State share : Rs 95.85 Crore					

<sup>3.75</sup> m width road - 26 Nos & Length - 144.42 km - Rs. 90.95 Lakhs/km

5.50 m width road - 2 Nos & Length - 19.56 km - Rs. 108.83 Lakhs/km

#### 3. General Observations

- i) The State Government of Bihar has already been sanctioned 1,816.82 km of road works under RCPLWEA.
- ii) The State has now submitted proposals for 28 roads of length 163.98 km and 16 LSBs of 1079.24 m. Out of 28 roads, 26 roads of 144.42 km road length have been proposed with 3.75 m carriageway width at an average cost of Rs. 90.95 lakh/ km and 2 roads of 19.56 km road length have been proposed with carriageway width of 5.50 m at an average cost of Rs. 108.83 lakh/ km. Proposed 16 bridges are on the same alignment of the proposed 28 no. of roads.
- iii) All proposals have been uploaded and scrutinized by the STAs on OMMAS. However, STA scrutiny has been done for only 5 bridges out of 16 bridges, which should be done soon. PTA scrutiny for at least 3 roads and 2 bridges is to be carried out.
- iv) State representative informed that, out of 16 bridges, 4 bridges in Jamui district are on the canal and Irrigation Department is yet to grant their approval/ NOC for the construction. Decision from the department is likely to come in a week's time. State was asked if there are alternatives in nearby alignments. State confirmed the availability of alternatives. State was asked to inform about the exact number of bridges to be constructed before EC meeting. *The alignment of roads should be checked on Geosadak*.

## 4. <u>Distribution of roads based on Traffic Category</u>

i) It was observed that, state has proposed all the 28 roads under T7 traffic category. Committee observed that it is not statistically possible that all the roads will have same level of traffic. State was asked to re-survey & re-examine these roads randomly. 3<sup>rd</sup> party traffic survey may also be carried out. The average pavement cost per km is very high. New technology should be used to decrease the cost.

#### 5. Distribution of roads based on widening to various carriageway

i) State has proposed majority of roads (24 in number) for upgradation from 3 m to 3.75 m. State mentioned that the roads were earlier constructed by local district boards, and it is important to propose these roads with 3.75 m width. Committee asked the state to use FDR for these roads as the pavement cost appears to be much higher. State mentioned that they are constructing a road under RCPLWEA in Muzaffarpur district using FDR technology. Based on the result, they will further propose roads with FDR. State was informed that the technology is being successfully used by many states and even in Bihar, other departments are using FDR technology for construction of roads. State assured to examine the possibility of adopting FDR technology and rationalize the cost. It was mentioned that using FDR will decrease the cost substantially.

## 6. Average cost trends (Bridges)

i) In the earlier batch of proposal, the average cost of LSBs was Rs. 5.05 lakh/m. However, in the current batch of proposals, it has increased to Rs. 5.72 lakh/m. State was asked about the reason of such an increase. State representative mentioned that due to rise in the cost of steel, the cost has increased. State was asked to re-look into it and rationalize the cost. *NRIDA should examine the justification given by the state*.

#### 7. DPR Issues

- i) It was observed that the GSB quantity has not been deducted from the gross earthwork quantity. State was asked to re-calculate the net earthwork quantity required for the construction of embankment by deducting the GSB quantity from the gross earthwork quantity. State mentioned that they have corrected it and updated the cost.
- ii) As per IRC:SP:72-2015, for the roads of traffic category T7, 100 mm modified soil, 100 mm GSB is required. However, the State has proposed 200 mm GSB. State mentioned that the base rate for GSB is nearly Rs. 837 per cubic meter, whereas in case of cement treated soil stabilization, this is Rs. 586 per cubic meter. So, if they propose 100 mm GSB and 100 mm cement treated soil stabilization, it will lead to cost saving of Rs. 94,000 per km. However, it is very tedious for small projects. NRIDA clarified that modified soil and cement treated soil stabilization are different. Further, 200 mm GSB is not at all required for T7 category roads. NRIDA suggested the state to use stabilized sub base and if they don't want to do the cement stabilization then they may modify the GSB provision to 150 mm.
- iii) It was observed that the state has provisioned for BM & SDBC. Committee mentioned that the state cannot provision for the use of BM/SDBC for T7 category roads. Same should be deleted. Single layer of BC of 40 mm thickness in place of BM/ SDBC should be provisioned for RCPLWEA.
- iv) It was observed that clearing and grubbing of road has been done for a width of 8 m. There is already an existing earthen road which does not have any vegetation. Hence, vegetation should be removed from the shoulder portions. State mentioned that they have corrected it and have updated the cost.
- v) State has proposed protection work for 70m. But as per the photo and L section attached with DPR, it is only required in 40 m length. The size of toe wall appears to be on higher side and the same needs to be re-examined. State mentioned that they have corrected the DPR and have updated the cost.
- vi) It was observed that, cutting material is not being re-used in the embankment construction, only borrowed material is used. State was asked to re-look into it. State mentioned that they have provisioned the use of cutting material and have updated the cost.

- vii) State should propose the quantity of road furniture as per the actual site requirements. State mentioned that they have provisioned the road furniture as per the road safety audit report.
- viii) It was observed that the State has proposed drain cover slab. There is no provision of providing drain cover slab under RCPLWEA. State mentioned that drains are provided in the habitations and drain cover slab should be provided for safety purposes. It also acts like a footpath. State was asked, how will they ensure the maintenance of these slabs. State mentioned that municipal corporation does the routine maintenance. State intimated that the estimated cost of the slab would be Rs. 5,000 per meter. State was asked to work out the total cost implication of the slabs and NRIDA to examine the same. The same may be taken under higher specifications if the state wants.
- ix) State has proposed Pucca drain size 600\*750 (clearance). State should re-examine the proposed drain size as per requirement.
- x) State was advised to propose panel concrete / RCCP in place of conventional CC road (built up area). State agreed to the same and assured to propose PCC/ RCCP.

#### Observations for bridges:

- xi) It was observed that the design of superstructure of bridges is not given in the DPR. State was asked to give the design in the DPR based on IRC: 112-2011/2020. State was further asked to recheck the value of response reduction factor "R" for seismic considerations. State mentioned that they have done the super structure as per MORTH standard drawings. It was however observed that the drawings of MoRTH are quite old. State clarified that they have done the super structure as per the corrected plates.
- xii) State was asked to re-check the quantity of elastomeric bearings/pads proposed in abstract, as per drawings. It was observed that here is a mismatch in the drawings for the provision of the bearings. In some drawings PTFE has been provisioned and in some elastomeric bearings. State needs to correct the same. State informed that they have corrected the same.
- xiii) Circular section of the pier has been shown in the drawing (Drg No. RCD/Aurangabad/2021-22/GAD-2+625), whereas in the design it is rectangular. In reinforcement detailing, circular binder has been shown. Further, state has considered Fe415 for binder reinforcement in the design. The same should be checked and corrected accordingly.
- xiv) State needs to make provision in the DPR for acceptance load testing of one span before opening to traffic as per IRC code. The scheme of load testing, load positions, test load and deflections should be shown in the drawing. State assured to do the same.
- xv) The proposed RCC T-beam slab bridge is a new construction on pile foundation with single span of 21.75 m. From attached photographs, it appears that the proposed bridge is over a canal. State mentioned that Water Resource Department, Bihar had constructed a bridge near the

proposed bridge and the same is in bad condition. Now, WCD are proposing to strengthen that bridge. Hence, the proposal of this bridge will be dropped by the state.

#### 8. Maintenance

State has proposed 6<sup>th</sup>year Renewal cost of Rs. 19.96 crore which is 13.08 % of construction cost. The same should ideally be more than 18% of the construction cost. State mentioned that, in case of Bihar, the cost/km is higher, so percentage is lower. NRIDA mentioned that, if the State reduces the cost of the proposals by adopting stabilized base & sub-base and other technologies like FDR, this percentage may increase. State assured to re-look into it.

#### 9. R&D Proposals

State has not proposed any road for construction using new technology. State needs to revise the proposal by adopting new technologies like **cement stabilization**, RCCP, **paneled cement concrete**, FDR, waste plastics and other commercial stabilizing agents. State was asked to revise the proposal before EC meeting.

# 10. Sanctioned, Completed, Balance and Un-awarded Works

It was observed that 11 roads and 2 Bridges are still un-awarded. State was advised to award these works by 31<sup>st</sup> December. Post that, un-awarded works will be frozen and dropped. State assured to award the works by the said date.

#### 11. eMarg

i) It was observed that 20% packages are pending for MEE, 20% packages are pending for locking on eMarg. Further, RI has been missed in 45% of the roads. State was asked to review the progress on eMarg and saturate at the earliest. It was clarified that eMarg saturation should be 100% before the EC.

#### 12. Quality

- i) Target of SQM Inspections allotted to the state during the year 2021-22 was 825, against which, only 177 inspections have been carried out which is very less. State needs to expedite the pace of SQM Inspections.
- ii) It was observed that, 9.3% of the ongoing works have been graded as unsatisfactory, which is a very serious issue. State needs to monitor the quality of works seriously.
- iii) 4 ATRs of NQM Inspections are pending from the state. State was asked to ensure the submission at the earliest.

#### 13. Anomalies of SQM Inspections

i) No tests are actually conducted on the field, only general photographs are uploaded, roads graded as 'Satisfactory'. BR12RC59, BR12RC61, BR12RC051.

- ii) Poor condition of road furniture has been graded as 'Satisfactory'. (Package Number BR12RC59, BR12RC62)
- iii) Poor condition of logo board is graded as 'Satisfactory'. (Package Number BR02RC009, BR12RC59)
- iv) Meaningless photographs are uploaded (Package Number BR02RC011, BR12RC03, BR15RC271, BR03RC021B)
- v) Wrong way of checking super elevation and camber (Package Number BR15RC207, BR12RC47, BR12RC052)
- vi) Unequipped field labs are graded as 'Satisfactory' (Package Number BR03RC025, BR12RC47, BR15RC271)

State was asked about the 3 months critical analysis of the SQM inspections. State mentioned that, they are doing it. State was asked to submit the report of the analysis before EC meeting and the action taken thereon will be reviewed in the EC meeting. Further, the State was asked to sensitize their SQMs to reduce such anomalies.

#### 14. Financial issues

- i) Balance sheet has not been received by the state. State informed that the reports are in the process of compilation and will be sent soon.
- ii) State share of budget is not being reflected in PFMS TSRY-07 report. State needs to look into it and ensure that it is being reflected in the ratio of 60:40.
- 5 works are pending for financial closure for more than 180 days. State needs to expedite the financial closure of these works on priority.

The State was asked to furnish the compliance report on the observations of the Pre-Empowered Committee urgently so that the proposal could be placed before the Empowered Committee at the earliest.

Meeting ended with Vote of Thanks to and from the chair.

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