

**GOVERNMENT OF MEGHALAYA  
PUBLIC WORKS (ROADS & BUILDINGS ) DEPARTMENT  
WORKS BRANCH**

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**ORDERS BY THE GOVERNOR**

**NOTIFICATION**

Dated: Shillong the 26<sup>th</sup> July 2017.

*No.PW/WR/234/2014/86*:- The Governor of Meghalaya is pleased to notify the Meghalaya Road Maintenance Policy 2017 which will remain in operation till such time as the State Government may consider fit and proper. The Government also reserves the right to make any amendment to the Policy & Rules from time to time as deem fit.

**Short title and commencement:-**

- (1) These rules may be called the "Meghalaya Road Maintenance Policy 2017".
- (2) They shall come into force from the date of the notification in the Gazette.

**1. INTRODUCTION**

This is a policy laying a clear guideline for maintenance management of all categories of State roads which have been created through a huge cost of State and Central resources in Meghalaya in a systematic manner in order to ensure the sustainability of these assets and to provide traffic worthy road connectivity to all parts of the state. Adequate and regular maintenance of this network will prevent the steep decline of its asset value. In order to achieve this a sound policy framework for the maintenance management of this road network by timely planning and establishing sets of implementation procedures supported by adequate funding is essential.



## **2. OBJECTIVE**

It is the objective of the Government to provide safe access to all types of vehicular traffic plying on the road to the satisfaction of road users. To meet this objective it is necessary to carry out regular and timely maintenance operations on all categories of road in the state by providing adequate funds every year. Appropriate maintenance requirement of each road will be assessed by conducting Road Condition Survey of the whole road network in a given format, which will be reflected in the Annual Road Maintenance Plan for the entire state. Rehabilitation of failed road sections will be done according to a priority plan which should ensure maintenance of connectivity to all parts of the state.

## **3. EMPOWERED COMMITTEE FOR MONITORING**

To achieve the objective, a high level Empowered Committee headed by the Additional Chief Secretary (PWD)/Principal Secretary (PWD) with senior level officers from the Department of Planning and Finance, the Secretary(PWD) as Member Secretary, the Chief Engineer PWD (Roads), Empowered Officer PMGSY, SRRDA, Joint Secretary(PWD), Additional CE PWD (Roads) (Eastern Zone) and Additional CE PWD (Roads) (Western Zone), Tura as member will be constituted. The Empowered Committee will be assisted by one full time Executive Engineer (Planning)/EE & Nodal officer, PMGSY SRRDA and one Assistant Executive Engineer(Planning)/one Assistant Executive Engineer PMGSY, SRRDA.

The Empowered Committee will have the overall responsibilities for monitoring the allocation and management of fund provided by the State under Non-plan head, by Finance Commission and from any other source.

## **4. ROAD MAINTENANCE MANAGEMENT**

a) The Inventory, Condition Survey and Traffic Survey of all roads under each category will be mandatorily carried out by every PWD(Roads)Divisions/PIUs for PMGSY works within its jurisdiction. The data for all these inputs will be recorded in Electronic Database and updated every year. All the divisions will forward these updated computerized data to the PWD Headquarters (Planning)/SRRDA which will in turn be preserved in the Centralized Data Bank to be created for maintenance of all documents. All information, such as, the name of the road, category of the road, length of the road, formation width of the road with all its components, type of pavement surface (bituminous, concrete or unsealed surface), approximate cost of construction/reconstruction of the road, engineering properties of the subgrade soil, right of way, the inventory of bridges, culverts and drainage structures, the month and year of construction/reconstruction of the road, present condition of the road based on Road Condition Survey and evaluation of its Present Condition Index, the traffic density of the road showing the classification of traffic as per Traffic Survey, will be preserved in the data bank.





b) All PWD(Roads) Divisions maintaining all categories of roads and the PIUs/DPIUs maintaining completed PMGSY roads headed by the Executive Engineers (EEs) will commence Road Condition Surveys for all roads under their jurisdiction every year after cessation of monsoon in October and complete it by 10<sup>th</sup> November. The computerized data from the above surveys will be uploaded in Road Maintenance Management System and forwarded to PWD (Roads) Headquarters (Planning) for all other roads and SRRDA Headquarters for PMGSY roads by the last week of November and at the same time the Divisions/PIUs/DPIUs will work out their Annual Road Maintenance Plan(ARMP) with the provision of Emergency Maintenance and the same to be submitted by the PWD (Roads) Divisions to the Superintending Engineer(SEs) and on the PIUs/DPIUs to the District Project Co-ordinators (DPCs). The SEs/DPCs will compile all the ARMPs under their respective jurisdictions and, if necessary, they will conduct field verification and submit the same to the Chief Engineer PWD (Roads)/Empowered Officer (EO) PMGSY, SRRDA as the case may be within 20<sup>th</sup> December. The CE (Roads)/EO PMGSY, SRRDA, after getting inputs from all the SEs/DPCs will finalize the priority list of ARMP for all roads of the State and submit the same to the Empowered Committee along with a consolidated demand for funds by 15<sup>th</sup> January. The Empowered Committee will approve the ARMP by 31<sup>st</sup> January and take up the matter with the Department of Finance of the State for budget allocation. The CE(Roads)/EO PMGSY, SRRDA will disseminate the approved ARMP to the concerned SEs/DPCs by the 1<sup>st</sup> week of February and the SEs/DPCs will forward the same to the concerned Divisions/PIUs/DPIUs by 15<sup>th</sup> of February.

c) All the Divisions/PIUs/DPIUs shall initiate action for preparing estimates, getting Technical Sanction of the same from the Appropriate Authority and invitation of bids for the approved works under ARMP and simultaneously, if any substitution is required regarding Periodical Renewal on field verification, the Divisions/PIUs/DPIUs will propose the same with full justification and get it approved by the CE (Roads)/EO PMGSY, SRRDA through the SEs/DPCs by end of February. After completion of the bidding procedure, the works should be awarded to the agencies by 5<sup>th</sup> April and the execution of works will start from 15<sup>th</sup> April.

d) Budget Allocation and Placement of Funds - The funds required for the above approved ARMP will be placed by CE (Roads)/EO PMGSY, SRRDA to the Empowered Committee for subsequent submission to the Department of Finance of the State for budget allocation and the management/monitoring of the allocated fund. Placement of the same to CE (Roads)/EO PMGSY, SRRDA will be done by the Empowered Committee.



## 5. ASSET MANAGEMENT SYSTEM

A simplified Asset Management System will be evolved by the state for its road network based on the regular collection of data, like Inventory and Condition Survey of roads by the PWD(R)/ SRRDA and analysis of the same. The AMS will enable maximizing the benefits of available fund under budget allocation covering the maintenance requirements of pavement, drainage, culvert, bridges, road-signs, pavement marking, crash barriers, retaining and breast walls, other traffic control and safety devices. A committee comprising of CE PWD(R), EO PMGSY, SRRDA, one SE and one EE both from PWD(R) and SRRDA will be constituted by the Empowered Committee for this purpose to work out the AMS by analyzing the above data and visual inspection of the sample roads of each category. The committee will recommend prioritization of maintenance interventions on the road network and assess the deterioration of roads to enable optimum fund management and to decide on mobilisation of additional funds so as to avoid the need of much higher investments later in rehabilitation and reconstruction. The output of the AMS would be:

- a) Road Inventory.
- b) Road network condition/ pavement condition index.
- c) Need based priorities based on deterioration prediction models.
- d) Annual Road Maintenance Plan for a given budget.
- e) Impact on deterioration of roads for which funds are not allocated.
- f) Feedback received from the Road Users Survey.

The report on the AMS will be submitted to the Empowered Committee every year by 15<sup>th</sup> April after allocation of the budget by the Finance Department along with the inputs of SEs/DPCs regarding the ARMP for the previous financial year under their jurisdiction.

## 6. PRIORITIZATION OF MAINTENANCE OPERATIONS

The prioritization of maintenance operations will be fixed as under.

- a) Routine Maintenance
  - b) Periodic Maintenance
  - c) Emergency Maintenance
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- a) Routine Maintenance - The routine maintenance for On & Off- Carriageway will be done for all roads every year and even on newly constructed roads from Day-1 after completion of Defect Liability Period(DLP) except the roads which are due for Periodical Maintenance and Rehabilitation.





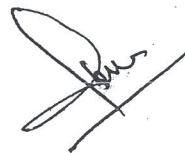
b) Periodical Maintenance (Renewals) - The broad guidelines for the type and periodicity of renewals may be utilized for working out the requirement of funds in the ARMP.

| Class of Road                            | Lane Width     | Type of renewal and periodicity of renewal treatment. |             |              |
|------------------------------------------|----------------|-------------------------------------------------------|-------------|--------------|
|                                          |                | Traffic(Commercial vehicle per day)                   |             |              |
|                                          |                | Less than 450                                         | 450 to 1500 | 1500 & above |
| State Highways and Major District Roads. | Single         | PC & SC/6                                             | PC & SC/5   | PC & SC/4    |
| State Highways and Major District Roads. | Double or more | PC & SC/6                                             | PC & SC/5   | PC & SC/4    |
| Rural Roads and Urban Roads              | Any            | PC & SC/6                                             | PC & SC/5   | PC & SC/4    |

Notes:

- i. PC & SC denotes Premixed Carpet (20 mm thick) and Seal Coat (6mm thick).
- ii. The denominator refers to periodicity of renewals in years.
- iii. Being a hill state with high rainfall in several areas, the periodicity of renewal may be at closer intervals based on the actual condition of the road in each case. The periodicity of renewal indicated above are for general guidelines for preparation of the ARMP.
- iv. Photographs of the pavement with shoulders at regular interval (100m) and the drainage structures, where applicable, will be taken before and after execution of the renewal work.
- v. The DLP for renewal will be 1(one) year from the date of opening the road to traffic after completion of work.
- vi. After completion of DLP, routine maintenance operation will be taken up on the road till it is due for next renewal/rehabilitation.

c) Emergency Maintenance - Emergency Maintenance will be taken up immediately for restoration in case of occasional and unforeseen events such as landslides, washouts, broken drainage structures and cleaning debris on the road to keep the road open. Special repairs, flood damage repairs of roads will fall under this category of maintenance. Provision of emergency maintenance will be included in the ARMP considering the records of such maintenance/restoration in the previous 5(five) years.



## 7. ANNUAL PERFORMANCE EVALUATION AND REPORTING SYSTEM

The PWD(R) Divisions/PIUs under SRRDA will prepare performance reports on use of maintenance fund made available to them. This will include the utilization of funds for the key performance indicators as given below.

- a) Percentage of each category of road subjected to Routine Maintenance and fund utilized for the same.
- b) Percentage of each category of road subjected to Periodic Maintenance and fund utilized for the same.
- c) Percentage of each category of road subjected to Emergency Maintenance and fund utilized for the same.
- d) Unit cost per Km of Routine Maintenance and Periodic Maintenance.
- e) Percentage of maintenance fund utilized for:
  - i) Routine Maintenance
  - ii) Periodic Maintenance
  - iii) Emergency Maintenance
- f) Asset/Replacement value of each category of road at the end of financial year i.e. 31<sup>st</sup> March.

After compilation of the above information, each PWD(R) Divisions/PIUs will forward the same electronically to their respective SEs/DPCs by end of April, which will in turn be submitted to the CE PWD(R)/EO PMGSY SRRDA, by 15<sup>th</sup> of May. The CE PWD(R)/EO PMGSY SRRDA will submit a consolidated report to the Empowered Committee by end of May for review and records.

**8. REHABILITATION** - The reconstruction of failed road sections which have undergone total disrepair and are unfit for movement of traffic will be taken up as per their priority considering the importance of the road and the connectivity served by the same. Such works will fall under the category of **Plan Work**. A separate assessment of such requirements for each category of road will be made by the road agency and based on this assessment a time bound programme for taking up all works in a phased manner over 4(four) years will be formulated to rehabilitate all those failed road sections depending upon the priority and availability of funds. Digitized with coordinates, photographs of the pavement with shoulders at regular intervals (50m) and the Bridge, Culvert and Drainage Structures where applicable to be taken before and after the work. The DLP for such work will be 2(two) years from the date of opening the road to traffic after completion of work. After the DLP, the road will undergo routine and periodic maintenance as per requirements of ARMP.





## **9. MONITORING OF WORKS, RECORDS, PROGRESS REPORT & REVIEW**

- a) The Chief Engineer PWD(Roads)/Empowered officer, PMGSY SRRDA will hold the overall responsibility for implementation of ARMP. Delegation of powers regarding Planning, Procurement, Execution and Monitoring of ARMP to be bestowed upon the CE PWD (Roads)/EO PMGSY, SRRDA, to enable him to discharge his duties.
- b) The CE PWD (Roads)/EO PMGSY, SRRDA assisted by EE (Planning)/EE & Nodal Officer PMGSY, SRRDA and others shall prepare quarterly progress report, Division-wise sanction of fund for all maintenance works for the quarter ending, June, September, December and March every year and such report shall reach the Empowered Committee for their review within 20(twenty) days from the date of each quarter ending. Further, the CE PWD (Roads)/EO PMGSY, SRRDA shall keep records of completion reports of maintenance works included in ARMP.
- c) The CE PWD (Roads)/EO PMGSY, SRRDA will keep the accounts and records of work and get them audited by the State Audit & Accounts Dept in their format and the same to be furnished to the Government not later than September of the subsequent year.
- d) The Empowered Committee will convene meetings from time to time to review the physical progress as well as expenditure incurred on works.

## **10. QUALITY MANAGEMENT**

- a) PWD(Roads)/SRRDA shall prescribe procedures for testing and evaluation of quality of various road materials, machineries, tools and plants, techniques involved in road maintenance, quality testing in progress and finished work as appropriate. PWD(Roads)/SRRDA shall also specify practices or set up necessary testing facilities in the field divisions to ensure that the specifications laid down in bid documents are strictly adhered to during execution of works.
- b) PWD(Roads)/SRRDA shall enable capacity building of its engineers, staff and other human resources in modern techniques, project implementation, monitoring, supervision, quality testing and operational practices.

## **11. TRAINING OF PERSONNEL UNDER PWD(R)DIVISIONS/PIUs UNDER SRRDA**

A dedicated Training Cell under Chief Engineer PWD(Standard) will be tasked to prepare Training Plan and calendar of yearly Training Programme for all the Engineers, Field Staff and other Human Resources under PWD(R) Divisions/PIUs for efficient delivery of maintenance programme in the State. The Training Plan will include the following areas:



- a) Preparation of Inventory and undertaking Condition Survey of roads, bridges, drainage structures and Traffic-Survey on roads.
- b) Prioritization of maintenance operations based on the above inputs to work out Annual Road Maintenance plan.
- c) Managing the procurement process and efficient supervision of work done by the contractor.
- d) Quality Control Tests at site of work.
- e) To be conversant with the codes, practices and guidelines formulated by Ministry of Rural Development, Government of India, for technology initiatives in maintenance of rural roads which can equally be utilized for SHs and MDRs.
- f) Capacity building in technological developments regarding maintenance of roads.
- g) Financial management of the maintenance operations within the allocated fund.

## **12. TRAINING OF THE CONTRACTORS AND THEIR PERSONNEL**

For efficient implementation of the road maintenance programme, the skill development of contractors and their site engineers, supervisory staff, construction workers and equipment operators is also imperative. CE PWD(Standard) will formulate necessary Training Plan in this regard after discussion with the Association of the Contractors registered with PWD.

## **13. ROAD USERS SURVEY**

The PWD(R)/SRRDA shall organize road user surveys once in a year as per directives of the Empowered Committee to assess level of satisfaction of the road users in a format evolved as per Asset Management System and the feedback received from the road users shall be taken into account in improving the performance of maintenance of the road network and placed to the Empowered Committee for consideration.

## **14. ENVIRONMENTAL SUSTAINABILITY**

In development, maintenance of road works under ARMP or any other scheme in rural and urban areas, the department and the executing agencies shall make best possible efforts to implement those technologies which are environmental friendly, have low carbon footprint and provide smooth access to all sections of society, including the disabled persons and maintenance workers in a safe manner.





## **15. ROAD MAINTENANCE FUND**

The allocation of fund for maintenance of the all category of roads except National Highways in Meghalaya may consist all or any of the following sources.

- a) Fund allotted from Consolidated Fund of the State under the Non-Plan Head 3054 or any other Head as may be decided by the Government.
- b) Fund allotted from Central Road Fund(CRF) for maintenance of State Highways and Major District Roads.
- c) Fund allotted by the Finance Commission, Government of India, for maintenance of State Roads.
- d) Fund allotted under Development of North Eastern Region(DONER) schemes for improvement of road network by Ministry of Development of North Eastern Region, Government of India.
- e) Any other sum or grant, aid, donation, gift, subscription, loan and taxes as may be imposed and utilized for the purpose of road maintenance as per decision of the Government.

## **16. MANAGEMENT OF THE FUND**

The monitoring, allocation and management of fund provided by the State under Non-Plan Head, by Finance Commission and from any other source, shall be done by the Empowered Committee in accordance with the Government rules.

## **17. UTILIZATION OF THE FUND**

The fund shall be utilized for:

- a) As per ARMP, maintenance of State Highways, Major District Roads, Rural Roads, completed PMGSY roads and Urban roads, which are within the jurisdiction of State PWD(Roads) and SRRDA.
- b) Emergency maintenance works on all State Roads, in case it is not covered under ARMP, but authorization/intimation has been given to PWD(R)/SRRDA by Empowered Committee to take up such works.
- c) Making payment to the consultant and/or experts, authorized by the Empowered Committee, for providing advice and assistance in connection with maintenance of State Roads
- d) Incurring authorized expenditure on equipments associated with the execution of works and road safety infrastructure.



e) Expenditure on research, education and training authorized by the Empowered Committee.

f) Making any other expenditure related to road maintenance authorized by the Empowered Committee.

### **18. INTERPRETATION**

In case of any confusion/ dispute or modification regarding implementation of the above rules, the same shall be referred to the Government for its decision; which shall be final and binding to all concerned.

### **19. DEFINITIONS :-**

i) "State" means the whole of Meghalaya State.

ii) "Expressways" - The function of expressways is to cater for movement of heavy volumes of motor traffic at high speeds. They connect major points of traffic generation and are intended to serve trips of medium and long length between large industrial areas, industrial or commercial concentrations, and the central business district. They are divided highways with high standards of geometrics and full or partial control of access and provided generally with grade separation at intersections. Parking, loading and unloading of goods and passengers and pedestrian traffic are not permitted on these highways.

iii) "National Highways(NHs)" - These are main highways running through the length and breadth of the country connecting major ports, highways of neighbouring countries, state capitals, large industrial and tourist centres, etc.

iv) "State Highways(SHs)" - These are arterial routes of a state linking district headquarters and important cities within the state and connecting them with National Highways of the neighboring states.

v) "Major District Roads(MDRs)" - These are important roads within a district serving areas of production and markets, and connecting these with each other or with the main highways

vi) "Other District Roads(ODRs)" - These are roads serving rural areas of production and providing them with outlet to market centres, taluka/tehsill headquarters, block development headquarters or other main roads.

vii) "Village Roads(VRs)" - These are roads connecting villages or group of villages with each other and to the nearest road of a higher category.

viii) "Rural Roads" - These roads cover and include the category of 'Other District Roads' and 'Village Roads'.





ix) "Urban Roads" - This system of streets, along with expressways where they exist, serves as the principal network for through traffic flows. Significant intra-urban travel, such as, between central business district and outlying residential areas or between major suburban centres takes place in this system.

x) "Core-network of roads" - This term denotes the network of roads that connects the habitations above a particular population level particularly in the rural areas of the state.

xi) "Maintenance of roads" - This implies to the routine work performed to upkeep pavement, shoulders and other facilities provided to the road users as nearly as possible in their constructed condition under normal condition of traffic and forces of nature. The maintenance of roads may be classified into the following categories:-

a) "Routine Maintenance" - The work items to be carried out on regular basis as a routine work during the year to upkeep pavement, shoulders, drainage and other facilities within the road reserve to an adequate serviceable condition.

b) "Periodical Maintenance" - This is more extensive maintenance of the road like providing a surface layer/bituminous overlays over pavement typically carried out after a period of 5 to 10 years depending upon traffic levels, pavement type, geographical and climatic condition. Strengthening of pavement and major repairs to drainage structures also fall under this category of maintenance.

c) "Emergency Maintenance" - Emergency maintenance responds to occasional, unforeseen events such as landslides, washouts, broken drainage structures and cleaning large trees or debris on the road to keep the road open. Special Repairs, Flood Damage Repairs will fall under this category of maintenance.

xii) "Rehabilitation" - It means reconstruction of the failed road sections which have undergone total disrepair and are unfit for movement of traffic.

xiii) "Annual Road Maintenance Plan" - Preparation of a yearly plan covering the maintenance requirement of all roads under the jurisdiction of the Department/agency based on condition survey of the road.

xiv) "Road Inventory Survey" - This survey is conducted on a particular road to get the detailed information on its assets including the geometry, type of construction, structures, signage's etc.



xv) "Road Condition Survey" - This survey is conducted on a particular road in each kilometre length in a given format to get the detailed information on its present condition of On and Off Carriageway and structures, including any type of defects.

xvi) "Pavement Condition Index(PCI)" - It is a numerical index used to indicate the condition of a pavement and also a statistical measure which requires manual/ mechanical survey of the pavement.

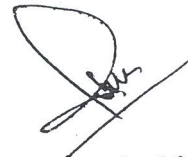
xvii) "Road Maintenance Management" - It is planning, funding, executing and monitoring of road maintenance through systematic approaches.

xviii) "Development of North Eastern Region(DONER)" - Funds are allocated to North Eastern States for improvement of road net work by the Ministry of Development of North Eastern Region, Government of India.

xix) "PMGSY" - Pradhan Mantri Gram Sadak Yojna is a sponsored scheme for all States of India under Ministry of Rural Development, Government of India, to provide all weather single lane road connectivity to all unconnected eligible habitations in the rural areas of the country.

xx) "SRRDA" - State Rural Roads Development Agency having its Headquarters adjacent to the PWD-Headquarters at Shillong for management, execution and monitoring of PMGSY works in the State under the control of Empowered Officer PMGSY, SRRDA, Meghalaya.

xxi) "PIUs" - Project Implementation Units are the Field Divisions for execution of PMGSY works in the State of Meghalaya under the control of SRRDA.



(Shri. B Kharbuli)

Secretary to the Government of Meghalaya,  
Public Works Roads & Buildings) Department



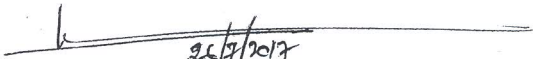
Memo. NO. PW/WR/234/2014/86-A,

Dated Shillong, the 26th July 2017.

Copy to :-

1. The Director of Printing and Stationery, Shillong, for favour of publication of the Notification in the Gazette.
2. The Accountant General (A&E) Meghalaya M.G.2 Shillong-793001 for information and necessary action.
3. The Private Secretary to the Chief Minister, Government of Meghalaya for favour of information of the Chief Minister.
4. The Private Secretary to the Minister in charge P.W.D (Roads), Government of Meghalaya for favour of information of the Minister.
5. The Private Secretary to the Chief Secretary, Government of Meghalaya for favour of information of the Chief Secretary.
6. The Private Secretary to the Additional Chief Secretary in charge P.W.D, Government of Meghalaya for favour of information of the Additional Chief Secretary.
7. Cabinet Affairs Department consulted I/D.
8. Law (A) Department for information consulted I/D.
9. Planning Department for information consulted I/D.
10. Finance (E) Department for information consulted I/D.
11. Programme Implementation & Evaluation Department for information.
12. All Heads of Administrative Departments.
13. ~~The Chief Engineer: P.W.D.(Roads)/ P.W.D. (National Highways)/ P.W.D. (Standard)/ P.W.D.( Buildings).~~
14. All Branches of P.W.D Secretariat.

By Order Etc.,

  
26/7/2017  
Under Secretary (Works) to the Govt. of Meghalaya,  
Public Works(R&B) Department, Shillong.

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