



ABSTRACT

Announcement – Hon'ble Chief Minister's Announcement under Rule 110 in the Floor of the Tamil Nadu Legislative Assembly - Schemes- State Scheme- Tamil Nadu Rural Roads Improvement Scheme(TNRRIS) – Implementation of the scheme during 2016-17 - Orders - Issued.

Rural Development and Panchayat Raj (SGS.II) Department

G.O. (Ms) No.96

Dated:29.08.2016

Read :

1. G.O.(Ms).No.81, Rural Development and Panchayat Raj (SGS.II) Department dated. 24.5.2015.
2. G.O.(Ms) No.93, Rural Development and Panchayat Raj (SGS-II) Department dated.23.06.2015.
3. From the Director of Rural Development and Panchayat Raj Letter No.30327/2016/TU1, dated 2.7.2016.
4. Announcement made by the Hon'ble Chief Minister under Rule 110 in the floor of Tamil Nadu Legislative Assembly on 29.08.2016.

ORDER:

The Hon'ble Chief Minister has made the following announcement under Rule 110 of the Tamil Nadu Legislative Assembly on 29.08.2016 as follows:

“2015-16-ஆம் ஆண்டில், முதல் முறையாக, “தமிழ்நாடு ஊரகச் சாலைகள் மேம்பாட்டுத் திட்டம்” என்ற புதிய திட்டம், 800 கோடி ரூபாய் நிதி ஒதுக்கீட்டில் செயல்படுத்தப்பட்டது. கிராம ஊராட்சிகளில் மண் சாலைகளை தார்ச் சாலைகளாக மேம்படுத்தவும், சேதமடைந்த தார்ச் சாலைகளை வலுப்படுத்தவும் மற்றும் சிறு பழுதடைந்த தார்ச் சாலைகளை புதுப்பித்து பராமரிக்கவும் இந்த திட்டம் செயல்படுத்தப்பட்டது.

இந்த ஆண்டில், 900 கிலோ மீட்டர் நீளமுள்ள மண் சாலைகள் தார்ச் சாலைகளாக மேம்படுத்தப்படும். அதிக அளவில் சேதமடைந்த 1,400 கிலோ மீட்டர் நீளமுள்ள தார்ச்சாலைகள் சீரமைக்கப்படும்; 1,200 கிலோ மீட்டர் நீளமுள்ள சிறு பழுதடைந்த தார்ச்சாலைகள் புதுப்பிக்கப்படும்.

இவை அனைத்தும் 800 கோடி ரூபாய் மதிப்பீட்டில் செயல்படுத்தப்படும். இதன் மூலம், விவசாயப் பெருங்குடி மக்கள் தங்களது விளைபொருட்களை எளிதில் சந்தைப்படுத்தவும், கிராமப்புற பொருளாதாரம் மேம்பாடு அடையவும் வழிவகுக்கும்.”

In the Government Orders 1st and 2nd read above, orders have been issued for the introduction of New Comprehensive scheme called **Tamil Nadu Rural Roads Improvement Scheme (TNRRIS)** for the comprehensive improvement of the rural roads with an overall allocation of Rs.800 crore and approving the guidelines for the said scheme.

2. The Director of Rural Development and Panchayat Raj in the letter third read above, has stated that, the Government had already announced that “Every village with a population of more than 500 will have a black topped road and other habitations will have an all-weather road”. **The objective of the Government is to ensure access to the remotest regions and far flung areas through all weather roads.**

Rural Road Network

The status and condition of the Panchayat Union and Village Panchayat roads is the basis for planning of any road improvement scheme. Hence, the Rural Development and Panchayat Raj department updated the list of Village Panchayat and Panchayat Union roads and each Village Panchayat and Panchayat Union road was assigned a unique ‘Road Code’. The details of Bus plying roads were identified and listed out and each bus plying road was assigned an unique “Bus Route Code”. An online road register was created in the website tnrd.gov.in.

3. The surface details of the Village Panchayat and Panchayat Union roads in the State are as given below:

Sl. No	Type of Surface	Village Panchayat Road	Panchayat Union Road	Total
		Length in ‘Km’		
1	Black topped	66,727	29,189	95,916
2	Cement concrete	2,633	274	2,907
3	Double layer WBM	2,148	244	2,392
4	Single Layer WBM	7,249	514	7,763
5	Gravel	5,947	266	6,213
6	Earthen	31,254	1,098	32,352
	Total	1,15,958	31,585	1,47,543

The rural road network consists of roads with various surface types. About 60% of the roads are surfaced and 40% are unsurfaced roads. Hence, the department shall have to continue to adopt its multi-pronged approach towards improvement of rural roads as given below:

- i. Upgradation of Non-BT roads into BT roads**
- ii. Strengthening of the existing damaged BT roads**
- iii. Maintenance of the existing BT roads**

Prioritisation of roads

Considering the importance of optimal use of funds, the department has been prioritizing the roads based on the following criteria.

- (i) Roads connecting unconnected habitations, irrespective of the population, are given first priority.
- (ii) Next Priority is given for upgrading and strengthening of bus-plying and minibuses-plying roads.
- (iii) Important link roads connecting market places, Educational/Health Services and roads which have good utility value are then selected.

Need

As already indicated, the existing road schemes like RIS, RRMS, and BPRIS etc have been discontinued. There are no grants for Maintenance of Roads and Bridges under 14th Finance Commission. Hence, in order to sustain the momentum of the last 5 years towards the improvement of rural roads, it is imperative to continue the implementation of TNRRIS during 2016-17 with a similar outlay of Rs.800 crore.

4. The Director of Rural Development and Panchayat Raj has further proposed certain changes in the TNRRIS guidelines for the year 2016-17 and he has also stated that the proposed changes have been incorporated in the draft guidelines and requested the Government to issue necessary orders on the following items:

- (i) For the implementation of **Tamil Nadu Rural Roads Improvement Scheme (TNRRIS)** 2016-17 with an overall outlay of Rs.800 crore, and also to approve the draft guidelines for the same.
- (ii) Permitting allocation of 50% of the funds to the Districts based on population and the remaining 50%, based on the length of road network in the District. The District-wise allocation of funds is given in Annexure-I

(iii) To permit provision of an increment of 20% for The Nilgiris District over and above the apportioning indicated in (ii) above which shall be met from the overall savings/interest under the scheme.

(iv) According permission for taking the road works in three streams:

- a. **Stream-I:** Upgradation of the Non-BT roads to BT standards
- b. **Stream-II:** Strengthening of Existing damaged BT roads
- c. **Stream-III:** Maintenance of Existing damaged BT roads which require renewal.

From out of the total allocation to a district, atleast 25% of the funds allocated shall be earmarked for each of the three streams. Out of the total allocation to a district, atleast 25% of funds shall be allocated to Bus-Plying roads cumulatively under all the three streams.

(v) To provide financial sanction for meeting Rs.800 crore from out of the State Finance Commission grants devolution to the Rural local bodies, authorizing the Director of Rural Development and Panchayat Raj to draw the amount of Rs.800 crore from the State Finance Commission Grants in the ratio of 60:32:8 from the share of Village Panchayats, Panchayat unions and District Panchayats respectively.

(vi) To authorize the Director of Rural Development and Panchayat Raj to permit roads with less than 1Km length based on the specific recommendation of the concerned District Collector.

(vii) Each District shall propose at least one road by adopting any of the alternate technologies approved by Indian Roads Congress (IRC).

(viii) Authorizing the Director of Rural Development and Panchayat Raj, to permit inter-component flexibility for allocation of funds, on a case by case basis, based on the specific request of the District Collectors with proper justifications, under intimation to the Government.

5. The Government after careful examination of the proposal of Director of Rural Development and Panchayat Raj and decided to accept the same. Accordingly, the Government issue the following orders:-

- (i) For the implementation of **Tamil Nadu Rural Roads Improvement Scheme (TNRRIS)** 2016-17 with an overall outlay of Rs.800 crore.
- (ii) Permitting allocation of 50% of the funds to the Districts based on population and the remaining 50%, based on the length of road network in the District. The District-wise allocation of funds is given in Annexure-I.
- (iii) To permit provision of an increment of 20% for The Nilgiris District over and above the apportioning indicated in (ii) above which shall be met from the overall savings/interest under the scheme.
- (iv) According permission for taking the road works in three streams:
 - a. **Stream-I:** Upgradation of the Non-BT roads to BT standards
 - b. **Stream-II:** Strengthening of Existing damaged BT roads
 - c. **Stream-III:** Maintenance of Existing damaged BT roads which require renewal.

From out of the total allocation to a district, atleast 25% of the funds allocated shall be earmarked for each of the three streams. Out of the total allocation to a district, atleast 25% of funds shall be allocated to Bus-Plying roads cumulatively under all the three streams.
- (v) To provide financial sanction for meeting Rs.800 crore from out of the State Finance Commission grants devolution to the Rural local bodies, authorizing the Director of Rural Development and Panchayat Raj to draw the amount of Rs.800 crore from the State Finance Commission Grants in the ratio of 60:32:8 from the share of Village Panchayats, Panchayat unions and District Panchayats respectively.
- (vi) To authorize the Director of Rural Development and Panchayat Raj to permit roads with less than 1Km length based on the specific recommendation of the concerned District Collector.
- (vii) Each District shall propose at least one road by adopting any of the alternate technologies approved by Indian Roads Congress (IRC).

ANNEXURE-I

G.O.(Ms) No.96, Rural Development and Panchayat Raj
(SGS-II)Department Dated:29.08.2016

TNRRIS-2016-17-Districtwise allocation of fund

Sl. No.	District	50% Based on the Population (Rs.in Crores)	50% Based on the Road network (Rs.in Crores)	Total allocation (Rs.in Crores)
1	Kancheepuram	18.39	7.87	26.26
2	Tiruvallur	15.66	11.37	27.03
3	Cuddalore	17.79	15.13	32.92
4	Viluppuram	28.78	21.64	50.42
5	Vellore	24.53	16.11	40.64
6	Tiruvannamalai	20.15	14.83	34.98
7	Salem	19.34	21.99	41.33
8	Namakkal	10.75	15.18	25.93
9	Dharmapuri	12.75	12.42	25.17
10	Krishnagiri	14.48	12.42	26.90
11	Erode	11.17	12.53	23.70
12	Tiruppur	11.26	17.39	28.65
13	Coimbatore	10.09	10.11	20.20
14	The Nilgiris	3.07	2.75	5.82
15	Thanjavur	16.48	22.03	38.51
16	Nagapattinam	12.46	14.95	27.41
17	Thiruvarur	9.94	18.46	28.40
18	Tiruchirappalli	14.54	16.59	31.13
19	Karur	6.60	12.50	19.10
20	Perambalur	4.62	5.27	9.89
21	Ariyalur	6.63	8.72	15.35
22	Pudukkottai	13.25	25.02	38.27
23	Madurai	12.85	6.96	19.81
24	Theni	5.68	4.50	10.18

25	Dindigul	14.40	15.53	29.93
26	Ramanathapuram	9.97	12.24	22.21
27	Virudhunagar	12.71	7.58	20.29
28	Sivaganga	9.41	13.88	23.29
29	Tirunelveli	16.26	11.67	27.93
30	Thoothukkudi	9.60	7.84	17.44
31	Kanniyakumari	6.39	4.52	10.91
Total		400.00	400.00	800.00

HANS RAJ VERMA,
PRINCIPAL SECRETARY TO GOVERNMENT.

//True Copy//

S. Vijayan
Section Officer. 24.8.16

29/8/16

ANNEXURE-II

G.O.(Ms) No.96, Rural Development and Panchayat Raj
(SGS-II)Department Dated:29.08.2016

Guidelines for Tamil Nadu Rural Roads Improvement Scheme (TNRRIS) 2016-17

1. Introduction

The rural road network in Tamil Nadu has been witnessing phenomenal growth in recent years. In the last 5 years, about 45,000 Km length of roads have been added to the rural road network accounting for nearly 43% increase. Due to the addition of new roads, there is an urgent need to balance allocation of funds between new roads and existing roads. Moreover, the characteristics of the rural road network vary from district to district and block to block. Considering this the Government introduced an omnibus scheme called the Tamil Nadu Rural Roads Improvement Scheme (TNRRIS) during 2015-16 which provided scope for multi-component funding for various road conditions through a single window. The Government intends to continue this approach, which provides flexibility in the selection of roads to the District and Block level agencies, through the implementation of **Tamil Nadu Rural Roads Improvement Scheme (TNRRIS) - 2016-17**.

2. Objective

The objective of the scheme is to ensure optimal allocation of funds to all the Districts for Upgradation, Strengthening and Maintenance of Panchayat Union and Village Panchayat roads.

3. Allocation of Funds

Out of the total allocation of Rs.800 crore, 50% shall be allocated to the Districts based on population of the District and the remaining 50% based on the length of rural road network in the District.

In the case of The Nilgiris district an increment of 20% will be provided over and above the apportioning indicated above. This shall be within the overall allocation of Rs.800 crore.

4. Components of TNRRIS

Tamil Nadu Rural Roads Improvement Scheme (TNRRIS) will be implemented in three streams.

- a) **Under Stream-I:** Upgradation of the Non-BT roads to BT standards
- b) **Under Stream-II:** Strengthening of Existing damaged roads
- c) **Under Stream-III:** Maintenance of Existing damaged BT roads which require renewal

From out of the total allocation to a district, atleast 25% of the funds allocated shall be earmarked for each of the three streams. Out of the total allocation to a district, atleast

25% of the funds, shall be allocated to Bus-Plying roads cumulatively under all the three streams.

Type of Works

i) Stream-I

Upgradation of Non-BT roads to BT standard

- Under Stream-I, Earthen, Gravel and WBM roads of the Panchayat unions and Village Panchayats should be taken up for upgradation as Black Topped roads.

ii) Stream-II

Strengthening of existing Damaged BT roads

- Under Stream-II, existing, damaged BT roads with a pavement condition Index (PCI) value of 2 and below only should be selected.
- Damaged BT roads, requiring one or more layers of WBM + BT alone should be proposed under this scheme.

iii) Stream-III

Maintenance of existing Damaged BT roads

- Damaged BT Roads, which require periodic Maintenance/Renewal, should be selected.
- Worn out BT roads, requiring pothole filling/patch work and relaying of BT surface alone should be proposed under this scheme.
(In case if a portion of a road is in good condition or has been improved / maintained recently then that portion of the road should not be proposed)

6. Prioritisation and selection of works (common for all the Streams)

- Roads connecting unconnected habitations, irrespective of the size of population, should be given first priority.
- Next Priority should be given for upgradation of non-Black Topped bus-plying and mini-bus plying roads.
- Important link roads connecting market places, Educational/Health Services and roads leading to other utility services.
- Roads connecting two National Highways or State highways or Major District Roads or a combination of the above or Roads leading to National Highways or State Highways or Major District Roads.
- The entire stretch of a road should be taken up for improvement irrespective of the length. Roads with a length of less than 1 Km should not be taken up. If the funds allocated under this scheme are not adequate enough to cover the entire length of the road, funds may be dovetailed from other Rural Development Schemes to take up the entire stretch while according Administrative Sanction. *(In exceptional cases where the length of the road is less than 1 Km, specific clearance shall be obtained from the Director*

of Rural Development based on the recommendations of the respective District Collector)

- (vi) The roads should be selected only from the list of updated Village Panchayat and Panchayat Union roads which are available in the *tnrd.gov.in* website, and roads without the 'road code' are not permitted to be taken up under this scheme.
- (vii) In cases where only a portion of a long stretch of road is damaged, then only such damaged portion should be selected.
- (viii) Roads already proposed under other schemes should not be proposed under TNRRIS.
- (ix) Roads passing through/on PWD Channel, other water bodies like ooranies, Kanmai and Tank bund should not be proposed. Roads under litigation/involving Patta land, even if it is a small stretch, should not be proposed. It should also be ensured that the proposed road does not fall in Forest land, irrespective of the length of the stretch.
- (x) In case of a road passing on/over tank bunds and proposed for Upgradation/Improvement, the Project Director (DRDA) and Executive Engineer (RD) shall inspect the road. Based on the importance and utility of the roads detailed proposals shall be submitted along with necessary photographs etc to the Director of Rural Development. In case of roads passing on/over PWD tank bund or PWD channel, "No Objection Certificate" should be obtained from PWD and the same shall be submitted to Director of Rural Development along with the proposal. The Director of Rural Development will accord approval on a case by case basis after detailed scrutiny.
- (xi) Road works should be selected based on joint inspection of the BDO (Block Panchayat) and the Assistant Engineer (RD) concerned. The concerned Assistant Engineer (RD) should ensure that the roads are prioritized based on the present condition of the surface and the time lag after the previous maintenance in the case of existing BT roads. The BDO (BP) and the Assistant Engineer (RD) will select and prioritize the works to be taken up strictly as per the guidelines.
- (xii) Roads that have been improved by Panchayat Unions or Village Panchayats under any of the Rural Development Schemes within the last 5 years or nearing the timeline shall not be taken up. (Under extraordinary circumstances, if the road is heavily damaged warranting immediate renewal/maintenance due to act of natural forces, such roads can be proposed after due verification and certification by the Collector after inspection *which will also verified by the ADRDs, SE and EEs from the Directorate. The estimates of such work will be technically approved by the SE(RD) irrespective of the value of work*)

7. Specifications and Project Preparation

Roads taken up under this scheme shall conform to specifications and standards laid down in IRC-SP-20 Rural Roads manual, MoRD specifications on Rural Roads or

MoRTH specifications as the case may be. Geometric standards shall be maintained as per IRC SP 20 Rural Roads Manual, such as

- i. Carriage way width should be 3.75m for single lane.*
- ii. Roadway width should be 7.5m in case of Plain & Rolling terrain and 6.0m in case of Mountainous and steep terrain*
- iii. Right of way should be 15 m for plain and 12m for Steep terrain*
- iv. Ruling Gradient should be 1 in 30 for Plain and 1in20 for Steep terrain*
- v. Camber should be 3 to 3.5 % for Bituminous pavement*
- vi. Super elevation should be 7% for plains and 10% for hilly areas and Minimum super elevation should not be less than percentage of the camber.*

Pavement design of the roads proposed under Stream-I and Stream-II shall be as per figure 4 of IRC SP-72-2015 (Guidelines for the Design of flexible pavements for Low Volume Rural Roads) for traffic intensity upto 2 msa (million standard axles), (Note: IRC SP-72 permits use of Bituminous Macadam for traffic intensity more than 1.5 msa).

In case of Upgradation or strengthening of roads, where the traffic is more than 2 msa (million standard axles) strengthening of flexible pavements by using Wet Mix Macadam (WMM), Bituminous Macadam (BM) and Bituminous Concrete (BC) as per traffic intensity and strength of the soil should be done as per IRC-37-2012, (Guidelines for Design of Flexible pavements).

Use of Automatic Paver Finisher and other equipments are permitted for laying of Bituminous layers.

After the selection of roads, detailed estimates shall be prepared by the engineers concerned after thorough field inspection. Only after the actual estimates are prepared, the proposal should be put up by the Project Director, DRDA to the District Collector for Administrative Sanction.

Transect walk with photographs at every 100m should be prepared while submitting proposal. The details of transect walk should be part of the Detailed Project Report.

Estimates should be prepared after carrying out detailed topographical and soil surveys and the proposed thickness of the road should be based on existing sub- grade CBR, traffic intensity and existing crust. **Approximations based on physical observations are not at all permitted.**

Improvement of berms and widening of shoulders to the required standards is mandatory and the Geometric standards indicated in para 7 above shall be followed. The typical cross section of a rural road is given in the annexure to these guidelines for reference.

Cross drainage and protective works should be taken up along with the road, without omission, wherever necessary. In cases where bridge works of more than 15 m length are required, they should be taken up under any other suitable scheme at the

District level. However, the road and bridge works should be taken up concurrently. Drainage (Earthen/masonry) must be provided as per site condition.

In case of Maintenance of existing roads, Repairs/Reconstruction of the existing Cross drainage works may be taken up along with the Road works to ensure proper drain of rain water. However, construction of new CD works is not permitted under maintenance component.

The following are the Non-negotiables of these guidelines:

- (a) Roads less than 1Km length shall not be taken up under this scheme subject to provisions in para 6(iv) of these guidelines.*
- (b) Construction of Berms shall be undertaken simultaneously along with the construction of each component of carriageway. Construction of berms after the laying of BT will be viewed seriously and will lead to appropriate disciplinary action.*
- (c) Construction of CC pavements shall be taken up in the residential areas and the CC pavements have to be designed as per IRC SP-62, 2014, Guidelines for Design and construction of CC pavements for low volume roads.*

8. Road Safety Measures

The purpose of Road Signs is to promote road safety and efficiency by providing for orderly movement of road users on the roads. Road Signs notify road users of regulations and provide warning and guidance needed for reasonably safe, uniform and efficient operation. Hence, the location and the type of road signages, road markings etc should be identified during transect walk and necessary provisions should be made in the estimate.

Cautionary, mandatory, informative signs using road markers, reflectors, delineators etc are to be provided depending on the site requirement in accordance with IRC: 67-2012 guidelines for Road Signs. In the case of road markings, the Code of Practice for Road Markings, IRC: 35-1997 has to be adopted. For safe and easy access of differently-abled persons, informative signs indicating the international wheelchair symbol shall be installed at appropriate places especially at important junctions, busy traffic zones, school zones etc. Similarly, engraving on the surface of the zebra crossing for blind or for persons with low vision shall also be provided. Construction of kerb cuts and slopes in the pavements for easy access of the wheel chairs is also to be provided mandatorily, wherever required. Road safety measures like road signs should not exceed 5% of the total cost of the work.

9. Avenue Plantation

Raising of avenue plantations will be an integral component under this scheme. Fruit bearing trees, shade trees, timber trees etc should be planted along the roadside beyond the outer periphery of the berms so as to avoid cutting of trees in future during widening/improvement in convergence with MGNREGS. Avenue Plantation shall be done as per IRC-SP-103-2014 (Guidelines for Tree Plantation along Rural Roads) Avenue plantations need not be done from this scheme's fund. The same can be done either

under general Fund or MGNREGS or in co-ordination with the Forest Department under the special scheme for massive tree plantation in non-forest areas.

10. Technology Initiatives

In order to promote cost-effective and fast-track construction technologies in the construction of rural roads, it has become imperative to mainstream the technologies already developed through R&D in the past.

Following Technologies may be adopted based on the requirement and need:

- Soil stabilization Techniques
- Use of Innovative new additives (List of Materials accredited by IRC is available on the Website of IRC and NRRDA)
- Use of fly ash
- Cold mix technology using bitumen emulsions for bituminous wearing coat (premix carpet, surface dressing) – IRC: SP: 20: 2002 (Rural Roads Manual)

The above list is indicative and the choice of technology is not limited to the above and appropriate technology can be adopted based on field conditions. Selection of technology shall be done in consultation with and approval of the Superintending Engineer (RD) and the State Technical Agency, NIT, Trichy. The guidelines on technology initiatives issued by NRRDA may be referred for this purpose.

Each District shall propose atleast one road adopting alternate technologies. The choice of technology shall be decided in consultation with the SE (RD).

11. Test verification of list of works and the estimates

The District Collectors shall, on getting the proposals for Administrative Sanction under **Tamil Nadu Rural Roads Improvement Scheme (TNRRIS)**, depute officials to test check the need and genuineness of the works identified and correctness of the estimates prepared. The District Collector shall himself inspect at least 2% of the works before according Administrative Sanction. **The Project Director, DRDA and EE (RD), will super-check atleast 10% of the works each and the AEEs (R&B) & AEE (RD) and other Assistant Director level officers shall each inspect at least 20% of the works independently and check the correctness of the estimates.** Thus, the District Collectors should ensure 100% super-check of the roads proposed under the Scheme.

12. Administrative Sanction

The District Collector will accord Administrative Sanction to the works after completing 100% test-verification as prescribed in Para 11 above. The District Collectors shall have the right to amend the list of works, if need arises after consultation with the Director of Rural Development & Panchayat Raj.

13. Technical Sanction

Technical sanction will be accorded by the competent authority as per G.O. (Ms) No.203, RD&PR Department, dt.20.12.2007, amendment to the Tamilnadu Panchayats

(preparation of Plans and Estimates for works and mode and conditions of Contracts) Rules 2007 and G.O.No.54, RD & PR (PR.1) Department, dated 22.5.2014.

14. Tendering

- (i) **The works under Tamil Nadu Rural Roads Improvement Scheme will be executed following the Tamil Nadu Transparency in Tenders Act, 1998 and Rules, 2000.** Table-II of Notification-II in the Tamil Nadu Panchayats (Preparation of Plans and Estimate of works and mode and conditions of contracts) Rules, 2007 vide G.O. (Ms) No.203, RD&PR Department, dt.20.12.07 will be followed for tendering.
- (ii) The Project Director, DRDA shall be the tender inviting authority. The District Collector/ Chairman, DRDA shall be the Tender Accepting Authority.
- (iii) e-submission of bids shall be followed for the works under TNRRIS.

15. Execution of works

The measurements will be recorded by the Union Engineer/Assistant Engineer and the Check Measurement will be done by the concerned Assistant Executive Engineer(R&B). **The Executive Engineer (RD) shall super check the works as per the norms indicated in G.O. (Ms) No. 54, RD&PR (PR.1) Dept., dt. : 22.05.2014.**

The instructions of the National Green Tribunal regarding onsite compliance during construction of roads shall be strictly followed.

16. Quality Control

- All the mandatory Quality control tests before, during and after execution of the works shall be carried out as per the Quality Control Handbook Vol. I and II published by NRRDA. These shall include, but not limited to,
 - i. Sieve Analysis, Atterberg limit, Proctor Density, Field Density for Earth work.*
 - ii. Atterberg limit, Gradation, Aggregate Impact value, Proctor Density, Field Density, Thickness for sub base and base course.*
 - iii. Rate of spread for prime and tack coat.*
 - iv. Gradation, Aggregate Impact value, Binder Content, Thickness and surface regularity for bituminous surface.*
 - v. Compressive strength of concrete for cross drainage works.*
- A separate QC register should be maintained for each work and the record of tests shall be entered by the Assistant Engineer and verified by the Assistant Executive Engineer (R&B) and Executive Engineer (RD).

- QC register shall be submitted along with the bills and the same shall be verified before release of payment.
- The details of the QC tests conducted, observations made etc shall be entered in the online QC module in tnrd.gov.in website.

17. Monitoring

The execution of the works taken up under **Tamil Nadu Rural Roads Improvement Scheme (TNRRIS)** will be monitored through the **Real Time Monitoring System** developed by **NIC, Chennai** in order to ensure continuous monitoring and for expeditious completion of works.

18. Documentation

Proper documentation of the works should be done capturing various processes in the implementation of the scheme. Photographs of the site before undertaking the work, during execution of the work and after completion of the work should be taken and properly documented.

The Principal Secretary to Government, Rural Development and Panchayat Raj Department is empowered to modify the guidelines of TNRRIS Scheme, whenever necessary, in consultation with the Director of Rural Development and Panchayat Raj.

HANS RAJ VERMA,
PRINCIPAL SECRETARY TO GOVERNMENT.

//True Copy//

S. Vijayaraj
Section Officer. 29-8-16
29/8/16.