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599

ADMINISTRATION REPORT OF THE HIGHWAYS
DEPARTMENT, 1948-49

CHAPTER I.

1. DIRECTION AND PERSONNEL.

Mr. W. H. Turner, B.S.O., A.M.I. MECH. E., M.I.E. (Ind.), I.S.E., continued as Chief Engineer (Highways) during 1948-49, the year under report.
Sri K. A. Nanjundeswara Chetti, B.E., A.M.I.E. (Ind.), continued as Deputy Chief Engineer (Highways) throughout the year 1948-49.
Sri M. C. Krishna Ayyar, B.A. (Hons.), continued as Accounts Officer throughout the year 1948-49.

The following statement shows the Highways Circle charges :—

I Circle, Kakinada.—Janab N. Durrani, B.Sc., B.E., M.I.E. (Ind.), M.A.C.I. M.A.S.C.E., M.A.R.B.A., continued to hold charge as Superintending Engineer (Highways), I Circle, throughout the year.

II Circle, Bellary.—Sri T. Sekharan continued to be in charge of the Circle till 16th January 1949 when the Circle was abolished.

III Circle (Madras later renamed as II Circle, Madras).—Sri S. C. Nayak, M.I.E. (Ind.), continued to be in charge of the Circle till 12 July 1948, a.n. when he was succeeded by Sri T. Lokanatha Mudaliar, B.E., who continued to hold charge till the end of the year.

IV Circle, Tiruchirappalli (subsequently renamed as III Circle, Tiruchirappalli, on account of the abolition of Bellary Circle).—Sri U. S. Ramasundaram, B.E., M.I.E. (Ind.), I.S.E., continued to hold charge till 20th July 1948, a.n. when Sri S. C. Nayak, M.I.E. (Ind.), succeeded him and continued to hold charge, for the rest of the year 1948-49.

V Circle (subsequently renamed as IV Circle), Coimbatore.—Sri O. R. Narayanaswami Ayyar, B.E., I.S.E., continued to be in charge of the Circle till 19th January 1949, f.n. when he was succeeded by Sri T. Sekharan who continued to hold charge for the rest of the year 1948-49.

Bridges Circle, Madras (temporary).—Sri T. Lokanatha Mudaliar, B.E., continued to hold charge of the Circle till 21st April 1948, a.n. when he proceeded on leave. Sri B. Narasimha Shenoy, B.E., Road Development Engineer, held additional charge of the Circle until Sri T. Lokanatha Mudaliar, B.E., rejoined duty on 21st June 1948, a.n. and continued to be in charge of the Circle till 12th July 1948, a.n. He was succeeded again by Sri B. Narasimha Shenoy, B.E., who continued to hold charge for the rest of the year 1948-49.

Road Development Engineer, Madras (temporary).—Sri B. Narasimha Shenoy, B.E., continued to hold the post till 12th July 1948, a.n. when the post was abolished.

2. GENERAL FEATURES OF ADMINISTRATION INCLUDING STAFF POSITION.

The department continued to function for the third year of its organization as a separate department with the following staff :—

One Chief Engineer.

Five Superintending Engineers in charge of circles.

ADMINISTRATION REPORT OF THE

Thirty Divisional Engineers in charge of regular divisions besides one Special Divisional Engineer in charge of Transport and Machinery Division and others in charge of special divisions.

One hundred and one Assistant Engineers [93 Assistant Engineers in charge of subdivisions and eight Assistant Engineers as personal Assistants to Superintending Engineers and Technical Assistants to Chief Engineer (Highways) exclusive of temporary sanctions].

Three hundred and ninety-three Supervisors actually in charge of sections (exclusive of temporary sanctions). For normal work, 120 subdivisions and 480 sections were considered as the minimum staff required but a 1st April 1948 sanction existed only for 101 Assistant Engineers and 383 Supervisors for such work. Even the full sanctioned strength could not be utilized in view of the shortage of technical personnel.

Depletion in the strength of Supervisors still continued and the staff position continued to be difficult as in the previous year.

A large number of posts of Supervisors had to be kept either vacant or in additional charge for want of suitable and qualified candidates. The staff position in respect of supervisors including temporary posts as on 31st March 1949 is given below :—

	As on 31st March 1949.
1 Total number of Supervisors required	711
2 Number of Supervisors sanctioned up to end of the month including temporary posts for special sanctions	598
3 Number of supervisors actually working	502
(a) Out of the above, number of qualified men with sufficient experience	298
(b) Number of retired men re-employed, unqualified men exempted, and those with less than two years of service	204
(c) Number of vacant sections, in additional charge or otherwise	96

Besides the number of Supervisors actually sanctioned as on 31st March 1949, additional sanctions for 151 Supervisors were expected for special works during 1949-50 both for Government and District Board works.

The number of passed Engineers and Licentiates allotted to this department each year had not exceeded 50 during the past three years. The position has since improved slightly with the allotment of about 90 students from those that came out of the Engineering Colleges in June 1949.

As in the previous years, this department continued to maintain two sets of accounts, one for District Boards and one for Government works and followed two sets of rules. Proposals were submitted to Government adopting the P.W.D. system of accounts and executing District Board works as "contribution works" Government have invited the remarks of the Special Officers of District Boards and the matter is under the consideration of Government.

Consequent on the reorganization of the department in 1947-48, there had been considerable reduction in the staff of this department, both technical and non-technical and most of the offices were already in arrears. Apart from this, the post of one Superintending Engineer with staff was abolished on 16th January 1949 as a measure of retrenchment and the existing divisions of circle abolished were redistributed among the remaining circle charges as

HIGHWAYS DEPARTMENT, 1948-49

detailed in Chapter IV. The reduction in staff in the several cadres varied from 10-7/10 per cent to 33-1/3 per cent as per the details given below :—

Serial number.	Name of cadre.	Original strength.	Reduced strength.	Reduction. PER CENT.
1	Superintending Engineers	6	4	33-1/3
2	Divisional Engineers	36	30	16-2/3
3	Assistant Engineers	158	106	33
4	Supervisors	522	383	26-3/5
5	Draughtsmen, I Grade	6	4	33-1/3
6	Do. II Grade	42	34	19-1/21
7	Do. III Grade	149	109	26-5/6
8	Tracers	42	34	19-1/21
9	Divisional Accountants	36	30	16-2/3
10	Managers, Circle Office	6	4	33-1/3
11	Head Clerks	6	4	33-1/3
12	Head Clerks, Division Circle Office	36	30	16-2/3
13	Upper Division Clerks	240	206	14-1/6
14	Lower Division Clerks	420	351	16-3/7
15	Steno-typists	6	4	33-1/3
16	Typists	42	34	19
17	Peons	841	751	10-7/10

This reduction in staff synchronized with considerable increase in the load of expenditure due to the heavy programme of Post-War Road Development. The increase in work will be evident from the following statement of expenditure (inclusive of expenditure on District Board works).

Year.	Expenditure. RS. LAKHS.
1946-47	375
1947-48	437
1948-49	627

Consequently, the work in all the offices increased considerably. Every effort was made by the existing staff to keep the work up to date but the demand for additional staff persisted and sanctions were obtained for special staff to a limited extent.

This department had to experience great difficulty in regard to the office accommodation required for several offices also. There had been a general demand from the District Boards to give back the District Board buildings occupied by the Divisional and Subdivisional offices. Private rented buildings suitable for office accommodation could not be secured easily. It is apprehended that this position would continue to remain the same until Government buildings are made available for locating the offices of this department.

CHAPTER II.

WORKS IN PROGRESS.

(a) Review of the progress during 1948-49.

It is now about three years since the Highways Department was formed but the year under report (1948-49) is the first year when the department made some headway in solving its numerous problems. The first year was an year of constant changes necessitated by the entire formation of a new department. At the end of the first year, the department was reorganized and this necessitated a further series of changes. During the first two years maintenance allotments for roads were utterly inadequate and hence roads which were already in heavy arrears of maintenance during war time deteriorated further. The allotment during the year 1948-49 was however comparatively more and Government took important decisions on several matters relating to Post-War Road Development programme. Hence the year 1948-49 may be said to be the first year when the department could try to show some

results although shortage of staff still continued to be the most serious problem.

Various complaints were received from local bodies and other interests and these complaints were studied with great care and remedial measures taken wherever necessary. Complaints from the public generally indicated their needs, and did not constitute complaints on the Highways Department as such. Complaints received from the local bodies did have a basis but they had apparently been put forward without a proper appreciation of the position. On careful analysis, it was found that the main cause of the complaint was that while, on the one hand, the staff had to follow two different sets of rules, maintain two separate sets of accounts, and exercise different powers for Government works and for District Board works, on the other hand, they had to manage an unprecedented load of expenditure. The staff available in relation to works expenditure was far short of what it was in the Highways Department before the reorganization in February 1947 or just before the formation of the department. It was not therefore possible for the Divisional Engineers (Highways) to be sufficiently prompt in the disposal of references from District Boards and to devote close attention to District Board works. With a view to improve the position certain remedial measures have since been formulated after obtaining the views of the District Boards in the Regional Conferences held in the months of April and May at Kakinada, Chittoor, Tiruchirappalli and Coimbatore. In these Regional Conferences, the representatives of some District Boards have acknowledged that the outturn in 1948-49 was satisfactory and was a record for several years. The overall outturn of 1948-49 was a distinct improvement on the outturn of the previous years. The following abstract figures for the whole Province will indicate that the officers of the department have generally tried to do their best in respect of district board works:—

Expenditure in 1948-49.

(1)	Final grant. (2) RS.	Actual expenditure. (3) RS.	Percentage. (4)
Government works—			
Original works including Post-War Road Development	60,81,000	48,33,513	79
Repairs	3,38,92,400	3,50,15,182	103
Total ..	3,99,73,400	3,98,48,695	99
District Board works—			
Original works including Post-War Road Development and non road works	1,52,31,190	1,12,81,908	74*
Repairs	1,21,63,743	1,15,83,288	95†
Total ..	2,73,94,933	2,28,65,196	83
Grand total in 1948-49	6,73,68,333	6,27,13,891	93

The figures are illustrated in the charts 1 to 3 in Appendix IV which would show that, on the one hand, total outturn has been increasing and

Janua. * This was only 41 per cent in 1946-47 and 50 per cent in 1947-48.
circle. † This was only 50 per cent in 1946-47 and 50 per cent in 1947-48.

that on the other lapses have been steadily decreasing. Detailed figures of expenditure for each district, and appropriation and outlay under detailed heads are furnished in the statements attached in Appendix III.

The figures are unprecedented in several aspects and it is significant that district boards have secured this result at a cost of only about 8.5 per cent of the works expenditure towards establishment charges whereas in the previous years the cost of establishment of district boards used to be about 14 per cent to 20 per cent. Increase in the scales of pay of the officers and subordinates has generally corresponded to the increase in the rates of materials and labour, and the economy indicated above has been achieved in spite of the increased scale of pay. The disparity in the percentage of the cost of establishment for District Board works before and after the formation of the Highways Department is an index of the extent of inadequacy of staff. In spite of this difficult staff position not even a single post-war road development work was put off and all the sanctioned works to the extent of about six crores of rupees were taken up and were under execution. The following statement gives an abstract of the various types of works in progress as on 31st March 1949:—

Statement showing progress of expenditure.

Serial number and category of works.	Number of works sanctioned so far.	Estimated amount.	Progress.		Total expenditure incurred to end of March 1949.
			Number of works taken up, i.e., technically sanctioned.	Number of works completed.	
(1)	(2)	(3) RS.	(4)	(5)	(6) RS.
1 Major and minor bridges and causeways	1,099	2,17,84,800	978	44	28,83,904
2 Cement concrete surfacing works.	88	1,84,45,500	57	5	17,80,853
3 Black top surfacing works.					
4 Formation of new roads.	1,521	3,78,09,550	1,162	524	97,61,095
5 Other improvements.					

(b) During the year under review, 76 works costing Rs. 1 lakh and more were in progress against 24 works during the previous year 1947-48. A list of important works costing over Rs. 1 lakh each in progress during the year is furnished in Appendix V with particulars of expenditure and progress.

(c) Review of progress of important works costing less than Rs. 1 lakh each.—The following statement gives an idea of the works costing less than Rs. 1 lakh each in progress under various categories:—

Serial number and category.	Works in progress on Government roads.		Works in progress District Board roads.		Total.	
	Number.	Estimated amount.	Number.	Estimated amount.	Number.	Estimated amount.
(1)	(2)	(3) IN LAKHS.	(4)	(5) IN LAKHS. RS.	(6)	(7) IN LAKHS. RS.
1 Bridges and causeways ..	474	18.13	494	35.02	968	53.15
2 Cement concrete and black top works ..	24	12.01	3	0.27	27	
3 New formations and improvements ..	232	32.89	891	117.78	1,123	
Total ..	730	63.03	1,388	153.07	2	

Details for each division are furnished in the annexure to this Chapter as Appendix VI.

(d) Programme of works to be done in the year 1949-50.

Works have been programmed for execution during 1949-50 as per details noted below under each category :—

Category.	Number of works.	Estimated cost. IN LAKHS. RS.	Programmed expenditure. IN LAKHS. RS.
I. Government roads—			
A. National Highways—			
1 Incomplete works of the previous year	23	73.60	27.00
2 New schemes	43	338.42	
Total National Highways ..	66	412.02	27.00
B. Other than National Highways—			
1 Part I Schemes—			
Incomplete works	204	323.99	124.08
2 Part II schemes—			
New works	132	151.44	
Total for other than National Highways	396	475.43	124.08
Total Government roads ..	462	887.45	151.08
II District Board works—			
1 Post-war Reconstruction—			
(i) Incomplete road works of previous year	691	181.33	48.63
(ii) New road works	383	108.66	
2 Excluding Post-war Reconstruction.		48.23	45.75
	1,074	336.22	94.38
3 Non-road works			68.40
Total programmed expenditure for District Board works			162.78
Total programmed expenditure for Government and District Board works			313.86

CHAPTER III.

THE REVISED FIVE-YEAR PLAN OF POST-WAR ROAD DEVELOPMENT.

National Highways.

The Five-year plan was finally recast during the year under review and submitted to Government of India. The cost of the programme is Rs. 4.25 crores, the salient features of which are detailed below :—

	Estimated cost of schemes. RS. CRORES.	Programmed expenditure. RS. CRORES.
(i) Major bridges	2.78	2.5
(ii) Other improvements including 98 miles of cement concrete surfacing, 102 miles of black top surfacing, and 21 miles of new formation	1.47	
Total ..	4.25	

In view of their present policy to cut down development expenditure, as part of the measures to combat inflation, it was not possible to indicate, at this stage, to what extent the five-year plan for the development of National Highways could be carried out.

However, works included in the plan are being taken up for execution every year with the specific technical approval and financial sanction of Government of India. An abstract of works sanctioned up to the end of 1948-49, is furnished below :—

	RS. LAKHS.
Bridge works	28.27
Other works	45.29
Total ..	73.56

Roads other than National Highways.

The Madras Government accorded general approval to the Five-year plan for development of roads other than National Highways costing Rs. 10.21 crores subject to certain modifications being effected therein, viz., to increase the mileage of new formation of Group II roads (other district roads and village roads) and by curtailing the provision under Group I roads (Provincial Highways and Major District Roads) by Rs. 133 lakhs.

The plan was accordingly recast and submitted to Government in March, 1949. The estimated costs of the recast five year plan is Rs. 12.04 crores, the salient features of which are detailed below :—

	Estimated cost of schemes. RS. CRORES.	Programmed expenditure. RS. CRORES.
1. Provincial Highways and major district roads (called Group I roads)—		
(a) Major bridges	1.75	4.20
(b) New formation (538 miles)	0.51	
(c) 189 miles of cement concrete surfacing and 231 miles of black top surfacing	1.45	
(d) Other improvements	2.47	
Total ..	6.18	
Other district roads and village roads (called Group II roads)—		
(a) 10,063 miles of new roads	3.56	4.30
(b) Improvements to the existing roads including metalling surface wherever necessary, widening and construction of necessary bridges and culverts	2.30	
Total ..	5.86	
Total for Group I and Group II roads ..	12.04	

CHAPTER IV.

TERRITORIAL CHANGES—ADDITIONS AND ALTERATIONS TO JURISDICTIONS.

The Highways Department continued to function with five circles and 30 regular divisions till 16th January 1949, *a.n.* when the II Circle, Bellary, was abolished and the divisions were redistributed among the remaining four circles.

The jurisdictions of the circle charges, before and after the retrenchment are given below :—

Before the retrenchment.		After the retrenchment.	
Name of Circle. (1)	Divisions attached. (2)	Name of circle. (3)	Divisions attached. (4)
I Circle, Kakinada.	1 Visakhapatnam North .. 2 Visakhapatnam South. 3 Agency Division. 4 East Godavari. 5 West Godavari. 6 Krishna.	I Circle, Kakinada.	1 to 6 as per column 2. and Guntur division.
II Circle, Bellary..	1 Guntur .. 2 Bellary. 3 Anantapur. 4 Cuddapah. 5 Kurnool. 6 Nellore.	Circle abolished ..	Divisions redistributed.
III Circle, Madras..	1 Chittoor .. 2 Chingleput. 3 North Arcot. 4 Salem South. 5 Salem North. 6 South Arcot.	II Circle, Madras ..	1 Anantapur. 2 Bellary. 3 Cuddapah. 4 Kurnool. 5 Nellore. 6 Chittoor. 7 Chingleput. 8 North Arcot. 9 South Arcot.
IV Circle, Tiruchirappalli.	1 Tanjore East.. 2 Tanjore West. 3 Tiruchirappalli. 4 Mathurai. 5 Ramnad. 6 Tirunelveli.	III Circle, Tiruchirappalli.	Same as in column 2. South Arcot was added from 1st April 1949 only.
V Circle, Coimbatore.	1 Coimbatore South .. 2 Coimbatore North. 3 Nilgiris. 4 Malabar North. 5 Malabar South. 6 South Kanara.	IV Circle, Coimbatore.	Same as in item 2 and Salem North and Salem South.

Consequent on the merger of the Pudukottai State in the Indian Union, the roads in the State were brought under the control of this department. The State Engineer was attached to the Tiruchirappalli division in respect of roads in the State. Similarly, on the merger of Banganapalle State in the Kurnool district, the roads in the State were brought under the Kurnool division and a separate section was formed.

The Bridges Circle with one Superintending Engineer, one Personal Assistant and 8 Assistant Engineers continued to function throughout the year, for investigation and preparation of plans and estimates for Bridges schemes. The two Bridges Divisions, one with jurisdiction over the Northern districts and the other with jurisdiction over the southern districts, also functioned throughout the year.

The Road Development Engineer continued to function till 12th July 1948 when the post was abolished. But the Technical Assistant to the Road Development Engineer continued to function from that date till 31st December

1948 when that post was also abolished. The working of the Bridges Circle and the Road Development Engineer is separately dealt with in Chapter V.

The Transport and Machinery Division continued to function throughout the year, attached to the Madras Circle for administrative purposes.

The following special divisions sanctioned for special works in the previous year, continued to function throughout the year:—

(1) The special division with its two subdivisions in charge of the "Cement concreting of Coimbatore Mettupalayam road."

(2) The special division sanctioned for "Providing Conphalt surfacing from M. 7/5 to 19/1 of the Great Southern Trunk road". In addition to the existing subdivision, one more subdivision was formed with effect from 5th January 1949, *f.n.*

(3) The special division (Srungavarapukota) at Vizianagaram, for the work of "Improvements to Visakhapatnam-Ananthagiri-Araku road from M. 38/2 to 79/2," with its two subdivisions.

In addition, the following special divisions were sanctioned during the course of the year and were functioning from the dates noted against each till the end of the year:—

Serial number and name of division.	Headquarters.	Date from which sanction was utilized.	Remarks.
1 Bharatpuzha Bridge division.	Kuttipuram.	9th May 1948.	The division was sanctioned for work connected with the construction of a bridge across the Bharathapuzha river at Kuttipuram in M. 18/2 of Angadipuram - Kuttipuram - Cochin frontier road (Malabar district).
2 Pugalur Bridge division.	Velur (Salem district).	5th July 1948.	The division was sanctioned for work connected with the construction of a bridge across River Cauvery at Pugalur on Benares-Cape Comorin road. (National Highway No. 7) one special subdivision was attached.
3 Chirakkal Special division. (Malabar district).	Cannanore.	22nd July 1948.	The division was sanctioned for work connected with "Improvements to communications in Chirakkal taluk (Malabar district)." Two special subdivisions were attached to the division.
4 Godavari Bridge Investigation division.	Kakinada	25th August 1949.	The division was intended for the investigation and preparation of project estimates for the construction of a bridge across the River Godavari. Two special subdivisions were attached to the division.
5 Minamalur Ghat division. (Visakhapatnam district).	Chodavaram	23rd December 1948.	The division was sanctioned for the formation of Minamalur Ghat road. Two subdivisions were sanctioned for the division.
6 Coleroon Bridge division.	Shirkali ..	25th December 1948.	The division was sanctioned for the work of constructing a bridge over the Coleroon at Anaikaran-chattram on the Chidambaram-Shiyali road. One special subdivision was attached to the division.

Subdivisions.

The following temporary subdivisions sanctioned in G.O. No. 1884, P.W., dated 28th June 1947 and formed in 1947-48 continued to function during the year under report :—

(1) The additional subdivision sanctioned for Visakhapatnam North division.

(2) The additional subdivision sanctioned for West Godavari division.

(3) Do. do. Guntur division.

(4) Do. do. Nellore division.

(5) Do. do. South Arcot division.

(6) Do. do. Salem South division.

(7) Do. do. Mathurai division.

(8) Do. do. Ramnad division.

(9) The special subdivision for the work "Reconstructing the damaged spans of Kalahasti Bridge" was continued till 30th November 1948 when it was abolished.

(10) The additional Technical Assistant to the Chief Engineer (Highways) sanctioned in 1946 for work connected with the Post-War Road Development programme continued throughout the year.

(11) The third Technical Assistant sanctioned from 20th June 1947 for the scrutiny of bridge estimates also functioned throughout the year.

(12) The following special subdivisions were sanctioned and formed during the course of the year :—

Serial number and headquarters.	Date of formations.	Remarks.
1 Tiruchirappalli ..	23rd October 1948, <i>f.n.</i>	The subdivision was sanctioned in G.O. No. 3797, P.W., dated 20th September 1948, for the investigation and realignment of the bridge over Cauvery.
2 Cuddapah ..	18th March 1949, <i>f.n.</i>	The subdivision was sanctioned for cement concreting Chittoor-Kurnool road—M. 101-107 in G.O. No. 3686, P.W., dated 11th September 1948, under Part II Schemes.
3 Vijayavada ..	15th October 1948, <i>f.n.</i>	The subdivision was sanctioned in G.O. No. 3686, P.W., dated 11th September, 1948 under Part II Schemes for cement concreting Machilipatnam-Vijayavada road—M. 34/0 to 40/0.
4 Salem ..	21st October 1948, <i>a.n.</i>	The subdivision was sanctioned in G.O. No. 3686, P.W., dated 11th September 1948, under Part II Schemes for cement concreting Salem-Cuddalore road—M. 2/2 to 5/2.
5 Tuticorin ..	3rd November 1948, <i>f.n.</i>	The subdivision was sanctioned in G.O. No. 3686, P.W., dated 11th September 1948, under Part II Schemes for cement concreting 8 miles of Tuticorin-Tirumelveli road.
6 Chidambaram ..	26th September 1948, <i>f.n.</i>	The subdivision was sanctioned in G.O. No. 3686, P.W., dated 11th September 1948, under Part II Schemes for cement concreting Chidambaram-Bhuvanagiri road—M. 0/0 to 3/5 and 25/0 to 26/0.
7 Anakapalle ..	20th December 1948, <i>f.n.</i>	The subdivision was sanctioned in G.O. No. 3686, P.W., dated 11th September 1948, under Part II Schemes for cement concreting Anakapalle-Madugole road—M. 0/7 to 7/5.

Serial number and headquarters.	Date of formations.	Remarks.
8 Tiruvur ..	18th September 1948, <i>f.n.</i>	The subdivision was sanctioned in G.O. No. 3187, P.W., dated 3rd September 1948, for improvements to certain roads in Tiruvur and Nandigama taluks in the Hyderabad border.
9 Chintalapudi ..	21st September 1948, <i>f.n.</i> closed on 31st March 1949, <i>a.n.</i>	The subdivision was sanctioned in G.O. No. 3132, P.W., dated 31st August 1948, for improvements to certain border roads in the Chintalapudi taluk border, Hyderabad State.
10 Nandigama ..	27th May 1948, <i>f.n.</i>	The subdivision was sanctioned in G.O. No. 1383, P.W., dated 21st April 1948, for improvements to the border roads at Nandigama.
11 Srirangam ..	17th January 1949, <i>f.n.</i>	The subdivision was sanctioned in G.O. No. 4522, P.W., dated 24th November 1948, for cement concreting the Madras-Tiruchirappalli-Dindigul road—M. 189 to 192/5 under National Highways.
12 Repalle ..	19th March 1949, <i>f.n.</i>	The subdivision was sanctioned for grant in aid works in Guntur District Board.

The headquarters of the regular circles and divisions remained unaltered during the year except in the case of the two divisions mentioned below :—

(1) The headquarters of Ramnad division was shifted from Mathurai to Sivaganga from 17th May 1948 with reference to G. O. No. 814, P.W., dated 8th March 1948.

(2) The headquarters of the Bridges North Division, was shifted from Kakinada to Madras in G.O. No. 83, P.W., dated 8th January 1949.

CHAPTER V.

ORGANIZATION AND WORKING OF THE BRIDGES CIRCLE AND THE ROAD DEVELOPMENT CIRCLE, DURING 1948-49.

Bridges Circle.

The Bridges Circle, formed on 1st August 1946 on a temporary basis for the investigation and preparation of plans and estimates for Bridge works included in the first five-year plan of the Post-War Road Development and Central Road Fund Programmes, continued to function in the year 1948-49. The Bridges Divisions, South and North, with eight subdivisions under them functioned throughout the year under review. Another special division called the Godavari Bridges Investigation Division with one Special Divisional Engineer, two Assistant Engineers and necessary staff was sanctioned in the course of the year for investigation of schemes connected with the bridging of the River Godavari. An amount of Rs. 2 lakhs was sanctioned by the Government of India for the purpose. The Special Division began functioning from 25th August 1948 and continued throughout the year.

Besides this, a special subdivision was also formed for investigation of the alternative alignment to National Highway No. 45 on the outskirts of Srirangam and Tiruchirappalli Municipalities and construction of a bridge across Cauvery River on this alignment. A sum of Rs. 10,000 was sanctioned by the Government of India for this subdivision also. This subdivision began functioning from 22nd October 1948 attached to the Bridges South Division and continued till the end of the year.

Investigation and preparation of estimates for the following bridge works estimated to cost more than Rs. 5 lakhs was completed during the year:—

Serial number and name.	Amount of estimate in lakhs.
	RS.
(1) Bridge across the Gowthami branch of the River Godavari at Alamur.	89.00
(2) Bridge across the Krishna on Madras-Calcutta Road, N. H. 5.	66.00
(3) Bridge across Pennar at Nellore	25.00
(4) Bridge across Palar at Ranipet (Ranipet-Krishnagiri Road)	12.00
(5) Bridge across Palar at M. 38/3-5 (Chingleput) on N. H. 45.	9.75
(6) Bridge across the Champavathi near Nathavalsala in M. 520/2-3 of N.H. 5.	8.00
(7) Bridge across Koderulanka at M. 153/2 of Ananthapuram section of Benares-Cape Comorin Road.	6.80
Total ..	216.55

Including the schemes listed above, estimates have been prepared for 69 bridges to the total value of Rs. 225.41 lakhs during the year.

Eighteen alternative estimates providing for two types of superstructure designs and two types of piers were prepared for the Gowthami branch of the River Godavari. Detailed estimates for Rs. 89 lakhs with detailed plans, design specifications and project reports for the bridge across the Gowthami branch of the River Godavari have been got ready and they are to be finalised after the results of the model experiments being conducted at Poona Research Laboratory are known.

Project estimates for the comprehensive scheme for Rs. 1.80 crores, including the cost of bridging the two arms of River Godavari, the cost of river training works and diverting N.H. 5 have also been submitted.

Detailed plans and estimates for Rs. 56 lakhs for the bridge across the Vasista branch of River Godavari with sub-estimates for superstructure, substructure, river projective works, approach roads and L.S. estimates for canal bridges have also been got ready. Comprehensive data required for model experiments being conducted at the Central Waterways Irrigation and Navigation Research Institute at Poona was collected and sent to Poona. Owing to the dearth of technical personnel, the detailed survey of the river bed for about 50 miles involved in the collection of data had to be got done with the help of the third-year students of the College of Engineering, Kakinada. This experiment of associating students in practical work and diverting their energies to purposeful activities proved a great success, in spite of the serious handicaps such as standing crops, heavy mist and cold weather and a tiresome life in house boats in which the party was accommodated.

Besides the above, the number of detailed plans and estimates sanctioned in the previous years were also revised on consideration of economy, latest ideas of designs and the latest schedule of rates. Further details regarding the number of estimates and their cost (1) as sanctioned in the offices of the Superintending Engineer (Bridges) and Divisional Engineers (Bridges) and (2) as submitted to Chief Engineer for sanction and (3) number of currents

alt with in the Offices of the Superintending Engineer (Bridges) and Divisional Engineers (Bridges) are given in the Annexure IX.

The outturn suffered for want of full complement of staff of the proper type. The jurisdiction of the Assistant Engineers and Divisional Engineers, covered a number of districts, the nature of work was arduous and full liaison could not be established with local officers. The question of special pay and allowances to the investigation staff was a long felt need and what was sanctioned towards the end of the year under review, met the needs only half-way.

Finally it may be pointed out that the Bridges Circle had just got into shape and proper organization. The usefulness of the circle therefore, would only be apparent in future in canalising of problems and issues and standardizing of types of construction and of designs.

The pooling of experience and observation and analysis of the large and varying data would help to evolve the most suitable and economical designs for each condition of flow. The continuity of design experience would develop initiative and confidence in the officers.

Road Development Circle.

The Road Development establishment was continued till 12th July 1948 in the year under report for completing the planning work on hand. But the entire staff of the Road Development establishment was continued up to 31st December 1948 and a skeleton staff till the end of 1948-49, for completing the compilation of lists and statements and other connected work.

The following items of work relating to the Post-War Road Development were done in the year:—

District maps showing Post-War Programmes for all districts were completed and submitted in duplicate.

Presidency maps in triplicate showing all the proposals of the five-year plan of Post-War Road Development were also prepared. The five-year plan was revised twice within the year with reference to the recommendations of the Standing Finance Committee, first for reducing the cost and for the proper distribution of work among the taluks and secondly for giving more prominence for the development of other district roads and village roads and for curtailing the works in Group I of the programme.

Classified lists of roads were brought to a final shape in 1948-49.

Supplementary statements showing the detailed lists of works in the comprehensive programme were finalized and submitted in triplicate.

New village road lists for sixteen districts were also completed and submitted in triplicate.

Side by side with the finalizing of the village lists, the taluk maps of the respective districts were also brought up to date, with Post-War Road Development proposals marked therein.

The Central Survey office was given all facilities to bring up to date the road maps that are proposed to be printed shortly incorporating the new frame work of roads.

CHAPTER VI.

THE BOARD OF COMMUNICATIONS.

There were two meetings of the Board in the year 1948-49. Various questions relating to policy in regard to the execution of works in the Post-War Road Development Programme were discussed and recommendation made to Government. The first meeting was held on the 20th May 1948, and the other on the 22nd October 1948.

2. The subjects discussed and the resolutions arrived at the meeting held on 20th May 1948 are detailed below :—

(i) Recommendations of the Sub-Committee of the Board of Communications—

The various recommendations made by the Sub-Committee were dealt at length in the administration report for the year 1947-48.

Resolution.—The Board adopted the recommendations of the Committee and endorsed the same for the acceptance of Government.

(ii) The Board resolved to recommend to Government to arrange for a census of double bullock-carts in the Province and to suggest the enhancement of the municipal tax on iron-tyred carts with a view to encourage pneumatic tyred wheels and to utilize the additional revenue to improve the roads.

(iii) The Board further approved a list of works costing more than Rs. 30,000 for execution during 1948-49.

Necessary proposals for implementing the recommendations were submitted to Government for orders.

At its meeting held on 22nd October 1948, the Board approved a list of roads proposed for transfer from the control of local bodies during 1949-50 and another list of original works costing Rs. 30,000 and more proposed to be taken up during 1949-50.

CHAPTER VII.

CENTRAL AND TERRITORIAL CONFERENCES.

The Madras Local and Municipal Engineers' Association at its meeting held on the 2nd and 3rd July 1948, suggested that conferences be held with a view to bring to notice difficulties that arise on various matters. The Chief Engineer (Highways) accordingly issued instructions to the officers of the department to convene the following conferences :—

1. *Periodical conference in divisions.*—A quarterly conference of Supervisors and Assistant Engineers at the Headquarters of the Divisional Engineer (Highways) when the Divisional Engineer (Highways) will be able to exchange views with his staff on all outstanding problems, assess the difficulties and issue suitable instructions. If, on any question, order higher authorities are considered necessary, such cases should be referred to the Superintending Engineer (Highways) who should either issue order straightaway if circumstances permit or should mark them for the periodical conference of the circle indicated below.

2. *Periodical conference in circles.*—Each Superintending Engineer (Highways) should convene a conference of his Divisional Engineer (Highways) once in six months in the Headquarters of the circle, survey the condition, exchange views with his Divisional Engineers (Highways) and arrive

at decisions on outstanding problems. If orders of higher authorities are found necessary on any particular issue, they should be referred to the Chief Engineer (Highways) for decision. The Superintending Engineers (Highways) should also mark such matters that require personal discussion with the Chief Engineer for the annual conference mentioned below.

3. *Central annual conference.*—After the holding of the Divisional and Circle conferences a conference of the Chief Engineer (Highways) and Superintending Engineers (Highways) was proposed to be convened for discussion of outstanding problems.

It was also considered this conference would give an opportunity for a preliminary discussion of all subjects to be considered at the territorial conferences (indicated below). Government have approved the proposal but the first conference could not be convened before the close of the official year. This actually took place in April 1949.

4. *Territorial conferences.*—At the monthly Highways conference held on 2nd July 1948 it was decided that, in order to facilitate the work of the Highways Department, a conference might be held once a year in each circle or convenient groups of circles, attended by the Chief Engineer (Highways) or his representative, the Inspector of Municipal Councils and Local Boards or his representative, the Superintending Engineers (Highways) concerned and the Special Officers of District Boards or the Presidents, District Boards concerned to discuss all matters of mutual interest. The Chief Engineer (Highways) is to preside at these meetings and the Superintending Engineers to function as convenors. It was also considered necessary that the Superintending Engineers (Highways) are to be assisted by the Divisional Engineers (Highways) under them at the meetings. Accordingly, it was recommended to Government for the holding of separate conferences for each of the four territorial circles as indicated below :—

Circle.	Venue.	Date.
I. Kakinada		23th April 1949.
II Chittgor		5th May 1949.
III Tiruchirappalli		26th May 1949.
IV Coimbatore		30th May 1949.

Government approved the proposal in March 1949.

CHAPTER VIII.

FIRKA DEVELOPMENT SCHEME.

The 27 firkas and 7 centres selected last year by Government for intensive rural reconstruction work continued to function during the year under review. During the previous year a grant of Rs. 50,000 was allotted for each firka for village roads and the unspent balance has been reallotted for the works to be executed during the year under review.

Schemes of improvement on Government and district board roads in the selected firkas were given high priority this year also and selected execution by Highways Department.

During the year under review 104 village roads aggregating to a length of 127 miles were formed at a cost of Rs. 1.4 lakhs as per the details given below :—

Serial number and name of firka.						Number of road works completed
1	Hindupur	..	..	..	..	5
2	Kalasapakkam	..	..	..	..	4
3	Alur	..	..	..	..	4
4	Nagari	..	..	..	..	8
5	Palladam	..	..	..	..	4
6	Vellakoil	..	..	..	..	1
7	Avanashi	..	..	..	..	1
8	Proddatur	..	..	..	..	5
9	Dendulur	..	..	..	..	2
10	Ongole	..	..	..	..	3
11	Guruvareddipalem	..	..	..	..	6
12	Vijayavada	..	..	..	..	10
13	Tirumangalam	..	..	..	..	11
14	Tellicherry	..	..	..	..	1
15	Payyanur	..	..	..	..	5
16	Kundah	..	..	..	..	1
17	Malli	..	..	..	..	2
18	Veerapandy	..	..	..	..	23
19	Saliangalam	..	..	..	..	2
20	Shermadevi	..	..	..	..	2
21	Musiri	..	..	..	..	4

104

The officers of the Highways Department continued to exercise technical control and supervision over these works.

CHAPTER IX.

TOOLS AND PLANT.

The comprehensive plan of Post-War Road Development provides plant and equipment to the value of Rs. 840 lakhs. It was formerly proposed to acquire plant and equipment to the extent of Rs. 332 lakhs for the immediate requirements of the department and for taking up works departmentally on a large scale through ex-service men. This did not materialize since ex-service men were generally not inclined to take up road work. The programme was therefore revised, providing only for the minimum equipment necessary for day-to-day work.

In G.O. Ms. No. 906, P.W., dated 12th March 1949, the Government have approved the revised phased programme for the purchase of minimum plant and machinery, required for the Highways Department at an estimate

cost of Rs. 332 lakhs. Permission was accorded to proceed with the acquisition of plant and machinery in conformity with the programme up to a limit of Rs. 135.98 lakhs. Suitable action was being taken by this department and an expenditure of Rs. 92.18 lakhs was incurred to the end of March 1949 (second supplement). The important units of plant and machinery available with the department as on 1st April 1948 and 31st March 1949 are listed below :—

Serial number and name of plant.	Number as on 1st April 1948.	Number as on 31st March 1949.
1 Lorries	237	238
2 Jeeps	..	18
3 Road-rollers	246	293
4 Concrete mixers	62	62
5 Tar boilers	43	43
6 Pump sets	17	21
7 Heat Master tar boilers	16	16
8 Graders	1	3
9 Stone crushers	4	5
10 Asphalt cold mixing plants	2	3
11 Concrete vibrator machine	..	1
12 Tractors, 40 h.p.	..	1
13 Oxy-acetylene welding sets	2	2
14 Drill sharpening machine	6	6
15 Mobile air compressors	3	3

2. *Pudukkottai State Workshops*.—Government directed in G.O. Ms. No. 4584, P.W., dated 27th November 1948, that the workshops including the lorries and stores under the control of the State Engineer, Pudukkottai, be transferred to the Highways Department. The workshop together with the staff employed therein was taken over accordingly in December 1948.

3. The Repair Yard at Gopalapuram and the Roller Repair Yard at Saidapet which were started early in 1947 continued at these places till January 1949. In February and March 1949, these yards and the Transport and Machinery Central Stores at Casa Major Road, Egmore, were shifted to the premises of the Engineering College Compound, Guindy. The temporary shifting of the yards and Central Stores and their location in a portion of the College grounds was approved by Government in G.O. Ms. No. 4531, dated 24th November 1948.

4. Special activities of the Transport and Machinery Division consisted of the following :—

(a) Urgent and major repairs to plant carried out by Transport and Machinery Repair Yards at Madras and at other circle headquarters.

(b) Maintenance of Central Stores at Madras.

(c) Departmental production of road metal by means of crusher plants.

(d) Soil stabilization experimental works near Madras.

(e) Inspection and acquisition of approved equipment from military surplus and purchase of sanctioned items of plant and machinery from firms.

(a) About 50 per cent of the rollers and other plants taken over from district boards on the formation of the Highways Department were major sick ones. It was an admitted fact that necessary workshop capacity for renovating these did not and do not exist in any private, Public Works Department or Railway workshops of our Province. To devise ways and means to tackle this great problem was one of the major activities of this division. To achieve the desired end, a special scheme for the establishment of a Central Workshop was worked out and has been submitted to Government for sanction. The scheme is pending sanction.

Repairs.—Four repair parties were organized for attending to major repairs to heavy plants in out-stations, as well as for emergency repairs. Ten works of major repairs to rollers were completed during the period.

A special section was started in each repair yard for repairing Diesel engines. As the majority of the department's mechanical equipments are powered by Diesel engines, special mechanics were trained to ensure efficient operation.

The automobile section systematically attended to routine works such as major and minor repairs and body-building.

The welding section of the Central Repair Yard has developed a special technique for repairing worn-out gear wheels and building up worn crusher-jaws.

Manufacture.—The resources of the Repair Yard were utilized in manufacturing certain equipments not easily available in market at a reasonably low cost. Asphalt drum mixers, asphalt spraying equipments, Trailer carts with A.D.V. equipments, trolleys and fittings for portable pump-sets, and soil testing apparatus, such as Liquid Limit Apparatus, Proctor Compaction Apparatus, Sand Density Bottle and Cone Penetrometer, etc., are among the items made during the year.

The Repair Yards at Coimbatore, Rajahmundry, Bellary and Tiruchirappalli also functioned satisfactorily during the year 1948-49.

(b) **Central Stores.**—Spare parts for plant and machinery, steel stores and other stores costing about Rs. 2.5 lakhs approximately were stocked in the Central Stores.

(c) **Departmental production of road metal by means of crusher-plants.**—Five Stone Crusher units worked during the year and showed the desired results in checking soaring rates and monopolistic tendencies.

(d) **Soil stabilization.**—Full scale field experiments on stabilized base courses in lieu of stone soling were carried out near Madras. An experiment on a larger scale involving black cotton soil was programmed in Guntur district for execution during the year 1949-50.

(e) **Other activities.**—This division took part in the Engineering Exhibition organized by the Engineering College, Guindy, in January 1949 and also in the Indian Roads Congress Exhibition at Ranchi in February 1949.

General resume.—In addition to making arrangements for supply of fuels, lubricating oils, tyres and batteries to various Highways Divisions this division initiated the use of mechanical road graders for rapid formation of village roads. A length of about 12 miles was formed by this method in the Firka Development area in South Arcot district.

CHAPTER X.

1. AVENUE PLANTATIONS.

Government called for proposals for the new plantation of avenue trees and the Superintending Engineers were asked to prepare them in the light of the instructions issued by the Chief Engineer. These proposals were under compilation in the several divisions.

During the year under review 25,496 plants of various species were planted. Good results were achieved in South Arcot Division where 13,723 plants were planted in all. Out of these 11,200 were planted by gang coolies on bonus system.

In G.O. No. 2758, P.W., dated 31st July 1948, the control of avenues on Government roads including National Highways in municipal areas was vested in the municipal councils concerned. It was laid down that municipal councils should maintain and develop the avenues subject to the general control of the Highways authority and that they may appropriate the entire income therefrom. The progress made in each division on 'avenue plantations' is given in Appendix XI.

2. FERRIES.

In G.O. No. 2050, P.W., dated 8th June 1948, the ferry across the Pennar river at M. 109/1-3 of the Madras-Calcutta road was transferred from the Nellore District Board to the Highways Department. In G.O. No. 5105, P.W., dated 30th December 1948, Chungadakodu kadavu, Karimpuzza kadavu and Perrantoi kadavu—ferries in Malabar district were transferred from the District Board to the Highways Department. In G.O. No. 4251, P.W., dated 21st October 1948, the Pasuvallanka ferry in the East Godavari District Board was transferred from the District Board to the Highways Department.

In G.O. No. 4130, P.W., dated 20th October 1948, the Manantoddy Changada kadavu ferry in Malabar district was retransferred to the District Board.

The question of adoption of common forms of sale notification, agreement, etc., for the ferry sales of the Highways Department was under consideration. A list of ferries in charge of the Highways Department as on 31st March 1949 is given in Appendix XII.

With a view to improve the ferry services it was decided to purchase some ramped cargo lighters for important ferries in the Province. Necessary tenders were sent.

3. ENCROACHMENTS.

In G.O. No. 518, P.W., dated 10th February 1949, Government authorized the municipal councils to instal box stalls on Government road margins within their limits with the approval of the Highways authority and the Collector and lease them. In the case of roads outside municipal limits the Revenue Department was authorized to instal box stalls and lease the

Type designs for box stalls were under preparation by the Chief Engineer for issue to the various authorities.

4. INSPECTION BUNGALOWS AND TRAVELLERS' BUNGALOWS.

Ten of the Inspection Bungalows mentioned below in charge of the Public Works Department in Dowlaishwaram Circle in 1947-48 and propose for transfer to this department were taken over during the year. :-

Inspection Bungalows at—

- | | |
|-------------------|------------------|
| (1) Dondapudi. | (6) Velagapalli. |
| (2) Buttayagudem. | (7) Parnasala. |
| (3) Jeelugumilli. | (8) Edira. |
| (4) Taduvai. | (9) Alpaka. |
| (5) Giddada. | (10) Perur. |

A list of Inspection Bungalows in charge of the department is given in Appendix XIII.

The question of taking over the Travellers' Bungalows resting with the district boards, without payment of compensation in respect of those which originally belonged to Government but were alienated to the District Boards free of cost, and other Travellers' Bungalows by paying some compensation was still under correspondence. The District Board Travellers' Bungalows were under the supervision of the Highways' officers. A list of (1) Travellers' Bungalows taken over and maintained by this department and (2) Travellers' Bungalows resting with the District Boards but were under the supervision of this department as on 31st March 1949 is given in Appendix XIII.

5. CONDITIONS OF LABOUR.

The labour position, continued to be acute during the year under review, owing to the high cost of living and scarcity of foodgrains. Whereas labour required could be secured at the local rates in some of the districts, the department had to import labour from the neighbouring districts in the other districts.

A brief picture of the labour conditions in the districts is given below :-

I Circle, Kakinada.

(1) *Visakhapatnam*.—There was scarcity of labour in general. In the southern area, scarcity of labour was mainly due to the demands of Scindia Navigation Company, Port Department and the Jute Mill at Chittivalasa. In the Agency area, coolies had to be brought from the plains offering high wages.

(2) *East Godavari district*.—Labour was available at the enhanced schedule of rates in the plains—but in the Agency area the position was difficult and labour was scarce in spite of high wages.

(3) *West Godavari district*.—Labour was available excepting in transplantation and harvesting seasons.

(4) *Krishna district*.—Labour was available throughout the district. Wages were high due to the high cost of living.

(5) *Guntur district*.—Labour was generally scarce, as this district is a tobacco growing centre.

II Circle, Madras.

(6) *Anantapur district*.—Labour was satisfactory except in Kadiri and Uravakonda taluks where 20 per cent extra wages had to be paid.

(7) *Bellary district*.—On account of the demand for Tungabhadra Project works, scarcity of labour was keenly felt. In addition to the local labour, outside labour was also imported for the project works.

(8) *Kurnool district*.—Labour was generally scarce and the execution of works was difficult.

(9) *Cuddapah district*.—The cost of labour both skilled and unskilled was higher, when compared with the neighbouring districts.

(10) *Nellore district*.—A good number of labourers are reported to have migrated to Tungabhadra Project Works, where they were paid higher rates and hence there was scarcity of labour in this district. Further the Mica Industry in this district attracts much of the labour.

(11) *Chittoor district*.—The position was generally satisfactory in this district.

(12) *Chingleput district*.—The position was very difficult in and around the City of Madras. In the remaining area, rates continued to be high.

(13) *North Arcot district*.—The cost of skilled labour increased. In Tiruvannamalai and Tiruppattur taluks, unskilled labour for breaking road metal had to be imported from other districts.

(14) *South Arcot district*.—Labour was diverted to cultivation and other works. Hence the cost of labour increased especially in Kallakurichi section.

III Circle, Tiruchirappalli.

(15) *Tanjore district*.—This is purely a deltaic area and agriculture is the main occupation. Labour was available only in seasons when agricultural operations were suspended. There was also a keen demand for labour owing to Kisan trouble in the district. Labour was not easily procurable and it was found that the wages that had to be paid were not commensurate with their outturn.

(16) *Tiruchirappalli district*.—The conditions of labour continued to be unsatisfactory and cost of labour showed a tendency to rise due to various causes. However towards the end of the year, road maintenance tenders showed a slight decrease in rates.

(17) *Mathurai district*.—Conditions of labour remained constant throughout the year. At the end of the year there seemed signs of decrease.

(18) *Tirunelveli district*.—In Srivaikuntam and Tiruchendur sections labour had to be imported from Sattur. Higher wages had to be paid except in rainy season due to the working of mills and salt pans around Tuticorin.

(19) *Ramnad district*.—Due to high prices prevailing and scarcity of food, labour emigrated to the other adjoining districts. In consequence there was scarcity of labour. During second half of the year, there was rain and coolies preferred agricultural labour.

IV Circle, Coimbatore.

(20) *Salem district*.—Cost of labour continued to be high and non-availability of labour was felt in the highly malarial places.

(21) *Coimbatore district*.—The position was comparatively better than what it was in 1947-48. Due to scarcity of foodgrains, there was difficulty in inducing coolies to take up hard work like road-making, breaking of metal, etc., further the Lower Bhavani Project attracted a large portion of unskilled labour.

(22) *Nilgiris district*.—Due to the project works under execution by the Electricity department in Gudalur and Naduvattam sections, there difficulty in procuring labour for road works.

(23) *Malabar district*.—Skilled labour was available to the required extent, but the problem of unskilled labour continued to remain acute. The very little labour available was apparently influenced by Communists' activities. Labour had to be imported from outside the district.

(24) *South Kanara district*.—The position was acute especially in skilled and semi-skilled labour required for masonry and quarrying works.

6. ACCIDENTS.

During the year under reference there were eight major accidents of which seven proved fatal. All the victims were coolies employed in road works and this involved payment of compensation to the tune of Rs. 7,978, the amount being recoverable from the contractors in most cases.

Details of the accidents are furnished below:—

District.	Date and nature of accident.	Name of victim and brief notes on the accident.	State in the award of compensation.	Loss to property, if any.
(1)	(2)	(3)	(4)	(5)
<i>Kannappa Maistri.</i>				
(1) Coimbatore ..	8th September 1948. Fatal.	The accident occurred at Kurundimalai quarry. The coolie Kannappa Maistri while levering a big stone slipped and fell down in an adjoining pit. The stone fell over him and crushed him. Death was instantaneous.	Rs. 1,500 awarded as compensation, was paid by the contractor.	Nil.
<i>Kuttai Palani Kuyavan.</i>				
(2) Coimbatore ..	29th November 1948. Temporary disablement.	A coolie employed on Udumalpet-Chinnadharam road at M. 8/1 slipped and fell down while dragging a roller. He was run over by the roller, resulting in fracture of the right thigh.	The Commissioner for Workmen's Compensation has awarded Rs. 108 and the contractor paid the amount.	
<i>Chinna Pillai.</i>				
(3) Ramnad ..	24th October 1948. Fatal.	Woman coolie was run over by a stone road roller while spreading work was in progress at M. 5/6 of Ramnad-Devipatnam road. She died on the spot. The accident was due to the sudden snapping of the wooden frame of the roller.	Rs. 550 awarded as compensation, has been deposited with the Commissioner for Workmen's compensation.	
<i>Kandaswami Goundan.</i>				
(4) North Arcot ..	3rd November 1948. Fatal.	Gang coolie met with an accident while cutting down the branch of an avenue tree on the Ranipet-Krishnagiri road at M. 128/6. He was on the tree and was cutting the branches. He fell down and died instantaneously.	Rs. 900 awarded as compensation, has been deposited with the Commissioner for Workmen's Compensation.	
<i>Govinda Goundan.</i>				
(5) Salem ..	14th November 1948. Fatal.	A coolie employed on the work of repairs to Tiruchengode-Ariyanur road was run over by the stone roller which was being dragged. He died on the	Rs. 1,050 awarded as compensation, has been deposited with the Commissioner for Workmen's Compensation.	

District.	Date and nature of accident.	Name of victim and brief notes on the accident.	State in the award of compensation.	Loss to property, if any.
(1)	(2)	(3)	(4)	(5)
<i>Velu Mudali.</i>				
(6) Tirunelveli ..	24th November 1948. Fatal.	A road coolie slipped and fell down while dragging a roller at M. 0/3 of Melagaram-Kasimajorpuram road. The roller ran over him and he was crushed to death.	Rs. 810 awarded as compensation, has been deposited with the Commissioner for Workmen's Compensation.	Nil.
<i>K. Ahmed.</i>				
(7) Malabar ..	24th December 1948. Fatal.	The coolie was engaged in blasting of granite stone from the quarry at M. 4/4 of Thanalur-Puthanathi road. While he was examining some of the holes loaded with explosives the previous day and trying to remove the unexploded charge from one of them, it suddenly exploded, and the coolie sustained very serious injuries. He was immediately rushed to the Local Fund Hospital for treatment where he died the next day 25th December 1948.	Rs. 1,800 awarded as compensation, has been deposited with the Commissioner for Workmen's Compensation.	Nil.
<i>Kamalam and Rajathi.</i>				
(8) Tiruchirappalli.	5th January 1949. Fatal.	Two women coolies were run over by a heavy stone roller while at work on Seplaputhur-Andapuram road in M. 2/7. One of them, Kamalam slipped and fell down while the other fell down due to nervousness. The former died on the spot and the latter was taken over to the hospital where she died the same day.	Rs. 1,250 awarded as compensation, has been deposited with the Commissioner for Workmen's Compensation.	Nil.

7. FLOOD AND MONSOON DAMAGES.

There were unseasonal and heavy rains during the year in the district^s of:—

- | | |
|--------------------|--------------------|
| (1) Mathurai. | (8) Krishna. |
| (2) Salem. | (9) East Godavari. |
| (3) Tirunelveli. | (10) South Arcot. |
| (4) Visakhapatnam. | (11) Ramnad. |
| (5) Malabar. | (12) North Arcot. |
| (6) South Kanara. | (13) Nilgiris. |
| (7) Chittoor. | (14) Chingleput. |

There were several cases of interruption to traffic. The most important of them occurred on the Ootacamund-Mettupalayam road due to land slide resulting in heavy damage and interruption lasting for about a month.

Prompt action was taken and the traffic was restored as early as possible

Details of roads affected and the extent of damage caused are given below:—

Name of district.	Name of road.	Month of occurrence.	Extent of damages caused and remarks.
(1)	(2)	(3)	(4)
1 Mathurai	.. Kodalkanal-Cochin road bridge at M. 27/0.	May 1948	.. Bridge collapsed.
2 Do.	.. Kodalkanal-Cochin road at M. 26/8.	Do.	.. Obstruction caused by uprooted trees, etc.
3 Do.	.. Salem-Tirupathur road Pennar crossing at M. 47/5.	Do.	.. Heavy rains, depth of flow 3 feet.
4 Do.	.. Do.	October 1948	.. Heavy rains.
5 Do.	.. Do.	November 1948	.. Culverts washed off due to over flooding.
6 Tirunelveli	.. Nanguneri-Thirukurangudi road: culvert at M. 6/8.	July 1948	.. Breach of Kesavami tank in Nammali Thalavampalayam village.
7 Visakhapatnam	.. Great Northern and Southern Trunk road Nathavasala river Crossing at M. 520/8-6.	Do.	.. Nathavasala river crossing unfordable.
8 Do.	.. Do.	August 1948	.. Do.
9 Do.	.. Do.	September 1948	.. Do.
10 Do.	.. Do.	October 1948	.. Do.
11 Do.	.. Do.	November 1948	.. Do.
12 Do.	.. Do.	Do.	.. Do.
13 Malabar Kozhikode.	.. Vaithiri-Gudalur road at M. 33/7.	August 1948	.. Slips occurred and blocked road for traffic.
14 South Kanara	.. Udipi Coast road: Kalsanka Bridge at M. 37/4.	Do.	.. Unprecedented rain-bridge collapsed—traffic diverted to Subbarayan road, Malpe town.
15 Chittoor	.. Puthalpet-Naldupet road: diversion at M. 54/2-4.	September 1948	.. Diversion road breached causing interruption of vehicular traffic—flood 3 feet deep.
16 Do.	.. Do.	October 1948	.. Do.
17 Do.	.. Do.	November 1948	.. Diversion road almost washed off—flood 4 feet deep—pedestrian traffic went on foot bridge.
18 Krishna	.. (1) Great Northern Trunk Road at M. 279/8 N.H. .. (2) Kankipad-Kesarappalli road at M. 5/1.	Do.	.. Traffic held up on account of floods.
19 East Godavari	.. Rajanagaram-Peddapuram road: culvert at M. 18/4.	Do.	.. Culvert collapsed causing interruption of traffic.
20 South Arcot	.. Chittoor-Cuddalore road: Pennar causeway at M. 45.	Do.	.. Pennar causeway unfordable on account of floods.
21 Do.	.. Vriddhachalam-Porto Novo road at M. 16 to 22.	Do.	.. Vellar in floods—traffic interrupted.
22 Do.	.. Madras-Tiruchirappalli road: Pennar: causeway at M. 105.	Do.	.. Traffic interrupted.
23 Do.	.. Solathiram-Srimushnam road near Thanampet.	Do.	.. Solathiram-Srimushnam road breached—traffic interrupted.
24 Ramnad	.. Great Southern Trunk road: causeway at M. 339/4.	Do.	.. Causeway in floods—traffic interrupted.
25 Do.	.. Ramnad-Devipattanam causeway at M. 3/2.	Do.	.. Vaigai river in floods—causeway unfordable—water 3 feet depth.
26 Do.	.. Madras-Ramnad road dam at M. 52/1.	Do.	.. Vaigai river in floods—road dam unfordable—water 3 feet depth.
27 North Arcot	.. Cuddalore-Chittoor road: Kannamangalam causeway at M. 105.	Do.	.. Traffic interruption due to floods.
28 Chingleput	.. Tada Varadayapalayam road at M. 6/5, 6/6.	Do.	.. Interruption of traffic occurred on account of floods.
29 Do.	.. Great Southern Trunk road: Palar causeway at M. 339/4.	Do.	.. Overflow at causeway—traffic interrupted.
30 Nilgiris	.. Ootacamund-Mettupalayam road at M. 2/5.	Do.	.. Heavy land slide—traffic interrupted for four weeks.
31 Do.	.. Ootacamund-Mettupalayam road at M. 14/25.	Do.	.. Traffic interruption on account of heavy slips to road diversion was arranged via Devarahola road.
32 Do.	.. Kotagiri-Mettupalayam road, at M. 0/5 to 10/3.	December 1948	.. Slips of boulders and earth slips and damage to revetments.

APPENDIX I-A.

(1) Growth of roads in Madras Province.

1880-81	19,500 MILES
1885-86	19,650 MILES
1890-91	21,600 MILES
1895-96	21,600 MILES
1900-01	23,800 MILES
1905-06	25,100 MILES
1910-11	26,000 MILES
1915-16	26,500 MILES
1920-21	26,500 MILES
1925-26	28,700 MILES
1930-31	32,600 MILES
1935-36	36,000 MILES
1940-41	37,900 MILES
1945-46	37,900 MILES

APPENDIX I-B.

Statement showing the lengths of metalled and unmetalled roads maintained during 1948-49 as on 31st March 1949.

Serial number.	Name of district.	Highways.		Public Works Department roads.		District Board roads.		Municipal roads.		Total metalled roads.	Total unmetalled roads.
		Metalled.	Unmetalled.	Metalled.	Unmetalled.	Metalled.	Unmetalled.	Metalled.	Unmetalled.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
I Circle.											
1	Visakhapatnam	1,065	4	..	..	538	240	144	30	1,747	274
2	East Godavari	595	94	..	..	378	581	96	54	1,075	736
3	West Godavari	443	56	17	..	225	343	76	13	761	412
4	Krishna	437	10	2	30	144	633	81	93	864	771
5	Guntur	602	57	1	30	336	599	110	56	1,049	742
II Circle.											
6	Madras	..	..	3	..	674	..	43	..	3	..
7	Nellore	604	..	4	1	300	283	38	21	1,325	66
8	Kurnool	650	12	..	..	418	155	59	30	933	316
9	Bellary	535	..	..	..	576	144	19	14	1,012	185
10	Anantapur	541	..	..	..	576	144	19	14	1,136	158
11	Chittoor	407	2	..	..	500	60	33	7	940	69
12	Chingleput	657	..	3	..	157	639	37	25	854	663
13	Chittoor	704	30	..	..	227	641	26	17	957	688
14	North Arcot	660	..	1	..	365	514	80	61	1,106	576
III Circle.											
15	South Arcot	525	24	11	102	427	1,021	76	16	1,039	1,163
16	Tiruchirappalli	663	474	16	78	282	497	93	37	1,059	1,081
17	Tanjore	609	56	4	402	287	1,633	116	135	1,016	2,276
18	Madurai	593	36	5	9	450	373	131	122	1,179	540
19	Ramanad	464	..	..	..	374	234	103	109	941	393
20	Tirunelveli	460	..	1	8	685	192	93	47	1,184	247
IV Circle.											
21	Salem	810	4	..	..	1,027	504	43	37	1,880	545
22	Coimbatore	1,063	3	3	..	1,023	1,224	154	43	2,243	1,275
23	Nilgiris	194	..	13	..	190	216	106	36	607	252
24	Malabar	933	7	13	..	497	533	104	76	1,547	616
25	South Kanara	683	15	..	..	200	542	53	11	941	568
Total		14,896	884	103	662	10,230	11,964	1,919	1,100	27,148	14,610

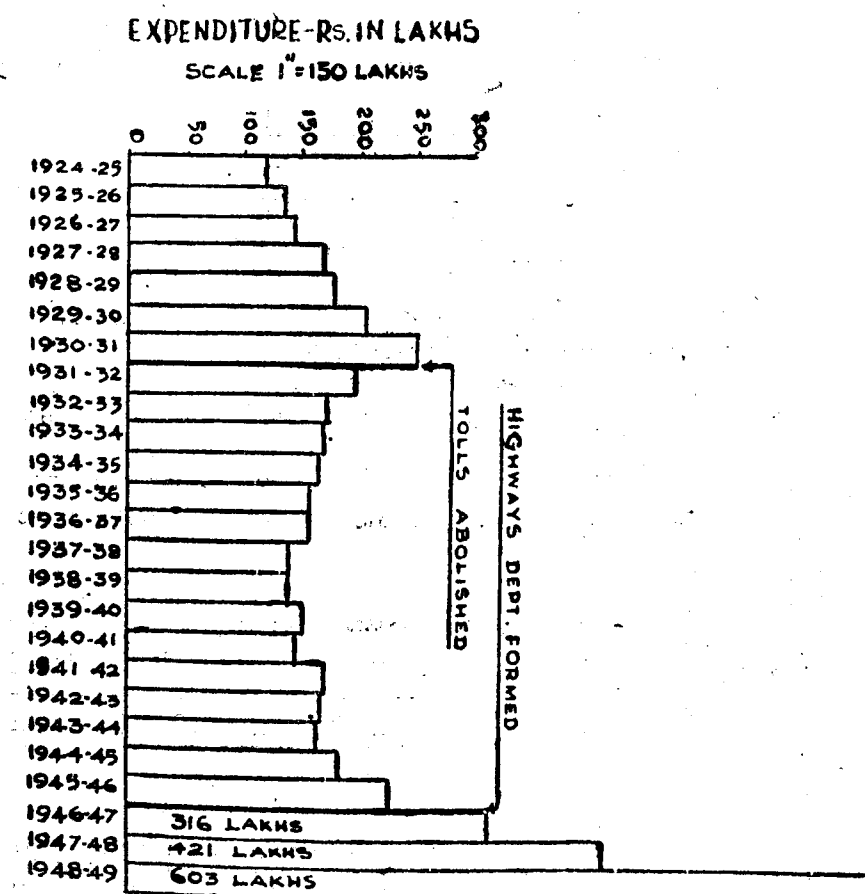
ABSTRACT.

	Metalled.	Unmetalled.
Highways	14,896	884
Public Works Department roads	103	662
District board roads	10,230	11,964
Municipal roads	1,919	1,100
Total	27,148	14,610

REMARKS.—104 miles of roads were taken over from the district boards during the year 1948-49. 77 miles of roads were taken over from the Forest Department and Banganapalle State. Includes roads in Pudukkottai State. (Metalled 75 and unmetalled 474.)

APPENDIX II

TOTAL ANNUAL EXPENDITURE ON ROADS INCLUDING CAPITAL WORKS.



APPENDIX III.

(1) Statement showing in abstract the appropriation and expenditure in 1948-49—Highways only.

Finance heads.	Original appropriation.	Final appropriation.	Actual expenditure.
(1)	(2)	(3)	(4)
RS.	RS.	RS.	RS.
50. CIVIL WORKS—CENTRAL—WORKS AND REPAIRS.			
50. Civil works—Central—Works and Repairs	50,60,000	49,90,000	53,62,754
(1) 50. Civil Works—Provincial Buildings and Roads—			
Partially Excluded Areas—			
(1) Excluding Post-War Reconstruction	8,11,300	5,81,600	5,67,696
(2) Post-war Reconstruction	1,30,000	81,700	95,881
Ordinary Areas—			
(1) Excluding Post-War Reconstruction	2,79,80,900	2,92,76,800	3,00,59,708
(2) Post-War Reconstruction	1,21,38,400	31,67,000	29,87,545
Total Civil Works, etc.			3,37,10,830
(2) Ordinary Establishment—			
50. Civil Works—Provincial—			
(1) Partially Excluded Areas	1,24,800	1,68,400	1,72,271
(2) Ordinary Areas	48,63,600	46,90,600	44,82,617
Charges in England	2,200		
Total, Establishment			46,54,888
(3) Tools and Plant—			
50. Civil Works—Provincial—			
(1) Partially Excluded Areas	60,100	19,900	62,973
(2) Ordinary Areas	53,14,200	39,72,700	42,44,406
Total, Tools and Plant			43,07,379
(4) Suspense	72,900	2,48,400	13,06,869
51. Capital Outlay—Central Works		16,38,900	13,87,578
RS.			
Total Provincial and Central	4,81,16,560		
Expenditure on district board works	2,28,65,196		
	7,09,81,756		
	or		
	709.8 lakhs.		

NOTE.—The expenditure on works and repairs (Provincial, Central and district boards) alone is Rs. 6,27,13,891 or 627.1 lakhs—Please see statements (3), (4) and (5).

(2) Statement showing the appropriation and outlay during 1948-49 under all heads of Civil Works—Highways only.

Service heads.	Original works.		Repairs.		Total.	
	Appropriation.	Outlay.	Appropriation.	Outlay.	Appropriation.	Outlay.
	(2)	(3)	(4)	(5)	(6)	(7)
(1)	RS.	RS.	RS.	RS.	RS.	RS.
Central—50. Civil Works—						
Communications			49,90,000	53,62,754	49,90,000	53,62,754
Provincial—50. Civil Works—						
Partially Excluded Areas—						
Excluding Post-War Recon-						
struction—						
Communications Post-War	92,100	90,726	4,89,506	4,76,976	5,81,606	5,67,696
Reconstruction					81,700	95,881
Communications	81,700	95,881			1,68,400	1,72,271
Establishment					19,900	62,973
Tools and Plant						
50. Civil Works—Partially						
Excluded Areas—Total						5,98,821
Ordinary Areas—						
Excluding Post-War Recon-						
struction—						
Communications Post-War	5,72,800	5,01,455	2,87,02,008	2,95,58,253	2,92,76,800	3,00,59,708
Reconstruction	30,87,000	28,82,822	80,000	1,04,723	31,67,000	29,87,545
Communications					46,90,600	44,82,617
Establishment						
Charges in England						

(2) Statement showing the appropriation and outlay during 1948-49 under all heads of Civil Works—Highways only—cont.

Service heads.	Original works.		Repairs.		Total.	
	Appropriation.	Outlay.	Appropriation.	Outlay.	Appropriation.	Outlay.
	(2)	(3)	(4)	(5)	(6)	(7)
(1)	RS.	RS.	RS.	RS.	RS.	RS.
Provincial—50. Civil Works—cont.						
Ordinary Areas—cont.						
Tools and Plant					39,72,700	42,44,406
Suspense					2,48,400	13,06,869
50. Civil Works—Ordinary						
Areas—Total						4,04,67,407
Total—50. Civil Works—						
Highways						4,13,66,228
51. Civil Works—Central—						
Communications	16,38,900	13,87,578			16,38,900	13,87,578
Total—Provincial and Central.						
Expenditure on district						
board works						2,28,65,196
Grand total						7,09,81,756
						or
						709.8 lakhs.

NOTE.—Of this, the expenditure on works and repairs (Provincial, Central and district boards) alone is Rs. 6,27,13,891 or 627.1 lakhs. Please see statements 3, 4 and 5.

(3) Statement showing the expenditure incurred on Government roads during 1948-49.

Serial number and name of division.	Expenditure on original works.		Expenditure on repairs.	Total.
	Excluding Post-War Reconstruction.	Post-War Reconstruction.		
	(2)	(3)	(4)	(5)
(1)	RS.	RS.	RS.	RS.
1 Visakhapatnam, North		545	10,26,917	10,27,462
2 Do. South	11,418	2,791	11,78,828	11,93,037
3 Do. Special		95,411	59,570	1,54,981
4 Godavari, East	27,909	96,607	18,33,819	19,58,335
5 Agency	1,08,560	9,194	3,46,569	4,64,323
6 Godavari, West	5,912	1,49,153	16,03,278	17,58,343
7 Krishna	5,889	11,517	19,64,507	19,81,503
8 Guntur	26,253	3,76,206	15,97,441	19,99,900
9 Chodavaram		14,469		14,469
10 Nellore	6,672	1,12,987	9,46,738	10,66,397
11 Kurnool	2,466	47,811	10,03,522	10,53,799
12 Bellary	10,099	66,830	7,85,996	8,68,425
13 Anantapur	7,110	29,751	11,89,809	12,26,670
14 Cuddapah	10,110	64,605	7,50,655	8,25,273
15 Comphalt		7,43,377	759	7,44,636
16 Chingleput	1,942	1,69,216	11,11,824	12,82,982
17 Chittoor	1,04,977	66,963	13,09,792	14,81,732
18 Arcot, North	14,925	27,888	13,70,541	14,13,354
19 Do. South	20,298	68,724	13,20,908	14,09,925
20 Bridges, North		17,960		17,960
21 Do. South		28,798		28,798
22 Tiruchirappalli	84,459	87,420	15,45,527	17,17,397
23 Tanjore, East		97,642	8,07,580	9,05,222
24 Do. West	2,122	37,974	13,11,871	13,51,967
25 Mathural	37	1,52,360	20,58,024	22,10,421
26 Ramnad	56	1,59,317	13,42,078	15,02,346
27 Tirunelveli	5,451	90,787	12,32,758	13,28,996
28 Pugalore, Special		22,655		22,655
29 Coimbatore		31,130		31,130
30 Coimbatore, North	21,046	20,222	8,38,890	8,80,158
31 Do. South	178	15,203	13,23,221	13,38,246
32 Do. Special	159	7,89,114	15,514	8,04,787
33 Nilgiris	3,780	1,01,271	5,90,015	6,95,068
34 Malabar, North	1,008	13,811	13,15,858	13,30,675
35 Do. South	15,139	51,991	12,62,775	13,29,895
36 Bharatpuzha Bridge		27,858		27,858
37 Chirakkal Special		64,056		64,056
38 South Kanara		39,513	7,15,227	7,54,740
39 Salem, North		1,885	5,67,007	5,68,892
40 Do. South		40,649	6,85,481	7,26,130
Total	5,92,17	42,41,386	3,50,15,182	3,98,49,739

(4) Statement showing the expenditure incurred on district board works, 1948-49.

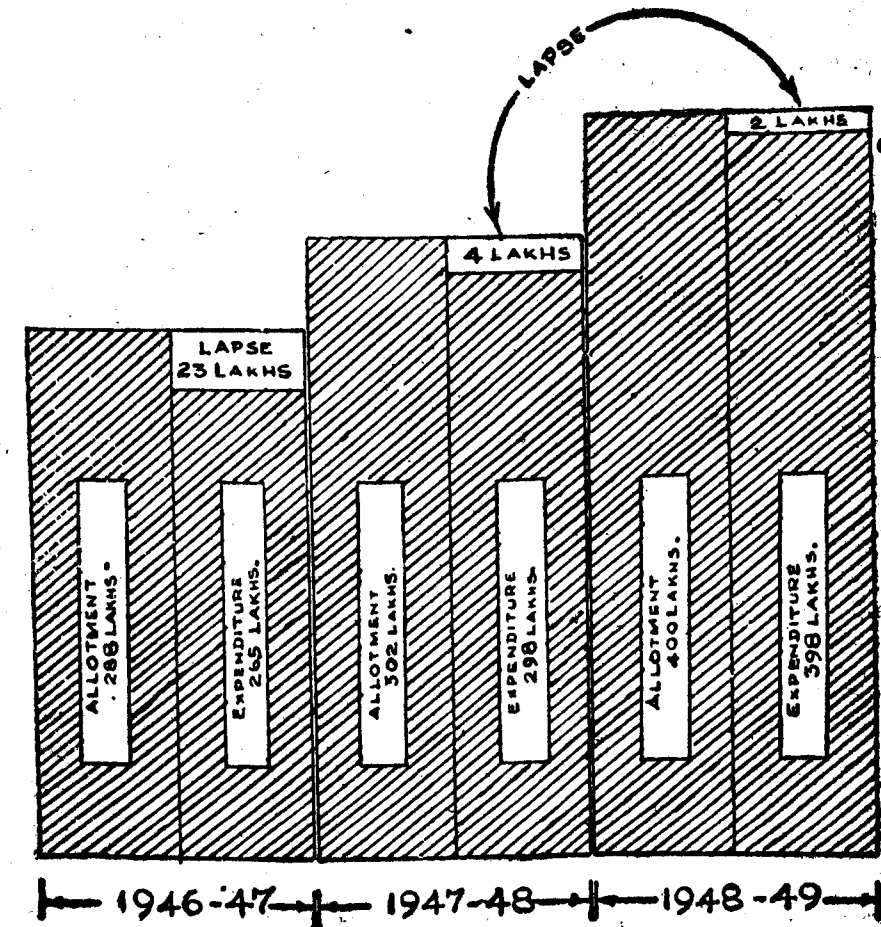
Expenditure on road works.							
Serial number and name of division.	Original works.			Total.	Expenditure on non-road works.	Total, Col. (6) + (7)	Remarks.
	Excluding Post-War Reconstruction.	Post-War Reconstruction.	Repairs.				
	(2)	(3)	(4)				
(1)	Rs.	Rs.	Rs.	(5)	(6)	(7)	(8)
1 Visakhapatnam, North.	10,784	1,10,810	1,79,486	3,01,060	1,32,466	4,33,526	..
2 Visakhapatnam, South.	9,886	1,35,578	2,90,024	4,35,488	66,652	5,02,140	..
3 Godavari, East ..	72,968	2,95,000	6,79,229	10,47,197	1,04,725	11,51,922	..
4 " West ..	2,95,095	3,01,681	3,51,720	9,48,446	94,488	10,42,934	..
5 Krishna ..	10,18,106	1,82,557	4,22,311	16,22,974	2,19,310	18,42,284	..
6 Guntur ..	4,90,357	5,23,051	3,57,422	13,70,830	1,32,741	15,03,571	..
7 Nellore ..	2,821	1,11,461	2,83,336	3,97,618	85,165	4,82,783	..
8 Kurnool ..	2,39,979	1,05,123	3,03,917	6,49,019	61,784	7,10,803	..
9 Bellary ..	5,110	9,210	1,76,000	1,90,320	11,308	2,01,628	..
10 Anantapur ..	15,122	1,58,826	3,13,380	5,17,328	27,690	5,45,018	..
11 Cuddapah ..	5,979	63,656	2,61,202	3,30,837	9,639	3,40,476	..
12 Chittoor ..	38,330	2,18,961	3,51,740	6,09,031	78,559	6,87,590	..
13 Chingleput ..	1,00,718	52,930	3,57,288	5,10,936	1,02,974	6,13,910	..
14 Arcot North ..	52,621	2,21,405	3,95,620	6,69,646	1,44,501	8,14,147	..
15 " South ..	1,09,370	2,99,287	5,70,222	9,79,879	79,441	10,59,320	..
16 Tiruchirappalli ..	65,585	1,40,809	3,06,637	5,13,031	77,597	5,90,628	..
17 Tanjore, East ..	1,18,331	35,688	3,41,337	4,95,356	60,050	5,55,406	..
18 " West ..	3,37,050	1,27,570	4,63,824	9,28,444	2,17,787	11,46,231	..
19 Madhurai ..	81,198	4,05,861	6,38,297	11,25,356	59,518	11,84,874	..
20 Ramnad ..	4,76,724	2,15,003	7,30,947	14,72,674	56,655	15,29,329	..
21 Tirunelveli ..	2,07,812	2,46,504	9,61,962	14,16,278	1,21,561	15,37,839	..
22 Salem, North ..	1,12,745	63,948	3,53,374	5,30,067	40,862	5,70,929	..
23 " South ..	59,109	1,30,555	3,22,455	5,12,119	36,235	5,48,354	..
24 Coimbatore, North ..	31,107	1,19,648	6,95,763	8,46,518	98,233	9,44,751	..
25 " South ..	41,979	84,667	4,96,867	6,22,513	1,02,956	7,25,469	..
26 Nilgiris ..	5,687	4,847	94,645	99,492	10,861	1,10,353	..
27 Malabar, North ..	18,550	69,937	4,06,166	4,81,790	46,418	5,28,208	..
28 " South ..	23,012	1,08,094	2,33,550	3,60,494	60,690	4,21,184	..
29 South Kanara ..	23,012	85,227	1,89,617	2,97,856	84,582	3,82,438	..
30 Chirakkal Special Division.	86,761	67,900	..	1,54,661	..	1,54,661	..
Total ..	41,29,166	47,27,744	1,15,83,288	2,04,40,198	24,24,998	2,28,65,196	..

(5) Statement showing the expenditure incurred on Government and district board works during 1948-49.

Serial number and name of division.	Total expenditure on Government and district board roads.			Expenditure on district board non-road works.	Grand total.
	Government roads.	District board roads.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.
1 Visakhapatnam, North	10,27,482	3,01,060	13,28,542	1,32,466	14,60,998
2 " South	11,98,087	4,35,488	16,33,575	66,652	16,99,177
3 Visakhapatnam Special.	1,54,981	..	1,54,981	..	1,54,981
4 East Godavari ..	19,58,335	10,47,197	30,05,532	1,04,725	31,10,257
5 Agency ..	4,64,323	..	4,64,323	..	4,64,323
6 West Godavari ..	17,58,343	9,48,446	27,06,789	94,488	28,01,277
7 Krishna ..	19,81,503	16,22,974	36,04,477	2,19,310	38,23,787
8 Guntur ..	19,99,900	13,70,830	33,70,730	1,32,741	35,03,471
9 Chodavaram ..	14,469	..	14,469	..	14,469
10 Nellore ..	10,66,397	3,97,618	14,64,015	85,165	15,49,180
11 Kurnool ..	10,53,799	6,49,019	17,02,818	61,784	17,64,602
12 Bellary ..	8,68,425	1,90,320	10,58,745	11,308	10,70,053
13 Anantapur ..	12,26,670	5,17,328	17,43,998	27,690	17,71,688
14 Cuddapah ..	8,25,273	3,30,837	11,56,110	9,639	11,65,749
15 Conphalt ..	7,44,686	..	7,44,686	..	7,44,686
16 Chingleput ..	12,82,932	5,10,886	17,93,818	1,02,974	18,96,792
17 Chittoor ..	14,31,732	6,09,081	20,40,813	78,559	20,19,372
18 Arcot North ..	14,18,354	6,69,646	20,88,000	1,44,501	22,32,501
19 " South ..	14,09,925	9,70,379	23,80,304	79,441	24,59,745
20 Bridges, North ..	17,960	..	17,960	..	17,960
21 " South ..	28,798	..	28,798	..	28,798
22 Tiruchirappalli ..	17,17,897	5,13,031	22,30,928	77,597	23,08,525
23 Tanjore, East ..	9,05,222	4,95,856	14,01,078	60,050	14,61,128
24 " West ..	13,51,967	9,28,444	22,80,411	2,17,787	24,98,198
25 Madhurai ..	22,10,421	11,25,356	33,35,777	59,518	33,95,295
26 Ramnad ..	15,02,346	14,72,674	29,75,020	56,655	30,31,675
27 Tirunelveli ..	18,28,996	..	18,28,996	1,21,561	19,50,557
28 Pugalur Special ..	22,655	..	22,655	..	22,655
29 Coimbatore, North ..	31,130	..	31,130	..	31,130
30 " South ..	8,80,158	8,46,518	17,26,676	98,233	17,24,909
31 " Special ..	18,38,246	6,25,513	24,63,759	1,02,956	25,66,715
32 Nilgiris ..	8,04,787	..	8,04,787	..	8,04,787
33 " Special ..	6,95,066	99,492	7,94,558	..	7,94,558
34 Malabar, North ..	18,30,675	4,31,790	22,62,465	10,861	22,73,326
35 " South ..	18,29,895	3,60,494	21,90,389	46,418	22,36,807
36 Barapuzha Bridge ..	27,853	..	27,853	..	27,853
37 Chirakkal Special ..	78,785	1,54,651	2,33,436	..	2,33,436
38 South Kanara ..	7,87,109	2,97,856	10,84,965	84,582	11,69,547
39 Salem, North ..	7,93,009	5,30,067	13,23,076	40,862	13,63,938
40 " South ..	7,50,724	5,12,119	12,62,843	36,235	12,99,078
Total ..	8,98,48,695	2,04,40,198	6,02,88,893	24,24,998	6,27,13,891

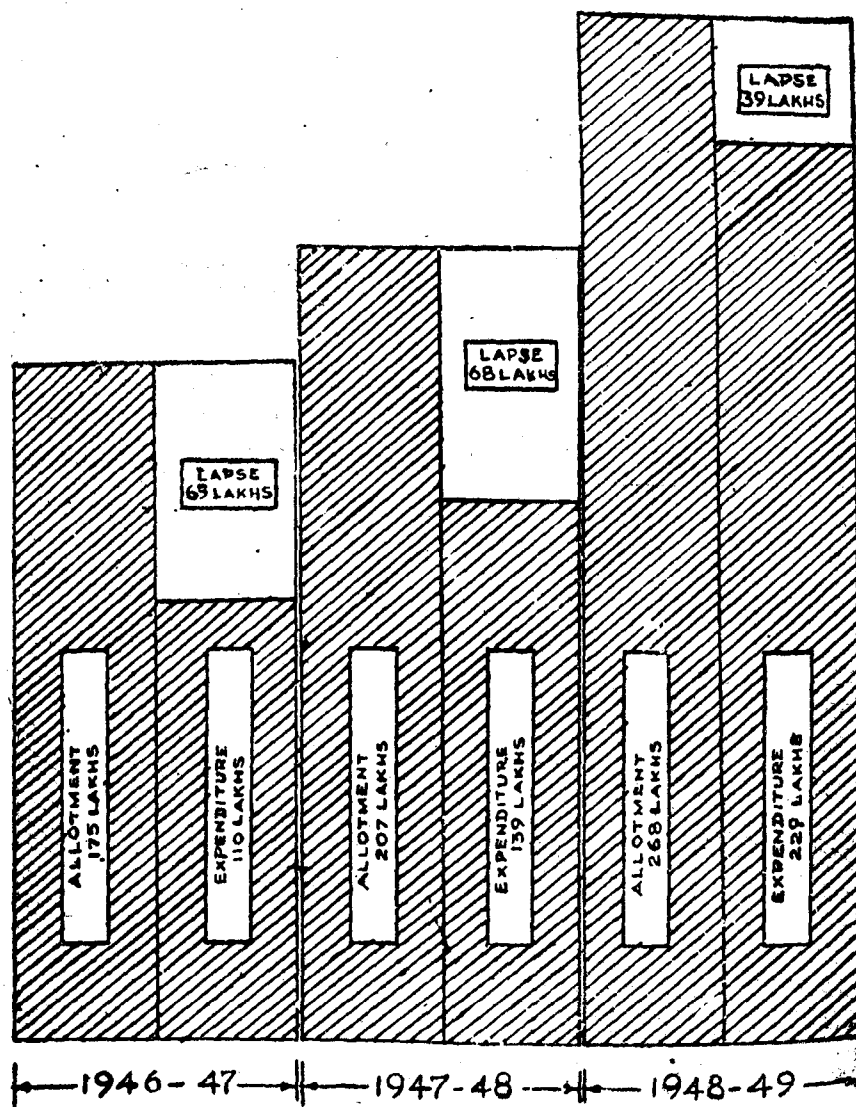
APPENDIX IV (1)

CHART SHOWING THE PROGRESS OF EXPENDITURE ON GOVERNMENT ROADS.



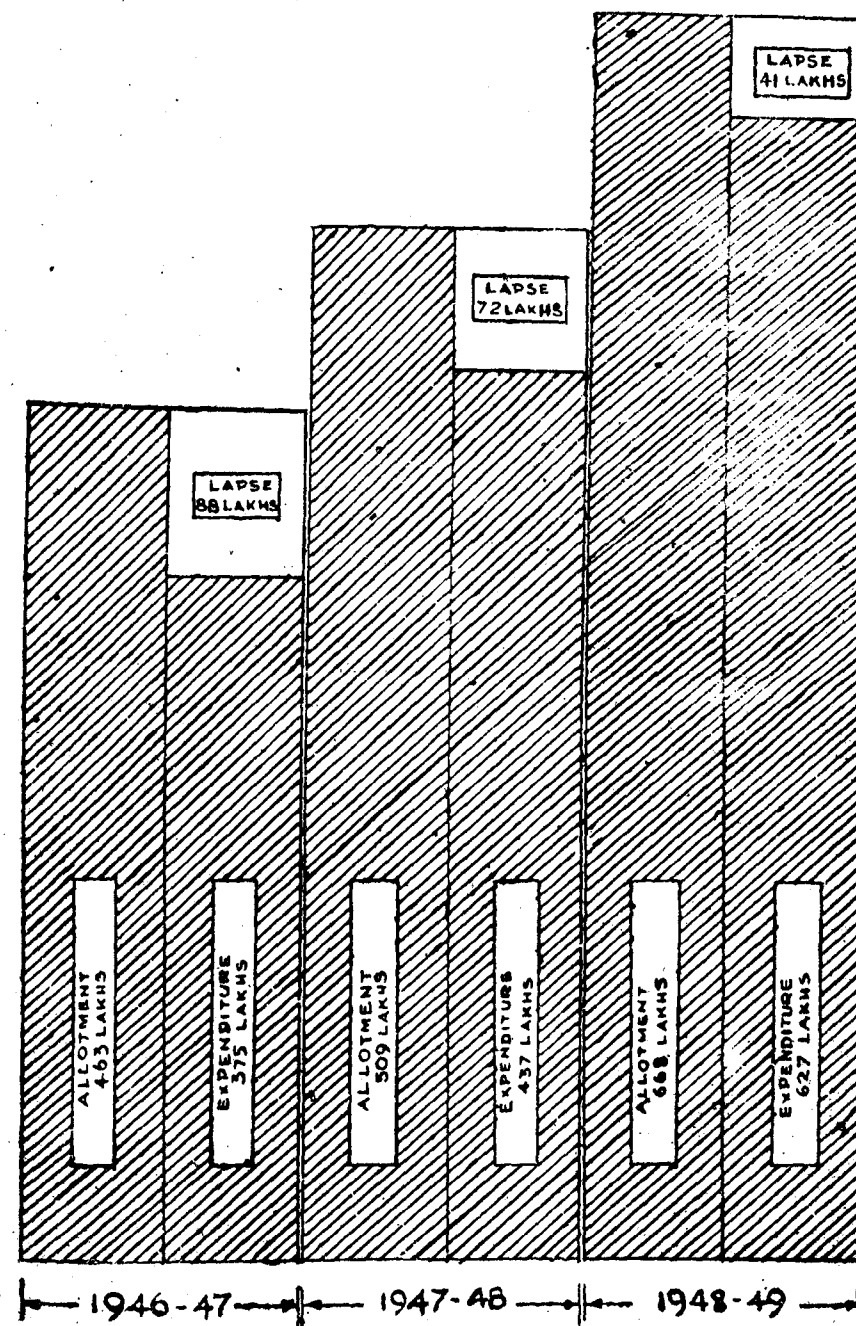
(2)

CHART SHOWING THE PROGRESS OF EXPENDITURE
ON DISTRICT BOARD WORKS.



(3)

CHART SHOWING THE PROGRESS OF EXPENDITURE
ON GOVERNMENT AND DISTRICT BOARD WORKS.



APPENDIX V.

Review of works costing over rupees one lakh each in progress.

Serial number and name of work.	Estimated cost.	Expenditure during the year.	Total expenditure up to end of the year.	Remarks.
(1)	(2)	(3)	(4)	(5)
RS.	RS.	RS.	RS.	
A. GOVERNMENT ROADS.				
I. ROAD DEVELOPMENT FUND WORKS.				
(a) Bridges and culverts.				
1 Constructing a bridge near Kalvapalli on Anantapur-Kalyandrug road at mile 19/8 (Anantapur II Circle).	2,70,060	1,398	67,884	A revised estimate was sanctioned and tenders were being called for executing the balance of work.
(b) Cement concrete and black-top works.				
2 Laying cement concrete surfacing on the Great Northern Trunk road from mile 271/3 plus 104 to 276/8-104 (Krishna I Circle).	2,98,000	5,389	2,60,250	Strengthening the culverts to A class loading and laying. Cement concrete slabs over them remain to be done. As there was no response to tenders, the work was under execution departmentally.
(c) Improvements to special repairs and other works.				
3 Metalling Bapatla-Pedanandipadu road, miles 12/0 to 18/1, M.D.R. (Guntur I Circle).	Revised Estimate 2,60,000	8,042	8,042	There was delay in starting the work due to settling of tenders; materials were being collected by the selected contractor.
4 Metalling Ilur-Nidumolu-Kowtharam road, miles 9/0 to 6/0 (Krishna I Circle).	Revised Estimate 2,23,500	Nil.	Nil.	Particulars of revised estimate were sent to Government of India and their approval was awaited.
5 Metalling and constructing two bridges and ten culverts on Rajahmundry-Maredumilli road, miles 47/0 to 48/2 (Agency Area I Circle).	1,74,600	69,552	1,11,942	Metalling of the road was completed; cement and steel indented for were not received before March 1949 and therefore the construction of culverts could not be completed in 1948-49 as programmed.
6 Metalling Chintapalli-Gudem road from miles 33/3-27/0 to 41/6 (Agency Area I Circle).	Revised Estimate 1,98,000	18,971	72,884	The work was in progress.
7 Widening and revetting the canal slopes of narrow portions of Narsapur-Prakkilanka road, miles 14/0 to 23/0 (West Godavari I Circle).	Revised Estimate 1,62,000	518	518	Do.
II. POST-WAR ROAD DEVELOPMENT WORKS.				
(a) Bridges and culverts.				
8 Constructing a bridge across River Cauvery at Pugalur on National Highways No. 7, Benares-Cape Comorin road (III Circle).	26,00,000	22,655	22,655	A special division was sanctioned for the execution of this work and it was formed on 1st July 1948. Necessary preliminaries were gone in to commence the work.
9 Bridge across the Coleroon at Analkaranchatram on Chidambaram-Shivalli road.	28.5 lakhs	31,071	31,071	Orders of Government on the tender proposals were awaited. The special division sanctioned for the execution of the work was formed on 25th December 1948. Preliminary work such as construction of staff quarters at work-site were undertaken.
10 Widening the Cauverypatnam bridge in Salem Section of National Highways No. 7, Benares-Cape Comorin road (IV Circle).	..	2,158	2,158	The estimate for the work was pending administrative approval of the Government of India. Expenditure indicates cost of M. S. roads received for the work. Estimate since sanctioned by Government of India.
11 Constructing a bridge across Kuttikole river at mile 5/8 of Ballapatnam Taliparamba Section of Cape Comorin-Bombay road (IV Circle).	1.3 lakhs	30,000	80,000	One abutment was raised to high tide level; wells for two piers were constructed and sinking was in progress.
12 Constructing a bridge over the Payaswami river at mile 52/8 of Kalladka-Kanhangad road (IV Circle).	5,50,000	2,152	2,152	The estimate was awaiting technical sanction. The expenditure incurred represents the cost of materials purchased.
13 Constructing a bridge across Bharatpuzha river at mile 18/2 of Angadipuram - Kuttipuram - Cochin Frontier road (IV Circle).	12,00,000	28,201	28,201	The agreement for the work was concluded only in March 1949. Materials were being collected to push through the work. Land acquisition proceedings for approach roads, quarries and sites for the erection of temporary structures were pending with the Revenue department.

Review of works costing over rupees one lakh each in progress—cont.

Serial number and name of work.	Estimated cost.	Expenditure during the year.	Total expenditure up to end of the year.	Remarks.
(1)	(2)	(3)	(4)	(5)
RS.	RS.	RS.	RS.	
A. GOVERNMENT ROADS—cont.				
II. POST-WAR ROAD DEVELOPMENT WORKS—cont.				
(b) Cement concrete and black-top works.				
14 Cement concreting the Madras-Calcutta road, miles 247/1-4 and 250/3 to 287/0 (Guntur I Circle).	10,50,000	19,792	19,792	Estimate was approved and tenders were being invited.
15 Cement concreting Guntur-Amaravathi road, miles 0/0 to 1/0 M.D.R. (Guntur I Circle).	1,00,000	3,069	3,069	Tenders were not settled during the year but cement was obtained in March 1949.
16 Cement concreting Machilipatnam-Hyderabad road, miles 34/0 to 39/5-354 (Krishna I Circle).	4,54,000	6,434	6,434	Tenders were awaiting approval. Cement was obtained.
17 Cement concreting Rajahmundry-Kakinada road including strengthening of culverts, miles 0/0 to 10/0 (East Godavari I Circle).	8,65,000	4,457	4,457	Expenditure was incurred on collection of cement only. Technical sanction to the Revised Estimate was pending.
18 Providing cement concrete surfacing from miles 1/0 to 2/4-20/0 of Rajahmundry-Kakinada road and Dowlishwaram to Rajahmundry (East Godavari I Circle).	1,26,000	228	228	Do.
19 Cement concreting from miles 22/0 to 26/0 K.N.F. road (M.D.R.) (East Godavari I Circle).	1,92,000	5,267	5,267	Do.
20 Cement concreting Koduru-Nallacharla road, miles 24/3 to 34/0 (West Godavari I Circle).	10,44,000	61,309	61,309	Tenders for widening of roads only were settled and work was put on hand.
21 Cement concreting Anakapalli-Madugole road, miles 0/7 to 7/5 (Visakhapatnam South I Circle).	5,53,000	186	136	Technical sanction to the estimate was accorded and all preliminaries were completed in 1948-49.
22 Cement concreting work on Tirumushi-Satyavedu road, miles 27/7 to 29/4 (Chingleput II Circle).	1,40,000	80,295	1,10,308	Concrete work for about one mile was completed by the end of the year.
23 Cement concreting Chidambaram-Bhuvanagiri road, miles 0/0 to 3/5 and miles 25/2 to 26/0 (South Arcot II Circle).	5,33,000	3,505	3,505	The work was entrusted to Messrs. Coromandel Engineering Company, Madras. The work was in progress.
24 Cement concreting the Nellore-Bombay road, miles 2/6 to 7/0 (Nellore II Circle).	2,10,000	1,027	1,027	The work was started during the year and was in progress.
25 Cement concreting the Nellore-Bombay road, miles 7/0 to 13/0 (Nellore II Circle).	3,00,000	1,165	1,165	Do.
26 Providing B.T. surface in miles 327/4 to 332/0 of Nellore-Bombay road (Bellary II Circle).	1,22,000	23,985	23,985	Contract was settled late. The quantity of bitumen required for the work was purchased.
27 Laying cement concrete on Yerraguntla - Proddatur road, miles 0/6 to 4/0 (Cuddapah II Circle).	1,57,000	6,448	6,448	The work was in progress.
28 Laying cement concrete on Chittoor-Kurnool road, miles 101 to 107 (Cuddapah II Circle).	3,30,600	14,265	14,265	Do.
29 Cement concreting miles 290/0 to 295/0 of Benares-Cape Comorin road (Mathurai III Circle).	5,28,000	80,311	80,341	The work could not be pushed through due to late receipt of administrative approval of estimate, short supply of cement and dearth of labour. Collection of materials was alone made.
30 Cement concreting miles 189/0 to 192/5-406 of Madras-Tiruchirappalli - Dindigul road (Tiruchirappalli III Circle).	3,63,000	8,192	8,192	A special Assistant Engineer and one Supervisor were sanctioned for the work. Collection of materials was in progress.
31 Cement concreting miles 15/0 to 22/0 of Dindigul-Palnil road (Mathurai III Circle).	2,20,000	59,410	59,410	Collection of materials to the value of Rs. 31,271 was done and laying of cement concrete started.
32 Cement concreting eight miles of Tuticorin-Palamcottah road (Tirunelveli III Circle).	3,72,900	4,523	4,523	Collection of materials was in progress. Work could not be pushed through for want of cement in time.
33 Cement concreting Karalkudi-Devakottai road, miles 52/1 to 57/5 (Ramanad III Circle).	2,79,000	88,449	38,449	The work was started at the end of the financial year. The work was in good progress.

Review of works costing over rupees one lakh each in progress—cont.

Serial number and name of work.	Estimated cost.	Expenditure during the year.	Total expenditure up to end of the year.	Remarks.
(1)	(2)	(3)	(4)	(5)
RS.	RS.	RS.	RS.	
A. GOVERNMENT ROADS—cont.				
II. POST-WAR ROAD DEVELOPMENT WORKS—cont.				
(b) Cement concrete and black-top works—cont.				
34 Cement concreting Kumbakonam-Mayuram - Shiyali - Anaikaran - chatram road, miles 20/7 to 22/6 in Mayuram Municipal limits (Tanjore East III Circle).	1,25,000	4,955	4,955	In spite of delay in the administrative approval, the work was entrusted on contract at the end of the year. Supply of 85 tons of cement was received.
35 Cement concreting miles 2/2 to 5/2 of Salem-Cuddalore road (IV Circle).	2,30,000	8,113	8,113	The work was let on contract late in the year.
36 Cement concreting Coimbatore-Mettupalayam road, miles 0/4 to 22/6 (IV Circle).	21,00,000	..	..	The work was administratively approved for Rs. 21,00,000. It is partly financed from the Central Road Fund to the extent of Rs. 3,90,000. For the convenience of execution, the work was split up into four reaches and details are given below for each reach.
(1) Miles 0/4-652 to 2/4 ..	3,00,000	33,822	33,822	Tenders were settled and the work entrusted to the contractor only in March 1949. The expenditure incurred represents the cost of material such as cement, bitumen, etc.
(2) Miles 2/4 to 9/0 ..	7,35,000	3,94,523	4,92,129	Out of the length of 52 furlongs, sub-grade work was completed in all furlongs except in five, while cement concrete pavement and earthwork were completed in 34 furlongs. The balance of work yet to be done was 5 furlongs of sub-grade work, 18 furlongs of c.c. pavement work and earth work and metalling on berms for 7 furlongs.
(3) Miles 9/0 to 16/0 ..	4,19,000	3,51,151	3,51,989	Water-bound macadam work was completed in 56 furlongs. Cement concrete pavement was completed in 43 furlongs. The balance of work yet to be done was 13 furlongs of cement pavement work and metalling over berms.
(4) Miles 16/0 to 22/6 ..	..	..	69	The work was not taken up pending technical sanction to estimate. The work of strengthening and reconstructing the bridges and culverts in the four reaches mentioned above was included in the main work for cement concreting the respective reaches of the road.
37 Cement concreting Coimbatore-Pollachi road, miles 1/6 to 2/1 and 3/0 to 3/4 (IV Circle).	1,10,000	960	960	The estimate was sanctioned in December 1948 and the work was entrusted to the contractor in March 1949 after completing necessary formalities. The expenditure incurred represents the cost of materials purchased.
38 Cement concreting the Tiruchirappalli-Coimbatore road, miles 120/0 to 124/5 (IV Circle).	8,38,000	992	992	Technical sanction was accorded at the end of the year. The expenditure incurred represents the cost of materials purchased.
(c) Improvements and special repairs.				
39 Improvements to Coonoor-Kotagiri road (IV Circle).	1,60,000	60,059	92,941	Surface dressing between miles 4/2 to 6/3 and 6/4 to 10/8 was completed during the year. Earthwork for widening and construction of retaining walls were also done.
40 Providing improved surfacing to Madras-Bangalore road, miles 145/3 to 159/6.	2,60,000	97,638	1,72,039	The base coat work entrusted to Messrs. Banade Sons in 1947-48 was completed and seal coat was laid during 1948-49. Metal shoulders for the black-top surface were being laid.
41 Providing surfacing to Madras-Bangalore road, miles 169/0 to 178/3 (IV Circle).	1,85,000	97,127	1,59,618	The work was in progress.
42 Metalling Repalli-Nizampatnam road, M.D.R. 10 miles 7 furlongs (Guntur I Circle).	3,38,000	1,40,280	1,40,280	Collection of materials was in progress.
43 Metalling Macherla-Nagarjunakonda road (Guntur I Circle).	2,05,000	34,602	34,602	Do.
44 Metalling the road from Tirumalla to Chandole (Guntur I Circle).	1,60,000	19,115	19,115	

Review of works costing over rupees one lakh each in progress—cont

Serial number and name of work.	Estimated cost.	Expenditure during the year.	Total expenditure up to end of the year.	Remarks.
(1)	(2)	(3)	(4)	(5)
RS.	RS.	RS.	RS.	
A. GOVERNMENT ROADS—cont.				
II. POST-WAR ROAD DEVELOPMENT WORKS—cont.				
(c) Improvements and special repairs—cont.				
45 Metalling the road from Tenali to Ananthavaram (Guntur I Circle).	2,40,000	31,000	31,000	Collection of materials was in progress.
46 Forming a road from mile 20/1 of Anaparthi-Madugole road to foot of Minamalur Ghat Plains, miles 0/0 to 6/2 (Chodavaram special division I Circle).	2,57,900	23,193	23,193	Work was commenced on 30th January 1949 and the contractors did not show any appreciable progress in 1948-49.
47 Improvements to Visakhapatnam-Ananthagiri-Araku road - miles 39/2 to 79/2 (Visakhapatnam special division II Circle).	15,10,000	85,165	1,56,973	Improvements to the water-bound surface macadam from miles 74/0 to 79/2 was in progress. Cement and steel required for small culverts was indentated for.
48 Metalling Tiruvottiyur-Ponneri-Panjotli road, miles 5 to 8/5 (Chingleput II Circle).	1,07,500	49,849	83,307	The work was completed except about 10 miles of earthwork to be done for making up berms.
49 Improvements to Dornal Pass road (Kurnool II Circle).	3,88,000	9,258	9,258	The tenders were not settled. The expenditure incurred was towards purchase of cement.
50 Improvements and special repairs to Mathural-Danushkodi road, National Highways No. 49 (Ramnad III Circle).	1,51,965	81,821	81,821	During the year under report metal, gravel, etc., was collected and consolidation was in progress. Improvements to bridges and culverts, etc., was proposed to be completed during 1949-50.
51 Forming a road from Ramnad to Pamban, 21 miles (Ramnad III Circle).	2,32,000	111	111	Premium tenders were sent up to Government for approval. Government directed the revision of estimate at tender rates. Revised Estimate for Rs. 1.8 lakhs was sent to Government of India for revised administrative approval.
52 Widening Kotagiri-Mettupalayam Ghat road, miles 0/0 to 10/3 Standard width (IV Circle).	1,62,000	1,116	1,116	Earth work for widening the road to standard width to the extent grant was allotted was done.
53 Widening Ooty-Avalanche road, miles 0/0 to 13/0 (IV Circle).	1,25,900	283	355	Only a token grant was spent.
54 Forming a road from Vellur to Karivellur (IV Circle).	2,63,000	36,000	36,000	This was a new road to be formed 5½ miles long and metalled through out. About 2 miles of formation was done. Soiling was done in 1-1/8 miles and collection of materials for 3½ miles. As! and acquisition was not completed more progress could not be made.
III. WORKS OTHER THAN POST-WAR ROAD DEVELOPMENT WORKS.				
(a) Bridges and culverts.				
55 Reconstructing the damaged portion of the girder bridge at miles 53/4-5 of Puthalpet-Naidupet road at Kalahasti (Chittoor II Circle).	1,95,000	91,588	1,96,847	The bridge work was completed except for construction of revetment work. Traffic was allowed on 31st March 1949.
(b) Cement concrete and black-top works.				
56 Cement concrete surfacing in miles 3/0 to 8/0 of Visakhapatnam-Ananthagiri-Araku road (Visakhapatnam-Pendurthi road) (Visakhapatnam South I Circle).	4,47,000	24,663	24,663	The work was carried to completion by the Public Works Department before the transfer of the road to the Highways department. Certain adjustments advised by the Public Works Department were done in 1948-49.
(c) Improvements and special repairs.				
57 Special repairs to miles 25/9 to 29/3 of Machilipatnam Chailappalli-Nagayalanka road (Krishna I Circle).	1,12,000	33,572	33,572	The work was in progress.
58 Improvements to and upgrading the road surface of Kathipudi-Pithapuram-Kakinada road (C.R.F. Reserve) (East Godavari I Circle).	15,25,000	10,972	13,56,972	The work was taken up at the instance of military. Work was completed and paid.
59 Improvements to the approach road to the Bobbili air field (C.R.F. Reserve) (Visakhapatnam North I Circle).	2,15,000	..	2,15,369	The work was taken up at the instance of the military. The work was practically completed but a credit of Rs. 450 on the work remained to be adjusted.

Review of works costing over rupees one lakh each in progress—cont.

Serial number and name of work.	Estimated cost.	Expenditure during the year.	Total expenditure up to end of the year.	Remarks.
(1)	(2)	(3)	(4)	(5)
RS.	RS.	RS.	RS.	
B. DISTRICT BOARD ROADS.				
I. ROAD DEVELOPMENT FUND WORKS.				
(a) Bridges and culverts.				
60 Constructing a bridge across Pennar near Tadpatri (Anantapur II Circle).	4,97,600	4,83,278	4,63,278	The work was completed. Final payment was pending.
61 Constructing a bridge at miles 6/1 of Mangiri-Kallal road across Manimukthar river (Ramnad III Circle).	2,13,500	63,174	2,06,575	The work was almost completed except for spreading metal over bridge and its approaches and some other minor items.
(b) Cement concrete and black-top works—Nil.				
(c) Improvements and special repairs—Nil.				
II. POST-WAR ROAD DEVELOPMENT WORKS.				
(a) Bridges and Culverts—Nil.				
(b) Cement concrete and black-top works—Nil.				
(c) Improvements and special repairs.				
62 Forming and metalling road from Kasapa to meet the Biccavole-Narasaraopet road at Chintapalli via Kandugula and Sampra (East Godavari I Circle).	1,16,700	41,114	52,001	Metal collection was almost completed.
63 Metalling the road from Rajavaram to Gannavaram via Katrango-Padagatlapalli-Ithakota and Ganty (East Godavari I Circle).	1,47,000	58,416	58,416	Do.
64 Forming a road from Sampavaram to Divilli via Chandrapalem-Kanthavadi and Viravada (East Godavari I Circle).	1,12,000	60,588	60,588	One bit of the project in metalling the road from Divilli to Viravada was taken up in 1948-49. Metal collection was completed.
65 Metalling the road from Kollur to Vellatur of Tenali Kollur-Donapudi-Vellatur road (Guntur I Circle).	1,37,000	8,129	1,59,852	The work was completed.
66 Metalling the road from Enani to Vallabapuram (Guntur I Circle).	1,42,000	1,18,873	1,18,873	Do.
67 Metalling the road from Pedavadiapudi crossing to Pedapalem crossing via Ramachandrapur (Guntur I Circle).	1,70,000	1,158	1,158	The work was started by the end of the year.
68 Metalling Adavala Devi village road including construction of a bridge (Guntur I Circle).	3,50,000	32,851	32,851	Collection of materials was in progress.
69 Metalling the earthen road from Repalli-Thammala via Arepalli-Nalloniapalem and Pothametta (Guntur I Circle).	4,00,000	37,268	37,628	Earth-work and collection of materials was in progress.
70 Metalling the road from Arepalli-Pudivada and on to meet mile 12/2 of Repalle-Pittalavaripalem road (Guntur I Circle).	1,14,000	3,047	3,047	The work was started and was in progress.
71 Metalling the unmetalled portion from Kovvalli to Jayamangalam up to mile 7/7 of Bhuru Jangareddigudem road (West Godavari I Circle).	1,37,000	8,831	35,412	Do.
72 Forming a road from Elayirampannal to Thulukkankurichi part of Elayirampannal to Thulukkankurichi (Part of Elayirampannal to Satirapatti) (Ramnad III Circle).	1,22,200	6,620	6,620	A grant of Rs. 3,182 was drawn and the work was in progress.
73 Forming a road from Uttirakosamangali to Sikkil (Ramnad III Circle).	1,10,500	2,663	2,873	A grant of Rs. 1,157 was drawn and the work was in progress.
74 Metalling the road from Kuthanallur to Mavoor via Vadapathimangalam (Tanjore III Circle).	1,14,700	(1,787 Tanjore East, 37,913 Tanjore West).	(1,797 Tanjore East, 37,913 Tanjore West).	A grant of Rs. 19,932 was drawn. The work was being executed partly in Tanjore East and partly in Tanjore West Divisions.
75 Forming a road from Tisayanvillal to Ulangudi (Tirunelveli III Circle).	1,50,000	234	234	A grant of Rs. 117 was drawn. Land acquisition was being done by the Revenue department.
76 Metalling Vootingal - Chetwai Ala road (IV Circle).	1,31,700	33,452	50,402	The work was in progress and expected to be completed in 1949-50.

III. WORKS OTHER THAN POST-WAR ROAD DEVELOPMENT WORKS—Nil.

APPENDIX VI.

Review of original works costing less than Rs. 1 lakh each in progress during 1948-49.

Serial number and name of division.	Government works.			District board works.		
	Total number of works.	Total cost.	Total expenditure.	Total number of works.	Total cost.	Total expenditure.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Original works on bridges, culverts and causeways.						
I Circle.						
1 Visakhapatnam North	..	..	..	2	42,000	35,954
2 Agency Division	..	1,80,000	..	..	..	..
3 East Godavari	..	..	..	14	1,80,700	29,444
4 West Godavari	..	..	..	2	19,300	19,300
5 Krishna	..	6,000	4,251	17	3,74,650	49,378
6 Guntur	..	73,900	14,584	4	2,90,700	22,198
II Circle.						
7 Anantapur	..	1,64,800	7,169	3	20,400	10,217
8 Bellary	..	49,300	39,882	..	..	..
9 Cuddapah	..	2,230	1,716	1	6,100	382
10 Nellore	..	1,20,200	22,878	8	34,950	15,246
11 Chittoor	..	53,180	10,418	45	2,78,900	2,47,707
12 Chingleput	..	29,900	19,929	1	9,500	1,176
13 Arcot North	..	2,14,000	16,929	5	55,000	16,334
14 Arcot South	..	76,465	61,896	19	2,25,815	73,001
III Circle.						
15 Tanjore East	..	98,530	38,962	37	26,747	11,170
16 Do. West	..	85,600	..	2	5,163	5,163
17 Tiruchirappalli	..	74,100	..	7	48,300	31,100
18 Madurai	..	..	..	19	2,65,750	1,68,109
19 Ramnad	..	..	..	143	3,56,767	67,710

Will be completed in 1949-50.

Works were completed.
One work was completed.
Twelve works were completed. The rest were in progress.
Eighty-eight works were completed and the rest were in progress.

Review of original works costing less than Rs. 1 lakh each in progress during 1948-49—cont.

Number and name of division.	(1)	Government works.			District board works.		
		Total number of works.	Total cost.	Total expenditure.	Total number of works.	Total expenditure.	Remarks.
		(2)	(3)	(4)	(5)	(6)	(7)
			RS.	RS.		RS.	
20 Tirunelveli	..	..	..	..	..	..	1,03,482 Many small culvert works and minor causeway works were started under Post-War Road Development Scheme late in the year.
21 Pudukkottai State	..	9	10,133	6,370	..	..	..
IV Circle.							
22 South Kanara	..	5	1,97,334	25,606	12	72,060	Works were in progress.
23 Nilgiris	..	5	38,700	29,041	2	13,200	Do.
24 Erode Division	..	31	67,735	42,323	40	3,09,750	Do.
25 Coimbatore	..	1	18,000	2,770	2	34,700	Do.
26 Krishnagiri	..	1	1,400	1,385	3	5,800	Do.
27 Salem	..	6	1,04,700	41,079	8	94,400	Do.
28 Kozhikode	..	3	78,300	4,713	12	1,18,750	Do.
29 Palghat	..	31	68,500	63,531	35	4,27,000	Do.
30 Cannanore Special Division.	..	..	..	..	4	16,294	Do.
Total		474	18,13,000	5,18,014	494	13,15,569	

II. Cement concreting and black-top surfacing works.

I Circle.		II Circle.		III Circle.	
1 Godavari East	1	67,000	223 Estimate was awaiting technical sanction.	..	..
2 Cuddapah	1	97,500	91 Work was commenced.	..	..
3 Nellore	2	12,000	2,427 Works were in progress.	..	..
4 Chittoor	4	78,000	35,390 Do.	1	4,000
5 Chingleput	1	19,000	4,804 Do.	1	15,800
6 Arcot South	1	10,000	2,198 Do.	..	..
7 Tanjore West	3	2,10,900	9,041 Works were in progress.	..	..
8 Tiruchirappalli	2	94,000	69,150 Do.	..	..
9 Madurai	4	1,15,400	6,949 One work was completed.	1	7,000
10 Ramnad	..	..	..	..	..
11 Tirunelveli	3	1,47,300	42,667 Contractors for the works were selected at the flag end of the year.	..	..
Total	24	12,01,100	1,81,154	3	26,800

III. New formations—Improvements and special repairs.

IV Circle.		V Circle.		VI Circle.		VII Circle.		VIII Circle.		IX Circle.		X Circle.	
13 Salem	1	2,80,000	8,114 Work was in progress.	..	..	17	2,43,460	91,820	..	45	5,37,200	1,88,760	..
13 Kozhikode	1	1,20,000	100 Do.	..	..	62	3,10,900	1,85,578	..	2	21,800	8,986	..
Total	24	12,01,100	1,81,154	3	26,800	63	17,06,103	7,94,378	..	13	2,42,100	63,656	..
I Circle.		II Circle.		III Circle.		IV Circle.		V Circle.		VI Circle.		VII Circle.	
1 Visakhapatnam, North	..	..	..	..	..	..	..	..	..	..	..	..	..
2 Do. South	..	..	..	..	..	..	..	..	..	..	..	..	..
3 Agency Division	36	3,92,861	1,17,409	..	..	42	8,36,920	3,33,998	..	42	8,36,920	3,33,998	..
4 Godavari, East	7	1,78,760	51,245	..	..	40	2,17,580	2,17,580	..	46	8,23,350	3,39,525	..
5 Do. West	1	18,700	1,870	..	..	46	8,23,350	3,39,525	..	63	17,06,103	7,94,378	..
6 Krishna	..	..	..	..	..	..	..	..	..	..	..	..	..
7 Guntur	23	3,98,200	1,35,808	..	..	..	..	..	..	..	..	..	..
8 Anantapur	9	2,47,930	53,294	..	..	..	..	..	..	..	..	..	..
9 Bellary	..	..	..	..	..	..	..	..	..	..	..	..	..
10 Cuddapah	19	1,48,600	40,912	..	..	..	..	..	..	..	..	..	..
11 Kurnool	28	5,88,000	2,03,932	..	..	..	..	..	..	..	..	..	..
12 Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..
13 Chittoor	..	..	..	..	..	..	..	..	..	..	..	..	..
14 Chingleput	..	..	..	..	..	..	..	..	..	..	..	..	..
15 Arcot, North	7	82,600	24,085	..	..	..	..	..	..	..	..	..	..
16 Do. South	15	1,01,700	53,745	..	..	..	..	..	..	..	..	..	..
17 Tanjore, East	5	1,78,700	53,820	..	..	..	..	..	..	..	..	..	..
18 Do. West	1	35,000	1,154	..	..	..	..	..	..	..	..	..	..
19 Tiruchirappalli	10	1,88,650	1,04,180	..	..	..	..	..	..	..	..	..	..
20 Madurai	2	18,900	4,338	..	..	..	..	..	..	..	..	..	..
21 Ramnad	3	81,906	31,597	..	..	..	..	..	..	..	..	..	..
22 Tirunelveli	..	..	..	..	..	..	..	..	..	..	..	..	..
23 South Kanara	20	3,15,620	23,520	..	..	..	..	..	..	..	..	..	..
24 Nilgiris	..	..	..	..	..	..	..	..	..	..	..	..	..
25 Coimbatore	1	14,000	12,505	..	..	..	..	..	..	..	..	..	..
26 Krishnagiri	9	88,200	16,444	..	..	..	..	..	..	..	..	..	..
27 Salem	8	36,130	12,348	..	..	..	..	..	..	..	..	..	..
28 Kozhikode	4	40,750	9,870	..	..	..	..	..	..	..	..	..	..
29 Cannanore Special Division.	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	232	32,88,771	10,54,376	..	..	..	..	..	..	..	..	..	..

APPENDIX VII.

Statement showing quantities of cement and steel utilized on works—1948-49

Serial number and name of division.	Cement utilized.		Steel utilized.		Total cement utilized.	Total steel utilized.
	Government roads.	District board roads.	Government roads.	District board roads.		
	(1)	(2)	(3)	(4)	(5)	(6)
	(IN TONS)	(IN TONS)	(IN TONS)	(IN TONS)	(IN TONS)	(IN TONS)
<i>I Circle, Kakinada.</i>						
1 Visakhapatnam North Division ..	..	55	..	..	55	..
2 Do. South ..	..	..	..	..	..	..
3 Vizianagaram Special ..	405	..	10	..	405	10
4 Agency Division ..	23	..	..	..	23	..
5 Godavari East Division ..	..	..	..	..	..	..
6 Do. West ..	50	50	..	..	100	..
7 Krishna Division ..	16.5	1.5	1.225	..	18	1.225
8 Guntur ..	6	1.8	..	..	7.8	..
<i>II Circle, Madras.</i>						
9 Anantapur Division ..	..	..	..	..	..	..
10 Bellary ..	1.3	..	..	..	1.3	..
11 Kurnool ..	..	..	..	..	..	..
12 Cuddapah ..	..	..	..	..	..	..
13 Chittoor ..	229	..	7	..	229	..
14 Nellore ..	51.8	..	3.76	..	51.8	..
15 Chingleput ..	355.72	20.61	..	..	376.33	..
16 Arcot North ..	180	60	..	..	240	..
17 Do. South ..	158.75	119.95	14.96	..	278.7	14.96
18 Transport and Machinery Division ..	..	..	..	..	..	..
19 Conphalt Division ..	955	..	..	..	955	..
<i>III Circle, Tiruchirappalli.</i>						
20 Tanjore East Division ..	66.5	13.5	..	..	84	..
21 Tanjore West ..	200	100	6	4	300	10
22 Tiruchirappalli ..	323	20	42	1	343	43
23 Mathurai ..	216	100	..	..	316	..
24 Ramnad ..	208	156	..	2.76	364	2.76
25 Tirunelveli ..	17.35	38.8	..	..	56.15	..
26 Padukkottai State ..	9.5	..	..	..	..	..
<i>IV Circle, Coimbatore.</i>						
27 Coimbatore Division ..	..	252.5	..	..	252.5	..
28 Erode Division ..	119	195.5	..	..	314.5	..
29 Coimbatore Special Division ..	2,069.47	..	23	..	2,069.47	23
30 Salem Division ..	110.55	4.6	4.06	..	115.15	4.06
31 Krishnagiri Division ..	..	..	..	..	..	..
32 Nilgiris Division ..	100	..	4	..	100	..
33 South Kanara Division ..	172.98	157.98	1.769	.07	330.96	1.839
34 Palghat Division ..	13.5	12	..	..	25.5	..
35 Kozhikode Division ..	37.65	20	0.45	..	57.65	0.45
36 Cannanore Special Division ..	32.31	..	0.187	..	32.31	0.187
	6,126.38	1,384.74	118.411	7.83	7,511.62	126.241

APPENDIX VIII.

Work done in the office of the Chief Engineer (Highways).

The following statement shows the number of references dealt with under each category:—

Serial number and category.	Number in 1948-49.	Corresponding figures for	
		1947-48.	1946-47.
1 Currents in non-technical sections ..	60,095	48,743	40,949
2 Currents in technical section inclusive of agreements.	3,287	2,569	2,160
3 Tender proposals ..	264	271	64
4 Representations from public bodies or individuals regarding the formation of roads, construction of bridges, etc.	787	730	200
5 Grant applications from local bodies ..	For 602 works of the estimated cost of Rs. 179.64 lakhs.	For 824 works of the estimated cost of Rs. 126.29 lakhs.	For 144 works of the estimated cost of Rs. 21.44 lakhs.
6 Estimates dealt with ..	177 items totalling Rs. 630.98 lakhs.	229 items totalling Rs. 431.96 lakhs.	329 items totalling Rs. 355.67 lakhs.

Details.

Item 3.—Tender proposals—Of the 264 tenders dealt with in 1948-49, 214 items of the estimated cost of Rs. 26,67,177 were approved by Chief Engineer (Highways) and 50 to the estimated cost of Rs. 15,63,551 were recommended to Government for approval as against 141 and 130, respectively during 1947-48.

Item 5.—Grant applications from local bodies dealt with during 1948-49.

Serial number and local bodies.	Number of works.	Amount in lakhs. Rs.
1 District boards—		
(a) Post-War Road Development works ..	222	74.53
(b) Excluding Post-War Road Development works.	123	28.56
2 Municipal councils ..	252	76.55
	602	179.64

Item 6.—Estimates dealt with—Of the 177 estimates dealt with in 1948-49, 115 were for roads, 38 for bridges and causeways and 24 were miscellaneous estimates. Estimates costing Rs. 1 lakh and above are detailed below:—

below :—	Estimate. RS.	Estimate. RS.	
(a) Roads.		(a) Roads—cont.	
1 Cement concreting Madras-Calcutta road, miles 110 to 112 (National Highways No. 5)	2,13,000	7 Providing sheltercrete surfacing 2½" thick to Coimbatore-Mettupalayam road, miles 0/3 plus 652 to 2/4 (municipal reach). (Coimbatore district)	3,00,000
2 Metalling Bapatla-Pedanandipadu road, miles 12/0 to 13/1 (Road Development Fund Works (Guntur district)	2,60,000	8 Cement concreting Madras-Kozhikode road, miles 443/0 to 444/6 within Kozhikode Municipal limit (Malabar district)	2,10,000
3 Metalling the Repalli-Pittalavari-palem road, from miles 6/0 to 12/3 (Guntur district)	1,65,000	9 Metalling Repalle-Thummala road, miles 0/0 to 9/0 (Guntur district)	4,30,000
4 Cement concreting Nellore-Bombay road, miles 2/6 to 7/0 (Nellore district)	2,10,000	10 Cement concreting Coimbatore-Polachi road, miles 1/6 to 2/1 and 3/0 to 4/0 (Coimbatore district)	1,10,000
5 Cement concreting Chittoor-Kurnool road from miles 173/3 plus 147 to 180/5 plus 86	2,00,000	11 Providing dustless surfacing to the Beach road in Kozhikode Municipality	1,60,000
6 Metalling Guntur-Macherla-Nagar-janakonda road, miles 0/0 to 13/4 (Guntur district)	2,06,000	12 Metalling the road from Tenali to Anantavaram and thence to bank canal (Guntur district)	2,40,000

	Estimate. RS.		Estimate. RS.
(a) Roads—cont.		(a) Roads—cont.	
13 Formation of a road from Elayangudi to Rajasingamangalam Ramnad district	2,12,000	40 Cement concreting G.N.T. road from miles 424/2 to 464/2, Visakhapatnam district	43,00,000
14 Improvements to the road leading from Tirupalavanam to Pulicat, miles 9/6 to 12/0, Chingleput, district	1,01,700	41 Cement concreting Karalkudi-Devakottai road in miles 52/1 to 57/5 (Part II, 1948-49)	2,79,000
15 Cement concreting Tirumushi-Satyavedu road, miles 27/7 to 29/4, Chingleput district (revised estimate)	1,52,000	42 Cement concreting Coimbatore-Mettupalayam road, miles 16/0 to 22/5-400	3,78,000
16 Metalling Chidambaram-Shiyali road, South Arcot Division	1,44,000	43 Cement concreting 8 miles of Palamcottah-Tuticorin road (Part II Scheme, 1948-49)	3,63,700
17 Formation of a road from Chinna-ganjam to Ongole	3,53,000	44 Cement concreting Sankari-Tiruchen-godu road, miles 1/8 to 7/1	2,77,000
18 Constructing Board High School building at Ghantasala, Krishna district	1,14,000	45 Forming a road from 20/1 of Anakapalli-Madugole road to the foot of the Minamalur Ghat for the plains miles portion 0/0 to 6/2 (Part II Schemes, 1948-49)	2,94,000
19 Cement concreting Cuddalore-Pondicherry road, miles 117/2 to 118/3, South Arcot district	1,00,000	46 Cement concreting Madras-Tiruchirappalli-Dindigul road from miles 189 to 192/5 (National Highways No. 45)	3,50,000
20 Special repairs to Hyderabad-Vijayavada road	1,80,000	47 Cement concreting K.N.F. road from mile 22/7-410 to 26/0 (East Godavari district)	3,37,900
21 Remedial measures to bad condition of the bitumen surface of the Madras-Bombay road (National Highways) miles 14/0 to 71/0	6,32,700	48 Cement concreting miles 323/5 plus 272 to 325/3 of Nellore-Bombay road in Bellary Municipal limits	2,10,030
22 Forming a diversion road to National Highways No. 5 at Vijayavada (comprehensive estimate)	5,14,000	49 Widening, improvements and reconstruction of culverts and bridges on Benares-Cape Comorin road (Salem section) (National Highways No. 7)	1,50,870
23 Cement concreting 86/4 to 90/0 miles the Ranipet-Krishnagiri road, North Arcot district	3,84,000	50 Formation and metalling of the by-pass for distance of two miles (National Highways No. 7) (Mathurai district)	4,49,000
24 Metalling Ilur, Nidumolu-Kowthavaram road, miles 0/0 to 6/0, Krishna district	2,32,000	51 Metalling the road from Tirumella to Chandole (Guntur district)	1,60,000
25 Improved surfacing of lanes in the Coimbatore Municipality	4,97,000	52 Provision of improved surfacing with pre-coated chips, miles 71-90/0 of Kurnool-Bangalore road and miles 261/0 to of Madras-Bombay road, Anantapur district	3,65,700
26 Cement concreting miles 4/6 to 11/8 of Madras-Calcutta road	6,50,000	53 Providing a by-pass at Kovur on Madras-Calcutta road, miles 110 to 112 (National Highways No. 5) (Nellore district)	1,17,000
27 Cement concreting, miles 70/0 to 81/6 of Tiruchirappalli-Salem road, Salem district	18,40,000	54 Forming and metalling the road from Nawabpalem to Nidadavole (West Godavari Division)	1,90,000
28 Cement concreting Chidambaram-Bhuvanagiri road, miles 0/0 to 3/5 and 25/2 to 26/0	5,52,000	55 Black-top surfacing with pre-coated chips to Jammalamadugu-Nellore Frontier road, miles 35/0 to 40/0 and 57/0 to 58/3	1,61,000
29 Cement concreting the Yerraguntla-Proddatur road, miles 0/5 to 5/1, Cuddapah district	2,21,000	56 Widening Narasapur-Prakilanka road, miles 14/0 to 23/0	1,62,000
30 Cement concreting Dindigul-Palni road, miles 15 to 22	2,17,000	57 Remodelling and widening 17 culverts on Rajahmundry-Kakinada road, miles 0/0 to 20/0, East Godavari district	1,23,750
31 Cement concreting Chittoor-Kurnool road, miles 101/0 to 107/0 Post-War Road Development Part II, 1948-49	3,90,000	58 Upgrading by providing block-top for 18 miles of Benares-Cape Comorin road	3,61,000
32 Improvements to the Dornal pass road (Kurnool-Guntur Provincial Highways between miles 54/4 and 69/0), Kurnool district (revised estimate)	3,88,000	59 Improvements to Visakhapatnam-Ananthagiri Araku road improving and eliminating bends	1,37,000
33 Cement concreting Nellore-Bombay road, miles 7/0 to 13/0 Part II, Scheme, 1948-49	3,00,000	60 Cement concreting Chittoor-Kurnool road, miles 30/0 to 90/2, Cuddapah district	1,95,000
34 Cement concreting Madras-Calcutta road, miles 247/0 to 267/0 (National Highways No. 5)	10,50,000	61 Cement concreting Anakapalli-Madugole road, miles 0/7 to 7/5 (Visakhapatnam South Division)	7,10,000
35 Black topping the built up areas in Salem-Cochin road, Malabar Division (National Highways No. 47)	3,14,000	62 Metalling Tiruvottiyur-Ponneri-Panjetty road, miles 5/0 to 8/5	1,24,000
36 Metalling the road from Arepalli-Pudivada and on to meet 12/2 mile of Repalle-Pittalavaripalem road, Guntur district (Grant-in-aid work)	1,11,000	63 Cement concreting the road in miles 290 to 295/4 (National Highways No. 7, Mathurai Division)	5,22,000
37 Cement concreting Salem-Cuddalore road, miles 2/2 to 5/2, Part II Schemes, 1948-49	3,43,000		
38 Repairs to Great Northern Trunk road from miles 624/0 to 683/6 plus 148 (Famine relief works, Ichapur taluk)	2,20,000		
39 Providing block-top surface in miles 327/4 plus 300 to 332/0 of Nellore-Bombay road	1,17,000		

	Estimate. RS.		Estimate. RS.
(a) Roads—cont.		(b) Bridges and culverts—cont.	
64 Improvements to the missing link portions of the road from Velagadapalli to Kanavarpukota by metalling Road Development Fund Works Scheme covered by old programme)	1,10,000	6 Constructing a bridge over Upputeru near Someswaram, mile 21/1 of Gudivada-Bhimavaram road, Krishna district	3,20,000
65 Metalling Iyalur-Nidumole-Kowtharam road, miles 14/7 to 18/3, Krishna district	1,13,500	7 Widening and strengthening the bridge across the river Pennar at mile, 166/4 of Madras-Calcutta road (near Kaveripattinam)	1,95,000
66 Forming a road and providing cement concrete pavement to Guntur-Repalle-Chinnaganjam road, miles 0/7 plus 574 to 3/0 to 5/0 to 6/3, Guntur district	4,20,000	8 Constructing a bridge across the Tirur river at miles 26/3 of Tirur-Poorpparambur road, Malabar district	1,08,000
67 Widening Kotagiri-Mettupalayam road, miles 0/0 to 10/3	1,62,000	9 Construction of a causeway across Pennar, miles 10/4 to 11/2 of Jammalamadugu-Mudanur road (revised estimate), Cuddapah district	1,18,000
68 Metalling Emami-Vallabhapuram road (revised estimate)	1,60,000	10 Constructing a bridge across Kanigiri-Badvel river at mile 34/1-2	1,83,000
69 Provision of improved surface to Palghat-Cochin Frontier road, miles 1/6 plus 80 to 7/2	4,50,000	11 Constructing a bridge across Cole-roon river near Anakara Chattram	30,39,000
70 Metalling the road from Kollur to Vellatur of Tenali-Kohur-Donepudi-Vellatur road, Guntur district	1,63,120	12 Constructing a causeway (bridge) at mile 13/2 of Arkonam-Ocheri road	1,27,000
71 Cement concreting Kumbakonam-Shiyali road, miles 20/7 to 22/6 in Mayavaram Municipal limits	1,30,000	13 Constructing a bridge across the Palar at Ranipet	25,50,000
72 Metalling the road from Pusur to Komur, miles 10/3 to 14/2 plus 100, Guntur district	1,25,000	14 Constructing a submersible bridge across the Agnair at mile 0/4 of Pattukkottai-Arantangi road	2,50,000
73 Metalling Vikravandi Lower Anicut road, miles 134 to 142, South Arcot district	1,54,000	15 Remodelling the girder bridge at Talaiwasal at mile 41/7-8 of Salem-Cuddalore Road	1,15,000
74 Cement concreting Cuddalore-Chittoor road in miles 6261 to 10/0, South Arcot district	6,95,000	16 Reconstructing the bridge Pavthavoor at mile 25/1 on Edapal, Kan-bur road, Palghat Division, District Board grant-in-aid works	1,63,000
75 Forming a road from Ramnad to Mandabam, miles 0/0 to 21/4 (National Highways No. 49)	2,32,000	17 Constructing a bridge across Goundanya in Katpadi-Venkatagiri road in Gudiyattam Municipal limits	1,56,000
76 Cement concreting between miles 34/0 and 39/5 plus 354, Masulipatnam-Hyderabad road, Krishna district (revised estimate)	4,64,000	18 Constructing bridges and culverts in Visakhapatnam-Ananthagiri-Araku road (14 estimates)	9,50,000
77 Widening Ooty-Avalanche road miles 0/0 to 7/3 Nilgiris district Post-War Road Development, 1948-49	1,25,900	19 Constructing a bridge across Sankaraparam river at mile 56/4 of Madras-Dindigul road	2,60,000
78 Providing black top surface in Ranipet-Krishnagiri road from miles 116/6-117/6 and 126/7 to 128/6	1,79,000	20 Constructing a bridge across Tondiar River at mile 85/1 of Madras-Dindigul road	2,24,000
79 Cement concreting Benares-Cape Comorin road from miles 219/0 to 228/0 (revision of estimate)	8,30,000	21 Constructing a causeway across Hagari mile at 32/2 of Bellary-Kalyandrug road	1,54,000
80 Laying a road from Kotabommali Railway Station to Banivalasa Famine Relief Works, Visakhapatnam district	2,80,000	22 Constructing a bridge at mile 14/1-2 of Chittoor-Tiruttani road Chittoor district	6,70,000
81 Cement concreting Madras-Kozhikode road, miles 266/6 to 268/0	2,60,000	23 Constructing a bridge across Pennar at Nellore on Madras-Calcutta road (National Highways No. 5)	25,00,000
82 Cement concreting Great Northern Trunk road from miles 271/0 to 276/6 and reconstructing culverts	3,43,000	24 Constructing a bridge across Nandiyar at mile 18/4 of Tiruchirappalli-Chidambaram road, Tiruchirappalli district	1,90,000
(b) Bridges and culverts.		25 Constructing a bridge across the Champavathi river at mile 520/8-6 Madras-Calcutta road	8,00,000
1 Constructing a causeway at mile 15/8 of Bellary-Kalyandrug road	1,60,000	26 Constructing a causeway at mile 2/3-4 of Adoni-Sirugappa road, Bellary district	1,86,000
2 Reconstructing of the damaged spans of the bridge across the Swarnamukhi river near Kalahasti in mile 54/4 of Puthalpet-Naidupet road	1,95,000	27 Constructing a causeway over the Pennar near Siddhout, Cuddapah district	4,23,000
3 Constructing a stone masonry semi-circular arch bridge of 12 spans of 36 feet each across the river Pennar near Kalavapalli village, mile 19/8 of Anantapur-Kalyandrug road	2,75,000	28 Constructing a bridge across Gadilam river at mile 110/2 of Vikravandi Lower Anicut road South Arcot district (grant-in-aid works)	19,00,000
4 Constructing a causeway in mile 13/7-8 of Rajampet-Kadiri road	1,28,000	29 Reconstructing a bridge at mile 331/1 of Madras-Kozhikode road—bridge across Noyyal river	2,22,000
5 Constructing a bridge across Budamern on Vijayavada-Nusvid road (Krishna district)	1,75,000	30 Constructing a bridge over Krishna on National Highway No. 5	61,60,000

Estimate. RS.	Estimate. RS.
<i>(c) Miscellaneous estimates.</i>	
1 Purchase of Heatmasters Tar boilers and spraying equipments ..	1,54,000
2 Purchase of mathematical and scientific instruments for Post-War Reconstruction Road Schemes ..	5,42,000
3 Purchase of 3-10 ton steam rollers from Messrs. Marshall & Sons, Madras ..	1,10,000
4 Purchase of five stone crushers for Highways Department—New supplies ..	3,10,000
<i>(c) Miscellaneous estimates—cont.</i>	
5 Purchase of 20 Diesel (Marshall) rollers for Highways Department—New supplies ..	6,17,000
6 Purchase of 4 Austin Western Auto-crat rollers for Highways Department—New supplies ..	1,33,500
7 Purchase of 30 Gallien Tondum Rollers for Highways Department—New supplies ..	5,90,000
8 Payment of compensation towards cost of 106 road rollers taken over from local bodies ..	4,41,000

APPENDIX IX.

Work done in the offices of the Superintending Engineers and Divisional Engineers (Highways).

The following statement shows the volume of work done in the offices of the Superintending Engineers and Divisional Engineers (Highways) under each category during 1948-49:—

Serial number and category.	Number in 1948-49.	Corresponding figures for	
		1947-48.	1945-46.
(1)	(2)	(3)	(4)
<i>Estimates sanctioned.</i>			
1 For Government works ..	9,168 estimates to a cost of Rs. 7,91,00,000.	8,260 estimates to a cost of Rs. 6,81,00,000.	1,258 estimates to a cost of Rs. 1,34,00,000.
2 For district board works ..	12,303 estimates to a cost of Rs. 4,09,00,000.	12,285 estimates to a cost of Rs. 2,60,00,000.	15,220 estimates to a cost of Rs. 3,56,00,000.
3 For panchayat works ..	901 estimates to a total cost of Rs. 31,00,000.	392 estimates to a cost of Rs. 8,14,272.	293 estimates to a cost of Rs. 3,01,793.
4. Tenders dealt with ..	15,506	8,451	10,091
5. Agreements dealt with ..	13,424	7,333	7,401

Division and circlewar details under each category are given in the statements (1) to (6) respectively.

The number and cost of estimates sanctioned and of those submitted to the Chief Engineer (Highways) for sanction are separately given in Statements (6) and (7).

(1) Statement showing the number and cost of estimates sanctioned for Government works during 1948-49 in the offices of the Superintending Engineers (Highways) and Divisional Engineers (Highways).

Serial number and name of division or circle office.	Road Development Fund works.		Original works.		Repairs.		Avenues.		Tools and plant new supplies.		Tools and plant repairs and carriage.	
	Number. (2)	Amount. (3)	Number. (4)	Amount. (5)	Number. (6)	Amount. (7)	Number. (8)	Amount. (9)	Number. (10)	Amount. (11)	Number. (12)	Amount. (13)
1 Superintending Engineer's Office, Kakinada	..	..	..	..	..	..	..	..	..	..	..	..
2 Centur Division ..	..	..	..	..	..	..	..	..	..	..	..	..
3 Krishna Division ..	..	..	..	..	..	..	..	..	..	..	..	..
4 Godavari West Division ..	..	..	..	..	..	..	..	..	..	..	..	..
5 Do. East Division ..	..	..	..	..	..	..	..	..	..	..	..	..
6 Visakhapatnam North Division ..	..	..	..	..	..	..	..	..	..	..	..	..
7 Do. South Division ..	..	..	..	..	..	..	..	..	..	..	..	..
8 Agency Division ..	..	..	..	..	..	..	..	..	..	..	..	..
9 Vizianagaram Special Division ..	..	..	..	..	..	..	..	..	..	..	..	..
10 Chodavaram Special Do. ..	..	..	..	..	..	..	..	..	..	..	..	..
11 Superintending Engineer's Office, Madras	..	..	..	..	..	..	..	..	..	..	..	..
12 Anantapur Division ..	..	..	..	..	..	..	..	..	..	..	..	..
13 Arcot North Division ..	..	..	..	..	..	..	..	..	..	..	..	..
14 Do. South Division ..	..	..	..	..	..	..	..	..	..	..	..	..
15 Bellary Division ..	..	..	..	..	..	..	..	..	..	..	..	..
16 Chidambaram Division ..	..	..	..	..	..	..	..	..	..	..	..	..
17 Chittoor Division ..	..	..	..	..	..	..	..	..	..	..	..	..
18 Chingleput Division ..	..	..	..	..	..	..	..	..	..	..	..	..
19 Kolar Division ..	..	..	..	..	..	..	..	..	..	..	..	..
20 Kurnool Division ..	..	..	..	..	..	..	..	..	..	..	..	..
21 Transport and Machinery Division ..	..	..	..	..	..	..	..	..	..	..	..	..
22 Comptroller Division, Suddipet ..	..	..	..	..	..	..	..	..	..	..	..	..
23 Superintending Engineer's Office, Tiruchirappalli	..	..	..	..	..	..	..	..	..	..	..	..
24 Tanjore East Division ..	..	..	..	..	..	..	..	..	..	..	..	..
25 Tanjore West Do. ..	..	..	..	..	..	..	..	..	..	..	..	..
26 Tiruchirappalli Do. ..	..	..	..	..	..	..	..	..	..	..	..	..
27 Madurai Do. ..	..	..	..	..	..	..	..	..	..	..	..	..
28 Ramanathapuram Do. ..	..	..	..	..	..	..	..	..	..	..	..	..
29 Tirunelveli Do. ..	..	..	..	..	..	..	..	..	..	..	..	..
30 Coimbatore Bridge Special Division ..	..	..	..	..	..	..	..	..	..	..	..	..
31 Pudukkottai Bridge Special Division ..	..	..	..	..	..	..	..	..	..	..	..	..
32 Pudukkottai Division ..	..	..	..	..	..	..	..	..	..	..	..	..
33 Superintending Engineer's Office, Coimbatore	..	..	..	..	..	..	..	..	..	..	..	..
34 Mangalore Division ..	..	..	..	..	..	..	..	..	..	..	..	..
35 Nidhi Division ..	..	..	..	..	..	..	..	..	..	..	..	..
36 Erode Division ..	..	..	..	..	..	..	..	..	..	..	..	..
37 Coimbatore Division ..	..	..	..	..	..	..	..	..	..	..	..	..
38 Krishnagiri Division ..	..	..	..	..	..	..	..	..	..	..	..	..
39 Salem Division ..	..	..	..	..	..	..	..	..	..	..	..	..
40 Palghat Division ..	..	..	..	..	..	..	..	..	..	..	..	..
41 Kozhikode Division ..	..	..	..	..	..	..	..	..	..	..	..	..
42 Cannanore Special Division ..	..	..	..	..	..	..	..	..	..	..	..	..
43 Barapuzha Special Division ..	..	..	..	..	..	..	..	..	..	..	..	..
44 Coimbatore Special Division ..	..	..	..	..	..	..	..	..	..	..	..	..
Total	24	9,20,700	644	20,03,153	6,862	6,47,17,761	195	2,07,025	183	7,86,563	786	39,37,124

(1) Statement showing the number and cost of estimates sanctioned for Government works during 1948-49 in the offices of the Superintending Engineers (Highways) and Divisional Engineers (Highways)—cont.

Serial number and name of division or circle office.	Post-War Road Development Works.			Repairs.			Total for 1948-49.			Corresponding figures		
	Original works.						* 1947-48.			† 1945-46.		
	Number. (14)	Amount. (15) RS.	Number. (16)	Amount. (17) RS.	Number. (15)	Amount. (19) RS.	Number. (20)	Amount. (21) RS.	Number. (22)	Amount. (23) RS.		
1. Superintending Engineer's Office, Kakinada	119	11,94,540	..	..	249	15,79,940	..	..	..	..	..	..
2. Gunjur Division ..	4	2,39,300	..	..	392	49,76,225	265	25,57,787	5	2,945	..	..
3. Krishna Division ..	26	2,00,350	..	..	243	35,96,565	213	31,20,420	..	..	..	..
4. Godavari West Division ..	1	1,93,000	..	..	363	20,90,700	91	10,65,800	..	..	..	..
5. Do. East Division ..	2	18,600	..	..	430	47,44,617	208	20,90,650	56	3,26,503	..	..
6. Visakhapatnam North Division ..	3	3,500	..	..	198	23,57,157	204	10,37,900	..	..	..	..
7. Do. South Division ..	4	4,270	..	..	209	16,57,552	189	11,55,890	159	3,01,161	..	..
8. Agency Division ..	1	2,57,000	..	..	122	8,28,166	123	8,41,640	..	..	..	..
9. Chidambaram Special Division ..	13	43,080	14	76,450	41	1,90,495	..	..	..	..	..	..
10. Superintending Engineer's Office, Madras	23	6,89,380	..	..	324	21,10,522	245	22,70,115	6	16,060	..	..
11. Arcot North Division ..	2	1,32,300	..	..	177	19,66,947	319	21,18,903	203	10,48,300	..	..
12. Do. South Division ..	19	61,200	..	..	317	21,23,973	285	21,86,225	..	..	..	..
13. Bellary Division ..	11	1,37,820	..	..	253	41,32,985	195	9,44,440	..	..	..	..
14. Chittoor Division ..	9	3,02,600	..	..	148	12,14,625	143	9,12,432	53	3,22,705	..	..
15. Chingleput Division ..	23	2,07,250	..	..	362	36,51,090	240	17,60,744	193	47,44,300	..	..
16. Kurnool Division ..	6	4,83,300	..	..	251	19,75,374	153	15,13,830	..	..	..	..
17. Transport and Machinery Division ..	..	..	..	..	288	24,70,814	125	11,95,745	..	..	..	..
18. Superintending Engineer's Office, Tiruchirappalli	13	6,27,900	..	..	190	17,34,564	304	1,42,18,698	..	..	..	..
19. Tanjore East Division ..	11	90,796	..	..	73	3,98,956	..	..	..	..	..	..
20. Do. West Division ..	8	1,10,000	..	..	200	18,03,480	490	7,06,990	..	..	..	..
21. Tiruchirappalli Division ..	8	62,745	1	7,000	477	19,02,536	622	16,11,150	..	..	..	..
22. Madurai Division ..	19	1,39,150	2	87,200	391	15,85,969	477	35,15,860	..	..	..	..
23. Ramanathapuram Division ..	8	10,500	37	2,73,390	529	37,78,765	539	41,58,223	..	..	..	..
24. Tirunelveli Division ..	8	61,550	29	1,03,595	245	28,17,190	594	48,86,700	..	..	..	..
25. Cuddalore Division ..	2	17,600	..	..	6	18,100	396	11,29,310	..	..	..	..
26. Pudukkottai Division ..	9	4,00,955	..	..	2	21,000	..	..	..	..	..	..
27. Superintending Engineer's Office, Coimbatore	1	10,000	2	35,222	185	3,15,430	..	..	225	43,07,750	..	..
28. Nilgiris Division ..	1	80,052	..	..	230	20,17,250	151	16,24,345	..	..	..	..
29. Erode Division ..	5	20,200	..	..	104	8,65,199	277	8,50,401	6	7,349	..	..
30. Coimbatore Division ..	2	15,700	..	..	167	10,37,100	274	92,30,039	..	..	..	..
31. Krishnagiri Division ..	6	34,800	..	..	252	25,77,330	103	22,46,929	213	9,90,435	..	..
32. Salem Division ..	4	24,100	..	..	125	9,97,492	192	12,46,400	..	..	..	..
33. Palghat Division ..	1	10,000	..	..	187	20,15,745	197	18,08,520	139	13,43,256	..	..
34. Kannur Division ..	4	6,920	3	800	187	49,52,034	150	2,37,453	..	..	..	..
35. Superintending Engineer's Office, Coimbatore	..	..	..	..	9	15,830	..	..	..	..	..	..
36. Bangalore Division ..	..	..	..	..	8	24,760	5	10,800	..	..	..	..
37. Nilgiris Division ..	..	..	..	..	..	..	..	..	..	..	..	..
38. Erode Division ..	..	..	..	..	..	..	..	..	..	..	..	..
39. Coimbatore Division ..	..	..	..	..	..	..	..	..	..	..	..	..
40. Krishnagiri Division ..	..	..	..	..	..	..	..	..	..	..	..	..
41. Salem Division ..	..	..	..	..	..	..	..	..	..	..	..	..
42. Palghat Division ..	..	..	..	..	..	..	..	..	..	..	..	..
43. Kannur Division ..	..	..	..	..	..	..	..	..	..	..	..	..
44. Coimbatore Special Division ..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	386	60,25,708	88	5,63,657	9168	7,91,61,631	8,260	6,81,06,676	1,253	1,34,10,764	..	..

* The division war figures for 1947-48 include those sanctioned by the Superintending Engineers for the respective divisions.

† The figures for 1945-46 pertain to the ex-roads circles and divisions.

(2) Statement showing the number and cost of estimates sanctioned for District Board roads during 1948-49 in the offices of the Superintending Engineers (Highways) and Divisional Engineers (Highways).

Serial number and name of circle office or division office.	Road Development Fund Works.			Original Works.			Repairs.			Avenues.		
	Number. (2)	Amount. (3) RS.	Number. (4)	Amount. (5) RS.	Number. (6)	Amount. (7) RS.	Number. (8)	Amount. (9) RS.	Number. (10)	Amount. (11) RS.	Number. (12)	Amount. (13) RS.
1. Superintending Engineer's Office, Kakinada	..	..	22	9,27,900	322	8,08,075	..	..	2	1,900	..	..
2. Gunjur Division ..	..	..	111	19,80,255	710	7,63,800	..	..	2	900	..	..
3. Krishna Division ..	..	..	75	13,24,000	336	20,73,581	..	..	8	10,459	..	..
4. Godavari West Division ..	7	1,36,400	48	9,24,390	1,035	12,38,060	..	..	..	..	..	..
5. Do. East Division ..	1	61,800	..	..	278	3,61,705	..	..	..	..	..	..
6. Visakhapatnam North Division ..	..	..	29	1,91,265	316	4,80,925	..	..	..	..	..	..
7. Do. South Division ..	1	45,455	..	..	..	..	..	..	..	..	..	..
8. Superintending Engineer's Office, Madras	..	..	17	6,56,250	161	3,97,360	..	..	1	3,000	..	..
9. Arcot North Division ..	..	..	4	48,300	91	2,33,140	..	..	..	..	..	..
10. Do. South Division ..	1	6,900	2	18,600	148	8,18,326	..	..	..	..	..	..
11. Chittoor Division ..	..	..	1	6,400	352	12,13,834	..	..	..	..	..	..
12. Chittoor Division ..	..	..	19	93,560	365	5,15,950	..	..	9	6,730	..	..
13. Chittoor Division ..	..	..	13	1,07,300	311	4,28,271	..	..	..	..	..	..
14. Chittoor Division ..	..	..	..	..	529	9,07,584	..	..	..	..	..	..
15. Chittoor Division ..	..	..	27	1,28,810	1,042	11,80,002	..	..	20	8,000	..	..
16. Arcot North Division ..	..	..	4	98,110	58	52,950	..	..	..	..	..	..
17. Do. South Division ..	..	..	292	8,45,260	169	4,52,029	..	..	..	..	..	..
18. Superintending Engineer's Office, Tiruchirappalli	..	..	83	3,17,470	396	4,83,430	..	..	..	..	..	..
19. Tanjore East Division ..	..	..	9	31,230	386	8,10,785	..	..	2	590	..	..
20. Do. West Division ..	..	..	..	..	522	17,11,585	..	..	12	7,600	..	..
21. Tiruchirappalli Division ..	..	..	186	9,12,420	200	8,31,900	..	..	..	..	..	..
22. Madurai Division ..	..	..	14	4,68,270	..	..	..	..	..	..	..	..
23. Ramanathapuram Division ..	..	..	..	..	14	27,200	..	..	..	..	..	..
24. Tirunelveli Division ..	..	..	..	..	..	..	..	..	..	..	..	..
25. Superintending Engineer's Office, Coimbatore	..	..	31	1,75,385	435	14,02,879	..	..	..	..	..	..
26. Nilgiris Division ..	..	..	6	17,830	252	6,56,295	..	..	..	..	..	..
27. Erode Division ..	..	..	16	1,67,550	254	6,02,448	..	..	..	..	..	..
28. Coimbatore Division ..	..	..	39	1,18,780	225	5,56,954	..	..	..	..	..	..
29. Krishnagiri Division ..	..	..	5	1,00,680	267	13,57,049	..	..	..	..	..	..
30. Salem Division ..	..	..	..	..	..	..	..	..	..	..	..	..
31. Kozhikode Division ..	..	..	..	..	..	..	..	..	..	..	..	..
32. Palghat Division ..	..	..	..	..	..	..	..	..	..	..	..	..
33. South Kanara Division ..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	17	5,24,635	1,318	99,66,810	9,773	2,07,43,461	77	48,170	..	..	..	..

(2) Statement showing the number and cost of estimates sanctioned for District Board roads during 1948-49 in the offices of the Superintending Engineers (Highways) and Divisional Engineers (Highways)—cont.

Serial number and name of circle office or division office.	Original Works.			Repairs.			Total 1948-49.			Corresponding figures.		
	Number.	Amount.	RS.	Number.	Amount.	RS.	Number.	Amount.	RS.	Number.	Amount.	RS.
1 Superintending Engineer's Office, Kakinada	9	3,45,550	RS.	31	12,76,450	RS.	40	16,21,999	RS.	1,060	60,70,170	RS.
2 Guntur Division	16	10,25,350	..	451	38,15,580	..	467	48,40,930	..	627	8,22,800	..
3 Krishna Division	12	4,97,080	..	799	25,85,760	..	811	30,82,840	..	308	1,11,350	..
4 Godavari, West Division	25	8,71,260	..	495	40,19,581	..	520	48,90,841	..	1,275	7,14,775	..
5 Do. East Division	10	4,52,400	..	1,046	17,52,060	..	1,056	12,04,460	..	301	6,24,462	..
6 Visakhapatnam, North Division	13	1,71,610	..	320	8,73,810	..	333	9,45,420	..	530	11,69,195	..
7 Do. South Division	45	3,47,390	..	362	6,56,250	..	407	10,03,640	..	400	25,45,402	..
8 Superintending Engineer's Office, Madras	41	3,25,916	..	208	7,84,376	..	249	11,10,292	..	169	2,79,060	..
9 Anantapur Division	3	99,000	..	96	3,51,340	..	99	4,50,340	..	354	21,57,845	..
10 Bellary Division	3	49,600	..	152	3,74,326	..	155	4,23,926	..	450	6,91,654	..
11 Cuddapah Division	8	3,39,500	..	417	15,47,334	..	425	18,86,834	..	575	8,02,800	..
12 Chittoor Division	24	81,800	..	343	9,12,820	..	367	10,94,620	..	328	8,97,416	..
13 Nellore Division	12	2,20,850	..	313	11,34,884	..	325	13,55,734	..	557	15,80,160	..
14 Arcot, North Division	2	20,800	..	1,098	15,45,412	..	1,100	15,66,212	..	650	21,56,008	..
15 Arcot, South Division	9	2,31,600	..	419	11,57,070	..	428	13,88,670	..	900	7,23,060	..
16 Superintending Engineer's Office, Tiruchirappalli	6	1,94,500	..	269	10,98,789	..	275	12,93,289	..	736	11,72,720	..
17 Do. East Division	15	3,17,800	..	442	8,36,180	..	457	11,53,980	..	454	8,57,000	..
18 Tiruchirappalli Division	37	3,70,520	..	613	15,31,870	..	650	19,02,390	..	410	14,44,215	..
19 Mathurai Division	224	5,40,456	..	777	26,76,135	..	1,001	32,16,591	..	1,028	18,94,910	..
20 Ramnad Division	36	30,950	..	333	15,10,010	..	369	15,40,960	..	351	18,09,000	..
21 Tirunelveli Division	28	4,65,510	..	23	9,77,770	..	51	10,45,280	..	300	20,61,981	..
22 Superintending Engineer's Office, Coimbatore	9	5,09,500	..	201	1,90,945	..	210	2,41,445	..	919	26,23,880	..
23 Nilgiris Division	5	47,200	..	365	10,17,950	..	370	10,65,150	..	692	9,31,594	..
24 Erode Division	20	2,58,580	..	477	17,39,464	..	497	19,98,044	..	711	Not available.	..
25 Coimbatore Division	11	1,61,400	..	259	7,08,585	..	270	7,70,085	..	560	7,43,000	..
26 Salem Division	7	63,300	..	317	8,57,998	..	324	8,61,298	..	15,220	3,56,12,242	..
27 Kozhikode Division	30	2,37,720	..	271	7,38,504	..	301	8,09,000	..	560	7,43,000	..
28 Palghat Division	1	15,000	..	269	38,500	..	270	53,500	..	15,220	3,56,12,242	..
29 South Kanara Division	..	..	..	7	53,280	..	7	53,280	..	..	..	..
Total	728	85,46,501	..	390	10,95,300	..	1,118	96,41,801	..	..	..	..

* The division war figures for 1947-48 include the number and amount of estimates sanctioned in the Superintending Engineers' offices.
 † The corresponding figures for 1945-46 relate to the ex-district board Engineers' offices.

(3) Statement showing the number and amount of estimates sanctioned for panchayat works in the offices of the Superintending Engineers and Divisional Engineers (Highways).

Serial number and name of division or circle.	1948-49.		Corresponding figures, 1947-48.		Corresponding figures, 1945-46.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
	(1)	(2)	(3)	(4)	(5)	(6)
1 Superintending Engineer's Office, Kakinada.	2	1,08,000	..	..	..	..
2 Guntur Division	53	4,07,790	47	2,04,260	..	..
3 Krishna Division	34	1,66,000	29	34,000	..	..
4 Godavari, West Division	268	9,50,092	15	18,400	..	..
5 Do. East Division	62	1,18,500	6	12,500	181	..
6 Visakhapatnam, North Division	51	54,617	21	25,160	18	..
7 Do. South Division	6	31,830	21	30,800	..	..
8 Superintending Engineer's Office, Madras.	..	..	..	..	..	..
9 Anantapur Division	14	42,610	16	43,910	11	15,980
10 Bellary Division	36	1,01,200	18	30,920	..	..
11 Cuddapah Division	4	6,970	11	14,400	7	11,030
12 Kurnool Division	34	44,385	9	18,200	..	..
13 Chittoor Division	26	1,39,670	20	18,195	..	..
14 Nellore Division	50	2,54,396	6	9,670	9	23,050
15 Chingleput Division	9	16,070	4	26,160	..	..
16 Arcot, North Division	..	..	29	54,951	11	25,600
17 Arcot, South Division	10	17,500	13	26,973	..	..
18 Superintending Engineer's Office, Tiruchirappalli.	..	..	..	..	..	..
19 Tanjore, East Division	8	21,200	7	12,830	4	4,200
20 Do. West Division	31	75,067	24	43,150	18	24,470
21 Tiruchirappalli Division	4	6,400	9	27,650	4	3,600
22 Mathurai Division	17	40,880	9	36,373	10	20,280
23 Ramnad Division	25	61,950	4	5,800	49	91,250
24 Tirunelveli Division	13	1,18,575	10	20,320	15	53,650
25 Superintending Engineer's Office, Coimbatore.	..	..	..	..	..	..
26 South Kanara Division	44	1,59,722	15	49,970	..	..
27 Nilgiris Division	9	16,310	6	11,315	3	25,700
28 Erode Division	27	95,940	6	9,380	..	..
29 Coimbatore Division	21	7,200	24	2,200	..	..
30 Krishnagiri Division	10	5,060	12	2,150	..	..
31 Salem Division	18	43,240	6	8,480	..	..
32 Kozhikode Division	..	..	..	..	..	..
33 Palghat Division	..	..	..	..	..	..
Total	901	31,33,774	293	8,14,272	293	3,03,770

* Particulars of amount not available.

(4) Statement showing the number of tenders dealt with during 1948-49 in the offices of the Superintending Engineers (Highways) and Divisional Engineers (Highways).

Serial number and name of division or circle.	Government works.		District Board works.		Government works.		District Board works.		Total number of tenders.		Total number of tenders.	
	Number checked and approved.	Number of tenders checked and sent up.	Number checked and approved.	Number of tenders checked and sent up.	Number checked and approved.	Number of tenders checked and sent up.	Number checked and approved.	Number of tenders checked and sent up.	Total number of tenders.	Total number of tenders.	Total number of tenders.	Total number of tenders.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1 Superintending Engineer's Office, Kakinada.	120	126	..	..	..	..	..	..	261	..	..	..
2 Visakhapatnam, North Division.	91	246	9	15	361	378	191	..	..	..	..	..
3 Do. South Division.	194	480	..	..	674	296	350	..	..	..	..	..
4 Vislanagaram Special Division.	1	..	..	..	1	..	..	..	..	..	..	..
5 Agency Division	28	..	11	..	39	135	52	..	..	..	..	..
6 Godavari, East Division	94	232	26	37	389	575	420	..	..	..	..	..
7 Do. West Division	116	160	16	18	310	269	208	..	..	..	..	..
8 Krishna Division	79	555	38	30	702	146	444	..	..	..	..	..
9 Guntur Division	120	151	23	63	357	111	447	..	..	..	..	..
10 Superintending Engineer's Office, II Circle, Madras.	548	..	..	..	548	38	..	..	..	..	..	..
11 Anantapur Division	73	78	10	65	226	262	109	..	..	..	..	..
12 Bellary Division	61	71	16	1	149	57	109	..	..	..	..	..
13 Cuddapah Division	66	55	17	33	171	873	175	..	..	..	..	..
14 Chittoor Division	267	340	50	18	675	815	845	..	..	..	..	..
15 Nellore Division	219	252	..	..	471	357	420	..	..	..	..	..

(4) Statement showing the number of tenders dealt with during 1948-49 in the offices of the Superintending Engineers (Highways) and Divisional Engineers (Highways)—cont.

Serial number and name of division or circle.	Number of tenders checked and approved.		Number of tenders checked and sent up.		Total number of tenders.	*Corresponding figures for 1947-48.	†Corresponding figures for 1945-46.
	Government works.	District Board works.	Government works.	District Board works.		Total number of tenders.	Total number of tenders.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
16 Kurnool Division	70	130	30	20	250	223	1,021
17 Ohingepet Division	89	235	3	7	334	240	257
17(a) Compalt Division	57	301	68	105	529	358	104
18 Arcot, North Division	73	298	17	15	403	547	358
19 Arcot, South Division	2	..	..	..	2	..	..
20 Transport and Machinery Division.	212	144	..	..	356	..	..
21 Superintending Engineer's Office, III Circle, Tiruchirappalli.	2	..	..	..	2	..	..
22 Coleroon Bridge Division	..	..	..	..	..	..	..
23 Tanjore, East Division	..	..	..	..	..	..	..
24 Do, West Division	53	390	10	10	410	140	432
25 Tiruchirappalli Division	169	169	3	25	250	65	142
26 Mathurai Division	455	397	22	91	965	610	795
27 Ramnad Division	209	368	47	12	636	475	257
28 Tirunelveli Division	229	794	186	324	1,483	114	1,037
29 Pudukottai Division	282	491	1	85	859	342	347
30 Superintending Engineer's Office, IV Circle, Coimbatore.	57	..	5	..	62	..	..
31 Coimbatore Division	393	438	31	32	894	..	258
32 Erode Division	..	..	..	..	..	..	..
33 Salem Division	100	354	59	178	529	251	139
34 Krishnagiri Division	4	55	54	106	386	249	..
35 South Kanara Division	82	80	17	56	219	244	268
36 Nilgiris Division	72	33	25	11	235	667	217
37 Palghat Division	70	81	13	11	141	230	238
38 Kozhikode Division	97	213	9	18	165	29	122
39 Special Division, Cannanore	76	203	27	80	337	170	259
40 Special Division, Coimbatore	3	3	4	2	386	185	395
41 Bharatapuzha Division	21	..	..	..	12	..	..
42	6	..	..	..	21	8	..
Total	4,825	8,239	867	1,575	15,506	8,451	10,091

* The entries in this column against each division include those dealt with in the Superintending Engineer's offices.

† The entries in this column represent the tenders dealt with in the then Communications Branch and the District Board Engineers' offices.

(5) Statement showing total number of agreements dealt with and their amount in the offices of the Superintending Engineers and Divisional Engineers (Highways) during 1948-49.

Serial number and name of division or circle.	Number of agreements.		Amount.		Total number.	Total amount.	*Corresponding figures for 1947-48.	†Corresponding figures for 1945-46.
	Government works.	District board works.	Government works.	District board works.				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Superintending Engineer's office, Kakinada	42	..	18,24,595	..	42	18,24,595	..	..
Visakhapatnam North Division	154	203	7,53,185	3,90,273	357	11,78,458	430	9,24,036
Do, South Division	114	206	9,10,478	4,23,514	320	13,33,992	368	16,35,150
4. Agency Division	112	..	3,20,780	..	112	3,20,780	87	5,72,120
5. Godavari East Division	..	..	11,12,000	10,44,990	557	21,56,990	448	19,91,400
6. Krishna West Division	..	..	12,64,732	25,34,801	767	37,99,533	250	13,40,000
7. Gunur Division	129	725	14,35,783	19,20,995	854	33,56,778	158	21,44,010
8. Vizianagaram Division	116	242	11,80,534	21,52,645	358	33,33,179	153	15,74,189
9. Chodavaram Division	13	..	52,637	..	13	52,637	..	..
10. Superintending Engineer's office, II Circle, Madras	..	..	..	..	..	..	..	..
11. Bellary Division	102	141	5,15,046	5,04,230	19	5,15,046	..	..
12. Kurnool Division	86	167	9,97,970	1,43,345	243	12,08,648	153	2,49,830
13. Cuddapah Division	211	185	8,51,460	7,07,137	396	15,58,597	238	7,20,884
14. Chittoor Division	79	160	6,26,189	4,79,996	178	11,06,185	72	6,32,092
15. Chingleput Division	277	241	9,70,695	7,14,243	618	16,84,938	373	4,16,531
16. Arcot North Division	271	231	6,47,575	3,36,281	403	9,83,856	211	10,98,689
17. Arcot South Division	285	232	13,23,516	6,36,281	432	19,59,797	429	8,48,983
18. Do, South Division	180	313	13,23,516	6,36,281	567	21,18,109	441	8,55,835
19. Transport and Machinery Division	11	..	14,41,653	6,53,513	493	20,98,466	411	12,10,491
20. Compalt Division	..	..	..	..	..	..	..	..
21. Superintending Engineer's office, Tiruchirappalli	..	..	..	..	..	..	..	..
22. Tanjore East Division	27	..	1,55,150	..	27	1,55,150	..	..
23. Do, West Division	124	236	12,79,509	5,04,000	410	18,03,509	280	4,41,400
24. Tiruchirappalli Division	470	..	13,08,516	..	470	13,08,516	552	10,23,697
25. Mathurai Division	352	322	13,08,516	5,31,500	574	17,28,711	555	12,65,174
26. Ramnad Division	391	395	13,11,973	11,03,000	786	24,16,973	344	12,15,565
27. Tirunelveli Division	77	516	10,43,400	15,43,500	593	25,87,900	415	14,61,820
28. Pudukottai Division	158	416	10,43,400	11,03,000	572	21,46,400	457	18,97,534
29. Superintending Engineer's office, Coimbatore	..	..	..	..	..	..	..	..
30. Coimbatore Division	31	..	32,31,014	..	31	32,31,014	807	13,07,354
31. Erode Division	141	251	9,78,514	4,35,416	392	14,13,930	..	..
32. Salem Division	155	531	8,41,692	7,59,000	686	16,00,692	..	..
33. Krishnagiri Division	153	177	7,05,092	2,03,920	330	9,09,012	140	5,58,392
34. South Kanara Division	220	165	4,30,857	2,53,178	385	6,84,035	338	13,63,216
35. Nilgiris Division	139	165	8,96,390	1,10,353	304	10,06,743	..	..
36. Palghat Division	88	125	6,92,733	1,10,353	213	8,03,086	..	..
37. Kozhikode Division	99	160	7,07,085	4,25,735	259	11,32,820	..	..
38. Cannanore Special Division	137	174	7,72,708	3,39,170	311	11,11,878	..	..
39. Bharatapuzha Special Division	5	..	8,000	..	5	8,000	..	..
40. Coimbatore Special Division	18	..	63,176	..	18	63,176	..	..
Total	5,524	7,900	3,58,60,507	2,19,51,700	13,424	5,78,12,207	7,333	2,93,11,015
Total	..	..	..	..	..	..	..	7,491

* The divisionwar entries in this column include the number and amount of agreements dealt with in the respective Superintending Engineers' offices also.

† This is the total figure for the then Fifth Circle, Coimbatore.

(6) Statement showing the number of estimates and their cost sanctioned in the offices of the Superintending Engineer (Bridges) and Divisional Engineers (Bridges) during 1948-49.

Serial number and name of office.	Road Development Fund works.		Post-War Road Development works.		District board works.		Total.		Corresponding figures for 1947-48.	
	Number.	Amount in lakhs.	Number.	Amount in lakhs.	Number.	Amount in lakhs.	Number.	Amount in lakhs.	Number.	Amount in lakhs.
		RS.		RS.		RS.		RS.		RS.
1 Superintending Engineer's office.	10	4.43	22	10.00	15	15.73	47	30.16	13	5.26
2 Divisional Engineer's office (Bridges), South Division.	..	..	..	..	..	..	..	..	..	..
3 Divisional Engineer's office (Bridges), North Division.	2	0.32	1	0.15	..	..	3	0.47	..	..
Total	12	4.75	23	10.15	15	15.73	50	30.63	13	5.26

(7) Statement showing the number and cost of estimates prepared in the Bridges Circle and submitted to Chief Engineer (Highways) for sanction.

Number and category of works.	During 1948-49.		Corresponding figure for 1947-48.	
	Number.	Cost in lakhs.	Number.	Cost in lakhs.
		RS.		RS.
1 Road Development Fund Works	2	5.95	..	..
2 Post-War Road Development Fund.	16	187.25	14	130.00
3 District Board	1	1.58	..	..
Total	19	194.78	14	130.00

APPENDIX X.

Statement showing the percentage cost of establishment to expenditure on works.

Year.	Expenditure on works (including tools and plant).	Cost of establishment.	Percentage.
		RS.	RS.
1944-45	2,01,07,014	24,92,249	12.4
1945-46	2,67,89,201	27,54,573	10.3
1946-47	3,51,71,279	36,10,492	10.3
1947-48	4,67,32,659	46,50,373	9.9
1948-49	6,70,21,270	46,54,888	6.9

APPENDIX XI.

Progress made on "Avenue Plantations" in each division is shown below.

Serial number and name of division.	Number of new plants planted during the year.	Remarks.
(1)	(2)	(3)
I Circle.		
1 Visakhapatnam, North.	301	Two nurseries were also opened.
2 Do. South.	850	..
3 East Godavari	679	..
4 Agency Division	1,763	..
5 West Godavari	..	The existing avenues were maintained.
6 Krishna	3,379	..
7 Guntur	..	The existing avenues were maintained.
II Circle.		
8. Anantapur	..	The existing avenues were maintained. An estimate for new plantations and their maintenance for 4 years was prepared.
9 Bellary	..	No avenues were planted for want of rains. Proposals for new plantations for 1949-50 were drawn up.
10 Kurnool	..	
11 Cuddapah	..	
12 Nellore	..	
13 North Arcot	..	The existing avenue plantations were maintained. Some new plantations were done and that existing avenues maintained.
14 Chittoor	..	Nurseries were opened in the rest houses, sub-division office and such other premises. The seedlings will be transplanted in 1949-50.
15 Chingleput	682	Out of these 11,200 were planted and reared by gang coolies on bonus system. The adoption of the bonus system proved to be economical over the usual method of engaging regular avenue coolies.
16 South Arcot	13,723	..
III Circle.		
17 Tanjore East	..	A beginning was made for planting 1,000 cocoa plants. The existing plantations were maintained.
18 Co. West	..	Existing plantations were maintained.
19 Mathurai	..	Do.
20 Tiruchirappalli	700	Nurseries were opened in the Manaparai Traveller's Bungalow.
21 Tirunelveli	1,821	On Government roads.
22 Ramnad	1,198	On District Board Roads.
	..	Nurseries were maintained in the Division office compound and in the Travellers' Bungalows at Manamadurai and Srivilliputhur.
IV Circle.		
23 Krishnagiri	..	No new plantations were made. The nurseries opened in the previous years were maintained in a good condition. Proposals for new plantations costing Rs. 1.58 lakhs were awaiting approval. Form works of avenue plantations were taken up on District Board Roads.
24 Salem	400	Nurseries were newly opened in the travellers' Bungalow compounds at Namakkal and Tiruchengode. Six hundred plants planted in 1947-48 were maintained, during 1948-49. The fresh plants planted could not be maintained due to failure of monsoon. The work of plantation on Tiruchengode-Sankari road was in progress.
25 Coimbatore, North	..	The existing plantations were maintained.
26 Do. South	..	
27 Nilgiris	..	

Serial number and name of division.	Number of new plants planted during the year.	Remarks.
(1)	(2)	(3)
<i>IV Circle—cont.</i>		
28 South Kanara	..	Avenue plantations were being done on a large scale by gang coolies without incurring extra expenditure. The plantations done were mostly common, jack and mango which besides being fruit bearing, yield timber.
29 Calicut	..	The existing plantations were maintained.
30 Palghat	..	An expenditure of Rs. 677 on Government Roads and Rs. 378 on District Board Roads was incurred on new plantations.
Total ..	25,496	

APPENDIX XII.

Statement showing the list of ferries in charge of the department as on 31st March 1949.

I Circle, Kakinada—

1 Visakhapatnam North Division ..	(1) Sankili. (2) Calingapatnam. (3) Ninagam.
2 Do. South Division ..	Nil.
3 Agency Division ..	(1) Devipatnam. (2) Kunavaram. (3) Taliperu.
4 Godavari East Division ..	(1) Kotipalli. (2) Bodisakurru. (3) Yadurlanka. (4) Bobbarlanka (Rajahmundry to Bobbarlanka, Rajahmundry to Kovvur and Rajahmundry to Vizzeswaram). (5) Kapileswarapuram. (6) Pasuvullanka.
5 Do. West Division ..	(1) Prakkilanka. (2) Madhavayapalem. (3) Doddipatla. (4) Koderu.
6 Krishna Division ..	(1) Someswaram. (2) Illur. (3) Singala.
7 Guntur Division ..	(1) Pandugula. (2) Dharanikota. (3) Kolluru river.

II Circle, Madras—

8 Anantapur Division ..	..	Nil.
9 Bellary Division ..	..	(1) Ferry across Tungabhadra at Madhavaram. (2) Ferry across Tungabhadra at Manadala.
10 Cuddapah ..	..	(1) Ferry at M. 10/4 to 11/2 of Muddanur Jammalamadugu road. (2) Ferry on Yarraguntla-Proddatur road. (3) Chennur ferry at M. 108/7 to 109/1 of Chittoor-Kurnool road.

II Circle, Madras—cont.

11 Kurnool }	..	Nil.
12 Chittoor }	..	(1) Ferry across the Pennar at Nellore.
13 Nellore	..	(2) Mypaud Basin.
14 Arcot, North }	..	Nil.
15 Do. South }	..	Nil.
16 Chingleput	..	Nil.

III Circle, Tiruchirappalli—

17 Tanjore, East ..	..	(1) Gopalasamudram. (2) Elangudi. (3) Engan.
18 Tanjore, West ..	..	(1) Sundaraperumal koil. (2) Parithikudi.
19 Tiruchirappalli ..	..	(1) Kammanaickanpalayam - Ayyam-palayam. (2) Velur (Pugalur). (3) Manapalle-Manniyur. (4) Kulittalai-Musiri. (5) Tirumanur-Vilangudi. (6) Thirumalavadi-Vaithinathanpettai.
20 Mathurai ..	..	(1) Narikalpatti ghat. (2) Perichipalayam ghat. (3) Manur ghat.
21 Ramnad ..	..	(1) Kottagudi.
22 Tirunelveli ..	..	(1) Vilathikulam.

IV Circle, Coimbatore—

23 South Kanara Division ..	..	(1) Bolar. (2) Keelur. (3) Pavange. (4) Moolky. (5) Chandragiri. (6) Shire. (7) Kariongott. (8) Chitteri. (9) Mogral. (10) Kanipura. (11) Uppala. (12) Bekal. (13) Kallathkere. (14) Thekil. (15) Hosmat. (16) Mabukal. (17) Bardragirin-Kalliampur. (18) Udiavar. (19) Puttige. (20) Halady. (21) Gangolly. (22) Hangar Hole. (23) Kandlur. (24) Vandse. (25) Jadkal. (26) Poochamoger. (27) Malpe. (28) Souda.
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IV Circle, Coimbatore—cont.

24 Nilgiris	}	.. Nil.
25 Coimbatore, North		
26 Do. South		
27 Salem		
28 Krishnagiri		(1) Hanumantheertham. (2) Irumathur.
29 Kozhikode Division (Malabar) ..		(1) Baliapatnam. (2) Kuppam. (3) Kutticole. (4) Manantoddy-Chengadakedavu. (5) Panamaram and Cherupzhakadavu (6) Chalam.
30 Palghat (Malabar)		(1) Nuangathiri kadavu. (2) Thirthalavarandakutty kadavu. (3) Chamasakattani. (4) Mallura alias Chattampara kadavu

APPENDIX XIII.

(1) Statement showing the Inspection Bungalows in charge of the department as on 31st March 1949.

Serial number and name of division.	Name of inspection bungalow.
1 Visakhapatnam North, Chicacole.	Elurupeta.
2 Vijayanagaram Special Division ..	Sunkurametta.
3 Do.	Ananthagiri.
4 Chittoor Division	Madayagaripalle.
5 Cuddapah Division	Duvvur.
6 Do.	Kesapuram.
7 Do.	Jammalamadugu.
8 Kurnool	Kalva.
9 Do.	Jupad.
10 Do.	Cumbum tank
11 Do.	Giddalore.
12 Do.	Sirvel.
13 Do.	Kovilkuntla.
14 Do.	Santhajutur.
15 Do.	Kamballapalle.
16 Do.	Markapur.
17 Ootacamund	Naduvattam.
18 Coimbatore	Manupatti.
19 Do.	Attakatti.
20 Salem	Yercaud.
21 Kozhikode Division	Vennakad.
22 Do.	Ruttiaramba.
23 Do.	Iritty.
24 Do.	Mattanur.
25 Do.	Lakkidi.
26 Do.	Puduppadi.
27 Do.	Meppadi.

(2) Statement showing the Travellers' Bungalows in charge of the department as on 31st March 1949.

Division.	Travellers' bungalow.
1 Anantapur	Guntakal.
2 Do.	Rayalacheruvu.
3 Bellary	Alur.
4 Do.	Hirchal.
5 Do.	Gadiganur.
6 Do.	Kudatini.
7 Do.	* Paramadevanahalli.
8 Chingleput	Karunguli.
9 Do.	Acharapakkam.
10 Do.	Gummidipundi.
11 Do.	Guduvancheri.
12 Do.	Kadappeni (rest-house).
13 Do.	Avadi (rest-house).
14 Kurnool	Markapur.
15 Tiruchirappalli	Thoramangalam.
16 Do.	Aravakurichi.
17 Do.	Manaparai.
18 Mathurai	Ganguvarpatti.

* This Travellers' Bungalow was leased to the District Board from 23rd February 1949 for running an elementary school.

(3) Statement showing Travellers' Bungalows, rest-houses, etc., resting with the District Boards but under the supervision of Highways Department.

Serial number and name of division.	Serial number and name of travellers' bungalow.
1 Visakhapatnam North Division ..	(1) Belgaum (rest-house).
	(2) Belgam (travellers' bungalow).
	(3) Palakonda (travellers' bungalow).
	(4) Do. (rest-house).
	(5) Bobbili (travellers' bungalow).
	(6) Do. (rest-house).
	(7) Chicacole.
	(8) Narasannapeta.
	(9) Tekkali.
	(10) Cheepurupalli.
	(11) Ichapur.
	(12) Amadalavalasa.
	(13) Rajam.
	(14) Cheepurupalli (rest-house).
	(15) Salur (do.).
	(16) Rajam (do.).
	(17) Sigadam (do.).
	(18) Sarubiyili (do.).
	(19) Kottur (do.).
	(20) Donkinavalasa.
	(21) Kalingapatnam.
	(22) Kasibugga.
	(23) Ponduru.
	(24) Kanchili.
	(25) Chilakapalem.
	(26) Naupada.
	(27) Baruva.
	(28) Rangarayapuram.
	(29) Ranasthalam.
	(30) Veeraghattam.
	(31) Heeramandalam.

Serial number and name of division.	Serial number and name of travellers' bungalow.
2 Visakhapatnam South Division ..	(1) Narasapatnam. (2) Medivada. (3) Pentakota. (4) Narasapatnam (rest-house). (5) Do. (native choultry). (6) Uddandapuram. (7) Gummuluru. (8) Kotauratla. (9) Gummuluru (rest-house). (10) Uttaravahini (choultry). (11) Yalamanchili. (12) Kammurupalem. (13) Anakapalle (first class). (14) Kondakerla. (15) Sabbavaram. (16) Paravada. (17) Govada. (18) Madugole. (19) Chodavaram (Jubilee rest-house). (20) Pendurthi. (21) Padmanabhan. (22) Srungavarapukota. (23) Jammadevipeta. (24) Jammi. (25) Gajapathinagaram. (26) do. (rest-house). (27) Thamarapalli. (28) Chittivalasa. (29) Gajapathinagaram (Jubilee choultry).
3 Godavari, East i	(1) Tuni. (2) A. Annavaram. (3) Uppada. (4) Jaggampeta. (5) Yeleswaram. (6) J. Annavaram. (7) Samalkot. (8) Prathipadu. (9) Iriyaram. (10) Mandapeta. (11) Ramachandrapuram. (12) Rajanagaram. (13) Dwarapudi. (14) Anaparthi. (15) Amalapuram. (16) Godilanka. (17) Gannavaram. (18) Mummidivaram. (19) Katrenikona. (20) Gokavaram. (21) Kathipudi.
4 Godavari, West	(1) Dharmajigudem. (2) Chintalapudi. (3) Bhimadole. (4) Kamavarapukota. (5) Tadikalapudi. (6) Nallacharla.

Serial number and name of division.	Serial number and name of travellers' bungalow.
4. Godavari, West—cont.	(7) Pangidi. (8) Prakkilanka. (9) Kovvur (old). (10) Do. (new) (11) Gopalapuram. (12) Neggipudi. (13) Penumantra. (14) Undi. (15) Veeravasaram. (16) Narasapur.
5 Krishna	(1) Nidumole. (2) Pamarru. (3) Vuyyur. (4) Kankipadu. (5) Nandigama. (6) Kanchikacharla. (7) Sher Muhammodpeta. (8) Komarabanda. (9) Munagala. (10) Kaikalur. (11) Gannavaram. (12) Gudivada. (13) Bapulapadu. (14) Nuzvid. (15) Challapalli. (16) Vissannapeta. (17) Jaggayyapeta. (18) Singala. (19) Mylavaram. (20) Kondur. (21) Tiruvur.
6 Suntur	(1) Vallampalle. (2) Chilakalurpeta. (3) Gurzala. (4) Veldurthi (store shed). (5) Bapatla. (6) Prattipad. (7) Medikonda (store shed). (8) Chebrolu. (9) Inakollu. (10) Nakarikal. (11) Tangutur. (12) Phirangipur. (13) Macherla. (14) Addanki. (15) Chirala. (16) Mangalagiri. (17) Achampeta. (18) Ponnur. (19) Konanki. (20) Kommalapad. (21) Kottapatnam. (22) Vinukonda. (23) Dacheipalli. (24) Repalle. (25) Parchur. (26) Amaravattur.

Serial number and name of division.	Serial number and name of travellers' bungalow.
6 Guntur—cont.	(27) Sattenapalli. (28) Vadarevu. (29) Nekanikal (store shed). (30) Kondavedu. (31) Piduguralla. (32) Vollalacheruvu. (33) Dingi. (34) Ammanabrole. (35) Rompicherla (store shed).
7 Anantapur	(1) Uravakonda (rest-house).
8 Bellary	(1) Hagari Boonanahalli. (2) Hampasagar.
9 Cuddapah	(1) Yarraguntla. (2) Kondapuram.
10 Kurnool	(1) Kodamur. (2) Karivemula. (3) Allardianna. (4) Pattikonda. (5) Maddikera. (6) Peapally. (7) Dhone. (8) Veldurthi. (9) Namur. (10) Cargiyapuram. (11) Velgode. (12) Panyam. (13) Owk. (14) Allagadda. (15) Nagareddipally. (16) Chagalamarri. (17) Kumbum. (18) Markapur.
11 Chittoor	(1) Paradarimi. (2) Venkatagirikota. (3) Kuppam. (4) Palamaner. (5) Punganur. (6) Madanapalle. (7) Kothakota. (8) Kalikiri. (9) Pileru. (10) Damalcheruvu. (11) Kallur. (12) Chandragiri. (13) Yerpedu. (14) Kalahasti. (15) Puthuru. (16) Tiruttani. (17) Mulakelacheruvu (choultry). (18) Gurramkonda (do.)
12 Nellore	(1) Tada. (2) Sulurpeta. (3) Kovur. (4) Singarayakonda. (5) Muthukuru.

Serial number and name of division.	Serial number and name of travellers' bungalow.
12 Nellore—cont.	(6) Nellore palayam. (7) Nandavaram. (8) Bhata. (9) Nandipad. (10) Duttalur. (11) Kanigiri. (12) Kaligiri. (13) Podili. (14) Venkatagiri. (15) Vinjamur.
13 Chingleput	(1) Pudevoyal. (2) Uthukottai. (3) Periapalayam. (4) Chittamuru.
14 North Arcot	(1) Katpadi. (2) Kannamangalam. (3) Anaicut. (4) Polur. (5) Cheyyar. (6) Moranum. (7) Sholinghur. (8) Wandiwash. (9) Tirupattur (road shed). (10) Virudambat (do.). (11) Agaram (do.). (12) Ambur (do.). (13) Pachal (do.). (14) Siruvallur (do.). (15) Dusi (do.). (16) Kalavai (do.). (17) Banavarm (do.). (18) Sholinghur (do.).
15 Tanjore, East	(1) Sirkali. (2) Narasingampet. (3) Nannilam. (4) Karunganni (rest-house). (5) Kuttalam (chattram).
16 Do. West	(1) Tiruvadamardur. (2) Kumbakonam. (3) Tiruvadi. (4) Vallam. (5) Sengipatti. (6) Madukkur. (7) Peranurani. (8) Nagudi. (9) Pattukottai (rest-house). (10) Budalur (do.). (11) Grand Anicut (do.).
17 Tiruchirappalli	(1) Karur. (2) Thuraiyur. (3) Chinnadharapuram. (4) Pudukpalayam. (5) Noyal. (6) Koilpatti. (7) Samayapuram.

Serial number and name of division.	Serial number and name of travellers' bungalow.
17 Tiruchirappalli—cont.	(8) Tiruvellarai (rest-house). (9) Vyyampatti (do.). (10) Ariyalur (do.). (11) Kilapalur (do.). (12) Jayankondasholampuram house). (13) Lower Anicut (rest-house). (14) Padalur (do.). (15) Mandurai (do.).
18 Mathurai	(1) Usilampatti. (2) Thirumangalam. (3) Kodai road. (4) Palni. (5) Kodaikanal. (6) Palakanuthu. (7) Theni. (8) Eriyodu. (9) Natham. (10) Kottampatti. (11) Periakulam. (12) Checkanurani. (13) Karungalakudi. (14) Sidapatur. (15) T. Kallupatti. (16) Vendasandur. (17) Shempatti. (18) Muhayar chatram. (19) Batlagundu.
19 Tirunelveli	(1) Koilpatti. (2) Kayattar. (3) Nanguneri. (4) Kurukkuchalai. (5) Sankarankoil. (6) Vasudevanallur. (7) Pavoorchatram. (8) Ambasamudram. (9) Vagchaikulam. (10) Tiruchendur.
20 Ramnad	(1) Sattur. (2) Tiruppattur. (3) Managiri. (4) Manamadura. (5) Paramakudi. (6) Ramnad. (7) Kariapatti. (8) Palayampatti. (9) Tiruvadanai. (10) Tondi. (11) Sivaganga. (12) Mudukulattur. (13) Sayalkudi.
21 South Kanara	(1) Kasargod (old). (2) Do. (new). (3) Kumbala (new). (4) Hosdrug (second class).

Serial number and name of division.	Serial number and name of travellers' bungalow.
21 South Kanara—cont.	(5) Bellal (second class). (6) Chervathur (second class). (7) Pallikere (third class). (8) Kolekar. (9) Maryeswar. (10) Puthur (major). (11) Do. (minor). (12) Uppinangadi. (13) Beltangady. (14) Charmady. (15) Karkal. (16) Mulki. (17) Bantwal. (18) Panemangalore. (19) Mudabidri. (20) Irital. (21) Bajpe. (22) Ferangipet. (23) Suratkal. (24) Gunpur. (25) Siddakatte. (26) Udipi Pentland. (27) Kaup. (28) Brahmavar. (29) Coondapur. (30) Baindur. (31) Kirimanjeshwar. (32) Kollur. (33) Sullia. (34) Sampaji. (35) Advastalar (shed). (36) Iriya (Inspection shed). (37) Kallar (do.). (38) Periya. (39) Kurnad (shed). (40) Bayar (shed). (41) Mani (Inspection shed). (42) Shiradi. (43) Kokkada (Inspection shed). (44) Kulkanda (do.). (45) Kunnathur (do.). (46) Punyalcatta (do.). (47) Someshwar (chatram). (48) Shirva (shed). (49) Beluron (shed). (50) Kota (shed). (51) Someshwar (shed). (52) Shankaranarayana (shed). (53) Ampar (shed). (54) Hasangadi (shed). (55) Alkadi (chatram). (56) Hasangadi (shed). (57) Shiriyar (shed). (58) Nagody (shed). (59) Aranthod (Inspection shed). (60) Jalsoor (do.). (61) Kandadka (do.).

Serial number and name of division.	Serial number and name of travellers' bungalow.
22 Nilgiris Division	(1) Coonoor. (2) Kundha Bridge. (3) Kotagiri. (4) Gudalur. (5) Masanigadi.
23 Erode Division	(1) Mulanur. (2) Kangayam. (3) Kundadam. (4) Vellakoil. (5) Sathi. (6) Gobichettipalaiyam. (7) Nambeyur. (8) Bhavani. (9) Andiyur. (10) Kodumudi. (11) Perundurai. (12) Uthukuli. (13) Kollegal. (14) Ramapuram. (15) Dhimbam. (16) Talavadi.
24 Coimbatore division	(1) Avanashi. (2) Karumuthampatty. (3) Kodunoi. (4) Annur. (5) Palladam. (6) Sirumugai. (7) Karamadai. (8) Kattampatty. (9) Periapatty.
25 Krishnagiri	(1) Krishnagiri. (2) Bargur. (3) Uttangarai. (4) Mathur. (5) Dharmapuri. (6) Omalur. (7) Thoppur. (8) Harur. (9) Adamankotta. (10) Shulagiri. (11) Hosur. (12) Palacole. (13) Royakotta.
26 Salem	(1) Athur. (2) Edappadi. (3) Karipatty. (4) Munchavadi. (5) Namakkal. (6) Rasipuram. (7) Sankari. (8) Tiruchengode.
27 Kozhikode	(1) Tamarasseri. (2) Quilandy. (3) Kuttiady. (4) Payyoli.

Serial number and name of division.	Serial number and name of travellers' bungalow.
27 Kozhikode—cont.	(5) Nadapuram. (6) Badagara. (7) Pattanur. (8) Taravama. (9) Madai. (10) Sultans' Battery. (11) Kannottu. (12) Taliparamba. (13) Vayitri. (14) Perunayal (rest house). (15) Panangod (do.). (16) Perambra (do.).
28 Palghat	(1) Vedakancherry. (2) Alathur. (3) Koduvayur. (4) Kollongode. (5) Mannarghat. (6) Kongad. (7) Perintalmanua. (8) Ottapalam. (9) Cherpalssery. (10) Pattambi. (11) Thuppanad. (12) Nilambur. (13) Thirurangadi. (14) Karuvarathandu. (15) Pandicad. (16) Ponnani. (17) Kuttipuram. (18) Thirthala. (19) Chowghat. (20) Valapad. (21) Vaikathur. (22) Pulamamthole. (23) Kondotti. (24) Parappanangadi. (25) Thirur. (26) Areacode. (27) Edakkara. (28) Pattambi (chatram). (29) Tirur (chatram). (30) Malappuram (chatram). (31) Manjeri (chatram).