

**TWELFTH KERALA LEGISLATIVE ASSEMBLY**

**COMMITTEE  
ON  
PUBLIC ACCOUNTS  
(2006-2008)**

**SIXTY THIRD REPORT**

(Presented on 15th July, 2008)



SECRETARIAT OF THE KERALA LEGISLATURE  
THIRUVANANTHAPURAM  
2008

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**On**

**Paragraphs relating to Public Works Department, contained in the  
Reports of the Comptroller and Auditor General of India for  
the years ended 31st March 1999 No. 3 (Civil), 31st  
March 2000 (Civil) & 31st March 2004 (Civil).**

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## INTRODUCTION

I, the Chairman, Committee on Public Accounts, having been authorised by the Committee to present this Report on their behalf present the Sixty Third Report on paragraph relating to Public Works Department contained in the Reports of the Comptroller and Auditor General of India for the years ended 31st March 1999 No. 3 (Civil), 31st March 2000 (Civil) & 31st March 2004 (Civil).

The Report of the Comptroller and Auditor General of India for the years ended 31st March 1999 No. 3 (Civil), 31st March 2000 (Civil) & 31st March 2004 (Civil) were laid on the table of the House on 31st March, 2000, 2nd July 2001 and 20th July 2005 respectively.

The Committee considered and finalised this Report at the meeting held on 7th July, 2008.

The Committee place on record their appreciation of the assistance rendered to them by the Accountant General in the examination of the Audit Report.

Thiruvananthapuram,  
15th July, 2008.

ARYADAN MUHAMMED,  
*Chairman,*  
*Committee on Public Accounts.*

## REPORT

### PUBLIC WORKS DEPARTMENT

#### AUDIT PARAGRAPH

#### **Calicut bypass—Extra expenditure due to inadequate investigation**

*The contractor firm derived an undue advantage of Rs. 3.01 crore due to departmental lapses in investigation and preparation of estimates*

Based on soil investigation tests conducted in 1991 by a Design Consultant, Ministry of Shipping and Transport (MOST), Government of India, accorded sanction (July 1993) for the construction of 'Calicut Bypass-Phase 1' of NH 17 at an estimated cost of Rs. 11.36 crore. In October 1996, the work was awarded to the lowest tenderer for Rs. 11.86 crore. The work, stipulated to be completed in 44 months, commenced in February 1997.

In April 1996, the Department asked the Consultant to conduct revised soil test to confirm the results of the original investigations. Accordingly, the Consultant furnished a revised report in June 1996 and the Chief Engineer (National Highways) accepted it in August 1996. The Department revised the estimate in October 1997 to Rs. 27.60 crore which was modified and sanctioned for Rs. 30.19 crore by MOST in April 1999.

The result of the fresh investigation available with the Department in June 1996 were not brought to the notice of MOST, but the lowest tender received on the basis of the original estimates was accepted in October 1996 resulting in vitiation of the whole tender proceedings as stated below:

(i) In respect of four items of the work, the rates quoted by the successful tenderer were exorbitantly high (between 57 *per cent* and 869 *per cent* above estimate rates) and in respect of two items the rates were unworkably low (67.73 *per cent* and 48 *per cent* below estimate rates) whereas the rates quoted by the second lowest tenderer for these 6 items, were between 16 *per cent* and 51 *per cent* above estimate rates. The quantities of four items, the rates for which quoted by the successful tenderer were significantly high, registered manifold increase in the revised estimate. Consequently, the contractor firm derived an undue monetary advantage of Rs. 3.01 crore *vide* Appendix III.

(ii) As against embankment filling of 291788 cubic metres originally estimated, it was 590012 cubic metres in the revised estimate. For the increased quantity of 225277 cubic metres over and above 125 *per cent* (364735 cubic metres) of the original quantity, the mutually agreed rate was fixed at Rs. 150 per cubic metre (against the original rate of Rs. 100 per cubic metre) implying a financial burden of Rs. 1.13 crore. Evidently, the departmental lapse in arranging the work on the basis of inadequate soil studies and site investigation led to such additional contractual commitments. The matter was referred to Government in May 1999; reply has not been received (October 1999).

[Paragraph 4.12—contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 1999 No.3 (Civil)]

Note furnished by Government on the above audit paragraph is included as Appendix II.

The Committee found that in the work of “Calicut Bypass—phase I NH- 17” there was an extra expenditure incurred over the original estimate of Rs.11.36 crore which increased to Rs.27.60 crore due to lack of proper and detailed investigation of the Project. Though the Department was fully aware of the fact that NH-17 was passing through marshy paddy field they did not conduct any kind of soil test or a detailed investigation. Instead they had resorted to only a random investigation conducted by LBS in the year 1991 on the basis of which the original estimate was prepared. While issuing sanction in July 1993, the MOST had specifically instructed that a soil consultant must be associated with the execution of the high embankment since the alignment of the Calicut Bypass was passing through marshy paddy fields. Based on this direction a work of detailed soil investigation was entrusted with LBS and they submitted their report in June 1996. Meanwhile the tenders were invited in 1994 based on the original estimate and the same was approved by MOST in July 1996. But the data collected based on this revised detailed soil investigation were not made available to MOST before the acceptance of the original tender. This has resulted in the additional expenditure. To this the Department submitted that after getting the investigation report it was not possible to make any change in the tender documents already received and submitted to MOST.

2. The witness, Chief Engineer, National Highways replied that the original investigation was conducted by LBS in 1991 based on a random study and estimates were prepared accordingly. The second soil test was necessitated since high embankments had to be constructed in marshy lands. Based on the revised report, the Department revised the estimate of Rs. 11.36 crore to Rs. 27.60 crore in October 1997 and the same was approved by MOST in April 1999 for Rs.30.19 crore. Accordingly the work was sanctioned to the lowest tenderer so that the delay in the work could be avoided.

3. The Committee was dissatisfied over the reply deposed by the witness and opined that lack of proper investigation was the main reason for the extra expenditure in the work. Though the Department was armed with sufficient technical know-how they had neither utilised this nor taken any step for a detailed investigation which on the part of the Department was a serious lapse, bears no justification. Hence the Committee suggested that the estimate of any work in the Department should be prepared only on the basis of a proper and detailed investigation arresting any loopholes in future.

4. The Committee noticed that reinvestigation of soil necessitated increased quantity of soil filling for embankment. Even though revised soil test was conducted with the good intention of giving sufficient strength to the high embankments, 590012 cubic metres of soil was needed for embankment filling as against the original estimate of 291788 cubic metres. For the excess quantity, the mutually agreed rate fixed at Rs. 150 per cubic metre of soil against the original rate of Rs. 100 per cubic metre, had led to a financial burden of Rs. 1.13 crore. The Committee opined that if proper soil studies and site investigation were conducted in the beginning, the financial loss could have been avoided. Since there was no provision in the PWD Manual for conducting random investigation the Committee expressed strong dissatisfaction over the steps taken by the Department. Hence the Committee urged the Department to give strict directions to the concerned to make sure that approval of works in future should be given only after conducting a detailed investigation as per the relevant provisions in the PWD Manual. The Secretary assured the Committee that necessary directions would be issued to the concerned at the earliest.

5. The Committee observed that for 4 out of 6 items of work, the successful tenderer had quoted unbelievably high rates (between 57 percent and 869 percent above estimate rates) and surprisingly low rates for the remaining 2 items (67.73 percent and 48 percent below estimate rates). At the same time, the rates quoted by the second lowest tenderer for the above items were between 16 percent and 51 percent above estimate rates. The Committee wanted to know whether the work could have been awarded separately among the two contractors.

6. To this the witness, Chief Engineer clarified that the work would be awarded invariably on the basis of total cost but not on item wise rate and hence it would not be practicable to divide various items of work among different contractors.

#### **Conclusions/Recommendations**

**7. The Committee views this as a classic example of how a Government Department like Public Works Department functions virtually in contrast with the financial interest of the State by some officials in connivance with the contractors. It is also appalling to note that such elements are still present and remained unscathed in the Department even after they looted public money under the guise of project implementation. It has seen that in the case of almost all the projects in Public Works Department, implementation commences without conducting a proper detailed scientific investigation and this resulted in huge contractual commitments. In the case of 'Calicut Bypass-**

**Phase I NH 17' – an extra unavoidable expenditure was incurred due to the departmental lapse of not conducting a detailed investigation of the work. Only a random investigation was conducted by the LBS and on the basis of which the original estimate was prepared and approved and the work was started. But though a detailed investigation was conducted later by LBS in 1996, the data collected based on the investigation were not submitted to the MOST before the acceptance of the original tender. It is also to be noted that the Government had taken a stand that after getting the revised investigation report it was not possible to make any change in the tender documents already submitted to MOST. This is not acceptable to the Committee. The Committee sees that it is this irresponsible act of the officials of the PWD that resulted in a huge undue advantage to the contractor. The Committee opines that since there is no provision in PWD manual for conducting random investigation but for a detailed investigation of a work, the action on the part of the officials is also 'ultravires'.**

**8. The Committee suggests that the Department should give strict directions to the officers concerned to make sure that the work in future should be approved only after conducting a detailed investigation as per the provisions in the PWD manual.**

AUDIT PARAGRAPH

**Non-recovery of excess payment for earth filling**

*Excess payment of Rs.15.13 lakh was made due to wrong computation of earth filling for embankment formation*

Mention was made in paragraph 4.16 of the Report of the Comptroller and Auditor General of India for the year ended 31st March 1995 about excess expenditure due to incorrect computation of rate for earth filling with contractor's own earth for forming embankment in respect of the work 'Construction of combined bypass for Neyyattinkara from Chainage 17116 metre to 20720 metre'. The following instance of excess payment for the same work came to the notice of audit in August 1997.

According to original estimate of the work, the quantity of earth required for filling the embankment was 139600 cubic metres. During execution, a supplemental agreement was executed for a quantity of 185727 cubic metres and payment (Rs.65.89 lakh) was made (March 1992) for 180774 cubic metres of earth filling on the basis of interim level measurement. While taking final levels in August 1996 for the purpose of preparation of final bills. Executive Engineer (EE), National Highways Division, Thiruvananthapuram detected that the actual

quantity of filling done was only 139250 cubic metres resulting in excess payment of Rs.15.13 lakh. The amount was to be recovered but not so done as of April 1999.

Executive Engineer stated (April 1999) that as the reduction in quantity of filling was suspected to be the sinkage of earth due to 'sub soil subsidence' the matter had been referred (April 1999) to Lal Bahadur Shastri Centre for Science and Technology for investigation and that the final bill for the work had not been settled pending finalisation of the case.

The reply of Executive Engineer was not tenable as specification of the work required consolidation of earth in 150 mm layers of finished thickness using power roller. Possibility of sub soil subsidence, would arise only if the measurement at interim level was taken before consolidation with power roller. The non-recovery of the excess payment conferred undue advantage to the contractor.

The matter was referred to Government in May 1999; reply has not been received (October 1999).

[Audit Paragraph 4.17—contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 1999, No. 3 (Civil)].

Notes furnished by Government on the above audit paragraph is included as Appendix II.

9. The Committee from the audit observation found that as per the original estimate of work, construction of combined bypass for Neyyattinkara from chainage 17116 metres to 20720 metre work, the quantity of earth required for embankment filling was 139600 cubic metre. But as per a supplement agreement executed during the course of the work, the quantity rose to 185727 cubic metre and in March 1992, Rs. 65.89 lakh was paid for 180774 cubic metre of earth filling on the basis of interim level measurement. The Committee also noticed that in 1996, the EE, National Highway Division, Thiruvananthapuram found that the actual quantity of filling done was only 139250 cubic metres resulting in excess payment of Rs. 15.13 lakh. The Committee distressed to note that the amount was not recovered even after audit observation and hence desired to know the present position in the matter.

10. The witness, Chief Engineer, National Highways clarified that a settlement of 76 cm was found by LBS in its study and if the settlement would be taken into account, the total quantity of earth filling would have been come to 180000 cubic metre.

11. The Committee pointed out that while the Executive Engineer, in 1996 had detected an excess payment of Rs. 15.13 lakh, but later in April 1999, the Executive Engineer had suspected that there was reduction in quantity of filling due to subsoil subsidence and hence referred the matter to LBS for investigation. The Committee wanted to know why two officers of the same department made conflicting opinions on the same matter and desired to know the veracity of the opinions.

12. The witness, Chief Engineer, explained that the opinion of the subsequent Executive Engineer was correct since the quantity of settlement was added subsequent to the report by LBS. The witness further clarified that eventhough consolidation was done as per specifications, using power rollers, the surcharge of earth fill on the original ground surface would attribute to gradual subsidence of soil which could be found out only by proper scientific study. The LBS in their Report stated that there was elastic settlement of foundation soil.

13. The Committee observed that the scientific study conducted subsequent to audit, helped the contractor in evading the excess payment and conferred undue advantage to him.

14. To the Committee's query as to whether any amount was refunded, the witness replied that Rs. 1,78,834 was recovered from the final bill.

15. The Committee observed that there was malafide intention on the part of the Department Officials by re-examining the earth filling work once completed and also every reason there to suspect the possibility of serious malpractice that could not be set aside. Hence the Committee urged the Department to conduct a thorough enquiry examining all aspects in detail and take relevant action to recover the excess payment made from the authority responsible for the same.

#### **Conclusions/Recommendations**

**16. The payment of an excess amount of Rs. 15.13 lakh as part of a supplemental agreement executed for the so called excess filling done, flouts all the norms of financial propriety. The Committee believes that it was suspected to be aimed at favouring undue advantage to the contractor associated with the work and siphoning out of public money into the hands of a private contractor. All the arguments in favour of sinkage of earth due to sub-soil subsidence do not appear to be conclusive and do not rule out serious malpractice involving the Department officials.**

**17. The Committee recommends the Department to conduct a thorough probe into the whole episode of 'earth filling' and furnish the findings of the probe and the action taken thereon to the Committee at the earliest.**

AUDIT PARAGRAPH

**Unintended benefit to a contractor**

*Extra rate was allowed for excavating medium rock resulting in an unintended benefit of Rs. 13.67 lakh to the contractor*

Superintending Engineer, National Highways, Kozhikode arranged (July 1993) formation of south approach road for additional length of 2.5 km to the southern approaches of Chandragiri bridge in Kasaragod District, through a contractor for an agreed amount of Rs. 1.37 crore. The contractor completed the work in March 1998. Final payment has not, however, been made to the contractor as of July 1999. An aggregate amount of Rs. 2.12 crore has been paid to the contractor till July 1999.

During the course of the work, the contractor pointed out (March 1995) that there was large quantities of medium rock in the excavation area requiring blasting and demanded enhanced rates for excavating the medium rock. In February 1996, Chief Engineer, National Highways, recommended to Government to treat the excavation in medium rock as extra item and to pay enhanced rate for it. Till March 1998, Rs. 48.67 lakh (inclusive of the tender excess of 32 *per cent*) was paid for excavating a quantity of 44872 cubic metres of medium rock at the rate of Rs. 821.74 per 10 cubic metres. Calculating with reference to the agreed rate for ordinary earth work excavation (i.e. Rs. 590.97 per 10 metres), the extra payment worked out to Rs. 13.67 lakh.

As per specification, the contractor was bound to do earth work excavation 'in all classes of soil except hard rock requiring blasting' at the agreed rate. Therefore, recategorisation of earth excavation during execution of work and allowing extra rate for medium rock subsequently, was not in order. Thus, payment of Rs. 13.67 lakh for excavation of medium rock was outside the purview of the agreement and constituted an unintended benefit to the contractor.

The matter was referred to Government in May 1999; reply has not been received (October 1999).

[Audit Paragraph 4.18 contained in the Report of the Comptroller and Auditor General of India for the year ended 31 March 1999, No. 3, (Civil)]

Note furnished by Government on the above audit paragraph is included as Appendix-II.

18. The Committee desired to know why the Chief Engineer, National Highways had recommended to Government in February, 1996 to treat the excavation in medium rock as extra item and pay enhanced rate for it.

19. The witness, Chief Engineer, National Highways explained that since the rock in Kasaragod area was very hard and sticky laterite rock, it would be difficult to break it by ordinary means. At the same time that kind of rock was treated as medium rock. Since there was provision for blasting such type of medium rock, a revised proposal was sent to Government to treat the medium rock as an extra item and the same was approved by Government.

20. To the Committee's query as to why medium rock was not found during investigation, the witness informed that the presence of medium rock was noticed by the Department only during the excavation work. The Committee observed that there was a clear indication of the fact that there were serious lapses on the part of the officers who had conducted the investigation.

#### **Conclusion/Recommendation**

**21. The Committee opines that there is serious lapse on the part of the department officials who conducted the investigation and not discovered the presence of medium rock at the worksite during the investigation. The presence of medium rock was noticed only during the excavation work later. Even though the contractor was bound to do earth work excavation in all classes of soil including the medium rock as per specification he was allowed extra rate for medium rock which resulted in an unintended benefit of Rs. 13.67 lakh to the contractor. This is most unwelcome in the interest of the State. Had a proper investigation been done earlier, this extra expenditure could have been avoided. Hence the Committee recommends that appropriate step should be taken to prevent such occurrence of flaws in future.**

AUDIT PARAGRAPH

**Non-realisation of amounts due from Government of India towards expenditure incurred on National Highway works**

*Expenditure of Rs.83.98 crore incurred by the State Government on National Highways remains to be reimbursed by Government of India*

The expenditure on National Highway works executed by NH Divisions in the State is initially met from State funds. On the basis of claims preferred by

Accountant General (A & E), alongwith vouchers from National Highway divisions, the amount is reimbursed by the Pay and Accounts Officer (PAO), National Highways, Government of India (GOI), Bangalore.

At the end of May 2000, an amount of Rs.83.98 crore was outstanding in Accountant General's books awaiting reimbursement from the PAO of which Rs. 24.85 crore related to the period from 1979-80 to 1996-97. Scrutiny revealed that the amounts were either withheld or disallowed by the PAO for want of vouchers from the divisions, sanction for the job, revised estimates etc. Due to failure of the NH divisions to supply wanting documents, amounts due to the State from the GOI were pending for two decades.

The matter was brought to the notice of the Secretaries of Finance And Public Works Departments in April 2000 for urgent action in the matter and to enforce accountability of officials for the delay.

Government stated (September 2000) that effective action was being taken for the release of the amount withheld by the PAO and that strict instructions have been given to the officers to submit the claims in proper shape to the PAO.

[Audit Paragraph 3.21—contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2000 (Civil)]

Note furnished by Government on the above audit paragraph is included as Appendix-II.

22. The Committee observed that an amount of Rs. 83.98 crore, expended on NH works was pending reimbursement by GOI as of May 2000. Out of this, Rs. 63.40 crore was withheld for want of revised estimates from the Ministry, New Delhi. The Committee enquired whether revised estimates had been submitted and the withheld amount had since been recovered.

23. The witness, Chief Engineer, National Highways explained that revised estimates had been submitted but sanction was yet to be received. Once sanction was obtained, no extra amount would be obtained for patchworks or renewal works. The total sanction for each year would be included in the sanction for the revised estimates also. For land acquisition cases, even though Rs. 40 crore was sanctioned, the total expense worked out was Rs. 53 crore, of this Rs. 43 crore was still pending settlement.

24. The Committee enquired whether works were done in excess of budget provision. To this, the witness replied that separate funds were earmarked by the Government for the purpose and taken up.

25. The Committee enquired whether any amount, out of Rs. 83.98 crores had been reimbursed so far by GOI.

The witness clarified that Rs. 38 crore relating to Non plan Expenditure was earlier reimbursed. Last year Rs.18 crore was obtained and Rs. 20.3 crore was reimbursed this year. Efforts were being taken to obtain sanction for the revised estimates relating to land acquisition.

26. To the Committee's query as to whether the amount of Rs. 24.85 crore relating to the period from 1979-80 to 1996-97 was spent for land acquisition, the witness explained that it was expended for certain regional works and was still awaiting sanction.

27. The Committee wanted to know whether any action had been taken against the officers who were responsible for the loss of vouchers and other wanting documents.

The reply of the witness in this regard was not satisfactory.

28. The Committee noticed that no effective action was taken by the concerned Departments to reimburse the amount withheld by GOI, eventhough the matter was brought to the notice of both the Departments of Public Works and Finance by the A.G. in April 2000. It was saddening to note that the Departments had failed to fix liability on the officers concerned for their failure to reimburse the fund even after two decades. Hence the Committee demanded the Departments to furnish the details regarding the action taken in this matter within one week. The Committee also demanded to furnish the upto date details regarding the steps taken to reimburse the amounts withheld by GOI. The Committee also wanted to know the amount pending reimbursement from GOI as of March, 2006.

29. The Committee opined that proper investigation should be conducted before sanctioning works and the system of giving additional administrative sanction based on revised estimates should be stopped in future.

#### **Conclusions/Recommendations**

**30. The Committee strongly deplores the indifferent attitude of the Department in being unable to get a mammoth amount reimbursed from GOI. The apathy of the concerned officials is all the more evident from the fact that out of a total of Rs. 83.98 crores outstanding to be reimbursed on account of the expenditure on National Highway works executed by NH Divisions of PWD met from state funds, Rs. 24.85 crores pertained to the period from 1979-80 to 1996-97. The Committee urges the Department to initiate immediate steps to get the amount due to be reimbursed from the Pay and Accounts Officer, N.H., Bangalore.**

31. **The Committee views the failure of the Department to furnish a detailed action taken report seriously. It is also alarming to note that often the reimbursement is delayed for want of revalidation of sanction, loss of vouchers etc. The Department should take necessary steps to arrest such occurrences and requisite action against the officials responsible for loss of documents related to National Highway works may be initiated and inform the Committee about the same at the earliest.**

AUDIT PARAGRAPH

**Four-laning of Aluva to Vyttila and Aroor to Cherthala Sections of NH 47**

*Major deviation from conditions of contract and failure to regulate payment on the basis of specifications led to unintended monetary benefit of Rs. 2.64 crore to the firm; of which Rs. 30.71 lakh only has been recovered (August 2000)*

In February 1994, Ministry of Surface Transport (MOST) sanctioned implementation of the Project, viz., Four-laning and strengthening of National Highway 47 portions from Aluva to Vyttila and Aroor to Cherthala and strengthening of Vyttila-Aroor Section at an estimated cost of Rs. 93.97 crore. The project implemented with assistance from Asian Development Bank (ADB) comprised two contract packages\* N2 and N3 arranged for execution simultaneously. Project Director (Superintending Engineer), National Highways (ADB) Circle, Edapally arranged the works in March 1994 through a New Delhi firm for an agreed contract amount of Rs. 78.01 crore. The work originally stipulated to be completed by September 1997, was completed in March 1999. The payment made to the firm up to September 2000 was Rs. 104 crore.

Audit scrutiny revealed instances of incorrect computation of cost escalation claims, adoption of contractor's own rate contrary to contract conditions and irregular payment for substituted items at the original rate. The total extra expenditure thus involved amounted to Rs.2.64 crore. The details are given in the table below:

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• Package N2-Four-laning and strengthening of Aluva-Vyttila section of NH 47 (16.226km)  
 Package N3-Strengthening of Vyttila-Aroor section (10.164 km) and four-laning and strengthening of Aroor-Cherthala section of NH 47 (20.226km)

<i>Sl. No.</i>	<i>Particulars of items</i>	<i>Gist of deviations/ variations noticed</i>	<i>Excess/extra expenditure (Rs. in lakh)</i>	<i>Remarks</i>
(1)	(2)	(3)	(4)	(5)
1	Price escalation in respect of labour and materials	Cost escalation for local labour, general and POL* was allowed wrongly (August-September 1998) based on cent per cent value of work done instead of limiting it to 94.73 per cent (for N2 package) and 95 per cent (for N3 package) as provided for in the prescribed price adjustment formulae.	62.19	Excess payment of Rs. 30.71 lakh relating to N2 package was recovered in February 1999 on the basis of audit observation.
2	Escalation in cost of local labour	Contrary to agreement provisions, cost indices (base as well as current for Aluva were adopted in the price adjustment formulae instead of the all India based indices as mentioned in the agreement.	103.37	Excess payment under N2 package was Rs. 48.90 lakh (January 1999) and under N3 package Rs.54.47 lakh (June 1998).
3	Earth filling for median	Median filling was done with soil instead of granular materials. Though CE# approved (December 1996) the rate of Rs.182.14 per cubic metre for the substituted item, payment was made at Rs. 286.90 per cubic metre as demanded by the contractor. As per the contract, rates for the varied items rates fixed by the engineer would prevail in case of any dispute.	13.85	
4	Upward revision of basic price of cement	As against the basic price of Rs. 1900 per tonne for cement projected in the agreement	17.09	For purchase of 15023 tonnes of cement as of

\* Petroleum, Oil and Lubricants

# Chief Engineer, National Highways

(1)	(2)	(3)	(4)	(5)
		<p>schedule, enhanced rate of Rs. 2340 per tonne was allowed accepting the contractor's plea in September 1995 that the basic price indicated in the tender was erroneous.</p>		<p>February 1999 at the enhanced rate</p>
5	<p>Removal of slush during pile driving N2 package</p>	<p>Though the agreed rate included charges for clearance of slurry thrown up during piling operations, contractor's demand (July 1995) for extra payment on the ground that agreed rate for the item did not include charges for removal of slush obtained from piling operations was accepted in June 1997.</p>	17.98	<p>On a quantity of 10497.33 cubic metres till August 1999.</p>
6	<p>Formation of Granular Sub Base (GSB) in N2 package</p>	<p>Specification for construction of GSB with gravel and aggregate in the ratio of 50:50 was changed by CE in October 1997 to two separate gradings with departmental cut earth, borrow materials and aggregate in the ratios of 50:20:30 and 35:35:30 respectively. However, payments were made at the agreed rate of Rs. 478.92 per cubic metre for the original specification instead of regulating it as per the approved unit rates of Rs. 316.80 and Rs. 354.85 respectively.</p>	49.16	<p>Payment made in August 1998 for 58311 cubic metres of GSB</p>
Total			263.64	

The incorrect computation of price escalation payable (*vide* Sl.No.1) and non-regulation of the payments for various items with reference to approved rates (*vide* Sl. No. 6) indicated failure of departmental officers in exercise of due caution in working out rates and thus safeguard the financial interests of Government. Further, the conditions of contract especially in regard to rates, specifications of items, etc., were not properly enforced by department or the Government and the contractor's claims for revision of rates were conceded without any demur. Possibility of serious irregularity and malpractice in this regard cannot be ruled out.

Government stated (September 2000) that overpayments of Rs. 31.48 lakh in respect of N3 package (Sl.No.1) and Rs. 49.16 lakh (Sl.No.6) would be recovered from the final payment to the contractor.

Government stated further that adoption of Aluva based indices (Sl.No.2) was justified as the construction site was near to Aluva. As the agreement specifically laid down that cost escalation was to be computed with reference to base cost index and current cost index on All India basis, there was no scope of price adjustments based on indices for Aluva.

As for the cost escalation in the basic price of cement to Rs. 2340 per tonne (Sl. No.4), Government admitted that the enhancement in price was allowed on the basis of contractor's claim that the price of cement prevailing at Kochi was Rs. 2340 per tonne at the time of tender. This was unjustified as the tender documents were to be prepared by the department carefully incorporating all the relevant factors and the contractors were to examine them in detail before quoting their rates.

Regarding Sl. No. 5. Government added that the extra payment for removal of over-flowing slurry was necessary to ensure smooth and uninterrupted traffic in the service road near the pile driving area and to protect nearby houses and that there was no Government land for dumping the mud. This was not tenable as the agreed rate included the charges for disposal of slush ejected during piling operations. Hence the extra payment for removal of slush was a financial favour to the contractor.

Government observed that eligible claims were admitted to the maximum extent to secure maximum utilisation of ADB loan assistance and for avoiding arbitration as ADB loan did not provide for reimbursement of arbitration costs. As the External loan assistance constituted a liability and not a gratuitous payment, its proper utilisation merited strict enforcement of conditions of the contract concluded for execution of the project. The plea that the contractor's claims were allowed for the sake of avoidance of arbitration proceedings was far-fetched and provided justification for an untenable position.

The large scale deviations and alterations from the agreed contract conditions and the settlement of contractor's claims without proper analysis warrant investigation by Government. Of the excess/extra payments totalling Rs. 2.64 crore, an amount of Rs. 30.71 lakh only has been recovered from the contractor. Recovery particulars of the balance Rs. 2.33 crore were awaited (November 2000).

[Audit paragraph 4.5—contained in the Report of the Comptroller and Auditor General of India for the year ended 31 March, 2000 (Civil)].

Note furnished by Government on the above audit paragraph is included as Appendix II.

32. The Committee observed that even though the works were arranged for an agreed contract amount of Rs. 78.01 crore, the actual payment made to the firm upto September 2000 was Rs. 104 crore. The Committee wanted to know from audit that why Audit had objected only to payment of Rs. 2.64 crore while the actual difference was more than Rs. 25 crore.

Audit replied that it had objected to the excess payment on only 6 items of work which amounted to Rs. 2.64 crore and the balance payment was made for extra quantities in extra items.

33. The Committee remarked that Audit would have made detailed objections regarding the entire excess payment of more than Rs. 25 crore. If so, the Committee could have conducted a detailed study in the matter and arrived at decisions regarding the permissibility/non permissibility of the entire amount.

34. Since the Committee could not infer from the audit observation whether any further payment was made to the contractor after September 2000, the Committee demanded the Department to furnish a detailed report in the matter. The Committee also sought details regarding the extra items of work for which payment of more than Rs. 22 crore was incurred.

35. The Committee enquired whether the project was implemented as per a standard contract with the ADB.

The witness, Secretary, Public Works Department explained that for all externally aided projects, the FIDIC contract system was followed which was the international contract system recommended by the EAP agency and the implementing agency has to follow it. In such cases, payments would be in Indian currency/foreign currency and there would be escalation clause, arbitration clause, dispute redressal board etc. Such works differ from the existing PWD code and Manuals.

36. The Committee observed that the payment of more than Rs. 22 crore might have been effected due to agreement conditions on which the Audit hardly raised any objection, since there was no contradiction with agreement conditions and PWD Manual. Even then the details of the payment should be made available to the Committee.

37. The Committee enquired whether the irregularities pointed out by Audit in six items of work have been rectified.

The witness, CE, National Highways replied that the escalation payment made so far in all cases have been recalculated and regularized. The excess payments of Rs. 62.19 lakh and Rs.103.37 lakh in respect of the first two items were recovered.

38. The Committee wanted to know whether there was any clause in the agreement, which facilitated the contractor to claim escalation at 100 % of the value of work done.

Audit replied that such a clause was not included in the contract. The contractor had to claim the payment of variation cost of local labour, general and POL at 95% of value of work done and payment of 5% in convertible foreign exchange and variation in price in foreign input as envisaged in the agreement. The contractor was allowed an advantageous option in order to set right the audit objection.

39. The Committee suspected some serious irregularities in the matter and directed the Department to furnish a detailed report in this regard without further delay.

40. To the Committee's query regarding the escalation payment made for the third item, i.e., earth filling, the witness explained that as per the contract, even though the filling for median was to be done using granular materials, red earth was subsequently used for planting saplings.

The Committee pointed out that if planting of saplings was visualized in the original plan, such a variation could have been avoided.

41. The Secretary, PWD explained that while settling the final bill, only the balance amount was paid adjusting all the previous payments. He further explained that under the FIDIC contract system, usually upto 5% variation occur during the course of work due to site conditions etc., even if the design was perfect.

42. The Committee observed that there were serious flaws in the departmental investigation, resulting in escalated payments for substituted items.

The Committee stated that if proper investigation could not be conducted in future, it would recommend fixing of responsibility on the officers responsible for the lapse and recovering the loss thus sustained from them.

43. When asked whether the officer who was responsible for the payment of enhanced rate for earth filling, was still in service, the witness answered in the negative.

44. Regarding the fourth item, the Committee observed that by changing the basic price of cement accepting the contractor's plea, the Department had defeated even the purpose of the tender and opined that such practice was not at all desirable. The Committee wanted to know why the Department had taken such a decision.

45. The witness, Secretary, PWD replied that the decision was taken after verification by the Empowered Committee constituted by the Government. The Ministry of Surface Transport had also approved the change of rate.

The Committee was dissatisfied over the whole state of affairs and remarked that the contractor's plea was unjustifiable.

46. The Committee enquired about the extra payment made for removal of slush during pile driving in N2 package.

The witness, CE, NH explained that the excess payments made for the fifth and sixth items were adjusted in the final payment.

Audit objected to the above reply since the notes furnished by the Government was silent in the matter.

The Committee urged the Department to furnish a detailed report regarding the same.

#### **Conclusions/Recommendations**

**47. The Committee learns that the execution of work relating to two packages involving four-laning and strengthening of Aluva-Vytila Section, strengthening of Vytila-Aroor Section and four-laning and strengthening of Aroor-Cherthala Section of NH 47 contain serious lapses on the part of the Department by accepting unjustifiable claim from the contractor in the pretext of avoiding arbitration. Failure of the Department to recover the excess payment made to the contractor, as pointed out by the Audit, raises apprehensions about the role of Department officials in making such an excess payment by allowing large scale deviations and alterations from the contract conditions on petty and untenable grounds.**

48. The Committee finds that though the audit observation was based on an excess payment of Rs. 2.64 crore, the actual excess payment amounted to more than Rs. 25 crore. But the Department could effect recovery of only Rs. 165.56 lakh in respect of first two items as objected by the Audit and there was no serious efforts to recover the balance amount even after six years. Change in the plan from filling for median using granular materials to filling using red earth causing enhanced payment showed lack of foresight and inadequate planning.

49. The Committee urges the Department to conduct an enquiry into the excess payment due to large scale variations from the original contract and allowing inadmissible rates against the conditions of contract and take action against those responsible. The Department should also take earnest steps to reclaim the excess payment made to the contractor. The Committee desires to be furnished with a detailed report regarding the excess payment made to and recovered from the contractor and also containing action taken against the erring officials.

#### AUDIT PARAGRAPH

#### **Undue benefit due to manipulation in the contract provision for escalation**

*Price for the purpose of payment of escalation was shown as lower in the agreement than the rates considered in the estimate and consequently, the firm derived a monetary benefit of Rs.1.42 crore*

Superintending Engineer (SE), National Highways Central Circle, Thrissur awarded the contract for construction of 'Varapuzha Bridge and viaducts' in Ernakulam District to a firm in May 1995 on 'item-rate contract' basis for an aggregate contract amount of Rs. 29.63 crore. Ministry of Surface Transport issued a revised estimate for Rs. 33.97 crore in May 1995. The construction of the bridge was in progress as of December 1999. Rupees 30.63 crore was paid to the firm till November 1999.

The agreement executed by SE provided for price escalation of certain materials to be supplied by the firm over the basic price projected in the agreement schedule. Scrutiny revealed that price adopted in the tender documents were lower than the basic price considered for estimation purpose. As the rates applied for preparation of the estimate were not adopted in the tender documents, the scale of escalation was higher than justified and this resulted in the firm reaping an undue monetary gain of Rs. 1.42 crore on account of escalation till November 1999 as below:

<i>Particulars of material</i>	<i>Basic price shown in Schedule</i>	<i>Actual price reckoned for preparation of estimate inclusive of contractor's profit (10 per cent)</i>	<i>Difference in price</i>	<i>Quantity of material supplied*</i>	<i>Amount derived with reference to the difference in rate</i>
				<i>Tonnes</i>	<i>(Rupees in lakh)</i>
<i>Rupees per tonne</i>					
Cement ordinary	2058	2530	472	12965	61.19
Cement- High Strength	2744	2750	6	666	0.04
Steel-HYSD	12162	15840	3678	2176	80.03
MS Steel and MS Angle	17152	17600	448	267	1.20
<i>Total</i>					142.46

Government stated (October 2000) that estimate Bill of Quantities (BOQ) was prepared only for the limited purpose of evaluating tenders and for enabling technical acceptability. The reply is not acceptable as BOQ formed the main documents of agreement and the rate adopted for estimation was to be reckoned as the price of materials prevailing at the time of tender.

The undue deflation of the basic price in the tender documents by SE calls for investigation.

[Audit paragraph 4.6—contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2000 (Civil).]

Note furnished by Government on the above audit paragraph is included as Appendix II.

50. The Committee wanted to know whether detailed estimates form part of the tender document and whether the adoption of rates well below the estimate rate in the Schedule conferred any undue advantage to the contractor.

The witness, CE, National Highways replied that in an item rate contract, the rate of materials provided in the detailed estimate was not included in the schedule and the contractor had to quote his rate for each item based on the information regarding the specification and quantity furnished to him.

\* as per CBV 12 of November 1999.

51. To the Committee's query as to why a huge difference occurred between the basic price and actual price reckoned for preparation of estimate, the witness could not give a satisfactory explanation.

The witness replied that a detailed report would be furnished to the Committee after verification.

52. To a query regarding the total amount spent for the construction, the witness replied that an amount of Rs. 45.43 crores was utilised for the purpose. An amount of Rs. 2 crore was to be paid to the contractor for the work and the final settlement was still pending.

#### **Conclusion/Recommendation**

**53. The Committee desires to be furnished with a report regarding the undue deflation of the basic price in the tender documents leading to huge difference between the basic price and actual price reckoned for preparation of estimate. The Department should take action against the officials who were responsible for this deflation resulting in an undue monetary gain of Rs. 1.42 crore to the contractor on account of price escalation.**

#### AUDIT PARAGRAPH

##### **Avoidable expenditure due to departmental lapses**

*Departmental lapses in evaluation of the alternative offer and failure to effect timely supply of materials and payment of contractor's dues led to avoidable financial commitment of Rs. 1.24 crore*

The Superintending Engineer, National Highways Central Circle, Thrissur awarded (November 1988) the construction of Kumbalangi – Perumpadappu bridge in Ernakulam District to the Kerala State Construction Corporation Limited (KSCC), a Government company, for a contract amount of Rs. 2.97 crore. However, KSCC could execute partially two pier wells and two abutment wells valued Rs. 39.51 lakh till October 1991. Government terminated the contract in August 1992 without risk and cost as KSCC could not maintain the stipulated progress of work.

In March 1993, the Chief Engineer (CE), National Highways invited pre-qualification tenders for arranging the balance works (Estimated cost : Rs. 4.61 crore). The lowest offer was for Rs. 6.36 crore from a Kochi firm which also submitted an alternative proposal to execute the work with its own design of pile foundation at an agreed cost of Rs. 5.94 crore on a lumpsum contract. CE accepted the alternative proposal in July 1993 and an agreement was executed in October 1993. The stipulated date of completion was December 1995.

In December 1995, the firm intimated that it could not complete the execution within stipulated date due to (i) restrictions imposed by the Kerala High Court on construction activity in the waterway, (ii) departmental delays in issue of materials and (iii) departmental failure to make timely payment of bills and demanded extension of time and increase in the agreed rates. In August 1997, Government allowed an overall increase of 35 per cent in rates for works done after 1 July 1996. The construction of the bridge was completed in December 1998 and the firm was paid Rs. 7.23 crore (March 1999), of which an amount of Rs. 85.42 lakh was towards 35 per cent enhancement in rates allowed by Government.

Audit scrutiny revealed that the department sustained a loss of Rs. 1.24 crore as mentioned below:

(a) While the firm's offer to execute the work for Rs. 6.36 crore as per the department's original design of well foundation included charges for sinking wells up to 58.50 metres, its alternative offer (Rs. 5.94 crore) with pile foundation included charges for driving piles up to a depth of only 48 metres. The firm had demanded extra rate of Rs. 12,000 per metre for driving piles beyond 48 metres and the total estimated additional commitment was Rs. 61.45 lakh. This aspect was not taken into account while evaluating the firm's alternative offer to execute the work with pile foundation. Consequently, cost for the substructure with pile foundation worked out to Rs. 6.55 crore which was higher than the offer for well foundation by Rs. 19.17 lakh. Thus, faulty evaluation of the offer of the firm entailed an extra expenditure of Rs. 19.17 lakh.

(b) Two wells, partially constructed by KSCC for piers, could not be made use of in any manner, resulting in wasteful expenditure of Rs. 20 lakh (Approximately).

(c) On many occasions supply of departmental materials could not be effected due to their non-availability in the district store and that payment schedule in the agreement could not be maintained due to paucity of funds. Thus, departmental failure in not ensuring timely supply of departmental materials and timely payment of bills resulted in enhancement in rates and extra expenditure of Rs. 85.42 lakh.

(d) As a consequence of the departmental lapses, the cost of construction increased from Rs. 2.97 crore to Rs. 7.23 crore (143 per cent).

The matter was referred to Government in April 2000; reply has not been received (November 2000).

[Audit paragraph 4.8—contained in the Report of the Comptroller and Auditor General of India for the year ended 31 March 2000 (Civil)]

Note furnished by Government on the above audit paragraph is included as Appendix II.

54. The Committee wanted to know why the Department had opted for the alternative offer of the contractor to change the design from well foundation to pile foundation even though the original design was beneficial to the department.

The witness, CE, National Highways explained that the work could be easily executed using pile foundation . The offer of the contractor was accepted because the agreed cost was only Rs. 5.94 crore but extra rate had to be paid at the rate of Rs. 12,000 per meter for driving piles beyond 48m upto 58.50m resulting in an additional payment of Rs. 9 lakh. Hence the total commitment came to Rs. 6.03 crore which was less than the lowest offer of Rs. 6.36 crore for well foundation.

55. Audit pointed out that the total number of piers used was 8 instead of 5 and the total number of piles was 24.

The witness, Secretary, PWD explained that usually in the design of all the bridges in Kerala, there has been usage of well foundation. But now there was a shift to pile foundation. Many contracts executed in the last 5 to 6 years have undergone this change while implementation due to changes in technology. The Secretary also explained that pile depth could be changed while driving and hence variation in rates occurs.

56. The Committee pointed out that even if pile foundation was the cheapest, the same should have been observed during investigation. The absence of such an observation was a clear indication of the departmental lapse in the matter resulting in an extra liability of Rs.19.17 lakh.

57. Hence the Committee directed the Government to fix responsibility against the officer responsible for opting the alternate offer of the contractor without analysing the cost benefit.

#### **Conclusion/Recommendation**

58. **The Committee observes that the reasons adduced by the Government for accepting the alternative proposal of the firm with its own design of pile foundation is not acceptable to the Committee since the total cost of the work when completed was Rs. 6.55 crore which was higher than the agreed rate of Rs. 5.94 crore. It is also to be noted that the Chief Engineer opted the offer**

of the firm by neglecting the lowest offer of the well foundation of Rs. 6.36 crore which is less than the total cost of work. Eventhough the agreed rate was Rs. 5.94 crore, the firm had demanded extra rate of Rs. 12,000 per metre beyond 48 metres of pile foundation. The Chief Engineer did not take into account the extra cost while evaluating the firm's alternative proposal. So the faulty evaluation of the proposal by the Chief Engineer had resulted in an extra expenditure of Rs. 19.17 lakh. The Committee also likes to point out that if the pile foundation is more beneficial and cheaper than the well foundation, that aspect should have been highlighted during the investigation of the work. But any such effort has not been seen taken in this case. Hence, the Committee remarks that there is a clear indication of wilful lapse on the part of the departmental officials which resulted in the wasteful expenditure of Rs. 19.17 lakh. The Committee views this seriously and directs the Government to take stringent action against those responsible and fix responsibility against the officers responsible for opting the alternative proposal of the contractor without analysing the cost benefit element of the proposal.

AUDIT PARAGRAPH

**Unjustified excess payment for sinking foundation wells**

*Payment for sinking wells for extra depths was made at inadmissible rates resulting in excess payment of Rs. 45.72 lakh*

Superintending Engineer (SE), National Highways Circle, Thrissur arranged construction of the link road connecting Willington Island and Cochin bypass in December 1992 on a lumpsum contract of Rs. 35.58 crore. The road construction was completed in June 1998 but final payment to the contractor has not been made as of October 2000. Audit scrutiny (December 1998) disclosed inadmissible payment of Rs. 45.72 lakh for sinking wells for the foundation of the piers as discussed below:

The agreement envisaged well foundation for 17 piers. According to the agreement, the rates for well sinking were Rs.10,000 per metre up to a depth of 30 metres. Rs.13,000 per metre for depth between 30 metres and 39 metres and Rs.16,000 per metre for depths between 39 metres and 49.5 metres. Provisions in the contract also envisaged sinking of wells beyond the depth of 49.5 metres to be treated as extra items, payment for which was to be regulated as follows:

First 3 metres beyond 49.5 metres	Rs. 1,50,000 per metre
Next 3 metres	Rs. 1,80,000 per metre
Next 3 metres	Rs. 2,10,000 per metre

In the tender documents, tentative founding levels for the wells approved by the Chief Engineer in respect of each pier, ranging from 30 to 50 metres were projected. As the agreement contained agreed rates for sinking of wells up to a depth of 49.5 metres, payment for sinking wells up to 49.5 metres was to be regulated in accordance with agreed rates. However, well sinking between 31.32 to 54.765 metres below the tentative levels indicated in the tender documents was treated as extra item though the extra items to levels only beyond 49.5 metres was provided for in the agreement. Consequently extra rates were allowed unjustifiably for the entire depth below 30 to 50 metres. The resultant inadmissible payment was Rs. 45.72 lakh.

Government stated (October 2000) that for variations in founding levels, fixed after confirmatory borings as decided in the pre-bid meeting (July 1992), separate rates were agreed upon. Government, however, admitted that the contract envisaged sinking of wells up to the founding levels as in the drawings given along with tender documents and that the rates quoted in the Bill of Quantities (BOQ) formed the basis for regulating contractual payments. As the BOQ contained quoted rates for sinking wells up to a depth of 49.5 metres, extra rates for variations ought to have been applied only for sinking wells beyond this depth.

[Audit paragraph 4.11—contained in the Report of the Comptroller and Auditor General of India for the year ended 31 March 2000 (Civil)]

Note furnished by Government on the above audit paragraph is included as Appendix II.

59. The Committee wanted to know why the contractor was allowed extra rates for sinking wells between 30m and 50m in violation of the agreement conditions.

The witness, Chief Engineer, National Highways explained that the total depth beyond 49.5m from all the wells came to 31.32m and excess payment was made only for the depth beyond 49.5m.

60. Audit objected to the above reply and pointed out that extra payment was made in all cases, which exceeded the tentative founding level.

The Secretary, PWD clarified that only interim payment was released. But in the final bill, extra payment was given only for sinking wells beyond 49.5m.

61. The Committee observed that if no extra payment was made against the agreed quantities, it should have been intimated to the Audit in time. Then such an observation by Audit would not have arisen.

### Conclusion/Recommendation

**62. The Committee is of the opinion that the Department should furnish the replies to the initial audit observations in time so as to do away with avoidable observations.**

AUDIT PARAGRAPH

#### **Extra expenditure due to adoption of higher rates**

*Though agreement clearly provided for payment at agreed rates for any excess over scheduled quantities, enhanced rates were allowed for the excess quantity of works causing avoidable financial commitment of Rs. 22.58 lakh*

Superintending Engineer (SE) National Highways Circle, Thrissur awarded (April 1998) the contract for formation of new road from Kuttipuram to Puduponnani 3<sup>rd</sup> Reach for an agreed contract value of Rs. 2.56 crore at 14.2 per cent below estimate rates. Execution of the works was in progress as of November 1999. The value of work done till April 2000 was Rs. 1.64 crore.

Schedule of quantities in the agreement of April 1998 contained provision for filling embankment of the road with an estimated quantity of 43000 cubic metres of hard gravelly soil at the rate of Rs. 162 per cubic metre. The quantity of filling was re-assessed (May 1999) as 100900 cubic metres. Based on a request from the contractor, the Superintending Engineer executed a supplemental agreement with the contractor in July 1999 which guaranteed payment at the rate of Rs. 217.82 per cubic metre for executing the excess quantity of 47150 cubic meters of filling with gravel. The estimated extra financial commitment on account of the proposed payment was Rs. 22.58 lakh.

According to terms of agreement, the contractor was bound to execute any excess over the schedule quantities at his agreed rates for the work. In view of this specific provision, execution of supplemental agreement providing for payment at contractor's enhanced rate for quantities in excess of 125 per cent of the originally estimated quantities lacked justification and was not permissible.

The matter was referred to Government in May 2000; reply has not been received (November 2000).

[Audit Paragraph 4.12 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2000 (Civil)]

Note furnished by Government on the above audit paragraph is included as Appendix II.

63. The Committee observed that the Public Works Department had made an initial agreement for filling the embankment of road from Kuttipuram to Puduponnani with an estimated quantity of 43,000m<sup>3</sup> for Rs. 162/ m<sup>3</sup>. But this was reassessed to 100900 m<sup>3</sup> and an additional agreement was framed with payment at the rate of 217.82/ m<sup>3</sup>. This resulted in an additional expenditure of Rs. 22.58 lakh. The Committee wanted to know the reason behind such a supplementary agreement and the reason for this huge difference in amount.

64. The Committee pointed out that the payment at an enhanced rate for quantities in excess of 125% of the originally estimated quantities was against the terms of agreement and the contractor was bound to execute excess over the scheduled quantities at his agreed rates for the work.

65. The Committee was informed by the witness, the Chief Engineer, NH that the Superintending Engineer cancelled the agreement under his direction. He admitted that usually a negotiated rate was given when the enhanced rate went beyond 25%.

The Audit said that supplementary agreement was not cancelled and was still in force.

66. The Committee enquired whether there was any benefit in cancelling the Supplementary agreement as the payment had been made already. The Committee observed that the agreement caused a heavy loss and this was viewed as very serious.

The Committee also enquired whether the department had taken any action against the Superintending Engineer.

#### **Conclusion/Recommendation**

**67. The execution of supplementary agreement to provide undue financial benefit to the Contractor against the provisions of the original contractual agreement for the work of filling of the embankment of the Kuttippuram to Puduponnani road at an enhanced rate of Rs. 217.82 per cubic metre by the Superintending Engineer, National Highway Circle, Thrissur, is highly irregular. Subsequent cancellation of the supplementary agreement after the payment at the enhanced rates amounts only to an eyewash. The Committee views the action of the Superintending Engineer as very serious and recommends that strict action be taken against him.**

#### AUDIT PARAGRAPH

#### **Avoidable expenditure due to change in scope of work**

*Post contractual change in the design of foundation and non-observance of Chief Engineer's guidelines resulted in avoidable liability of Rs. 5.89 crore*

The Superintending Engineer, Roads and Bridges (North) Circle Kozhikode (SE) awarded the contract for the construction of Kadalundi Kadavu Bridge (Malappuram District) in March 1998 at an accepted contract price of Rs.5.92 crore at a tender premium of 90 per cent. The contract contemplated well foundation for the abutments and piers of 13 span bridge of 345 metre long. After completing the foundation work of one abutment, one pier and partially completing the foundation work of two piers, the contractor in December 1998, intimated the Chief Engineer (CE) that the site of the bridge was at the confluence of river and sea and therefore tidal action into the river was severe rendering well sinking difficult. The contractor also requested for change from well foundation to cast in-situ pile foundation. Chief Engineer accepted the contractor's request and obtained a new drawing (July 1999) from the Design Wing contemplating cast in-situ pile foundation for nine piers. The partially completed well foundation of two piers were also abandoned and changed to pile foundation. The construction of the bridge was in progress as of March 2004. The estimated extra expenditure due to change in design was Rs.5.05 crore, Rs. 0.33 crore spent on the partially completed well foundation became in fructuous.

Contract conditions demanded the contractor to construct the bridge and approaches in accordance with the plan and design attached to agreement. The contractor was expected to have quoted rates taking into account the hostile site conditions and as such the contractor had no valid ground for a request in change of the design of foundation after the contract was concluded.

In the design of the bridge, the Department proposed well foundation for piers after taking into consideration all the aspects of the site and as such there was no justification on the part of the department in allowing a change from well foundation to cast in-situ pile foundation.

Further, in March 2002, the Chief Engineer proposed a revised estimate for Rs. 10.29 crore to Government, which apart from taking the design change into account envisaged construction of retaining walls in cement concrete for protecting the sides of approaches at places more than the number provided for in the original agreement. The revised estimate also contained provision for cement concrete belts over retaining walls constructed in rubble masonry. According to the instructions issued by Chief Engineer in December 1990 retaining walls above 3 metres height need be constructed only in rubble masonry avoiding cement concrete belts. Proposal to construct side wall in

cement concrete and to provide cement concrete belt over rubble masonry walls deviating from Chief Engineer's instructions resulted in extra liability of Rs.0.51 crore.

Government stated (July 2004) that the change in design was necessitated owing to the drastic environmental changes near and around the site during the intervening period after the investigation (1984) and execution of agreement (1998). Regarding construction of side wall in cement and providing cement concrete belt over rubble masonry wall Government stated that it was due to limitation in space to accommodate the bottom width of embankment and also to accommodate future expansion. However, the reply is silent as to why due professional care was not taken by taking into account these aspects at the time of according technical sanction in 1995 despite specific provision in Kerala PWD Manual that if there is a time lag of two years or more between the date of preparation of an estimate and the date of its sanction it is necessary that site conditions are examined again to verify whether any changes have occurred necessitating modifications and as such the reply is not acceptable.

[Audit Paragraph 4.4.5- contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2004 (Civil)]

Note furnished by Government on the above audit paragraph is included as Appendix II.

68. The Committee in its concern explained that Kadalundi Kadavu Bridge was in dangerous situation and the work has not yet been completed. The Committee pointed out that the main reason for this situation was lack of proper investigation. The investigation team did not take into account the topography of the land and other conditions prevailing there.

69. The Secretary, PWD informed that investigation for the proposed bridge was conducted in 1984. Administrative sanction was accorded during 1994 and technical sanction in 1995. Government reply was that during that period certain drastic environmental changes had taken place in the concerned site.

The Committee pointed out that if technical sanction was accorded 2 years after investigation then reinvestigation should have been done.

70. The Committee recommended the department to speed up the construction of Chandragiri Bridge, which was sanctioned in the year 2000. The Committee also decided to call a conference regarding the investigation procedure. The Committee observed that if strong decisions pertaining to investigation procedure were framed then Government can reduce heavy loss incurred in such cases.

### Conclusions/Recommendations

71. The chain of events leading to the change of design and resultant avoidable liability of Rs. 5.89 crore associated with the yet to be completed construction work of Kadalundi Kadavu bridge in Malappuram District is a perfect example of work haunted by irresponsible attitude and non-adherence to PWD norms by the Department officials. Firstly, according technical sanction to a work for which investigation was completed 11 years ago, flouted the provisions of Kerala PWD Manual. Secondly, Department accepted request of a contractor who had only started the work 9 months earlier, agreed and satisfied with the terms and conditions and the plan and design of the project at the commencement of work. It is hard to believe that there occurred drastic environmental changes during the span of nine months. Thirdly, the work executed so far based on the original design had to be abandoned resulting in an infructuous expenditure of Rs. 0.33 crore.

72. The Committee recommends that action should be taken against the officials who exhibited little regards to the codal provisions causing an avoidable expenditure of Rs. 0.33 crore over and above the additional expenditure of Rs. 5.05 crore due to the change in the design. The Committee also suggests to hold a discussion with the Chief Engineer, Finance Secretary, Secretary, PWD and Expenditure Secretary to expedite the work of the bridge which was plagued by a string of irregularities. The Committee also suggests that effective guidelines should be framed in the wake of unending list of projects rendered handicapped by faulty investigations.

#### AUDIT PARAGRAPH

#### **Erroneous Preparation of estimates and consequential loss**

*Substitution of an item of work during execution resulted in estimated loss of Rs. 35.25 Lakh by way of compensation*

The Project Director (SE) who is in charge of implementation of World Bank aided Kerala State Transport Project (KSTP) concluded a contract with a firm in April 2002 for the periodic renewal of Cherkala-Jelsoor road (length 41 Km) under the jurisdiction of Executive Engineer, KSTP Division Kannur for a contract outlay of Rs. 9.74 crore.

The Bill of quantities attached to agreement among other items, included surface dressing of pavement after doing the Profile Corrective Course (PCC). According to the Ministry of Road Transport and High ways (MORTH)

Manual, for Construction and Supervision of Bituminous Works, surface dressing is a thin layer of treatment which does not enhance the structural strength of pavement and does nothing to improve riding quality where the existing surface is full of undulation and irregularities.

In September 2002 the firm pointed out that the entire black-topped road surface running through deep ghat terrain, was full of potholes and that some treatment other than surface dressing was necessary to maintain the structural strength and to improve the riding quality. The firm proposed Mix Seal Surface (MSS) over PCC in the place of surface dressing. The Superintending Engineer rejected this proposal and instructed (November 2002) the firm to proceed with the work of surface dressing as contemplated in the Agreement. The work of surface dressing was undertaken at the agreed rate of Rs. 150 per sq. metre.

When surface dressing was completed for a length of one Km it was found that performance of this wearing course was unsatisfactory and it was decided to replace surface dressing with MSS (30 mm). The firm demanded (February 2003) a rate of Rs. 179 per sq. metre for providing MSS. As the Project authorities perceived the rate as too high, the matter was placed before the Adjudicator. The Adjudicator in May 2003, recommended the rate of Rs. 145 per sq. metre. This rate, inter-alia, included pro-rata allowances of Rs. 15 per sq. metre towards compensation to the firm on account of loss sustained by it on mobilizing men, material and machinery for doing the item of surface dressing. Based on the estimated quantity of 235000 sq. metre of MSS, the firm thus became entitled for a claim of Rs. 35.25 lakh as compensation due to post contractual change in the nature and scope of work.

Thus the incorporation of an item of work which was not necessary and the failure of SE to address the problem in time resulted in estimated loss of Rs. 35.25 lakh towards compensation payable to contractor. The work was completed by the firm in May 2003 and the final payment has not been made (April 2004).

Government stated (July 2004) that surface dressing originally proposed was more cost effective but on ground it was found unsuitable for Kerala conditions and that there was public protest against this item and hence changed to MSS. Thus this reply is an indirect admission that the original contract was not properly concluded. Government further stated that no extra expenditure was incurred due to the change of surface dressing to Mix seal surfacing. But the fact remains that had the problem been addressed in time and action taken to substitute the item, payment of the element of compensation @ Rs. 15 per sq. metre included in the rate approved by the Adjudicator could have been avoided.

[Audit Paragraph 4.4.6 contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2004 (Civil)]

Note furnished by Government on the above audit paragraph is included as Appendix II.

73. To the Committee's query regarding surface dressing the Chief Engineer, NH stated that the World Bank insisted to proceed the work with surface dressing. Out of the 13 works, 7 were completed with MSS and the remaining 6 with SD. He also explained that no additional expenditure was incurred in the above work.

74. The Committee enquired whether there was any provision in PWD manual regarding surface dressing. The Committee urged the department to comply with the manual or should take necessary steps to change the existing manual.

The Secretary, PWD assured the Committee that necessary steps were being taken for the modification of the existing PWD manual.

75. To the Committee's query asking whether there was any G.O. pertaining to the exclusion of KSTP project from PWD manual, the Secretary PWD stated that PWD code and manual were around 45 years old. The modification work of the manual was in the final stage and most probably within 31<sup>st</sup> December 2006 they could promulgate a new PWD code and manual.

#### Conclusions/Recommendations

**76. It is disturbing to note that even after being aware of the fact that surface dressing incorporated in the agreement of the work periodic renewal of Cherkala-Jelsoor Road, was unsuitable for Kerala conditions, Department pressed on with the same, and for subsequent substitution of surface dressing by Mix Seal Surface, the Department had to role out Rs. 35.25 lakh from its coffers due to post contractual change in the nature and scope of work.**

**77. The Committee recommends that responsibility should be fixed against the superintending Engineer who accepted a work not suitable to the ground conditions of the site resulting in the loss of Rs. 35.25 lakh.**

**78. The Committee urges the department to bring out the new PWD Manual incorporating necessary changes in codal provisions required for special projects like KSTP funded by external agencies urgently.**

## AUDIT PARAGRAPH

**Erroneous preparation of estimates leading to extra expenditure**

*Post contractual reclassification of soil and execution of excess quantity of work entailed extra liability of Rs. 2.76 crores*

Superintending Engineer, Roads and Bridges Circle Aluva (SE), arranged (September 2002) the work of Improvements to Kanjar-Pullikkanam road (ch. km 3/500 to km 19/000) in Idukky district through a contractor for a contracted price of Rs. 2.68 crore (0.3 per cent below estimate). The work targeted to be completed in March 2005 is in progress. Audit scrutiny of the accounts of the work revealed following.

The contract included a provision for excavating 104400 cubic meter of earth in all classes of soil (except hard rock and medium rock requiring blasting) for widening the road way, easing gradient, etc. After commencement of work, the Executive Engineer (Roads Division, Painavu) re-estimated the quantity as 223115 cubic metre of which 111123 cubic metre of soil was classified as medium rock.

The reason for increase in quantity of excavation was attributed to steepness of one side of road under improvement where widening by filling with earth was not practicable thereby demanding extra excavation on the other side. As regards re-classification of soil as medium rock, it was reasoned that it was an omission in the original estimate and that its presence was noticed only when excavation commenced. This argument is not acceptable as the categorization of soil was done after detailed investigation and the admission of the department that there was omission in the reclassification of soil suggests carelessness in preparation of the estimate. Calculated with reference to the rates for excavation in all classes of soil ( Rs. 848 per 10 cubic metre) and in medium rock (Rs. 1560 per 10 cubic metre) the reclassification of soil entailed an extra commitment of Rs. 0.79 crore.

In respect of the item of work “Blasting and removing hard rock” the excavation was estimated at 1200 cubic metre (Rs. 0.03 crore). However, after commencement of the work the quantity was re-estimated as 26662 cubic metre (Rs. 0.74 crore) an increase of 2122 per cent in the quantity, for which no valid reason had been indicated by the department. The extra expenditure on this account was Rs. 0.71 crore.

In respect of the item of work of construction of retaining wall to protect sides of the road under improvement, the estimated cost of Dry Rubble Masonry work was Rs. 0.07 crore (1168 cubic metre). After commencement of the work

the cost of the item was re-estimated as Rs. 1.33 crore (13418 cubic metre @ Rs. 611 per cubic metre and 17311 cubic metre @ Rs. 298 per cubic metre) an increase of 2531 per cent in quantity on the ground that protective walls were needed at more places. This aspect could have very well been foreseen at the time of preparation of the estimate and as such there was no justifiable reason for a conclusion that protective walls were needed at more places after commencement of the work. The estimated avoidable liability on this account was Rs. 1.26 crore.

Thus Government incurred an avoidable liability of Rs. 2.76 crore in the execution of the above three components of the work due to erroneous preparation of estimates. Apart from this post contractual reclassification of soil and increase of 2100-2500 per cent in quantities executed vitiated the entire tender process. Collusion of officers of the department with the contractor cannot be ruled out as the estimate of the work has been revised to Rs. 8.07 crore from Rs. 2.69 crore.

The matter was referred to Government in July 2004, reply has not been received (November 2004)

[Audit Paragraph 4.4.7-contained in the Report of the Comptroller and Auditor General of India for the year ended 31 March 2004 (Civil)]

Note furnished by Government on the above audit paragraph is included as Appendix II.

79. The Committee found that extra expenditure was incurred in the improvement of Kanjar—Pullikanam Road. The additional expenditure was due to the erroneous preparation of estimates, post contractual reclassification of soil as medium rock and increase of 2100-2500 percent in quantities executed. This resulted in a liability of Rs. 2.76 crores which could be avoided. The Committee observed that the main reason for this was lack of proper investigation.

The witness, Secretary PWD explained that in many cases soil was detected as medium rock only after the commencement of work.

#### **Conclusion/Recommendation**

**80. Three fold increase in the estimates and an increase of 2100-2500 per cent in quantities show how an investigation prelude to a project can go haywire. And this time with a project independent of any drastic environmental changes at the project site and only foreseeable factors which could have easily been detected during the investigation put the whole project in shambles. The Committee, hence notices that the investigation conducted by the department for the work of improvements to Kanjar-Pullikkanam Road**

**was only a formal exercise nothing to do with the purpose envisaged and urges the department to be more vigilant during the investigation process so as to avoid the recurrence of such unhealthy happenings during the execution of project. The Committee is also of the opinion that the Department should deploy modern techniques to detect the nature of soil/rock present in the project sites. The Committee urges the Department to conduct a thorough probe into the whole affair and take action against those who are responsible for the faulty investigation.**

AUDIT PARAGRAPH

**Failure to observe conditions governing tender and resultant avoidable expenditure**

*Though the circumstances demanded awarding the contract to second lowest bidder it was not done leading to avoidable expenditure of Rs. 1.47 crore*

Superintending Engineer, Buildings and Local Works Circle, Thrissur (SE) invited pre-qualification bids in March 1998 for arranging the construction of a building for Mini Civil Station at Irinjalakuda in Thrissur District. Four tenders were received from the selected panel of contractors. Though Contractor "A" who quoted a premium of 32.2 per cent was the lowest tenderer (accepted Probable Amount of Contract Rs. 4.15 crore), Government decided (May 1999) to award the work to M/s. Kerala State Construction Corporation Limited (KSCC) a Government owned company at their quoted premium of 39.8 per cent (accepted probable amount of contract – Rs. 4.39 crore) on the ground that the company was entitled for price preference to the extent of 10 per cent. Accordingly Superintending Engineer issued selection notice to KSCC on 8th June 1999 with direction to execute an agreement within a week from the date of receipt of notice. KSCC however executed the agreement only after six months (December 1999) and commenced the work in January 2000. Even though the time specified in the agreement for completion of the work was 24 months. Progress in construction work was very slow and the value of work done by KSCC was only Rs. 12.51 lakh as of July 2002 (2.8 per cent of contract value). The Superintending Engineer, therefore terminated (July 2002) the contract at the risk and cost of KSCC and rearranged (March 2003) the balance works through another contractor (incidentally contractor "A") on competitive tender basis for a contract price of Rs. 5.50 crore. The construction of building is targeted for completion in October 2005.

Conditions governing tender enjoin that successful tenderer shall execute agreement within 30 days from the date of acceptance of tender, failing which the work shall be awarded to the next lowest tenderer. Had this condition been followed and contract awarded to "A" at the quoted premium of 32.2 per cent, the estimated value of contract would have been only Rs. 4.15 crore. The failure of the Superintending Engineer to invoke this condition resulted in an avoidable estimated expenditure of Rs. 1.47 crore on this work besides the expenditure towards rent of offices occupied in rented buildings.

The Department also failed to assess the risk and cost liability of KSCC even after a lapse of 14 months of rearrangement of the work even though Government orders in force demand fixation of risk and cost liability provisionally on the basis of estimates within one year from the date of termination of contract.

The matter was referred to Government in June 2004, reply has not been received (November 2004).

[Audit Paragraph 4.4.8—contained in the Report of the Comptroller and Auditor General of India for the year ended 31st March 2004 (Civil)]

Note furnished by Government on the above audit paragraph is included as Appendix II.

81. The Committee understood that Kerala State Construction Corporation Ltd had not completed any work given to them within the prescribed period and causing heavy loss to Government. In 1970, a judgment of the Hon. High Court of Kerala stated that if work was not completed within one year then its risk and cost could not be calculated. So the work should be arranged within one year.

#### **Conclusions/Recommendations**

**82. The Committee observes that Kerala State Construction Corporation Limited has not shown commitment towards the works entrusted to them. Hence necessary steps should be initiated to showcase more professionalism vis-à-vis the works taken up by the Corporation so as to complete them within the stipulated time.**

**83. The Committee opines that the Department should exercise more caution towards the monitoring of progress of work and take necessary steps to cancel the arranged works if that are unsatisfactorily progressing within one year of the arrangement in order to invoke the clause of risk and cost.**

## AUDIT PARAGRAPH

**Loss due to cost and time overrun**

*Defective preparation of estimate led to cost over run of Rs.10.91 crore and time over run of four years*

Based on sanction accorded by Government of India (GOI) in March 1996 for an estimate of Rs. 12 crore, the Superintending Engineer, NH South Circle, Thiruvananthapuram arranged works (estimated to cost Rs. 9 crore) relating to construction of Thiruvananthapuram bypass (Ch: 5600 m to 5750 m and 6119 m to 10617 m) through a contractor in December 1996. The contract price was Rs. 9.35 crore and the construction was to be completed by 30 June 1999. On commencement of construction, it was noticed that the characteristics of sub soil were different from that reckoned for estimation purpose. Fresh soil studies were, therefore, arranged through M/s. Lal Bahadur Shastri Centre for Science and Technology, an autonomous body of Government. The consultant firm, in their study, suggested various remedial measures which included execution of additional cross drainage works providing vertical drain and horizontal drain using metal chips and needled coir fit. The Chief Engineer, NH, Thiruvananthapuram, in October 2002 proposed to GOI, a revised estimate of Rs. 24.99 core which included, in addition to provisions suggested by the consultants, increased provision for junction improvement and provision for cost escalation. While approving (March 2003) the first revised estimate of Rs. 22.91 crore, the standing Finance Committee (GOI-MORTH) decided that action for fixing responsibility of the concerned State Government Officers involved on this project at the sanction stage should be taken by the State Government. But State Government has not taken any action against any official so far (June 2004).

The project to be completed in June 1999 could therefore be completed only in December 2003, i.e, after a lapse of more than four years. Audit scrutiny revealed the following points:

(i) Project estimate was prepared without conducting proper soil study and underestimating quantities which led to re-estimation of project cost. Consequently there was inordinate delay in implementation and the project cost registered an increase of 91 per cent.

(ii) While original estimate did not contain provision for payment of cost escalation, the revised estimate envisaged noticeably huge expenditure of Rs. 1.17 crore towards escalation charges, which is attributable to the unprecedented time and cost over run.

(iii) While approving the revised estimate, GOI rejected the provision for Agency charges on the ground that time and cost over run was primarily because of the poor preparation of the project by State PWD. This resulted in an estimated loss of Rs. 0.99 crore to State Government.

While admitting that there was delay at various stages of implementation, Government stated in July 2004 that MORTH, State PWD and Railways are equally responsible for the delay in the execution resulting in cost and time over run.

[Audit Paragraph 4.4.9—contained in the Report of the Comptroller and Auditor General of India for the year ended 31 March 2004 (Civil)]

Note furnished by Government on the above audit paragraph is included as Appendix II.

84. The Committee enquired about the action taken against the officers involved in the construction of Thiruvananthapuram bypass at the sanction stage. The Secretary, PWD answered that no action was taken against the officers, as the State Government was not solely responsible for sanction and Government of India sanctioned the project.

85. The Committee understood that failure on the part of investigation was the main problem highlighted in the audit paragraph. Investigation was conducted by the State Government and based on this investigation estimate and tender was called.

The witness admitted that some fault occurred in the investigation stage and in the preparation of estimate.

#### **Conclusions/Recommendations**

86. **The Committee finds that the project estimate for the construction of Thiruvananthapuram bypass was prepared without conducting proper soil study and understanding of soil quantities has led to increase in the project cost by 91 per cent. Apart from this, it also caused a loss of Rs. 0.99 crore on account of agency charges for the revised project preparation. The Committee demands that responsibility should be fixed against the officers who are responsible for the loss due to cost and time over run of the work and the action taken thereon should be furnished to the Committee.**

**AUDIT PARAGRAPH****Loss on account of delay in handing over site to the contractor**

*Lapse on the part of the Department in handing over site in time to the contractor and consequent post contractual increase in rates resulted in extra financial commitment of Rs. 50.92 lakh*

In January 2000, Superintending Engineer (SE), Roads and Bridges, Thiruvananthapuram awarded the contract for the work "Forming approaches to the Rail Under Bridge" at Varkala in Thiruvananthapuram district to a contractor for an accepted outlay of Rs. 2.10 crore (1996 SOR). One of the conditions of the contract was that the work should be completed within six months from 31 December 1999 (date of selection notice). As the land required for forming approaches was not fully in the possession of the department, the site of work could be handed over partially in March 2000. The remaining portion of land (belonging to Kerala Water Authority, Health Department and land leased to a Hospital) was handed over to the Contractor only in November 2001 by the Department. In the meantime, the contractor demanded (October 2001) enhancement in agreed rates for works done after the original time of completion.

Considering the contractor's demand, Government Arbitration Committee adjudicated (January 2002) that there was lapse on the part of the department in handing over site in time to the contractor and recommended payment of originally quoted tender premium of 7.4 per cent over 1999 schedule of rates for works done after February, 2001. Government accepted the recommendation in March 2002. Extra financial commitment to Government following the post contractual increase in rates was Rs. 50.92 lakh.

According to the provisions of Karala Public Works Department Manual, Departmental officers, before inviting tenders for arranging works should ensure that there is ample provision of funds for the work in the budget and that in no case should tenders be invited before making sure that the land required will be ready for being handed over to the contractor or to start the work in time. Though Administrative sanction was accorded by Government in January 1998 and the tender was invited in August 1999 the land was completely handed over to the contractor only on November 2001, after a lapse of 17 months from the date of completion of the work originally fixed. Thus non-adherence of these provisions by Superintending Engineer resulted in extra liability of Rs. 50.92 lakh to Government.

The matter was referred to Government in May 2004, reply has not been received (November 2004).

[Audit Paragraph 4.4.10—contained in the report of the Comptroller and Auditor General of India for the year ended 31 March 2004 (Civil)]

Note furnished by Government on the above audit paragraph is included as Appendix II.

87. Regarding the audit Paragraph 4.4.10, the witness Chief Engineer, Roads and Bridges explained that sufficient land was handed over for the completion of 80% of work in the year 2000 itself and in 2001 remaining 20% of land was acquired. On 23-1-2001, sufficient land was acquired and work resumed. But for that 20% land an enhanced rate was paid. He claimed that if tender was invited after 2001 then an enhanced rate should have to be paid for the whole work. But here an enhanced rate was paid only for 20% of work.

88. The Committee asked the reason for the delay in the acquisition of land, as the land belonged to Kerala Water Authority and Health Department. The Committee observed that this happened due to delay in procedure and lack of co-ordination between the Departments.

#### **Conclusion/Recommendation**

**89. The Committee is surprised to note that the inordinate delay in the acquisition of land caused an excess expenditure of Rs. 50.92 lakh even that though the land belonged to Health Department and Kerala Water Authority. The Committee opines that there should have been effective co-ordination between Government agencies to facilitate speedy land acquisition process pertaining to developmental projects.**

Thiruvananthapuram,  
15th July, 2008.

ARYADAN MUHAMMED,  
*Chairman,*  
*Committee on Public Accounts.*

## APPENDIX I

**Summary of Main Conclusions/Recommendations**

<i>Sl. No.</i>	<i>Para No.</i>	<i>Department Concerned</i>	<i>Conclusions/Recommendations</i>
(1)	(2)	(3)	(4)
1	7	Public Works	<p><b>The Committee views this as a classic example of how a Government Department like Public Works Department functions virtually in contrast with the financial interest of the state by some officials in connivance with the contractors. It is also appalling to note that such elements are still present and remained unscathed in the Department even after they looted public money under the guise of project implementation. It has seen that in the case of almost all the projects in Public Works Department, implementation commences without conducting a proper detailed scientific investigation and this resulted in huge contractual commitments. In the case of 'Calicut Bypass-Phase I NH 17' – an extra unavoidable expenditure was incurred due to the departmental lapse of not conducting a detailed investigation of the work. Only a random investigation was conducted by the LBS and on the basis of which the original estimate was prepared and approved and the work was started. But though a detailed investigation was conducted later by LBS in 1996, the data collected based on the investigation were not submitted to the MOST before the acceptance of the original tender. It is also to be noted that the Government had taken a stand that after getting the revised investigation report it was not possible to make any change in the</b></p>

(1)	(2)	(3)	(4)
			<p>tender documents already submitted to MOST. This is not acceptable to the Committee. The Committee sees that it is this irresponsible act of the officials of the PWD resulted in a huge undue advantage to the contractor. The Committee opines that since there is no provision in PWD manual for conducting random investigation but for a detailed investigation of a work, the action on the part of the officials is also 'ultravires'.</p>
2	8	Public Works	<p>The Committee suggests that the Department should give strict directions to the officers concerned to make sure that the work in future should be approved only after conducting a detailed investigation as per the provisions in the PWD manual.</p>
3	16	„	<p>The payment of an excess amount of Rs. 15.13 lakh as part of a supplemental agreement executed for the so called excess filling done, flouts all the norms of financial propriety. The Committee believes that it was suspected to be aimed at favouring undue advantage to the contractor associated with the work and siphoning out of public money into the hands of a private contractor. All the arguments in favour of sinkage of earth due to sub-soil subsidence do not appear to be conclusive and do not rule out serious malpractice involving the Department officials.</p>
4	17	„	<p>The Committee recommends the Department to conduct a thorough probe into the whole episode of 'earth filling' and furnish the findings of the probe and the action taken thereon to the Committee at the earliest.</p>

(1)	(2)	(3)	(4)
5	21	Public Works	<p>The Committee opines that there is serious lapse on the part of the department officials who conducted the investigation and not discovered the presence of medium rock at the worksite during the investigation. The presence of medium rock was noticed only during the excavation work later. Even though the contractor was bound to do earth work excavation in all classes of soil including the medium rock as per specification he was allowed extra rate for medium rock which resulted in an unintended benefit of Rs. 13.67 lakh to the contractor. This is most unwelcome in the interest of the State. Had a proper investigation been done earlier this extra expenditure could have been avoided. Hence the Committee recommends that appropriate steps should be taken to prevent such occurrence of flaws in future.</p>
6	30	„	<p>The Committee strongly deplores the indifferent attitude of the Department in being unable to get a mammoth amount reimbursed from GOI. The apathy of the concerned officials is all the more evident from the fact that out of a total of Rs. 83.98 crore outstanding to be reimbursed on account of the expenditure on National Highway works executed by NH Divisions of PWD met from state funds, Rs. 24.85 crore pertained to the period from 1979-80 to 1996-97. The Committee urges the Department to initiate immediate steps to get the amount due to be reimbursed from the Pay of the Accounts Officer, NH Division, Bangalore.</p>

(1)	(2)	(3)	(4)
7	31	Public Works	<p><b>The Committee views, the failure of the Department to furnish a detailed action taken report, seriously. It is also alarming to note that often the reimbursement is delayed for want of revalidation of sanction, loss of vouchers etc. The Department should take necessary steps to arrest such occurrences and requisite action against the officials responsible for loss of documents related to National Highway works may be initiated and inform the Committee about the same at the earliest.</b></p>
8	47	„	<p><b>The Committee learns that the execution of work relating to two packages involving four-laning and strengthening of Aluva-Vytilla Section, strengthening of Vytilla-Aroor Section and four-laning and strengthening of Aroor-Cherthala Section of NH 47 contain serious lapses on the part of the Department by accepting unjustifiable claim from the contractor in the pretext of avoiding arbitration. Failure of the Department to recover the excess payment made to the contractor, as pointed out by the Audit, raises apprehensions about the role of Department officials in making such an excess payment by allowing large scale deviation and alterations from the contract conditions on petty and untenable grounds.</b></p>
9	48	„	<p><b>The Committee finds that though the audit observation was based on an excess payment of Rs. 2.64 crore, the actual excess payment amounted to more than Rs. 25 crore. But the Department could effect recovery of only Rs. 165.56 lakh in respect of first two items as objected by the Audit and there was no serious efforts to recover the</b></p>

(1)	(2)	(3)	(4)
			balance amount even after six years. Change in the plan from filling for median using granular materials to filling using red earth causing enhanced payment showed lack of foresight and inadequate planning.
10	49	Public Works	The Committee urges the Department to conduct an enquiry into the excess payment due to large scale variations from the original contract and allowing inadmissible rates against the conditions of contract and take action against those responsible. The Department should also take earnest steps to reclaim the excess payment made to the contractor. The Committee desires to be furnished with a detailed report regarding the excess payment made to and recovered from the contractor and also containing action taken against the erring officials.
11	53	„	The Committee desires to be furnished with a report regarding the undue deflation of the basic price in the tender documents leading to huge difference between the basic price and actual price reckoned for preparation of estimate. The Department should take action against the officials who were responsible for this deflation resulting in an undue monetary gain of Rs. 1.42 crore to the contractor on account of price escalation.
12	58	„	The Committee observes that the reasons adduced by the Government for accepting the alternative proposal of the firm with its own design of pile foundation is not acceptable to the Committee since the total cost of the work when completed was Rs. 6.55 crore which was higher than the agreed rate of Rs. 5.94 crore. It is also to

(1)	(2)	(3)	(4)
13	62	Public Works	<p>be noted that the Chief Engineer opted the offer of the firm by neglecting the lowest offer for the well foundation of Rs. 6.36 crore which is less than the total cost of work. Even though the agreed rate was Rs. 5.94 crore, the firm had demanded extra rate of Rs. 12,000 per metre beyond 48 metres of pile foundation. The Chief Engineer did not take into account the extra cost while evaluating the firm's alternative proposal. So the faulty evaluation of the proposal by the Chief Engineer had resulted in an extra expenditure of Rs. 19.17 lakh. The Committee also likes to point out that if the pile foundation is more beneficial and cheaper than the well foundation, that aspect should have been highlighted during the investigation of the work. But any such effort has not been seen taken in this case. Hence, the Committee remarks that there is a clear indication of wilful lapse on the part of the departmental officials which resulted in the wasteful expenditure of Rs. 19.17 lakh. The Committee views this seriously and directs the Government to take stringent action against those responsible and fix responsibility against the officers responsible for opting the alternative proposal of the contractor without analysing the cost benefit element of the proposal.</p> <p>The Committee is of the opinion that the Department should furnish the replies to the initial audit observations in time so as to do away with avoidable observations.</p>

(1)	(2)	(3)	(4)
14	67	Public Works	<p>The execution of supplementary agreement to provide undue financial benefit to the Contractor against the provisions of the original contractual agreement for the work of filling of the embankment of the Kuttippuram to Puduponnani road at an enhanced rate of Rs. 217.82 per cubic metre by the Superintending Engineer, National Highway Circle, Thrissur, is highly irregular. Subsequent cancellation of the supplementary agreement after the payment at the enhanced rates amounts only to an eyewash. The Committee views the action of the Superintending Engineer as very serious and recommends that strict action should be taken against him.</p>
15	71	..	<p>The chain of events leading to the change of design and resultant avoidable liability of Rs. 5.89 crore associated with the yet to be completed construction work of Kadalundi Kadavu bridge in Malappuram District is a perfect example of work haunted by irresponsible attitude and non-adherence to PWD norms by the Department officials. Firstly, according technical sanction to a work for which investigation was completed 11 years ago, flouted the provisions of Kerala PWD Manual. Secondly, Department accepted request of a contractor who had only started the work 9 months earlier, agreed and satisfied with the terms and conditions and the plan and design of the project at the commencement of work. It is hard to believe that there occurred drastic environmental changes during the span of nine months. Thirdly, the work executed so far based on the original design had to be</p>

(1)	(2)	(3)	(4)
16	72	Public Works	<p><b>abandoned resulting in an infructuous expenditure of Rs. 0.33 crore.</b></p> <p><b>The Committee recommends that action should be taken against the officials who exhibited little regards to the codal provisions causing an avoidable expenditure of Rs. 0.33 crore over and above the additional expenditure of Rs. 5.05 crore due to the change in the design. The Committee also suggests to hold a discussion with the Chief Engineer, Finance Secretary, Secretary, PWD and Expenditure Secretary to expedite the work of the bridge which was plagued by a string of irregularities. The Committee also suggests that effective guidelines should be framed in the wake of unending list of projects rendered handicapped by faulty investigations.</b></p>
17	76	„	<p><b>It is disturbing to note that even after being aware of the fact that surface dressing incorporated in the agreement of the work, periodic renewal of Cherkala-Jelsoor Road, was unsuitable for Kerala conditions, Department pressed on with the same and for subsequent substitution of surface dressing by Mix seal surface, the Department had to role out Rs. 35.25 lakh from its coffers due to post contractual change in the nature and scope of work.</b></p>
18	77	„	<p><b>The Committee recommends that responsibility should be fixed against the superintending Engineer who accepted a work not suitable to the ground conditions of the site resulting in the loss of Rs. 35.25 lakh.</b></p>

(1)	(2)	(3)	(4)
19	78	Public Works	<b>The Committee urges the department to bring out the new PWD Manual incorporating necessary changes in codal provisions required for special projects like KSTP funded by external agencies urgently.</b>
20	80	„	<b>Three fold increase in the estimates and an increase of 2100-2500% in quantities show how an investigation prelude to a project can go haywire. And this time with a project independent of any drastic environmental changes at the project site and only foreseeable factors which could have easily been detected during the investigation put the whole project in shambles. The Committee, hence notices that the investigation conducted by the department for the work of improvements to Kanjar-Pullikkanam Road was only a formal exercise nothing to do with the purpose envisaged and urges the department to be more vigilant during the investigation process so as to avoid the recurrence of such unhealthy happenings doing the execution of project. The Committee is also of the opinion that the Department should deploy modern techniques to detect the nature of soil/rock present in the project sites. The Committee urges the Department to conduct a thorough probe into the whole affair and take action against those who are responsible for the faulty investigations.</b>
21	82	„	<b>The Committee observes that Kerala State Construction Corporation Limited has not shown commitment towards the works entrusted to them. Hence necessary steps</b>

(1)	(2)	(3)	(4)
			<p>should be initiated to show case more professionalism vis-à-vis the works taken up by the Corporation so as to complete them within the stipulated time.</p>
22	83	Public Works	<p>The Committee opines that the Department should exercise more caution towards the monitoring of progress of work and take necessary steps to cancel the arranged works if they are unsatisfactorily progressing within one year of the arrangement in order to invoke the clause of risk and cost.</p>
23	86	„	<p>The Committee finds that the project estimate for the construction of Thiruvananthapuram bypass was prepared without conducting proper soil study and understanding quantities had led to increase in the project cost by 91 per cent. Apart from this, it also caused a loss of Rs. 0.99 crore on account of agency charges for the revised project preparation. The Committee demands that responsibility should be fixed against the officers who are responsible for the loss due to cost and time over run of the work and the action taken thereon should be furnished to the Committee.</p>
24	89	PWD & Revenue	<p>The Committee is surprised to note that the inordinate delay in the acquisition of land caused an excess expenditure of Rs. 50.92 lakh even though the land belonged to Health Department and Kerala Water Authority. The Committee opines that there should have been effective co-ordination between Government agencies to facilitate speedy land acquisition process pertaining to developmental projects.</p>

## APPENDIX II

**Action taken report on para 4.12, 4.17 and 4.18 of Report of Comptroller and Auditor General (Civil) for the year 1998-99**

(1)	(2)	(3)	(4)
<i>Sl. No.</i>	<i>Para No.</i>	<i>Subject</i>	<i>Action Taken</i>
1	4.12	<b>Calicut bypass-Extra expenditure due to inadequate investigation.</b>	
		<p>Based on soil investigation tests conducted in 1991 by a Design Consultant, Ministry of Shipping and Transport (MOST), Government of India, accorded sanction (July 1993) for the construction of 'Calicut Bypass-Phase 1' of NH 17 at an estimated cost of Rs. 11.36 crore. In October 1996, the work was awarded to the lowest tenderer for Rs. 11.86 crore. The work, stipulated to be completed in 44 months, commenced in February 1997.</p> <p>In April 1996, the Department asked the consultant to conduct revised soil test to confirm the results of the original investigations. Accordingly, the consultant furnished a revised report in June 1996 and the Chief Engineer (National Highways) accepted it in August 1996. The Department revised the estimate in October 1997 to</p>	<p>The Statement given in the 1st para is true. The Ministry of Surface Transport while issuing sanction in July 1993 had specifically instructed that a soil consultant must associated with the execution of the high embankment since the alignment of the Calicut Bypass is passing through marshy paddy fields. It was based on this direction that the detailed soil investigation was entrusted with LBS Centre and they submitted their report in June 1996. The investigation reveals that the soil strata upto 16m depth from the ground level in certain reaches are having very low strength and are not suitable for supporting high embankment. They also suggested methods to improve the sub soil strata to take the load of high embankment. Because of all the additional soil stablization works to be carried out as per the suggestions in the revised soil report, the work could not be completed in the stipulated time and also resulted in execution of additional quantity and financial commitments.</p>

(1)	(2)	(3)	(4)
	<p>Rs. 27.60 crore, which was modified and sanctioned for Rs. 30.19 crore by Most in April 1999. The results of the fresh investigations available with the Department in June 1996 were not brought to the notice of MOST, but the lowest tender received on the basis of the original estimate was accepted in October 1996 resulting in vitiation of the whole tender proceedings as stated below:</p>	<p>As the original soil investigation was done in 1991, the direction given by MOST to entrust a consultant for further soil investigation at the time of execution is in order, since there can be variations in the sub soil strata since the first study. This was necessitated because of the fact that high embankment has to be constructed in a marshy land. A detailed study to ascertain the soil condition was quite essential and hence justified.</p>	
	<p>(i) In respect of four items of the work, the rates quoted by the successful tenderer were exorbitantly high (between 57% and 869% above estimate rates) and in respect of two items the rates were unworkably low (67.73% and 48% below estimate rates) where as the rates quoted by the second lowest tenderer for these 6 items were between 16% and 51% above estimate rates. The quantities of four items, the rates for which quoted by the successful tenderer were significantly high, registered manifold increase in the revised estimate. Consequently, the contractor firm derived an undue monetary advantage of Rs. 3.01 crore vide Appendix XIX.</p>	<p>In this regard, it may also be informed that tenders were invited in 1994 and the same was approved by MOST in July 1996. The soil investigation report from LBS was received in June 1996. This shows that the soil report was not available with the National Highway while inviting tenders.</p>	<p>In this connection, it may also be informed that after getting the investigation report, it was not possible to make any change in the tender documents already received and submitted to MOST.</p>
		<p>(i) The contention that though the rates quoted by the successful tenderer in respect of 4 items were exorbitantly high and for another 2 items were unworkably low where as the rates by the second lowest tenderer were between 16% and 51% above estimate rates and by</p>	

(1)	(2)	(3)	(4)
		<p>(ii) As against embarkment filling of 291788 cubic meters originally estimated, it was 590012 cubic meters in the revised estimate. For the increased quantity of 225277 cubic metres over and above 125% (364735 cubic meters) of the original quantity, the mutually agreed rate was fixed at Rs. 150 per cubic metre (against the original rate of Rs. 100 per cubic metre) implying a financial burden of Rs. 1.13 crore. Evidently, the departmental lapse in arranging the work on the basis of inadequate soil studies and site investigation led to such additional contractual commitments. The matter was referred to Government in May 1999, reply has not been received (October 1999).</p>	<p>allowing these items to the successful contractor the firm had received undue monetary advantage of Rs. 3.01 crore is not justified. The construction of Bridge/Road consists of various items and even it is on a rate contract the items of works cannot be divided among contractors according to the rates quoted by them. In a project, the tender is evaluated finally on the total cost quoted by the tenderer out of which some rates may be high or low compared to the second lowest. Dividing of various items among different contractors as stated above is not practicable and so the decision taken by the Superintending Engineer is in order and is justified since MOST accepted the tender in October 1996.</p> <p>(ii) As per agreement conditions, the contractor has to do only 125% of the agreed quantity. For any excess the rate will be fixed as mutually agreed by the contractor and the Engineer. As stated in the Para 1, the excess quantity was executed due to actual necessity at site to give sufficient strength and required stability to the high embankments. The extra rates allowed for excess quantity over 125% of the agreed quantity is in order as per clause 20 (a) of Form No. 85.</p> <p>The decision taken by then Chief Engineer to get the excess quantity</p>

(1)	(2)	(3)	(4)
			and extra items executed for proper completion of the work is justified since MOST approved the revised estimate for Rs. 30.19 crores including all changes and extra items vide their order dated 9-4-1999.
2	<b>4.17 Non-recovery of excess payment for earth filling</b>	Mention was made in paragraph 4.16 of the Report of the comptroller and Auditor General of India for the year ended 31 March 1995 about excess expenditure due to incorrect computation of rate for earth filling with contractor's own earth for forming embankment in respect of the work 'Construction of combined bypass for Neyyattinkara from chainage 17116 metre to 20720 metre'. The following instance of excess payment for the same work came to the notice of audit in August 1997.	As per the original estimate of the work, the quantity of earth required for filling the embankment was 139600m <sup>3</sup> . A supplemental agreement was executed for a quantity of 185727m <sup>3</sup> and payment was made for 180774m <sup>3</sup> of earthwork on the basis of interim level measurements (March 1992). While taking measurements in August 1996 for the preparation of final bills, Executive Engineer, NH Dvn., Trivandrum detected that the actual quantity of filling done was only 139250 m <sup>3</sup> .  In this regard, it may be noted that even though proper consolidation by layers by power roller was done as per specification, the total surcharge of earth fill on the original ground surface will attribute gradual subsidence of subsoil. This can be found out only by proper scientific study. Para 2 of the study report submitted by the LBS Centre for Science and Technology, Trivandrum states that there is elastic settlement of foundation soils to the twice of 25.6 cm. at Borehole No. 3 and 22.6 cm at Borehole No.1.

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(1)	(2)	(3)	(4)
		<p>According to original estimate of the work, the quantity of earth required for filling the embankment was 139600 cubic meters. During execution, a supple-mental agreement was executed for a quantity of 185727 cubic metres and payment (Rs. 65.89 lakhs) was made (March 1992) for 180774 cubic metres of earth filling on the basis of interim level measurement. While taking final levels in August 1996 for the purpose of preparation of final bills, Executive Engineer (EE), National Highways Division, Thiruvananthapuram detected that the actual quantity of filling done was only 139250 cubic metres resulting in excess payment of Rs. 15.13 lakhs. The amount was to be recovered but not so done as of April 1999.</p>	
		<p>EE stated (April 1999) that as the reduction in quantity of filling was suspected to be the sinkage of earth due to 'sub soil subsidence' the matter had been referred (April 1999) to Lal Bahadur Shastri Centre for Science and Technology for investigation and that the final bill for the work had not been settled pending finalization of the case.</p>	

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(1)	(2)	(3)	(4)
		<p>The reply of EE was not tenable as specification of the work required consolidation of earth in 150 mm layers of finished thickness using power rollers. Possibility of sub soil subsidence, would arise only if the measurement at interim level was taken before consolidation with power roller. The non-recovery of the excess payment conferred undue advantage to the contractor.</p> <p>The matter was referred to Government in May 1999, reply has not been received (October 1999).</p>	
3	4.18	<p><b>Unintended benefit to a contractor.</b></p> <p>Superintending Engineer, National Highways, Kozhikode arranged (July 1993) formation of south approach road for additional length of 2.5 km. to the southern approaches of Cheandragiti bridge in Kasargod district, through a contractor for an aggregate amount of Rs. 1.37 crore. The contractor completed the work in March 1998. Final payment has not, however, been made to the contractor as of July 1999. An</p>	<p>As the name of this work indicates, the main object of the above work was to construct an approach road to Chandraghiri bridge for a length of 2.5 km. The work was originally awarded to Kerala State Construction Corporation and due to the slow progress, the contract was terminated without risk and cost as per Government direction. Then the balance work was tendered with the balance quantities of original work. This work was awarded to Shri K. Moideenkutty Haji, as per agreement No. 14/93/94/SE/NH/Kozhikode. As per the agreement, the road has to be constructed by cutting two hillocks and forming the</p>

(1)	(2)	(3)	(4)
	<p>aggregate amount of Rs. 2.12 crore has been paid to the contractor till July 1999.</p>	<p>During the course of the work, the contractor pointed out (March 1995) that there was a large quantity of medium rock in the excavation area requiring blasting and demanded enhanced rates for excavation the medium rock. In February 1996, Chief Engineer, NH recommended to Government to treat the excavation in medium rock as extra item and to pay enhanced rate for it. Till March 1998, Rs. 48.67 lakh (inclusive of the tender excess of 32%) was paid for excavating a quantity of 44872 cubic metres of medium rock at the rate of Rs. 821.74 per 10 cubic metres. Calculated with reference to the agreed rate for ordinary earthwork excavation (ie. Rs. 590.97 per 10 cubic metres), the extra payment worked out to Rs. 13.67 lakhs.</p>	<p>embankment with the excavated soil. The maximum depth of cutting at the hillock is about 18m. When the excavation started, the top layers were found to be very bad. But soon during further excavation, the nature of the soil began to change to clay after some depth. This was not anticipated at the time of preparation of the estimate. A road embankment cannot be constructed with clay soil, as the same has no bearing capacity. Since the road will be completed only after cutting the hillock to the approved levels, the clayey bottom layer also has to be excavated to the required levels. This cut earth must be conveyed to some place. The only possible way was to dump the maximum quantity of the slushy soil on the sides of the embankment. Then the paddy field owners on both sides of the embankment started complaining that this slushy soil will flow to their paddy fields during the rainy season, damaging their crops. Local enquiries were made to sell the excess slushy soil but there were no buyers as good earth is easily available in Kasargod district. If the surplus earth has to be conveyed beyond 5 km. for disposals the contractor will claim additional payment for the same. As the department does not own departmental dumping yard and to avoid the loss to Government by way of acquiring costly land for</p>
	<p>As per specifications, the contractor was bound to do earth work excavation 'in all classes of soil except hard rock requiring blasting' at the</p>		

(1)	(2)	(3)	(4)
		<p>agreed rate. Therefore, recategorisation of earth excavation during execution of work and allowing extra rate for medium rock subsequently was not in order. Thus, payment of Rs. 13.67 lakh for excavation of medium rock was outside the purview of the agreement and constituted an unintended benefit to the contractor.</p> <p>The matter was referred to Government in May 1999, reply has not been received (October 1999).</p>	<p>collecting this wastate materials of no value, the Executive Engineer, Roads Division, Kasargod was approached to dump the excess earth on the sides of the Kasargod-Kanhangad road of that division. This road is the continuation of the road PWD was then constructing and the same is within 5 km. of lead from the cutting hillock and the contractor was therefore not eligible to ask for additional conveyance.</p> <p>In the audit, the loss to Government is worked out at the total amount of loss as from non-disposl through auction and additional payment made to contractor for conveying the surplus earth. Both these objections are not sustainable for the following reasons.</p> <p>(i) Since the whole quantity of surplus earth is not good for any purpose, no value can be fetched for the same. Good earth is very easily available in Kasargod district at moderate rates.</p> <p>(ii) The contractor is not paid extra for conveying the surplus earth and without completely cutting the hillocks to the approved levels the work cannot be completed. If the excavation is done, the earth has to be conveyed either to the embankment formation places or dumped somewhere else. In any case the contractor should be paid the average lead provided in the agreement.</p>

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(1)	(2)	(3)	(4)
			<p>If the department wants to avoid payment of conveyance to the contractor for disposing of the surplus earth, this earth should be dumped within 50m. of the cutting place, which in this case was not at all possible.</p>
			<p>If the departments is to sell the surplus earth, it would have to collect the whole quantity at a selected location some is done in the case of excavation in granite etc. For this also the department have to pay the lead as without paying lead for the complete quantity of earth cutting, the work cannot be completed.</p>
			<p>If the department was to have acquired land for collecting the waste surplus earth, there would have been many problems as there will be local resistance to dumping of this slushy soil. During the rainy seasons this soil will begin to flow to the paddy lands at the lower levels causing damage to the cultivation. From this it can be understood that instead of incurring loss, Government actually saved the additional expenses for land acquisition, expenditure for auction notices etc.</p>
			<p>As per the audit findings out of 1.37 lakhs cubic metres of excavated earth 0.86 lakhs cubic metre (including 0.451 lakhs cubic metres spoils obtained from excavation in</p>

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(1)	(2)	(3)	(4)
			<p>medium rocks) was utilized for filling in reaches and embankment. The surplus quantity of 0.511 lakhs cubic metres was allowed to be removed by the contractor instead of disposing it through auction sale.</p> <p>From the details given in the above paragraphs, it can be seen that the bottom portion of the cutting is of clayey soil. As good earth is available in the Kasargod district nobody would come forward to buy this waste soil. Also the department would have to acquire costly land to stack this waste earth. If this acquired land is beyond 5 km. from the cutting place, then the department will have to pay extra conveyance to the contractor. Hence there is no loss of Rs. 12.68 lakh rupees incurred by the department as reported. As a matter of fact, there are gains by way of non-incurrence of expenditure towards acquisition of land and conveyance to the acquired dumping yard.</p> <p>The other point in the audit is that the contractor also gained undue monetary benefit of Rs. 21.43 lakhs by way of conveyance charges included in the rate for earthwork excavation. As per the following reasons, it can be seen that no irregular payment is made to the contractor in this regard also.</p>

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(1)	(2)	(3)	(4)
			<p>For completing the construction of the road, the two hillocks have to be cut to the required levels. The earth should be conveyed to the embankment formation places and the balance to be conveyed away with 5 km lorry lead. In the data book average conveyance is worked out for different leads of filling, without providing this in the data, the cutting and filling work cannot be done at site. If no payment is to be given to the contractor for conveyance, the whole quantity of cut earth should be dumped at a place within 50m of the cutting point, which is not possible in this case.</p>
			<p>It is indicated that the surplus earth was conveyed to the sides of the 6th and 8th km. of the stretches of Kasargod-Kanchangad road and it was to develop the same. This is not true. It was a unilateral proposal made to the PWD roads division to dump the waste earth at the open spaces on the sides of that road which is within 5km of the cutting area so that the possibility of claiming additional payment for conveyance of dumped earth beyond 5km from the contractor can be avoided. It is true that at the time of preparation of estimate, the presence of slushy soil was not envisaged but during the execution, the same was obtained.</p>
			<p>Considering all the details given above, it can be seen tht no loss is incurred to the Government due to the disposal of surplus earth.</p>

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## GOVERNMENT OF KERALA

## PUBLIC WORKS DEPARTMENT

**Report of the Comptroller and Auditor General of India for the year  
ended 31-3-2000 (Civil)-Statement showing remedial measures  
taken by Government in respect of audit  
paragraph 3.21, 4.8, 4.11, 4.12**

<i>Sl. No</i>	<i>Para No.</i>	<i>Subject</i>	<i>Remedial measures taken</i>
(1)	(2)	(3)	(4)
1	3.21	<p><b>Non-realisation of amounts due from Government of India towards expenditure incurred on National Highways works.</b></p> <p><i>Expenditure of Rs. 83.98 crores incurred by the State Government on National Highways remains to be reimbursed by Government of India.</i></p> <p>The expenditure on National Highway works executed by NH Divisions in the State is initially met from State funds. On the basis of claims preferred by Accountant General (A&amp;E), along with vouchers from National Highway divisions, the amount is reimbursed by the Pay and Accounts Officer (PAO), National Highways, Government of India (GOI), Bangalore.</p>	<p>The Regional Pay and Accounts Officer, Bangalore has reported the following outstanding amount to be reimbursed from Government of India.</p> <p>1. Amount withheld for want of revised estimate from the Ministry, New Delhi under MH 5054-OW-NHS Rs.63.40 crores</p> <p>2. Amount withheld/disallowed under MH-5054-OW-NHS Rs. 3.37 crores.</p> <p>3. Admitted amounts under MH-3054-M&amp;R from 1996-97 &amp; 1998-99 Rs. 11.18 crore.</p> <p>4. Sum of Rs. 66797505+4459372 was withheld for want of revalidation of sanction and allotment from the Ministry for the spill over works under PR/SRP/IRQP works for the year 2001-02 Spill over to 2002-03 Rs. 7.13 crores.</p>

(1)	(2)	(3)	(4)
		<p>At the end of May 2000, an amount of Rs. 83.98 crore was outstanding in Accountant General's books awaiting reimbursement from the PAO of which Rs. 24.85 crore related to the period from 1979-80 to 1996-97. Scrutiny revealed that the amounts were either withheld or disallowed by the PAO for want of vouchers from the divisions, sanction for the job, revised estimates etc. Due to failure of the NH divisions to supply wanting documents, amounts due to the State from the GOI are pending for two decades.</p>	<p>5. Amount withheld for want of funds under MH-3054-M&amp;R (Plan) crash programme for the spill over works from 1999-2000 to 2000-2001 financial year</p>
		<p>The matter was brought to the notice of the Secretaries of Finance and Public Works Departments in April 2000 for urgent action in the matter and to enforce accountability of officials for the delay.</p>	<p>6. Amount withheld/ disallowed under 3054-M&amp;R (Non-Plan)</p>
		<p>Government stated (September 2000) that effective action was being taken for the release of the amount withheld by the PAO and that strict instructions have been given to the officers to submit the claims in proper shape to the PAO.</p>	<p>Total</p>
			<p>Rs. 2.13 crores</p>
			<p>Rs. 2.42 crore</p>
			<p>Rs. 89.63 crores</p>
			<p>The Government of India has introduced Direct Payment Procedure (DPP) for the payment of bills in respect of the following item of expenditure with effect from 1-3-2003.</p>
			<p>(i) Original works included under plan scheme of Ministry of Road Transport and Highways (5054-OW-NHS).</p>
			<p>(ii) PR/SRP works under 3054-(M&amp;R)</p>
			<p>The outstanding balance of total Rs. 89.63 crore as reported by the Pay and Accounts Officer (A.G. has reported only and amount of Rs. 83.98 crore). A sum of Rs. 22.86 crores is related to the Non-Plan expenditure Maintenance of National Highways kept in the office of Pay and Accounts Officer</p>

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(1)	(2)	(3)	(4)
			<p>for want of due vouchers, clarification and Budget allocation. Out of this amount sum of Rs. 2.42 crores Non-Plan expenditure and Rs. 3.37 crores under original works under 5054-OW-ONHS was disallowed by the PAO due to in admissibility of claim. In a joint meeting with the officials of Accountant General and Finance Secretary during July 2004, the Finance Secretary agreed to write back the claim by providing equal amount in the supplementary demands for grants. Accordingly, PWD was proposed a sum of Rs. 2.30 crores in the July 2004 SDG as per the instructions received from the Accountant General to write back the disallowed amount from February 1982 to March 2003. But no provision included in the SDG and the amounts of claim are still kept unsettled. The Pay and Accounts Officer has since reimbursed a sum of Rs. 20.44 crores after rectifying the defects. The balance outstanding balance kept withheld in the office of the Pay and Accounts Officer is for the following reasons.</p>
			<p>(i) For want of required revised administrative sanction for the completed work from the Ministry due to various administrative reason.</p>

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(1)	(2)	(3)	(4)
			<p>(ii) For want of administrative sanction for payment of LA Charges with the approval of EFC etc.</p>
			<p>(iii) For want of required budget allocation as the work was already completed and opened for traffic and claims are pending long time. The matter was already taken up with Ministry and the Ministry is under consideration of the settlement of claims after satisfying the formalities. All Divisional Engineers were directed to take follow up action to settle the issue.</p>
			<p>Consequent to the introduction of DPP, no bills related to original work/PR/SRP works are kept withheld as the payments are effected directly from the Pay and Accounts Officer, Bangalore without charging the same in the State 'Suspense'.</p>

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## GOVERNMENT OF KERALA

## PUBLIC WORKS DEPARTMENT

**Report of the Comptroller and Auditor General for the year ended  
31-3-2000 (Civil)—Statement showing remedial measures taken by  
Government in respect of audit paragraph 4.5 & 4.6**

<i>Sl. No</i>	<i>Para No.</i>	<i>Subject</i>	<i>Remedial measures taken</i>
(1)	(2)	(3)	(4)
1	4.5	<p><b>Four laning of Aluva to Vyttila and Aroor to Cherthala Sections of NH 47.</b></p> <p><i>Major deviations from conditions of contract and failure to regulate payment on the basis of specifications led to unintended monetary benefit of Rs. 2.64 crores to the firm, of which Rs. 30.71 lakh only has been recovered (August 2000).</i></p> <p>In February 1994, Ministry of Surface Transport (MOST) sanctioned implementation of the project, viz., Four-laning and strengthening of National Highway 47 portion from Aluva to Vyttila and Aroor to Cherthala and strengthening of Vyttila-Aroor section at an estimated cost of Rs. 93.97 crore. The project implemented with assistance from Asian Development Bank (ADB) comprised two contract packages N2 and N3 arranged for execution simultaneously. Project Director (Superintending Engineer), National Highways (ADB) Circle, Edappally arranged the works in March 1994</p>	<p>The Contractor agreed to forgo payment in convertible currency in exchange of payment of escalation at 100% of value of work done. Accordingly, as per order No. F2.3251/94 Vol. VI dated 26-9-2000 of the Project Director, it was decided forgo any payment in foreign exchange and the related claims and the contractor was allowed to claim variations in prices of local labour general and POL at 100% of the value of work done. This was concurred by the office of CE (NH) in letter No. NH4/D7/3781/2000 dated 12-10-2000. According to the above decision, the entire escalation paid so far has been recalculated and paid only the balance. The excess payment was automatically adjusted in the recalculation.</p> <p>Taking the whole issue of payment of escalation as per agreement, the payment of variation of prices of local</p>

(1)	(2)	(3)	(4)	(5)
		through a New Delhi firm for an agreed contract amount of Rs. 78.01 crore. The work originally stipulated to be completed by September 1997, was completed in March 1999. The payment made to the firm up to September 2000 was Rs. 104 crore.		labour general and POL at 100% of the value of work done was advantageous to PWD. Compared to payment of claims of variation price of local labour general and POL at 95% of value of work done and payment of 5% of value of work done in convertible foreign exchange and variation of price in foreign input as provided in the agreement.
		Audit scrutiny revealed instances of incorrect computation of cost escalation claims, adoption of contractor's own rate contrary to contract conditions and irregular payment for substituted items at the original rate. The total extra expenditure thus involved amounted to Rs. 2.64 crore. The details are given in the table below.		Regarding the excess payment towards the use of cut earth instead of burrow the granular materials, the following facts may be noted. The variation orders for change of specification as well as rate has been issued and payment in final bill has been regulated accordingly. The file claim regulated accordingly. The file claim admitted were as below:
<i>Sl. No.</i>	<i>Particulars of item</i>	<i>Gist of variations/ deviations noticed</i>	<i>Excess/ Extra-expenditure (Rs. in lakhs)</i>	<i>Remarks</i>
(1)	(2)	(3)	(4)	(5)
1	Price Cost escalation in respect of labour and material	Cost escalation for local labour, general and PoL was allowed wrongly	62.19 Excess Payment of Rs. 30.71 lakhs relating to N2	3.01 original grading changed 50:20:30 2.01 changed grading
				6680.368—3199362 M <sup>3</sup> @ 478.92 3890.32—1232453 m <sup>3</sup> @ 316.80 51860 m <sup>3</sup> —18401679 @ 354.83

(1)	(2)	(3)	(4)	(5)	(4)					
		(1)	(2)	(3)	(4)	(5)	35:35:30			
				(August September 1998) based on cent per cent, value of work done instead of limi- ting it to 94.73 percent (for N2 package) and 95 per cent (for N3 package) as prov- ided for in the prescri- bed pr- ice adj- ustment formula	pack- age was recov- ered in Feb ruary 1999 on the basis audit of ob- serva- tion	5.03(1) changed grading 35:35:30 (ii) changed m <sup>3</sup> @ grading 354.83 35:35:30	17.03 m <sup>3</sup> @ 354.83	6060	505732	While settling the final bill, only the balance amount due was paid adjusting all the previous payments. Thus the excess payment was automatically adjusted.
2	Escalation in cost of local labour	Contrary to agree- ment provis- ions, cost indices (base as well as current) for	103.37	Excess pay- ment under N2 pa- ckage was Rs . 48.90 lak h						

(1)	(2)	(3)			(4)
(1)	(2)	(3)	(4)	(5)	
		Aluva		(Jan-	
		were adopted in		uary	
		the price		1999)	
		adjustment for		and under N3	
		formula		package	
		instead of the all		Rs. 54.47	
		India based indices		lakh	
		as mentioned in		(June	
		the agreement.		1998)	
3	Earth filling for median	Median filling was done with soil instead of granular materials. Though CE approved (December 1996) the rate of Rs. 182.14 per cubic metre for the substituted item,	13.85		

(1)	(2)	(3)	(4)	(5)
		payment was made at Rs. 286.90 per cubic metre as demanded by the contractor. As per the contract, rates for the varied items fixed by the Engineer would prevail in case of any dispute		
4	Upward revision of basic price of cement	As against basic price of Rs. 1900 per tonne for cement projected in the agreement schedule, enhanced rate of Rs. 2340	17.09	For purchase of 1503 tonnes of cement as of February 1999 at the enhanced rate

(1)	(2)	(3)	(4)
(1)	(2)	(3)	(4)
		<p>per tonne was allowed accepting the contractor's plea in September 1995 that the basic price indicated in the tender was erroneous</p>	
5.	<p>Removal of slush during pile driving in N2 package</p>	<p>Though the agreed rate included charges for clearance of slurry thrown up during pitting operations, contractor's demand (July 1995) for extra payment</p>	<p>19.78 On a quantity of <del>104733</del> cubic metres till August 1999.</p>

(1)	(2)	(3)	(4)
(1)	(2)	(3)	(4)
		<p>on the ground that agreed rate for the item did not include charges for removal of slush obtained from piling operations was accepted in June 1997.</p>	
6.	<p>Formation of granular sub base (GSB) in N2 package</p>	<p>Specification for construction of GSB with gravel and aggregate in the ratio of 50:50 was changed</p>	<p>Payment made in August 1998 for 58311 cubic metres of GSB</p>

(1)	(2)	(3)	(4)	
(1)	(2)	(3)	(4)	(5)
		<p>by CE in October 1997 to two sep- a r a t e gradings w i t h depart- mental cut earth, borrow m a t e - rials and aggre- gate in t h e ratios of 50: 20: 30 and 35:35:30 respe- ctively. However, payments w e r e made at t h e agreed rate of Rs. 478.92 p e r c u b i c meter for</p>		

(1)	(2)	(3)	(4)	(5)
		the orig- i n a l specifi c a t i o n instead of regula- ting it as per the a p p r - o v e d u n i t rates of Rs. 316.80 and Rs. 354.85 r e s p e ctively.		
		Total	263.64	
		The incorrect computation of price escalation payable (vide Sl. No. 1) and non regulation of the payments for various items with reference to approved rates (vide Sl. No. 6) indicated failure of departmental officers in exercise of due caution in working out rates and thus safeguard the financial interest of Government. Further, the conditions of		Regarding the excess payment of RA bill No. 48 to 55 has not been passed in RA Bill 56, which was passes as the final bill entire claim from RA bill No. 48 to 56 was clubbed and payment effected. Thus the over payment upto RA bill No. 55 was automatically adjusted.
				Regarding item No. 4, the following facts are submitted.
				The contractor had requested to change the basic price of cement from 1900 to Rs. 2340/T, as at the time of submission of tender. The basis price

(1)	(2)	(3)	(4)
		<p>contract especially in regard to rates, specifications of items etc. were not properly enforced by department or the Government and the contractor's claims for revision of rates were conceded without any demerit. Possibility of serious irregularity and malpractice in the regard cannot be ruled out.</p> <p>Government stated (September 2000) that over payments of Rs. 31.48 lakh in respect of N3 package (Sl. No.1) and Rs. 49.10 lakh (Sl. No. 6) would be recovered from the final payment to the contractor.</p> <p>Government stated further that adoption of Aluva based indices (Sl. No. 2) was justified as the construction site was near to Aluva. As the agreement specifically laid down that cost escalation was to be computed with reference to base cost index and current cost index on an all India basis, there was no scope of price adjustments based on indices for Aluva.</p>	<p>of cement at Cochin was Rs. 2340/T (for price).</p> <p>The decision to change the basic price of cement to Rs. 2340/T for the purpose of calculation of escalation was taken on 18-7-1997 after verification by the empowered committee constituted by Government for examining and resolving the various disputed claims therewith the contractor and the department before referring them to arbitration. The change of rate has been approved by Ministry of Surface Transport vide letter No. RW/NH-12018/347/93-KL Vol-II dated 6-3-1998. The extra financial commitment due to change in the basic price of cement has been included in the revised estimate of the four laning project and the same has been approved by Ministry vide letter No. RW/NH-12018/651/98-KL dated 9-7-1999. Since the decision was taken by the Empowered Committee and the ministry has already admitted the escalation charges due to the difference in the basic price the amount paid is justified.</p>

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(1)	(2)	(3)	(4)
		<p>As for the cost escalation in the basic price of cement to Rs. 2340 per tonne (Sl. No.4), Government admitted that the enhancement in price was allowed on the basis of contractor's claim that the price of cement prevailing at Kochi was Rs. 2340 per tonne at the time of tender. This was unjustified as the tender documents were to be prepared by the department carefully incorporating all the relevant factors and the contractors were to examine them in detail before quoting their rates.</p>	
		<p>Regarding Sl. No. 5, Government added that the extra payment for removal of overflowing slurry was necessary to ensure smooth and uninterrupted traffic in the service road near the pile driving area and to protect nearby houses and that there was no Government land for dumping the mud. This was not tenable as the agreed rate included the charges for disposal of slush ejected during piling operations. Hence the extra payment for removal of slush was a financial favour to the contractor.</p>	

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(1)	(2)	(3)	(4)
		<p>Government observed that eligible claims were admitted to the maximum extent to secure maximum utilization of ADB loan assistance and for avoiding arbitration as ADB loan did not provide for reimbursement of arbitration costs. As the external loan assistance constituted a liability (and not a gratuitous payment), its proper utilization merited strict enforcement of conditions of the contract concluded for execution of the project. The plea that the contractor's claims were allowed for the sake of avoidance of arbitration proceedings was far-fetched and provided justification for an untenable position.</p>	
		<p>The large scale deviations and alterations from the agreed contract conditions and the settlement of contractor's claims without proper analysis warrant investigation by Government. Of the excess/extra payments totaling Rs. 2.64 crore, and amount of Rs. 30.71 lakh only has been recovered from the contractor. Recovery</p>	

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(1)	(2)	(3)	(4)
		particulars of the balance Rs. 2.33 crore were awaited (November 2000).	
2	4.6	<p><b>Undue benefit due to manipulation in the contract provision for escalation</b></p> <p>Price for the purpose of payment of escalation was shown as lower in the agreement than the rates considered in the estimate and consequently, the firm derived a monetary benefit of Rs. 1.42 crore.</p> <p>Superintending Engineer (SE), National Highways Central Circle, Thrissur awarded the contract for construction of 'Varapuzha Bridge and viaducts' in Ernakulam district to a firm in May 1995 on 'item-rate contract' basis, for an aggregate contract amount of Rs. 29.63 crore. Ministry of Surface Transport issued a revised estimate for Rs. 33.97 crore in May 1995. The construction of the bridge was in progress as of December 1999, Rupees 30.63 crore was paid to the firm till November 1999. The agreement executed by SE provided for price escalation of certain materials to be supplied by the firm over the basic price projected</p>	<p>The detailed estimate does not form part of tender documents and the contractor has no opportunity to know what is the rate of materials provided in the detailed estimate. In an item rate contract, the rate of work is not provided in the tender documents and the contractor quote his rate based on information furnished to him.</p> <p>The rate of specified materials and this work are the rate at railway head at Ernakulam, which was the basis on which the contractor quoted. As the estimate rate was not the basis for quoting the rate by the contractor, comparison between estimate rate and the rate specified in the contract has no meaning and the audit objection is only a hypothetical one, and hence, there is no real loss. The payment has been regulated based on agreement condition.</p>



(1)	(2)	(3)	(4)
		Government stated (October 2000) that estimate Bill of Quantities (BOQ) was prepared only for the limited purpose of evaluating tenders and for enabling technical acceptability. The reply is not acceptable as BOQ formed the main document of agreement and the rate adopted for estimation was to be reckoned as the price of materials prevailing at the time of tender.	
		The undue deflation of the base price in the tender document by SE calls for investigation.	

<i>Sl. No.</i>	<i>Para No.</i>	<i>Subject</i>	<i>Remedial measures taken</i>
(1)	(2)	(3)	(4)
1.	4.8	<p><b>Avoidable expenditure due to departmental lapses.</b></p> <p>Departmental lapses in evaluation of the alternative offer and failure to effect timely supply of materials and payment of contractor's dues led to avoidable financial commitment of Rs. 1.24 crore.</p> <p>The Superintending Engineer, NH Central Circle, Thrissur awarded (November 1988, the construction of Kumbalangi-Perumpadappu bridge in Ernakulam district to the Kerala State Construction Corporation Limited (KSCC), a Government Company, for a contract amount of Rs. 2.97 crore. However, KSCC could execute partially two pier wells and two abutment wells valued Rs. 39.51 lakh till October 1991. Government</p>	<p>The para relates to the work of construction of Kumbalangi-Perumpadappu bridge in Ernakulam district.</p> <p>(a) The work was executed by NH Division, Palarivattom under the control of National Highways (Central) Circle, Thrissur. Both the officers were deployed and the work related to that office was since transferred to NH (Circle), Kochi and NH Division, Kodungallur and NH Division, Malappuram. The work was completed by 31-12-1998. The tender was approved by the Chief Engineer, NH, Thiruvananthapuram for an amount of Rs. 5,94,000. The total piers as per the files is 5 Nos. On</p>

(1)	(2)	(3)	(4)
		<p>terminated the contract in August 1992 without risk and cost as KSCC could not maintain the stipulated progress of work.</p>	<p>a calculation, it can be seen that the payment of additional amount for a depth beyond 48 metres above was the reason for the excess expenditure.</p>
		<p>In March 1993, the Chief Engineer (CE), National Highways invited pre-qualification tenders for arranging the balance works (estimated cost Rs. 4.61 crore). The lowest offer was for Rs. 6.36 crore from a Kochi firm which also submitted an alternative proposal to execute the work with its own design of pile foundation at an agreed cost of Rs. 5.94 crore on a lumpsum contract. CE accepted the alternative proposal in July 1993 and an agreement was executed in October 1993. The stipulated date of completion was December 1995.</p>	<p>(i) Cost of work of sinking charges of well 6.36 Crore upto 58.5 Mtr.</p>
			<p>From the above, it is clear that extra payment is necessary for sinking charges of well above a depth of 58.5 meters.</p>
			<p>(ii) Cost of work of sinking charges of well upto 48m—5.94 crores</p>
			<p>Addl. cost of Rs. 12,000 per meter for 10.5 mtr. for piers (ie. upto 58.5 meter).</p>
			<p>Total 6.03 crores.</p>
		<p>In December 1995, the firm intimated that it could not complete the execution within stipulated date due to (i) restrictions imposed by the Kerala High Court on construction activity in the waterway (ii) departmental delays in issue of materials and (iii) departmental failure to make timely payment of bills and demanded extension of time and increase in the agreed rates. In August 1997, Government allowed an overall increase of 35 per cent in rates for works done after 1 July 1996. The construction of the bridge was completed in December 1998 and the firm was paid Rs. 7.23 crore (March 1999); of which an amount of Rs. 85.42 lakh was</p>	<p>From the above it can be seen that the admission of extra payment for additional sinking is not the reason for the excess expenditure.</p>
			<p>(b) An amount of Rs. 10.00 lakhs has already been deducted for not using the wells. Hence the observation may be dropped.</p>
			<p>(c) There was shortage of funds and the delay in supply of departmental materials. There was no scope of an alternate arrangements during the period. Hence the extra expenditure incurred.</p>

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(1)	(2)	(3)	(4)
		<p>towards 35 per cent enhancement in rates allowed by Government.</p> <p>Audit scrutiny revealed that the department sustained a loss of Rs. 1.24 crore as mentioned below:</p> <p>(a) While the firm's offer to execute the work for Rs. 6.36 crore as per the department's original design of well foundation included charges for sinking wells upto 58.50 metres, its alternative offer (Rs. 5.94 crore) with pile foundation included charges for driving piles upto a depth of only 48 metres. The firm had demanded extra rate of Rs. 12,000 per metre for driving piles beyond 48 metres and the total estimated additional commitment was Rs. 61.45 lakh. This aspect was not taken into account while evaluating the firm's alternative offer to execute the work with pile foundation. Consequently, cost for the sub structure with pile foundation worked out to Rs. 6.55 crore which was higher than the offer for well foundation by Rs. 19.17 lakh. Thus faulty evaluation of the offer of the firm entailed an extra expenditure of Rs. 19.17 lakh.</p> <p>(b) Two wells, partially constructed by KSCC for piers, could not be made use of in any manner, resulting in wasteful expenditure of Rs. 20 lakh (approximately).</p>	

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(1)	(2)	(3)	(4)
		<p>(c) On many occasions, supply of departmental materials could not be effected due to their non-availability in the district store and that payment schedule in the agreement could not be maintained due to paucity of funds. Thus, departmental failure in not ensuring timely supply of departmental materials and timely payment of bills resulted in enhancement in rates and extra expenditure of Rs. 85.42 lakh.</p> <p>(d) As a consequence of the departmental lapses, the cost of construction increased from Rs. 2.97 crore to Rs. 7.23 crore (143 per cent).</p> <p>The matter was referred to Government in April 2000; reply has not been received (November 2000).</p>	
3	4.11	<p><b>Unjustified excess payment for sinking foundation wells</b></p> <p>Payment for sinking wells for extra depths was made at inadmissible rates resulting in excess payment of Rs. 45.72 lakh.</p> <p>Superintending Engineer (SE), National Highways Circle, Thrissur arranged construction of the link road connecting Willington Island and Cochin bypass in December 1992 on a lumpsum contract of Rs. 35.58 crores. The road construction was completed in</p>	<p>The work of NH 47A Phase II is a L.S. Contract work. The interim bills were made based on the payment schedule in which the unit rate of wells is arrived considering the depth of well sinking up to 49.5 m as said in the audit para. Only the additional depth over and above the founding levels for all the wells were taken for extra payment i.e., for depth above 49.5m. The first 31.32m. mentioned in the</p>

(1)	(2)	(3)	(4)
	<p>June 1998 but final payment to the contractor has not been made as of October 2000. Audit scrutiny (December 1998) disclosed inadmissible payment of Rs. 45.72 lakh for sinking wells for the foundation of the piers as discussed below:</p> <p>The agreement envisaged well foundation for 17 piers. According to the agreement, the rates for well sinking were Rs. 10,000 per metre up to a depth of 30 metres, Rs. 13,000 per meter for depth between 30 metres and 39 metres and Rs. 16,000 per metre for depths between 39 metres and 49.5 metres. Provision in the contract also envisaged sinking of wells beyond the depth of 49.5 metres to be treated as extra items, payment for which was to be regulated as follows:</p> <p>First 3 metres beyond 49.5 meters Rs. 1,50,000 per meter</p> <p>Next 3 metres Rs. 1,80,000 per meter</p> <p>Next 3 metres Rs. 2,10,000 per meter</p> <p>In the tender documents, tentative founding levels for the wells approved by the Chief Engineer in respect of each pier ranging from 30 to 50 metres were projected. As the agreement contained agreed rates for sinking of wells up to a</p>	<p>audit para is the total additional depth for all the wells, which have grown 3m. above 49.5m. Hence no extra payment made for a depth upto 49.5m. as mentioned in audit para likewise. Reduction is also effected for wells or which have met gone upto a depth of 49.5m. Therefore, there was no extra payment against the agreed quantities.</p>	

(1)	(2)	(3)	(4)
		<p>depth of 49.5 meters, payment for sinking wells upto 49.5 meters was to be regulated in accordance with agreed rates. However, well sinking between 31.32 to 54.765 metres below the tentative levels indicated in the tender documents was treated as extra item though the extra items to levels only beyond 49.5 metres was provided for in the agreement. Consequently, extra rates were allowed unjustifiably for the entire depth below 30 to 50 metres. The resultant inadmissible payment was Rs. 45.72 lakh.</p>	
		<p>Government state (October 2000) that for variations in founding levels, fixed after confirmatory borings as decided in the pre-bid meeting (July 1992) separate rates were agreed upon. Government, however, admitted that the contract envisaged sinking of wells up to the founding levels as in the drawings given along with tender documents and that the rates quoted in the Bill of Quantities (BOQ) formed the basis for regulating contractual payments. As the BOQ contained quoted rates for sinking wells up to a depth of 49.5 metres, extra rates for variations ought to have been applied only for sinking wells beyond this depth.</p>	
4	4.12	<p><b>Extra expenditure due to adoption of higher rates</b></p>	<p>The supplemental agreement No. 1 dated 16-7-1999 has</p>
		<p>Though agreement clearly provided for payment of excess over</p>	

(1)	(2)	(3)	(4)
		<p>scheduled quantities, enhanced rates were allowed for the excess quantity of works causing avoidable financial commitment of Rs. 22.58 lakh.</p> <p>Superintending Engineer (SE), National Highways Circle, Thrissur awarded (April 1998) he contract for formation of a new road from 'kuttiipuram to Puduponnani (3rd Reach)' for an agreed contract value of Rs. 2.56 crore at 14.2 per cent below estimate rates. Execution of the work was in progress as of November 1999. The value of work done till April 2000 was Rs. 1.64 crores.</p> <p>Schedule of quantities in the agreement of April 1998 contained provision for filling embankment of the road with an estimated quantity of 43000 cubic metres of hard gravelly soil at the rate of Rs. 162 per cubic metre. The quantity of filling was re-assessed (May 1999) as 100900 cubic metres. Based on a request from the contractor, the SE executed a supplemental agreement with the contractor in July 1999, which guaranteed payment at the rate of Rs. 217.82 per cubic metre for executing the excess quantity of 47150 cubic metres of filling with gravel. The estimated extra financial commitment on account of the proposed payment was Rs. 22.58 lakh.</p> <p>According to terms of agreement, the contractor was bound to</p>	<p>already been executed for the excess quantity beyond 125% of the agreed quantity at an enhanced rate based on the approved revised estimate by the Chief Engineer, National Highway, Thiruvananthapuram. Later order have been issued by the Superintending Engineer, National Highway, Kochi for cancelling the above agreement as per the directions from the Chief Engineer, NH, Thiruvananthapuram. Now the contractor has raised his objections against canceling the already executed agreement without his consent.</p>

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(1)	(2)	(3)	(4)
		<p>execute any excess over the scheduled quantities at his agreed rates for the work. In view of this specific provision, execution of a supplemental agreement providing for payment at contractor's enhanced rate for quantities in excess of 125 per cent of the originally estimated quantities lacked justification and was not permissible.</p>	
		<p>The matter was referred to Government in May 2000; reply has not been received (November 2000).</p>	

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## GOVERNMENT OF KERALA

## PUBLIC WORKS DEPARTMENT

## Report of the Comptroller and Auditor General for the year 2003-04

## Para No. 4.4.5

<i>Sl. No.</i>	<i>Para No.</i>	<i>Subject</i>	<i>Remedial measures</i>
(1)	(2)	(3)	(4)
1	4.4.5	<p>Avoidable expenditure due to change in design of foundation and non-observance of Chief Engineer's guidelines resulted in avoidable liability of Rs. 5.89 crore.</p> <p>The SE, R&amp;B (North Circle), Kozhikode (SE) awarded the contract for the construction of Kadalundikadavu bridge (Malappuram District) in March 1998 at an accepted contract price of Rs. 5.92 crore at a tender premium of 90 per cent. The contract contemplated well foundation for the abutments and piers of 13 span bridge of 345 metre long. After completing the foundation work of one abutments, one pier and partially completing the foundation work of two piers, the contractor, in December 1998, initiated the CE that the site of the bridge was at the confluence of river and sea and therefore tidal action in the river was severe, rendering well sinking difficult. The contractor also requested for change from well foundation to cast in-situ pile foundation. CE</p>	<p>The investigation for the Kadalundikadavu bridge in Malappuram district was conducted in 1984 and the design was finalized accordingly. During that period, there was only a narrow water channel flowing under the bridge site and natural islands were available at many points. The agreement for construction of the bridge was executed only in 1998. During this period, certain drastic environmental changes had occurred near and around the site due to violent wave action of the sea whereby the sea itself had shifted eastwards resulting in a large water spread and strong waves inwards. During the sinking operation of wells for foundation of the proposed bridge the strong wave action caused the islands formed for sinking wells for the foundation to collapse. The islands were washed away and the wells sunk by the</p>

(1)	(2)	(3)	(4)
		<p>accepted the contractor's request and obtained a new drawing (July 1999) from the Design Wing contemplating cast in-situ pile foundation for nine piers. The partially completed well foundation of two piers were also abandoned and changed to pile foundation. The construction of the bridge was in progress as of March 2004. The estimated extra expenditure due to change in design was Rs. 5.05 crore and Rs. 33 crore spent on the partially completed well foundation became in fructuous.</p>	<p>contractor got tilted beyond the permissible limits due to the disturbance of side soil holding the well in position. Even under these severe conditions, wells for one abutment and one pier were seated on hard strata after rectifying the tilts. The completed wells were near the bank and the remaining wells to be constructed were in the badly affected area where the wave action was very strong. Had we preceded with the well foundation works at the sites, where the sea action was direct and very strong, it would have caused a great loss to the exchequer. Taking this reality in to consideration, the situation was got examined by the Chief Engineer, DRIQ.</p>
		<p>Contract conditions demanded the contractor to construct the bridge and approaches in accordance with the plan and design attached to agreement. The contractor was expected to have quoted rates taking into account the hostile site condition and as such the contract had no valued ground for a request in charge of the design of foundation after the contract was concluded.</p>	<p>After inspection, it was proposed to change the well foundation into cast-in-site pile foundation, since there was no other alternative to proceed with the work.</p>
		<p>In the design of the bridge the department proposed well full foundations for piers after taking into consideration all the aspects of the sites and as such there was no justification on the part of the department in allowing a change from well foundation to cost in-situ pile foundation. Further, in March 2002, the CE proposed a revised</p>	<p>At the time of investigation, fishing boats were being landed in the seashore itself. But later, due to the construction of sea walls, it was not possible to land on the seashore. Hence the boats have to ply upstream of the river, crossing the bridge</p>

(1)	(2)	(3)	(4)
		<p>estimate for Rs. 10.29 crore to Govt. which apart from taking the design change into account envisaged construction of retaining walls in cement concrete for protecting the sides of approaches at places more than the number provided for in the original agreement. The revised estimate also contained provision for cement concrete belt over rubble masonry walls deviating from CE's instruction resulted in extra liability of Rs. 0.51 crore.</p> <p>Government stated (July 2004) that the change and design was necessitated owing to the drastic environmental changes near and around the site during the intervening period after the investigation (1984) and execution of agreement (1998). Regarding the construction of sidewall in cement and providing cement concrete belt over rubble masonry wall, Govt. stated that it was due to limitation in space to accommodate the bottom width of embankment and also to accommodate future expansion. However, the reply is silent and to why due professional care was not taken by taking into account these aspects at the time of according technical sanction in 1995 despite specific provision in Kerala PWD Manual that if there is a time lag of two years or more between the</p>	<p>alignment, in order to land on the riverbank. Consequently, in order to provide sufficient navigation clearance, the bridge had to be raised by 2 meters than originally proposed and the approach road had to be raised accordingly. As the width of the land acquired for the bridge approaches was for the original proposal, there is not enough land width to accommodate the bottom width of the embankment. Hence in order to accommodate the construction within the available land by reducing the bottom width of embankment, cement concrete retaining wall was proposed in the revised estimate.</p> <p>There is a proposal for construction of a Coastal Highway, the alignment of which is along this bridge. Hence cement concrete belts are proposed over the R.R. retaining wall in the estimate, in order to accommodate future expansion by raising the retaining wall for widening the road way.</p> <p>The additional expenditure in the above cases were essential and unavoidable, and was incurred in order to make the construction useful for the</p>

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(1)	(2)	(3)	(4)
		<p>date of preparation of an estimate and the date of its sanction, it is necessary that site conditions are examined again to verify whether any changes have occurred necessitating modifications and as such the reply is not acceptable.</p>	<p>present and future volume of traffic. The circular referred to in the proposed para of the Chief Engineer is a general instruction and in the specific case, the Chief Engineer was convinced of the necessity for change.</p> <p>As already stated there was drastic change in the site condition after the date of investigation, ie. during 1984. The Technical sanction was accorded on 1995 after receiving administrative sanction during 1994. The provision in the manual, mentioned in the PAC report, was not followed due to oversight. There was no willful negligence on the part of departmental officers in this regard. A lenient view may be taken in this matter and the explanation given may be accepted.</p> <p>The above explanation may please be accepted and paras may be dropped.</p>

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## GOVERNMENT OF KERALA

## PUBLIC WORKS (D) DEPARTMENT

**Report of the Comptroller and Auditor General for the year ended  
2003-04 Para No. 4.4.6**

<i>Sl. No</i>	<i>Para No.</i>	<i>Subject</i>	<i>Remedial measures</i>
(1)	(2)	(3)	(4)
1	4.4.6	<p>Erroneous preparation of estimates and consequential loss substitution of an item of work during execution in estimated loss of Rs. 35.25 lakh by way of compensation.</p>	<p>The maintenance of the Cherkala-Jelsoor road was taken up under the World Bank aided KSTP. Around 1000 km. of road was included under this programme of heavy maintenance. No widening, geometric improvements such as easing of curves and correction of alignment etc. was included in this programme.</p> <p>The provision of surface dressing as wearing course included in the Year One maintenance programme was proposed by the Engineering Consultancy firm, duly appointed by Government of Kerala to conduct the studies and estimates for 1st year maintenance roads. The provision of surface dressing was included as per the World Bank's direction, considering it as the cheapest method of treatment and from the good experience from other states like Andhra Pradesh, Gujarat etc.</p> <p>The observation in the audit for the year 2002-2003 that the "surface dressing is a thin layer of treatment, which does not enhance the existing structural strength of pavement and is of no use where existing surface is full of undulation and irregularities" is not correct. As per clause 510 of MORTH specifications, surface dressing is a form of construction, whereby, a thin layer of bituminous binder is sprayed on to road surface, and then covered with layers of stone chipping of size varying from 19mm to 6 mm and well rolled. The bituminous film acts as a water proofing seal. The stone chipping protects the film of binder from damage and forms a durable</p>

(1)	(2)	(3)	(4)
		<p>skid resistant and dust-free wearing surface. Hence it cannot be treated as an inferior quality treatment.</p> <p>In the estimate there was provision to fill pot holes, carry out full depth repairs, and then profile corrective course using bituminous macadam prior to surface dressing or any other surface treatment. After pot hold filling and other surface treatment, the road is no longer full of undulations and irregularities. The surface dressing originally proposed was more cost effective but on ground was not found suitable for Kerala conditions. This would include heavy monsoons, ribbon development on road margins, larger number of curves and steep gradient. There were public protests against this surface dressing. Hence the original surface dressing treatment was changed to MSS of 30mm thickness for better durability and acceptability. The alternate proposal submitted by the contractors was Bitumen Concrete (BC) which is a costlier item than MSS and hence this was rejected.</p> <p>The contractor had approached the Adjudicator for rate increase and compensation for the loss due to mobilization of machineries and materials for the above work. The rate quoted by the contractor for surface dressing was Rs. 150/m<sup>2</sup>. The award of adjudicator at Rs. 145/m<sup>2</sup> was inclusive of all the costs due to compensation. The total cost as per the Original surface dressing proposal was Rs. 3,52,50,000 for an area of 2.35,000m<sup>2</sup>. The payment made for mix seal surface @Rs. 245/m<sup>2</sup> was Rs. 3,40,75,000. Thus there is a saving of Rs. 11.00 lakhs due to the change of items.</p> <p>Thus it may please be seen that no extra expenditure was incurred due to the change of items from surface dressing to Mix Seal Surfacing.</p>	

## GOVERNMENT OF KERALA

## PUBLIC WORKS (G) DEPARTMENT

**Report of the C&AG of India for the year ended 31st March 2004 (Civil)  
Action Taken Reg.**

<i>Para No.</i>	<i>Recommendation</i>	<i>Action Taken</i>
(1)	(2)	(3)
4.4.7	<p>Superintending Engineer, Roads and Bridges Circle, Aluva (SE), arranged (September 2002) the work of 'Improvements to Kanjar-Pullikkanam road' (Ch. Km.3/500 to Km. 19/000)in Idukki district through a contractor for a contracted price of Rs. 2.68 crore (0.3 per cent below estimate). The work targeted to be completed in March 2005 is in progress. Audit scrutiny of the accounts of the work revealed the following.</p> <p>The contract included a provision for excavating 104400 cubic metre of earth in all classes of soil (except hard rock and medium rock requiring blasting) for widening the road way, easing gradient, etc. After commencement of work, the Executive Engineer (Roads Division, Painavu) re-estimated the quantity as 223115 cubic metre of which 111123 cubic metre of soil was classified as Medium rock.</p>	<p>Administrative Sanction was accorded for the work vide G. O. (Ms.) No. 70/2000/PWD dated 17-12-2000 under financial assistance form NABARD. The work was awarded to Sri. Saji Mathew, PWD contractor at 0.3% below estimate rate. The PAC of this work was Rs. 265.25 lakhs. The work starts form Km. 3/ 500 of Kanjar Pullikanam road and upto, which PWD has already improved. From 3/500 to 7/200 there was an existing jeepable narrow mud road with steep gradient, From 7/200 to 8/250 there was a footpath 2 to 2.5m in width. There was no road at all from chainage 8/250 to 15/000 and new road has to be constructed through this virgin portion. This reach of the road is having rough terrain. From 15/000 to the end, the road passes through estate portion.</p> <p>The entire road passes through the land freely surrendered by the local land owners and the Government has not incurred any expenditure for land acquisition. As land was obtained free of cost, during execution</p>

(1)	(2)	(3)
<p>The reason for increase in quantity of excavation was attributed to steepness of one side of road under improvement where widening by filling with earth was not practicable thereby demanding extra excavation on the other side. As regards reclassification of soil as medium rock, it was reasoned that it was an omission in the original estimate and that its presence was noticed only when excavation commenced. This argument is not acceptable as the categorization of soil was done after detailed investigation and the admission of the department that there was omission in the reclassification of soil suggests carelessness in preparation of the estimate. Calculated with reference to the rates for excavation in all classes of soil (Rs. 848 per 10 cubic metre) and in medium rock (Rs. 1560 per 10 cubic metre) the reclassification of soil entailed an extra commitment of Rs. 0.79 crore.</p>	<p>In respect of the item of work 'Blasting and removing hard rock' the excavation was estimated at 1200 cubic metre (Rs.0.03 crore). However, after commencement of the work the quantity was re-estimated as 26662 cubic metre (Rs. 0.74 crore), an increase of</p>	<p>maximum effort was made to obtain a stable and smooth trafficable gradient for the road. For achieving this, the length of the road was differed from the original estimate provision. The original proposal was to form the road with cutting and filling. Since the filling side was dangerously steep, in order to avoid sliding of the embankment and to ensure stability of the new road major portion of the road was aligned through cutting side. The original estimate quantity of the earthwork was assessed on tape measurements and by taking typical cross section at certain chainage. There was no accessible road at all from Ch. 8/250 to 15/000. So the increase in cutting quantity attributed to the above stated facts. Detailed investigation along steep and rocky slope was not possible at the time of original estimate adequate provision of medium rock was not included in the original estimate and it was an omission at the time of preparation of estimate. Since the cutting quantity increased, there is subsequent increase in medium rock quantity also. Even though the medium rocks is claimed as an extra item of work, the rate given for this item is same as the schedule of rates prevailing at the time of preparation of original estimate. The work was awarded at 0.3% below estimate rate. Hence this caused no loss to Government.</p>

(1)	(2)	(3)
<p>2122 per cent in the quantity, for which no valid reason had been indicated by the department. The extra expenditure on this account was Rs. 0.71 crore.</p>	<p>In respect of the item of work of construction of retaining wall to protect sides of the road under improvement, the estimated cost of Dry Rubble Masonry work was Rs. 0.07 crore (1168 cubic metre). After commencement of the work the cost of the item was re-estimated as Rs. 1.33 crore (13418 cubic metre @ Rs. 611 per cubic metre and 17311 cubic metre @ Rs. 298 per cubic metre), an increase of 2531 per cent in quantity, on the ground that protective walls were needed at more places. This aspect could have very well been foreseen at the time of preparation of the estimate and as such there was no justifiable reason for a conclusion that protective walls were needed at more places after commencement of the work. The estimated avoidable liability on this account was Rs. 1.26 crore.</p>	<p>The road passes through hilly terrain having steep gradient. A number of streams having varying widths cross the newly formed road at many places. After heavy rain concentrated flow of storm water occurs through these streams crossing the road and which cause frequent landslides. The edges of the road formed by filling have also to be protected against erosion. For getting rocky strata for foundation at the filling side, by the height of the wings, portion of abutments and retaining walls has to be increased. When road is formed by cutting and filling especially in virgin portion and due to the formation of new approach roads by the local people, the flow path of the stream are getting changed and there is possibility of accumulation of rain water at certain places. This cannot be assessed during original estimate. Due to the above reasons the quantity of rubble masonry increased.</p>
<p>Thus Government incurred an avoidable liability of Rs. 2.76 crore in the execution of the above three components of the work due to erroneous preparation of estimates. Apart from this, post contractual reclassification of soil and increase of 2100-2500 per</p>	<p>In the light of the above facts, it was decided to prepare the revised estimate incorporating all items necessary for the proper completion of the work. Accordingly the revised estimate was prepared. For formation of the road the excavation of medium rock was unavoidable and carried out as extra item. The supplemental agreement and payment for the executed quantity was made limiting the expenditure within the agreed PAC.</p>	

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(1)	(2)	(3)
	<p>cent in quantities executed vitiated the entire tender process. Collusion of officers of the department with the contractor cannot be ruled out as the estimate of the work has been revised to Rs. 8.07 crore from Rs. 2.69 crore.</p>	
	<p>The matter was referred to Government in July 2004 reply has not been received (November 2004).</p>	

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## GOVERNMENT OF KERALA

## PUBLIC WORKS DEPARTMENT

**Action Taken Statement on Audit Paras 4.4.8 contained in the C&AG Report for the year ended 31st March, 2004 (Civil)**

<i>Sl. Para No. No.</i>	<i>Subjects</i>	<i>Action Taken</i>
(1) (2)	(3)	(4)
1 4.4.8	<b>Failure to observe conditions governing tender and resultant avoidable expenditure</b>  Superintending Engineer, PWD (Buildings), Central Circle, Thrissur invited pre-qualification bids in March 1998 for arranging the construction of a building for Mini Civil Station at Irinjalakuda in Thrissur District. Four tenders were received from the selected panel of contractors. Though contractor 'A' who quoted a premium of 32.2% was the lowest tenderer (accepted Probable Amount of Contract Rs. 4.15 Crore), Government decided (May 1999) to award the work to M/s Kerala State Construction Corporation Limited (KSCC), a Government owned Company, at their quoted premium of 39.8% (accepted probable amount of contract Rs. 4.39 crore) on the ground that the company was entitled for price preference to the extent of 10%. Accordingly SE issued selection notice to KSCC on 8th June 1999 with	As per G. O. (Rt.) No. 178/98/PWD dated 2-3-1998, Administrative Sanction for an estimated amount of Rs. 387 lakhs was issued for the construction of Mini Civil Station at Irinjalakkuda and Technical Sanction issued on 25-1-1999 as per Order 10/CE/B&LW/98 on 1996 Schedule of Rates. The tender for pre-qualification for the above work was invited and out of the panel of 5 tenderers, 4 numbers of pre-qualification tenderers were received on 10-2-1999. The lowest tender was from M/s K. V. Joseph & Sons at the rate of 32.2% above estimate rate. But second lowest tenderer M/s KSCC quoted rate was 39.8% above estimate rate. As per G. O. (Ms.) No. 81/97/PW&T dated 7-8-1997 the corporation is entitled for price preference to the extent of 10% from the lowest quoted amount and as

(1)	(2)	(3)	(4)
		<p>directions to execute an agreement within a week from the date of receipt of notice. KSCC, however, executed the agreement only after six months (December 1999) and commenced the work in January 2000. Even though the time specified in the agreement for completion of the work was 24 months, progress in construction work was very slow and the value of work done by KSCC was only Rs. 12.51 lakhs as of July 2002 (2.8% of contract value). The SE, therefore, terminated (July 2002) the contract at the risk and cost of KSCC and rearranged (March 2003) the balance works through another contractor (incidentally contractor 'A') on competitive tender basis for a contract price of Rs. 5.50 crore. The construction of building is targeted for completion in October 2005.</p> <p>Conditions governing tender enjoin that successful tenderer shall execute agreement within 30 days from the date of acceptance of tender, failing which the work shall be awarded to the next lowest tenderer. Had this condition been followed, and contract awarded to 'A' at the quoted premium of 32.2% the</p>	<p>such they were the lowest one. The work was awarded to KSCC Ltd. by Government (vide G.O. (Rt.) No. 431/99/PWD dated 12-5-1999) and Selection Notice was issued by the CE (Buildings) for executing the agreement on or before 17-6-1999. But the agreement was executed only on 16-12-1999. As the KSCC's performance for the work was very poor and unsatisfactory, the contract with KSCC Ltd. was terminated as per agreement conditions and the balance work re-arranged at the risk and cost of the original contractor (ie. KSCC Ltd.) . The estimate for the balance work as per 1999 Schedule of Rate was prepared. Pre-qualification tenders were invited and the work was arranged at 35% above Estimte Rate and awarded to K.V. Joseph &amp; Sons being the lowest tenderer. Regarding the risk and cost liability, and amount of Rs. 1,23,09,945 has been worked out as labiliy by Superintending Engineer, PWD (Buildings), Central Circle, Thrissur and M/s KSCC Ltd. informed for making remittance, vide letter dated 4-10-2004 from</p>

(1)	(2)	(3)	(4)
		<p>estimated value of contract would have been only Rs. 4.15 crore. The failure of the SE to invoke this condition resulted in an avoidable estimated expenditure of Rs. 1.47 crore on this work besides the expenditure towards rent of offices occupied in rented buildings. The department also failed to assess the risk and cost liability of KSCC even after of 14 months of re-arrangement of the work even though Government orders in force demanded fixation of risk and cost liability provisionally on the basis of estimate within one year from the date of termination of contract.</p>	<p>the office of the Superintending Engineer, PWD (Buildings), Central Circle, Thrissur.</p> <p>The delay for assessing the risk and cost liability towards he KSCC Ltd. was due to the time consuming departmental procedure for rearranging this work.</p>

## GOVERNMENT OF KERALA

## PUBLIC WORKS DEPARTMENT

**Report of the Comptroller and Auditor General of India for the year ended  
2003-04 Para No. 4.4.9**

<i>Sl. Para No No.</i>	<i>Subject</i>	<i>Remedial measure</i>
(1) (2)	(3)	(4)
1 4.4.9	<p><b>Loss due to cost and time overrun</b></p> <p>Defective preparation of estimate led to cost over run of Rs. 10.91 crore and time over run of four years.</p> <p>Based on sanction accorded by Government of India in March 1996 for an estimate of Rs. 12 crore, the SE (NH) South Circle, Thiruvananthapuram arranged works (estimated to cost Rs. 9 crores) relating to construction of Thiruvananthapuram bypass (ch. 5600m to 5750m and 6119m to 10617m) through a contractor in December 1996. Contract price was Rs. 9.35 crore and the construction was to be completed by 30th June 1999. On commencement of construction, it was noticed that the characteristics of subsoil</p>	<p>The project for construction of balance length of 4.65 kms from ch. 5600 to 5750 and 6119 to 10617m of Trivandrum-Neyyattinkara combined bypass on NH 47 at the cost of Rs. 12.00 crore was sanctioned on 26-2-1996 with a scheduled date of completion as 3rd July 1999. Revised Cost Estimate for Rs. 2291.90 lakh with the revised schedule of 30-9-2003 has also been sanctioned.</p> <p>In the 1st Revised estimate, rate for items already executed were allowed as per contract agreement and for extra items, analyzed rates based on 1999 schedule of rates plus 15% were allowed. The rates for the work of removal of slushy soil, unsuitable soil, earthwork excavation in hard soil and formation of embankment were modified and incorporated in the Technical Notes while sanctioning the 1st Revised Cost Estimate. The Revised Estimate was sanctioned for the cost not exceeding Rs. 22.91 crores to avoid any contractual obligation on account of the revised rates.</p> <p>There is a time overrun of 4 years 2 months and 27 days. The contract was</p>

(1)	(2)	(3)	(4)
		<p>were different form that reckoned for estimation purpose. Fresh soil studies were therefore arranged through M/s Lal Bahadur Sastri Centre for Science and Technology, an autonomous body of Government. The consultant firm in their study, suggested various remedial measures which included execution of additional cross drainage works providing vertical drain and horizontal drain using metal chips and needled coir fit. The CE (NH), Thiruvananthapuram in October 2002 proposed to GOI a revised estimate of Rs. 24.99 crore which included, in addition to provision suggested by the construction, increased provision for junction improvement and provision for cost escalation. While approving (March 2003) the first revised estimate of Rs. 22.91 crore, the standing finance committee (GOI, MORTH) decided that action for fixing responsibility of the concerned State Govt.</p>	<p>awarded on 26-12-1996 and due to non-receipt of soil investigation report of the stretch; the actual work could progressed after February 1998. The site requirement has forced the need for a detailed soil investigation due to the peculiarities of the sub soil intermittently. The project also had a component of ROB at a cost of Rs. 92.11 lakhs. The cost of the project increased to Rs. 171.50 lakh (Ministry's share) entailing additional cost of Rs. 79.39 lakh. The change of design contributed to delays in completion of the project. The ROB was completed in April 2003, though the scheduled date of completion of ROB was before June 1999. Hence there is a clear delay of about 4 years on the part of Railways.</p> <p>The following points may kindly be considered for the reasons stated.</p> <ul style="list-style-type: none"> <li>(i) The sub soil investigation done at the estimation stage required detailed investigation due to the peculiarities of the sub soil intermittently, which was noticed only on the commencement of the work. There was a time overrun due to sub soil investigation stage construction of embankment and soil stabilization.</li> <li>(ii) The scheduled date of completion of the project was 3-7-1999 and in the revised estimate, revised date of completion is 30-9-2003. The actual expenditure because of time overrun is Rs. 20.26 lakh against Rs. 117.26 lakh.</li> </ul>

(1)	(2)	(3)	(4)
	<p>officers involved in this project at the sanction stage should be taken by State Govt. But State Government has not taken any action against any officials so far (June 2004).</p> <p>The project to be completed in June 1999 could therefore be completed only in December 2003 ie. after a lapse of more than 4 years. Add to scrutiny revealed the following points.</p>	<p>(a) Escalation paid upto 30-6-1999 on items as per agreement : Rs. 56.48 lakh</p> <p>(b) Escalation if the entire work as per Agreement would have been completed by 3-7-1999 : Rs. 97.00 lakh</p> <p>(c) Total escalation paid : Rs. 117.26 lakh</p> <p>(d) Escalation paid because of time overrun : Rs. 20.26 lakh</p>	
	<p>(i) Project estimate was prepared without conducting proper soil study and under estimating quantity, which led to re-estimation project cost. Consequently, there was inordinate delay in implementation and the project cost registered an increase of 91%.</p>	<p>(iii) While sanctioning the 1st Revised Estimate for Rs. 2291.90 lakh with due modifications etc. on 31-3-2003, the Government of India in Ministry of Road Transport and highways has disallowed the agency charges payable @9% as per the decision of the Standing Finance Committee of Government of India. The portion of agency charges for a total cost of Revised Estimate for Rs. 1091.90 lakh that comes to around Rs. 0.99 crore was pending disallowed for the time being.</p>	<p>However, the Ministry of Road Transport and Highways (Finance Wing) had constituted a Standing Committee under the Chairmanship of Shri A. K. Mohopatra, AS &amp; FA, Ministry of Road</p>
	<p>(ii) While original estimate did not contain provision for payment of cost escalation, the revised estimate envisaged noticeably. Huge</p>		

(1)	(2)	(3)	(4)
		<p>expenditure of Rs. 1.17 crore towards escalation charges, which is attributable to the unprecedented time and cost overrun.</p> <p>(iii) While approving the revised estimate, GOI rejected the provision for Agency charges on the ground that time and cost overrun was primarily because of the poor preparation of the project by State PWD. This resulted in an estimated loss of Rs. 0.99 crore to State Government.</p>	<p>Transport and Highways for fixing responsibility for time and cost overrun in respect of Ist Revised Cost Estimate for the Work. The objective of the standing committee is to fix the responsibility in the case of time overrun and cost overrun. The final report of the Standing Committee has been submitted before the Ministry on 12-6-2003. The various aspects held under objection also has been taken up by the Government of India in Ministry of Road Transport and Highways seriously and also under due consideration of the Government of India.</p> <p>In short, the completion of the work was delayed due to many reasons such as poor sub soil conditions which led to further investigation and adoption of multistage soil consolidation technique, the only technical solution which is a time consuming process. This method was adopted as recommended by soil experts and accepted by officials of Ministry of Road Transport and Highways. There was delay in taking decision on the part of MORTH, Railways, which attributed time and cost overrun. However, the State PWD has put an earnest attempt to complete the major project in spite of all the problems and completed the same.</p> <p>Hence further action in this issue may kindly be dropped.</p>
		<p>While admitting that there was delay at various stages of implementation, Government stated in July 2004 that MORTH, State PWD and Railways are equally responsible for the delay in the execution resulting in cost and time overrun.</p>	

GOVERNMENT OF KERALA  
PUBLIC WORKS DEPARTMENT

**Report of the Comptroller and Auditor General for the year ended 2003-04**

**(No. 12792/05., 2236/D1/06/PWD, Dated 3rd January 2006.)**

<i>Sl. Para No. No.</i>	<i>Subject</i>	<i>Remedial measures</i>
(1) (2)	(3)	(4)
1 4.4.10	<p><b>Loss on account of delay in handing over site to the contractor</b></p> <p>Lapse on the part of the department in handing over site in time to the contractor and consequent post contractual increase in rates resulted in extra financial commitment of Rs. 50.92 lakhs.</p> <p>In January 2000, Superintending Engineer (SE) Roads &amp; Bridges, Thiruvananthapuram awarded the contract for the work 'Forming approaches to the Rail Under Bridge' at Varkala in Thiruvananthapuram district to a contractor for an accepted outlay of Rs. 2.10 crore (1996 SOR). One of the conditions of the contract was that the work should be completed within six months from 31st December 1999 (date of selection notice). As the land required for forming approaches, was not fully in the</p>	<p>The construction of Rail under bridge across railway line and its approach road coming in the PWD road (Varkala-Kallambalam road and Vettoor road) was entrusted to Southern Railway. When the Railway authorities finalize the alignment of approaches there were public agitation fearing eviction as a consequence of a acquisition of land and submitted a memorandum to State Government. Hence Southern Railway desired to take up the work of construction of bridge proper only and gave up the work of approach road. Subsequently, this State PWD after considering the grievance of the public finalized the alignment of approaches. It was decided to complete the work of approach road on war footing since Railway authorities will close the level crossing after completion of the construction of work of bridge. Accordingly detailed estimates for construction of the approach road was prepared and TS issued in the year 1999-2000. Government issued orders to acquire the land invoking urgency clause as per Order No. G.O. (Rt.) 398/99/PWD dated 28-4-1999. The work was tendered based on 1996 schedule of rates. The agreement for the work was</p>

(1)	(2)	(3)	(4)
		<p>possession of the department, the site of work could be handed over partially in March 2000. The remaining portion of land (belonging to Kerala Water Authority, Health department and land leased to a Hospital) was handed over to the contractor only in November 2001 by the department. In the meantime, the contractor demanded (October 2001) enhancement in agreed rates for works done after the original time of completion.</p>	<p>executed on 22-1-2000 with time of completion of 6 months ie. upto 30-6-2000. The acquired land was handed over to the PWD by the Revenue Department on 8-3-2000. The land was handed over to the contractor on 14-3-2000. But the Kerala Water Authority and KSEB could hand over the land only after the shifting of the pipeline. During this period, there occurred hike in price of cement and other materials and the collection of sand from Kulathoopuzha river (agreed quarry was on the part of Forest Department) was banned. For the various reasons explained above, the rate was enhanced by Government as per G.O. (Rt.) No. 246/02/PWD dated 30-3-2002.</p>
		<p>Considering the contractor's demand, Government Arbitration committee adjudicated (January 2002) that there was lapse on the part of the department in handing over site in time to the contractor and recommended payment of originally quoted tender payment of 7.4% over 1999 Schedule of rates for works done after February 2001. Government accepted the recommendation in March 2002. Extra financial commitment to Government following the post contractual increase in rates was Rs. 50.92 lakhs.</p>	<p>The stipulation of K.P.W.D. Manual was followed into the date on which the complete land for the construction of the work would have been ready only on November 2001. The tender ought have been invited after that and the work would have been completed during 2002. The estimate of the work should have been prepared on 1999 schedule of rates with new quarry and 25% rate enhanced over 1996 schedule of rates and the cost of construction would have been much higher than the present cost of Rs. 2.62 crores. (Rs. 2.10 crores + Rs. 0.5092 crores). The works tendered during 2002 were arranged at high tender excess due to the prevalent pending bill crisis. Hence the department was able to complete a</p>

(1)	(2)	(3)	(4)
		<p>According to the provisions of Kerala Public Works Department Mannual, Departmental officers, before inviting tenders for arranging works should ensure that there is ample provision of funds for the work in the budget and that in no case should tenders be invited before making sure that the land required will be ready for being handed over to the contractor or to start the work in time. Though Administrative sanction was accorded by Government in January 1998 and the tender was invited in August 1999 the land was completely handed over to the contractor only in November 2001, after a lapse of 17 months form the date of completion of the work originally fixed. Thus non adherence of this provisions by SE resulted in extra liability of Rs. 50.92 lakh to Government.</p>	<p>significant volume of work by March 2001 at a time when 1999 schedule of rates was prevalent.</p> <p>The department executed the agreement with the contractor after ensuring that the urgency clause land acquisition orders have been issued by Government. In fact the land acquisition proceedings had reached final stage at that time.</p> <p>The importance of the over bridge in solving the traffic bottleneck in Varkala Town was one of the main reasons for awarding the work before receipt of the land. These would have been a huge out cry from public in the work was not carried out after acquiring their land during March 2000 and arranging the work during 2002.</p> <p>The work was arranged in best interest of the State and the department has taken every possible measure to hand over the land in time. In view of the facts mentioned above, the Draft para may be dropped.</p>
		<p>The matter was referred to Government in May 2004. Reply has not been received (November 2004).</p>	

APPENDIX III

**Comparative Statement showing the rates quoted by the lowest tenderer and Increase in quantities in the revised estimate and monetary impact on the accepted tender**

Sl. No.	Item No. & Particulars	Estimated quantity*		Estimate rate (Rs. per cu.m)	Accepted rate of lowest tenderer (Rs. per cu.m)	Cost as per		Rate quoted by the 2nd lowest tenderer (Rs. per cu.m)	Cost as per	
		Original	Revised			Original Estimate	Revised Estimate		Original Estimate	Revised Estimate
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Appendix I Part I Item I Earth work in clayey soil etc.	7584	197978	15.88	154	1167936	30488612	24	182016	4751472
2	Item 6 Conveying Item (I) above	15040	197978	32.01	100	1504000	19797800	48	721920	9502944
3	Appendix II Part II Item 4, Earth work excavation for cutting and filling	68970	68970	71.29	23	1586310	1586310	60	4138200	4138200

832/2008.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
4	Item 5 Compacting	68970	68970	9.78	5	344850	344850	60	4138200	4138200
5	Item 7 Embankment filling	291778	590000	66.21	100	29177800	59000000	100	29177800	59000000
6	Turffing the slopes of embankment	77357	90524	7.09**	15**	1160355	1357860	10**	773570	905240
Total		34941251112575432					3913170682436056			

Extra expenditure (Col. 8-Col. 11)=Rs. 3.01 crore.

\* In cubic metres for Sl.No. 1 to 5 and in square metres for Sl. No. 6.

\*\* Per square metre.