



PROJECT AUDIT REPORT

ON

**CONSTRUCTION OF
NORTHERN & SOUTHERN BYPASS
MULTAN**

**MULTAN DEVELOPMENT
AUTHORITY**

**HUD & PHE DEPARTMENT
GOVERNMENT OF PUNJAB**

FOR THE YEAR 2013-14

AUDITOR GENERAL OF PAKISTAN

PREFACE

The Auditor General conducts audit under Articles 169 and 170 of the Constitution of the Islamic Republic of Pakistan 1973, read with sections 8 and 12 of the Auditor General's (Functions, Powers and Terms and Conditions of Service) Ordinance, 2001. The audit of projects "Construction of Northern Bypass from Lahore Multan Quetta Road to Bosan Road (Dual Carriageway with Service Road Multan) (Phase-1) (9.00 km)" and "Construction of Multan Southern Bypass (Dual Carriageway) from Lahore Multan Quetta Road to Bahawalpur Chowk including Railway underpass Multan (15.66 km) with Service Roads from Lahore Multan Quetta Road to Bahawalpur Chowk (15.66 Km)" executed by Multan Development Authority Multan, was carried out accordingly.

The Directorate General Audit Works (Provincial), Lahore conducted audit of the above mentioned Projects for the period 2008-09 to 2012-13 during 2013-14 with a view to reporting significant findings to stakeholders. Audit examined the economy, efficiency, and effectiveness aspects of the projects. In addition, Audit also assessed, on test check basis, whether the management complied with applicable laws, rules, and regulations in managing the projects. The Audit Report indicates specific action which if taken, would help the management realize the project objectives. Audit observations included in this report have been finalized in the light of discussions in the SDAC meeting.

The Audit Report is submitted to the Governor of the Punjab in pursuance of the Article 171 of the Constitution of the Islamic Republic of Pakistan 1973, for causing it to be laid before the Provincial Assembly.

Islamabad
Dated: 8th March, 2017

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Rana Assad Amin
Auditor General of Pakistan

TABLE OF CONTENTS

ABBREVIATIONS & ACRONYMS
EXECUTIVE SUMMARY

SECTION	Page No
1. INTRODUCTION	01
2. AUDIT OBJECTIVES	03
3. AUDIT SCOPE AND METHODOLOGY	04
4. AUDIT FINDINGS AND RECOMMENDATIONS	04
4.1 Organization and Management	04
4.2 Financial Management	05
4.3 Procurement and Contract Management	14
4.4 Construction and Works	19
4.5 Asset Management	24
4.6 Monitoring and Evaluation	24
4.7 Compliance with Grant/Loan Covenants	24
4.8 Environment	24
4.9 Sustainability	25
4.10 Overall Assessment	25
5. CONCLUSION	26
ACKNOWLEDGMENT	27

ABBREVIATIONS & ACRONYMS

ADP	Annual Development Programme
B&R Code	Buildings& Roads Department Code
BOQ	Bill of Quantities
Cu.m	Cubic Meter
DNIT	Draft Notice Inviting Tender
EIA	Environmental Impact Assessment
ECNEC	Executive Committee of the National Economic Council
JMF	Job Mix Formula
LMQ Road	Lahore Multan Quetta Road
MRS	Market Rates System
MDA	Multan Development Authority
PSDP	Public Sector Development Programme
RR&MTI	Road Research and Material Testing Institute
SDAC	Special Departmental Accounts Committee
SDA	Special Drawing Account
Sqm	Square Meter
TSE	Technically Sanctioned Estimate
TST	Triple Surface Treatment
W/I	Widening / Improvement

EXECUTIVE SUMMARY

CONSTRUCTION OF NORTHERN BYPASS (9.00 KM) & SOUTHERN BYPASS (15.66 KM) MULTAN

The Directorate General Audit Works (Provincial) Lahore conducted audit of the Projects “Construction of Northern Bypass from LMQ Road to Bosan Road (Dual Carriageway with Service Road Multan) (Phase-1) (9.00 km) and “Construction of Multan Southern Bypass (Dual Carriageway) from LMQ Road to Bahawalpur Chowk including Railway underpass Multan (15.66 km)” in June, 2014 covering financial years 2008-09 to 2012-13. The main objectives of audit were to review the performance of the project against the intended objectives and to assess whether projects were managed with due regard to economy, efficiency, and effectiveness along with assessment of compliance with applicable rules, regulations and procedures. The audit was conducted in accordance with the INTOSAI Auditing Standards.

The project was funded under Annual Development Programme (ADP) & Public Sector Development Programme (PSDP). Administrative Approvals of Northern Bypass Road & Southern Bypass Road were issued by the Secretary HUD & PHE Department with total cost of Rs 653.220 million and Rs 1,569.323 million during January & April 2009 respectively with the completion periods of 24 months.

Detailed estimates of the projects “Construction of Northern Bypass Road” & “Construction of Southern Bypass Road” were technically sanctioned for Rs 697.122 million and Rs 1,392.30 million by Director Engineering MDA Multan in February and May 2009 respectively. Revised technical estimates were approved for Rs 718.515 million and Rs 1,722.510 million in December 2011.

The work on both the roads was in progress at the time of audit during June 2014. The expenditure of Rs 692.069 million and Rs 1,469.40 million on both projects was incurred up to June 2013.

The system of internal controls as laid down in the departmental codes/instructions was found to be lacking in their effective implementation resulting in irregularities and violations of rules and prescribed internal controls in the areas of financial management, contract management, execution of works, monitoring and evaluation.

Key audit findings

Audit findings categorized into major issues i.e. financial management, contract management, execution of works and monitoring & evaluation were as under:

- i. A sum of Rs 462.305 million was paid to the contractor against agreement cost of Rs 380.017 million without enhancement of agreement (Para 4.2.9.1)
- ii. Price variation of Rs 77.732 million was paid to the contractor against the provision of Rs 24.350 million in the revised Technically sanctioned estimate (Para 4.2.9.3)
- iii. An additional item of “Supplying and filling sand in trenches” for 1887052.75 cft paid @ Rs 1,700% cft for Rs 32,079,897 against the admissible rate of Rs 931.39 % cft for Rs 17,575,821 (Para 4.2.9.5)
- iv. Performance security bonds issued by Pakistan General Insurance Co. and Shaheen Insurance Co. were accepted by the Authority instead of obtaining performance security in the shape of bank guarantee for Rs 86,795,702 from the contractors (Para 4.3.5.1)
- v. Cost of road crust area for 273195 cu.m for Rs 67,862,889 was not recovered from the contractors while making payment of item “Earth work for embankment” (Para 4.4.6.1)
- vi. A sum of Rs 20,106,000 was overpaid to the contractors due to non-deduction of rate for less use of bitumen in the item,

“Providing and Laying plant premixed bituminous carpet for asphalt base course” (4.4.6.3)

Recommendations

Audit observed that most of the irregularities were either due to weak technical, supervisory and financial controls or poor contract management. Principal Accounting Officer needs to strengthen internal control regime in the department in the light of following recommendations:

- i. Technical controls at pre-execution stage of work need to be strengthened to ensure accurate rough cost estimates and technical estimates strictly in line with Market Rates System (MRS).
- ii. Financial controls need to be strengthened to ensure payments to the contractors strictly in line with contract agreement and Finance Department’s instructions.
- iii. Contract management needs to be improved to implement the contract clauses in their true spirit by obtaining/renewal of performance guarantees from the contractors within the prescribed period in order to safeguard the public interest.
- iv. Administrative controls need to be exercised at appropriate levels to take timely action against the contractors as laid down in contract agreement for ensuring timely completion of the project besides effecting the recoveries involved.
- v. Inquiries/Investigation against the officers responsible for violations and irregularities need to be conducted and finalized for appropriate action.
- vi. Internal Audit Wing needs to be strengthened to effectively implement the existing internal controls.

1. INTRODUCTION

1.1 The Directorate General of Audit Works (Provincial) Lahore conducted audit of the Projects “Construction of Northern Bypass Road from LMQ Road to Bosan Road Multan Phase-I (Dual Carriageway) with Service Roads (9.00 Km)” and “Construction of Southern Bypass Road (Dual Carriageway) with Service Roads from LMQ Road to Bahawalpur Chowk (15.66 km)” in June 2014 covering five financial years i.e. 2008-09 to 2012-13. The Projects were part of PSDP and ADP of the Government of the Punjab.

1.2 Both projects were approved by the Executive Committee of the National Economic Council (ECNEC). No specific instructions/decisions were passed on by the approving authority.

1.3 Both the projects were to be completed within 24 months after award of work to the contactors.

1.4 ECNEC approved construction of Northern and Southern By Pass roads in its meetings dated 06.11.2008 & 30.03.2009 for total cost of Rs 653.220 million (Federal Government share Rs 326.610 million + Provincial Government share Rs 326.610 million) and Rs 1,569.323 million (Federal Government share Rs 667.368 million + Provincial Government share Rs 901.955 million) respectively. The scope of work included construction of sub base course, base course, road edging, brick soling, culverts, TST for treated shoulders, sign posts, boards, shifting of electric poles, shifting of telephone poles, etc. Technical estimate of both the schemes were approved by the Director Engineering MDA for Rs 697.122 million on 09th February, 2009 and for Rs 1,392.259 million on 13th May, 2009 respectively. Revised technical estimates were approved by the Director Engineering, MDA for Rs 718.515 million on 12th December, 2011 and for Rs 1,722.510 million on 31st December 2011.

The design of the project was as under:

		SOUTHERN BYPASS	NORTHERN BYPASS
S. No	Description	Specification	Specification
i.	Length	15.66 KM	9 KM
ii.	Formation width	44.7 M	44.7 M
iii.	Sub base course	30 cm Thick	20 cm Thick
iv.	Base Course	25 cm Thick	20 cm Thick

1.5 Directorate General Audit Works (Provincial), Lahore conducted detailed audit in June 2014 of the expenditure amounting to Rs 2,161.469 million incurred on both projects upto June 2013.

1.6 Project objectives as per approved PC-1 were as under:

- To minimize the traffic hazards and ensure efficient and speedy movement of freight and passengers.
- To construct an express road, which will form basis for future infrastructure development, improvement of quality of life of people living in this zone.
- To cope with increased flow of traffic.

The management neither quantified the project objectives nor provided performance indicators to evaluate the planned objectives vis-à-vis outputs. Further, since the work on both of the projects was still in progress, therefore, Audit was not in a position to comment on the achievement of the set objectives.

1.7 The project was funded/financed through ADP & PSDP without donor component.

1.8 Summary of the year-wise financial results i.e. financial phasing,

ADP & PSDP allocations, funds released and actual expenditure were as under:

Year wise Allocation & Funds Released
SOUTHERN BYPASS

(Rs in million)

Year	Allocation			Releases			Expenditure
	PSDP	ADP	Total	PSDP	ADP	Total	
2008-09	800.00	100.00	900	50.00	100.00	150.00	150.000
2009-10	500.00	100.00	600	636.255	100.00	736.255	736.255
2010-11	134.167	150.00	284.167	93.745	326.066	419.811	389.811
2011-12	130.00	0	130.00	91.000	52.334	143.334	173.334
2012-13	0	20.000	20.000	0	20.000	20.000	20.000
Total	1564.167	370.00	1934.167	871.00	598.40	1469.40	1469.40

Year wise Allocation & Funds Released
NORTHERN BYPASS PHASE-I

(Rs in million)

Year	Allocation			Releases			Expenditure
	PSDP	ADP	Total	PSDP	ADP	Total	
2008-09	273.00	100.00	373.00	273.000	100.00	373.00	373.000
2009-10	1500.00	100.00	1600.00	0	100.00	100.00	100.000
2010-11	134.167	126.704	260.871	3.167	109.929	113.096	109.929
2011-12	100.00	0	100.00	51.963	0	51.963	55.130
2012-13	50.000	20.291	70.291	33.719	20.291	54.010	54.010
2013-14	0	0	0	11.144	0	11.144	0
Total	2057.167	346.995	2404.162	372.993	330.220	703.213	692.069

Source: Expenditure Statement of Department.

2. AUDIT OBJECTIVES

- 2.1 To assess whether project was managed with due regard to economy, efficiency and effectiveness.
- 2.2 To review compliance with applicable rules, regulations and procedures.
- 2.3 To review project performance against intended objectives.

3. AUDIT SCOPE AND METHODOLOGY

3.1 Multan Development Authority (MDA) Multan executed the projects. Scope of audit was to cover the period from financial year 2008-09 to 2012-13.

3.2 The audit methodology consisted of understanding the audited entity, conducting risk assessment, defining detailed audit objectives, developing audit programmes, performing analytical procedures, testing the controls, determining sample size for substantive testing of details, conducting substantive tests, evaluating results, reporting and follow up to achieve the audit objectives. An expenditure of Rs 692.069 million and Rs 1,469.400 million was incurred up to 30th June, 2013 on Northern & Southern Bypasses respectively which was audited.

4. AUDIT FINDINGS AND RECOMMENDATIONS

4.1 Organization and Management

4.1.1 Multan Development Authority (MDA) Multan had an elaborate organizational and administrative set-up. Secretary Housing, Urban Development and Public Health Engineering Department was the Principal Accounting Officer. The Engineering Division of MDA headed by Executive Engineer was supervised/monitored by the Director Engineering MDA/ Director General MDA Multan to ensure that the schemes/projects under execution were completed within the given time-frame and according to the approved specifications and design. The division, headed by an Executive Engineer, was supported by the Sub-Divisional Officers, Sub-Engineers and Divisional Accounts Officer. Job descriptions of the said staff were well defined in the B & R Departmental Code. The Sub-Divisional Officers and Sub-Engineers were responsible for 100% checking of work while the Executive Engineer was responsible to check payment upto 10% of the executed work.

4.1.2 There was no turn-over against key posts as the project was executed and monitored/supervised by the regular establishment of the department.

4.1.3 The actual working strength of field engineers and other staff was as per sanctioned strength. Pre-audit of contractor's bills was carried out by the Divisional Director, Local Fund Audit (Government of Punjab) Multan.

4.1.4 Internal audit mechanism existed in the organizational set-up of the department.

4.1.5 The projects were being executed under the normal administrative set-up without intervention of Project Management Unit. Both the projects were monitored/supervised by the consultant M/s ABM Engineering Karachi. Further, the division involved in execution of the schemes was also responsible to supervise other ongoing development schemes being executed within their jurisdiction.

4.1.6 The contractors submitted the bills through Sub-Engineer, which were forwarded to the Sub-Divisional Officer. The Accounts Branch processed the bills and submitted to the Executive Engineer concerned for approval which was further pre-audited by the Divisional Director Local Fund Audit MDA Multan before payment to the contractor.

4.1.7 The accounts of formations were compiled on monthly basis and not submitted to the Director General Accounts Works, Lahore.

4.2. Financial Management

4.2.1 Cash flows/release of funds were regulated by the Finance Department through its cash management plan depending on the cash flows. Generally, funds were released to the executing agency at the start of the financial year to take up execution of works as per work plan issued by the executing agency.

4.2.2 Financial reports were prepared on the format as prescribed in the Accounting Policies and Procedures Manual issued by the Auditor General of Pakistan.

4.2.3. Reconciliation of expenditures was done on monthly basis by the spending units as prescribed in the Punjab Budget Manual.

4.2.4 Project accounts were maintained as SDA account in District Accounts Office. After pre-audit of bills by Director Local Fund Audit, payments were withdrawn from pre-audit counters of field accounting office of Accountant General Punjab.

4.2.5 Payments were regulated by the provisions of contract agreements.

4.2.6 Advance payment of mobilization advance and secured advance was made against valid bank guarantees and recovery made according to the provision of relevant agreement.

4.2.7 Advances to the employees were paid as per rules.

4.2.8 Engineering divisions maintained their accounts manually, hence, data archiving was not involved.

4.2.9 The issues relating to the financial management observed during audit involving an amount of Rs 246.164 million were highlighted as under:

**4.2.9.1 Irregular payment without enhancement of agreement
- Rs 80.287 million**

According to Finance Department, Government of the Punjab circular No. FD (M-1M) III-2 /87 (P-III) dated 19.12.1994, enhancement of agreement was required before finalization of work in case of increase in agreement cost of the work.

Director Engineering/ Executive Engineer, Division II, MDA, Multan made total payment of Rs 462,304,737 to the contractor upto 13th running bill against the contract amount of Rs 382,017,469 without enhancement of agreement.

Weak supervisory and financial controls resulted in irregular payment of Rs 80,287,268 (Rs 462,304,737 - Rs 382,017,469).

Audit pointed out the irregularity in June 2014. The Authority replied that all the payments had been made as per site requirement/work done and availability of funds from the government after getting necessary approval of variation as per site requirements and provisional approval from the competent authority i.e. Director Engineering, MDA. The work would be enhanced after seeking revised approval of the scheme from the competent authority which was under process.

Reply was not tenable because the Authority had not got revision of administrative approval, T.S estimate and enhancement of agreement from the competent authority.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority explained that all the items over and above the revised estimate would be covered in 2nd revised T.S. Estimate. The Committee directed the Authority to get the revised administrative approval and PC-I verified from Audit within 10 days. The compliance of the Committee's directive was not reported/made till the finalization of this report.

Audit recommends condonation of irregularity.

(Para 11)

4.2.9.2 Loss due to payment of price variation in extended period - Rs 77.732 million

As per clause 55(8) of the contract agreement, no price escalation shall be allowed to the contractor in respect of the period extended for

completion of work due to his own fault.

Director Engineering, paid price adjustment amounting to Rs 77,732,216 to the contractor against the material consumed during the extended period despite the fact that the progress of the work was hampered due to contractor's fault.

Weak supervisory and financial controls resulted in unjustified payment of Rs 77,732,216.

Audit pointed out the loss in June 2014. The Authority replied that all the payments had been made to the contractor within stipulated period i.e. within extended time limit approved by the competent authority on genuine reasons and no payment had been made after stipulated period.

The reply was not correct because sufficient funds remained with the department almost during entire period of execution. The contractor deliberately delayed the work. In this regard, several reminders to re-start the work were issued by the department to the contractor but work could not be completed in time due to contractor's fault.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority explained that contractor was granted time extension up to 31.09.2013. Work could not be completed due to non-availability of funds and no record i.e. cash flow statement was shown to audit. The Committee directed the Authority to get all the record i.e. applications of contractor, time extensions and cash flow statement verified from Audit within 10 days. The compliance of the Committee's directive was not reported/made till the finalization of this report.

Audit recommends recovery of price variation paid in extended period besides fixing responsibility against the officer(s) concerned.

(Para 21)

4.2.9.3 Payment of price variation over and above the estimate - Rs 53.382 million

As per revised T.S. Estimate of the work vide No. 558/DE/MDA dated 09.02.09 the price escalation was to be paid up to Rs 24.350 million.

Director Engineering made payment of price variation for Rs 77.732 million upto 38th running bill against the permissible provision of Rs 24.350 million as per revised estimate.

Weak supervisory and financial controls resulted in payment of Rs 53,382,216, above the estimate.

Audit pointed out the overpayment in June 2014. The Authority replied that price variation over & above the TS estimate was paid against the work done after getting the approval of the competent authority as per site requirement. The quantities exceeded from the revised TS estimate would be covered in the 2nd revised TS Estimate.

The reply of the Authority was not tenable because payment of price variation over and above the approved amount was not admissible to the contractor.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority explained that contractor was granted time extension up to 31.09.2013. Work could not be completed due to non-availability of funds and no record was shown to Audit. The Committee directed the Authority to get all the record i.e. applications of contractor, time extensions and cash flow statement verified from Audit within 10 days. The compliance of the Committee's directive was not reported/made till the finalization of this report.

Audit recommends that the extra payment may be regularized and responsibility be fixed against the officer(s) concerned.

(Para 18)

4.2.9.4 Overpayment due to non-reduction of rate for using unpacked bitumen - Rs 16.679 million

According to Finance Department letter No. RO (Tech) FC-2-3 dated 02.08.2004 in case unpacked (bulk) bitumen is used, the rate shall be reduced by Rs 4.5 per kg.

Director Engineering, made the payment to the contractors for using unpacked bitumen in the execution of item “Providing and laying premixed bituminous carpet including compaction and finishing to required camber, grade and density” at full rate without reducing the rate by Rs 4.50 per kg.

Weak financial and supervisory controls resulted in overpayment of Rs 16,679,613.

Audit pointed out the overpayment in June 2014. The Authority replied that matter of packed/unpacked bitumen was not concerned with nomenclature of MRS rates, “Providing and laying plant premixed bituminous carpet including compaction and finishing to required camber, grade and density (C-18, P-118, i-10)” without giving any further remarks about supply of packed or unpacked bitumen. In the light of MRS the bitumen used in asphaltic base/wearing course had been paid as per rate quoted by the contractor.

The reply was not tenable because as per Finance Department instructions dated 02.08.2004, in case unpacked bitumen is used, the rate shall be reduced by Rs 4.50 per kg.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority explained that contractor was paid as per agreement and matter of packed/unpacked bitumen was not concerned with MRS rates and Finance Department letter. Audit contended that unpacked bitumen was used in execution of work. The Committee directed to refer the matter to Finance Department for clarification within

10 days. The compliance of the Committee's directive was not reported/made till the finalization of this report.

Audit recommends early recovery/condonation.

(Para 3,13)

4.2.9.5 Overpayment due to application of incorrect rate - Rs 14.504 million

As per MRS, 1st Qtr 2009 District Multan, the item "Supplying and filling sand in trenches/floors" is to be executed @ Rs 10.59 per cft.

Director Engineering/Executive Engineer, Division-III MDA Multan got executed an additional item of "Supplying and filling sand in trenches" for quantity 1887052.75 cft @ Rs 1,700% cft against the admissible rate of Rs 1,059 % cft. Since the contractor had quoted 12.05% below the rate approved in technical sanction estimate, the department was required to pay the item @ Rs 931.39 % cft (1059-127.61).

Weak technical and financial controls resulted in overpayment of Rs 14,504,076 (1,887,052.75cft x 768.61 % cft i.e. 1700 - 931.39).

Audit pointed out the overpayment in June 2014. The Authority replied that the item "sand filling under the floor" could not be compared with the sand filling of trench under the carriageway. The sand filling in the trench under the Carriageway was done layer by layer, after proper flooding and compacting by mechanical vibratory roller. The rate of this item Rs 17 p.cft was paid to the contractor after approval by the competent authority which was quite justified and based upon market rates.

The reply of the Authority was not correct because it was MRS item and as per condition No. 8 of acceptance letter "Any item of MRS not prescribed in the BOQ but cropped up at site would be paid as per estimate/MRS rates with 12.05% below.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority explained that payment to contractor was made on quoted rate. Audit contended that reply was not relevant. The Committee directed the Authority to make recovery from concerned besides taking action against the persons responsible. The compliance of the Committee's directive was not reported/made till the finalization of this report.

Audit recommends early compliance of SDAC directives.

(Para 27)

4.2.9.6 Non-recovery due to use of steel other than Pakistan Steel Mills - Rs 3.166 million

As per Finance Department's Notification No. RO (TECH) FD/2-3 dated 02.08.2004, the contractor is responsible for providing the invoice (original) and certificate from the manufacturer that mild steel bars used in the work had been manufactured from Pakistan Steel Mill's billet. If the same are not provided by the contractor and not annexed with vouchers, the rate of bars will be reduced by Rs 4,500 per m.ton while making payment to the contractor.

Director Engineering paid the item "Fabrication of mild steel (G-60)" without obtaining the invoices/certificates of manufacturer that the steel was made from billet of Pakistan Steel Mills Karachi. Neither invoices/certificates were available on record nor reduction in the rate of steel @ Rs 4.5 per kg was made.

Weak financial and supervisory controls resulted in overpayment of Rs 3,166,350.

Audit pointed out the non-recovery in June 2014. The Authority replied that the plinth area rates issued for the 2nd quarter 2009 for different types of buildings in Punjab Buildings Department, South Zone, Multan was adopted and the rate for mild steel reinforcement was based on local billet instead of Pakistan Steel Billet.

Reply was not tenable because the Authority used the mild steel bars made of local steel billet in violation of Finance Department's instructions.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority admitted that local steel/billet had been used instead of Pakistan Steel Billet. The Authority further explained that rate of steel was paid as per MRS and the Finance Department instructions were not applicable on MRS items. The Committee did not agree with reply and directed the Authority to refer the case to Finance Department for clarification within 10 days. The compliance of the Committee's directive was not reported/made till the finalization of this report.

Audit recommends recovery for using local steel.

(Para 8,12,29)

4.2.9.7 Overpayment due to higher rate - Rs 415,970

As per Finance Department notification No. RO (tech.) FD-16-47/2006 dated 24.04.2006 A & C No.6 MRS Vol-III the quantity of crush stone aggregate is to be used for 120 cft against 100 cft in P/L sub base course.

Director Engineering/Executive Engineer-III, MDA, Multan paid an item of work "P/L sub base course" for quantity 48937.64 cft. The analysis of rate of said item revealed that against carriage of 100 cft stone for sub base, 122 cft was taken instead of 120 cft.

Weak technical and financial controls resulted in overpayment of Rs 415,970 due to excess rate.

Audit pointed out the overpayment in June 2014. The Authority replied that the contract was awarded to the firm on the basis of BOQ/DNIT considering the item rate/quoted rate for laying of compacted sub base course material complete in all respect. Remarks of MRS

regarding 120 cft loose sub base material for compacted 100 cft is guideline for supply/purchase of only loose material.

The reply was not correct because the rate was not in accordance with the Finance Department's instructions.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority explained that 100% compacted item was measured and paid but reply was not supported with evidence/documentary proof i.e. Measurement Book and rate analysis of item. The Committee directed the Authority to get the record verified from Audit within 10 days. The compliance of the Committee's directive was not reported/made till the finalization of this report.

Audit recommends early recovery.

(Para 26)

4.3. Procurement and Contract Management

4.3.1 No procurements were involved in the project.

4.3.2 Civil works were executed in accordance with the approved specifications and designs and quality of the construction materials was assured by regional material testing laboratories and Road Research & Materials Testing Institute (RR&MTI) Lahore.

4.3.3 Change in the scope of work order was noticed by Audit. The same was not got approved from the competent authority before execution at site.

4.3.4 Payments to the contractors were regulated by the framework provided in Departmental Financial Rules and Department's Codes/instructions. However, some lapses in procurement were observed and agreement provisions regarding performance security/bank guarantees were also not adhered to.

4.3.5 Issues relating to non-observance of contractual obligations involving Rs 199.698 million observed during audit were as under:

4.3.5.1 Undue financial benefit due to non-obtaining of performance security - Rs 86.794 million

According to Section (h) of Memorandum of Work appended with the contract agreement read with Finance Department's Notification No. RO (TECH) FD-1-2/83 (VI) (P) dated 06.04.2005, performance security in the shape of bank guarantee will be obtained at the rate of 5% of contract amount exceeding Rs 50 million.

Director Engineering MDA Multan did not obtain/get renewal of expired performance securities from the contractors of both the schemes @ 5% of the agreement amount/tendered cost in shape of bank guarantees.

Weak contract management resulted in undue financial benefit of Rs 86,794,000 to the contractor.

Audit pointed out the irregularity in June 2014. The Authority replied that the contractor furnished performance security bond issued by Shaheen Insurance Company Ltd Karachi which was accepted by the Authority as per clause-7 of the contract agreement.

The reply was not tenable as performance bond of Shaheen Insurance Company was not valid in the first place and it also expired on 31.12.2013(Northern Bypass Phase-1) and on 01.01.2010 (Southern Phase-1) and the works were still in progress.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority explained that performance security bond was furnished by the firm in the shape of Surety Bond of Pakistan General Insurance Company Ltd. Lahore. The Committee did not accept the viewpoint of Authority and directed that the irregularity may be got condoned by Finance Department and action be taken against concerned within 10 days. The compliance of the Committee's directive was not

reported/made till the finalization of this report.

Audit recommends early condonation of irregularity besides fixing responsibility for non renewal of performance security upon the persons responsible.

(Para 5,10,30)

4.3.5.2 Non-recovery on account of compensation for delay - Rs 173.591 million

As per clause 39(a) of the contract, the time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor. The work shall throughout the stipulated period of contract be executed with all due diligence and in accordance with the approved programme of the work. The contractor shall pay compensation as liquidated damages equal to one percent of the amount of contract subject to maximum of 10% of the estimated cost stated in item (b) of memorandum of work for every day that the work remained unfinished after the target date.

The Authority awarded both schemes to be completed within contract period i.e. 24 months to the contractors. The contractors neither completed the works within stipulated period nor applied for time extension. The contractors rendered themselves liable to be penalized.

Reply was not tenable because the Authority did not impose the penalty @ 10% of the contract amount for delay in completion of work.

Weak supervisory control and poor contract management resulted in non-recovery of penalty of Rs 173,591,498 million and also caused delay in delivery of better road facilities to the public.

Audit pointed out the non-recovery in June 2014. The Authority replied that all the payments had been made to the contractor within stipulated period i.e within extended time limit by the competent authority on genuine reasons and no payment was made after stipulated period.

The reply was not tenable because the time extension was granted upto 31.10.2012 and 30.09.2013 and after that, neither any further extension had been granted nor any penalty was imposed while the work was still in progress.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority explained that contractors were granted time extension upto 31.10.2012 for Southern Bypass and extension upto 30.09.2013 for Northern Bypass and projects could not be completed due to non-availability of funds. No record i.e. cash flow statement was shown to Audit to ascertain the factual position. The Committee directed the Authority to get all the record i.e. applications of contractor, time extensions and cash flow statement verified from Audit within 10 days. The compliance of the Committee's directive was not reported/made till the finalization of this report.

Audit recommends ensuring payments to the contractors strictly in line with contract agreement and Departmental Financial Rules.

(Para 7,17,23)

4.3.5.3 Unjustified payment of price variation on crush/bajri - Rs 1.332 million

As per instructions issued by the P&D Department, Government of Punjab vide No.1 (10) RO (Tech) P&D /2012 dated 28.04.2012, no price variation would be admissible for crush stone/bajri used in bitumen carpeting work.

Director Engineering/Executive Engineer-III, MDA paid total price variation on item crush/bajri used in item "P/L plant premix bituminous carpet AC bearing & wearing base course" to the contractor amounting to Rs 1.332 million in violation of instructions of P&D Department.

Weak supervisory and financial controls resulted in unjustified payment of price variation of Rs 1,332,040 to the contractor.

Audit pointed out the unjustified payment in June 2014. The Authority replied that price variation on item crush/bajri “Providing and laying plant premix bituminous carpet” amounting to Rs 1,332,040 would be recovered from the next running bill of contractor.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority explained that recovery would be made in next running bill. The Committee directed the Authority to make recovery and get it verified from Audit. The compliance of the Committee’s directive was not reported/made till the finalization of this report.

Audit recommends for early recovery.

(Para 20)

4.3.5.4 Overpayment due to allowing escalation on the secured advance material - Rs 0.750 million

According to clause 55 (9) of contract agreement, if under the existing codal rules, secured advance is paid on all or any of the imperishable items mentioned in sub clause (2), no price variation shall be admissible to such items in respect of the quantity for which secured advance has been paid to the contractor.

Director Engineering/Executive Engineer, Division II, MDA paid price variation on steel Grade-60 for the quantity of 81.218 M.ton used in item “Fabrication of steel grade-60 reinforcement bars cage for RCC” whereas out of the consumed quantity secured advance on 66.419 M.ton had already been paid. In this way, excess price variation was paid on steel grade-60 for 66.419 M.ton.

Weak supervisory and financial controls resulted in overpayment of Rs 750,535 to the contractor (66.419 M.ton x escalation paid @ Rs 11,300 per M.ton = Rs 750,535).

Audit pointed out the overpayment in June 2014. The Authority replied that excess amount of Rs 750,535 paid to the contractor would be recovered from the next running bill.

The matter was also discussed in SDAC meeting 21.04.2016. The Authority explained that recovery would be made in next running bill. The Committee directed the Authority to make recovery and get it verified from Audit. The compliance of the Committee's directive was not reported/made till the finalization of this report.

Audit recommends for early recovery.

(Para 15)

4.4. Construction and Works

4.4.1 Site selection and land acquisition was involved as the scheme was related to construction of Northern and Southern Bypass road.

4.4.2 Design and drawings were prepared by the field engineers concerned and got vetted and approved through Planning & Design Directorate of the department from the competent authority.

4.4.3 Cost estimates of the scheme were prepared according to the approved specifications and design on the basis of MRS.

4.4.4 Tendering process as laid down in the rules was followed and the works were awarded on competitive basis after due comparison of quoted rates with the rates approved in the cost estimates.

4.4.5 Execution of works was not made as per construction schedule agreed between the employer and the contractors because the contractors had not submitted the work plan for execution of work. Progress of execution was supervised through periodic progress reports and physical inspection of works by the field engineers for ensuring both quality and quantity.

4.4.6 Issues like unjustified payment/overpayments due to non deduction of road crust, violation of approved provision and application of richer specification etc. involving payment of Rs 153.216 million, noticed during audit, were as under:

4.4.6.1 Overpayment due to non deduction of road crust - Rs 67.862 million

As per Technical Sanctioned Estimate, the quantity of road crust was required to be deducted from the total quantity of earthwork for embankment.

Director Engineering MDA, Multan did not make the deduction of road crust for quantity of 170,990 cu.m and 102205 cu.m while making measurement of the item of earthwork for embankment which was paid @ Rs 197.84 per cu.m and Rs 333 per cu.m respectively in Southern & Northern Bypass projects.

Weak supervisory and technical controls resulted in overpayment of Rs 67,862,724.

Audit pointed out the overpayment in June 2014. The Authority replied that all quantities of road crust would be deducted after making overall measurements in the next running bill on receipt of funds from the Government.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority explained that road crust would be deducted while making overall measurements in next bill. The Committee directed the Authority to make recovery and get it verified from Audit. The compliance of the Committee's directive was not reported/made till the finalization of this report.

Audit recommends for early recovery.

(Para 2,22)

4.4.6.2 Irregular payment beyond approved estimate - Rs 62.386 million

According to paras 2.7, 2.12 & 2.86 of Buildings & Roads Department Code read with Finance Department's letters dated 24.06.1996 and 29.03.2005, no change in the approved scope of work/specifications could be made without prior approval of the authority that accorded sanction to the technical estimate.

The Authority made payment for various items of work either in excess or without provision in the approved revised technical sanction estimate/administrative approval. No prior approval of the competent authority, as required under the rules, was obtained.

Weak supervisory and financial controls resulted in irregular payment of Rs 62,386,892 to the contractors.

Audit pointed out the irregularity in June 2014. The Authority replied that all the items over and above the revised T.S. Estimate had been paid after getting the approval of variation from the competent authority as per site requirement. The quantities in excess of revised T. S. estimate would be covered in the 2nd revised T.S. estimate after fulfilling the codal formalities.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority explained that all the items over and above the revised estimate would be covered in 2nd revised estimate. The payment of excess quantities of items of work beyond the provisions in revised T.S. estimate was accepted by the Authority and it stated that excess quantities would be covered in the 2nd revised estimate. The Committee directed the Authority to get the revised Administrative Approval/PC-I and get it verified from Audit within 10 days. The compliance of the Committee's directive was not reported/made till the finalization of this report.

Audit recommends for condonation of irregularity.

(Para 6)

4.4.6.3 Overpayment due to non-reduction of rate for less use of bitumen - Rs 20.102 million

As per condition No.6 of Finance Department notification No.RO(Tech) FD 2-3/2004 dated 02.08.2004, rate for an item of carpeting should be fixed by Chief Engineer on the basis of different percentages of bitumen ranging from 3% to 6%, and payment would be made to contractor as per Job Mix Formula of actual bitumen used in the work.

Director Engineering, MDA, Multan paid an item of work “P/L plant premixed bituminous carpet i/c compaction and finishing to required camber, grade and density for Asphalt base course” by taking bitumen with density of 4.0% & 4.5% instead of 3.50% & 4.1% as per JMF and laboratory test reports. Payment to the contractors was made at a higher rate without reduction of rate for less use of bitumen.

Weak supervisory and technical controls resulted in overpayment of Rs 20,102,413 (12.185 + 7.921) to the contractor.

Audit pointed out the overpayment in June 2014. The Authority replied that the payment to the contractor was made on quoted rates of the contractor.

The reply was not tenable because as per JMF and Laboratory test report, the bitumen was used @ 3.5% & 4.10% instead of 4.0% & 4.50%.

The matter was also discussed in SDAC meeting dated 21.04.2016. The Authority explained that payment to the contractor was made on quoted rate. Audit contended that reply was not relevant. The Committee directed the Authority to make recovery in next running bill. The compliance of the Committee’s directive was not reported/made till the finalization of this report.

Audit recommends for early recovery.

(Para 14,16,24,28)

4.4.6.4 Excess payment due to allowing use of bitumen in tack coat beyond approved limit - Rs 2.858 million

According to Specification No. 611-I to 611-5 of Building and Road Construction 1971, 10 to 12 lbs bitumen is to be used in the item “P/L Bituminous Tack Coat” and as per clause No.5 of Finance Department letter No. RO. (tech) FD-1-2/2007(P) dated 21.10.2009, bitumen in tack coat was required to be used 10 lbs per 100 sft instead of 15 lbs per 100 sft.

Director Engineering, MDA Multan paid an item of work “P/L bituminous tack coat using 15 lbs % sft area complete in all respect instead of using bitumen 12 lbs % sft.

Weak technical and supervisory controls resulted in overpayment of Rs 2,858,075.

Audit pointed out the overpayment in June 2014. The Authority replied that the quantity of “P/L bituminous tack coat” was incorporated @ 15 lbs % sft in approved PC-1, BOQ, technical estimate and tenders in accordance to MRS 1st qtr 2009 and the letter of Finance Department was issued on 21.10.2009, therefore it was not applicable on subject work.

The reply was not tenable because as per B&R specifications 1971, 10-12 lbs bitumen % sft was to be used in tack coat.

The matter was also discussed in SDAC meeting held on 21.04.2016. The Authority explained that Finance Department notification for use of 10 lbs bitumen was issued in October 2009 and work was awarded before October 2009. Audit contended that as per B&R specifications 1971, 10-12 lbs bitumen was to be used. The Committee directed the Authority to refer the case to Finance Department for clarification within 10 days. The compliance of the Committee’s directive was not reported/made till the finalization of this report.

Audit recommends early recovery besides fixing responsibility.

(Para 4,9,25)

4.5. Asset Management

4.5.1 Data and manual record of road network under the jurisdiction of Multan Development Authority are being maintained road-wise and location-wise as prescribed in the Department's Codes and Manuals.

4.6. Monitoring and Evaluation

4.6.1 Progress of schemes under execution was reviewed on monthly basis and quarterly basis by the Director Engineering MDA, Principal Accounting Officer (PAO) concerned and Planning & Development Department levels.

4.6.2 Internal checks such as inspections, regular monitoring, supervision by field engineers, mechanized testing/laboratory test reports of the executed works are also vital to ensure qualitative execution of work in line with the specifications and approved design. Two levels of monitoring/supervision were in place; firstly it was carried out by the RR&MTI and secondly by the supervisory engineers.

Recommendation: The management needs to augment its monitoring and supervisory role in order to ensure execution of quality work and timely delivery of desired benefits to the public.

4.7. Compliance with Grant/Loan Covenants

No donor funding was involved in the project.

4.8. Environment

4.8.1 No compliance of Section 12 of Pakistan Environmental Protection Act, 1997 was made.

4.8.2 No Environmental Impact Assessment (EIA) was carried out.

4.8.3 No environmental data and analysis thereon were available with

the department to check whether or not any remedial steps towards improvement viz-a-viz the planned results were taken or initiated by the department.

Recommendation: The management needs to carry out EIA before the start of every project.

4.9. Sustainability

4.9.1 Sustainability is an integral part of operational performance. Sustainability of the project depends mainly upon the sufficient flow of financial resources both during implementation and operation. Funding for maintenance of existing road network was generally made as per fixed yardstick i.e. an amount of Rs 176,000 per kilometer per year for 20 feet wide road. This yardstick was needed to be revised in the light of price increase in the cost of materials and labour, otherwise, the department needed to charge toll on the said road to improve funding position for up-keeping and maintaining the 20 feet wide metalled road.

4.9.2 Recurring cost will be met through annual budget provision under relevant Grant for M&R.

4.9.3 Multan Development Authority (MDA) had the required expertise and skill to operate the scheme.

Recommendation: The management needed to get the yardstick for M&R revised from the Government of the Punjab.

4.10. Overall Assessment

4.10.1 Relevance: MTDF aims to improve existing project “Construction of Northern and Southern Bypass road Multan”. The project was within overall MTDF framework and in line with Government’s sectoral policies and priorities identified for Punjab’s Road Sector.

4.10.2 Efficiency: The project was required to be completed within 24 months but after the expiry of 48 months the project was still in process. However, it was near to completion in June 2014. The major causes of

poor performance were ill-planning and poor surveys at the feasibility stage of the project clubbed with poor coordination with the stakeholders concerned.

4.10.3 Efficacy: Cost and time overruns were a permanent feature prevailing in the Multan Development Authority resulting in delays in the achievement of the project objectives/targets and delay in delivery of the desired benefits to the end users. Review of project “Construction of Northern and Southern Bypass road Multan” also indicated cost and time overruns.

4.10.4 Economy: The works were awarded through open competition on competitive rates.

4.10.5 Effectiveness: Since the project had not been completed despite lapse of more than stipulated period, the successful achievement of objectives, targets and desired results could not be analyzed and assessed.

4.10.6 Compliance with Rules: Non-adherence to provisions of agreement was a critical area which needed to be given a serious thought for improving service delivery and ensuring timely execution of quality work.

4.10.7 Performance Rating: Satisfactory.

4.10.8 Risk Rating: Medium.

5. CONCLUSION

5.1 Key Issues for the Future: Fluctuations in the prices of materials/labour as well as severe climatic conditions and inadequate funding may limit the project's/scheme's performance and achievement of objectives.

5.2 Lessons Learnt: Improper feasibility/survey and non-compliance of contractual obligations and violation of rules are critical areas to be improved.

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