

PREFACE

Madhya Pradesh Works Department Manual 1983 was adopted in this state of Chhattisgarh since its formation i.e. 1st November 2000. In view of remarkable advancement in the field of information and construction technologies, substantial rise in price indices of all construction components, and increase in budget allocations, the provisions in existing manual have become inadequate and are almost outdated. Under such conditions the revision of Manual had become essential. This Manual is termed as "The Chhattisgarh Work Department Manual 2006."

The task of revising the manual has been indeed of onerous, complicated and technical. The State government constituted a committee of secretaries and Engineer-in-Chief's of all three works department Viz Water Resources Department, Public Works Department and Public Health Engineering Department and Shri N.S. Bhadauria, Engineer-in-Chief, Water Resources Department was nominated as nodal officer. The draft was finalised by the Committee on 30th Aug. 2006. This revised manual has also been vetted by the Law Department and the finance Department.

Basically, the rules in the manual apply day to day working of all three Engineering Department viz Public Health Engineering Department, Public Work Department and Water Resources Department. The rules of the Manual can also be made applicable to other departments where the work are being carried out on the general public work pattern.

Economy, speed and quality of works are three important factors which works department are required to keep in view at each stage of the projects entrusted to them. I am confident that these ideal parameters would be achieved if proper administrative and accounting procedure provided in the Manual would be followed.

I wish, this manual will be an instrument to accelerate the speed of developmental works with quality which will ultimately improve the living standards of the people of Chhattisgarh. I record my appreciation and thanks to all the officers who have contributed in the revision and printing of this Manual.

I am privileged to present this Manual to the community, all sector partners and implementers in this field.

Dated : Sept, 2006

Raipur:

**R.P. BAGAI, IAS
CHIEF SECRETARY
GOVERNMENT OF CHHATTISGARH**

INTRODUCTION

Since the formation of the new state of Chhattisgarh it was felt that the provision in the existing Work Department Manual do not match with present scenario of fast developmental activities. The State Government, therefore, constituted a Committee for revision of Works Department Manual.

The Committee held number of meetings between August - 2002 and August, 2006. All provisions of the manual were discussed and carefully examined so as to suit present standards and conditions. A few most importance features in the revision are Introduction of Electronic Tender Management System and formation of Chhattisgarh Irrigation Projects Board (CIBP) for expeditious execution of projects. In addition to this rules and procedures have been simplified, incentives have been provided for tedious job, irrelevant portions have been removed and last but not the least all activities of development works have been transparent.

My sincere thanks to Shri N.S. Bhadauria former Engineer-in-Chief, W.R.D. for arranging regular meetings and mutual discussion which enabled the Committee to complete the Herculean task and also for proposing effective and updated proposals for qualitative and expeditious completion of projects.

The Committee wishes to place on record their deep sense of appreciation for the hard work and sincere efforts of Shri G.S. Solanki, Engineer-in-Chief, PWD and Shri R.N. Gupta, Engineer-in-Chief, PHED to enable the Committee to complete its work in spite of their heavy normal duties. The Committee also places on record its appreciation of the co-operation rendered by of Mr. Serjius Minj, former Principal Secretary, W.R.D., Shri P.Joy Oommen, Principal Secretary, P.W.D., Shri K.D.P. Rao, former Secretary, P.H.E.D., and Shri Narayan Singh, Secretary P.H.E.D. without whose cooperation and active participation the enormous task assigned to the Committee could not have been accomplished.

It is very difficult task to mention names of all concerned persons who have sincerely worked in this task of revision, however I thank all those have appeared in chapter "Acknowledgement" in later pages.

Dated : Sept, 2006

Raipur:

**VIVEK DHAND, IAS
PRINCIPAL SECRETARY
GOVERNMENT OF CHHATTISGARH
WATER RESOURCES DEPARTMENT**

ACKNOWLEDGEMENT

In bringing out the works department manual, all the shortcomings experienced in the past and application of information technology coupled with the enhancement of technical, financial and administrative powers have been considered. As a nodal officer, I would like to thank one and all who directly or indirectly have helped and without whose active support the manual would not have been possible.

I am grateful to Shri Vivek Dhand, IAS, Principal Secretary, Water Resources and Energy Department, for his valuable suggestion and guidance. It is very difficult to mention names of all concerned persons who have sincerely worked in the task of revision. However, I extend my sincere thanks for the rigorous participation to Mr. B. N. Roy, Ex.- C.T.E. & E-in-C, PHED, Mr. G.S. Solanki, E-in-C, PWD, Mr. R. N. Gupta, E-in-C, PHED, Mr. S. K. Bhaduri, Ex.- C.T.E. & E-in-C, WRD, Mr. B.S. Gupta, Technical Advisor of Public Works Department, Mr. P. S. Kshatriya, C.E., PWD, Mr. H. L. Tamrakar, S.E., WRD, Mr. V.N.V. Nair, S.E., WRD, Mr. G.M. Sheikh, E.E., WRD, Mr. K. K. Choubey, S.E., PHED, Mr. J. M. Lulu, E.E., PWD, Mr. M. L. Agrawal, E.E., PHED, Mr. Abhishek Bajpai, E.E., PHED, and Mr. G. R. Lilhare, A.E., WRD.

I am also pleased to acknowledge with thanks for active part taken by the following officers in discussion for revision of the manual :-

Water Resources Department

1.	Mr. Serjius Minj,	Principal Secretary to Govt.
2.	Mr. Vivek Dhand,	Principal Secretary to Govt.
3.	Mr. Dilip Vashnikar,	Deputy Secretary to Govt.
4.	Mr. H. V. Rathod	Engineer - In- Chief
5.	Mr. S. K. Bhaduri	Ex.- C.T.E. & Engineer - In- Chief
6.	Mr. S. K. Sarkar	Chief Engineer
7.	Mr. P. R. Agrawal	Chief Engineer
8.	Mr. K. G. Gupta	Superintending Engineer (Incharge C.E.)
9.	Mr. H. L. Tamrakar	Superintending Engineer (Incharge C.E.)
10.	Mr. J. K. Kukkal	Superintending Engineer (Incharge C.E.)
11.	Mr. R. Patel	Superintending Engineer (Incharge C.E.)
12.	Mr. H. C. Shukla	Superintending Engineer (E&M)
13.	Mr. V. N. V. Nair	Superintending Engineer (O.S.D.)
14.	Mr. H. U. Khan	Superintending Engineer
15.	Mr. G. K. Shrivastava	Superintending Engineer
16.	Mr. G. M. Sheikh	Executive Engineer (Incharge S.E.)
17.	Mr. S. B. Soni	Executive Engineer
18.	Mr. S. R. Gupta	Executive Engineer

19.	Mr. V. R. Bhure	Assistant Engineer
20.	Mr. G. R. Lilhare	Assistant Engineer
21.	Mr. R. P. Soni	Assistant Engineer
22.	Mr. Rajiv Mishra	Assistant Engineer
23.	Mr. Sanjay Gupta	Assistant Engineer

Public Works Department

1.	Mr. P. Joy Oommen	Principal Secretary to Government
2.	Mr. Anil Roy	Special Secretary
3.	Mr. B. S. Gupta	Advisor to Government
4.	Mr. G. S. Solanki	Engineer - In- Chief
5.	Mr. S. K. Shrivastava	O.S.D.
6.	Mr. P. S. Kshatriya	Chief Engineer
7.	Mr. A. K. Tiwari	Superintending Engineer (Incharge C.E.)
8.	Mr. B. M. Chaudaha	Superintending Engineer (Incharge C.E.)
9.	Mr. A. K. Sexena	Superintending Engineer
10.	Mr. J. P. Gupta	Superintending Engineer
11.	Mr. Sarfaraj Ahmand	Superintending Engineer
12.	Mr. J. M. Lulu	Executive Engineer
13.	Mr. R. K. Goyal	Executive Engineer
14.	Mr. D. K. Agrawal	Executive Engineer
15.	Mr. R. K. Verma	Executive Engineer
16.	Mr. A. K. Chakravarty	Executive Engineer

Public Health Engineering Department

1.	Mr. Narayan Singh	Secretary to Government
2.	Mr. K.D.P. Rao	Secretary to Government
3.	Mr. B. N. Roy	Ex.-CTE & Engineer - In- Chief
4.	Mr. R. N. Gupta	Engineer - In- Chief
5.	Mr. K. K. Choubey	Superintending Engineer
6.	Mr. M. L. Agrawal	Executive Engineer
7.	Mr. J. K. Sharma	Executive Engineer
8.	Mr. Abhishek Bajpai	Executive Engineer

N.S. BHADAURIA
ENGINEER-IN-CHIEF
WATER RESOURCES DEPARTMENT
CHHATTISGARH, RAIPUR

ABBREVIATION

A.E.	Assistant Engineer
A.G.	Accountant General
A.G.II	Assistant Geohydrologist
A/R	Annual Repairs
A.R.O.	Assistant Research Officer
B.M.	Bench Mark
C.C.A.	Culturable Command Area
C.D.C.	Canal Deputy Collector
C.E.	Chief Engineer
C.E.A.	Central Electricity Authority
Cm.	Centimetre
C.P.W.A.	Central Public Works Accounts
C.S.	Civil Surgeon
S.O.R.	Schedule of Rates
C.W.C.	Central water Commission
C.T.E.	Chief Technical Examiner
cumec.	Cubic metre per second
D.A.	Divisional Accountant/Daily Allowance
Dept.	Department
D.G.S.& D.	Director General of Supplies and Disposals
D.M.	District Magistrate
D.S.C.	Departmental Selection committee
E.E.	Executive Engineer
e.g.	exempli gratia/ for example
E.I.	Embankment Inspector
E-in-C	Engineer-in-Chief
E/M	Electrical Mechanical
F.D.	Finance Department
Fin.	Financial
F.R.L.	Full Reservoir Level
G.A.D.	General Administration Department
G.B.C.	General Book Circular
G.T.S.	Geodetic Traverse Survey
ha.	hectare
h.p.	horse power
W.R.D.	Water Resources Department
I.I.	Irrigation Inspector
I.S.	Indian Standard
km.	kilometre
L.D.C.	Lower Division Clerk
L.O.C.	Letter of Credit
L.P.C.	Last Pay Certificate
M.B.	Measurement Book

m.	Metre
C.G.	Chhattisgarh
C.S.E.B.	Chhattisgarh State Electricity Board
N.I.T.	Notice Inviting Tender
No.	Number
Paras.	Paragraphs
P.C.	Purchase Committee
P.H.E.D.	Public Health Engineering Department
P.O.L.	Petrol, Oil and Lubricant
P.R.C.	Progress Reviewing Committee
P.W.A.F.	Public Works Accounts Form
P.W.D.	Public Works Department
R.A.	Research Assistant
R.R.C.	Revenue Recovery Certificate
Rs.	Rupees
R.D.	Revenue Department
R.L.	Reduced level
R.C.C.	Reinforced Cement Concrete
S.B.I.	State Bank of India
S.D.C.	Sub-Divisional Clerk
S.D.O.	Sub-Divisional Officer
S.E.	Superintending Engineer
S.K.	Store -keeper
S.No.	Serial number
S.O.	Section Officer
S.R.	Supplementary rules
S. & S.	Survey and Settlement
T.A.	Travelling Allowance
T.O.	Treasury Officer
S.O.R.	Schedule of Rates
V.I.P.	Very Important Person
Vol.	Volume
viz.	Videlicet/namely
W.B.M.	Water Bound Meccadam
W.D.	Works Department ,i.e. P.W.D., P.H.E.D., W.R.D.

CONTENTS

Section No.	Subject	Paragraph Nos.		
CHAPTER I - ESTABLISHMENT				
1.	Applicability	1.001		
2.	Functions of Departments	1.002		
3.	Organisational Set-up	1.003	to	1.010
4.	Administrative Structure	1.011	to	1.016
5.	Classes of Establishment	1.017	to	1.021
6.	Categories of Posts	1.022	to	1.024
7.	Appointments, Promotions, Confirmation and Gradation List	1.025	to	1.032
8.	Transfer of Government Servants	1.033	to	1.041
9.	Code of Conduct	1.042		
10.	Confidential Reports	1.043	to	1.044
11.	Special Pay and Allowances	1.045	to	1.047
12.	Leave	1.048	to	1.049
13.	Pension	1.050		
14.	Security from Government Servant Working as Storage keepers and Cashiers	1.051		
15.	Examinations	1.052	to	1.059
16.	Training to Personnel of Works Department	1.060	to	1.068
17.	Office Arrangements	1.069	to	1.087
18.	Miscellaneous	1.088	to	1.128
19.	Duties and Powers	1.129	to	1.130
20.	Work Charged Establishment and Contingency Paid Employees	1.131	to	1.134
CHAPTER II - WORKS				
1.	Classification of Operations	2.001	to	2.002
2.	General Rules Regarding Administrative Approval Technical Sanction and Appropriation	2.003	to	2.007
3.	Detailed Procedure for the Grant of Administrative Approval, Technical Sanction and Appropriation of Funds for Major, Minor and Petty Works	2.008	to	2.024
4.	Preparation of Schemes for Works	2.025		
5.	Procedure for Surveys and Investigation of Irrigation Works	2.026		
6.	Rates	2.027	to	2.029
7.	Selection of Site for Buildings	2.030	to	2.034
8.	Preparation of Schemes for Roads	2.035		

Section No.	Subject	Paragraph Nos.		
9.	Repairs to Buildings	2.036	to	2.042
10.	Repairs to Roads	2.043	to	2.055
11.	Repairs to Irrigation Works	2.056	to	2.059
12.	Repairs to Special Type of Works of P.H.E.D.	2.060	to	2.063
13.	Special Instructions Regarding Bridges and Cross Drainage Works	2.064	to	2.074
14.	Tenders	2.075	to	2.087
15.	Contract Agreements	2.088	to	2.095
16.	Registration of Contractors	2.096	to	2.102
17.	Acquisition of Land	2.103	to	2.116
18.	Sale and Disposal of Land	2.117	to	2.119
19.	Execution of works	2.120	to	2.129
20.	Supplementary and Revised Estimate	2.130	to	2.135
21.	Accidents	2.136	to	2.143
22.	Hutting, Sanitary and Medical Arrangements for Labourers	2.144	to	2.145
23.	Jail Works	2.146	to	2.155
24.	Execution of Public Works by Officers of Other Departments	2.156	to	2.161
25.	Deposit Works	2.162	to	2.173
26.	Works of Other Departments Executed by the W.D.	2.174	to	2.175
27.	Completion Reports, Certificates and Plans	2.176	to	2.184
CHAPTER III - BUILDINGS				
1.	Definition and Classification of Public Buildings	3.001	to	3.002
2.	Additions and Alterations Public Buildings	3.003	to	3.006
3.	Capital Cost of Buildings	3.007		
4.	Occupation of Public Buildings by Private Persons, etc.	3.008	to	3.012
5.	Residences for Government Officials	3.013	to	3.020
6.	Rent Rules	3.021	to	3.031
7.	Purchases and Sale of Buildings	3.032	to	3.040
8.	Hire of Buildings	3.041	to	3.042
9.	Fixtures and Furniture	3.043		
10.	Circuit Houses, Rest Houses and Inspection Bungalows/Hunts	3.044	to	3.058
11.	Municipal Taxes on Public Buildings	3.059	to	3.061
12.	Conservation of Ancient Monuments	3.062		

Section No.	Subject	Paragraph Nos.		
13.	Inspection of Public Buildings	3.63	to	3.067
14.	Register of Buildings	3.068	to	3.072
15.	Miscellaneous Rules Regarding Public Buildings	3.073	to	3.085
CHAPTER IV - ACCOUNTS OF WORKS AND STORES				
1.	Initial Records of Accounts	4.001	to	4.033
2.	The Taking and Checking of Measurements	4.034	to	4.045
3.	Register of Bills of Suppliers	4.046		
4.	Payments of Bills	4.047	to	4.051
5.	Note Books	4.052	to	4.053
6.	Cheque Books and Receipt Books	4.054	to	4.055
7.	Indent Books and Disposal of Counterfoils	4.056		
8.	Bank Drafts	4.057	to	4.058
9.	Custody of Cash	4.059	to	4.064
10.	Imprests	4.065	to	4.069
11.	Stores	4.070	to	4.0.91
12.	Instructions for the Preparation and Check of Road Material Returns	4.092	to	4.112
13.	Instructions Concerning the Inspection of Circle/Division/Sub-Division Offices	4.113	to	4.118
14.	Recruitment of Labour Departmentally and its Employment	4.119	to	4.127
15.	Rules Relating to Budget Estimates of Work Departments	4.128	to	4.157
CHAPTER V - ELECTRICAL AND MECHANICAL				
1.	E/M Formation and Structure	5.001	to	5.004
2.	The Responsibilities of the C.E. E/M	5.005		
3.	Inspection of Plants, Machines and Electrical/Mechanical works	5.006	to	5.010
4.	Plant Planning, Selection, Procurement and Purchase of Equipment	5.011	to	5.014
5.	Checking of Measurements	5.015		
6.	Utilisation and Deployment of Plant and Machinery	5.016	to	5.022
7.	Hourly Use Rates	5.023	to	5.026
8.	History Sheets of the Machines	5.027	to	5.029
9.	Log Books of Machines / Vehicles	5.030	to	5.036
10.	Repairs to Machines	5.037	to	5.043
11.	Cannibalisation	5.044		

Section No.	Subject	Paragraph Nos.		
12.	Spillway Outlet and Regulator Gates	5.045		
13.	Financial Powers in Respect of Electrical / Mechanical Works	5.046		
14.	Hiring of Machines	5.047	to	5.048
CHAPTER VI - QUALITY CONTROL IN IRRIGATION PROJECTS				
1.	General	6.001	to	6.002
2.	Stages of Control	6.003	to	6.006
3.	Means of Quality Control	6.007	to	6.010
4.	Test Procedures of Quality Control	6.011	to	6.014
5.	Organisational Set -up	6.015		
6.	Duties and Functions	6.016	to	6.023
CHAPTER VII- RESPONSIBILITIES DURING INVESTIGATION AND CONSTRUCTION OF IRRIGATION PROJECTS				
1.	General	7.001		
2.	Investigation	7.002	to	7.008
3.	Preparation of Project Reports	7.009		
4.	Land Acquisition	7.010		
5.	Inspection and Control During Construction	7.011	to	7.018
6.	First Filling of Reservoirs	7.019		
CHAPTER VIII - OPERATION AND MAINTENANCE OF IRRIGATION WORKS				
1.	Maintenance of Head works and Canal	8.001	to	8.013
2.	Operation of Head Works and Canal	8.014	to	8.015
3.	Periodical Inspection of Irrigation Works	8.016	to	8.019
CHAPTER IX - MISCELLANEOUS				
1.	Care and Maintenance of Steam Plant	9.001	to	9.010
2.	Repairs and Up Keep of Machinery	9.011	to	9.014
3.	Hiring of plant and Machinery to Contractors	9.015	to	9.016
4.	Hiring of plant and Machinery to Other Government Departments, Semi - Government Organisations/Local Bodies.	9.017	to	9.018
5.	Levy of Royalty on Construction Materials	9.019		
6.	Sale of Natural Miscellaneous Produce Obtained from Road or Canal Lands in charge of the Works Department	9.020	to	9.024
7.	Military Encamping Grounds	9.025	to	9.030

Section No.	Subject	Paragraph Nos.		
8.	Transportation of Heavy Machinery on W.D. Roads	9.031		
9.	Miscellaneous Instructions	9.032	to	9.036
10.	Law Suits and Law Charges	9.037		
11.	Destruction of Accounts and other Records	9.038	to	9.041
12.	Tolls on Bridges and Ferries	9.042	to	9.045
13.	Executive Instructions for the Management of Public Ferries	9.046		
14.	Registration and Stamping of Leases	9.047	to	9.050
15.	Encroachments on Government Land in Charge of the W.D.	9.051	to	9.053
16.	Expenditure on Hutting During outbreak of Epidemic	9.054		
17.	Femine Tools and Plants	9.055		
18.	Custody of Explosives	9.056		
19.	Chief Technical Examiner	9.057		