CHAPTER-I

1. INTRODUCTION

- **1.1** Work Study on "Review of engineering works staff of Bhopal division" has been taken as a "Crash work Study" for the year 2018-19.
- 1.2 'Works' wing is a part of Engineering Department, and a large manpower is engaged in various categories in this department, which can be broadly categorized as Unskilled, Skilled, Highly Skilled. These staffs are utilized for maintenance of residential, service and welfare buildings, roads and water supply arrangements.

1.3 Activities

The activities of the 'Works' department can be broadly classified into-

- a- Execution work.
- b- Field work, and
- c- Ancillary or Allied work.

The work includes maintenance of the following:

- a- Service buildings.
- b- Residential & welfare buildings.
- c- Roads, circulation areas.
- d- Gardens/Playgrounds/Lawns.
- e- Water drainage/ Sewage disposal.
- f- Platforms in Passenger & goods yards.

1.4 Procedure for working:

The maintenance/creation of new assets is carried out with the help of the following types of works

- **a-Revenue work**: Works carried out with the help of departmental staff, looked after by 'Works' staff.
- **b-Estimated work:** Works entrusted to outside contractors, under the supervision of 'WORKS' Staff.

Major works are entrusted to by Zonal contract whereas minor repairs (Petty repairs) are done departmentally.

CHAPTER-II

2. 'WORKs' STAFF OF BHOPAL DIVISION.

2.1 Bhopal division spread over from Khandwa to Bina, Bina-Guna-Ruthiyai-Maksi, Guna-Shivpuri-Gwalior section, BIR-KNW section and MKC-UJN section details of these sections is as following.

Section	KMs	Line
Khandwa-Itarsi Section	183.42	Double Line
Itarsi-Bhopal Section	96.70	Double Line
Bhopal-Bina Section	138.37	Double Line
Bina-Guna-Ruthiyai-Makshi Section	332.36	Single Line
Guna-Shivpuri-Gwalior Section	227.05	Single Line
Bir-Khandwa Section	33.41	Single & Double Line
Makshi-Ujjain Section	44.88	Single Line

To maintain the above length of track, following staff are deployed.

- 2.2 Apart from maintaining the Railway assets and ancillary works to be carried out, for which a large number of staff are provided for this department, most of the portion of workload of 'Works' staff is being out sourced under "Zonal Contracts"
- 2.3 Sanctioned strength, men on roll and vacancy position of Group 'D' Works' staff working under IOWs of Bhopal division is as under-

S.N	Category	Grade Pay	Sanctioned Strength	Men On Roll	Vacancies
1	Helper	1800	575	492	83
2	Watchman	1800	45	41	04
3	Safaiwala	1800	13	43	0
	Total		633	576	87

Thus it may be seen from the above 633 sanctioned posts, 576 men are on roll and 87 posts are lying vacant.

2.4 WORKLOAD

IOW staff is performing duties both in the office and field. These duties are broadly classified as –

- (i) Executive works
- (ii) Store works
- (iii) Establishment/Office work

2.5 EXECUTIVE WORKS

Inspection and maintenance of-

- (i) Service buildings
- (ii) Staff quarters
- (iii) Welfare buildings
- (iv) Roads
- (v) Drainage system
- (vi) Water supply arrangements
- (vii) Removal of encroachment

In the existing pattern, the maintenance work is divided as

- (i) Revenue work
- (ii) Estimate work

Revenue work is looked after by 'Works' staff with the help of departmental staff and estimated work is entrusted to contractors under the supervision of themselves.

2.6 STORE WORKS

Man power of the depot is also utilized in stores work like as maintenance of registers for receipts and supply of material required in maintenance work.

2.7 ESTABLISHMENT WORK

'Works' staff has to maintain various type of record and registers regarding wages and other 'Personnel' matters of the staff. He also issues Pass/ PTOs to employees.

2.8 Zonal contract in operation for petty repair works at BHOPAL division in following fields (which is less than Rs. 2 lakhs):

- 1. White Washing
- 2. Colour Washing
- 3. Distempering
- 4. Acrylic Emulsion
- 5. Painting of Doors/windows
- 6. Repairs of flooring
- 7. Repairs of brick/stone mason
- 8. Repair of Sanitary Fitting/Water supply
- 9. Repairs of Doors & Windows
- 10. Septic Tank/Water Tank cleaning
- 11. Repairs of Drain & Debris
- 12. Repairs of fencing
- 13. Repairs of leaking roof/GI Sheet
- 14. Miscellaneous

2.9 Critical Analysis:-

- *Outsourcing of major maintenance in work department, thereby reducing the departmental work.
- * Outsourcing the formation/maintenance of road except approach road of level X-ing at road side stations, also reducing the departmental work.
- * Replacement of wooden articles like doors, windows, almirah and furniture etc. by iron and steel, which has reduced the maintenance considerably.
- * Staff is utilized as Watchmen. The requirement of Watchmen seems to be justified but this activity may also be given on contract.
- * Pattern of working as well as utilization of 'Works' staff is not very effective to attend any complaint. Proper planning and effective supervision will definitely improve a lot of productivity.
- * Multi Skilling of Artisan Staff: Multi skilling should be encouraged for artisans and the following combinations of skills can be considered: Plumber cum mason, Carpenter cum mason, Fitter cum welder.

Since, the maintenance work requires multi skilled artisans, to avoid delays for want of other skilled man, it is necessary that multi skilling for artisans should be introduced.

As per RB letter no. E(MPP)2016/1/59 dtd 10.01.2017, Multi-skilling can be planned from the initial stage itself in new activities in Depot. The new activities even in the older establishments can be encouraged by calling for suggestion from employees and employee Unions. This will lead to huge reduction in costs and increased productivity. Multi skilling should be encouraged for artisans' category. To avoid delays for want of other skilled man, it is necessary that multi skilling for Artisans should be introduced.

Engineering staff are required to maintain track, service buildings, staff quarters and bridges.

A lot of works arise on Engineering department, have been given on contract. Due to implementation of outsourcing of various activities, the requirement of engineering staff has been reduced.

In light of above facts, the requirement of 'Works' staff has been reduced, hence vacant posts = 87 posts may be surrendered.

2.10 Recommendation:

With a view to achieve economy, it is recommended to surrender 87 vacant posts of 'Works' section of engineering department, immediately.

CHAPTER-III

3 FINANCIAL IMPLICATION

Financial implication on surrender of 87 vacant posts of 'Works' section of Engineering department of Bhopal division is as under-

Particular	Amount
Mean of grade	37,450
DA@7%	2622
Transportation	1800
Salary Per Month	41,872
X 12 = Per annum	5,02,464
X No. of posts (87)	4,37,14,368
Say	4.37 Crore

Say Rs. 4.37 Crores Per Annum

INDEX

TABLE OF CONTENT

Sr.No.	Contents	Page
		No.
Chapter -I	Introduction	-1-
Chapter-II	'Works Staff of Bhopal divn.	2 - 4
Chapter-III	Financial Implication	-5-