



**EAST CENTRAL RAILWAY**

**WORK STUDY REPORT**

**To assess the utility of Mason, Painter, Plumber, Carpenter &  
chowkidar of Engg. Department  
of Samastipur Division**

**EFFICIENCY CELL**

**EAST CENTRAL RAILWAY**

**HAJIPUR**

**STUDY NO. ECR/EFF./WSR/SPJ/20-21/04**

REVIEW  
OF  
STAFF STRENGTH  
OF  
MASON, PAINTER, PLUMBER, CARPENTER & CHOWKIDAR OF ENGINEERING  
DEPARTMENT  
WORKING  
AT  
SAMASTIPUR DIVISION  
(ECR/Effi/WSR/SPJ/20-21/04)

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WORK-STUDY CELL

East Central Railway

HAJIPUR

## EXECUTIVE SUMMARY

Study No.	(ECR/Effi/WSR/SPJ/20-21/04)
Subject	REVIEW OF STAFF STRENGTH OF MASON, PAINTER, PLUMBER, CARPENTER & CHOWKIDAR OF ENGINEERING DEPARTMENT WORKING AT SAMASTIPUR DIVISION .
Area	SAMASTIPUR
Division	SPJ
Department	ENGINEERING .
Terms of Reference	Assessment of Man Power requirement
Total No. of Recommendations	01
No. of posts recommended for surrender	10
Financial Implication	76.62 Lakh
Month of Circulation	AUGUST 2020

## INDEX

Sr. No.	Content	Reference	
		Page No.	
1	Terms of Reference and Methodology Adopted	01	-
2	Synopsis	02	-
3	<u>Chapter I</u> – Introduction	03	-
4	<u>Chapter II</u> – Present Status	04	06
5	<u>Chapter III</u> - Critical Analysis	07	08
6	<u>Chapter IV</u> – Recommendation	09	-
7	<u>Chapter V</u> – Financial Implication	10	-
8	<u>Chapter VI</u> – Summary	11	-
9	Annexure	12	-

## **TERMS OF REFERENCE**

The study has been conducted under the following terms of references:

- a) To review staff strength vis-à-vis workload of Engineering Department of Samastipur Division with a view to identify the surplus manpower in different section.
- b) To assess the effective utilization of Mason, Painter, Plumber, Carpenter & Chowkidar working in Engineering Department of Samastipur Division.
- c) To suggest ways and means to improve working of Mason, Painter, Plumber, Carpenter & Chowkidar in Engineering Department of Samastipur Division .

## **METHODOLOGY ADOPTED**

The following techniques have been applied to conduct the study:-

- i) Data collection and its critical analysis to arrive on factual status of present working.
- ii) Reassessment of manpower requirement by applying on need base.
- iii) Discussion with Sr.DEN(Co-ord)/SPJ
- iv) Discussion with ADEN/SPJ, ADEN Land/SPJ, AEN I&II DBG, AEN/NKE, AEN /BMKI & AEN/SHC.
- v) Discussion with SSE/P.Way & SSE(W) of SPJ Division.

## SYNOPSIS

1. In Railways, the process of absorption of modernization has been started and still in progress in every sphere of system. These technological up gradations have shown considerable improvement in the efficiency and manpower productivity in Railways.
2. Keeping in view, all these constraints, the Work Study Cell was assigned to conduct work study of staff strength of Mason, Painter, Plumber, Carpenter & Chowkidar of Engineering Department of Samastipur Division with a view to assess the staff requirement as per the existing workload .
3. Mason, Painter, Plumber, Carpenter & Chowkidar of Engineering Department also plays a vital role in Indian Railways and leads in performance of any Zonal Railway. At present 87 men are working against Sanction Strength 130 in Engineering Department of Samastipur Division as on Sr.DEN(Co-ord) letter no- WE/283/BOS-III/2020-21/W-6/89 dt. 18.08.2020

## **Chapter-I**

### **INTRODUCTION**

Benchmarking is a continuous process of comparing different units and identifying which one is the best in the business and then learning how this excellence was achieved and setting out to improve the efficiency of those units, which were behind. If this concept is implemented it will result large reduction in the cost and make significant contribution in improving the efficiency of various divisions of Railways, but Samastipur Division has not infrastructure developed than other Division of Indian railway. Hence, reassessments of man power on need base is done.

Mason work, Painting work, Plumbing work, Carpentry work & Chowkidary are done by Mason, Painter, Plumber, Carpenter & chowkidar of Engg. Department of Samastipur Division. Mason, Painter, Plumber, Carpenter & Chowkidar are under control of Sr.DEN(Co-ord) and assisted by Sr.DEN, DEN, AEN and other staff. At present overall 87 Mason, Painter, Plumber, Carpenter & chowkidar are working against the Sanction Strength 130 in Engineering Department of Samastipur Division.

The working culture of Mason, Painter, Plumber, Carpenter & chowkidar are different, the bench marking norm is difficult for calculation of staff. The work study team observed that need base is best option for calculation of staff. Competent Authority has approved a Work Study on "Review of staff strength of Mason, Painter, Plumber, Carpenter & Chowkidar of Engineering Department of Samastipur Division.

## CHAPTER-II

**2.1 Work Load:** - Mason, Painter, Plumber, Carpenter & Chowkidar of Engineering Department of Samastipur Division is divided into the following sections with the job entrusted to:-

Sl.No.	P.Way Section
01	SSE/ P.Way /SPJ
02	SSE/ P.Way /DBG
03	SSE/ P.Way /BMKI
04	SSE/ P.Way /SHC
05	SSE/ P.Way /KGG at SHC
06	SSE/ P.Way /E/NKE
07	SSE/ P.Way /W/NKE
08	SSE/ P.Way /RXL
09	SSE/ P.Way /JNR
10	SSE/P.Way/JJP
11	SSE/P.Way/SKI
12	SSE/P.Way/SGL
13	SSE/P.Way/HPO
14	SSE/P.Way/TD/SPJ
15	SSE/P.Way/BNKI
16	SSE/P.Way/RGV
<b>WORKS Section</b>	
01	SSE/W/South SPJ
02	SSE/W/North / SPJ
03	SSE/W/Line
04	SSE/WS/SPJ
05	SSE/W/BNKI
06	SSE/W/RGV
07	SSE/W/SHC



08	SSE/W/DBG
09	SSE/W/MBI
10	SSE/W/JJP
11	SSE/W/RXL
12	SSE/W/NKE
13	SSE/W/BMKI
14	SSE/W/SGL
15	SSE/BRI/SPJ

Sl.No.	DRM &ADEN office
01	DRM office
02	ATEN /SPJ
03	ADEN/SPJ
04	ADEN/I/DBG
05	ADEN/II/DBG
06	ADEN/BMKI
07	ADEN/NKE
08	ADEN/SHC

2.2 Duties of Mason:- A large number of Building office stations are repaired by Mason.

2.3 Duties of Painter:- A large number of equipments are paint by painter.

2.4 Duties of Plumber:- A large number of pipe fitting work are done by plumber.

2.5 Duties of Carpenter:- A large number of repairing of doors and windows of quarters and office are done by carpenter.

2.6 Duties of Chowkidar:- A large number of equipment items, assets of railway has been kept in store of P.WAY, IOW & BRI units and office of DRM & ADEN/ATEN. Chowkidar is utilized for look after of store.

## **CHAPTER-III**

### **2.0.0 CRITICAL ANALYSIS, REQUIREMENT OF STAFF VIS-À-VIS WORK LOAD AND RECOMMENDATIONS:**

2.1.0 Mason, Painter, Plumber, Carpenter & Chowkidar of Engineering Department of Samastipur Division is working under control of Sr. DEN(Co-ord)/SPJ. To arrive at a factual conclusion on requirement of Mason, Painter, Plumber, Carpenter & Chowkidar in Engineering Department of Samastipur Division, the work study team collected workload of all activities. For calculation of manpower required, the team applied on spot observations and discussions at various levels and applied on need base.

Since manpower is the biggest component of the expenditure of Indian Railway, rightsizing of manpower to reduce unit costs is an effective way to increase efficiency of Indian Railway.

There is no specific yardstick for measuring workload of Mason, Painter, Plumber, Carpenter & Chowkidar of Engineering department of Samastipur division. It is very difficult to assess the efficiency of Mason, Painter, Plumber, Carpenter & Chowkidar of Engineering department of Samastipur Division, different sections are established in different important station.

### 2.2.1 Staff cadre in Division:-

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Sl NO	Category	Scale	Grade pay	S S	Men on Roll	Vacancy
1.	Mason (MCM)	9300-34800	4200	05	01	04
2.	Mason (Gr.I)	5200-20200	2800	09	01	08
3.	Mason (Gr.II)	5200-20200	2400	01	04	+3
4.	Mason (Gr.III)	5200-20200	1900	03	01	02
5.	Painter (MCM)	9300-34800	4200	07	04	03
6.	Painter (Gr.I)	5200-20200	2800	13	00	13
7.	Painter (Gr.II)	5200-20200	2400	02	04	+2
8.	Painter (Gr.III)	5200-20200	1900	03	03	00
9.	Plumber (MCM)	9300-34800	4200	02	00	02
10.	Plumber (Gr.I)	5200-20200	2800	01	00	01
11.	Plumber (Gr.II)	5200-20200	2400	00	01	+1
12.	Plumber (Gr.III)	5200-20200	1900	01	00	01
13.	Carpenter (MCM)	9300-34800	4200	05	05	00
14.	Carpenter (Gr.I)	5200-20200	2800	13	00	13
15.	Carpenter (Gr.II)	5200-20200	2400	02	05	+3
16.	Carpenter (Gr.III)	5200-20200	1900	05	02	03
17.	Chowkidar	5200-20200	1800	58	56	02

## CHAPTER IV

### RECOMMENDATION

As there is no yardstick for calculation of Mason, Painter, Plumber, Carpenter & Chowkidar, the work study team has made its assessment of staff on the need base, it is observed that at present 10 posts of Mason, Painter, Plumber, Carpenter & Chowkidar is excess than requirement.

**Total Sanction Strength = 130**

**Total Men on Roll = 87**

**Total Vacant post =43**

**Total Staff required =120**

**Exceeds post =130-120=10 Staff**

After going through the requirement of Mason, Painter, Plumber, Carpenter & Chowkidar, the work study team observed that the 10 posts of Mason, Painter, Plumber, Carpenter & Chowkidar may be recommended for surrender and financial saving will be 76.62 Lac per annum. The work is going on without any hindrance.

## CHAPTER - V

### FINANCIAL SAVINGS:-

If the recommendation of the study report is implemented, the annual recurring financial savings will be as under:

SL. No.	Category	Scale of pay (Rs.)	Grade pay	Level	No. of post	Mean pay per year per staff (Rs.)	Annual financial savings in Lacs (Rs.)
1.	Mason	19900-63200	1900	02	01	583368	583368
2.	Painter	29200-92300	2800	05	03	852936	2558808
3.	Plumber	19900-63200	1900	02	01	583368	583368
4.	Carpenter	29200-92300	2800	05	04	852936	3411744
5.	Chowkidar	5200-20200	1800	01	01	525804	525804
	Total				10		7662092 i.e. 76.62 lacs

## CHAPTER VI

### Summary:-

After critically examining the work load of Mason, Painter, Plumber, Carpenter & Chowkidar of Engineering Department of Samastipur Division, the work study team proposes as below:-

S.No.	Designation	BOS	Requirement as per WS	Proposed surrender	Remark
01	Mason	18	17	01	01 vacant post may be Surrendered.
02	Painter	25	22	03	03 vacant posts may be Surrendered
03	Plumber	04	03	01	01 vacant post may be Surrendered
04	Carpenter	25	21	04	04 vacant posts may be Surrendered
05	Chowkidar	58	57	01	01 vacant post may be Surrendered
Total		130	120	10	

### Annexure -I

Staff position of Mason, Painter, Plumber, Carpenter & Chowkidar of Engineering Department of Samastipur Division as on 18.08.2020

Sl NO	Category	Scale	Grade pay	S S	Men on Roll	Vacancy
1.	Mason (MCM)	9300-34800	4200	05	01	04
2.	Mason (Gr.I)	5200-20200	2800	09	01	08
3.	Mason (Gr.II)	5200-20200	2400	01	04	+3
4.	Mason (Gr.III)	5200-20200	1900	03	01	02
5.	Painter (MCM)	9300-34800	4200	07	04	03
6.	Painter (Gr.I)	5200-20200	2800	13	00	13
7.	Painter (Gr.II)	5200-20200	2400	02	04	+2
8.	Painter (Gr.III)	5200-20200	1900	03	03	00
9.	Plumber (MCM)	9300-34800	4200	02	00	02
10.	Plumber (Gr.I)	5200-20200	2800	01	00	01
11.	Plumber (Gr.II)	5200-20200	2400	00	01	+1
12.	Plumber (Gr.III)	5200-20200	1900	01	00	01
13.	Carpenter (MCM)	9300-34800	4200	05	05	00
14.	Carpenter (Gr.I)	5200-20200	2800	13	00	13
15.	Carpenter (Gr.II)	5200-20200	2400	02	05	+3
16.	Carpenter (Gr.III)	5200-20200	1900	05	02	03
17.	Chowkidar	5200-20200	1800	58	56	02