

# **SOUTH WESTERN RAILWAY**



## **Work Study Report**

**On**

**“Review of Staff Strength of SSE/WORKS units in Engineering  
Department of Hubli Division”**

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## I N D E X

## **ACKNOWLEDGEMENT**

The Work-Study Team is thankful to Shri. **P. K. JHA** ADRM/UBL, Shri. **T.V. Bhushan**, Sr. DEN/Co-ord/UBL and concerned branch officers for their guidance during the Work-study.

The Work-Study team is also thankful to all the supervisory staff for their co-operation in carrying out the Work-Study effectively.

## **SYNOPSIS**

Work-Study on “Review of staff strength of SSE/Works of UBL division was conducted. The total sanctioned staff strength of SSE/Works is **446** posts against which **380** incumbents are available, as per BOS of 1/4/2018 and actual men on Roll as per the data submitted by SSE/JE’s Works there are **66** vacant posts over UBL division. (**446 - 380 = 66 vacant posts**)

The data collected was evaluated as per Indian Railway Benchmarking, current IR average and general principles of work-study. After critical examination with the existing pattern of work, work study team opines that the requirement of staff under SSE/Works is **396** duly applying Railway Board Benchmarking report of JAN-2019 i.e. **0.4 men** per ITKM of plinth area if less than 750 ITKM ) against the sanctions of **446 posts**.

Hence (**446 - 396 = 50** posts) are found surplus to the requirement in the units of SSE/JE’s Works over UBL division.

The existing vacancies in Technicians category are essential for Works cadre, hence Work study team recommend for surrender of **50 posts in Group “D”** in SSE/JE’s Works units over UBL division.

Optimisation of manpower results in improvement of work culture, and increase productivity.

## **TERMS OF REFERENCE**

As per the instructions of AGM/SWR, a study for “Review of staff strength of SSE/Works Engineering department in UBL division has been carried out.

## **METHODOLOGY**

- Collection of data from site.
- Discussions with field officials and staff.
- Benchmarking / Critical Analysis.

## **SUMMARY OF RECOMMENDATIONS**

The work–study team collected the details of staff strength from the office of Sr.DPO/UBL and actual staff of roll and plinth area particulars for respective SSSE/JE of their field units. The work study team critically analyzed the requirement of staff based on the data collected duly applying Indian Railway Benchmark & current IR average of July -2017 and general principal of work study.

BOS OF 1/4/2018 of SSE/W/units of UBL division is enclosed as **Annexure -I**.

Actual staff of roll collected for respective SSSE/JE of their field units is enclosed as **Annexure -II**

Total ITKM of Building in SSE/JE's Works units over UBL division = **452.42** ITKM as per the data submitted by the respective units of SSE/JE's enclosed as **Annexure -III**.

Benchmarking is the continuous process of comparing different units and identifying the employees with maximum output. The requirement of staff strength is achieved duly applying Benchmarking report vide Railway Board letter Lr.No.2006/E&R/2800/Rly/Imp/Vol.V(Corr.) dated: 31.03.09 to 27.11.09, man power planning is to be adopted based on current IR average.

Current IR average (**0.4 men** per ITKM of plinth area if less than 750 ITKM as per JAN -2019 report) in each division. Hence the requirement of staff in SSE/Works is worked out based on the current IR average and benchmarking report of JAN -2019 issued by per Railway Board letter dated 24/1/2019. enclosed as **Annexure –IV**.

The Work Study Team has analyzed the Manpower requirement based on the above guide lines and general principal of work study.

**The total number of staff required as per Indian Railway ITKM Norms is 0.4 Men per ITKM (Divisions less than 750 ITKM) and general principle of work study.**

<b>Total sanctioned posts in SSE/Works units of UBL division ( as per BOS statement of 01.04.2018)</b>	<b>Actual requirement of staff as per present IR average of JAN-2019 = 0.4 per ITKM</b>	<b>No. of posts recommended for surrender which are found surplus to the requirement</b>
<b>446</b>	Total ITKM = 452.42 452.42 x 0.40 = 182 men Miscellaneous works = 170 LR @ 12.5% = 44 <b>Total requirement = 396 men</b>	<b>446-396 = 50 posts</b>

## **CHAPTER – I**

### **INTRODUCTION:-**

Capital and labour are the basic factors of production for any organization. The role of these two factors is complimentary and not supplementary. While the capital provides for basic infrastructure, labour makes use of the same and contributes for production. The requisite production cannot be achieved in the absence of any of these two factors.

Human resources are the most indispensable asset of any organization. Effective utilization of this asset is the prime responsibility of the Management, especially for an organization like Indian Railways, The Engineering Department is one of the important department in Indian Railways and first largest department in terms of manpower employed.

The work force cost constitutes around 40% (excluding pension) of gross ordinary working expenses of Indian Railways. Human resource development and manpower planning are thus crucial for Indian Railways financial viability. Continuous updating and designing of job descriptions, reduction of number of categories for job enrichment through multi skilling, qualifications and responsibilities are need of the day.

Review of work methods and sequences regularly, so as to create groups for execution of job whenever new technologies are introduced. The controlling of the manpower and its best utility is the need of the hour in the organization. It is realized that output of every individual railway employee has to be substantially optimized to enable the railway system to work with requisite economy and achieve more productivity.

Keeping the reforms in view, there should be sweeping changes in the content and composition of manpower.

In view of the fore said objectives, AGM/SWR has advised the Work-Study cell to take up study on “Review of Staff Strength of SSE/Works units of Engineering department of UBL division.

## CHAPTER - II

### **Existing Manpower :**

Sanctioned Staff strength of SSE/works of UBL division. as per BOS of 1/4/2018 and actual as per data submitted by respective SSE/JE of UBL Division is shown below:-

Sl. No.	CATEGORY	S	A	V	E
01.	MASON	33	22	11	Nil
02.	CARPENTER	37	09	28	Nil
03.	PAINTER	15	07	08	Nil
04.	BLACK SMITH	Nil	05	Nil	05
05.	FITTER/PLUMBER	27	15	12	Nil
06.	CARETAKER	07	07	Nil	Nil
07.	CHOWKIDAR	24	21	03	Nil
08.	GARDEN KHALASI	303	294	09	Nil
09.	KHALASI				
	<b>TOTAL</b>	<b>446</b>	<b>380</b>	<b>71</b>	<b>05</b>

### **Nature of duties of staff of SSE/ Works over Hubli division:-**

Sl. No	Category/designation	Nature of duties
1	Mason	Attending masonry repair works at colony, staff quarter and service building.
2	Carpenter	Attending Carpentry repair works in Railway Colony, staff quarter and service building.
3	Fitter	Maintenance of railway colony pipe line and repair works of pipe line in staff quarter and service building.
4	Plumber	
5	Painter	Attending Painting works in colony, staff quarter, service building name boards and tank painting.
6	Black Smith	Making clamps for pipe repairs and new connection and attending fencing repairs at service building and staff quarters
7	Care take	Working as caretaker in ORH/SRH
8	Chowkidar	Working as office watch man
9	Khalasi/Helper	Assisting all technicians for repair works and loading and unloading of materials.
10	Sanitary/Khalasi	Attending Sanitary works in colony, staff quarter, service building.
11	Safaiwala	Cleaning and sweeping at office.

**ITKM (Integrated track kilometre) of SSE/ Works over Hubli division:-**

Sl. No	SSE units	1 ITKM = 1500 Sqm plinth area	Sanction staff strength as per field data.	Men On Roll	Men required as per Railway Board Bench marking report of Jan 2019 i.e 0.4 men per ITKM	Addition al staff for miscella neous works	Total require ment	Surplus staff in each units
1	SSE/SW/UBL	48.18	95	65	19	20	39	446 - 396 = 50 posts
2	SSE/M/UBL	54.35	53	42	25	20	45	
	SE/DWR	07.61						
3	SSE/QRTS/UBL	21.35	62	35	10	20	30	
4	SSE/WW/UBL	57.14	88	59	23	20	43	
5	SSE/WS/UBL	45.92	27	13	18	10	28	
6	SSE/GDG/UBL	43.48	33	23	17	10	27	
7	SSE/HPT/UBL	36.92	46	31	25	20	45	
8	SSE/BAY/UBL	26.32						
9	SSE/BJP/UBL	41.94	33	25	17	10	27	
10	SSE/BGM/UBL	41.24	42	41	16	10	26	
11	SSE/CLR/UBL	12.11	32	16	6	10	16	
12	SSE/VSG/UBL	15.86	48	30	6	20	26	
	TOTAL	452.42	559	380	182	170	352	
	Total sanctions as per BOS 01/04/2018		446		TOTAL		352	

There is no pinpointing of staff in UBL division, hence the sanction staff strength is take as per Book of sanctions of 01/04/2018.

**Total requirement of Staff in SSE/JE/Works in UBL division:-**

**352 + 12.5% (Leave reserve - LR) i.e. 44 men**

**352 + 44 = 396 men**

There are **50** posts surplus to the requirement in SSE/JE/Works over UBL division as per Benchmarking report of Jan -2019, general principle of Work study and Railway Board letter dated 10.01.2017 Para 6. Enclosed as **Annexure –V**.

**1) SSE/SW/UBL:-**

<b>Sl. No.</b>	<b>CATEGORY</b>	<b>S</b>	<b>A</b>	<b>V</b>	<b>E</b>
01.	MASON	9	3	6	-
02.	CARPENTER	8	1	7	-
03.	PAINTER	2	1	1	-
04.	BLACK SMITH	4	1	3	-
06.	FITTER/PLUMBERS	1	-	1	-
07	CARETAKER	2	3	-	1
08	CHOWKIDAR	4	3	1	-
09	KHALASI	44	38	6	-
10	SANITARY KHALASI	3	2	1	-
11	GARDEN KHALASI	18	13	5	-
	<b>TOTAL</b>	<b>95</b>	<b>65</b>	<b>31</b>	<b>1</b>

**2) SSE/M/UBL & SE/DWR:-**

<b>Sl. No.</b>	<b>CATEGORY</b>	<b>S</b>	<b>A</b>	<b>V</b>	<b>E</b>
01.	MASON	8	4	4	-
02.	CARPENTER	5	2	3	-
03.	PAINTER	2	2	-	-
04.	BLACK SMITH	2	2	-	-
06.	FITTER/PLUMBERS	3	3	-	-
07	CHOWKIDAR	5	4	1	-
08	KHALASI	24	21	3	-
09	SANITARY KHALASI	4	3	1	-
10	PEON	-	1	-	1
	<b>TOTAL</b>	<b>53</b>	<b>42</b>	<b>12</b>	<b>1</b>

**3) SSE/QRTS/UBL:-**

<b>Sl. No.</b>	<b>CATEGORY</b>	<b>S</b>	<b>A</b>	<b>V</b>
01.	MASON	12	3	9
02.	CARPENTER	9	3	6
03.	PAINTER	4	0	4
04.	BLACK SMITH	1	0	1
06.	FITTER/PLUMBERS	1	0	1
07	CARETAKER	2	1	1
08	CHOWKIDAR	2	1	1
09	KHALASI	25	25	0
10	SANITARY KHALASI	6	2	4
	<b>TOTAL</b>	<b>62</b>	<b>35</b>	<b>27</b>



**4) SSE/WW/UBL:-**

<b>Sl. No.</b>	<b>CATEGORY</b>	<b>S</b>	<b>A</b>	<b>V</b>
01.	MASON	4	2	2
02.	CARPENTER	2	-	2
03.	PAINTER	1	-	1
04.	BLACK SMITH	2	-	2
06.	FITTER/PLUMBERS	12	5	7
07	CARETAKER	1	1	-
08	CHOWKIDAR	5	4	1
09	KHALASI	60	47	13
10	SANITARY KHALASI	1	-	1
	<b>TOTAL</b>	<b>88</b>	<b>59</b>	<b>29</b>

**5) SSE/WS/UBL:-**

<b>Sl. No.</b>	<b>CATEGORY</b>	<b>S</b>	<b>A</b>	<b>V</b>
01.	MASON	3	3	-
02.	CARPENTER	3	-	3
03.	BLACK SMITH	1	-	1
04.	FITTER/PLUMBERS	2	-	2
06.	KHALASI	15	10	5
07	SANITARY KHALASI	3	-	3
	<b>TOTAL</b>	<b>27</b>	<b>13</b>	<b>14</b>

**6) SSE/GDG/UBL:-**

<b>Sl. No.</b>	<b>CATEGORY</b>	<b>S</b>	<b>A</b>	<b>V</b>
01.	MASON	04	01	03
02.	CARPENTER	04	01	03
03.	PAINTER	01	01	NIL
04.	BLACK SMITH	02	01	01
06.	FITTER/PLUMBER	01	NIL	01
08	CHOWKIDAR	02	01	01
09	KHALASI	19	18	01
	<b>TOTAL</b>	<b>33</b>	<b>23</b>	<b>10</b>

**7) & 8) COMBINED SCALECHECK OF SSE/W/HPT & SSE/W/BAY:-**

<b>Sl. No.</b>	<b>CATEGORY</b>	<b>S</b>	<b>A</b>	<b>V</b>	<b>E</b>
01.	MASON	06	01	05	
02.	CARPENTER	04	-	04	
03.	PAINTER	01	-	01	
04.	BLACK SMITH	01	01	-	
06.	FITTER/PLUMBERS	03	02	01	
07	CARETAKER	-	01	-	01
08	CHOWKIDAR	03	01	02	
09	KHALASI	25	24	01	
10	SANITARY KHALASI	03	01	02	
	<b>TOTAL</b>	<b>46</b>	<b>31</b>	<b>16</b>	<b>01</b>

**8) SSE/BJP/UBL:-**

<b>Sl. No.</b>	<b>CATEGORY</b>	<b>S</b>	<b>A</b>	<b>V</b>	<b>E</b>
01.	MASON	03	02	01	-
02.	CARPENTER	05	-	05	-
03.	PAINTER	01	-	01	-
04.	BLACK SMITH	01	-	01	-
05.	FITTER/PLUMBERS	02	02	-	-
06.	CHOWKIDAR	05	-	05	-
07.	KHALASI	13	19	-	06
08.	SANITARY KHALASI	03	02	01	-
	<b>TOTAL</b>	<b>33</b>	<b>25</b>	<b>14</b>	<b>06</b>

**9) SSE/BGM/UBL:-**

<b>Sl. No.</b>	<b>CATEGORY</b>	<b>S</b>	<b>A</b>	<b>V</b>	<b>E</b>
01.	MASON	3	-	3	-
02.	CARPENTER	2	-	2	-
03.	PAINTER	1	2	-	1
04.	FITTER/PLUMBERS	1	1	-	-
06.	CHOWKIDAR	2	2	-	-
07	KHALASI	32	33	-	1
08	SANITARY KHALASI	1	3	-	2
	<b>TOTAL</b>	<b>42</b>	<b>41</b>	<b>5</b>	<b>4</b>

**10) SSE/CLR/UBL:-**

<b>Sl. No.</b>	<b>CATEGORY</b>	<b>S</b>	<b>A</b>	<b>V</b>	<b>E</b>
01.	MASON	02	01	01	-
02.	CARPENTER	03	01	02	-
03.	PAINTER	01	-	01	-
04.	BLACK SMITH	01	-	01	-
05	FITTER/PLUMBERS	-	01	-	01
06	CHOWKIDAR	05	-	05	-
07	KHALASI	18	13	05	-
08	SANITARY KHALASI	02	-	02	-
	<b>TOTAL</b>	<b>32</b>	<b>16</b>	<b>17</b>	<b>01</b>

**11) SSE/VSG/UBL:-**

<b>Sl. No.</b>	<b>CATEGORY</b>	<b>S</b>	<b>A</b>	<b>V</b>	<b>E</b>
01.	MASON	04	02	02	-
02.	CARPENTER	02	01	01	
03.	PAINTER	02	01	01	-
04.	BLACK SMITH	01	-	01	-
06.	FITTER/PLUMBERS	03	01	02	-
07	CARETAKER	02	01	01	-
08	CHOWKIDAR	05	05	-	-
09	KHALASI	26	19	07	-
10	SANITARY KHALASI	03	-	03	-
	<b>TOTAL</b>	<b>48</b>	<b>30</b>	<b>18</b>	
	<b>Grand Total</b>	<b>559</b>	<b>380</b>	<b>193</b>	<b>14</b>

## CHAPTER – III

### **SUGGESTIONS:**

1. All Engineering works staff are required to be trained in multi-skilling works using modern technology.
2. Maintenance of Residential Buildings and Service Buildings can be done through maintenance contract.
3. Maintenance of work may strictly be done by implementing direct buildings maintenance scheme (DBM).
4. It is suggested for timely dismantling of identified condemned quarters to avoid unauthorized occupation and theft of Railway materials.

## CHAPTER – IV

### **CONCLUSION:**

The work study is concluded with the recommendation for surrender of **50** posts in the units of SSE/Works of UBL division which are found surplus to the requirement based on the Railway Board Benchmarking report of JAN - 2019. The money value thus obtained from these surrenders may be utilised for the creation of safety posts.

Sl. No.	CATEGORY	S	A	V	E	Posts recommended to surrender
01.	MASON	33	22	11	Nil	11
02.	CARPENTER	37	09	28	Nil	10
03.	PAINTER	15	07	08	Nil	05
04.	BLACK SMITH	Nil	05	Nil	05	Nil
05.	FITTER/PLUMBER	27	15	12	Nil	05
06.	CARETAKER	07	07	Nil	Nil	07
07.	CHOWKIDAR	24	21	03	Nil	03
08.	GARDEN KHALASI	303	294	09	Nil	09
09.	KHALASI					
	<b>TOTAL</b>	<b>446</b>	<b>380</b>	<b>71</b>	<b>05</b>	<b>50</b>

**The existing vacancies in Technician category which is essential for Works cadre, hence Work study team suggested for surrender 50 posts in Group ‘D’.**

## CHAPTER – V

### FINANCIAL IMPLICATIONS:

Implementation of work study recommendations will increase productivity in Engineering Department of UBL Division and SWR can save **Rs. 2,51,66,400.00** annually as shown below:-

#### A) Surrenders recommended as per existing vacancies:-

Sl. No.	CATEGORY	S	A	V	E	Posts recommended to surrender	Emoluments per month in Rs	Annual Emoluments in Rs
01.	MASON (GP-2800)	33	22	11	Nil	11	68040.00	55,36,608.00
02.	CARPENTER (GP-2800)	37	09	28	Nil	10	68040.00	50,33,280.00
03.	PAINTER (GP-2800)	15	07	08	Nil	05	68040.00	25,16,640.00
04.	BLACK SMITH	Nil	05	Nil	05	Nil	Nil	Nil
05.	FITTER/PLUMBER (GP-2800)	27	15	12	Nil	05	68040.00	25,16,640.00
06.	CARETAKER (GP-1800)	07	07	Nil	Nil	07	41944.00	35,23,296.00
07.	CHOWKIDAR (GP-1800)	24	21	03	Nil	03	41944.00	15,09,984.00
08.	GARDEN KHALASI	303	294	09	Nil	09	41944.00	45,29,952.00
09.	KHALASI (GP-1800)							
	<b>TOTAL</b>	<b>446</b>	<b>380</b>	<b>71</b>	<b>05</b>	<b>50</b>		<b>2,51,66,400.00</b>

The existing vacancies in Technician category which is essential for Works cadre, hence Work study team suggested for surrender **50 posts in Group 'D'**.

#### B) As per Work study team suggestion:-

SL No	Category	S	A	V	E	No. of posts		Emoluments per month in Rs	Annual Emoluments in Rs
						Live	vacant		
01.	GARDEN KHALASI	303	294	09	Nil	41	09	41944.00	2,51,66,400.00
02.	KHALASI (GP-2800)								
	<b>Total</b>	<b>403</b>	<b>365</b>	<b>09</b>	<b>Nil</b>	<b>41</b>	<b>09</b>		<b>2,51,66,400.00</b>
	<b>Grand Total</b>					<b>50</b>			

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## **ANNEXURES**

<b>Sl. No.</b>	<b>Description</b>	<b>Annexure</b>
<b>1.</b>	BOS OF 1/4/2018 as issued by Sr.DPO/O/UBL	<b>I</b>
<b>2.</b>	Actual staff On Roll statement of respective SSE/Works units	<b>II</b>
<b>3.</b>	ITKM details of respective of SSE/W of UBL division.	<b>III</b>
<b>4.</b>	Railway Board Benching marking report of JAN – 2019	<b>IV</b>
<b>5.</b>	Railway Board letter dated 10.01.2017 Para 6	<b>V</b>