



**NORTH EAST FRONTIER RAILWAY**

**WORK STUDY REPORT ON**

**REVIEW OF STAFF STRENGTH OF ENGINEERING(WORKS) DEPARTMENT AT APDJ UNDER  
Sr.DEN/C/APDJ OF ALIPURDUAR DIVISION.**

**GUIDED BY** : SHRI R.K.MANGLA, SDGM.

: SHRI L.R.WARY, E.O.

**CONDUCTED BY** : SHRI ACHINTA BARUAH. WSI/MLG

: SHRI B.R.GHOSE DASTIDER. WSI/MLG

**STUDY NO.** : WSNF/77 /2018-19

**CASE NO.** : Z/375/10/77/18-19

**AUTHORITY** : SDGM.

**CENTRAL PLANNING ORGANISATION**

**MALIGAON : GUWAHATI : 781011**

**NORTHEAST FRONTIER RAILWAY**

# **WORK STUDY REPORT**

ON  
REVIEW OF STAFF STRENGTH OF ENGINEERING(WORKS) DEPARTMENT AT APDJ UNDER  
Sr.DEN/C/APDJ OF ALIPURDUAR DIVISION

## **CO-ORDINATING OFFICERS & PERSONNEL**

BRANCH OFFICER-	SHRI YOGESH VERMA,	SR.DEN/C/APDJ
ASSOCIATED OFFICER-	SHRIMATI MAHUA PAUL,	ADEN/II/NCB
ASSOCIATED INSPECTOR-	SHRI B.M.ROY,	SSE/W/COB

## **CONDUCTED BY:**

SHRI ACHINTA BARUAH,	WSI.
SHRI B. R. GHOSE DASTIDAR,	WSI.

STUDY NO. WSNF/77 /2018-19

CASE NO. Z/375/10/77/2018-19

CENTRAL PLANNING ORGANISATION

N. F. RAILWAY/MALIGAON

GUWAHATI - 781011.

### **EXECUTIVE SUMMARY**

**SUBJECT** : Work Study on “Review of staff strength of engineering(works) department at APDJ under Sr.DEN/C/APDJ of Alipurduar Division.”

**STUDY NO** : **WSNF/77 /18-19**  
**CASE NO** : **Z/375/10/77/18-19**  
**AUTHORITY** : **SDGM**  
**CONCERN DIV.** : **ALIPURDUAR**  
**DEPARTMENT** : **ENGINEERING**  
**DATE OF COMMENCEMENT** : **17.12.2018**  
**DATE OF COMPLETION** : **08.01.2019**  
**DATE OF SUBMISSION** : **17.01.2019**

**TERMS OF REFERENCE:**

Review of staff strength of Engineering Department (Works) at APDJ Division under Sr.DEN/C/APDJ.

**NOS. OF RECOMMENDATION:** 1 (One).

The work study team, had identified that total 26 posts (Tech Carpenter- 04, Tech Fitter -06, Tech Mason – 06, Khalasihelper (M) - 09 & S/Cleaner -01,= 26) surplus and proposed that those posts may be surrender and deleted from the BOS of Engineering Department of APDJ Division

- **PROJECTED MAN POWER:** 26 Posts
- **PROJECTED FINANCIAL SAVING :** Rs. 121.20 Lakh per annum.
- **MONTH AND YEAR OF CIRCULATION:** JANUARY/ 2019

**I N D E X**

<b>Chapter</b>	<b>Contents</b>	<b>Page No.</b>
<b>I</b>	<b>Introduction</b>	<b>5</b>
<b>II</b>	<b>Activities and work load</b>	<b>6-8</b>
<b>III</b>	<b>Critical analysis of staff requirements.</b>	<b>9-10</b>
<b>IV</b>	<b>Recommendation.</b>	<b>11</b>
<b>V</b>	<b>Financial implication.</b>	
<b>VI</b>	<b>Ready Reckoner</b>	<b>12</b>

## **CHAPTER - I**

### **INTRODUCTION**

#### **1.0. INTRODUCTION:**

The Railway administration has to make the best use of its resources including manpower keeping them at the optimum level to attain the financial viability. Taking into consideration to these objectives, the Railway Board has emphasized to take up review on staff strength of various departments in the Railway. In pursuance with this policy of Railway Board the Central Planning Organization has conducted this work-study on requirements of Engineering Staff of APDJ Division.

#### **2.0.**

##### **ACKNOWLEDEMENT :**

Work study team is grateful to Shri Yogesh Verma , Sr DEN/C/APDJ and M.Paul ADEN/II/NCB for their kind guidance and co-operation for conducting this study.

The work study team is also thankful to for their assistance rendered to the Work Study team for conducting the subject study.

#### **3.0. RATIONALE FOR CONDUCTING THIS STUDY**

- Man power is the most costly and precious resource over Indian Railway and Right sizing is the need of the hour.
- Focusing attention on core activities by reducing / elimination of non-core activities.
- Improving the efficiency (out put / input) either by improving the output (numerator) or by decreasing the input (denominator).
- Multi-skilling of existing Staff and combining various activities.
- Up gradation / introduction of automation / Innovations.
- Outsourcing of non core activity.
- Availability of better process/ technology.
- Reducing/ removing redundancy in work.

#### **4.0. TERMS OF REFERENCE :**

Annual programme of work study approved by SDGM/NFR

#### **5.0. METHODOLOGY:**

##### **a) Discussion with ADEN/APDJ & SSE/Works/APDJ**

During field work, discussion was done regarding present work load of Engineering staff in the category of Khalashi , B/smith, Mason, Carpenter and Fitter . Review of staff strength with respect to present workload. Discussion also done regarding modernisation of equipment as well as engagement of out agencies against the rightsizing of man power. In connection with this study, the Associated officers, Sri Mahua Paul ADEN/II/APDJ and Sri B.M.Roy SSE/W/COB the concerned Inspectors nominated by Sr.DEN/C/APDJ (enclosed as **Annex-I**).

##### **b) Collection of data relating to workload**

After discussion, the relevant data regarding present work load and staff position was obtained from concerned unit in-charge and other data regarding sanctioned strength, etc was gathered personal branch of engineering department, on the basis data obtained assessment of work load is done in the study report.

## **CHAPTER - II**

### **SUMMARY OF WORKLOAD**

- 2.0 They performs duty of both office and field. The works are broadly classified as follows:
- Executive works.
  - Store works.
  - Establishment work
  - Industrial Relation & staff welfare etc.
- 2.1 The normal duty performed by SSE/Works are:
- Inspection and maintenance of service buildings, staff Quarter, FOB & drainage system regularly.
  - Account, procurement and periodical verification of stores & tools required for regular revenue maintenance.
  - Maintenance of land boundaries of Railway as specified in Engineering code/Manual.
  - Execution of new /sanctioned works including Zonal works.
  - Measurement and bill pertaining to works including correspondence if any.

### **SUMMARY OF WORKLOAD**

They performs duty of both office and field. The works are broadly classified as follows:

Executive works.

Store works.

Establishment work

Industrial Relation & staff welfare etc.

2.2 The normal duty performed by SSE/Works are:

- Inspection and maintenance of service buildings, staff Quarter, FOB & drainage system regularly.
  - Account, procurement and periodical verification of stores & tools required for regular revenue maintenance.
  - Maintenance of land boundaries of Railway as specified in Engineering code/Manual.
  - Execution of new /sanctioned works including Zonal works.
- Measurement and bill pertaining to works including correspondence if any.

### **2.3. WORK LOAD OF SSE/W-I/APDJ**

#### **1.RESIDENTIAL QUARTER**

TYPE OF QUARTER	TOTAL NUMBER OF QUARTER
TYPE-I	137
TYPE-I (spl)	257
TYPE-II	1440
TYPE-III	80
TYPE-IV	NIL
TYPE-V	NIL
TOTAL	1910

Total plinth area of residential building/Qrs. \_95000\_ sq.m.

#### **2. SERVICE BUILDING (Office Building)**

a) List of service building under SSE.Works/

- DRM Building
- Microwave Building
- Data Centre
- Statistical Cell
- CHI Office
- Rly H.S.School
- Rly Institute
- Rly Hospital
- Electric ffile
- Electric sub station -4
- NFRWWO
- Filter House
- Valve man Room
- Transit Hostel
- RPF Barrack(old)
- RPF Barrack ( 2 Nos)
- Indoor Stadium

Total plinth area of service building/Office building 32,400 sq.m

### OTHER WORKS LOAD

- i) ROAD =32,000 RM.
- ii) DRAIN - MAJOR =37,500 RM and MINOR= NIL
- iii) BRIDGE-MAJOR = NIL and
- iv) MINOR==NIL
- v) LEVEL CROSSING =MANNED NIL
- = UN-MANNED NIL
- vi) PIPE LINE =32,000 RM.

#### 3. FILTER PLANT

STATION	NUMBER	TYPE OF FILTER	CAPACITY
APDJ	01	Rapid sand filter	227000 lit/hour

#### 4. DETAILS OF WORK LOAD FOR THE PERIOD FROM APRIL '14 TO MAR'2015

Nature of works	Number of complaint	
	Received	complied
Leak proof	7300	4850
Door changed	4300	780
Masonry	4520	278
Carpentry	3900	340

#### 5. WATER SUPPLY

Station	Tap water	Raw water	No of tube well	No of Deep tube well
APDJ	1910 nos.of Qtrs & Service Building	NIL	4 Nos	One at Hospital Chowpati

6. No of trolley - NIL
7. No of Rest House - NIL
8. RUB (Road Under Bridge) - NIL
9. FOB (Foot Over Bridge) - NIL
10. Retiring Room- - NIL
11. No of Go down :- 14 Nos( 8 + 6 - Group) at SSE(W)/I/APDJ.

#### **2.2.. Activities and Work load of Carpenter, Fitter, Mason and Khalasi.**

- Work load of Tech.Carpenter:**  
This category is engaged for Carpentry work as well as repairing of doors, windows and other wooden structures of buildings of Railway and Railway colonies. Presently these works are accomplished by engaging the contractor/agency.
- Work load of Fitter :**  
This category is employed to look after the plumbing , water pipeline repairing jointing work etc. of Railway premises and colonies and maintain the water line network trouble free in day to day working. Presently these works are accomplished by engaging the contractor/agency and these fitter categories are employed to keep vigil and monitor the same as and when it is required.

- **Work load of S/Mason:**

This category is engaged for masonry work of safety tanks, repairing the safety tanks, sewage lines of Railway buildings and premises. Presently these works are accomplished by the contractor/agency engaged.

- **Work load of Khalashi**

Khalashi/ Kh helpers are entrusted to assist the artisan staff and other duties as directed by supervisors. Due to engagement of contractor/out-agencies for execution of works, the work load of Khalashi/ Kh helpers is reduced drastically.

**DISTRIBUTION OF STAFF UNDER SR DEN/C/APDJ OF ALIPUDUAR DIVISION**

SN	Station	Category	Pay band	Grade pay	BOS	On Roll strength	Vac	
1	SSE/W-I/APDJ	Tech Carpenter.	Floating	-	6	2	4	
		Tech Fitter.	Floating	-	7	1	6	
		Tech Mason.	Floating	-	3	0	3	
		Khalasi	5200-20200	1800	1	1	0	
		Khalasi Helper (M)	5200-20200	1800	21	20	1	
	Khalasi Helper (FP)	5200-20200	1800	4	3	1		
2	SSE/W-II/APDJ	Tech Carpenter.	Floating	-	9	8	1	
		Tech Painter.	Floating	-	1	1	0	
		Tech Fitter.	Floating	-	6	5	1	
		Tech Mason.	Floating	-	4	3	1	
		Khalasi Helper (M)	5200-20200	1800	14	12	2	
3	SSE/W/COB	Tech Carpenter.	Floating	-	4	4	0	
		Tech Fitter.	Floating	-	2	1	1	
		Tech Mason.	Floating	-	2	1	1	
		Khalasi Helper (M)	5200-20200	1800	6	4	2	
4	SSE/W/FKM	Tech Carpenter.	Floating	-	5	3	2	
		Tech Painter.	Floating	-	1	0	1	
		Tech Fitter.	Floating	-	5	3	2	
		Tech Mason.	Floating	-	2	2	0	
		Khalasi Helper (M)	5200-20200	1800	9	8	1	
		Khalasi Helper (FP)	5200-20200	1800	2	2	0	
5	SSE/W/DTX	Tech Carpenter.	Floating	-	4	3	1	
		Tech Fitter.	Floating	-	3	1	2	
		Tech Mason.	Floating	-	2	2	0	
		Khalasi Helper (M)	5200-20200	1800	14	10	4	
6	SSE/W/FLK	Tech Carpenter.	Floating	-	2	2	0	
		Tech Fitter.	Floating	-	3	3	0	
		Khalasi Helper (M)	5200-20200	1800	2	1	1	
6	SSE/W/NMX	Tech Carpenter.	Floating	-	2	1	1	
		Tech Fitter.	Floating	-	1	1	0	
		Tech Mason.	Floating	-	1	1	0	
		Khalasi Helper (M)	5200-20200	1800	3	2	1	
7	SSE/W/NOQ	Tech Carpenter.	Floating	-	1	1	0	
		Tech Fitter.	Floating	-	1	1	0	
		Tech Mason.	Floating	-	1	1	0	
		Khalasi Helper (M)	5200-20200	1800	9	8	1	
8	SSE/W/MBZ	Tech Carpenter.	Floating	-	3	3	0	
		Tech Painter.	Floating	-	1	1	0	
		Tech Fitter.	Floating	-	3	2	1	
		Tech Mason.	Floating	-	1	1	0	
		Khalasi Helper (M)	5200-20200	1800	9	8	1	
9	SSE/W/HSA	Tech Carpenter.	Floating	-	3	2	1	
		Tech Fitter.	Floating	-	1	1	0	
		Tech Mason.	Floating	-	2	2	0	
		Khalasi	5200-20200	1800	1	1	0	
		Khalasi Helper (M)	5200-20200	1800	14	12	2	
		TOTAL-				201	155	46



## **CHAPTER - III**

### **3.0 CRITICAL ANALYSIS OF EXISTING WORKLOAD AND STAFF REQUIREMENTS:**

**3.1.** The activities and work load involved against Mason , Carpentry, Fitter and Khalasi has already discussed in Chapter-II.

**3.2.** The work load of Mason , Carpentry, Fitter is off-loaded in some Railways by engaging out-agencies in field of work and same policy also adopted in APDJ Division. Thus, redundancy of work load is analysed in view of proper utilisation of man power without disturbing the avenue of promotion of staff.

#### **3.3. Tech Carpenter :**

SSE/Works I&II/APDJ reported that Carpentry work of this unit had reduced due to shortage of supply of wood, as well as wooden structures are replaced by fiber/PVC make items day by day by engaging out agencies, which are more durable than wooden structure, such as PVC make door and frame, PVC water tank, PVC/ steel make office furniture, etc.

Thus, in conform to Railway's existing policy to reduce the utilization of wood in support of movement against deforestation , causes the redundancy of work load of carpenter.

#### **3.4. Tech. B/Smith:**

The present scenario of work load of B/smith is that smithy work is reduced many fold due to utilisation of out agencies in various works as well as welding work carried out as gas welding or electric welding at low cost and in less time and less effort.

#### **3.5. Tech . Mason :**

The work load of Mason is reduced abruptly due to maintenance work through contractual.

#### **3.6. KHALASI**

The work load of khalasi helper is reduced abruptly that due to out-sourcing of maintenance and operational work of works department.

**IDENTIFICATION OF SURPLUS POSTS UNDER Sr.DEN/C/APDJ**

SN	Station	Category	Pay band	Grade pay	BOS	On Roll strength	Vac	SURPLUS POSTS
1	SSE/W-I/APDJ	Tech Carpenter.	Floating	-	6	1	5	4
		Tech Fitter.	Floating	-	7	2	5	3
		Tech Mason.	Floating	-	3	2	1	1
		Khalasi	5200-20200	1800	1	1	0	
		Khalasi Helper (M)	5200-20200	1800	21	18	3	2
		Khalasi Helper (FP)	5200-20200	1800	4	3	1	
		S/Cleaner	5200-20200	1800	1	1	0	
2	SSE/W-II/APDJ	Tech Carpenter.	Floating	-	9	6	3	
		Tech Painter.	Floating	-	1	1	0	
		Tech Fitter.	Floating	-	6	4	2	1
		Tech Mason.	Floating	-	4	2	2	2
		Khalasi Helper (M)	5200-20200	1800	14	11	3	2
		<i>S/Cleaner</i>	<i>5200-20200</i>	<i>1800</i>	<i>1</i>	<i>2</i>	<i>-1</i>	
3	SSE/W/COB	Tech Carpenter.	Floating	-	4	4	0	
		Tech Fitter.	Floating	-	2	1	1	
		Tech Mason.	Floating	-	2	1	1	1
		Khalasi Helper (M)	5200-20200	1800	6	5	1	1
4	SSE/W/FKM	Tech Carpenter.	Floating	-	5	2	3	
		Tech Painter.	Floating	-	1	0	1	
		Tech Fitter.	Floating	-	5	3	2	1
		Tech Mason.	Floating	-	2	2	0	
		Khalasi Helper (M)	5200-20200	1800	9	8	1	1
		Khalasi Helper (FP)	5200-20200	1800	2	2	0	
5	SSE/W/DTX	Tech Carpenter.	Floating	-	4	2	2	
		Tech Fitter.	Floating	-	3	1	2	1
		Tech Mason.	Floating	-	2	1	0	1
		Khalasi Helper (M)	5200-20200	1800	14	12	2	1
		S/Cleaner	5200-20200	1800	2	1	1	1
6	SSE/W/FLK	Tech Carpenter.	Floating	-	2	0	2	
		Tech Fitter.	Floating	-	3	3	0	
		Khalasi Helper (M)	5200-20200	1800	2	2	0	
6	SSE/W/NMX	Tech Carpenter.	Floating	-	2	1	1	
		Tech Fitter.	Floating	-	1	1	0	
		Tech Mason.	Floating	-	1	1	0	
		Khalasi Helper (M)	5200-20200	1800	3	2	1	
7	SSE/W/NOQ	Tech Carpenter.	Floating	-	1	1	0	
		Tech Fitter.	Floating	-	1	1	0	
		Tech Mason.	Floating	-	1	1	0	
		Khalasi Helper (M)	5200-20200	1800	9	7	2	
8	SSE/W/MBZ	Tech Carpenter.	Floating	-	3	1	2	
		Tech Painter.	Floating	-	1	1	0	
		Tech Fitter.	Floating	-	3	2	1	
		Tech Mason.	Floating	-	1	1	0	
		Khalasi Helper (M)	5200-20200	1800	9	7	2	
9	SSE/W/HSA	Tech Carpenter.	Floating	-	3	2	1	
		Tech Fitter.	Floating	-	1	1	0	
		Tech Mason.	Floating	-	2	0	2	1
		Khalasi	5200-20200	1800	1	1	0	
		Khalasi Helper (M)	5200-20200	1800	14	12	2	2
		<b>TOTAL-</b>			<b>205</b>	<b>147</b>	<b>57</b>	<b>26</b>

#### **CHAPTER -IV**

##### **RECOMMENDATION**

The work study team, had identified that total 26 posts (Tech Carpenter- 04,Tech Fitter -06, Tech Mason – 06, Khalasihelper (M) - 09 & S/Cleaner -01,= 26) as surplus and proposed that those posts may be surrender and deleted from the BOS of Engineering Department of Alipurduar Division.

#### **CHAPTER - V**

##### **FINANCIAL IMPLICATION**

SN	Category	Pay Band	G/Pay	Basic Pay in Rs	Revised Pay as per 7 <sup>th</sup> CPC	Salary per annum in INR	Nos. of posts proposed for surrender	Total amount in Rs
1	Tech Carpenter.	5200-20200/-	2800/-	15,500	39,835	4,78,020	4	19,12,080
2	Tech Fitter.	5200-20200/-	2800/-	15,500	39,835	4,78,020	6	28,68,120
3	Tech Mason.	5200-20200/-	2800/-	15,500	39,835	4,78,020	6	28,68,120
4	Khalashi helper(M)	5200-20200/-	1800	14,500	37,265	4,47,180	9	40,24,620
5	S/Cleaner	5200-20200	1800	14,500	37,265	4,47,180	1	4,47,180
						TOTAL =	26	1,21,20,120.

##### **5.1. PROJECTED FINANCIAL SAVINGS PER ANNUM**

Rs. 121.20 Lakhs (say) per annum

**CHAPTER - VI**

**6.0. READY RECKONER**

<b>Pay Band</b>	<b>GP</b>	<b>Mean pay</b>	<b>Basic Pay in Rs</b>	<b>M.F. of CPC(2.57) revised Pay</b>	<b>7<sup>th</sup> &amp; Salary per annum in INR</b>
<b>9300-34800</b>	<b>4600</b>	<b>22050</b>	<b>26,650</b>	<b>68,490.5</b>	<b>8,21,886</b>
<b>9300-34800</b>	<b>4200</b>	<b>22050</b>	<b>26,250</b>	<b>67,462.5</b>	<b>8,09,550</b>
<b>5200-20200</b>	<b>2800</b>	<b>12700</b>	<b>15,500</b>	<b>39,835</b>	<b>4,78,020</b>
<b>5200-20200</b>	<b>2400</b>	<b>12700</b>	<b>15,100</b>	<b>38,807</b>	<b>4,65,684</b>
<b>5200-20200</b>	<b>2000</b>	<b>12700</b>	<b>14,700</b>	<b>37,779</b>	<b>4,53,348</b>
<b>5200-20200</b>	<b>1900</b>	<b>12700</b>	<b>14,600</b>	<b>37,522</b>	<b>4,50,264</b>
<b>5200-20200</b>	<b>1800</b>	<b>12700</b>	<b>14,500</b>	<b>37,265</b>	<b>4,47,180</b>