

## **ACKNOWLEDGEMENT**

The Central Planning Organization takes this opportunity to express hearty thanks to the Sr.DEN/Co-Ord/SC & other officials and Inspectors of Engineering Department and Sr.DPO/SC & other officials and staff of Personal department of SC Division for their valuable guidance and co-operation in extending their support by giving necessary information/statistical data.

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## **METHODOLOGY**

The Work Study department has applied the following techniques for completion of the Work Study.

1. Collection of the details of workload.
2. Interaction with the Officers and Staff.
3. Observation of the pattern of working.
4. Critical examination of the existing system of working and
5. Assessment of manpower requirement for the existing work Load

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## **പ്രമുഖ സംഗ്രഹം** **SYNOPSIS**

- **വിഷയം/Subject:** Review Of Staff Strength Of Engineering Department over Secunderabad Division.
- **അനുമതി/Authority:** Annual Programme of Work studies 2018-19.
- **പ്രോജക്ട് നമ്പർ/Study No:** WSSCR-13/2018-19.
- **അനുബന്ധം/Reference File No:** G.276/2/WSSCR-13/ 2018-19.
- **പ്രദേശം/Area Of Activity:** Engineering Department Over Secunderabad Division.

- As per the directives of SDGM, the Central Planning Organization of South Central Railway has taken up Work-study on "Review of staff strength of Engineering department over SC Division".
- **Application of Benchmarking Norms:** Benchmarking is based on dynamic and comparative analysis and is a very useful tool to manage efficient deployment of staff and monitor effects of improvement in working practices, use of new technologies and level of outsourcing. Board in successive meetings has directed all units to achieve average of Indian Railway Benchmark.

- **June 2018 IR average and Bench Marking of SC** divn is as follows.

Organization	MPR of SC	IR avg MPR	Bench Mark MPR
P.Way	1.27	1.30	0.69
Buildings	0.09	0.20	0.04
Bridges	0.07	0.08	0.04

- Engineering department of SC division is below IR average in Bridges, Buildings and P.way.
- Major changes have taken in the working system of Engineering department, as some works are being done on **zonal contract**. Many **works have been outsourced**. Recently the works department has **out sourced** number of activities in a big way House Keeping Services - Maintenance of service buildings (Divisional Office, Officers Rest House/Subordinate Rest house including maintenance of roads, roofs, maintenance of Lawn and Gardens etc) and rodent control treatment at stations.
- In the **P.Way wing, some works are being outsourced** such as track maintenance works.
- In order to have first hand information the Work-study team visited all the SSE units, sections, yards and offices of the Engineering department of SC division and observed the working pattern, various processes involved in maintenance of activities.

**The Work-study team made an analysis on the requirement of staff based on the following parameters.**

- a) No. of activities under out sourcing in Engineering department.
- b) The activities permitted to work under Contract in Engineering department.
- c) Requirement of Artisan/Khalasi staff on need base
- d) Recommendation to surrender Artisan/Khalasi staff due to **Contract works/outsourcing** activities and **posts are lying vacant/redundant**.
- e) Requirement of Artisan/Khalasi staff on need base

➤ **Multipurpose khalasi:**

Multipurpose khalasi is required to assist the Artisan staff like Black smithy, welder, Brick Layer, carpenter etc. But, most of the activities in the works organization are under Zonal contract system and these activities are not regular. There are total 14 units in Works organization of SC division and each unit requires 6 Multipurpose khalasis. Hence, 84 no.s multipurpose khalasis are required. Leave Reserve @12.5% for 84 multipurpose khalasis is 10. Hence, total requirement of multipurpose khalasi is 84+10=94.

Designation	Sanction	Actual	Vacancy	Requirement	Excess
Multi purpose khalasi	111	85	26	94	17

The sanctioned strength of multipurpose khalasi is 111, the actual staff is 85, requirement is 94 and found 17 staff excess on requirement.

➤ **Black Smith:**

Most of the Black Smith activities in the works organization are under Zonal contract system and the activity is not regular work. There are total 14 units in Works organization of SC division. Hence, 9 no.s Black smith are required to execute the work in 14 units of Works organization.. Hence, total requirement of Black smith is 9. In case of exigency, multipurpose khalasi may be used.

Designation	Sanction	Actual	Vacancy	Requirement	Excess on requirement
Black smith	12	9	3	9	3

The sanctioned strength of Black smith is 12, the actual staff is 9, requirement is 9 and found 3 staff excess on requirement.

➤ **Mason:**

Most of the Mason activities in the works organization are under Zonal contract system and the activity is not regular work. There are total 14 units in Works organization of SC division There are total 14 units in Works organization of SC division and each unit requires 1 Mason. Leave Reserve @12.5% for 2 Mason. Hence, total requirement of Mason is 14+2=16.

Designation	Sanction	Actual	Vacancy	Requirement	Excess on requirement
Mason	32	17	15	16	16

The sanctioned strength of Mason is 32, the actual staff is 17, requirement is 16 and found 16 staff excess on requirement.

➤ **Painter:** Since most of the Painter activities in the works organization are under Zonal contract system and the activity is not regular work. In case of exigency, multipurpose khalasi may be used.

Designation	Sanction	Actual	Vacancy	Requirement	Excess on requirement
Painter	29	13	16	13	16

The sanctioned strength of Painter is 29, the actual staff is 13 requirement is 13 and found 16 staff excess on requirement.

As per D.O No.SCR/P-HQ/MPP/156/Rightsizing/VIII, dated 23.01.2017, AGM/SCR advised all DRMs to initiate action to surrender vacant/redundant posts like Black smithy, carpenter, Luskar, painter, Plumber etc.

➤ **Carpenter:** Since most of the carpenter activities in the works organization are under Zonal contract system and the activity is not regular work. One carpenter with one khalasi is required for each unit. There are total 14 units in Works organization of SC division. Hence, 14 no.s carpenters are required to execute the work in 14 units of Works organization. Leave Reserve @12.5% for 14 Carpenter is 2. Hence, total requirement of Carpenter is 14+2=16. In case of exigency, multipurpose khalasi may be used.

Designation	Sanction	Actual	Vacancy	Requirement	Excess on requirement
Carpenter	23	18	5	16	7

The sanctioned strength of carpenter is 23, the actual staff is 18, requirement is 16, and found 7 staff excess on requirement.

- **SM fitter/Plumber:** Most of the SM fitter/Plumber activities in the works organization are under Zonal contract system and the activity is not regular work. One no. Pipeline fitter/Plumber is required for each unit. There are total 14 units in Works organization of SC division. Hence, **14 no's** SM fitter/Plumber are required to execute the work in 14 units of Works organization. Leave Reserve @12.5% for 14 SM fitter/Plumber is 2. Hence, total requirement of SM fitter/plumber is 14+2=16.

Designation	Sanction	Actual	Vacancy	Requirement	Excess
<b>SM fitter/Plumber</b>	<b>24</b>	<b>11</b>	<b>13</b>	<b>16</b>	<b>08</b>

The sanctioned strength of SM fitter/Plumber is 24, the actual staff is 13, requirement is 16, and found 08 staff excess on requirement.

Driver: Driver activities can be outsourced and there are 5 vacancies in Drivers category. Hence the vacant post may be surrender.

Designation	Sanction	Actual	Vacancy
<b>Driver</b>	<b>7</b>	<b>2</b>	<b>5</b>

The sanctioned strength of Driver is 7, the actual staff is 2 found 5 post vacant.

- As per D.O No.SCR/P-HQ/MPP/156/Rightsizing/VIII, dated 23.01.2017, AGM/SCR advised all DRMs to initiate action to **surrender vacant/redundant posts like Black smithy, Driver, carpenter, Luskar, painter, Plumber etc.**
- Recommendation to surrender Artisan/Khalasi staff due to **Contract works/outsourcing** activities and **posts are lying vacant/redundant.**

Summary of Requirement of Artisan/khalasi staff on need based on practical observation.

S. No.	Design	Sanction	Actual	Vacancy	Requirement	Excess
1	Multipurpose khalasi	111	85	26	94	17
2	Black Smith	12	9	3	9	3
3	Painter	29	13	16	13	16
4	Carpenter	23	18	5	16	7
5	Plumber	24	11	13	16	08
6	Mason	32	17	15	16	16
7	Driver	07	02	5	02	05
		<b>238</b>	<b>155</b>	<b>83</b>	<b>166</b>	<b>72</b>

The sanctioned strength of above artisan and khalasi staff is 238, the actual staff is 155, requirement is 166, and found 72 staff excess on requirement.

- As per D.O No.SCR/P-HQ/MPP/156/Rightsizing/VIII, dated 23.01.2017, AGM/SCR advised all DRMs to initiate action to surrender **vacant posts like Black smithy, Driver, carpenter, Luskar, painter, Plumber etc.**\_\_\_\_\_

Hence, Recommended as follows.

**Recommendation**      **RECOMMENDATION:**

- It is recommended to surrender 72 posts from sanctions of Engineering department over SC division.

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## 1.0 ÑßçðÃððãðĐðð INTRODUCTION:

### 1.1 RAILWAY'S ROLE:

Indian Railways is a premier transport service provider to the nation and is vested with the responsibility of carrying bulk of freight and passenger traffic across the country at rates affordable for public. The Indian Railways operates through 18 Zones with 73 Divisions to serve the above objective and its operations cover [twenty nine states and seven union territories](#) and also provide limited international services to [Nepal](#), [Bangladesh](#) and [Pakistan](#).

1.2 **GENESIS OF THE REPORT:** Engineering Department consists of three organizations namely Permanent way, Works, and Bridges. The prime job of engineering department is to keep on maintaining the track in good fettle from beginning to the end, which is done by Permanent way. Works Organization maintains the Railway properties such as buildings, stations etc and looks after the passenger amenities at station, supply of water to Railway Colonies & stations, and maintains the sewage lines, roads & premises of Railway colonies etc. Bridge Organization constructs and maintains Railway Bridges where Railway Track is available.

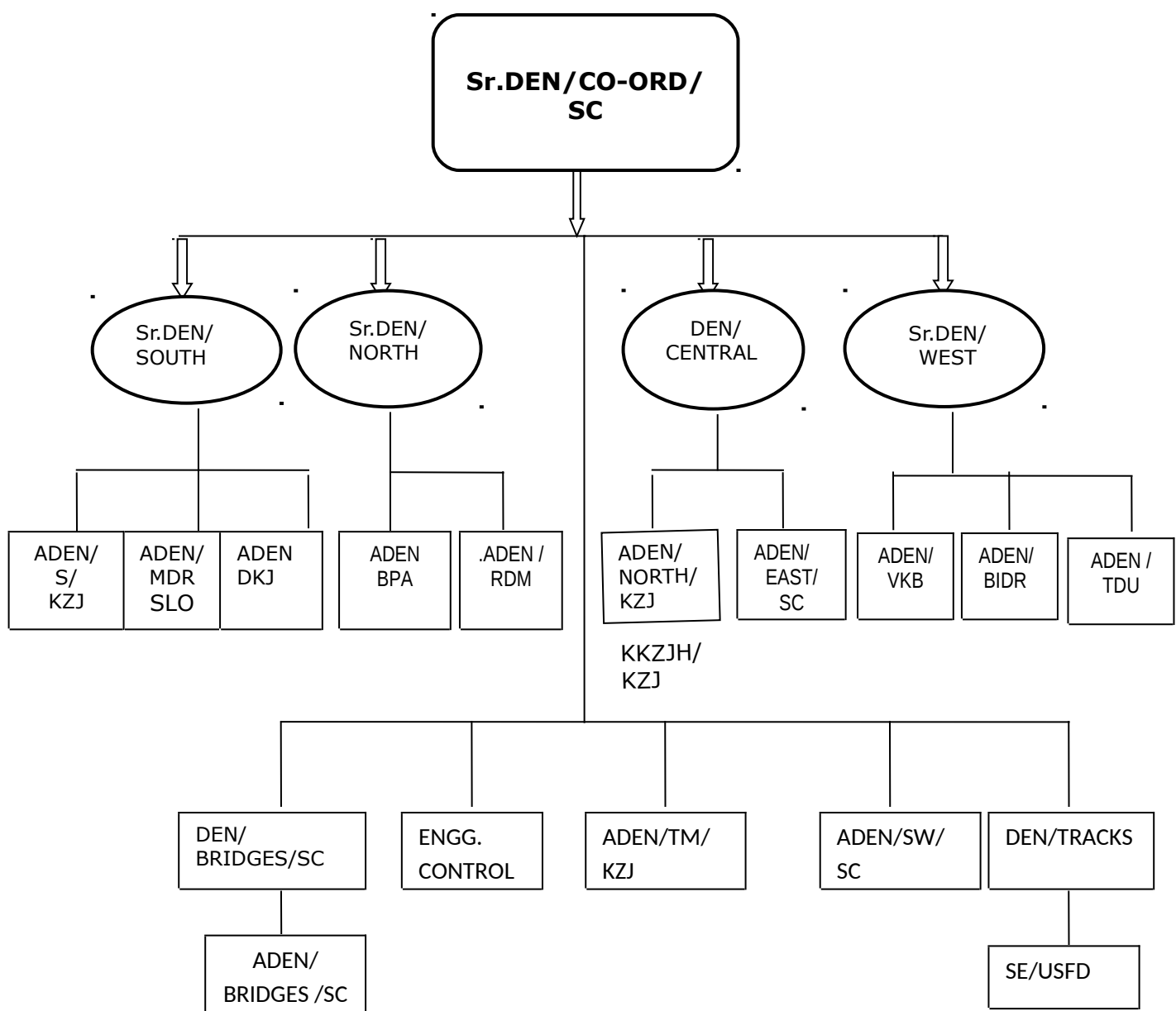
1.3 Civil Engineering infrastructure is the largest static infrastructure of Indian Railways comprising of track, bridges, land, etc. Management of this huge infrastructure has to be done in accordance with the organization's vision. Civil engineering department of Indian Railways manages and maintains all these infrastructures. Further, it has key role in the area of infrastructure development, technological leap in various fields, high-speed travel and development of world-class stations.

1.4 In view of the above, the Central Planning organization under the control of SDGM conducted work-study of Engineering department over SC Division of South Central Railway and humbly presents this report.

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**2.0 EXISTING SCENARIO:**

**2.1 ORGANISATION:** The Civil Engineering Department of Secunderbad Division is headed by Sr. DEN/Co-ord and assisted by Sr.DEN/South, Sr.DEN/North, Sr.DEN/C and DEN/West. In turn, Sr.DENs and DEN are assisted by ADENs and SSE/SEs/JEs. For the administrative convenience and close supervision and inspection, total KM over the division has been divided into small segments as far as practicable and kept under the control of Sr. Section Engineers, who are also responsible for their jurisdictions. These SSEs are controlled directly by ADENs posted at suitable places, so that coordination will be easy. These ADENs are answerable to Sr.DEN/DENs for their respective jurisdiction who are normally placed at division Headquarters which are detailed in the chart below:



## **SSE/SE/JE's**

The list of SSE/SE/JE's are working under the control of the respective ADENs as follows.

SSE/P.WAY/SC	SSE/P.Way/N/KZJ	SSE/Works/BPA	SSE/Works/BIDAR
SSE/P.Way/GT	SSE/P.Way/ALER	SSE/Works/RDM	
SSE/P.Way/LPI	SSE/P.Way/MDR	SSE/Works/RDM@KZJ	
SSE/P.Way/VKB	SSE/P.Way/KI	SSE/Works/WL	
SSE/P.Way/TDU	SSE/P.Way/DKJ	SSE/Works/DKJ	
SSE/P.Way/SEM	SSE/P.Way/BDCR	SSE/Works/MDR	
SSE/P.Way/BIDAR	SSE/P.Way/BPA	SSE/Works/S/KZJ	
SSE/P.Way/UDGR	SSE/P.Way/SKZR	SSE/Works/N/KZJ	
SSE/P.Way/PARLI	SSE/P.Way/MAGH	SSE/Works/E/SC	
SSE/P.Way/ZB	SSE/P.Way/MCI	SSE/Works/MLY	
SSE/P.WAY/CR/KZJ	SSE/P.Way/PDPL	SSE/Works/HYB	
SSE/P.Way/MABD	SSE/P.Way/SNF	JE/Works/VKB	
SSE/P.Way/WL	DRM/Works	JE/Works/TDU	

**2.2 SCALE CHECK:** The consolidated Scale check of Staff of Civil Engineering/SC is furnished below:

### **P.Way**

<b>S. No</b>	<b>Designation</b>	<b>Pay Band</b>	<b>Grade pay</b>	<b>Sanction</b>	<b>Actual</b>	<b>Vacancy</b>
1	Senior Section Engineer (P.Way)	9300-34800	4600	136	104	32
2	Junior Engineer(P.Way)	9300-34800	4200	107	51	56
3	Safety counsellor	9300-34800	4200	1	1	0
4	Senior Section Engineer(Drg)	9300-34800	4600	19	17	2
5	Junior Engineer(Drg)	9300-34800	4200	12	8	4
6	Senior Section Engineer(USFD)	9300-34800	4600	13	16	-3
7	Junior Section Engineer(USFD)	9300-34800	4200	8	0	8
<b>Sub Total</b>				<b>296</b>	<b>197</b>	<b>99</b>
8	Technician(MCM)/B.Smith	9300-34800	4200	15	7	8
9	Technician I /B.Smith	5200-20200	2800	17	5	12
10	Technician II /B.Smith	5200-20200	2400	4	4	0
11	Technician III /B.Smith	5200-20200	1900	10	6	4
<b>Sub Total</b>				<b>46</b>	<b>22</b>	<b>24</b>
12	Sr.Technician(S/M/G)	9300-34800	4200	4	3	1
13	Grinder/moulder/striker-I	5200-20200	2800	8	2	6
14	Grinder/moulder/striker-II	5200-20200	2400	1	0	1
15	Grinder/moulder/striker-III	5200-20200	1900	3	3	0
<b>Sub Total</b>				<b>16</b>	<b>8</b>	<b>8</b>
16	Technician(MCM)/Carpenter	9300-34800	4200	2	0	2



17	Technician I /Carpenter	5200-20200	2800	2	0	2
18	Technician II /Carpenter	5200-20200	2400	2	0	2
19	Technician III /Carpenter	5200-20200	1900	4	0	4
<b>Sub Total</b>				<b>10</b>	<b>0</b>	<b>10</b>
20	Technician(MCM)/Painter	9300-34800	4200	2	1	1
21	Technician I /Painter	5200-20200	2800	2	1	1
22	Technician II /Painter	5200-20200	2400	2	1	1
23	Technician III /Painter	5200-20200	1900	2	0	2
<b>Sub Total</b>				<b>8</b>	<b>3</b>	<b>5</b>
24	Brick Layer Gr-III	5200-20200	1900	0	2	-2
25	Mason	5200-20200	1900	2	1	1
<b>Sub Total</b>				<b>2</b>	<b>3</b>	<b>-1</b>
26	Driver	5200-20200	1900	3	2	1
<b>Sub Total</b>				<b>3</b>	<b>2</b>	<b>1</b>
27	Technician/MCM/Welder	9300-34800	4200	4	2	2
28	Technician I / Welder	9300-34800	2800	8	3	5
29	Technician I I/ Welder	9300-34800	2400	1	2	-1
30	Technician III/ Welder	9300-34800	1900	40	10	30
<b>Sub Total</b>				<b>53</b>	<b>17</b>	<b>36</b>
31	Khalasi/P.Way	5200-20200	1800	254	179	75
<b>Sub Total</b>				<b>254</b>	<b>179</b>	<b>75</b>
32	Track Maintainer I	5200-20200	2800	361	236	125
33	Track Maintainer II	5200-20200	2400	713	524	189
34	Track Maintainer III	5200-20200	1900	1310	1189	121
35	Track Maintainer IV	5200-20200	1800	3495	2883	612
<b>Sub Total</b>				<b>5879</b>	<b>4832</b>	<b>1047</b>
36	Ch.OS	9300-34800	4600	21	14	7
37	Divisional Accountant	9300-34800	4600	1	1	0
38	OS	9300-34800	4200	65	59	6
39	Stenos	9300-34800	4200	5	4	1
40	Sr.Clerk	5200-20200	2800	21	8	13
41	Jr.Clerk cum typist	5200-20200	1900	2	3	-1
42	Peon	5200-20200	1800	11	11	0
<b>Sub Total</b>				<b>126</b>	<b>100</b>	<b>26</b>
43	Khalasi (Survey)	5200-20200	1800	3	6	-3
<b>Sub Total</b>				<b>3</b>	<b>6</b>	<b>-3</b>
44	Safaiwala	5200-20200	1800	0	2	-2
				<b>0</b>	<b>2</b>	<b>-2</b>
45	Sr.Lascar/W.Man	5200-20200	1800	0	1	-1
<b>Sub Total</b>				<b>0</b>	<b>1</b>	<b>-1</b>
TMO (Track Machine Organisation)						
46	SSE/TM	9300-34800	4600	56	40	16
47	JE/TM	9300-34800	4200	26	10	16
48	MCM/TM	9300-34800	4200	20	9	11
49	Tech I/TM	5200-20200	2800	45	36	9
50	Tech II/TM	5200-20200	2400	7	11	-4
51	Tech III/TM	5200-20200	1900	11	10	1
52	Khalasi/TM	5200-20200	1800	69	44	25
<b>Sub Total</b>				<b>234</b>	<b>160</b>	<b>274</b>

### Summary of P.Way organization

S. No	Designation	Sanction	Actual	Vacancies
1	SSE/JE	296	197	99
2	Technician/BS	46	22	24
3	Technician/Carpenter	10	0	10
4	Technician/painter	8	3	5
5	Technician/BL/Mason	2	3	-1
6	Technician/GM Sticker	16	8	8
7	Technician/Welder	53	17	36
8	Driver	3	2	1
9	Track maintainer	5879	4832	1047
10	Office staff	126	100	26
11	Khalasi (P.Way)	254	179	75
12	Khalasi (Survey)	3	6	-3
13	Safaiwala	0	2	-2
14	Sr.Lascar/W.Man	0	1	-1
15	SSE/JE/TM	82	50	32
16	Tech/TM	83	66	17
17	Khalasi/TM	69	44	25
<b>Total</b>		<b>6930</b>	<b>5532</b>	<b>1398</b>

### WORKS

1	Senior Section Engineer (Works)	9300-34800	4600	20	19	1
2	Junior Engineer(Works)	9300-34800	4200	27	20	7
<b>Sub Total</b>				<b>47</b>	<b>39</b>	<b>8</b>
3	Technician(MCM)/Mason	9300-34800	4200	8	1	7
4	Technician I / Mason	5200-20200	2800	17	4	13
5	Technician II / Mason	5200-20200	2400	3	8	-5
6	Technician III / Mason	5200-20200	1900	4	4	0
<b>Sub Total</b>				<b>32</b>	<b>17</b>	<b>15</b>
7	Technician(MCM)/B.Smith	9300-34800	4200	2	2	0
8	Technician I /B.Smith	5200-20200	2800	2	2	0
9	Technician II /B.Smith	5200-20200	2400	2	2	0
10	Technician III /B.Smith	5200-20200	1900	6	3	3
<b>Sub Total</b>				<b>12</b>	<b>9</b>	<b>3</b>
11	Technician(MCM)/Carpenter	9300-34800	4200	6	4	2
12	Technician I /Carpenter	5200-20200	2800	14	11	3
13	Technician II /Carpenter	5200-20200	2400	1	1	0
14	Technician III /Carpenter	5200-20200	1900	2	2	0
<b>Sub Total</b>				<b>23</b>	<b>18</b>	<b>5</b>
15	Technician(MCM)/Painter	9300-34800	4200	12	6	6
16	Technician I /Painter	5200-20200	2800	17	7	10
17	Technician II /Painter	5200-20200	1900	0	0	0
18	Technician III /Painter	5200-20200	1900	0	0	0
<b>Sub Total</b>				<b>29</b>	<b>13</b>	<b>16</b>
19	Technician(MCM)/SM Fitter	9300-34800	4200	5	4	1
20	Technician I /SM Fitter	5200-20200	2800	10	4	6
21	Technician II /SM Fitter	5200-20200	2400	5	2	3

22	Technician III /Fitter	5200-20200	1900	4	1	3
<b>Sub Total</b>				<b>24</b>	<b>11</b>	<b>13</b>
25	Driver	5200-20200	2800	7	2	5
<b>Sub Total</b>				<b>7</b>	<b>2</b>	<b>5</b>
24	Khalasi (Multipurpose)	5200-20200	1800	111	85	26
25	Sweeper	5200-20200	1800	3	2	1
<b>Sub Total</b>				<b>114</b>	<b>87</b>	<b>27</b>

#### Summary of Works organization

S. No	Designation	Sanction	Actual	Vacancies
1	SSE/JE	67	59	8
2	Technician/BS	12	9	3
3	Technician / Mason	32	17	15
4	Technician/Carpenter	23	18	5
5	Technician/painter	29	13	16
6	Technician/SM Fitter	24	11	13
7	Driver	7	2	5
8	Khalasis(M.Purpose)/Sweeper	114	87	27
<b>Sub Total</b>		<b>308</b>	<b>216</b>	<b>92</b>

#### BRIDGES

1	Senior Section Engineer (Bridges)	9300-34800	4600	5	5	0
2	Junior Engineer(Bridges)	9300-34800	4200	2	3	-1
<b>Sub Total</b>				<b>7</b>	<b>8</b>	<b>-1</b>
3	Technician(MCM)/B.Smith	9300-34800	4200	0	0	0
4	Technician I /B.Smith	5200-20200	2800	1	0	1
5	Technician II /B.Smith	5200-20200	2400	1	0	1
6	Technician III /B.Smith	5200-20200	1900	0	0	0
<b>Sub Total</b>				<b>2</b>	<b>0</b>	<b>2</b>
7	Technician(MCM)/Erector	9300-34800	4200	2	0	2
8	Technician I /Erector	5200-20200	2800	3	0	3
9	Technician II /Erector	5200-20200	2400	1	1	0
10	Technician III /Erector	5200-20200	1800	1	0	1
<b>Sub Total</b>				<b>7</b>	<b>1</b>	<b>6</b>
11	Technician/MCM/Revitter	9300-34800	4200	1	0	1
12	Technician I/ Revitter	5200-20200	2800	2	0	2
13	Technician II/ Revitter	5200-20200	2400	1	4	-3
14	Technician III/ Revitter	5200-20200	1900	1	0	1
<b>Sub Total</b>				<b>5</b>	<b>4</b>	<b>1</b>
15	Khalasi/ Helper	5200-20200	1800	70	50	20
<b>Sub Total</b>				<b>70</b>	<b>50</b>	<b>20</b>
16	Sarang	5200-20200	2800	1	0	1
<b>Sub Total</b>				<b>1</b>	<b>0</b>	<b>1</b>

#### Summary of Bridges organization

S. No	Designation	Sanction	Actual	Vacancy
1	SSE/JE	7	8	-1

2	Technician/BS	2	0	2
3	Technician/Erector	7	1	6
4	Technician/Revitter	5	4	1
5	Khalasis	70	50	20
6	Sarang	1	0	1
<b>Sub Total</b>		<b>92</b>	<b>63</b>	<b>29</b>

### Summary of Engineering organization

<b>S. No</b>	<b>Designation</b>	<b>sanction</b>	<b>Actual</b>	<b>Vacancy</b>
1	P.Way including TMO	6930	5532	1398
2	Works	308	216	92
3	Bridges	92	63	29
<b>Grand Total</b>		<b>7330</b>	<b>5811</b>	<b>1519</b>

### 2.3 DUTIES OF ENGINEERING STAFF (WORKS):

**SSE/SEWORKS:** SSE/SE (Works) performs duties both in office and in field. The works are broadly classified as follows:

- Executive works.
- Store Works.
- Establishment works.
- Industrial relations, staff welfare etc.

The normal duties performed in the office of the SSE/SE (Works) are:

**Official work:**

- Maintenance of registers connected to staff quarters and service buildings.
- Periodical verification of stores and placement of indents for procurement of material.
- Maintain attendance, leave, pass and other staff welfare matters and office correspondence.

**Field work:** Inspection of

- staff Quarters
- Service / Welfare Buildings
- Roads sewage lines
- Maintenance of gardens after they are handed over by the contractor.
- Encroachment their removal and eviction of unauthorized occupants.

**Maintenance work:** Carries out maintenance works of staff quarters, service buildings etc. The repairs are undertaken based either on complaints lodged or on routine Inspection. Cob webs cleaning, Cleaning of shrubs and bushes in the around railway premises. Maintain registers to keep record of maintenance and repair works undertaken.

**Stores:** Periodical indents are to be placed on various stores depots for the procurement of material. Loading/un-loading of material. After procurement of material, the same are to be entered in respective ledgers. Day to day issues of materials are to be entered in 'voucher book' maintained in the office.

**Water Supply:** SE (Works) is responsible for procurement and supply of water to service buildings and residential buildings. In order to keep continuous supply of water, he has to maintain water pipe line, bore wells, reservoirs and overhead tanks and keep them in good fettle.

**Roads:** SSE/SE (Works) has to maintain and repair the roads when warranted.

**Sewerage Line:** SSE/SE (Works) arranges staff to attend underground drainage lines, and cleaning/de- sledge of septic tanks.

**Maintenance of gardens:** After the plantation and maintenance by the contractor for one year, the gardens are taken over by the SE/JE (Works) for further maintenance and are being maintained with the help of a valve-man for watering the plants.

## **2.4 DUTIES OF ENGINEERING STAFF (P.Way):**

- **Gang mate:** He supervises the work done by trackmen, custodian of tools, introducing patrolling attention in case of emergencies, weekly twice key-man duty.
- **Keyman:** He performs daily daytime patrolling of track for observing any rail failure and in time protection for safe running of trains and tightens all fittings.
- **Spl. Gr. Trackmen:** He is entrusted with duties of Monsoon patrolling, Hot Weather patrolling, cold weather patrolling, watchmen at vulnerable locations, pilot men at work spots of special works.
- **Sr. Trackmen:** He performs the duties of Monsoon patrolling, Hot Weather patrolling, cold weather patrolling, watchmen at vulnerable locations, patrol men at work spots of special works.
- **Jr.Trackmen:** For assisting working of small track machines i.e. transportation/carrying to loading and unloading, replacement of glued joints, SEJs, trucking of rails, rail renewals, stacking of rails and various other P. Way materials for declaring scraping, jungle clearance, through gauging for improving TGI values, curve greasing, points and crossing, L.C. approach screening of pumping joints, cleaning of waterways of bridges longitudinal drains, cross drains, cache water drains.
- **Spl.Gr.Store watchman:** For watching store materials and to watching out side dump P. Way materials, temperature, rain fall measuring, Mail collection, stocking of P. Way materials, cleaning of office compound, Receive phone message and passing the message controlling in charges.
- **Sr.Gr.Store Watchman:** He is entrusted with duties of watching store materials and to watching out side dump P. Way materials, temperature, rain fall measuring, Mail collection, stocking of P. Way materials, cleaning of office compound, Receive phone message and passing the message controlling in charges.
- **Spl.Gr.Trolley man:** Pushing of Trolley, Measuring along with PWI i.e. curves, points and crossings, SEJ's Pre and post Tampering measurements, L.C. Gates measuring, Attending emergency Rail/Weld failures along with PWI's, Ballast stocks measurements, P. Way material Inventory, Scrap rails

Inventory, ASV/DSK, Accompanying along with PWI's, Joint Inspection with SSE/Signals, Traffic Inspector, SE/Bridges and collecting of various details of track works.

- **Jr.Gr.Trollyman:** Pushing of Trolley, Measuring along with PWI i.e. curves, points and crossings, SEJ's Pre and post Tampering measurements, L.C. Gates measuring, Attending emergency Rail/Weld failures along with PWI's, Ballast stocks measurements, P.Way material Inventory, Scrap rails Inventory, ASV/DSK, Accompanying along with PWI's, Joint Inspection with SSE/Signals, Traffic Inspector, SE/Bridges and collecting of various details of track works.
- **Carpenter Khalasi:** Deployed for laying and adjusting Wooden layouts Points and crossings rail screw prodding and tightening of wooden blocks, cutting and drilling, providing of wooden block at the time of R/W failures, and attending Section Trolley's repairs.
- **Painter:** Painting of curves, points and crossings, SEJ Pillars, Fouling Marks, Km stones, LC. Gates Boards Caution Order Boards, curve Boards, Points Boards letter painting, checking rails, painting, Bridges DL, HFL Level Markings Bridges Nos. paintings, Scrap rails measurements marked with paint, Stencil cutting, Weld collar painting.

## 2.5 work Load of Works Department:

### Integrated Track Kilometers (ITKMS):

The work Load of P.Way Organisation is represented in the form of ETKMs (Equated track Kms) & Work Load of works Organisation is Integrated Track Kilometers (ITKMS) of the concerned units, which is shown below to throw light on the workload of the various units.

- buildings (i.e Plinth area in sqms),
- Pipe line length (ie. Water pipe line and sewage pipe line )
- Roads ( Length in metres)
- Pump stations and sewages schemes (Measured in numbers)
- Circulating area (Area sqmts)
- Platforms.

All the above factors are converted into ETKMS & ITKMS and furnished in the following table

## 2.6 Work load of P.Way wing of Engineering department:

DE Ns	AENs	SSE/ SEs	ROUT E KMs	MAIN LINE			YARDS AND			TOTAL		
				RUNNING TRACK			SIDINGS					
				TKMs	ETKMs	ITKMs	TKMs	ETKMs	ITKMs	TKMs	ETKMs	ITKMs
		SEM	44.00	88.00	161.35	129.08	13.98	19.02	15.22	101.98	180.37	144.30
		TDU	43.20	86.40	150.89	120.71	8.99	12.22	9.78	95.39	163.11	130.49
	AEN/ TDU		87.20	174.40	312.24	249.79	22.97	31.24	24.99	197.37	343.48	274.78
		VKB	39.71	78.49	144.34	115.47	13.32	19.93	15.94	91.81	164.27	131.42
		LPI	45.25	90.50	159.11	127.29	34.79	30.51	24.41	125.29	189.62	151.70

		ZB	64.21	64.21	86.65	69.32	6.11	6.76	5.41	70.32	93.41	74.73
	AEN/ VKB		149.17	233.20	390.10	312.08	54.22	57.20	45.76	287.42	447.30	357.84
		BIDR	102.29 7	102.29 7	124.04	99.23	9.03	10.62	8.50	111.32 9	134.66	107.73
		UDGR	71.11	71.11	90.88	72.70	6.36	7.41	5.93	77.47	98.29	78.63
		PRLI	66.85	66.85	88.80	71.04	14.97	16.84	13.47	81.82	105.64	84.51
	AEN/ BIDR		240.25 7	240.25 7	303.72 0	242.98	30.36 2	34.87 2	27.898	270.61 9	339.592	270.874
Sr.DEN/WEST/SC			476.62 7	647.85 7	1006.0 60	804.84 8	107.5 52	123.3 12	98.650	755.40 9	1129.37 2	903.498
		SC	23.02	37.25	64.19	51.35	82.07	60.56	48.45	119.32	124.75	99.80
		SNF	28.51	45.27	69.52	55.62	32.84	27.81	22.25	78.11	97.33	77.86
		GT	51.52	102.56	174.15	139.92	16.09	19.46	15.57	118.65	193.61	154.89
	AEN/EAST/ SC		103.05	185.08	307.86	246.29	131.0 0	107.8 3	86.26	316.08	415.69	332.55
		ALER	47.53	95.06	159.99	127.99	9.80	13.98	11.18	104..8 6	173.97	139.18
		KZJ/C	29.86	59.72	99.76	79.81	39.88	46.26	37.01	99.60	146.02	116.82
	AEN/N/KZJ		77.39	154.78	259.75	207.80	49.68	60.24	48.19	204.46	319.99	255.99
DEN/CENTRAL/SC			180.44	339.86	567.71	454.09	180.6 8	168.0 7	134.46	520.54	735.68	588.54
		MAGH	62.51	93.51	151.36	121.09	16.14	21.81	17.45	109.65	173.17	138.54
		SKZR	38.00	76.00	139.29	111.43	7.80	12.75	10.20	83.80	152.04	121.63
		BPA	37.74	75.48	128.68	102.94	29.82	32.59	26.07	105.30	161.27	129.02
	AEN/BPA		138.25	244.99	419.33	335.46	53.76	67.15	53.72	298.75	486.48	389.18
		MCI	31.11	85.64	134.34 2	107.47	15.81	17.81	14.25	101.45	152.15	121.72
		KRMR	81.96	81.96	83.74	66.99	10.63	7.14	5.71	92.59	90.88	72.70
		PDPL	43.795	97.57	153.07 5	122.46	35.48	40.11	32.09	133.04 5	193.185	154.55
		KZJ/N	50.00	100.00	163.85	131.08	9.53	12.19	9.75	109.53	176.04	140.83
	AEN/RDM		206.87	365.17	535.00 7	428.01	71.45	77.25	61.80	436.62	612.26	489.81
Sr.DEN/NORTH/ SC			345.12	610.15 7	954.33 7	763.47	125.2 1	144.4 0	115.52	735.36 7	1098.74	878.99
		WL	38.30	76.60	134.04	107.23	12.08	16.65	13.32	88.68	150.69	120.55
		MABD	50.70	101.40	175.76	140.61	6.99	9.78	7.82	108.39	185.54	148.43
	AEN/S/KZJ		89.00	178.00	309.80	247.84	19.07	26.43	21.14	197.07	336.23	268.98
		DKJ	57.15	86.81	147.38	117.90	20.45	29.69	23.75	107.26	177.07	141.66
		BDCR	89.62	90.03	132.14	105.71	29.99	24.41	19.53	120.02	156.55	125.24
	AEN/DKJ		146.77	176.84	279.51	223.62	50.44	54.10	43.28	227.28	333.63	266.90
		MDR	94.788	140.53 9	215.12	172.10	20.39	24.25	19.40	160.92 9	239.37	191.50

	KI	35.20	70.40	130.09	104.07	8.99	14.65	11.72	79.39	144.74	115.79
AEN/MDR		129.98 8	210.93 9	345.21	276.17	29.38	38.90	31.12	240.31 9	384.11	307.29
Sr.DEN/SOUTH/ SC		365.75 8	565.77 9	939.54	747.62	98.89	119.4 3	95.54	664.66 9	1053.96	843.18
NEW LINES											
LPJL-MRTD		50.395	50.395	50.395	40.32						
MRTD-NZB		43.794	43.794	43.794	35.04						
MACU- MATTAMPALLI		10.095	10.095	10.095	8.08						
MATTAMPALLI- JANPAHAD		18.635	18.635	18.635	14.91						
SC DIVISION TOTAL (INCL. NEW LINES)		1490.85 9	2286.57	3585.45 5	2868.36	512.33	555.21	444.17 0	2798.9 04	4140.67	3312.53
<b>Total ETKM(P.way) of SC Division is 4140.67</b>											



**3.0 CRITICAL EXAMINATION:**

- 3.1 On critical examination of the scale check of Engineering department over SC division, it can be seen that out of sanctioned strength of 7330 staff, 5811 staff are working at present with 1519 vacancies in different grades.
- 3.2 The work-study team approached Sr.DEN/Co-Ord/SC in order to conduct Work-study on engineering department over SC Division.
- 3.3 **General:** Secunderabad Division is an important division in South Central Railway. The prime job of engineering department is to keep the wheels on Rail, either in motion or in stable condition. For this purpose, it has to keep on maintaining the track in good fettle from beginning to the end. In addition to this, there are many Service Buildings and residential buildings in the division to cater to the needs of the employees. Since train services are round the clock, water and other amenities are to be provided to the passenger so that smooth functioning is maintained. Round the clock water supply is also required for the Railway Hospitals and other service buildings in the division. In this direction Engg organization of SC division plays a major role in up keep of the same.
- 3.4 **Yardsticks:** In olden days, when these yardsticks were come into force, all these activities were managed by the depots' staff itself. However, nowadays Zonal Contracts are introduced to make easy and procurement of required material to achieve the early performance in a satisfactory level without the help of our labour, as we are under going into these contracts for early achievement along with an intention to save some work force. That is why the Work study cell ignores them because yardsticks have become outdated and not suggest-able to implement in Engineering Organization from the date when the Zonal Contracts for the activities have been introduced.
- 3.5 **Application of Benchmarking Norms:** Benchmarking is based on dynamic and comparative analysis and is a very useful tool to manage efficient deployment of staff and monitor effects of improvement in working practices, use of new technologies and level of outsourcing. Board in successive meetings has directed all units to achieve average of Indian Railway Benchmark.
- 3.6 **June 2018 IR average and Bench Marking of SC divn is as follows:**

Organization	MPR of SC	IR avg MPR	Bench Mark MPR
P.Way	1.27	1.30	0.69
Buildings	0.09	0.20	0.04
Bridges	0.07	0.08	0.04

- 3.7 Engineering department of SC division is below IR average in Bridges, Buildings and P.way.
- 3.8 Major changes have taken in the working system of Engineering department, as some works are being done on **zonal contract**. Many **works have been outsourced**. Recently the works department has **out sourced** number of activities in a big way House Keeping Services - Maintenance of service buildings (Divisional Office, Officers Rest House/Subordinate Rest house including maintenance of roads, roofs, maintenance of Lawn and Gardens etc) and rodent control treatment at stations.

In the P.Way wing, some works are being outsourced such as track

maintenance works.

3.9 In order to have first hand information the Work-study team visited all the SSE units, sections, yards and offices of the Engineering department of SC division and observed the working pattern, various processes involved in maintenance of activities.

3.10 **The Work-study team made an analysis on the requirement of staff based on the following parameters.**

- a) No. of activities under out sourcing in Engineering organization.
- b) The activities permitted to work under Contract in Engineering organization.
- c) Requirement of Artisan/Khalasi staff on need base
- d) Summary of Save Position of engineering department
- e) Recommendation to surrender Artisan/Khalasi staff due to Contract works/ outsourcing activities and posts are lying vacant/redundant.

3.11 No. of activities under outsourcing in engineering organization of SC division.

S.NO.	P.Way contracts
1.	pre-tamping and post tappings operations
2.	Reconditioning of worn-out 52/60kg CMS Crossings and tongue rails with "H 3C" class (using two electrode system CP BUFFER 040 (Buffer layer) & CP TOP 080 (hard surfacing layer).)
3.	Repairs to track by eliminating scabbed wheel burnt rails of 60/52kg rails.
4.	Casual renewal of sleepers.
5.	Repairs to cess side non cess side on UP & DN sides.
6.	Alumino thermic welding of rail joints with compressed air petrol/lpg pre heating with automatic tapping thimble * multiple use crucible with three piece pre-fabricated moulds in accordance with IRS Specifications.
7.	Provision of lifting barrier in connection with manning of unmanned LCs.
8.	Repairs to ballast retaining walls at important and major bridges on UP & DN lines.
9.	Proposed safety related track works on UP & DN lines.
10.	Construction of side drains & ballast retaining wall for patch tripiling work.
11.	Repairs to bridge protective works.
12.	Proposed to anti corrosive treatment by way of painting of rails and sealing of linear contact area.
13.	Maintenance of yard surroundings by rag picking and cleaning & maintenance of 6 MMTS stations.
14.	Provision of bus type shelters at various stations over SC Division.
15.	Construction of boundary wall at k.m no.89-91 in Bidar
16.	Provision of airconditioning of running rooms at VKB, CT, PRLI & BIDAR.
17.	Additional facilities at fit line and coach maintenance.
18.	Manufacture and supply of welding portions with all consumables and accessories.
19.	Hiring of trucks 4.5MT carrying capacity for transportation of

	men and material to bridge sites.
20.	Surveying for design mode tamping-tenders under process.
21.	Operation and maintenance of water recycling plant at secunderabad station
22.	Casual renewal of rails.
23.	Casual renewal of sleepers.
24.	Casual renewal of cms crossings and switches.
25.	Provision of gapless joints.
26.	De-stressing of LWR.
27.	Fixing of check rails on curves and bridges.
28.	Repair welding.
29.	Casual renewal of Glued joints and SEJs.
30.	Lubrication of ERCs and sealing of liner contact area.
31.	Removal of seized ERC.
32.	Removal of jammed plate screws in P&C.
33.	Oiling ,greasing and tightening of fittings on bridges.
34.	Greasing of plate screws in P&C
35.	Renewal of 10 mm thick rubber pads under CMS Crossings.
36.	In servicing painting of rails in corrosion prone areas and station yards.
37.	Drilling of holes and fixing of joggled fish plates.
38.	Shallow screening of isolated locations.
39.	Loading ,leading and unloading of P.Way materials.
40.	Collection and stacking of P.Way scraps.
41.	Overhauling of level crossings.
42.	Casual renewal of fittings of steel channel sleepers on girder bridges.
43.	Casual renewal of crushed/missing rubber pads/elastomeric pads under vsteel channel sleepers.
44.	De-silting of water ways.
45.	Clearing of drains,water ways and attention to cuttings.
46.	Unloading of BOBYs.
47.	Ballast Profiling.
48.	Cess repairs and attention to trolley refuges.
49.	De-weeding and jungle clearance.
50.	Rag picking and removal of debris along the track at the approaches of A1, A and B Class sttions.
	<b>Works Contracts</b>
1	Construction of buildings, improvements buildings/repairs to buildings
2	Construction of structural steel work for sheds, FOB, COPs, Girder bridges etc
3	Laynig track/Maintenance of track/improvements/repairs to track
4	Construction/maintenance and repairs to bridges/RUBs
5	Construction/repairs/improvements to Roads
6	Annual Zonal contracts
7	Water supply to Railway colonies
8	Earth works/Formation treatment works
9	Painting of Rails/Bridges/Railway assets

10	Rag picking in station yards and along the track
11	Monsoon reserves for emergency
	<b>Service contracts</b>
1	Gardening /garden maintenance contract
2	Safety councellers
3	House keeping contracts
4	Annual maintenance contracts of computers, printers and other machinery
5	Raingauging works
6	Water supply to stations
7	Transportation (Hiring of vehicles) contracts
8	Welding of track contracts
9	Internet Data cards

### 3.12 Requirement of Artisan/Khalasi staff on need base

#### ➤ **Multi purpose khalasi:**

Multi purpose khalasi is required to assist the Artisan staff like Black smithy, welder, Brick Layer, carpenter etc. But, most of the activities in the works organization are under Zonal contract system and these activities are not regular. There are total 14 units in Works organization of SC division and each unit requires 6 Multi purpose khalasis. Hence, 84 no.s Multi purpose khalasis are required. Leave Reserve @12.5% for 84 Multi purpose khalasis is 10. Hence, total requirement of Multi purpose khalasi is 84+10=94.

Designation	Sanction	Actual	Vacancy	Requirement	Excess
<b>Multi purpose khalasi</b>	<b>111</b>	<b>85</b>	<b>26</b>	<b>94</b>	<b>17</b>

The sanctioned strength of Multi purpose khalasi is 111, the actual staff is 85, requirement is 94 and found 17 staff excess on requirement.

#### ➤ **Black Smith:**

Most of the Black Smith activities in the works organization are under Zonal contract system and the activity is not regular work. There are total 14 units in Works organization of SC division. Hence, 9 no.s Black smith are required to execute the work in 14 units of Works organization. Hence, total requirement of Black smith is 9. In case of exigency, multipurpose khalasi may be used.

Designation	Sanction	Actual	Vacancy	Requirement	Excess on requirement
<b>Black smith</b>	<b>12</b>	<b>9</b>	<b>3</b>	<b>9</b>	<b>3</b>

The sanctioned strength of Black smith is 12, the actual staff is 9, requirement is 9 and found 3 staff excess on requirement.

➤ **Mason:**

Most of the Mason activities in the works organization are under Zonal contract system and the activity is not regular work. There are total 14 units in Works organization of SC division. There are total 14 units in Works organization of SC division and each unit requires 1 Mason. Leave Reserve @12.5% for 2 Mason. Hence, total requirement of Mason is 14+2=16.

Designation	Sanction	Actual	Vacancy	Requirement	Excess on requirement
<b>Mason</b>	<b>32</b>	<b>17</b>	<b>15</b>	<b>16</b>	<b>16</b>

The sanctioned strength of Mason is 32, the actual staff is 17, requirement is 16 and found 16 staff excess on requirement.

- **Painter:** Since most of the Painter activities in the works organization are under Zonal contract system and the activity is not regular work. In case of exigency, multipurpose khalasi may be used.

Designation	Sanction	Actual	Vacancy	Requirement	Excess on requirement
<b>Painter</b>	<b>29</b>	<b>13</b>	<b>16</b>	<b>13</b>	<b>16</b>

The sanctioned strength of Painter is 29, the actual staff is 13 requirement is 13 and found 16 staff excess on requirement.

As per D.O No.SCR/P-HQ/MPP/156/Rightsizing/VIII, dated 23.01.2017, AGM/SCR advised all DRMs to initiate action to **surrender vacant/redundant posts like Black smithy, carpenter, Luskar, painter, Plumber etc.**

- **Carpenter:** Since most of the carpenter activities in the works organization are under Zonal contract system and the activity is not regular work. One carpenter with one khalasi is required for each unit. There are total 14 units in Works organization of SC division. Hence, 14 no.s carpenters are required to execute the work in 14 units of Works organization. Leave Reserve @12.5% for 14 Carpenter is 2. Hence, total requirement of Carpenter is 14+2=16. In case of exigency, multipurpose khalasi may be used.

Designation	Sanction	Actual	Vacancy	Requirement	Excess on requirement
<b>Carpenter</b>	<b>23</b>	<b>18</b>	<b>5</b>	<b>16</b>	<b>7</b>

The sanctioned strength of carpenter is 23, the actual staff is 18, requirement is 16, and found 7 staff excess on requirement.

- **SM fitter/Plumber:** Most of the SM fitter/Plumber activities in the works organization are under Zonal contract system and the activity is not regular work. One no. Pipeline fitter/Plumber is required for each unit. There are total 14 units in Works organization of SC division. Hence, **14 no's** SM fitter/Plumber are required to execute the work in 14 units of Works organization. Leave Reserve @12.5% for 14 SM fitter/Plumber is 2. Hence, total requirement of SM fitter/plumber is 14+2=16.

Designation	Sanction	Actual	Vacancy	Requirement	Excess
<b>SM fitter/Plumber</b>	<b>24</b>	<b>11</b>	<b>13</b>	<b>16</b>	<b>08</b>

The sanctioned strength of SM fitter/Plumber is 24, the actual staff is 13, requirement is 16, and found 08 staff excess on requirement.

- As per D.O No.SCR/P-HQ/MPP/156/Rightsizing/VIII, dated 23.01.2017, AGM/SCR advised all DRMs to initiate action to **surrender vacant/redundant posts like Black smithy, carpenter, Luskar, painter, Plumber etc.**

Driver: Driver activities can be outsourced and there are 5 vacancies in Drivers category.Hence the vacant post may be surrender.

Designation	Sanction	Actual	Vacancy
<b>Driver</b>	<b>7</b>	<b>2</b>	<b>5</b>

The sanctioned strength of Driver is 7, the actual staff is 2 found 5post vacant.

- As per D.O No.SCR/P-HQ/MPP/156/Rightsizing/VIII, dated 23.01.2017, AGM/SCR

advised all DRMs to initiate action to **surrender vacant/redundant posts like Black smithy, Driver, carpenter, Luskar, painter, Plumber etc.**

- 3.13 Summary of Requirement of Artisan/khalasi staff on need based on practical observation.

S.No.	Design	Sanction	Actual	Vacancy	Requirement	Excess
1	Multi purpose khalasi	111	85	26	94	17
2	Black Smith	12	9	3	9	3
3	Painter	29	13	16	13	16
4	Carpenter	23	18	5	16	7
5	Plumber	24	11	13	16	08
6	Mason	32	17	15	16	16
7	Driver	07	02	5	02	05
		<b>238</b>	<b>155</b>	<b>83</b>	<b>166</b>	<b>72</b>

The sanctioned strength of above artisan and khalasi staff is 238, the actual staff is 155, requirement is 166, and found 72 staff excess on requirement.

- 3.14 **As per D.O No.SCR/P-HQ/MPP/156/Rightsizing/VIII, dated 23.01.2017, AGM/SCR advised all DRMs to initiate action to surrender vacant posts like Black smithy, Driver, carpenter, Luskar, painter, Plumber etc.**
- 3.15 Recommendation to surrender Artisan/Khalasi staff due to **Contract works/outsourcing** activities and **posts are lying vacant/redundant.**

Hence, Recommended as follows.

- 3.16 **RECOMMENDATION:**

It is recommended to surrender 72 posts from sanctions of Engineering department over SC division.

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#### 4.0 **FINANCIAL IMPLICATIONS:**

- 4.1 When the recommendations are accepted, the recurring savings on surrender of the following posts in Engineering department over SC Division will be as follows:

S No	Category	Scale		No. of posts	Mean Pay	Grade Pay	DA @ 9%	Emoluments P.M (in Rs.)	Total Emoluments P.A (in Rs.)
		From	To						
1	Multi purpose khalasi	18000	56900	17	37450	1800	3370	693940	8327280
2	Black smith	18000	56900	3	37450	1900	3370	122460	1469520
3	Painter	18000	56900	16	37450	1900	3370	653120	7837440
4	Carpenter	18000	56900	7	37450	1900	3370	285740	3428880
5	Plumber	18000	56900	8	37450	1900	3370	326560	3918720
6	Mason	18000	56900	16	37450	1900	3370	653120	7837440
7	Driver	18000	56900	5	37450	1900	3370	204100	2449200
	<b>TOTAL</b>			<b>72</b>				<b>2939040</b>	<b>35268480</b>

On implementation of the recommendations of Work-study report, an annual savings of **Rs.3.52 crores** can be achieved.

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**çðüçÃðôôÃðó / çðô»ððãð**

## RECOMMENDATION / SUGGESTION

Sl. No. အမှတ် နံပါတ်.	Description	Para No.
01	<p><b><u>ဝန်ထမ်းများ၏ အသိပေးချက်</u></b>    <b>Recommendation:</b>  It is recommended to surrender 72 posts from sanctions of Engineering department over SC division.</p>	3.16