ACKNOWLEDGEMENT

The Central Planning organization takes this opportunity to express hearty thanks to the Sr.DEN/Co-ord/HYB, Officials, SSEs and staff of Engineering department & Sr.DPO/HYB, Officials and staff of Personnel department over Hyderabad Division for their valuable information, guidance and co-operation in compilation of the report.

METHODOLOGY

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

- 1. Collection of the details of work Load particulars
- 2. Interaction with all the Staff and Office of the Division
- 3. Observation of the pattern of working.
- 4. Critical examination of the existing system of working and
- 5. Assessment of man power requirement for existing work Load.

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ÞÑðÜ÷®ðð SYNOPSIS

- > òãðæðÚð/SUBJECT: Review of staff strength of Engineering department over Hyderabad division.
- Ñổôið"iðÜ/AUTHORITY: Annual Programme of Work studies for the year 2018-19
- j³ÚðÚðĐð çðü/ STUDY NO: WSSCR-20/2018-19.
- ÇÕÜÇØðá Òîðýâð ÇÕÜ/REFERENCE FILE NO:G.276/2/WSSCR-20/2018-19.
- > ±ðòÃðòãðòÏð "îð êð÷ëð/ AREA OF ACTIVITY: Engineering Units over Hyderabad 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 Hyderabad Division".
- > The work-study team approached Sr.DEN/Co-Ord/HYB in order to conduct Work-study on engineering department over HYB Division.
- ➤ **Application of Benchmarking Norms**: Bench marking is based 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 out sourcing. Board in successive meetings has directed all units to achieve IR average and further to Indian Railway Benchmark.

> July-2017 IR average and Bench Marking dated 18/07/2018 of HYB divn is as follows.

Organization	MPR of HYB	IR avg MPR	Bench Mark MPR
P.Way	1.36	1.41	0.73
Buildings	0.23	0.20	0.04
Bridges	0.07	0.11	0.02

MPR (Man Power Productivity Ratio) of Bridges & P.Way wings of engineering department of HYB division is below IR average. But, Works wing is slightly higher than IR average of MPR. Hence, instead of calculating requirement of staff basing on IR average, the work-study team is focussed on redundant categories/vacancies and need based calculation by Practical Observation.

- ➤ 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 outsourced/under contract such as track maintenance works, provision of safety counsellers at UMLC Gates etc.

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 HYB 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 Practical Observation and following parameters.

- a) out sourcing activities in Engineering department.
- **b)** The activities are under Contract in Engineering department.
- c) Requirement of Artisan staff in Works Wing on need base
- d) Requirement of Group D staff in Works Wing on need base
- e) Summary of SAVE Position of Engineering department over HYB division
- f) Recommendation to surrender Artisan/Khalasi staff due to **Contract** works/outsourcing activities and posts are lying vacant/redundant.
- > Outsourcing activities in Engineering department are four in number
- > Activities under Contract in progress are twenty four in number

> Requirement of Artisan staff in Works Wing on need base

Mason, Painter, Welder staff of works organization is essential. But, Carpenter and Plumber Posts are to be reviewed on account of Contracts.

➤ **Carpenter:** Most of the carpenter activities in the works organization are under Zonal contract system and the activity is not regular work. Two no's carpenters are required for each unit. There are total 16 units in Works organization of HYB division. Hence, 32 no's carpenters are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 32 carpenters is 4. Hence, total requirement of carpenters is 32+4=36.

Designation	Sanction	Actual	Vacancy	Requirement	Excess
Carpenter	49	21	28	36	13

The sanctioned strength of carpenter is 49, the actual staff is 21, requirement is 36, and found 13 staff excess on requirement.

➤ **Pipeline fitter/Plumber:** Most of the Pipeline fitter/Plumber activities in the works organization are under Zonal contract system and the activity is not regular work. Two no's Pipeline fitter/Plumber are required for each unit. There are total 16 units in Works organization of HYB division. Hence, **32 no's** Pipeline fitter/Plumber are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 32 carpenters is 4. Hence, total requirement of carpenters is 32+4=36.

Designation	Sanction	Actual	Vacancy	Requirement	Excess
PL fitter/Plumber	43	31	12	36	7

The sanctioned strength of Pipeline fitter/Plumber is 43, the actual staff is 31, requirement is 36, and found 7 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.

Summary of Requirement of Artisan staff in Works Wing on need base and practical observation

S.N	Designation	Sanction	Actual	Vacancy	Requirement	Excess
1	Carpenter	49	21	28	36	13
2	PL fitter/Plumber	43	31	12	36	7
	Total	92	52	40	72	20

Requirement of Khalasi staff in Works Wing on need base

▶ Mali: Mali has to look after the garden work. Most of the Mali activities in the works organization are under Zonal contract system and the activity is not regular work. Three Mali posts are required for each unit. There are total 16 units in Works organization of HYB division. Hence, 48 no's Mali posts are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 48 Mali posts is 6. Hence, total requirement of Mali posts is 48+6=54.

Designation	Sanction	Actual	Vacancy	Requirement	Excess
Mali	59	46	13	54	5

Mason Khalasi:

Most of the Mason activities in the works organization are under Zonal contract system and the activity is not regular work. Five Mason khalasis are required for each unit. There are total 16 units in Works organization of HYB division. Hence, 80 no's Mason khalasis are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 80 Mason khalasis is 10. Hence, total requirement of Mason khalasis is 80+10=90.

Carpenter Khalasi:

Most of the activities in the carpenter works organization are under Zonal contract system and the activity is not regular work. Five no's carpenter khalasis are required for each unit. There are total 16 units in Works organization of HYB division. Hence, 80 no's Carpenter Khalasis are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 80 carpenter khalasis is 10. Hence, total requirement of Carpenter khalasis is 80+10=90.

Pipeline fitter/Plumber Khalasi:

Most of the Pipeline fitter activities in the works organization are under Zonal contract system and the activity is not regular work. Five no's Pipeline fitter khalasis are required for each unit. There are total 16 units in Works organization of HYB division. Hence, 80 no's Pipeline fitter Khalasis are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 80 Pipeline fitter is 10. Hence, total requirement of Pipeline fitter is 80+10=90.

- ➤ **Painter Khalasi**: Most of the Painter activities in the works organization are under Zonal contract system and the activity is not regular work. One Painter Khalasi is required for each unit. There are total 16 units in Works organization of HYB division. Hence, 16 no's Painter Khalasis are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 16 Painter Khalasi is 2. Hence, total requirement of Painter Khalasi is 16+2=18.
- ➤ **Welder Khalasi**: Most of the Welder activities in the works organization are under Zonal contract system and the activity is not regular work. One Welder Khalasi is required for each unit. There are total 16 units in Works organization of HYB division. Hence, 16 no's Welder Khalasis are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 16 Welder Khalasi is 2. Hence, total requirement of Welder Khalasi is 16+2=18.
- ➤ Black smithy Khalasi: Most of the Black smithy activities in the works organization are under Zonal contract system and the activity is not regular work. One Black smithy Khalasi is required for each unit. There are total 16 units in Works organization of HYB division. Hence, 16 no's Black smithy

Khalasis are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 16 Black smithy Khalasi is 2. Hence, total requirement of Black smithy Khalasi is 16+2=18.

Summary of Requirement of Group D staff on need based and practical observation

S.N	Designation	San	Act	Vaca	Requir	Excess on	
0		ction	ual	ncy	ement	Requirement	
1	Mali	59	46	13	54	5	
2	Mason Khalasi		334 302 32		90		
3	Carpenter Khalasi				90		
4	Pipeline fitter Khalasi	224		202	202 22	90	
5	Painter Khalasi	334		32	18	10	
6	Welder Khalasi			18			
7	Black smithy Khalasi				18		
	Total	393	348	45	378	15	

Summary of SAVE Position of Engineering department over HYB division (para 2.2)

S.No	Summary of SAVE POSITION	Sanction	Actual	Vacancy
1	PWAY WING	1999	1465	534
2	WORKS WING	694	572	122
3	BRIDGE WING	36	18	18
4	Ministerial staff	17	15	2
	Total	2746	2070	676

- Recommendation to surrender Artisan and Khalasi staff due to Contract works/ outsourcing activities and posts are lying vacant/redundant.
- 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, carpenter, Luskar, painter, Plumber etc.
- > Summary of Requirement of Artisan staff & Group D staff on need based and practical observation as follows (Para 3.7 & 3.8)

	S.N	Designation	Sanction	Actual	Vacancy	Require	Excess
						ment	
	1	Carpenter	49	21	28	36	13
	2	PL fitter/Plumber	43	31	12	36	7
	3	Mali	59	46	13	54	5
	4	Helper	334	302	32	324	10
Ī		Total	485	400	85	450	35

➤ The sanctioned strength of above mentioned Artisan & Group D staff is 485, the actual staff is 400, requirement is 450, and found 35 staff excess on requirement.

Hence, Recommended as follows.

òçðÒîðòÜäð RECOMMENDATION:

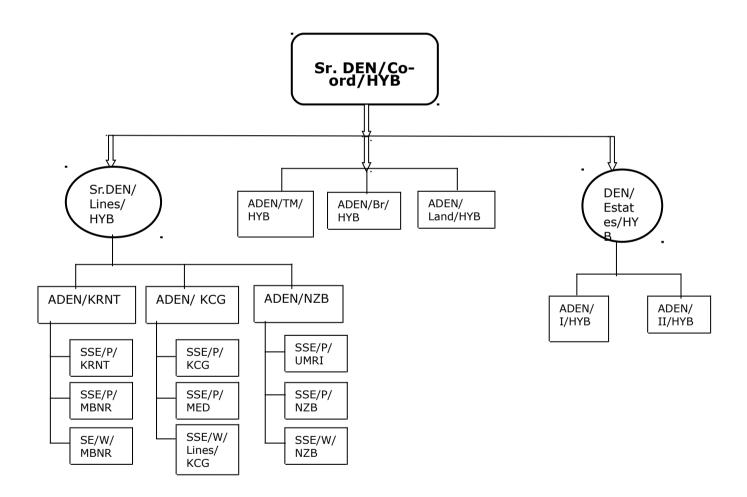
➤ It is recommended to surrender 35 Artisan/Group D posts from sanctions of Engineering department over HYB division

1.0 NBcðAððãðĐðð 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 17 Zones with 69 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**: It is evident that the Operating/working expenses are increasing year after year, the working expenses likely to shoot up further. It is therefore imperative that to keep the working expenses within financially viable limits, the Railways have no alternative but to reduce the expenses from all corners. The major portion of expenses being staff expenses, all out efforts have to be made to contain it.
- 1.3 In view of the above, the Central Planning organization under the control of SDGM conducted work-study on Engineering department over Hyderabad Division.
- 1.4 WORK AND IMPORTNCE OF ENGINEERING BRANCH: 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.
- 1.5 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.
- 1.6 In these three departments, staff is working under respective Sr. Section Engineer/ Section Engineer of the concerned unit, and is functioning under the administrative control of respective Sr. DEN/Co-ord of the division.
- 1.7 The Work-study Team made an effort to project the requirement of staff in Engineering department of HYB Division and humbly presented this report.

2.0 ãðÃðáÙððĐð çðü±ð¿ĐððÃÙð"î/Áðûµðð EXISTING SCENARIO:

- **2.1** Çðü±ð¿Đð ORGANISATION: For the administrative convenience, Civil Engineering Department of Hyderabad Division is headed by Sr. DEN/co-ord and assisted by Sr.DEN/ Lines/HYB, DEN/ Estates/HYB. In turn, Sr.DEN and DEN are assisted by ADENs and SSEs/SEs/JEs.
- 2.1.1 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 Engineer, who are also responsible for their jurisdictions. These SSEs are controlled directly by ADENs posted at suitable places, so that co-ordination will be easy. These ADENs are answerable to Sr.DEN/DENs for their respective jurisdiction who are normally placed at division Head quarter 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/KRNT	SSE/Works/MBNR	SSE/Works/RN
SSE/P.Way/MBNR	SSE/Works/L/KCG	SSE/Works/S.LGD
SSE/P.Way/KCG	SSE/Works/NZB	SSE/Works/N.LGD
SSE/P.Way/UMRI	SSE/Works/DIVN	SSE/Works/WW/LGD
SSE/P.Way/MED	SSE/Works/GOC	SSE/Works/Garden/LGD
SSE/P.Way/NZB	SSE/Works/W/MLY	JE/Works/IRISET/SC
	SSE/Works/KCG	SSE/TM/BMO
	SSE/Works/CKL	SSE/P/USFD/BMO
	SSE/Works/WW/SC	SSE/PWD/MLY
	SSE/Works/WS/LGD	SSE/Br/HYB

2.2 ç"÷îâð μð÷"Î Scale Check As On 01.07.2018

S.No	Category	Level in Pay Matrix	San	Act	Vac	
Super	Supervisors					
I	Permanent Way Wing					
1	SSE	L-7/ 4600	32	29	3	
2	Safety counsellor	L-7/4600	1	1	0	
3	SSE/USFD	L-7/ 4600	3	3	0	
4	SSE/Instructor	L-7/4600	1	5	-4	
5	JE	L-6/4200	20	17	3	
6	JE/USFD	L-6/4200	2	1	1	
7	JE/Instructor	L-6/4200	2	0	2	
		Total	61	56	5	
II	Works Wing					
1	SSE	L-7/ 4600	19	14	5	
2	Sr. Instructor	L-7/4600	2	2	0	
3	JE	L-6/4200	11	11	0	
4	JE/Instructor	L-6/4200	1	0	1	
		Total	33	27	6	
III	Drawing Cadre					
1	SSE/Drawing	L-7/ 4600	9	7	2	
2	JE/Drawing	L-6 4200	6	7	-1	
		Total	15	14	1	
IV	Bridges Wing					
1	SSE	L-7 4600	3	2	1	
2	SSE/Instructor	L-7 4600	1	1	0	
3	JE	L-7 4600	1	1	0	
		Total	5	4	1	

V	Track Machine Wing				
1	SSE/TM	L-7 4600	28	25	3
2	JE/TM	L-6 4200	11	3	8

		Total	39	28	11
Sumn	nary of Supervisor categories				
1	Permanent Way Wing		61	56	5
2	Works Wing		33	27	6
3	Drawing Cadre		15	14	1
4	Bridges Wing		5	4	1
5	Track Machine Wing		39	28	11
		Total	153	129	24
Techn	ician categories				
P.Way	/ Wing				
S.No	Category	Level in Pay Matrix	San	Act	Vac
1	Sr.Technician (BS)	L-6/ 4200	8	2	6
2	Tech Gr.I (BS)	L-5/ 2800	15	3	12
3	Tech Gr.II (BS)	L-4/ 2400	2	0	2
4	Tech Gr.III (BS)	L-2/ 2000	5	4	1
		Total	30	9	21
5	Tech Gr.II (Carpenter)	L-5/2800	1	0	1
		Total	1	0	1
6	Sr.Technician (Painter)	L-6/4200	1	1	0
7	Tech Gr.I(Painter)	L-5/2800	1	0	1
		Total	2	1	1
8	Sr.Technician (Welder)	L-6/4200	4	0	4
9	Tech Gr.I (Welder)	L-5 /2800	8	1	7
10	Tech Gr.II (Welder)	L-4/ 2400	1	0	1
11	Tech Gr.III (Welder)	L-2/ 2000	2	0	2
			15	1	14
12	Tech Gr.I (Motor Trolly Fitter)	L-5/ 2800	1	1	0
		Total	1	1	0
Summ	nary of Technicians - P.Way				
1	Tech (BS)		30	9	21
2	Tech (Carpenter)		1	0	1

3	Tech (Painter)		2	1	1
4	Tech (Welder)		15	1	14
5	Tech Gr.I (Motor Trolly Fitter)		1	1	0
		Total	49	12	37
Works	s Wing				
1	Sr.Technician (Mason)	L-6/ 4200	20	15	5
2	Tech Gr.I (Mason)	L-5 /2800	40	13	27
3	Tech Gr.II (Mason)	L-4/2400	7	1	6
4	Tech Gr.III (Mason)	L-2/2000	12	22	-10
		Total	79	51	28

5	Sr.Technician (Carpenter)	L-6/ 4200	13	12	1		
6	Tech Gr.I (Carpenter)	L-5/2800	25	5	`20		
7	Tech Gr.II (Carpenter)	L-4/2400	3	1	2		
8	Tech Gr.III (Carpenter)	L-2/2000	8	3	5		
		Total	49	21	28		
9	Sr.Technician (Pipe line fitter)	L-6/4200	11	9	2		
10	Tech Gr.I (Pipe line fitter)	L-5/ 2800	22	3	19		
11	Tech Gr.II (Pipe line fitter)	L-4/2400	3	3	0		
12	Tech Gr.III (Pipe line fitter)	L-2/ 2000	7	16	-9		
		Total	43	31	12		
13	Sr.Technician (BS)	L-6/ 4200	0	2	-2		
14	Tech Gr.I (BS)	L-5/ 2800	0	1	-1		
	Total 0 3				-3		
15	Sr.Technician (Painter)	L-6/ 4200	3	3	0		
16	Tech Gr.I (Painter)	L-5/2800	7	1	6		
17	Tech Gr.II (Painter)	L-4/2400	1	0	1		
18	Tech Gr.III (Painter)	L-2/2000	3	7	-4		
		Total	14	11	3		
19	Sr.Technician (Welder)	L-6/4200	1	0	1		
20	Tech Gr.I (Welder)	L-5/2800	1	0	1		
21	Tech Gr.III (Welder)	L-2/2000	1	1	0		
	1	Total	3	1	2		
22	Sr.Technician (Driver Mechanical)	L-6/ 4200	1	1	0		
23	Tech Gr.I (Driver Mechanical)	L-5/2800	1	0	1		
	Total		2	1	1		
24	Sr.Technician (Fitter Mechanical)	L-6/4200	1	1	0		
25	Tech Gr.I (Fitter Mechanical)	L-5/ 2800	2	2	0		
		Total	3	3	0		
Summ	Summary of Technicians - Works wing						

1	Tech(Mason)			51	28
2	Tech (Carpenter)		49	21	28
3	Tech (Pipeline)		43	31	12
4	Tech (BS)		0	3	-3
5	Tech (Painter)		14	11	3
6	Tech (Welder)		3	1	2
7	Tech (Driver Mechanic)		2	1	1
8	Tech (Fitter)			3	0
		Total	193	122	71
Bridge	es Wing				
1	Sr.Technician (Erector)	L-6/ 4200	2	0	2
2	Tech Gr.I (Erector)	L-5/ 2800	3	1	2
3	Tech Gr.III (Erector)	L-2/2000	1	1	0
	<u> </u>	Total	6	2	4

5 Tech Gr.I (Revitter) L-5/2800 2 1 1 6 Tech Gr.II (Revitter) L-4/2400 0 1 -1 Total Gr.II (Revitter) L-2/2000 0 1 -1 Total Gr.II (Revitter) 3 3 0 8 Tech Gr.I (BS) L-5 2800 1 0 1 Summary of Technicians - Bridge wing 1 Tech (Erector) 6 2 4 2 Tech (Revitter) 3 3 0 3 Tech (BS) 1 0 1 4 Tech (Revitter) 3 3 0 1 Total (BS) 1 0 1 1 1 1 0 1 1 1 1 1 1 1 0 1 1 1 0 1 1 0 1 1 5 6 2 4 4 2 4 1 2	4	Cr. Tachnician (Bayittan)		1.6/4200	1	0	1
Composite Name	4	Sr.Technician (Revitter)		L-6/ 4200	1	0	1
Tech Gr.III (Revitter)		, ,		,			
Total 3 3 0		, ,		· ·			_
Summary of Technicians - Bridge wing	7	Tech Gr.III (Revitter)		, , , , , , , , , , , , , , , , , , ,			
Total 1							
Tech(Erector)	8	Tech Gr.I (BS)					
1 Tech(Erector) 6 2 4 2 Tech (Revitter) 3 3 0 3 Tech (BS) 1 0 1 Total 10 5 5 Total 10 5 5 Total 10 5 5 Total 10 5 5 2 Tech Gr.I (TMM) L-5 2800 21 9 12 3 Tech Gr.II (TMM) L-2 2000 5 15 -10 Total 40 32 8 Summary of Technicians 1 P.Way Wing 49 12 37 2 Works Wing 182 118 64 3 Bridges Wing 10 5 5 4 Track Machine 40 32 8 Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Main					1	0	1
2 Tech (Revitter) 3 3 0 3 Tech (BS) 1 0 1 Total 10 5 5 Track Machine Wing 1 Sr.Tech. (TMM) L-6 4200 11 5 6 2 Tech Gr.I (TMM) L-5 2800 21 9 12 3 Tech Gr.II (TMM) L-2 2000 5 15 -10 Total 40 32 8 Summary of Technicians 1 P.Way Wing 49 12 37 2 Works Wing 182 118 64 3 Bridges Wing 10 5 5 4 Track Machine 40 32 8 Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer IV L-	Sumn	nary of Technicians - Bridg	ge wing				
Total Tota	1	Tech(Erector)					4
Total 10 5 5		Tech (Revitter)					0
Track Machine Wing 1 Sr.Tech. (TMM) L-6 4200 11 5 6 2 Tech Gr.I (TMM) L-5 2800 21 9 12 3 Tech Gr.II (TMM) L-4 2400 3 3 0 4 Tech Gr.III (TMM) L-2 2000 5 15 -10 Total 40 32 8 Summary of Technicians 1 P.Way Wing 49 12 37 2 Works Wing 182 118 64 3 Bridges Wing 10 5 5 4 Track Machine 40 32 8 Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer IV L-1 1800 1033 9	3	Tech (BS)			1	0	
1 Sr.Tech. (TMM) L-6 4200 11 5 6 2 Tech Gr.I (TMM) L-5 2800 21 9 12 3 Tech Gr.II (TMM) L-4 2400 3 3 0 4 Tech Gr.III (TMM) L-2 2000 5 15 -10 Total 40 32 8 Summary of Technicians 1 P.Way Wing 49 12 37 2 Works Wing 182 118 64 3 Bridges Wing 10 5 5 4 Track Machine 40 32 8 Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20				Total	10	5	5
2 Tech Gr.I (TMM) L-5 2800 21 9 12 3 Tech Gr.II (TMM) L-4 2400 3 3 0 4 Tech Gr.III (TMM) L-2 2000 5 15 -10 Total 40 32 8 Summary of Technicians 1 P.Way Wing 49 12 37 2 Works Wing 182 118 64 3 Bridges Wing 10 5 5 4 Track Machine 40 32 8 Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20	Track	Machine Wing					
3 Tech Gr.II (TMM) L-4 2400 3 3 0 4 Tech Gr.III (TMM) L-2 2000 5 15 -10 Total 40 32 8 Summary of Technicians 1 P.Way Wing 49 12 37 2 Works Wing 182 118 64 3 Bridges Wing 10 5 5 4 Track Machine 40 32 8 Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20	1	Sr.Tech. (TMM)	L-6 420	00	11	5	6
4 Tech Gr.III (TMM) L-2 2000 5 15 -10 Total 40 32 8 Summary of Technicians 1 P.Way Wing 49 12 37 2 Works Wing 182 118 64 3 Bridges Wing 10 5 5 4 Track Machine 40 32 8 Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20	2	Tech Gr.I (TMM)	L-5 280	00	21		12
Total 40 32 8	3	Tech Gr.II (TMM)	L-4 240	00	3	3	0
Summary of Technicians 1 P.Way Wing 49 12 37 2 Works Wing 182 118 64 3 Bridges Wing 10 5 5 4 Track Machine 40 32 8 Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20	4	Tech Gr.III (TMM)	L-2 200	00	5	15	-10
1 P.Way Wing 49 12 37 2 Works Wing 182 118 64 3 Bridges Wing 10 5 5 4 Track Machine 40 32 8 Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20				Total	40	32	8
2 Works Wing 182 118 64 3 Bridges Wing 10 5 5 4 Track Machine 40 32 8 Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20	Summ	nary of Technicians					
3 Bridges Wing 10 5 5 4 Track Machine 40 32 8 Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20	1	P.Way Wing			49	12	37
4 Track Machine 40 32 8 Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20		Works Wing			182	118	
Total 281 167 114 Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20		Bridges Wing			10		
Group-D Staff Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20	4	Track Machine			40	32	8
Permanent way wing 1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20				Total	281	167	114
1 Track Maintainer I L-5 2800 102 66 36 2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20	Group	o-D Staff					
2 Track Maintainer II L-4 2400 204 199 5 3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20	Perma	anent way wing					
3 Track Maintainer III L-2 2000 374 114 260 4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20	1_	Track Maintainer I			102	66	36
4 Track Maintainer IV L-1 1800 1033 900 133 5 Helper L-1 1800 51 31 20	2	Track Maintainer II	L-4 2400		204	199	5
5 Helper L-1 1800 51 31 20	3	Track Maintainer III	ner III L-2 2000		374	114	260
5 Helper L-1 1800 51 31 20	4	Track Maintainer IV	L-1 180	00	1033	900	133
		Helper			51	31	20
		Bellow Boy					

7	Messenger L-1 1800			1	0	1
			Total	1771	1316	455
Group	D-Works wing					
1	Helper	L-1 1800		334	302	32
2	Watch man	L-1 1800		12	12	0
3	Sanitary Helper/Safaiwala	L-1 1800		24	33	-9
4	Mali	L-1 1800		59	46	13
5	Duftry	L-1 1800		1	1	0
6	Trolly Man	L-1 1800		1	1	0
7	Record Lifter	L-1 1800		1	1	0
8	Peon	L-1 1800		4	1	3
9	Bunglow Peon	L-1 1800		2	1	1
10	Jamedar Peon	L-1 1800	·	5	3	2
11	Luscar	L-1 1800	·	10	8	2
			Total	453	409	44

Brid	lges Organization				
1	Trolly Man	L-1 1800	2	0	2
2	Heater	L-1 1800	1	0	1
3	Stores/Office Khalasi	L-1 1800	1	0	1
4	Watch Man	L-1 1800	2	0	2
5	Helper	L-1 1800	15	9	6
		Total	21	9	12
Trac	ck Machine Wing				
1	Helper/TM	L-1 1800	39	21	18
Sun	nmary of Group D staff				
1	P.Way Wing		1771	1316	455
2	Works Wing		453	409	44
3	Bridges Wing		21	9	12
4	Track Machine Wing		39	21	18
		Total	2284	1755	529
	isterial Staff				
Ch.OS			<u>3</u> 9	4	-1
	OS			5	4
	Clerk		3	1	2
Jr.C	lerk		2	5	-3
		Total	17	15	2
	nmary of Engineering Org	anization/PWAY			
1	Supervisor category		100	84	16
2	Technican category		89	44	45
3	Group D category		1810	1337	473
		Total	1999	1465	534
	nmary of Engineering Org	anization/WORKS	40	4.4	
1	Supervisor category		48	41	7
2	Technican category		193	122	71
3	Group D category		453	409	44
C		Total	694	572	122
Sun 1	nmary of Engineering Org	anization/BKIDGE	5	4	1
Т	Supervisor category	12	<u> </u>	4	1

2	Technican category	10	5	5
3	Group D category	21	9	12
	Total	36	18	18
	Summary of SAVE POSITION			
1	PWAY WING	1999	1465	534
2	WORKS WING	694	572	122
3	BRIDGE WING	36	18	18
4	Ministerial staff	17	15	2
	Total	2746	2070	676

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

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

- a) Executive works.
- b) Store Works.
- c) Establishment works, Industrial relations, staff welfare etc.

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

Official work:

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

Field work: Inspection of

- a) staff Quarters
- b) Service / Welfare Buildings
- c) Roads sewage lines
- d) Maintenance of gardens after they are handed over by the contractor.
- e) 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 under ground 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):

- <u>Gang mate:</u> He supervises the work done by trackmen, custodian of tools, introducing patrolling attention in case of emergencies, weekly twice key-man duty.
- <u>Keyman:</u> 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.
- <u>Sr.Gr.Store Watchman:</u> 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.Trolly 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.

- <u>Carpenter:</u> 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.

2.4 work Load of Engineering Department:

Integrated Track Kilometers (ITKMS) & Equated Track Kilometers:

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.

S.N	ADEN	SSE/SE/PW	Route	Track	ETKM	ITKM
0.			Km	Km		
1	KCG	MED	81.07	91.02	143.37	461.51
2		KCG	94.61	94.44	268.61	
3	KRNT	MBNR	91.94	103.79	155.03	471.60
4		KRNT	108.45	127.28	194.12	
5		GWD-RC Line		56.63	59.12	
6	NZB	NZB	98.35	123.37	177.16	361.42
7		UMRI	79.1	88.92	128.99	
8	ADEN/I/HYB					1095.04
9	ADEN/II/HYB					725.94
10	ADEN/BRIDGE					242.00
11	DEN/LGD					80.55
		T	otal		1126.4	3438.06

¡ÏÚððÚð-3 CHAPTER - 3

3.0 ¡ðâðð÷÷µðÐððÃÙð"î òãðäâð÷æðÂð CRITICAL EXAMINATION:

- **3.1** On critical examination of the scale check of Engineering department over HYB division, it can be seen that out of sanctioned strength of 2746 staff, 2070 staff are working at present with 676 vacancies in different grades.
- **3.1.1** The work-study team approached Sr.DEN/Co-Ord/HYB in order to conduct Work-study on engineering department over HYB Division.
- 3.2 General: Hyderabad 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. The track is maintained with the help of Track maintainer. The maintenance of track is a vital activity in the working of train in relation to safety & punctuality and it is duty of engineering department to up keep the standard of track using engineering parameter for the safe running of trains, in this way Engineering department is the backbone of Railway system.
- 3.2.1 Present trend and its importance: In view of the drastic changes in our day-to-day life, many changes/improvements also have been taken place in Indian Railways and like-wise in respect of P.Way activities and the system of their maintenance. Railway Board has formulated a new concept to work out the staff requirement, which is called Benchmarking. Presently, this has become a leading exercise to work out the required man power in various departments in our Railways from the year 2000 and onwards. Not only the Bench marking and its application, but also due to the importance of core/non core activities like Schools, Hospitals, Staff quarters and Service buildings (to some extent) may also get reduced to the minimum requirement.
- **3.2.2 Application of Benchmarking Norms**: Bench marking is based 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 out sourcing. Board in successive meetings has directed all units to achieve IR average and further to Indian Railway Benchmark.
 - > July-2017 IR average and Bench Marking dtd 18/07/2018 of HYB divn is as follows.

Organization	MPR of HYB	IR avg MPR	Bench Mark MPR
P.Way	1.36	1.41	0.73
Buildings	0.23	0.20	0.04
Bridges	0.07	0.11	0.02

MPR (Man Power Productivity Ratio) of Bridges & P.Way wings of engineering department of HYB division is below IR average. But, Works wing is slightly higher than IR average of MPR. Hence, instead of calculating requirement of staff basing on IR average, the work-study team is focussed on redundant categories/vacancies and need based calculation by Practical Observation.

- 3.3 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 outsourced/under contract such as track maintenance works, provision of safety counsellers at UMLC Gates etc.
- **3.4** 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 HYB 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 Practical Observation and following parameters.
 - a) out sourcing activities in Engineering department.
 - **b)** The activities are under Contract in Engineering organization.
 - c) Requirement of Artisan staff in Works Wing on need base
 - d) Requirement of Group D staff in Works Wing on need base
 - e) Summary of SAVE Position of Engineering department over HYB division
 - f) Recommendation to surrender Artisan/Group D staff due to **Contract** works/outsourcing activities and posts are lying vacant/redundant.
- **3.5** Out sourcing activities in Engineering department

S.N	Name of work	Amount	LOA No & date
1	SG-GOC maintenance of	91,41,145	YW/148/WIII/32/
	Lawn/Garden at GM's bungalow		18 Dt; 21.09.2018
	No.99, Rail Nilayam, Hyderabad		
	Bhavan and Lekha Bhavan		
2	GOC- House Keeping and	57,34,729	YW/148/WIII/07/
	maintenance of Officers Rest House		17 Dt; 05.08.2017
	including transit accommodation at		
	Secunderabad for 2 years		
3	House keeping and maintenance of	1,38,15,85	YW/148/WIII/48/
	the Rail Nilayam toilets, corridors	9	17 Dt; 07.02.2018
	and common areas for 2 years		
4	Hyderabad division- House keeping	19,54,174	YW/148/WIII/03/
	and maintenance of Rail kalarang		17 Dt; 12.07.2017

3.6 Activities under Contract – Works in progress

	ACTIVILIES UIIU	er Contract – Works in progress
SN	Project ID	Nature of the work
1	11.03.29.1	JKM-BDHN Section: Proposal widening of LC No: 18 JB to
	6.4.52.002	cater the increased road traffic.
2	11.03.29.1	Hyderabad division- Provision of Interlocked Sliding type
	7.4.52.001	booms as stand by Lifting barrier Booms at 5 Interlocked
		LC gates.
3	11.03.29.1	Hyderabad division - Manning of Unmanned LC gate 225
	7.6.52.001	between MZL-WDR and LC gate 216 between TMD-BKU
		stations.
4	11.03.30.1	Hyd div SC-MUE Elimination of Unmanned LC No. 229 at
	3.3.52.067	Km. 556/300-400 by constructing RUB. of size 1x4x4 M by
		open cut method without approach cove
5	11.03.30.1	Hyderabad division- subways in lieu of level crossing No.
	5.1.52.001	117, 121, 123, 125, 126, 131, 146, 157, 159 & 161 (10
		Nos)
6	11.03.30.1	Secunderabad-Dhone- subways in lieu of level crossing No.
	5.1.52.003	17, 21, 32, 36, 37, 41,43 Secunderabad-Mudkhed- level
		crossing No. 220 (8 Nos)
7	11.03.30.1	Secundrabad-Dhone & Jankampet-Bodhan -Subways in
	6.1.52.002	lieu of level crossing No. 53 & 6-JB respectively
8	11.03.30.16.	HYDERABAD Division :- Improvements and Ancilary Works
	3.52.001	to the existing RUBs in SC-MUE section.
9	11.03.30.17.	SC-DHNE: Elimination of Manned LC No. 56 between
9	3.52.001	Mahaboob nagar and Divitipalli stations at Km. 108/300-
	3.52.001	400 by constructing RUB.
10	11.03.31.16.	Mudkhed-Secunderabad - TBR-107 km
10	1.52.002	Mudkhed Secunderabad TBR 107 km
	1.52.002	
11	11.03.31.17.	SC-DHNE Section: CTR(P) for a length of 1.40 Km From
	3.52.001	Km 75 to Km 76.4 between BABR and GLY stations
12	11.03.31.17.	SC-DHNE Section: CTR(P) for a length of 1.40 Km From
	3.52.002	Km 76.4 to Km 77.8 between BABR and GLY stations
12	11 02 21 17	CC DUNE Costions CTD(D) for a longith of 1 40 Kee France
13	11.03.31.17.	SC-DHNE Section: CTR(P) for a length of 1.40 Km From
	3.52.003	Km 77.8 to Km 79.2 between BABR and GLY stations
14	11.03.31.17.	SC-DHNE Section: CTR(P) for a length of 1.40 Km From
	3.52.008	Km 90.6 to Km 92 between GLY and JCL stations
	2.02.000	
15	11.03.31.17.	SC-DHNE Section: CTR(P) for a length of 1.40 Km from Km
	3.52.009	52.8 to Km 54.2 between TMX and SHNR stations

16	11.03.32.15. 1.52.001	Hyderabad Division - Repl of stone top culvert bridges with RCC boxes (10 bridges)
17	11.03.33.09. 4.52.011	IRISET-Provision of covered sheds for A&B Blocks & portico & development of garden at Officers Hostel-4.

18	11.03.33.10. 3.52.006	IRISET-Provision of covered car and scooter shed, repairs and improvements to nursery.
19	11.03.33.16. 3.52.003	IRISET - Renovation of rooms with Sound Proofing and improvements to rooms in Officers Hostel
20	11.03.53.16. 4.52.010	HYB divn Provision of MEA facilites including toilet facility for divyang people at various stations and long term facility/short term facilities.
21	11.03.53.16. 4.52.009	Nizamabad: Provision of butter fly type shelters of 16 Meters on PF 2/3 towards SC end, KRNT - 16m on SC end on PF No. 1, SBBJ - 16m.
22	11.00.64.12. 1.52.001	South Central Railway - Boundary wall / fencing to prevent encroachment on railway land (PB 821/2012-13/NR)
23	11.03.64.10. 4.52.012	Railnilayam - Face lifting of external surface with wall care putty of Rail Nilayam 'A' block for the left over portion
24	11.03.64.11. 4.52.006	Hyderabad division - Railnilayam - Provision of evaporative cooling system in PCE/SC's office at 4th floor.

3.7 Requirement of Artisan staff in Works Wing on need base

Mason, Painter, Welder staff of works organization is essential. But, Carpenter and Plumber Posts are to be reviewed on account of Contracts.

➤ **Carpenter:** Most of the carpenter activities in the works organization are under Zonal contract system and the activity is not regular work. Two no's carpenters are required for each unit. There are total 16 units in Works organization of HYB division. Hence, **32 no's carpenters** are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 32 carpenters is 4. Hence, total requirement of carpenters is 32+4=36.

Designation	Sanction	Actual	Vacancy	Requirement	Excess
Carpenter	49	21	28	36	13

The sanctioned strength of carpenter is 49, the actual staff is 21, requirement is 36, and found 13 staff excess on requirement.

➤ **Pipeline fitter/Plumber:** Most of the Pipeline fitter/Plumber activities in the works organization are under Zonal contract system and the activity is not regular work. Two no's Pipeline fitter/Plumber are required for each unit. There are total 16 units in Works organization of HYB division. Hence, **32 no's** Pipeline fitter/Plumber are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 32 carpenters is 4. Hence, total requirement of carpenters is 32+4=36.

Designation	Sanction	Actual	Vacancy	Requirement	Excess
PL fitter/Plumber	43	31	12	36	7

The sanctioned strength of Pipeline fitter/Plumber is 43, the actual staff is 31, requirement is 36, and found 7 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.

> Summary of Requirement of Artisan staff in Works Wing on need base and practical observation

S.No.	Designation	Sanctio	Actual	Vacancy	Requiremen	Excess
		n			t	
1	Carpenter	49	21	28	36	13
2	PL fitter/Plumber	43	31	12	36	7
	Total	92	52	40	72	20

3.8 Requirement of Group D staff in Works Wing on need base

Mali: Mali has to look after the garden work. Most of the Mali activities in the works organization are under Zonal contract system and the activity is not regular work. Three Mali posts are required for each unit. There are total 16 units in Works organization of HYB division. Hence, 48 no's Mali posts are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 48 Mali posts is 6. Hence, total requirement of Mali posts is 48+6=54.

Designation	Sanction	Actual	Vacancy	Requirement	Excess
Mali	59	46	13	54	5

Mason Khalasi:

Most of the Mason activities in the works organization are under Zonal contract system and the activity is not regular work. Five Mason khalasis are required for each unit. There are total 16 units in Works organization of HYB division. Hence, 80 no's Mason khalasis are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 80 Mason khalasis is 10. Hence, total requirement of Mason khalasis is 80+10=90.

> Carpenter Khalasi:

Most of the activities in the carpenter works organization are under Zonal contract system and the activity is not regular work. Five no's carpenter khalasis are required for each unit. There are total 16 units in Works organization of HYB division. Hence, 80 no's Carpenter Khalasis are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 80 carpenter khalasis is 10. Hence, total requirement of Carpenter khalasis is 80+10=90.

Pipeline fitter/Plumber Khalasi:

Most of the Pipeline fitter activities in the works organization are under Zonal contract system and the activity is not regular work. Five no's Pipeline fitter khalasis are required for each unit. There are total 16 units in Works organization of HYB division. Hence, 80 no's Pipeline fitter Khalasis are required to execute the work in 16 units of Works organization. Leave Reserve @12.5%

for 80 Pipeline fitter is 10. Hence, total requirement of Pipeline fitter is 80+10=90.

- ➤ **Painter Khalasi**: Most of the Painter activities in the works organization are under Zonal contract system and the activity is not regular work. One Painter Khalasi is required for each unit. There are total 16 units in Works organization of HYB division. Hence, 16 no's Painter Khalasis are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 16 Painter Khalasi is 2. Hence, total requirement of Painter Khalasi is 16+2=18.
- ➤ **Welder Khalasi**: Most of the Welder activities in the works organization are under Zonal contract system and the activity is not regular work. One Welder Khalasi is required for each unit. There are total 16 units in Works organization of HYB division. Hence, 16 no's Welder Khalasis are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 16 Welder Khalasi is 2. Hence, total requirement of Welder Khalasi is 16+2=18.
- ➤ **Black smithy Khalasi**: Most of the Black smithy activities in the works organization are under Zonal contract system and the activity is not regular work. One Black smithy Khalasi is required for each unit. There are total 16 units in Works organization of HYB division. Hence, 16 no's Black smithy Khalasis are required to execute the work in 16 units of Works organization. Leave Reserve @12.5% for 16 Black smithy Khalasi is 2. Hence, total requirement of Black smithy Khalasi is 16+2=18.

> Summary of Requirement of Group D staff on need based and practical observation

S.N o	Designation	San ction	Act ual	Vaca ncy	Requir ement	Excess on Requirement											
1	Mali	59	46	13	54	5											
2	Mason Khalasi				90												
3	Carpenter Khalasi				90												
4	Pipeline fitter Khalasi	224	202	32	90												
5	Painter Khalasi	334	334	334	334	334	334	334	334	334	334	334	334	302	32	18	10
6	Welder Khalasi				18												
7	Black smithy Khalasi				18												
		393	348	45	378	15											

3.9 Summary of SAVE Position of Engineering department over HYB division (Para 2.2)

	Summary of SAVE POSITION			
1	PWAY WING	1999	1465	534
2	WORKS WING	694	572	122
3	BRIDGE WING	36	18	18
4	Ministerial staff	17	15	2
	Total	2746	2070	676

3.10 Recommendation to surrender Artisan and Khalasi staff due to **Contract** works/ outsourcing activities and posts are lying vacant/redundant.

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, carpenter, Luskar, painter, Plumber etc.

S.N	Designation	Sanction	Actual	Vacancy	Require	Excess
					ment	
1	Carpenter	49	21	28	36	13
2	PL fitter/Plumber	43	31	12	36	7
3	Mali	59	46	13	54	5
4	Helper	334	302	32	324	10
	Total	485	400	85	450	35

The sanctioned strength of above mentioned Artisan & Group D staff is 485, the actual staff is 400, requirement is 450, and found 35 staff excess on requirement.

Hence, Recommended as follows.

òçðÒîðòÜäð/RECOMMENDATION:

> It is recommended to surrender 35 posts from sanctions of Engineering department over HYB division.

4.0 òãðÃÃðóÚð ÑðòÜÂððÙð FINANCIAL IMPLICATIONS:

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

SI	Category	Sc	Scale		Mean	Grade	Grade Pay													DA @	Emoluments P.M	Total Emoluments P.A
No		From	То	posts	Pay	9%		(in)	(in)													
1	Carpenter Gr.III	18000	56900	13	37450	2000	3370	530660	6367920													
2	PL fitter/Plumber	18000	56900	7	37450	2000	3370	285740	3428880													
3	Mali	18000	56900	5	37450	2000	3370	204100	2449200													
4	Helper	18000	56900	10	37450	1800	3370	408200	4898400													
	TOTAL 35								17144400													

On implementation of the recommendation of Work-study report, an annual savings of **Rs. 1.71 crores** can be achieved

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RECOMMENDATION/SUGGESTION

SI. No. ªîÙð çðü.	Description	Para No.
01	òçðÒîðòÜäð çð/Recommendation:	3.10
	➤ It It is recommended to surrender 35 posts from sanctions of Engineering department over HYB div ision.	

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