

EASTERN RAILWAY

WORK STUDY REPORT

ON

Work study on 'Review of staff Strength vis-a-vis workload of Safaiwala' under Administration Department of Jamalpur Workshop.

(STUDY NO.WSER-05/18-19)

(Submitted on 25.06.2018)

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BY

CENTRAL PLANNING ORGANISATION

GM'S EFFICIENCY CELL

EASTERN RAILWAY

KOLKATA

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ACKNOWLEDGEMENT

The study team is very much thankful to CWM/ER/JMP for offering his valuable guidance in conducting the subject work study successfully. The study team will also be thankful to WPO, APO, AWO, respective OSs and CHI(W)/JMP for their appropriate co-operation for conducting the subject work study.

TERMS OF REFERENCES

As approved by the competent authority, the subject work study has been undertaken by the GM's Efficiency Cell of Eastern Railway in financial year 2018-19 under the following terms of reference:-

1. To evaluate the quantum of departmental Sanitary/Conservancy cleaning work.
2. To examine the deployment of departmental Safaiwala against above workload.
3. To analyze the participation of outside agency in Sanitary/Conservancy cleaning work.

METHODOLOGY ADOPTED

The following methodology has been adopted in course of carrying out the study:

- A. Collection of data related to existing workload of Departmental Safaiwalas.
- B. Discussion with respective personnel under CWM/ER/JMP.
- C. Study of the existing workload and deployment of departmental Safaiwalas.
- D. Study of the outsourcing proposals of Sanitary/Conservancy cleaning work at Workshop premises.

SUMMARY OF RECOMMENDATION

<i>Sl. No.</i>	<i>Recommendation</i>	<i>Para ref.</i>
1	The Study Team recommends that 51 posts to be surrendered from the existing Sanctioned Strength of Safaiwala over Administration Department under CWM/ER/JMP.	2.39.0.

EXECUTIVE SUMMARY

Study Name & No.	Work study on 'Review of staff Strength vis-a-vis workload of Safaiwala' under Administration Department of Jamalpur Workshop. (Work study No. WSER-05/18-19) Date of Submission : 25/06/2018
Year of conducting the study:	2018-19
Terms of references:	<ol style="list-style-type: none">1. To evaluate the quantum of departmental Sanitary/Conservancy cleaning work.2. To examine the deployment of departmental Safaiwala against above workload.3. To analyze the participation of outside agency in Sanitary / Conservancy cleaning work.
Methodology:	<ol style="list-style-type: none">(A) Collection of data related to existing workload of Departmental Safaiwalas.(B) Discussion with respective personnel under CWM/ER/JMP.(C) Study of the existing workload and deployment of departmental Safaiwalas.(D) Study of the outsourcing proposals of Sanitary/Conservancy cleaning work at Workshop premises.
Sanctioned Strength:	77
Existing Men on Roll:	62
Vacant post:	15
Proposed Surrender:	51
Already implemented:	Nil
Pending implementation:	51

CHAPTER-I

1.0.0. Introduction:

- 1.1.1.** Swachh Bharat Abhiyan (SBA) or Swachh Bharat Mission (SBM) or Clean India Mission in English is a campaign in India that aims to clean up the streets, roads and infrastructure of India's cities, smaller towns, and rural areas. The objectives of Swachh Bharat include eliminating open defecation through the construction of household-owned and community-owned toilets and establishing an accountable mechanism of monitoring toilet use. Run by the Government of India, the mission aims to achieve an Open-Defecation Free (ODF) India by 2 October 2019, the 150th anniversary of the birth of Mahatma Gandhi, by constructing 90 million toilets in rural India at a projected cost of 1.96 lakh crore. The mission will also contribute to India reaching Sustainable Development Goal.

The campaign was officially launched on 2 October 2014 at Rajghat, New Delhi by Prime Minister Narendra Modi. It is India's largest cleanliness drive to date with 3 million government employees, school students, and college students from all parts of India participating in 4,041 statutory cities, towns and associated rural areas. Modi has called the campaign "Satyagrah se Swachhagrah" in reference to Gandhi's "Champaran Satyagraha" launched on 10 April 1917.

The mission contains two sub-missions: Swachh Bharat Abhiyan ("Gramin" or rural), which operates under the Ministry of Drinking Water and Sanitation; and Swachh Bharat Abhiyan (Urban), which operates under the Ministry of Housing and Urban Affairs.

As part of the campaign, volunteers, known as Swachhagrahis, or "ambassadors of cleanliness", have promoted indoor plumbing and the Community Approaches to Sanitation (CAS) at the village level. Other non-governmental activities include national real-time monitoring and updates from non-governmental organizations (NGOs) such as The Ugly Indian, Waste Warriors and SWaCH Pune (Solid Waste Collection and Handling) that are working towards its ideas of Swachh Bharat.

- 1.1.2.** Indian Railways is the life-line of nation for providing Transportation facility over the length and breadth of country. Its vision is to provide efficient, affordable, customer-focused, environmentally sustainable integrated transportation solutions and to be the vehicle of inclusive growth, connecting regions, communities, ports and centres of industry, commerce, tourism and pilgrimage across the country.
- 1.1.3.** In the perspective of Swachh Bharat Abhiyan (SBA) or Swachh Bharat Mission (SBM) or Clean India Mission, Indian Railways also contributes its level best effort to achieve the cleanliness target of the nation.
- 1.1.4.** The Role of Indian Railways is to manufacture much of its rolling stock and heavy engineering components in its six manufacturing plants, called Production Units, which are managed directly by the Ministry. Popular rolling stock builders such as CLW and DLW for electric and diesel

locomotives; ICF and RCF for passenger coaches are Production Units of Indian Railways. Over the years, Indian Railways has not only achieved self-sufficiency in production of rolling stock in the country but also exported rolling stock to other countries. Each of these production units is headed by a general manager, who also reports directly to the Railway Board. The production units of Indian Railways are :-

1.1.5. Production Units:

Production Units	Abbr.	Year Estd.	Location	Functions
Chittaranjan Locomotive Works.	CLW	1947	<u>Chittaranjan, Asansol</u>	Manufacturing of Electric Locomotives. Originally set up in 1950 for producing Steam locomotives.
Diesel Locomotive Works	DLW	1961	Varanasi	Manufacturing of Diesel locomotives.
Integral Coach Factory	ICF	1952	<u>Perambur, Chennai</u>	Manufacturing of coaches.
Diesel Components Works	DCW	1981	Patiala	Manufacturing of Diesel Components.
Rail Coach Factory	RCF	1986	<u>Kapurthala</u>	Manufacturing of coaches.
Wheel & Axle Plant	W & AP	1984	Bangalore	Manufacturing of Wheel & Axles.

Thus, Indian Railways manages and maintains all those infrastructures. Management of those huge infrastructures have to be done in accordance with the organization's vision.

- 1.1.6. Besides the above, in Indian Railways, various Railway Workshops plays a very vital Role in connection with POH/ROH/IOH/NPOH repair of different kinds of Wagons, coaches (both AC & Non-AC) and Locomotives (both Diesel & Electric).
- 1.1.7. To cope up with the said changing scenario, Infrastructural Development is not only required in the area of manufacturing & periodical overhauling of various types of passenger coaches, goods wagons and Diesel/Electric Locomotives only, overall infrastructural development is necessary in whole Indian Railway system keeping in mind the minimum Environmental pollution in one hand and successful implementation of Clean India Mission on the other.
- 1.1.8. What's more, for any kind of development, money is the most important but limited resources. An organisation, like Indian Railway, may also provide a good financial support for its development, if good financial discipline can be practised and expenditure due to man, materials & overheads can be managed optimally & economically.
- 1.1.9. Indian Railway is facing tremendous financial crunch after implementation of 7th Pay Commission. Operating ratio is gradually increasing. Though Indian Railway is not a business organization but to survive, it is always essential to make the organization in

profit i.e. operating ratio should be less than 1(ONE). The year-wise Performance Efficiency Index of E. Rly. As per the E. Rly. published corporate plan is tabulated below-

Operating Ratio

2010-11	178.52 %
2011-12	179.79 %
2012-13	178.86%
2013-14	173.32%
2014-15	177.27%
2015-16	180.56%
2016-17	165.25%
2017-18	178.76% (Proposed)

- 1.1.10.** In view of the above, Rly. Board issued nos. of circulars, orders, etc. The Zonal Railways also implement various measures for financial discipline.
- 1.1.11.** At this juncture, the role of Railway Efficiency & Research Directorate is also very important in connection with 'Benchmarking', 'Rationalising of Man-Power', etc.
- 1.1.12.** The subject work-study has been undertaken by Railway Efficiency & Research Directorate i.e. GM's Efficiency Cell/E.Rly. during the current financial year 2018-2019 with the objective to find out the way for minimising the running expenditure of Workshop and thus improve the productivity index of the workshop. As per terms of reference, the study team has observed the cleaning activities of safaiwala in Workshop and other allied areas under the administration department of CWM/ER/JMP. Finally, study team is entrusted to analyze critically to ascertain the optimum utilization of railway resources for obtaining smart, efficient & economical cleanliness activities.

CHAPTER-II

2.0.0. EXISTING SCENERIO & CRITICAL ANALYSIS:

2.1.0. In Eastern Railway, there are three Workshops for POH/ROH/IOH/NPOH repair of different kinds of Railway Wagons, Coaches (both AC & Non-AC) and Locomotives (both Diesel & Electric). These Workshops are as follows-

- (I) Liluah Carriage & Wagon Workshop/Liluah/E.Rly.
- (II) Kanchrapara Carriage & Wagon Workshop & Kanchrapara Locomotive Workshop/
Kanchrapara/E.Rly.
- (III) Jamalpur Locomotive Workshop/Jamalpur/E.Rly.

2.2.0. Jamalpur Locomotive Workshop starts functioning on and from the 8th February, 1862. It was the first full-fledged railway workshop in India, set up by the then East Indian Railway (EIR). The Workshop has enjoyed the distinction of being the largest & oldest locomotive repair workshop with the most diversified manufacturing activities on the Indian Railways. It's Total Area is 5,74,654 Sq. Metre out of which. 2,38,953 Sq. Metres are Covered Area.

2.3.0. As per the updated Information and earlier statistics, The Workshop is presently engaged with Periodic Overhauling of Wagons, Diesel Locos, 140 & 20 T Cranes, tower cars, manufacture various types of wagons, ICF Bogies, Jamalpur Jacks, etc. Apart from the above main activities, Jamalpur Workshop are also engaged in

- a. POH of BG Wagons, BG Dsl. Loco & Production of Wagons.
- b. POH & Manufacture of Cranes and Tower Cars.
- c. POH of 140 T Gottwald Cranes and other cranes ranging from 20T to 120T.
- d. POH of Plasser & Theurer Unimat Tamping Machines.
- e. Manufacture of Tower Cars Mark-II and Mark-III.

2.4.0. Background of Jamalpur Locomotive Workshop:

The Railway age in Eastern India started on August 15, 1854, exactly ninety-three years before Independence. A locomotive, carriage and wagon workshop was set up in Howrah to put to commission imported rolling stock of EIR and also to render economic repairs to them but it proved unsuccessful because of problems with procuring supplies and getting skilled labour. The railways spread very fast, perhaps faster than the anticipation of EIR. Within a short span of eight years it became necessary to shift the site of workshop, as there was hardly any scope for expansion at Howrah. And then Jamalpur Locomotive Workshop was established at Jamalpur on the 8th day of February, 1862. It was the first full-fledged railway workshop facilities in India, set up by the East Indian Railway.

Jamalpur Workshop has enjoyed the distinction of being the largest and the oldest locomotive repair workshop with the most diversified manufacturing activities on the Indian

Railways. At first the Jamalpur shops were merely repairing locomotives and also assembling locomotives from parts salvaged from other or damaged locomotives. By the turn of the century they had progressed to producing their own locomotives. In year 1899, CA 764 Lady Curzon was produced by the Jamalpur Workshop. In 1893, the first railway foundry in India was set up at Jamalpur Workshop. It also had a boiler workshop for repairing and building boilers. A captive power plant of 5MVA was also developed in the Jamalpur Workshop. In 1870 it was equipped with a rolling mill of its own; unfortunately it's not working at present. In addition to various repairs of wagons, coaches, cranes and tower cars, and locomotives, Jamalpur also undertakes repair and production of permanent-way fixtures. It also manufactures some tower cars such as Mark II, Mark III and break-down cranes of 10, 20, and 140 tone capacities, besides various kinds of heavy-duty lifting jacks.

Finally, it also manufactures wheel sets for coaches and wagons. Jamalpur workshop was a significant supplier of cast-iron sleepers as well. Starting in 1961 it produced several rail cranes. It has also produced electric arc furnaces, ticket printers. The high-capacity synchronized lifting jacks known as Jamalpur Jacks were also produced by this workshop.

The school attached to the Jamalpur workshops eventually became the IR Institute of Mechanical and Electrical Engineering.

2.5.0. Vital Statistics of Jamalpur workshop:

(A)	Date Established	: The 8 th February, 1862.
(B)	Total Area	: 5,74,654 sq. meters.
(C)	Total Covered Area	: 2,38,953 sq. meters.
(D)	Total nos. of Machinery & Plants	: 1470 (As on 01/01/2014)
(E)	Total connected Load	: 27 MW.
(F)	Power Requirement	: 5 MVA.
(G)	Pneumatic Power installed	: 8,500 CFM.
(H)	Power generated locally	: 5 MVA.
(I)	Water Supply Filtered	: 15 Lac Gallon Per Day.
(J)	Staff Strength	: 10,050 (As on 01/01/2017).
(K)	Annual Turnover	: Rs. 550 Crores (Approx.).

2.6.0. ACHIVEMENTS OF JAMALPUR WORKSHOP:

Jamalpur workshop is the only workshop in Indian Railways that has a captive Power house of 5 MVA.

THE WORKSHOP HAS A NUMBER OF 'FIRSTS' IN INDIA TO ITS CREDIT. Few of which are:

- The First to manufacture a steam locomotive and a locomotive boiler – 216 of which were manufactured between 1899 and 1923.

- The First to have set up a rolling mill not only on the railways, but probably in the country in 1870. It had 3 mills, steam driven Power hammer, fish plate machine, billet shears, the mill was driven by steam from boilers placed on the top of the furnaces and heated by gas from the furnaces. It produced about 400 tons of rounds, channels, angles and fishplates per month.
- The First to establish a railway foundry in the year 1893.
- The First to manufacture a rail crane in the country with indigenous know-how in 1961.
- The First to manufacture high capacity electrical lifting jacks and ticket printing, ticket chopping, ticket slitting and ticket counting machines.
- The First and the only railway workshop to manufacture electrical arc furnaces of ½ tonne capacity in 1961 for production of steel castings.
- The First to established Signal Equipment shop, more popularly known as “Points and Crossing and Interlocking shop” was started in 1894. produced entire requirement of Interlocking frames of different sizes for EIR.
- The First and only to manufacture 140 Tonne Diesel Break-down Cranes.

2.7.0. Initiatives of Railway Board, New Delhi in connection with the ”Review of Safaiwala Cadre” :

- 2.7.1. Vide Railway Board’s Letter no. E(MPP)2018/21/1, dated 12/01/2018, Director (MPP)/ Railway Board informed to the General Managers, All Indian Railways including Production Units that “ Board has decided to review the cadre of safaiwala in Railways, especially where the work has been outsourced (Annexure-1).
- 2.7.2. Thereafter, vide Railway Board’s Letter no. E(MPP)2017/1/4, dated 25/04/2018, (Annexure-2) Director(MPP)/Railway Board informed to the General Managers / All Indian Railways including Production Units and others that Multi disciplinary task force, headed by AM(B) /Railway Board has recommended following measures for cost cutting on Indian Railway :-
- 2.7.3. “A large number of contracts have been entered into for cleanliness at stations, colonies, trains, etc. The matching surrender of posts and redeployment of safaiwala has not been completed. A 100% review and compliance of this should immediately be carried out. Similarly, a comprehensive review of cleaning contracts should be done for minimizing overlap. Intensified systems to ensure desired out-put from the same is also required”.
- 2.7.4. Accordingly, vide PCPO/E.Rly./ Kolkata’s office letter no. E.11/O/Pt.V, dated 03-05-2018, (Annexure-3) a format was forwarded to PCME, PCEE, PCOM, PCE, PCMD, PCOS, SDGM, DRMs of SDAH/HWH/ASN/MLDT & CWMs of LLH/KPA/JMP to furnish their relevant data for compliance of Railway Bd.’s aforesaid directives.
- 2.8.0.** Consequently, CWM/ER/JMP, vide his office letter no. W/SAN/Contract/2018-19, Jamalpur, dt. 08-05-2018, (Annexure-4) forwarded a concise report of **Health Inspector**

(W/S) in the supplied format as per ‘Recommendation of the Task Force’. The Report stated the below mentioned aspects :

1.	No. of existing Cleaning Contracts (Department wise)	01 in working position on quotation basis for Mega Toilet cleaning for 70 days only.
2.	No. of existing Safaiwalas (Department wise position)	36
3.	Nos. of Safaiwals surrendered due to contracts. (Department wise position)	14
4.	No. of Safaiwalas to be surrendered because of review done as per Rly. Bd.s letter. (Department wise)	36 Rly. Board’s decided that all type of cleaning work should be done by contractual basis.

2.9.0. Chief Health Inspector (W/S)/JMP deputed departmental safaiwalas under his control to cater the safai /cleaning work of Workshop premises, combined office buildings of CWM/JMP & IRIMEE, BTC, Office of Dy. CEE, etc. which are detailed below.

2.10.0. The present scenario of Cleaning activities performed by departmental safaiwala:

In Jamalpur, Administration Department consists of a good nos. of ‘Rly. Offices & Establishments’ besides the ‘Railway Workshop viz. ‘Jamalpur Locomotive Workshop, Eastern Railway’. The other Offices & Rly. Establishments are IRIMEE, PPTS, School, Rest Houses, Rly. Colonies, Hospital, etc.

2.11.0. Specific areas where departmental safaiwalas are regularly deputed to perform Sanitary / Conservancy cleaning activities like sweeping, mopping, drain cleaning, Toilet cleaning, Cutting of Jungle with jungle cutting machine, collection of garbage and their deposition in nominated place, etc. in under mentioned locations:

- a) Chambers, Toilets, etc. of all officers in combined office building.
- b) Offices of different sections and their surrounding areas in combined office building.
- c) All offices, canteen, Office Gates, Time Offices, inside the workshop premises and their surrounding areas.
- d) All the officers chambers, offices, class rooms and their surrounding areas of IRIMEE.

- 2.12.0.** The Sanitary/Conservancy cleaning activities for the above mentioned areas are executed by departmental 'Safaiwala'. In some areas under the administrative control of Jamalpur Workshop, Sanitary/Conservancy cleaning works are outsourced for a short / limited period 'On Quotation Tender basis'.
- 2.13.0.** Study team noticed that the competent Railway authority entered into 02 (two) nos. such cleaning contracts at Jamalpur Workshop in two different area of Sanitary / Conservancy cleaning 'On Quotation Tender basis' -
- 2.14.0.** Cleaning Contract (Quotation basis) vide LOA No. H/SAN/Contract/2017-18, Jamalpur, dated 16-02-2018 (Annexure-5). Title of the said Cleaning Contract is 'Mechanised cleaning of Mega Toilets, Toilets, Water Booth, Urinals, Wash Basin & Bath Rooms situated at IRIM&EE, Combined Building & Workshop area in Jamalpur Workshop'. (Duration of Contract: 70 days).

In connection with aforesaid Cleaning Contract, the under mentioned statement shows the work load vis-a-vis required man-power (as per the yard stick) for maintenance of sanitation works at Combined Building, IRIM&EE and whole Workshop Premises.

1. Total cleaning of surface area at Latrine, Urinal Bath Room & Wash Basin	: 6,85,440 Sq. Ft.
2. No. of Toilet	: 200 nos.
3. No. of Urinal	: 189 nos.
4. No. of Wash Basin	: 66 nos.
5. No. of Bath Room	: 14 nos.
6. Water Tap Booth	: 25 Nos.

Approx. Total Man Power (As per existing Yard Stick) : 20 Nos.

Total Value of Contract : Rs. 4,99,800.00.

2.15.0. Time period for execution of contract : Within 70 days of acceptance.

2.16.0. Cleaning Contract (Quotation basis) vide LOA No. H/SAN/Contract/2018-19, Jamalpur, dated 23-04-2018 (Annexure-6). Title of the said Cleaning Contract is 'Cleaning of Big & Small open Drains of Workshop, Combined Building & IRIM&EE'.

2.17.0. Measurement of Big Drains and Small Drains of Combined Building & Workshop premises in connection with the above cleaning contract were scheduled as 1,90,572 Cubic Feet in total.

2.18.0. Duration of Contract: 75 days of acceptance.

2.19.0. Total maximum cost of the contract: Rs. 7,24,174/-

2.20.0. The staff strength of 'Safaiwala' under the administrative control of CWM/JMP, vide his office letter no. E/MPP/Statement/Pt.XV, Dated 12/04/2018 (Annexure-7) is appended below -

Department	Work Place	Sanc. Strength	Men-On-Roll	Vacancy
Administration	HIW	40	33	07
	Rampur Hostel	08	06	02
	School	06	05	01
	Officer Rest House	01	01	00
	PPTS	03	03	00
	IRIMEE	19	14	05
Total		77	62	15
Medical	Hospital	63	47	16
	HIC	48	45	03
Total		111	92	19
Mechanical	CMT+DPS+WRS V	05	07	Ex 02
Civil Eng.	DEN (T)	01	00	01
GRAND TOTAL		194	161	33

2.21.0. Study team conducts work study on Administration departments except ‘Medical Department’, Mechanical & Civil Eng. Departments as per terms of reference of the present Work Study.

Thus, the above table was re-framed to pin point the nos. of sanctioned posts of safaiwala on which the present Work study is carried out.

Department	Work Place	Sanc. Strength	Men-On-Roll	Vacancy
Administration	HIW	40	33	07
	Rampur Hostel	08	06	02
	School	06	05	01
	Officer Rest House	01	01	00
	PPTS	03	03	00
	IRIMEE	19	14	05
GRAND TOTAL		77	62	15

2.22.0. It is very much clear from the above table that the above 77 nos. of sanctioned posts of safaiwala were distributed among various work places / units of Administration Department. Study team noted that each work place / units has separate working area which is clear from their name.

HIW (Health Inspector/Workshop): HIW looks after the Sanitary/Conservancy cleaning activities inside the Workshop Premises. He deputes departmental safaiwala / safaiwalas to the workplaces as mentioned in the above para no. 2.11.0. Besides the above departmental work supervision, he also supervises the contractual work of ‘**Mechanised cleaning of Mega Toilets**, Toilets, Water Booth, Urinals, Wash Basin & Bath Rooms situated at IRIM&EE, Combined Building & Workshop area in Jamalpur Workshop’ & ‘**Cleaning of Big & Small open Drains** of Workshop, Combined Building & IRIM&EE’.

In addition, as per the order of competent authority, HIW conducts survey and estimates the cleaning workload, based on which the Open Tender proposal for the same is under process.

2.23.0. In the other workplaces, as mentioned in the above table, safaiwalas are deputed to perform their cleaning activities under the supervision of respective work place personnel.

2.24.0. Within the periphery of workshop premises, a nos. of outsourcing proposals for various kinds of **Cleaning Work** are under process. Particulars of the same are mentioned below :

1. Cleaning of Mega Toilets, Toilets, Urinal, Water Booth, Wash Basin and Bath Room of entire workshop, Combined Building areas through Open Tender.

(A) **Estimate No.** H/SAN/Contract/2018-19/03, Jamalpur dated 29/05/2018.

(B) **Work Load:** Total surface area of Mega Toilets, Toilets, Water Booths, Wash Basins, Bath Rooms, Doors & Windows are 61,080 Sq. Ft.

Nos. of Toilets, Urinal, Wash Basin and Water Tap Booths are 200 nos., 189 nos., 66 nos. and 25 nos. respectively. [Proposed]

(C) **Period of Contract:** *730 days (02 Years) through Open Tender.* [Proposed]

(D) **Value of Contract:** *Total Rs. 67,10,160.00* [Estimated]

(E) **Remarks:** The Estimate is 'Technically Checked' by WPO/JMP on 06/06/2018.

2. Sanitation work i.e. **Sweeping** of road open space, surrounding area of workshop, **Garbage Collection**, etc.

(A) **Estimate No.** H/SAN/Contract/2018-19/03, Jamalpur dated 29/05/2018.

(B) **Work Load:** Both the Sweeping Area & Garbage/Refuse collection from sweeping and disposed off to nominated place 11,47,590 Square feet respectively [Proposed]

(C) **Period of Contract:** *730 days (02 Years) through Open Tender.* [Proposed]

(D) **Value of Contract:** *Total Rs. 1,05,03,970.00* [Estimated]

Remarks: The 'Abstract of Cost of Work (Outer Sheet)' has been signed by CHI (W)/E.Rly./Jamalpur, AWO/E.Rly./JMP & WPO/E.Rly./JMP on 29/05/2018 as token of its sanction.

3. Cleaning of open Drains of entire Workshop & Combined Building areas.

(A) **Proposal / Estimate Ref.:** H/SAN/Contract/2017-18/03/OT, Jamalpur dtd. 09/04/2018.

(B) **Work Load:** [Estimated]

Drains, i.e. Maintenance of drains, Main Drains, Pipe line drains for free flowing of water (Dead animals).

(a) Cleaning of Main Drains beside the main road of workshop (Daily).

(b) Small Drains (Branch Road) (Daily).

- (c) Combined Building drains (Daily).
- (d) Disposal of dead animals, i.e. Dog, Cat, Mongoose, Pig, etc. (As and when necessary)

Total Work Load: 1,90,572 Cubic feet.

(C) Period of Contract: 730 days (02 Years) through Open Tender [Proposed]

(D) Value of Contract: Total Rs. 18,57,496.00 [Estimated]

Remarks: 'Administrative approval' for the above Works Contract is obtained from CWM/JMP on 17/04/2018. Budget Officer certified the 'fund availability' of Rs.18, 57,496.00 in 2018-19 with suitable 'Head of allocation'.

4. Shop floor Cleaning, Pit Cleaning, Scrubbing, Removing & Cleaning of Industrial waste and Segregating, Picking, Collection of Ferrous and non-ferrous items from different shop floor area of different shops and transportation to the nominated bins in Railway areas at Jamalpur, on daily basis.

(A) Estimate No. F/CR/WC/91/Cleaning Contract/Revised Estt., dated 31/10/2017.

(B) Work Load: [Estimated]

- (a) Floor Area Cleaning: 96,433.97 Sq. Mtr.
- (b) Pit Cleaning: 287.91 Sq. Mtr.
- (c) Heavily deposited oily area to be scrubbed and cleaned: 9,453.00 Sq. Mtr.
- (d) Disposal of garbage/ rubbish- deposit the accumulated garbage/ rubbish from different shops to the nominated dustbins: 874 Cu. Mtr.
- (e) Accumulation and disposal of Ferrous and Non-Ferrous scrap from Workshop floor area to nominated bins in the shop premises: 920 MT.

(C) Period of Contract: 02 Years through Works Contract on Open Tender Basis.
[Proposed]

(D) Value of Contract: Total Rs. 93,97,946.00 [Estimated]

(E) Remarks: Shops covered under this fresh proposal are: WRS-I, WRS-II, WRS-III, WRS-IV, CBS, WCS-I, WCS-II, WS, BLC, BST, DSS, MTS, TTS, MCTR, BFS, CRS, BTC, Winding Section, DPS, TMS, TCS, SMS.

It is seen that the said proposal includes all the shop floor under the cover sheds of Jamalpur Workshop.

5. Proper cleaning and its disposal of accumulated garbage situated behind the crane shop (140 Ton Crane load testing area) in Jamalpur Workshop premises.

(A) Proposal /Estimate Ref.: H/SAN/Contract/2017-18/03, Jamalpur dtd. 13/04/2018.

(B) Work Load: Approximated quantity of accumulated garbage is 2,12,646 Cubic Ft.
[Estimated]

(C) Value of Contract: Total Rs. 4,99,718.00 [Estimated].

(D) Remarks: 'Administrative approval' for the above Works Contract through 'Quotation basis' is obtained from CWM/JMP on 21/04/2018. Budget Officer

certified the 'fund availability' of Rs. 4,99,718.00 in 2018-19 with suitable 'Head of allocation'.

6. Shop floor Cleaning, Pit Cleaning, Scrubbing, Removing & Cleaning of Industrial waste and Segregating, Picking, Collection of Ferrous and non-ferrous items from different shop floor area of different shops and transportation to the nominated bins in Railway areas at Jamalpur, on daily basis.

(A) Revised Estimate No. F/CR/WC/91/Cleaning Contract/Revised Estt., dated 31/05/2018.

(B) Work Load: [Estimated]

- (a) Floor Area Cleaning: 70,856.03 Sq. Mtr.
- (b) Pit Cleaning: 287.91 Sq. Mtr.
- (c) Heavily deposited oily area to be scrubbed and cleaned: 9,453.00 Sq. Mtr.
- (d) Disposal of garbage/ rubbish- deposit the accumulated garbage/ rubbish from different shops to the nominated dustbins: 874 Cu. Mtr.
- (e) Accumulation and disposal of Ferrous and Non-Ferrous scrap from Workshop floor area to nominated bins in the shop premises: 920 MT.

(C) Period of Contract: 02 Years through Works Contract on Open Tender Basis. [Proposed]

(D) Value of Contract: Total Rs. 78,40,557.00 [Estimated]

(E) Remarks: Shops covered under this fresh proposal are: WS, BLC, BST, DSS, MTS, TTS, MCTR, BFS, CRS, BTC, Winding Section, DPS, TMS, TCS, SMS.

It is seen that the said proposal does not includes all the shop floor under cover sheds of Jamalpur Workshop. It excludes floor areas of Wagon POH Group Shops i.e. WRS-I, WRS-II, WRS-III, WRS-IV, CBS, WCS-I, WCS-II.

- 2.25.0.** In connection of the Estimate No. F/CR/WC/91/Cleaning Contract/Revised Estt., dated 31/10/2017 (Sl. No. 4 of above para.) Dy. CME(W)/JMP opined vide his Office letter no. F/Dy.(W)/OFF/RB/49, Jamalpur dated 07/04/2018 that in wagon shops the garbage generated are in excess due to incoming of wagons, and hence the nature of cleaning activity would be different. Thus, it is desired that it may be undertaken by the office of Dy. CME (W)/JMP.

Accordingly, the said Estimate has been amended and the **Revised Estimate No.** F/CR/WC/91/Cleaning Contract/Revised Estt., dated 31/05/2018 (Sl. No. 6 of above para.) is prepared and processed.

- 2.26.0.** The proposal vide Sl. no. 6 is also kept aside by Work study team as it excludes the floor cleaning work of Wagon POH Group Shops i.e. *WRS-I, WRS-II, WRS-III, WRS-IV, CBS, WCS-I, WCS-II* from the proposal vide Sl. No. 4 of above para. Rather, the study team considers the proposal vide Sl. No. 4 of above para as it consists of the floor cleaning work of whole workshop.

The proposal vide Sl. no. 5 is also not taken into consideration by the study team as the job is 'temporary & one-time' in nature.

2.27.0. After studying the 'job details' of outsourcing proposals (which are planned for 02 years duration through Open Tendering System) vide Sl. no. 1,2,3 & 4 in para 2.24.0. above, it can be evidently stated that Regular need of sanitary cleaning, garbage removal, drain cleaning, sweeping, etc. of Jamalpur Workshop would be fulfilled without the involvement of Departmental Safaiwala, if the said four proposals are materialised in full. Moreover, any job of 'irregular' / 'temporary' / 'one time' in nature can also handled through quotation, based on one time contract like Sl. No. 5. above.

2.28.0. Summarised Estimated expenditure Value of the proposed outsourced Jobs vide Sl. no. 1,2,3 & 4 in para 2.24.0. above:

Sl. No	Proposal / Estimate Ref. No.	Title of the Job	Period of Contract	Proposed / Estimated Expenditure (In Rs.)	Total Expenditure	Total Annual Expenditure (In Rs.)
1.	H/SAN/Contract/2018-19/03, Jamalpur dated 29/05/2018	Cleaning of Mega Toilets, Toilets, Urinal, Water Booth, Wash Basin and Bath Room of entire workshop, Combined Building areas through Open Tender.	730 days (02 Years)	67,10,160/-	2,84,69,572/-	1,42,34,786/-
2.	H/SAN/Contract/2018-19/03, Jamalpur dated 29/05/2018	Sanitation work i.e. Sweeping of road open space, surrounding area of workshop, Garbage Collection , etc	730 days (02 Years)	1,05,03,970/-		
3.	H/SAN/Contract/2017-18/03/OT, Jamalpur dtd. 09/04/2018	Cleaning of open Drains of entire Workshop & Combined Building areas	730 days (02 Years)	18,57,496/-		

4.	F/CR/WC/91 /Cleaning Contract/Re vised Estt., dated 31/10/2017	Shop floor Cleaning, Pit Cleaning, Scrubbing, Removing & Cleaning of Industrial waste and Segregating, Picking, Collection of Ferrous and non-ferrous items from different shop floor area of different shops and transportation to the nominated bins in Railway areas at Jamalpur, on daily basis	730 days (02 Years)	93,97,946/-		
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2.29.0. From the office record, Study team collects the extract of the Total Salary drawn (During F.Y. 2017-18) by the staff concerned of HIW Unit [Bill Unit No. 0208480 for ‘MECHANICAL CONSERVENCY (HIW)’] as the unit is supposed to cater the job of sanitary cleaning, sweeping, garbage cleaning, etc. as mentioned in para 2.11.0. Salary drawn during F.Y. 2017-18 by staff of HIW Unit [Bill Unit No. 0208480] is tabulated below.

Month	Gross Salary drawn by the staff under HIW (In Rs.)	Gross Salary drawn by Supervisor i.e. CHI(W) (In Rs.)	Total Annual Expenditure of Department for the payment of salary to HI(W) unit / JMP Workshop (In Rs.)
April, 2017	15,61,205.00	81,510.00	16,42,715.00
May, 2017	14,70,351.00	77,184.00	15,47,535.00
June, 2017	15,07,629.00	78,204.00	15,85,833.00
July, 2017	15,98,336.00	97,472.00	16,95,808.00
August, 2017	16,23,125.00	79,216.00	17,02,341.00
September, 2017	15,74,513.00	79,144.00	16,53,657.00
October, 2017	12,22,411.00	82,188.00	13,04,599.00
November, 2017	11,64,970.00	79,905.00	12,44,875.00
December, 2017	11,81,163.00	80,905.00	12,62,068.00
January, 2018	11,65,772.00	80,905.00	12,46,677.00
February, 2018	11,12,202.00	85,905.00	11,98,107.00
March, 2018	11,43,734.00	80,905.00	12,24,639.00
Total Annual Salary Drawn	1,63,25,411.00	9,83,443.00	1,73,08,854.00

2.30.0. Analysis on the ‘Expenditure’ aspects pertaining to the above two Paras.

In Ref. to Para 2.28.0., Total Annual anticipated Expenditure after complete outsourcing Workshop Cleaning job is evaluated.

It is amounted to **Rs. 1,42,34,786/-** (Rupees One Crore forty-two lakhs thirty four thousand seven hundred eighty six only).

In Ref. to Para 2.29.0., Total Annual Expenditure during F.Y. 2017-18 for payment of HI(W) staff vide Bill Unit No. 0208480 is evaluated.

It is amounted to **Rs. 1,73,08,854/-** (Rupees One Crore seventy-three lakhs eight thousand eight hundred fifty four only).

In this respect, another aspect may also be pointed out here that two quotation basis Cleaning Works Contract (as discussed vide paras 2.14.0. to 2.19.0.) were needed along with the deployment of departmental safaiwalas which requires a considerable expenditure amounting to (Rs. 4,99,800.00 + Rs. 7,24,174.00) i.e. Rs. 12,23,974.00.

While deputing departmental safaiwalas in workshop premises for Sanitary / Conservancy cleaning, it is essential to enter quotation based works contract (as discussed vide paras 2.14.0. to 2.19.0.) for a very limited period to manage the cleaning work requirement of workshop in full. Therefore, to evaluate an approximate annual expenditure figure, **Rs.12,23,974.00** (expense for aforesaid contracts) may be added to **Rs. 1,73,08,854** (Salary of departmental staff) which arrived approximately to **Rs. 1,85,32,828.00**.

- 2.31.0.** Comparing the above two expenditure figure, it is seen that a direct annual savings can be achieved, if the aforesaid 4 nos. cleaning Works Contract Proposals can be materialised.

The amount of savings evaluated as [**Rs. 1,85,32,828.00 - Rs. 1,42,34,786.00**] i.e. **Rs. 42,98,042.00 per annum i.e. Approximately 43 Lakhs.**

- 2.32.0.** Competent authority of Jampalpur Workshop also reviewed the position of 'Cleaning Works Contracts' vis-a-vis the existing nos. of Departmental Safaiwalas as per the guide lines of Rly. Bd. (Ref. to PCPO/E.Rly./Kolkata's office letter no. E.11/O/Pt.V Kolkata, dtd. 03/05/2018 in connection with the 'Recommendations of the Task force') (Annexure-4).

- 2.33.0.** Vide Annexure-4, it is clear that consequent upon the Rly. Bd.'s decision that 'all type of cleaning work should be done by contractual basis', CWM/E.Rly./JMP conducted all round review in this matter. Thereafter, vide his office letter no. W/SAN/Contract/ 2018-19 Jamalpur, dtd. 08/05/2018, (Para 2.8.0.) conveyed to PCPO/E.Rly./Kolkata that **36 Nos. of existing posts of safaiwalas to be surrendered.**

- 2.34.0.** Thus, the result of review conducted by Competent Authority/JMP and savings evaluated by Work study team vide para 2.31.0. reached to the same conclusion i.e. **36 Nos. of existing posts of safaiwalas to be surrendered.**

- 2.35.0.** Other than Jamalpur Workshop and its adjoining office buildings premises, departmental safaiwalas under 'Administration' department are also deputed at Rampur Hostel, PPTS, School, etc. Study team noticed that no outsourcing of cleaning exists there and so it is very clear that existing deployment of departmental safaiwala is sufficient enough to cater the work of cleaning, sweeping, mopping, etc. Thus, it may be concluded that surrendering of

the vacant posts of safaiwala in 'Administration Department' can easily be done and no hindrance of the cleanliness of the said areas will be caused.

In this reference, it may be pointed out here that in another E. Rly. Workshop at Kanchrapara, total outsourcing of Workshop cleaning i.e. sanitary/conservancy cleaning, etc. has already been outsourced in full.

2.36.0. Proposal for outsourcing of Sanitary/Conservancy Cleaning for the rest areas under Administration Department / JMP, like Rampur Hostel, School, PPTS, etc. may be expedited so that Railway Bd.'s guideline in this regard may be met up at the earliest.

2.37.0. The study team thus come to an end that 36 posts of safaiwala to be surrendered after finalisation of all the 04 proposals for Sanitary/Conservancy Cleaning work on urgent basis i.e. positively within this F.Y. 2018-19. Together with the said 36 posts, 15 nos. of vacant posts of safaiwala, totalling 51 posts of the same to be considered as surplus and offered for surrender as a whole.

2.38.0. Bearing in mind the above analysis, study team put forward the under mentioned recommendation based on scientific analysis of Work Study as well as Railway Bd. Guide line related to existence of safaiwala posts.

2.39.0. Recommendations:

The Study Team recommends that 51 posts to be surrendered from the existing Sanctioned Strength of Safaiwala over Administration Department under CWM/ER/JMP.

CHAPTER-III

3.0.0. FINANCIAL APPRAISAL:

- 3.1.0. To appraise the approximate financial implication of proposed surrender, the minimum pay scale and grade pay is considered for the sake of simplicity of calculation.

<i>Level</i>	<i>Grade Pay (In Rs.)</i>	<i>Scale of Pay (In Rs.)</i>	<i>Mean Pay (In Rs.)</i>	<i>D.A. @ 7%</i>	<i>Total monthly Pay / Staff (In Rs.)</i>	<i>Nos. of Posts Surplus</i>	<i>Monthly Savings (In Rs.)</i>	<i>Annual Savings (In Rs.)</i>
<i>1</i>	<i>1,8000.00</i>	<i>18,000 - 56,900</i>	<i>37,450.00</i>	<i>2621.50</i>	<i>40071.50</i>	<i>51</i>	<i>20,43,646.50</i>	<i>2,45,23,758.00 i.e. 2.50 Crore (Approx.)</i>

- 3.2.0. As per recommendation made in Para – 2.39.0., Minimum Annual financial savings achieved on account of surrender of 51 (Fifty one) posts from Jamalpur/Administration unit under CWM/E.Rly./JMP is evaluated as Rs. 2,45,23,758.00 (Rupees Two Crore forty five Lakh twenty three thousand seven hundred fifty eight only) i.e. **2.50 Crore (Approx.)**
