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No.: SDM(P&E)-III/ 1076/ Budgetary Offer/ 781

Date : 18.12.2020.

To,

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Subject : Enquiry for obtaining budgetary quotations for the work for “Operation and Maintenance of 3 (Three) nos. DLW Make 3100 HP (Model : WDG3A) Locomotive for a period of 5 (Five) years for Haldia Dock Complex, Syama Prasad Mookerjee Port, Kolkata”.

It is requested to send budgetary offer for the work for “Operation and Maintenance of 3 (Three) nos. DLW Make 3100 HP (Model : WDG3A) Locomotive for a period of 5 (Five) years for Haldia Dock Complex, Syama Prasad Mookerjee Port, Kolkata”, in the enclosed **Bill of Quantities (Appendix-4)**, at the office of the under-signed, in accordance with enclosed document (i.e. Scope of Work, Obligation and Related Information; Special Conditions of Contract (SCC); Preventive Maintenance Schedules & Plan; Present Stock of Spares etc.), within 21 (Twenty One) days.

GENERAL CONDITIONS OF CONTRACT : The contract will be governed by our General Conditions of Contract (available at the official website of Syama Prasad Mookerjee Port, Kolkata: www.smpportkolkata.shipping.gov.in).

Thanking you,

Yours faithfully,

(K. MUKHOPADHYAY)
Sr. Dy. Manager (P&E)
For General Manager (Engineering)
Haldia Dock Complex
Syama Prasad Mookerjee Port, Kolkata
(Formerly Kolkata Port Trust)

Encl : As stated above.

**Operation and Maintenance of 3 (Three) nos. DLW
Make 3100 HP (Model : WDG3A) Locomotive for a
period of 5 (Five) years for Haldia Dock Complex,
Syama Prasad Mookerjee Port, Kolkata.**

TABLE OF CONTENTS

Contents	Pages
CHAPTERS	
Scope of Work, Obligation and Related Information	3-10
Special Conditions of Contract (SCC)	11-23
APPENDICES	
Appendix – 1 (General Specifications for 3 nos. WDG3A DLW Locomotive)	24-25
Appendix – 2 (Format for Scheduled and Preventive Maintenance of DLW Locomotives)	26-40
Appendix – 3 (Preventive Maintenance Schedule Plan of DLW Locomotives)	41
Appendix – 4 (Bill of Quantities)	42
Annexure- “Present Stock of Spares”	43-46

1. SCOPE OF WORK, OBLIGATION AND RELATED INFORMATION:

SCOPE OF WORK

1.1 Introduction :

Haldia Dock Complex (HDC), Syama Prasad Mookerjee Port, Kolkata (SMPK) is primarily a dry bulk and liquid cargo handling Port and the Port is well connected to the various industries in the hinterland through railway network. Due to smooth evacuation / aggregation of cargo through rail movement, more and more users are attracted towards Haldia and thus it is felt that the strengthening of the railway operation at Haldia is absolute necessity.

HDC, SMPK having Railway System which is spread over an area of approx. 65 hectares with 115 KM of track length and 11.5 KM of route length having 15 nos. of railway sidings within the Dock Zone and 9 sidings outside the dock Zone is catering to bulk, break bulk and containerized cargo. HDC railway is working as Terminal Agent of South Eastern Railway as per the working agreement. HDC Railway, apart from meeting the aggregation and evacuation requirement of Port bound cargo is also catering to the demand of port based industries.

At present, on an average, 17 out bound rakes and 17 in bound rakes are required to be handled daily at various sidings and the number of in bound and out bound rakes are likely to increase substantially in the near future due to increased volume of rail borne cargo expected to be handled at this port.

Handling of rail borne traffic involves not only placement and withdrawal of rake but also attachment and detachment of sick / reject wagons, weighment of the rake and formation of outward rakes to avoid detention.

1.2 Scope of work :

A. Scope of Contractor

- i) Operation and Maintenance of 3 (three) nos. DLW make 3100 HP (Model : WDG3A) Diesel Electric High power Locomotive of HDC, SMPK, for a period of 5 years by deploying trained manpower and spares, consumables etc. except fuel (to be supplied by HDC).
 - The locomotives would be utilized round the clock basis for shunting, marshalling, hauling, coupling & decoupling, recoupling, empty collection, placement, withdraw, train formation etc. deploying trained manpower by the contractor. The sequence of work shall have to be suitably programmed by the contractor in consultation with the Officer on duty at Railway Control or his authorized representative under Traffic Department without hampering other normal operational activities.
 - Round the clock manning of Diesel Loco Driver along with other personnel and adequate shunting staff for operation of Locomotive as per scope of work.
 - Placement of wagons over Wagon tippler shall be done as per site requirement.
 - Formation of empty rakes and taking the rake to empty line as well as re-marshalling as and when needed by HDC, SMPK.
- ii) The firm should have knowledge about Railway Operations and Locomotive related traffic operation and maintenance work.

- iii) The contractor will carry out complete operation and maintenance of the Locomotives including supply of spares, consumables etc. during the contract period of 5 years and the extended period, if any, as will be mutually agreed upon.
- iv) The contractor will deploy trained manpower in the locomotives as per the work requirement of HDC. The manpower will have to be provided during operation on round the clock basis including Sundays and Holidays as per the advice of Traffic Rly, Division, HDC and considering leave reserve and roster off.

Working procedure of the locomotives are mentioned below :-

1. The operation of the Locomotives will be carried out as per the direction and supervision of Traffic Railway Division, HDC.
2. Deployment of trained manpower to operate each of the 3 (three) nos. Diesel Electric High Power Locomotive (DLW 3100 HP) round the clock. Diesel Loco Driver should be trained to shoot Loco problems when in operation.
3. In case of sudden breakdown of Locomotive while in operation, the contractor should arrange for immediate repair so that the operation is not hampered.
4. Railway operation includes
 - A) Placement of full or half rake at siding
 - B) Withdrawal of rake from siding
 - C) Shunting out of sick or reject wagons as per list provided from office
 - D) Decoupling or recoupling as per necessity
 - E) Train formation and offering to S. E. Railway
 - F) After tripling empty wagons to be collected from empty collection line at post tripler and formation of rakes as and when needed by Traffic Department, HDC.
 - G) Weighment of empty / load rakes to be done as and when needed by Traffic
 - H) Placement of sick wagons from HDC Yard to S. E. Railway Sick line and withdrawal of the same after fitness or repair by S. E. Railway Department, HDC.
5. Locomotives should be available ready for use round the clock i.e. minimum 90% availability.
6. Contractor should forward the maintenance schedule at the beginning of the month.
7. The sequence of work shall be programmed in consultation with the Office on duty at yard.
8. Maintenance schedule should be such that minimum 2 nos. DLW Loco are always available on every day even on holidays.
9. The manpower deployed in the Loco should be well conversant with singles and track. Over shooting of signals shall be considered as a fault of Loco.
10. In case of any accident or derailment, a joint enquiry shall be conducted in line with Clause no. 8.10 of Special Conditions of Contract and responsibility shall be fixed by HDC on the basis of said enquiry. In case of failure in Locomotive operation by the contractor, the contractor shall be responsible for re-railment of the same.

1.3 Re-railment

It is the responsibility of the contractor for the Loco re-railment. However, based on the request of the contractor, the same may be done by HDC on chargeable basis. The charge will be the actual cost of manpower and 19.25% over head and the same will be deducted from the running bill of the contractor.

1.4 Coordination:

The operation of the Locomotive will be carried out as per the direction of Traffic Railway Division, HDC. Also, the contractor will keep their responsible person in each shift for supervision and coordination with port officials for operation and withdrawal of Locomotive for maintenance purpose with prior notice.

1.5 Breakdown Maintenance :

Detention time will start from the time of breakdown of Locomotive till the time of completion of repairing of such breakdown, wherein such time will be certified by T.O.(Railway) Division on receipt of feedback from the contractor.

1.6 Availability of Locomotives:

Availability of each Loco will be 90%. Each Loco may be allowed to carry out maintenance for 48 hrs. per month maximum. Although the contractor is entitled to 48 hrs. shutdown, in totality as free time during a month for preventive/ breakdown maintenance but 48 hrs. shutdown would not be given at a stretch. No unused free time in a month would be carried forward to the next month. The utilization of each Loco will be 18 hrs. per day.

B. Scope of HDC.

- i) Fuel (HSD) will be supplied by HDC. However, supply of fuel will be made on actual consumption basis.
- ii) HDC will provide the existing facility of Loco Shed i.e. pit, Loco Lifting Jack, available Tools and Tackles etc. for maintenance of Locomotive at free of cost. In such case, necessary intimation to be given in advance to HDC.
- iii) In case of any damage of railway line due to any accident / mal operation of Locomotive, the same may be rectified / replaced by HDC on chargeable basis which will be deducted from the running bill of the contractor at actual plus 19.25% overhead.

OBLIGATION AND RELATED INFORMATION

- 2.1 The contractor shall operate and maintain three (03) nos. DLW make 3100 HP (Model : WDG3A) Locomotive (Sl. Nos. DLW- 1, 2 & 3) of HDC, SMP, Kolkata in accordance with the Good Industry Practice with the objective of fulfilling the Scope of Work and service standards required under the contract and ensuring that the DLW make locomotives handed over by HDC, SMP, Kolkata to the contractor (to be transferred to HDC, SMP, Kolkata upon expiry of the contract) remain in good condition, normal wear and tear expected, so that the design life of 20 years of the equipment concerned (i.e. from 2009/10), is achieved. The contractor in this regard shall repair and maintain the DLW Locomotives or any part thereof as necessary and for this purpose take measures for carrying out scheduled and preventive maintenance of the DLW Locomotives including upgradation / repairing of structures, refurbishing, painting, etc.
- 2.2 It will be the responsibility of the contractor to provide all capital spares and all other spares and consumables for operation and maintenance of the DLW Locomotives of HDC, SMP, Kolkata at his own cost and arrangement.

- 2.3 It will be mandatory for the contractor to purchase / accept all the capital spares and other spares and consumables available with HDC, SMP, Kolkata in respect of the DLW Locomotives available with HDC, SMP, Kolkata at their respective book values plus 19.25% overhead charges at the beginning of the contract. An indicative list showing the spares available with HDC, SMP, Kolkata as on the date of publication of the tender is given at “Annexure- Present Stock of Spares”. However, this list may be revised in the event some of the spares mentioned in the list are consumed prior to handing over the locomotives to the contractor. The contractor will have to procure / make payment for all the spares as mentioned in the original list.
- 2.4 The contractor will have to purchase the aforesaid spares (as stated at clause no. 2.3 above) at least a week prior to handing over of the DLW Locomotives by HDC, SMP, Kolkata to the contractor.
- 2.5 All remaining capital spares, other spares and consumables (i.e. other than those indicated as at 2.3 above) as may be required shall have to be arranged and provided for by the contractor from DLW authorized vendors/ open markets, at his own cost.
- 2.6 The general specifications and maintenance schedule of the DLW Locomotives owned by HDC, SMP, Kolkata and to be handed over to the contractor are given at **Appendices 1 & 2**.

The Contractor should prepare and maintain preventive maintenance plan of DLW Locomotives as per **Appendices 3**. He also ensures that they are implemented and recorded. The record of preventive maintenance and if any breakdown maintenance has to be submitted along with submission of monthly bill.

2.7 Transportation of materials:

All materials, spare parts, tools, tackles, service equipment, including consumables, required under this contract, will have to be packed, securely placed and protected by the Contractor during transportation. The Contractor will be held responsible for the inefficient packing, storing and protection of the materials.

2.8 Contractor's equipment

The Contractor shall be responsible for all the equipment of the Contractor. When brought on to the site, the Contractor's equipment shall be deemed to be exclusively intended for the execution of the work. The Contractor shall not remove from the site any major items or Contractor's equipment without the consent of the Engineer. However, consent shall not be required for vehicle(s) transporting goods or Contractor's personnel off site.

- 2.9 It is the responsibility of the contractor for keeping all the DLW Locomotives in good health and condition. DLW Locomotive has Microprocessor based Control System (MEP660) and Micro Controlled based Governor (MCBG). These equipment are electronic based and MEDHA make, which is maintained by M/s. Medha Servo Drives Pvt. Ltd. Hence, it is the responsibility of the contractor to have contract with M/s. Medha Servo Drives Pvt. Ltd. for maintenance of these sophisticated equipment.
- 2.10 An Independent Agency (or Institution or Organization) like Railways, ALCO, DLW Varanasi, and other similar organizations / institutions/ OEMs, will be appointed to carry out annual inspection of the DLW Locomotives (including Engine) of HDC, SMP, Kolkata, handed over to the contractor. The Independent Institution / Organization / Agency, after each such inspection, will certify as to

whether these equipment are in order. They will also recommend corrective actions viz. repairing, overhauling, corrections etc. required for removing the defects, deficiencies if any in these assets and the respective timeframes within which such corrective actions are required to be undertaken. The contractor shall be required to carry out all such corrective actions within the respective timeframes at his own cost and arrangements. The Independent Agency will certify as to whether the contractor has undertaken all the corrective actions as recommended by the Independent Agency. The contractor will be obliged to obtain the said certificate from the Independent Agency and submit the same to HDC, SMP, Kolkata within a period of 7 days of the receipt of the said certificate. The costs and expenses of the Independent Agency shall be borne by the HDC, SMP, Kolkata and the contractor equally.

2.11

- a) The contractor will maintain, throughout the period of the contract, an Asset Management Guarantee in the form of an encashable Bank Guarantee amounting to **INR 10 Crores**. The said Bank Guarantee shall have to be deposited at the beginning of the contract, and the contractor shall have to supplement / replenish / extend the said Bank Guarantee as per direction of HDC, SMP, Kolkata from time to time. In the event of the contractor failing to comply with corrective actions recommended by the Independent Agency, HDC, SMP, Kolkata itself may implement the recommendations of the Independent Agency for removing the defects / deficiencies in the DLW Locomotives of HDC, SMP, Kolkata handed over to the contractor and recover the expenditure incurred along with 19.25% overhead by invoking the said Asset Management Guarantee. HDC, SMP, Kolkata may also, if required, withhold monthly payment(s) of the contractor in case the contractor shows reluctance in implementing the recommendations of the Independent Agency.
- b) SMP, Kolkata may also invoke the Asset Management Guarantee in case the contractor does not make good the damages caused to the DLW locomotives due to reasons attributable to the contractor or his workers.
- c) In the event of invocation of the Asset Management Guarantee, irrespective of the claim amount, HDC, SMP, Kolkata shall realize the entire amount of **INR 10 Crores**. This amount shall be retained by SMP, Kolkata till completion of the contract period. However, HDC, SMP, Kolkata may return the balance amount, if any, on submission of fresh Asset Management Guarantee in the form of encashable Bank Guarantee for INR 10 Crores as security. The bidder should note that the coverage, in the form of the Asset Management Guarantee, shall always remain active during the entire period of the contract for the amount of INR 10 Crores.

2.12

- a) The Independent Agency shall be selected through a tender process. SMP, Kolkata shall, within 30 (thirty) Days from the date of the Lol, forward to the Contractor a list consisting names accompanied by the respective profile in brief of the agencies so shortlisted. If within 15 (fifteen) days of forwarding the list, HDC, SMP, Kolkata does not receive any objection from the Contractor with reasons thereof, HDC, SMP, Kolkata shall call for a financial bid from the shortlisted agencies and select the Independent Agency ordinarily based on the lowest fee quoted. Any objection raised by the Contractor shall be considered by HDC, SMP, Kolkata. At the discretion of HDC, SMP, Kolkata, which shall be used with the highest degree of prudence and fairness, such agencies against

which objections are raised (and are found legitimate and valid), will be disqualified prior to seeking a financial bid.

- b) The Independent Agency selected pursuant to the aforesaid process shall be appointed for entire period of the contract.
 - c) The costs and expenses of the Independent Agency shall be borne by the HDC, SMP, Kolkata and the contractor equally.
 - d) If HDC, SMP, Kolkata, either on its own or based on report of the contractor, has reason to believe that the Independent Agency is not discharging its duties in a fair, appropriate and diligent manner, SMP, Kolkata may, after giving the Independent Agency due opportunity of being heard, terminate the appointment of the Independent Agency and appoint another firm in its place in accordance with the preceding clauses as at (a) and (b) above.
 - e) If either Party (HDC, SMP, Kolkata and / or the contractor) disputes any advice, instruction or decision of the Independent Agency, the dispute shall be resolved amicably by the parties to the contract. In case of any failure of such amicable settlement, the matter would be referred to the OEM / supplier of the equipment for opinion and the opinion of the OEM / supplier will be binding on both the parties. The cost and arrangement of getting the said recommendation of OEM will be on account of the party disputing the instruction / decision of the Independent Agency. However, HDC, SMP, Kolkata shall be at liberty, pending resolution of the said dispute, to implement the recommendations of the Independent Institution / Organization / Agency for removing the defects / deficiencies in the DLW Locomotives of HDC, SMP, Kolkata handed over to the contractor and recover the expenditure incurred along with 19.25% overhead by invoking the said Asset Management Guarantee.
- 2.13 The contractor shall supervise all the functions required under the provisions of the contract at its cost, charges, expenses, risks and responsibilities, manpower and other arrangements.
- 2.14 The contractor shall carry out all mentioned services and operations pertaining to this contract with the help of equipment as well as manpower to be deployed under the provisions of the contract in close coordination with HDC, SMP, Kolkata.
- 2.15 The contractor shall employ qualified and skilled personnel for operation and maintenance of all the equipment deployed under the provisions of the contract and also to carry out all and / or any of the functions / operations / services for fulfilling his obligations under the contract. The contractor shall ensure that all such personnel have valid Licenses / Certificates applicable under the law to operate & maintain the respective equipment and for undertaking the various services / operations under the contract.
- 2.16 The contractor shall at its own cost and arrangement obtain and maintain all required statutory clearances and permissions as may be required by law for operation and maintenance of all the equipment including port owned equipment and accessories deployed under the provisions of the contract and for undertaking the various services / operations under the contract.
- 2.17 The contractor shall indemnify SMP, Kolkata from the possible future demand of the employees / workers employed by the contractor that they be absorbed in SMP, Kolkata. It will be the responsibility of the contractor to find a solution for such demand if it arises.

- 2.18 The contractor shall comply with the requirements of all the Acts, Laws, Statutes, Bylaws, Rules and Regulations for the purpose of fulfilling all the obligations of the contract which shall include but not limited to the Major Port Trust's Act, 1963, the Indian Contract Act, the Dock Workers (Safety, Health & Welfare) Regulations, 1987, Motor Vehicles Act, Minimum Wages Act, 1948, Contract Labour (Regulation and Abolition) Act, 1970, Industrial Dispute Act, 1947, Shops and Commercial Establishment Act, Factory Act, 1948, Workmen's Compensation Act, 1923, ESI Act, 1948, Payment of Wages Act, 1963, Bonus Act, Employees Provident Funds & Misc. Provisions Act, 1952 etc. and such other applicable Central / State Acts from time to time and take such steps as may be deemed necessary in this regard.
- 2.19 The Contractor shall, at all times during the currency of the contract, ensure highest standards of safety to the equipment deployed and / or operated by them under the provisions of the contract as well as other properties of HDC, SMP, Kolkata or other parties while discharging the obligations under the provisions of the tender / contract. Also,
- (a) In case of HDC, SMP, Kolkata assets / property / employee suffering due to damage or sustaining injury (fatal / non-fatal) as the case may be, the contractor shall be solely accountable for all liabilities and losses thereof. In case of loss or damage of any property or any material belonging to HDC, SMP, Kolkata, the contractor shall immediately pay the required cost for making good the losses, as will be ascertained by HDC, SMP, Kolkata official, or in lieu thereof, the contractor may also repair / replace the damaged property to the satisfaction of HDC, SMP, Kolkata official, within the period to be indicated by HDC, SMP, Kolkata.
 - (b) The liability of the contractor in respect of the third party shall be ascertained through a joint inspection of the damaged property / injured person involving the contractor, the Port and the affected party, followed by a report to be submitted by a registered Surveyor, to be engaged by the affected party. If the contractor is found liable for all the damages in the aforesaid report, the Surveyor shall determine the extent of compensation and the contractor shall make good the losses. In case of failure on the part of the contractor to attend the joint enquiry / inspection despite prior intimation for the same, the report as stated above will be finalized in absence of their representative of the contractor and the same will be treated as final and binding on the contractor.
 - (c) In case of loss of life or injury caused to any person, the Contractor shall immediately pay the required compensation (as may also be decided by the statutory/ competent authority) to the affected party.
- Note:** In case of non-compliance with the above provisions, HDC, SMP, Kolkata will be at liberty to realize the cost of compensation from any amount due to the contractor.
- 2.20 The contractor shall keep HDC, SMP, Kolkata indemnified throughout the period of the contract for any loss, damage and expenses whatsoever which HDC, SMP, Kolkata may suffer or may have to suffer due to fault on the part of the contractor in operating and maintaining the equipment and in discharging other obligations as per provisions of the contract. Assessment of damages, expenses, cost etc. if any, will be carried out jointly by HDC, SMP, Kolkata and the contractor. In case of absence of the contractor for joint inspection, assessment done by HDC, SMP, Kolkata will be final and binding on the contractor. In case the contractor damages property belonging to parties other than HDC, SMP, Kolkata, assessment of damages, expenses, costs etc. if any, will be carried out jointly by HDC, SMP, Kolkata, the

contractor and the affected party concerned.

- 2.21 The contractor shall at its own cost and arrangement promptly repair / replace or restore any of the equipment or any part thereof which may be lost, damaged or destroyed.
- 2.22 The contractor shall not assign the contract to any other agency without approval of HDC, SMP, Kolkata.
- 2.23 The contractor shall allow HDC, SMP, Kolkata or any statutory authority to inspect DLW Locomotives deployed and operated by the contractor under the provisions of the contract at all / any point of time and take such action as may be directed by HDC, SMP, Kolkata or the said statutory authority with regard to any or all the equipment.
- 2.24 The contractor shall be responsible for payment of taxes, duties, cess, assessment or any other charges which may be levied by any statutory authority during the currency of the contract.

If during the period of the contract, any new tax / duty / cess or any other charge is imposed / levied by the Government / any statutory authority having impact on the payable amount to the contractor only to the extent of the services to be rendered after commencement of container handling operation, then the same would be paid by HDC, SMP, Kolkata to the contractor at actual on production of relevant proof.

- 2.25 The contractor shall submit different reports as per periodicity to be mentioned by HDC, SMP, Kolkata during the currency of the contract.

Note: All details reported may however, be separately ascertained by HDC, SMP, Kolkata and in case of any difference, the details as will be ascertained by HDC, SMP, Kolkata will be considered as final for the purpose of enforcing different clauses of the contract.

- 2.26 HDC, SMP, Kolkata is covered by the "International Ship and Port Facility Security (ISPS) Code". The general security of the entire dock area at HDC is provided by Central Industrial Security Force (CISF) as in existence now. Localized security for all the equipment and other infrastructure to be set up by the contractor inside the dock will be provided by the contractor at his cost, arrangement and liability.
- 2.27 The contractor shall have to obtain required permits / licenses for entry into the dock for its employees, workmen, security personnel, vehicles, tools and tackles, equipment and accessories etc. following the procedure of HDC, SMP, Kolkata in vogue at HDC. The required permits / licenses will be given on chargeable basis.

SPECIAL CONDITIONS OF CONTRACT (SCC)

8.1 Definition and Interpretation:

For definitions of different words used in this Tender Document, KoPT's General Conditions of Contract, May 1993 are to be followed.

8.1.1 In the event of the Contractor contravening this condition, HDC, SMP, Kolkata shall be entitled to terminate the contract forthwith and award a fresh contract to some other parties at risk and cost of the Contractor, who shall be liable for any loss or damage, which HDC, SMP, Kolkata may sustain in consequence to arising out of such replacement of the Contractor.

8.1.2 The contractor shall not assign his right and interest in these presents nor assume a fresh partner or partners, dissolve, the partnership existing between him in reference to this contract without the written permission of HDC, SMP, Kolkata.

8.1.3 No participating bidder shall be allowed to act as a subcontractor of the successful bidder.

8.2 Patent Rights :

8.2.1 The contractor shall fully indemnify HDC, SMP, Kolkata against any action, claim or demand, costs or expenses arising from or incurred by reason of any infringement or alleged infringements of letters, patents, design, trademark or name, copyright or other protected rights in respect of any machine, plant, work, materials or things, system or methods of using, fixing working or arrangement used for fixed or supplied by the contractor in India, or elsewhere.

8.2.2 All payments, or otherwise shall be deemed to be included by the contractor in the prices named in the tender and shall be paid by him to whom they may be payable.

8.2.3 In the event of any claim being made or action brought against HDC, SMP, Kolkata in respect of any such matter as aforesaid, the contractor shall be immediately notified thereof and he shall with the assistance, if he so requires of HDC, SMP, Kolkata but at the sole expense of the contractor conduct all negotiations for the settlement of the same or any litigation that may arise there from provided that the conduct of such negotiations or litigations shall be conditional upon the contractor giving to HDC, SMP, Kolkata such security as shall from time to time be reasonably required by HDC, SMP, Kolkata to recover the ascertained or agreed amount as the case may be of any compensation, damages, expenses and cost, which might be payable by the Trustees in respect of or as a result of any such negotiation or litigation.

8.3 Power Supply & water :

8.3.1 Supply of Electricity:

For execution of work, electricity will be supplied on chargeable basis. The contractor will provide cables; switch gears etc. to receive electricity from HDC's nearest electric supply source. **Electricity charges** will be determined on the basis of **Chargeable Unit (kWh)** [actual **Unit (kWh) consumed** (recorded through Energy Meter) **plus 3%** on actual Unit consumed] and applicable rate of **West Bengal State Electricity Distribution Company Limited (WBSEDCL)**. Billing will be done on the basis of **Electricity charges** and overhead charges @ 19.25% [on the aforesaid **Electricity charges**] as per the notifications of **Tariff Authority of Major Ports (TAMP)**.

The **Electricity consumption charges** [based on the prevalent rates of **WBSEDCL**, as may be amended from time to time] shall have to be paid by the Contractor immediately, on receipt of the bill from the office of Finance Division, Haldia Dock Complex. All

payment on this account should be updated, otherwise the pending bill amount, along with late payment surcharge, will be recovered from the Contractor's bill(s).

8.3.2 **Supply of water:**

Fresh Water for use of the staff members as well as for requirement of the Locomotive will be provided on chargeable basis by HDC-KoPT. The Contractor will have to take the delivery of fresh water for Locomotive from specified points. Necessary arrangement like flow meter, pipe & pipe fittings etc. to be arranged by the contractor

Billing against supply of water will be done on the basis of actual consumption recorded through water meter at the rate **INR 38.65 (including overhead charges @ 19.25%) per KL of Fresh Water** [As directed by **TAMP (Tariff Authority for Major Ports)**], with **escalation @ 5% per annum**.

The **water consumption charges** [based on the prevalent rates of KoPT, as may be amended from time to time] shall have to be paid by the Contractor immediately, on receipt of the bill from the office of the Finance Division, Haldia Dock Complex. All payment on this account should be updated, otherwise the pending bill amount, along with late payment surcharge, will be recovered from the Contractor's bill(s).

8.4 **Use of Land :**

For the purpose of setting up a site office to carry out the activities in connection with the contract, land as available, may be allotted to the firm by HDC, SMP, Kolkata, on chargeable basis, at applicable rate, at the nearby area of the Loco shed for which the firm will have to submit written application. It is emphasized that the construction of such site office, if required, shall in no way hinder any other operation inside the dock or elsewhere.

If the contractor does not handover the land allotted to him and/or does not remove the temporary structure erected on the said land within a fortnight, then the contractor will have to pay compensation to HDC equivalent to three times the applicable licence fee from the plot concerned as per schedule rent of HDC's land and building at Haldia.

8.5 **Access to Site :**

The contractor shall have to abide by the rules and regulations of HDC, SMP, Kolkata, which may be varied time to time, in respect of entry / exit and movement in the premises. Necessary Gate Pass for entering into the Dock area will be issued for the personnel, equipment, machineries, materials etc. of the contractor for execution of the instant work at chargeable basis as per rules then prevailing, on the basis of written request from the contractor. The contractor will be fully responsible for any injury (whether fatal or otherwise) to himself or his representative(s), for any loss or damage of property, or for any other loss, damage, costs and expenses whatsoever caused which but for the granting of such permission would not have arisen. The Contractor will be liable to indemnify HDC, SMP, Kolkata against any loss or damage to the property of HDC, SMP, Kolkata or neighbouring property, which may be caused due to any act of the contractor or his representative(s).

8.6 **Contract Document Mutually Explanatory :**

8.6.1 The several documents forming the contract are to be taken as mutually explanatory of one another and should anything appear in one, which is not described in the other, no advantage shall be taken of any such omission.

8.6.2 In case, any discrepancies or inconsistencies however appear or should any misunder-

standings arise as to the meaning and of the specifications or drawings or as to the dimensions or the quality of the materials or the due and proper execution of the work or as to the measurement or quality and valuation of the work executed under this contract or as extra thereupon, the same shall be explained by the Engineer or his authorized representative.

- 8.6.3 The explanation of Engineer or his authorized representative shall be final and binding upon the contractor and the contractor shall execute the work according to such explanations, and without extra charge or deductions to/from the prices specified in the Price Schedule and do all such work and things as may be necessary for the proper completion of the work as implied by the specification and drawings, even though such work and things are not specifically shown and described therein.

8.7 Existing Services :

- 8.7.1 Drains, pipes, cables, overhead wires and similar services whether above or below the ground which may be encountered in the course of the work shall be saved and kept harmless from injury and/or loss or damages by the contractor at their own costs and expenses so that they continue to be in full and uninterrupted use to HDC, SMP, Kolkata.
- 8.7.2 The contractor shall not store any materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services. The contractor shall at his own costs and expenses and without any delay repair and make good, to the satisfaction of the employer, any injury and/or loss or damage caused by the contractor to the same.

8.8 Labour :

- 8.8.1 The contractor shall make their own arrangements for the engagement of all labour for doing the work at site or in respect of or in connection with the execution of work as also for the transport, housing/residential accommodation, medical treatment, feeding/canteen facility and payment thereof. Therefore HDC, SMP, Kolkata will have no obligation for the labours engaged by the contractor. Since time is the essence of this contract, adequate strength of labour force has to be deployed, so as to supply including operation and maintenance of locomotive under HDC, SMP, Kolkata as stipulated in the tender.
- 8.8.2 In the event of any outbreak of illness or an epidemic nature, the contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government, or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.
- 8.8.3 Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst his employees and for the preservation of peace and protection of persons and property in the neighbourhood of the works against the same.
- 8.8.4 Contractor shall at all times during the continuance of the contract comply fully with all Acts, Rules, Regulations and Byelaws then prevailing including all statutory amendments and re-enactment by the State or Central Government and other Local Authorities and any other enactments and acts that may be passed in future either by the State or the Central Government or Local Authority, including Indian Workmen's Compensation Act, Labour Laws and Equal Remuneration Act, 1976, Factories Act, Minimum Wages Act, The Contract Labour (Regulation & Abolition) Act, 1970; Employees' Provident Fund & Miscellaneous Provision Act, 1952;

Employees' State Insurance Act, 1948; Dock Workers, (Safety, Health and Welfare) Act, 1986 etc.

8.8.5 If as a result of contractor's failure, negligence, omission, default or non-observance of any provisions of any law, HDC, SMP, Kolkata is called upon by any authority to pay or reimburse or required to pay or reimburse any amount, HDC, SMP, Kolkata shall be entitled to deduct the same from any moneys due or that become due to the contractor under this contract or any other contract or other wise recover from the contractor any sum, which HDC, SMP, Kolkata is required or called upon to pay or reimburse on behalf of the contractor. All registration and statutory inspection fees in respect of his work pursuant to the contract shall be paid by the contractor.

8.8.6 The contractor shall pay the labourer engaged by him for this instant work not less than a fair wage, under the Minimum Wages Act for corresponding workforce working in Haldia, West Bengal, India.

8.9 Labour Licence :

Before commencement of the work at site (within Dock area), the Contractor shall have to apply for Labour Licence (if applicable) for the maximum number of workers proposed to be deployed for operation & maintenance of Locomotive. Necessary certificate shall be issued by the concerned Sr. Dy. Manager (Rly.) under Traffic Department against a request from the contractor. Photocopy of the application shall have to be furnished to the concerned Sr. Dy. Manager (Rly.) under Traffic Department.

8.10 Report of Accident :

The contractor shall, inform immediately without delay of the occurrence of any accident, at or near the site or in connection with the execution of the work under the contract, report the accident to the concerned Sr. Dy. Manager (Rly.) or his authorized representative(s) and shall make every arrangement to render all possible assistance to the victim(s) of such accident. The contractor shall also report such accident to the competent authority whenever such a report is required by law. For any accident occurred within the entire operational area covered under the contract, the contractor shall ensure prompt investigation into the matter through recording of statement of the personnel witnessing the accident. The report containing the findings along with the statements so recorded will then be forwarded by the contractor to the concerned Sr. Dy. Manager (Rly.) or his authorized representative(s) at the earliest. At the first instance, an 'Accident Report' shall be prepared (in triplicate) by the concerned Supervisor / Engineer on duty engaged by the Contractor and a copy of the same to be forwarded immediately to the Engineer. Upon getting the first information Report of Accident, a joint Committee, consisting of representatives of I&CF Division, TO (Rly) Division & P&E Division of HDC, SMPK and a member of management cadre of contractor will be formed to investigate the accident.

8.11 Employees' Provident Fund (EPF) :

All intending bidders shall have to submit proof of registration of their establishment under the provision of Employees' Provident Fund & Miscellaneous Provisional Act and recent Challan, if applicable. If this is not applicable, documentary evidence to establish non-applicability of the same to be submitted along with the Techno-Commercial Bid.

Please refer to Clause No. 2.2.2 in this regard.

As per the provision of the Act, the contractor is liable for remittance of monthly subscription contribution with respect to Employees' Provident Fund (EPF) for the workers engaged by them, wherever applicable.

8.12 **Employees' State Insurance (ESI) :**

All intending bidders shall have to submit necessary documents along with their techno-commercial offer as to whether they are covered under ESI Act or not. If they are covered under the said Act, proof of registration of their establishment under the provision of Employees' State Insurance Act and recent Challan are to be submitted.

If they are not covered under ESI Act or exempted, necessary documents along with an affidavit affirmed before a First Class Judicial Magistrate to that effect are to be submitted. Such affidavit(s) will be examined by SMP, Kolkata and the bidder(s) must abide the observation/ recommendation in this regard.

Please refer to Clause No. 2.2.2 in this regard.

If the contractor is not under ESI Act, then the contractor must additionally indemnify HDC, SMP, Kolkata against all damage and accident occurring to his/their labour.

If the contractor is covered under ESI Act, as per the provision of the Act the contractor is liable for remittance of monthly subscription contribution with respect to Employees' State Insurance (ESI) for the workers engaged by them.

8.13 **Safety Gears, etc. :**

During the execution of contract, the contractor shall have to ensure safety of all their working personnel to the fullest compliance of the provisions of general safety rules/regulations including Dock Workers, (Safety, Health and Welfare) Act, 1986 along with associated Rules & Regulations.

The Contractor shall be solely responsible for consequences arising out of non-compliance or violation of safety rules / regulation.

The contractor shall at his own expenses and arrangement provide all required Personal Protective Equipment (PPE) and Safety Gears for all personnel and labours engaged during the execution of contract.

8.14 **Plant and Equipment :**

8.14.1 During execution of contract, the contractor shall be responsible for supply, use and maintenance of all the equipment, tools-tackles, lifting appliances, different vehicular transport etc. and the contractor shall ensure that those are suitable for the work and are maintained in such a manner, to ensure their efficient working. The contractor must have to comply with Dock Workers, (Safety, Health and Welfare) Act, 1986 along with associated Rules and Regulations and other safety rules (as applicable) in this regard.

8.14.2 To execute the contract, the contractor shall at their own costs and expenses provide all labour, plant, haulage, transportation of plant and equipment, all materials, stores, etc. required for efficiently carrying out and completing the work to the satisfaction of Engineer.

8.15 **Operation / Business of HDC, SMP, Kolkata must not be hampered :**

8.15.1 During the continuance of the contract, the contractor has to execute the work such a manner, so that, any business/work of HDC, SMP, Kolkata in the vicinity of worksite must not be hampered in any way.

8.15.2 The work shall be carried out in such a manner so as to enable the other contractors, if any, or the departmental employees to work, without any difficulty / hindrance etc.

8.16 **Guaranteed Availability :**

8.16.1 The Contractor will have to stand guarantee for the Locomotive's availability for 90% hours of respective month (Month starts from 06:00 Hrs. of first day and ends at 06:00 Hrs. of first day of next calendar month), in fully operational condition. In case the availability of the Locomotive falls below the said minimum guaranteed level, no daily O&M charge shall be paid for the 'DEFICIT PERIOD' i.e. Non availability of Locomotive for work as per Scope of Work and in addition to the same, penalty as per clause 8.20 will be applicable.

8.16.2 The firm shall maintain 90% availability of the Locomotives by adjusting schedule maintenance time during lean period of work. There will be no requirement of alternative locomotive or standby for the period of that maintenance. However, substitute equivalent locomotive is required to be provided during P.O.H maintenance.

Formula of availability :

A - Total locomotive hours during the period including holidays = no. of days x 24.

B – Hours loss due to scheduled & plant maintenance.

C – Hours lost due to major/minor breakdown

D – Actual locomotive availability {A-(B+C)}

% of availability i.e. D/A X 100 should be 90%

8.16.3 Locomotive becoming ineffective as a result of accident/ derailment on any account will continue to be shown in availability if reason for the same is attributable to HDC, SMPK.

8.16.4 If the DLW Locomotive gets involved in any sort of accident / derailment taking toll of life or materials or both or creating dislocation owing to inadvertent operations or loss of alertness, the firm shall have to submit a detailed report the accident enumerating its cause to HDC, SMPK. HDC in turn shall verify the above submission, if necessary by forming a committee in which one representative of the Firm will be there. In case of Driver / Locomotive being responsible for such accident as may be opined by the committee as aforesaid.

8.16.5 The following detentions will not be attributable to the contractor :-

Sl. No.	Reason for detention	Remarks
1	Fuelling Time of locomotive	To be certified by TO(Rlys.) of HDC
2	Problem of Railway Track	To be certified by I & CF Division of HDC, KoPT
3	Dense Fog	To be accepted by TO(Rlys.) of HDC
4	Non-availability of Locomotive due to Derailment.	A committee to be formed, as described in the clause No. 8.10 under heading "Report of accident" in this regard. Committee will judge the matter
5	Automatic signalling failure.	To be certified by TO(Rlys.) of HDC

8.17 Operation Mode & Charges :

8.17.1 The Locomotive shall be ready for operation for 24 hours.

8.17.2 On Standby Mode :

The Locomotive shall be deemed to be on standby if the Locomotive is made available to the authorized officer fully ready and fit for operation with sufficient crew & fuel on board whereby the officer can order the Loco Driver to commence operation at 15 minutes notice.

8.18 Accrual of Charges :

The contractual charges are inclusive of all the expenses connected to the operation and maintenance of the Locomotive including supply of manning and materials for the same. The charges shall accrue to the contractor at the rates quoted by him and accepted by HDC, SMPK.

8.19 Daily O&M Charge : Daily O&M Charge shall be paid for the day the Locomotive is in operation / standby mode as described in clauses 8.17.1 and 8.17.2 above.

8.20 Penalty :

- a) The utilization of Loco will be 18 Hrs. per day and the availability per loco will be 90%. Each loco may be allowed to carry out maintenance for maximum 48 Hrs. per month. Although the contractor is entitled to 48 hours shutdown, in totality, as free time during a month for preventive / breakdown maintenance of locomotive but 48 hrs. Shut-down would not be given at a stretch. No unused free time in a month would be carried forward to the next month. If the contractor takes the Loco for POH then substitute Loco will have to be provided of the same hauling capacity with prior intimation to HDC. Each Loco have to perform 18 Hrs. per day failing which Rs.500 per loco per hrs will be deducted from their running bill. Moreover, HDC, SMPK will not pay proportionate amount of the scheduled rates for the hours / days for the operation of the Locomotive, is suspended for the reason attributable to the contractor. However, Engineer of the contract may waive the penalty if he is satisfied that the reason for the default were beyond the control of contractor.
- b) If the DLW locomotive gets involved in any sort of accident / derailment taking toll of life or material or both or creating dislocation owing to inadvertent operations or loss of alertness, the site-in-charge of the firm shall have to submit a detailed report of the accident enumerating its cause to HDC, SMPK. HDC, SMPK in turn shall verify the above submission, if necessary by forming a committee in which one representative of the firm will be there. In case of driver / Locomotive the committee as aforesaid may opine being responsible for such accident as, the penalty will be at actual and the same to be deducted from the party's monthly RA bill or any other sum payable.
- c) In case the DLW Locomotive is not available for operation for a period of more than 7 (seven) days, then a substitute Locomotive with similar/ better specification (including age of the locomotive) shall be provided as a replacement by the Contractor at no extra charge within 30 days from the time and date the offered Locomotive is inoperative / broken down. However, supply of fuel to the replacement Locomotive will be on actual consumption basis.
- d) If the Contractor fails to deliver the offered/ substituted Locomotive as per specification given in the tender within next 30 days, in such a case Rs.5,000/- per day per Locomotive will be levied on the Contractor from the 31st day onward, and if the Locomotive is not delivered for operation within further 15 days, the same will be termed as default of the contractor and hence, Security Deposit will be forfeited.

- 8.21 **Duration of the contract** : This contract will come into effect from the date of signing of agreement and will remain valid for five years from the date of commencement of operation of the locomotives under our Traffic Railways Operation Division.
- 8.22 The Locomotive will normally ply at maneuvering speed but, may have to be increased or decreased as per operational requirement.
- 8.23 The Locomotive shall be under the operational command of Sr. Dy. Manager (Rly), HDC or his authorized representatives.
- 8.24 All transportation costs towards men and material will be the responsibility of the contractor.
- 8.25 **Fuel Supply** : The contractor, at their cost, will print sufficient number of log books and log abstracts as per approved format of HDC, SMPK. The contractor has to maintain a daily log book for the Locomotive. All particulars of the Locomotive including movement of the Locomotive (From-To), engine's important parameters, daily running hours, Fuel (HSD) position in Fuel tank of Locomotive: Opening Balance (OB) at the beginning of shift & Closing Balance (CB) at the end of shift, fuel oil consumed / received etc. to be logged daily and to be signed by the In-Charge of the Locomotive and countersigned by authorized representative of TO(Rly)Division under Traffic Department of HDC, SMPK. A monthly log abstract to be prepared mentioning all the above stated important parameters duly signed by the In-Charge and same to be submitted with the monthly bill without which no payment will be released. The daily logbook to be retained on Locomotive / office and same to be produced on demand. In view, HDC is an ISO 9001:2015 organization; the Locomotive will be required to follow ISO 9001: 2015 guidelines.
- 8.26 **Energy conservation** : The Contractor shall undertake strict measures for 'Energy Conservation' at all times. HSD will be issued by Loco Section of P&E Division under Engineering Department, HDC, SMPK upon generation of indent by the contractor and countersigned by Sr.Dy.Manager (Rly) or his authorized representative under Traffic Operations (Rlys.) Division. The Fuel would be dispensed during the period from 08:00 Hrs - 17:00 Hrs on all days. The indent with date should specify quantity of fuel required (in ltrs), last date of receipt of HSD with quantity of fuel (in ltrs), current stock of fuel (in ltrs) in Loco Fuel Tank, name & designation of indenting official of contractor, name & designation of countersigning official of TO(Rly) Division under Traffic Department.
- 8.27 Responsibility of operating the Locomotive including manning, lubricants, provisions and stores and all other supplies and services required to perform the designated duties wholly rests on the contractor and the costs of the same shall have to be taken in to account while quoting the rates.
- 8.28 **Insurance** :
The Locomotive, men & materials must have comprehensive insurance including persons deployed shall be insured by the contractor at his own cost during the entire contract period. Documentary evidence should be provided before commencement of work. HDC, SMP, Kolkata, under no circumstances, shall be responsible for any damage to the Locomotive or for any accident to the personnel engaged by the Contractor during the operation of the locomotive or otherwise. The insurance should cover Damage/ Death of Port property / Persons.
- 8.29 **Terms of Payment** :
100% payment against daily O&M charges of locomotive should be made against submitted monthly RA Bill, within 30 days, from the date of submission of clear & unambiguous bill along with locomotive log abstract, clearly depicting availability of Locomotive (in Hrs.) during

the calendar month, duly certified by Sr. Dy. Manager (Rlys.) or his authorized representative, under Traffic Rlys. Division of HDC, SMP, Kolkata.

Adjustments, if any, towards charges to be recovered against electricity, re-railment etc. would be done from the bill submitted by the contractor.

The contractor will be allowed to submit bill(s) only once in a calendar month.

Any claim for interest will not be entertained by HDC, SMP, Kolkata with respect to any payment or balance which may be in their hands owing to any disputes between themselves and the contractor or with respect to any delay on the part of HDC, SMP, Kolkata in making payment.

8.30 Tender Price, Taxes, Duties and other Statutory Levies etc. :

8.30.1 Price is to be quoted ONLINE only in the Price Bid (priced Price Schedule) should strictly as per "Price Schedule", without any extraneous condition. There should not be any change in the Format of un-priced "Price Schedule". Except in the Price Bid, the price must not be mentioned / disclosed in any other place of tender/offer.

8.30.2 Tender price shall be inclusive of all charges other than GST. All other incidental charges for the execution of the contract should be included.

8.30.3 Except where otherwise expressly provided, the contractor shall provide all materials, labour, plant and equipment and things necessary in connection with the contract work although everything may not be fully specified and although there may be errors and omissions in the specifications.

8.31 Price Variation :

8.31.1 The prices – other than GST, as applicable – shall be firm and fixed till completion of the contract.

8.31.2 In case of any upward variation in GST, Trustees will consider reimbursement of payment made against such increase of taxes, duties against documentary evidence of such payment made. In case of any downward revision in any taxes, duties and other statutory levies etc. and/ or withdrawal/ abolition of any taxes, duties and other statutory levies etc., the contractor will give due rebate, as would be effected by such revision or withdrawal/ abolition.

8.32 Extra Claim :

No claim for any detention / idle charges for labours, materials, equipments and machines organized by the contractor in connection with the work under the contract shall be payable by HDC, SMP, Kolkata to the contractor under any circumstances whatsoever.

8.33 Extended Stay Compensation :

Extended Stay Compensation for delay in execution of the contract will not be paid.

8.34 Storage of Material :

The safe storage of material shall be the responsibility of the contractor. Any kind of damage (including due to atmospheric condition), theft, pilferage etc. shall be on contractors account.

8.35 Removal of Materials on Completion :

The contractor shall, on completion of the works or as and when directed by the Employer, remove all plant, equipment, tools, materials, temporary constructions, etc. which may have accumulated during the execution of the work at their own cost and arrangement, other than those permanently used into the works, at employer's site.

During execution of work any type of scrap generated out of HDC, SMP, Kolkata property inside the HDC's premises is to be returned to HDC, SMP, Kolkata.

8.36 **Keeping the Site Clean :**

The contractor shall maintain the site such a manner so that, pollution may not be caused due to stacking of any scrap/surplus materials, rubbish and offensive materials etc. and hindrance in movement of man/equipment may not be happened due to stacking of such type of materials.

8.37 **Photography inside the Dock Zone is prohibited :**

Without taking any written permission from the appropriate authority of HDC, SMP, Kolkata any kind of photography whether still or video/movie inside the Dock Zone is prohibited.

In compliance to the above, the contractor must ensure that, any photograph of the work or any part thereof or plant employed by the contractor shall not be taken either by the contractor or by any of the sub-contractor(s) employed by the contractor, without the approval of HDC, SMP, Kolkata and no such photograph shall be published or otherwise circulated in any manner without the approval of HDC, SMP, Kolkata. The contractor will be held responsible in case of violation of this clause.

8.38 **Advertisement :**

Without the written permission of HDC, SMP, Kolkata the contractor shall not advertise in news paper and/or in electronic media and/or shall not display on any hoarding, fencing, building etc. in connection with this contract.

8.39 **Income Tax Deduction :**

Income Tax, if any, as per the relevant provision of the Income Tax Act shall be deducted at source from any payment payable to the contractor.

8.40 **No Interest on account of Delayed Payments :**

Any claim for interest will not be entertained by HDC, SMP, Kolkata with respect to any payment or balance which may be in their hands owing to any disputes between HDC-KoPT and the contractor or with respect to any delay on the part of HDC, SMP, Kolkata in making payment.

8.41 **Force Majeure :**

In the event of either party being rendered unable by Force Majeure to perform any obligations required to be performed by them under the Contract, the relative obligation of the party affected by such Force Majeure shall upon notification to the other party be suspended for the period during which Force Majeure event lasts. The cost and loss sustained by either party shall be borne by respective parties. The term FORCE MAJEURE as employed herein shall mean acts of God, Earthquake, War, Revolt, Riot, Fire, Floods, Sabotage and Hurricane/Cyclone, Strike excluding that of Contractor's Suppliers or Sub-contractor's Employees.

Upon the occurrence of such case and upon its termination the party alleging that it has been rendered unable as aforesaid, shall notify the other party in writing immediately but not later than 48 (forty eight) hours of the alleged beginning and ending thereof giving full particulars and satisfactory evidence in support of its claim.

8.42 Indemnity :

8.42.1 Notwithstanding that all reasonable and proper precautions may have been taken by the contractor at all times during the progress of the work, the contractor shall nevertheless be wholly responsible for all damages, whether to the works themselves or to any other property of HDC or to the lives, persons, property of others during the progress of the work.

8.42.2 In case any damage occurs to the existing structure due to the contractor's operation, the same shall be made good by the contractor at his own risk and cost. The areas, which are likely to be unsafe for use, shall be barricaded and all necessary precautionary measures, like displaying notices, shall be taken by the contractor, during commissioning and testing of equipment at site.

8.42.3 The contractor has to submit the Indemnity bond as per Format, enclosed in the General Conditions of Contract of Kolkata Port Trust, May 1993

8.43 Workmen's Compensation :

The contractor shall indemnify HDC in the event of HDC being held liable to pay compensation for injury to any contractor's servants or workmen under the Indian Workmen's Compensation Act, 1923, as amended from time to time, and shall take out an insurance policy covering all risks under the Act and shall keep the same renewed, from time to time as necessary, for the duration of the contract and produce the same before completion of work to the General Manager (Engg.).

8.44 HDC, SMP, Kolkata's Lien :

HDC, SMP, Kolkata shall have a lien on and over all or any money that may become due and payable to the contractor under this contract or any other contract or from any amount lying with them or under their control and in respect of any debt or sum that may become due and payable by HDC, SMP, Kolkata to the contractor, either alone or jointly with another or other and either under this contract or under any other contracts or transaction of any nature whatsoever HDC, SMP, Kolkata and the contractor.

8.45 Employer's Entitlement to Terminate :

8.45.1 The Employer shall be entitled to terminate the Contract, at the Employer's convenience, at any time after giving 56 days prior notice to the Contractor, with a copy to the Engineer's of the Contract Representative, and returning the performance security.

8.45.2 In the event of such termination, the Contractor shall:

- a) cease all further work, except for such work as may be necessary and instructed by the Employer's Representative for the purpose of making safe or protecting those parts of the Works already executed and any work required to leave the site in a clean and safe condition.
- b) hand over all Construction Documents, Plant and Materials for which the Contractor has received payment.
- c) hand over those other parts of the Works executed by the Contractor up to the date of termination and
- d) remove all Contractor's Equipment, which is on the Site and repatriate all his staff and labour from the site.

Any such termination shall be without prejudice to any other right of the Contractor under the Contract.

8.45.3 In the event of such termination, the Employer Representative shall determine the value of the work done and:

- a) The amounts payable for any work carried out for which a price is stated in the Contract;
- b) the Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the Contractor is liable to accept delivery; such Plant and Materials shall become the property of (and be at the risk of) the Engineer's of the Contract when paid for by the Engineer's of the Contract and the Contractor shall place the same all the Engineer's of the Contract disposal;
- c) any other Cost or liability, which in the circumstances was reasonably incurred by the Contractor in the expectation of completing the Works;
- d) the reasonable Cost of removal of Temporary Works and Contractor's Equipment from the site and the return of such items to the Contractor's works (or to any other destination at no greater cost) and
- e) the reasonable cost of repatriation of the Contractor's staff and labour employed wholly in connection with the Works at the date of such termination;
- f) return of HDC's plant, equipment, crane(s), machineries tools and tackles etc. which are deployed for the execution of work in good running condition and make payment accordingly.

8.46 **Settlement of Disputes** :

If a dispute of any kind whatsoever arises between the Employer and the Contractor in connection with or arising out of the contract or the execution of the works, the same shall be dealt as per relevant provisions of the General Conditions of Contract and THE ARBITRATION AND CONCILIATION (AMENDMENT) ACT, 2015 and any statutory amendment thereof.

8.47 **Outbreak of War** :

If during the continuance of the contract, there shall be an outbreak of war (whether war is declared or not) in any part of the world which, whether financially or otherwise materially affects the execution of the works, the contractor shall, unless and until the contract is terminated under the provision in this clause contained use his best endeavours to complete the execution of the works provided always that either the Employer or the Contractor shall be entitled at any time after such outbreak of war to terminate this Contract by giving notice in writing to the other and upon such notice being given this contract shall terminate but without prejudice to the rights of either party in respect of any antecedent breach.

8.48 **Applicability of Laws on the Contract** :

The contract shall be governed by all relevant Indian Acts as applicable only within the jurisdiction of the Honorable Calcutta High Court, India, including the following Acts.

- a) The Indian Contract Act, 1872.
- b) The Major Port Trust Act, 1963.
- c) The Workmen's Compensation Act, 1923.
- d) The Minimum Wages Act, 1948.

- e) The Contract Labour (Regulation & Abolition) Act, 1970.
- f) Dock Workers (Safety, Health & Welfare) Act 1987.
- g) The Indian Arbitration Act (1940) (in the case of definite Arbitration Agreement only).
- h) The Arbitration and Conciliation (Amendment) Act, 2015.
- i) Indian Electricity Rules, 1956 with latest amendments.
- j) Other Acts/Rules/Regulations which may be applicable to the contract during execution of the same.

8.49 **Locomotive Driver Profiles** : Contractor should submit the profiles of Locomotive Driver as per Format, Annexure- XVIII. The Training Certificates along with the Health Certificates of the Locomotive Drivers to be produced along with the Techno- commercial Bid.

8.50 **Liquidated Damage** :

If the contractor fails to commence the work within 15 (fifteen) days from the date of signing the Contract Agreement, the contractor shall pay as compensation (Liquidated Damage) to the Trustees not as a penalty, as per the following :

Liquidated Damage @ ½% of the contract price (excluding GST), for every week or part thereof beyond the scheduled period, will be deducted from the contractor's bill. However, the amount of such compensation shall not exceed 10% of the total contract value (excluding GST).

8.51 **Default** :

Occurrence of any one and more of the following will be considered as event of default:

- a) If the contractor does not perform the contractual obligations.
- b) If availability of the Locomotives are not maintained at 90% for 3 consecutive months.

In the event of occurrence of default, HDC may proceed for terminating the contract by invoking the termination clause of GCC.

8.52 **Integrity Pact** :

The bidder will have to submit on the plain paper, the duly filled-in, signed and stamped (on each page) Integrity Pact enclosed with the tender document along with their techno-commercial bid (Cover – I) of their offer, failing which their offer will not be considered any further. Names of the Independent External Monitors (IEMs) for this will be provided, if necessary, after the pre-bid meeting.

8.53 **Other Terms and Conditions** :

Notwithstanding anything contained herein, the contract will generally be guided by the General Conditions of Contract (GCC) of Kolkata Port Trust, duly approved by the Board of Trustees in May, 1993, as well as the Major Port Trust Act, 1963, and subsequent amendments thereof, if any, unless otherwise specified.

**GENERAL SPECIFICATIONS FOR
THREE NOS. WDG3A, DLW LOCOMOTIVES**

1. DESIGN DATA

Model No. :	WDG3A
Type	Co.Co
Horse Power	3100 HP
Max. Speed	100 Kmph.
Gear Ratio	18/74
Max. Radius of Curvature	73.2 m.

2. WHEEL BASE

Total Locomotive	14190 mm
Each Truck (Right)	3800 mm
Wheel Dia	1092 mm
Journal Size	150 mm
Traction Motor	BHEL- TM 4907 BZ
Track Gauge	1676 mm
Brake Equipment	Dual Brake System 28LAV-1

3. MAXIMUM OVERALL DIMENSIONS

Height	4162 mm
Width	3016 mm
Length (Overall)	19132 mm

4. Capacities

Fuel	6000 Litres
Cooling Water	1210 Litres
Water Expansion	155 Litres
Lube Oil	1025 Litres
Sand	0.40 Cu.m

5. APPROXIMATE WEIGHTS IN KG.

Locomotive with Supplies	123600
Locomotive Light	114645
Truck, Complete	25,000
Truck Frame with BK. Rigging	5600
Traction Motor (with Pinion)	3680
Traction Motor Pinion	22.7
Wheel and Axle Assy. with Gear	2150
Traction Motor Blower	81.6
Hood Over Engine	2019
Compressor	1089
Radiator (I)	788
Box and Eddy Current Clutch	360
Radiator Fan	53.5

Appendix : 2

**Format for Scheduled and preventive maintenance (A, B, C - Check) of DLW-1,
2, 3 Locomotives (3100 HP, Co-Co type, Diesel-Electric)**

SYAMA PRASAD MOOKERJEE PORT, KOLKATA
HALDIA DOCK COMPLEX
PLANT & EQUIPMENT DIVISION
LOCO SECTION
PREVENTIVE MAINTENANCE PLAN –“A”
HIGH POWER, 3100 HP CAPACITY, DIESEL-ELECTRIC, CO-CO TYPE DLW
LOCO
(9- RUNNING SHIFT INTERVAL)

LOCO NO.:

DATE:
SHIFT:

Sl. No.	Job Description	Work Done		Remarks
		Yes	No	
1	Engine in Running Condition :-			
	A) <u>Engine Side :</u> i) Check Engine RPM at low Idle (350-400) and High Idle (1050-1100). ii) Check Engine Lube Oil Pressure at Low Idle (2+/-0.1 Kg./Sq. Cm.) and High Idle RPM (6.5-7.5 Kg./Sq. Cm.). iii) Check any leakage to Fuel, Lube Oil, Air and Water Lines, Arrest leakage, if found. iv) Check any leakage for water / Oil from plate type lube oil cooler, Arrest leakage, if found. v) Check Loco driver's report (if any). Check the following for operation, high temperature noise or odour :- Crankcase exhaustor motor, Fuel booster pump motor, pre lube pump Motor, Aux. Generator & Traction Alternator . vi) Check condition of Fire Extinguisher in driver's Cabin. Engine room & Alternator Room.			
	B) <u>Electrical Transmission System :-</u> i) Check for smooth forward / reverse			

		<p>movement of Loco.</p> <p>ii) Check for proper battery charging through Ammeter / Display board.</p> <p>iii) Check Head Light / Buffer Lights / Fan & cabin Lights etc.</p>			
	C)	<p><u>Air Brake System :-</u></p> <p>i) Check for any leakage of Compressor Lube Oil, Arrest leakage, if found.</p> <p>ii) Check main Reservoir Air Pressure (10 Kg/ Sq. Cm.).</p> <p>iii) Check Auto Drain Valve cut-in and cut-out (10 to 8 Kg/ Sq. Cm.).</p> <p>iv) Check operation of Brake valve and Brake pressure should 3.5 Kg/ Sq. Cm. to 4.5 Kg/ Sq. Cm.</p> <p>v) Drain Condensate from Main Air Reservoir.</p> <p>vi) Any Air leakage from Under Gear Air Pile Line and Traction Motor Bellows.</p> <p>vii) Check Brake Pipe Gauge (it should be 5 Kg/ Sq. Cm.)</p>			
	D)	<p><u>Radiator Cooling Fan Drive Arrangement :</u></p> <p>i) Check for any abnormal sound coming from Radiator Fan Drive & Traction Motor Blower (if so, report).</p>			
2	Engine in Stopped Condition :				
		<p>a) Check Engine Oil Level which should be slightly less than 'H' mark on Dip Stick (after 20 minutes stop the engine) and top up, as required.</p> <p>b) Check Water Level in Radiator and top up, as required (Secure Radiator Cap after filling).</p> <p>c) Check throttle reverser & selector handles for inter locking and free movement...</p> <p>d) Check the safety clamps & brakets of Turbochargervent pipe.</p> <p>e) Check the oil level of Traction Alternator gear case with threads of bayonet gauge. Top up to the FULL mark, if required.</p>			

	<p>f) Check the rear traction motor blower belts for condition and tension. Replace all the six belts, as a matched set, even if one is defective.</p> <p>g) Check the Fuel Level on Fuel Gauge (it should be at least at 1000 Ltr. mark) Arrest leakage, if found.</p> <p>h) Check the Oil Level of Air Compressor through Gauge Glass (it should be 4/3 of the Gauge Glass).</p>		
3.	<p>a) <u>Electrical</u> :-</p> <p>i) Make visual Examination of all electric cabinets, main Alternator, Aux, Generator, Traction Motors, Eddy current clutch for Dirt, flash over, over heating and other defects.</p> <p>ii) Check the battery gravity and electrolyte level (Add distilled water, if required).</p>		
	<p>b) <u>Under Gear</u> :-</p> <p>i) Check Brake shoe condition (worn out or broken). Replace the same by new ones. Adjust Brake Shoe (maintain clearance 100 mm. to tween Brake shoe & Wheel Tread).</p> <p>ii) Check Brake Rigging and Brake Holders (any broken or loose) and attend for correction.</p> <p>iii) Check Traction Motor Bellows (if any damage found, report.)</p>		
	<p>c) <u>C. B. Coupling System</u> :-</p>		
	<p>i) Check smooth operation of C. B. Coupler / Transition Coupling and condition of side buffers.</p> <p>ii) Check for loose bolts, missing parts, etc. and rectify defect, in necessary.</p>		

Signature of Shift-In-Charge

SYAMA PRASAD MOOKERJEE PORT, KOLKATA
HALDIA DOCK COMPLEX
PLANT & EQUIPMENT DIVISION
LOCO SECTION
PREVENTIVE MAINTENANCE SCHEDULE –“B”
HIGH POWER, 3100 HP CAPACITY, DIESEL-ELECTRIC, CO-CO TYPE DLW LOCO
(45 RUNNING SHIFT INTERVAL)

LOCO NO.:

DATE:
SHIFT:

Sl. No.	Job Description		Work Done		Remarks
			Yes	No	
1		Engine Performance Check :			
	a)	Check, examine and detect loose, missing, defective parts, if any, of the Engine / Locomotive during performance trial run (Before taking up schedule maintenance work) and also check loco Driver's Log Book for any report. Note down the defects / abnormality / malfunctioning, if any and include in the Maintenance Schedule for correction.			
	b)	Check Fuel Oil level in the Fuel Gauge and arrange for fuelling, if required. Arrest leakage, if found.			
2		Cleaning of Locomotive :			
		Place the Locomotive at cleaning zone and start cleaning of Locomotive, Super Structure, Engine Compartment, Traction Alternator, Panel Filters / Car body Filters, Radiator, Electrical Panel Room and Under Gear Assemblies by compressed air.			
3		Loco maintenance (Mechanical) :-			
		Place the loco at Loco Maintenance Pit inside Loco Shed (by shunting with other locos).			
	a)	Clean primary fuel oil Filter.			

b)	Clean Car body air intake filters by compressed air.
c)	Clean and remove water from Water Separator in Fuel suction line.
d)	Clean and remove condensate from compressor Cooler by compressed air.
e)	Check the tension / condition of 'V'- Belts or rear Traction Motor Blower (Replace, if necessary).
f)	Check tightness of Foundation Bolts of Engine, Traction Alternator, Compressor, Exciter, Auxiliary Generator, Traction Motor Blower, Fuel Pump Motor, Lube Pump Motor, Dirt Blower Motors etc.
g)	Check tightness of drive shaft its flexible coupling bolts from Eng. to Comp. & Comp. to Ecc, lubricate flexible coupling, if necessary. Also check vertical Gear Box to Radiator Fan drive cardan shaft and lubricate all the Cross Bearings.
h)	Clean and lubricate external linkage & connections of Engine speed control linkage. Lubricate & check that fuel racks are free to attain full fuel setting.
i)	Check the Front & Rear Traction Motor Blower for any abnormality and lubricate its bearing, if necessary.
j)	Check Bearing Temp. of Traction Motor Suspension taper roller bearing just after operation. Check tightness of its bolts and Grease through its grease nipples.
k)	Check for any leakage through tappet cover joint. Fuel line joint (Replace joint, if necessary)
m)	Drain condensate from main Air Reservoir and Control Air Reservoirs.
n)	Check oil level of Engine Lube Oil, Compressor Oil, Radiator Fan Drive Gear Box, Traction Alternator Gear Box, etc. on Dip Stick or Gauge Glas and top up, as required.
o)	Check Coolant / Water Level in radiator Expansion Tank and top up, as required.
p)	Check Brake Rigging Assemblies for any loose / missing / defective / broken part and replace / correct the defect.
q)	Clean and lubricate the Brake Rigging Assemblies, Equalizer pin assly, for free movement.

r)	Check the condition of brake blocks / Shoes and replace, if found worn out badly.
s)	Check and adjust Brake Shoe for proper functioning of Brake (maintain clearance 10 mm. between Brake Shoe and wheel Tread).
t)	Check Traction Motor Gear case Lubricant Level and top up, as required. Arrest leakage, if found.
u)	Check Central Pivot and side Rubber Loading pad assembly, for any damage.
v)	Check Fixing Bolts tightness of all the Axle Boxes Cover, Axle Box side liner Plate- Correct the defects, if found and lubricates side liner plates.
w)	Check the functioning of Centre Buffer Coupler, Transition Coupler and Side Buffer and do the correction, in case of defects. Lubricate the Coupler and Buffer.
x)	Check clean and service check valve for Air Compressor.
y)	Check, clean and service Auto Drain Valve.

4.

Loco Maintenance (Electrical):

a)	Check specific gravity of the electrolyte in each of the batteries and also check the cell voltage of each battery. Top up distilled water in each cell, if required. Arrange for battery charging through charger, if required.
b)	Clean and tighten all the terminal connection of Electrical cables, Wires at Junction Boxes and at various types of Contractors, Relays, Switches, etc.
c)	Check and tighten different electrical connection with the Traction Alternator, Auxillary Generator, Exciter, Blower motors, traction motors, Axle generator, reverser, etc. and clean thoroughly by compressed air.
d)	Blow out with dry compressed air and clean brush holders. Check the carbon brushes and replace, if required, the following i) Auxillary Generator, Exciter ii) Traction Alternator, Eddy current clutch iii) Traction motors
e)	Check traction motor bellows and repair, if required.

5.	f)	Check, clean and lubricate operating gear (Throttle Lever & Reversor) for smooth operation.		
	g)	Check, clean and lubricate the reverser Unit Operating mechanism in Electrical Panel Room.		
	h)	Check, clean and Tighten the electrical connection of Electrical Control Panel, relay and Switches.		
	i)	Check and ensure tightness of couplers of MCBG unit.		
	j)	Check and functioning of all lights, cabin-fans, electro-pneumatic horn etc.		
	<u>Performance Check on Run :</u>			
	a)	Start the Engine and note down the different readiness on gauges (as per Preventive maintenance Schedule 'A')		
	b)	Note down Alternator output, Engine RPM at no load conditions.		
	c)	Run the locomotive on No-Load in the Shed Line and check the smooth functioning of Forward and Reverse movement, brake power, Head Light and Buffer Lights and horn.		
	d)	Keep the locomotive at Parking Zone and stop the engine. Apply brake.		

Signature of Engineer (Loco Maint.)

SYAMA PRASAD MOOKERJEE PORT, KOLKATA
HALDIA DOCK COMPLEX
PLANT & EQUIPMENT DIVISION
PREVENTIVE MAINTENANCE PLAN –“C”
HIGH POWER, 3100 HP CAPACITY, DIESEL-ELECTRIC, CO-CO TYPE DLW LOCO
(270 RUNNING SHIFT INTERVAL)

LOCO NO.:

DATE:

SHIFT:

Sl. No.	Job Description		Work Done		Remarks
			Yes	No	
1	a)	Engine Performance Check :			
		Check, examine and detect loose, missing, defective parts, if any, of the Engine / Locomotive during performance trial run (Before taking up schedule maintenance work) and also check loco driver's log book for any outstanding report. Note down the defects / abnormality / malfunctioning (if any) and include in the Maintenance Schedule for correction.			
	b)	Check Fuel Oil Level in the Fuel Gauge and arrange for fuelling, if required.			
2		Cleaning of Locomotive :			
	a)	Place the Locomotive at the cleaning zone and start cleaning of the Super Structure, Engine compartment, Traction Generator, car body/ panel filter, radiator, electrical panel room and under gear assemblies by compressed air.			
	b)	Drain the Radiator condensate and flush with fresh water. But even then, If heavy corrosion, scale deposit as well as oil contamination persist, arrange cleaning of radiator with the help of compressed air. Fill the radiator with fresh water up to the neck of Radiator top tank. Ensure trapped air venting. Add coolant additive concentrator as recommended by DLW.			

3	Loco Maintenance (Mechanical) :					
	A)	Engine (Clean Exterior of Engine by wast cloth) :				
		i)	Remove and replace Engine lube oil filter elements with gaskets. Drain filter tank thoroughly and top up fresh oil.			
		ii)	Drain crank case Lubricating Oil and fill the crank case with fresh oil, as recommended, between low and high mark on dip stick.			
		iii)	Remove and replace all Fuel Filter Elements and clean fuel magnet filter.			
		iv)	Clean and inspect Fuel Priming pump, Drive coupling & its functioning.			
		v)	Check the Fuel Injectors and their proper functioning and Change, if necessary.			
		vi)	Drain water sludge's from Fuel tank and clean its breather line.			
		vii)	Remove valve lever cover. Check adjusting Nuts and Tubings for tightness and proper lubrication. Also, check for any leakage through cover joint (replace joint, if necessary).			
		viii)	Check the smooth operation of Turbo Charger and its lubrication system and replace Turbo Charger assembly, if found defective.			
		ix)	Check tightness of fuel, water and lubrication lines and arrest external leakage, if any.			
		x)	Check and secure Engine Foundation Bolts.			
	B)	Pneumatics :				
	a)	Compressor :				
		i)	Drain Compressor oil and fill with fresh oil as recommended up to the middle of the gauge glass.			
		ii)	Clean, check & replace, if required, air intake filter elements.			
		iii)	Check Compressor tubing to arrest any leakage, if required.			

	b)	Pneumatic Valves :			
	i)	Check, service / renew straight Air Brake Valve (SA-9) and Vacuum Brake Valve (A-9) for their proper functioning.			
	ii)	Check, service / renew C2 Relay Valve, D-1 Auto Drain Valve, J-type Air Filter, Air Horn Valves, N-1 Reducing Valves, J-1 Safety Valve, HS-4 Control Air Valve, etc.			
	iii)	Dismantle service and re-fit all drain and isolating cocks.			
	iv)	Drain condensate from Main and Auxiliary Reservoir.			
	v)	Check flexible hoses and pneumatic pipe lines and arrest leakage, if any.			
	vi)	Check Exhaust blower dust collector hose & hose clamps.			
	C)	Auxilliary Drives and Couplings :			
	i)	Check the tightness of Foundation Bolts of Traction Alternator, Auxilliary Generators, Traction Motor Blowers etc,			
	ii)	Check condition and 'V'-Belt tension of the Auxilliary Drives and replace, if required.			
	iii)	Check tightness of drive shaft and its flexible Coupling Bolts from Engine to Compressor and Comp. to ECC, lubricate flexible coupling, if necessary. Also check vertical Vertical Gear Box to Radiator Fan drive caran shaft and Lubricate all the cross Bearings.			
	iv)	Check condition of oil level of gear housing from Engine to Traction Alternator, replace/top up oil, if required.			
	v)	Check for smooth functioning of Radiator cooling Fans. Lubricate the Radiator cooling Fans and lubricate the Radiator fan drive coupling.			
	vi)	Check Traction Motor Blower Suction and back side bearing assembly and lubricate the same.			

Signature of Engineer (Loco Maint.)

	D)	<u>Bogies :</u>		
	a)	Clean and remove clogged oil, dirt, grease, etc. from Bogie Frame and check and service the following :-		
	i)	Check Central Pivot Mounting Bolts for tightness. Remove dirt from Loading Pad Liner and lubricate.		
	b)	Clean, check and lubricate and renew if required, the following :-		
	i)	Wear Plates in Hangers / Hanger Levers.		
	ii)	Wear Plate on Bogie Frame Pads.		
	iii)	Wear Plate on equalizer and guide bracket.		
	iv)	Pins at Hanger Lever and Equalizer.		
	v)	Pins and Bushes at Hanger and Friction Arms.		
	vi)	Pin Supports at Hanger and Equalizer Fulcrum Brackets.		
	vii)	Clevis at Pin Holes and Interlocking Surface.		
	viii)	Brake Heads, Pull Rods and Slack Adjuster.		
	ix)	Replace worn out Brake Shoe and adjust.		
	x)	Check Brake Cylinder functioning and lubricate Piston.		
	xi)	Check Axle Box and Pedestal Wearing Surface - Clean and lubricate.		
	xii)	Clean and visually examine the Suspension Spring on Axle. Report if found defective.		
	xiii)	Check Loading Pad on Bogie Frame and lubricate.		
	xiv)	Check Traction Motor Axle Suspension and lubricate.		
	xv)	Check & top up lubricant in Axle Gear Box of Traction Motors.		
	xvi)	Check proper functioning of shock absorber connected between bogie and super structure and Equalizer beam.		
	xvii)	Check proper functioning of Centre Buffer and Transition Coupling and Operating Lever Mechanism. Also check side buffer.		

4	Loco Maintenance (Electrical) :			
	a)	Traction Alternator :		
		Clean exterior of Traction Alternator with a dry cloth. Clean all ventilating ports with dry compressed air. Check and tighten all terminal connection.		
	b)	Traction Alternator Excitor :		
	i)	Clean all ventilating parts with dry compressed air and secured tightness of all terminal connection		
	c)	Auxiliary Generator :		
	i)	Examine commutator surface after cleaning with Orion-77 /712. Remove loose dust / dirt and burrs from commutator surface, If found.		
	ii)	Clean and examine brush gear/ holder, brush gear spring pressure, carbon brush and replace the carbon brush if required.		
	d)	Axle Generator :		
		Remove from Axle, clean dismantle service, reassemble and re-fit on Axle.		
	e)	MEDHA CONTROL CARDS:		
		Clean the card with dry compressed air and secure all terminal connections.		
	f)	Magnetic Pick up (On engine fly wheel ring gear)		
		Clean with Orion-77 /712 and measure the gap which should be 0.5 mm (0.028 to 0.042 inch) through filler gauge.		
	g)	MEDHA MCBG:		
		Check for any damage of rubber bellow provided on the out put shaft of Medha Actuator unit, if so replace the bellow to avoid dust entry. Ensure free movement of Fuel racks, if any racks are found sticky, re-set after lubrication of racks.		
	h)	Traction Motor :		
		Disconnect T/ Motor bellow and clean the Armature & Commutator with Orion-77 and check the following:-		

Signature of Engineer (Loco Maint.)

		i)	Remove Brush Holders and clean with Orion-77, inspect the Brush clearance in the Holder, Check spring pressure and replace worn out carbon brushes, if required.			
		ii)	Remove any loose dust/dirt & burrs, if formed on commutator surface.			
		iii)	Check tightness of cable Termination and joints.			
		iv)	Check Traction Motor Air inlet bellows for cracking, tearing/ collapsing – renew if required.			
	i)	Reverser :				
		i)	Measure contact pressure, contact gap and over travel on contact fingers.			
		ii)	Clean and remove burrs, if developed on contact fingers.			
		iii)	Check air leaks at the piping / joints and magnet valve with soap solution and arrest leakage.			
		iv)	Check air pressure which should be at least 3.8 Kg/sq.cm.			
		v)	Clean the power fingers and stationary contacts with ORION-712 & remove burrs, if found.			
	j)	Electrical control Apparatus :				
		Clean with Orion-77 /712 and check, service and renew, if required, of the following items :-				
		i)	E.P Contactors.			
		ii)	Cranking contractor CK-1, CK-2 & CK-3.			
		iii)	Magnet Valves			
		iv)	Relay- Braking, engine speed, safety control, wheel slip, grounding etc.			
		v)	Master Controller.			
		vi)	Voltage regulator for batteries.			
		vii)	All MCBs, MCCBs & Toggle Switches and Push Button Switches, Rotary Switches etc.			
		viii)	Check all indication lamps, head light lamps, buffer unit lamps & lamp holders and replace, if required.			

	ix)	Remove the Rectifire cover & Blow clean compressed air at 2 Kg/sq.cm to remove dust ,dirt & soot deposit. Check that all Diodes/ Heatsinks are in proper tighten condition on DC busbers. Do not remove Diodes & Heat sikn assy.			
	x)	Cabin Fans Carbon Brushes.			
	g)	Batteries :			
	i)	Check specific gravity of the electrolyte in each of the battery and also check the cell voltage of each batteries.			
	ii)	Do battery charging through battery charger , if required.			
	5	Performance check on –run after Maintenance work :			
	a)	Start the engine and note down the different readings on gauges (as mentioned in Preventive Maintenance Schedule-'A'.			
	b)	Note down the Alternator out put voltage and Ecitation field voltage at different notch position of Master Controller.			
	c)	Run the locomotive on no load in shed line and check the smooth functioning of forward / reverse movement, Brake power , Head light , Buffer light and Horn.			
	d)	Keep the locomotive at Loco Parking Zone .Stop the engine and apply brake.			

Signature of Engineer (Loco Maint.)

Appendix -3

Preventive Maintenance Schedule Plan of DLW-1, 2, 3 Locomotives (3100 HP, Co-Co type, Diesel-Electric)

Locomotive	A- Check	B-Check	C-check
DLW-1,2,3	After every 9- Running Shift Interval	After every 45- Running Shift Interval	After every 270- Running Shift Interval

NOTE: 1 Shift equals to Eight (08) Hours.

Appendix -4

Operation & Maintenance of 3 (Three) nos. DLW Make 3100 HP (Model : WDG3A) Locomotive for a period of 5 (Five) years for HDC, SMP, Kolkata.

Bill of Quantities

Sl. No.	Item Description	Unit Rate in Indian Rupees (INR) (excluding GST)	Quantity (in nos.)	Amount In Indian Rupees (INR) (excluding GST)	Remarks
1)	Daily O&M Charge per Locomotive		03 (Three)		NOT TO QUOTE HERE [To be quoted by the bidder in the Price Schedule in the e- platform only].
	i) 1 st year				
	ii) 2 nd year				
	iii) 3 rd year				
	iv) 4 th year				
	v) 5 th year				
	Total Amount in Indian Rupees (INR) (excluding GST)				

Note:

- Evaluation will be done on the basis of 'Total Amount' in Indian Rupees (INR) including all charges but excluding GST. GST as applicable will be paid extra at actual.
- GST will be paid extra on submission of GST complaint bill mentioning GSTIN of both of the contractor and HDC, SMP, Kolkata.

ANEXURE- "PRESENT STOCK OF SPARES"

STOCK POSITION OF SPARES OF DLW MAKE LOCOMOTIVES at LOCOSHED, P&E DIVISION

Sl. No.	DESCRIPTON	STOCK AS ON 10.11.2020	UNIT RATE (in Rs.)	TOTAL (in Rs.)
1	AIR VALVE PT.NO-10245807	6	1303.91	7823.46
2	AIR & EXHAUST VALVE PT-NO 10244384	6	4295.7	25774.2
3	SPRING A&E PT.NO-10160115	24	258.84	6212.16
4	AIR VALVE SEAT INSERT PT.NO-10249254	12	786.23	9434.76
5	EXHAUST VALUE INSERT - 10249266	12	1125.96	13511.52
6	FUEL INJECTION PUMP 10050693	2	27098.64	54197.28
7	FUEL INJECTION NOZZLE & HOLDER - 10050024	6	10321.34	61928.04
8	ASSY FUEL INJECTION TUBE 3/8"-10051703	6	4146.87	24881.22
9	STEEL CAP PISTON (CR-11.75:1) 10142733	3	64129.28	192387.84
10	PISTON RING SET . FE-10031212	12	3948.42	47381.04
11	MAIN CON.ROD-BOLT & NUT KIT-10031479	12	859.57	10314.84
12	LUBE OIL FILTER ELEMENT.-11440259	17	2714	46138
13	LUBE OIL FILTER ELEMENT (97X197MM)	6	1888	11328
14	LONG LIFE SECONDARY FILTER - 10051740/10052331	39	2537	98943
15	LONG LIFE PRIMARY FILTER - 10051727	17	3068	52156
16	GASKET-10170194	20	118	2360
17	GASKET L.O FILTER -11270287	60	90.59	5435.4
18	CAM SHAFT BUSHING -10150080	36	542.49	19529.64
19	GASKET KIT FOR CYLINDR UPPER-10175817	48	492.87	23657.76
20	FUEL BOOSTER PUMP & BKT ASSLY-11664289	2	7159.15	14318.3
21	MODIFIED CYLINDER HEAD - 10040195	3	75044.69	225134.07
22	PISTON PIN ASSLY - 10030049	6	13793.49	82760.94
23	L.O.P MODIFIED 10063158	2	288548.45	577096.9
24	CYLINDER LINER FINAL FINISH-10124603	3	25439.06	76317.18
25	M.O.D CAM SHAFT ASSLY-10031285(BG)	2	201498.43	402996.86

Sl. No.	DESCRIPTON	STOCK AS ON 10.11.2020	UNIT RATE (in Rs.)	TOTAL (in Rs.)
26	M.O.D CAM SHAFT ASSLY-10031273(B.G)	2	198604.21	397208.42
27	O.S.T ASSLY- 10050188	2	143873.72	287747.44
28	FUEL PUMP SUPPORT & HEAD LIFTER-10050723	2	95532.4	191064.8
29	ANGLE RELIEF VALVE 2" ANGLE-11061182	2	19204.73	38409.46
30	REGULATING VALVE - 11065060	3	18720.41	56161.23
31	REGULATING VALVE - 11061273	2	19264.09	38528.18
32	VALVE LEVER ASSLY-10040079	6	7080.68	42484.08
33	PLATE HOLDER SPRING -11123291	6	700.65	4203.9
34	SPECIAL COUPLING - 11420066	2	27711.23	55422.46
35	GUIDE AIR & EXHAUST VALVE - 10120385	12	191.97	2303.64
36	CAR BODY FILTER - 11665830	3	61073.86	183221.58
37	SAND WITH MOUNTING- 11270019	6	2253	13518
38	SPRING OUTER - 11410383	3	18381.04	55143.12
39	SPRING INNER- 11410395	3	4737.89	14213.67
40	BREAK SHOE 11663406	479	1226.93	587699.47
41	CRANK CONTROL CONTACTOR-12141100	3	3491.13	10473.39
42	WHEEL SLIP -12242494	3	15073.25	45219.75
43	TIME DELAY RELAY -12170963	3	22099.75	66299.25
44	CIRCUIT BREAKER- 150AMS- 12319429	4	8850	35400
45	MCB CIRCUIT BREAKER 100 AMPS, 130VDC, 12319387	3	9462	28386
46	MCB CIRCUIT BREAKER 30 AMPS, 130VDC, 12319417	10	4366	43660
47	BEARING CRANK SHAFT- 903902	3	44803.46	134410.38
48	CON ROD WITH CAP-216320	3	8468.43	25405.29
49	BIG SHELL BEARING END-321290	6	327.86	1967.16
50	GUDGEON PIN (LP)-447460	6	1425.79	8554.74
51	GUDGEON PIN (HP)-0046266A	3	1316.86	3950.58
52	PISTON-197DIA (L.P) -4778830	3	9129.58	27388.74
53	PISTON 140DIA (H.P) 477810	3	8176.18	24528.54
54	CYLINDER HEAD - 216100	2	10005.33	20010.66

Sl. No.	DESCRIPTON	STOCK AS ON 10.11.2020	UNIT RATE (in Rs.)	TOTAL (in Rs.)
55	VALVE ONLY INLET - A070072	4	12385.6	49542.4
56	ONLY SUCTION UNLOADER - A070073	2	10909.12	21818.24
57	VALVE ASSLY DISCHARGE A070055	2	3589.28	7178.56
58	SQURE BODY FLUSH AND CONTACT HIGH SPEED FUSE TYPE-2BKN/75 RATED VOLTAGE-1000V,RATED CURRNT-800AMPS	30	7020	210600
59	CARBON BRUSH FOR AUX . GENERATOR AND EXCITER PT.NO 12420542	16	742.56	11880.96
60	CARBON BRUSH FOR TR.ALTERNATOR TA10102EV PT.NO-12420530	16	1829	29264
61	AIR SUCTION FILTER (AIR COMP) 11489121	6	5900	35400
62	GASKET, VALVE LEVER CASING TO CYL. HEAD- 10170886	16	330.4	5286.4
63	FIBRE GLASS BAG FILTER PTNO-11458045	12	23600	283200
64	IMPELLER WATER PUMP-10" DIA RDSO DRG NO- 10124664	1	4720	4720
65	WATER PUMP SEAL DRG NO- 10170844	3	5755.05	17265.15
66	SLINGER (WATER PUMP) DRGNO-10240263	3	641.55	1924.65
67	SLEEV IMPELLER WATER PUMP DRGNO-10210866	2	413.4	826.8
68	GASKET COVER SUPPORT - PTNO-10170170	28	16.8	470.4
69	GROMMET F.P SUPPORT COVER - 10170741	10	87.15	871.5
70	CHECK VALVE - 3/4" PT.NO-11376533	1	4553.85	4553.85
71	CUT OUT COCK 1"-111397081	1	2166.15	2166.15
72	CUT OUT COCK BALL TYPE 1"-1/4"-111397093	2	1800.75	3601.5
73	AIR STRAINER - 1/2" - 11440302	2	4030.95	8061.9
74	4" DUPLEX AIR PREASURE GAUGE- 11445476	4	4076.1	16304.4
75	AIR FLOW MEASURING GAUGE-1445506	1	2433.9	2433.9
76	GONG ALARM 75V - 12178019	2	1171.8	2343.6
77	8-LED INDICATER PANEL- 12202095	1	2491.65	2491.65
78	DOME LIGHT SWITCH -12313701	1	176.4	176.4
79	PUSH BUTTON RED-12314869	1	747.6	747.6
80	MUSHROOM HEAD PUSH BUTTON PT.NO 12314870	1	693	693
81	TWIN BEAM H.D LAMP SWITCH 12319752	3	2543.1	7629.3
82	WARNING LIGHT -12365520	1	6801.9	6801.9
83	KEY - 2/8" X 3/8" - 15311090	2	98.7	197.4

Sl. No.	DESCRIPTON	STOCK AS ON 10.11.2020	UNIT RATE (in Rs.)	TOTAL (in Rs.)
84	SEAL PLATE WP MACH - 10120208	6	7402.89	44417.34
85	MODIFIED OIL SEAL WATER PUMP-10175880	4	724.6	2898.4
86	SLEEVE WATER PUMP DRGNO-10212541	3	708	2124
87	AUTO DRAIN VALVE (GM TYPE)- 17390059	2	31034	62068
88	BASE DOOR ASSLY.- 10021255	1	1806	1806
89	PIPE ASSLY- 10063201	2	2164.05	4328.1
90	HOSE ASSLY- 11327637	1	695.1	695.1
91	HOSE WINDOW WIPER- 11328009	1	1353.45	1353.45
92	HOSE ASSLY- 11329180	1	1273.65	1273.65
93	1 1/4" CHECK VALVE - 11390130	2	4248	8496
94	THREE WAY COCK VALVE (BALL TYPE)-11390219	4	1429.05	5716.2
95	TACTION MOTOR BLOWER FRONT- 11434466	1	43829.1	43829.1
96	PRESSURE SWITCH RT 5 X72 VOLT, DC OPEN- 11459219	5	5003.25	25016.25
97	PRESSURE SWITCH(P-2) RT-116 X CLOSE- 11459803	2	5003.25	10006.5
98	PRESSURE SWITCH(P-1) RT-116 X CLOSE- 11459815	2	5003.25	10006.5
99	HOSE ASSLY- 11563169	1	784.35	784.35
100	DUST COLLCTOR BLOWER RH- 11665312	1	115355.1	115355.1
101	FLEXIBLE HOSE ASSLY - 10065064	1	5883.15	5883.15
			Total Value	56,19,511.14