



KIOCL Limited

(Formerly Kudremukh Iron Ore Company Limited)
(A Govt. of India Enterprise)
Panambur, Mangalore-575010

PROJECTS DEPARTMENT

AN ISO 9001 (QMS),
ISO 14001 (EMS) &
OHSAS 18001 (OHSMS)
COMPANY

Telephone Nos. : 0824 – 2407304, 2403294, 2403292
e - mail : mprojects@kudreore.com
Fax : 0824 - 2407422
Website : www.kioclltd.com

No.PROJ/5135

April 21, 2010

SHORT TENDER NOTICE

Sealed tenders are invited from the experienced Contractors who have carried out similar type of work and also **having Provident Fund code number & ESI Code number issued by respective authorities** for the below mentioned work at Panambur, Dakshina Kannada District, Karnataka State. Tenders will be received up to 3:00 PM on the date indicated below and opened in the presence of the tenderers who wish to be present on the same day in the office of the undersigned.

Tender papers can be had from the office of the undersigned on all working days during the office hours till 3:00 PM on. 30.04.2010 on payment of Rs.200.00 per set (inclusive of Sales Tax) in the form of demand Draft drawn in favour of KIOCL Limited, Panambur, Mangalore – 10 or payment in cash at KIOCL Limited., Mangalore cash counter. If the tender documents downloaded from website www.kioclltd.com, the DD towards cost of tender document should be furnished along with technical bid.

Name of the work	EMD (Rs.)	Duration of Contract	Last date for submission of tenders
Painting of furnace oil tanks and its accessories in Pellet Plant Unit, KIOCL Limited, Panambur, Mangalore.	(*) 19,000.00	FOUR MONTHS (excluding monsoon months from June to September)	03.05.2010

(*) Rupees 18,000.00 for registered contractors of Pellet Plant Unit, KIOCL Limited.

Sd/-
(GAJANANA PAI T)
DGM (Projects & PC)



KIOCL Limited

(Formerly Kudremukh Iron Ore Company Limited)
(A Govt. of India Enterprise)
Panambur, Mangalore-575010

KUDREMUKH

ISO 9001:2008,
ISO 14001:2004 &
OHSAS 18001:2007 COMPANY

Telephone No. : 0824 - 2407304
Fax : 0824 - 2407422

No.PROJ./TC/5135/

21 April 2010

Dear Sir,

Sub: Painting of furnace oil tanks and its accessories in Pellet Plant Unit,
KIOCL Limited, Panambur, Mangalore.

Please find enclosed herewith the tender documents for (i) Technical Bid - comprising of Proforma for Technical evaluation, Invitation for tender, instructions to tenderers & terms & conditions, Special conditions of contract, Technical specifications for Painting works and (ii) documents for Price bid comprising of Schedule of Work.

The Technical bid along with other documents shall also contain proforma for Technical evaluation, which shall be duly filled. The price bids of only technically qualified bidders shall be opened and others shall be rejected.

KIOCL's decision on Technical evaluation shall be final and no correspondence shall be entertained in this regard.

Thanking you,

Yours faithfully,
for KIOCL LIMITED

DGM (Proj. & PC)

Encl: As above.

TECHNICAL BID INDEX

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PRICE BID INDEX

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PROFORMA FOR TECHNICAL EVALUATION OF BIDDERS

The agencies who are sending their letter of expression must furnish following details along with documentary evidence of their claims. However, any surrogated submission in any form will disqualify them from consideration.

Generic

Name of the Agency	Postal Address	Communication Address	Contact Person	Emergency contact mode/No

Specific

Sl.No.	Description	Minimum Required
1.	<p>Highest value of similar work executed in in last seven years (i.e, 2003-2004 onwards).</p> <p>Similar work means Steel structures/tanks painting work carried out in Process Plants/Industries.</p> <p><i>Note: For works carried out in KIOCL Ltd., work order copies are to be enclosed. For works carried out in other areas, work done certificates should be furnished.</i></p>	<p>Should have executed at least single work order of minimum value of Rs.10.00 lakhs.</p> <p style="text-align: center;">OR</p> <p>Two orders of minimum value Rs.7.50 lakhs each.</p>
2.	Provident Fund Account No. (mandatory)	
3.	Income Tax PAN No (mandatory)	
4.	ESI No. (mandatory)	
5.	Service tax registration no (if available)	
6.	TIN No. (if available)	

CONTRACTOR

OWNER

KIOCL LIMITED.
(A Govt. of India Enterprise)
PANAMBUR, MANGALORE – 10

No.PROJ/TC/5135/

21 April 2010

Dear Sir(s)

Sub: Painting of furnace oil tanks and its accessories in Pellet Plant Unit,
KIOCL Limited, Panambur, Mangalore.

-
1. Bid documents for the above work are enclosed herewith.
 2. Sealed bids will be received upto 15.00 Hrs. on 03-05-2010 at the office of Contracts Section of Projects Department, KIOCL Limited, Panambur, Mangalore – 10. Bids received late are liable for rejection.
 3. Bidders shall abide by all the details of “Instruction to Bidders” enclosed with the tender documents. The sealed bids shall be submitted in two separate sealed covers – (1) Technical bid and (2) Price Bid and each sealed bids shall be superscribed with the respective subjects and shall be addressed to DGM (Projects & PC), KIOCL, Panambur, Mangalore – 575 010.
 4. The Technical Bid shall be accompanied by an Earnest Money Deposit (EMD) of *Rs.19,000.00 (Rupees nineteen thousand only) to be deposited in the form of a Demand Draft from a Scheduled Bank drawn in favour of KIOCL Limited, Panambur.
(*) (Rs. 18,000.00 for registered contractors of Pellet Plant Unit, KIOCL Ltd.)
 5. EMD shall be adjusted to the Security Deposit in the case of successful bidder. However, the same shall be returned to the unsuccessful bidders immediately after the award of work to successful bidder.
 6. Acceptance of the bid will be intimated to successful bidder through a letter enclosing the copies of the Letter of Intent (LOI) and this letter will be treated as authorization for award of work. The bidder shall sign the said copies of LOI and send to the owner within five days from the date of receipt for formal signature and issue of the same. In the event of failure on the part of the bidder to sign and return the LOI within the specified time, the EMD shall be liable to be forfeited at the sole discretion of the owner.
 7. The time of completion of all works under this contract shall be FOUR MONTHS (excluding monsoon months from June to September) from the date of issue of Letter of Intent.
 8. The successful bidder shall be required to execute an agreement within the time specified in the Letter of Intent/Work Order.
 9. The Company reserves the right to reject any or all the tenders without assigning any reason.

Thanking you,

Yours faithfully,
for KIOCL LIMITED

Encl: Bid documents.

DGM (Projects & PC)

A. INSTRUCTION TO TENDERERS

1. The Technical Bid should accompany EMD of (*) Rs.19,000.00 in the form of Demand Draft drawn in favour of KIOCL Limited, Panambur.
(*) (Rs. 18,000.00 for registered contractors of Pellet Plant Unit, KIOCL Ltd.)
2. Tender will be received upto 3:00 P.M. on 03-05-2010.
3. Tenderers have to acquaint themselves with the conditions prevailing at site, before submitting the tenders.
4. Tenderers shall furnish their quotation in the 'Schedule of Work' enclosed to the Price-bid documents. Quotations should be written in both words and figures.
5. Owner/Engineer reserves the right to reject any or all tenders without assigning any reason.
6. Owner/Engineer reserves the right to award part of the work or the whole, as may be considered necessary.
7. Tenders received late are liable for rejection.
8. Tenders submitted without EMD will not be considered.

B. TERMS AND CONDITIONS

1. The work shall generally be governed by KIOCL's General Conditions of Contract which is available for reference in the office of DGM (Projects & PC) on all working days.
2. Scope of work in this contract broadly covers the following.
 - (a) As per Special conditions of contract
3. The quantities given in the schedule of items are approximate and may vary, some of the items may or may not be executed. No claim by the contractor on account of variations, omissions and modifications will be entertained.
4. No escalation is admissible on any account whatsoever.
5. Mode of measurements for the work shall be as per IS-1200 latest edition unless otherwise specified for items not covered in IS-1200, CPWD standard shall be adopted.
6. Rates quoted against schedule items shall include all materials, labour, machinery expenses and hire charges, all taxes (except service tax), royalties, transport, maintenance incidents, enabling works etc. based on the conditions mentioned herein. Unless otherwise specified in the tender schedule the rates for all items will be deemed to include all leads, lifts and decents in the work.
7. The work executed shall be maintained in a good condition for a period FIVE YEARS from the date of completion including repair required if any at contractor's cost. If the contractor fails to fulfill his obligation during the maintenance period, the same shall be got done by the owner at contractor's risk and cost.

8. (a) 10% of the value of work shall be deducted and retained till the completion of maintenance period as applicable.
- (b) Initial Security Deposit of 3% of the value of work shall be adjusted immediately after the placement of order. EMD shall be adjusted against the initial Security Deposit. The balance 7% shall be recovered from each running bill. The Security Deposit shall be refunded after successful completion of maintenance period.
9. Any damage to the company's property caused by the contractor during the execution/maintenance of work, shall be charged to the contractor and the amount of damage shall be left to the sole discretion of the Engineer.
10. Statutory deduction towards all applicable taxes shall be made as per rules.
11. Royalties if any for materials applicable shall have to be paid by the contractor.
12. All safety appliances like safety belt, helmets etc. have to be provided by the contractor to all his workers and supervisors. None of the workmen without safety appliances shall be allowed to work at heights.
13. The contractor should obtain Insurance Policy to cover the risk of the labourers under Workmen Compensation Act and should be produced before starting the work.
14. Contractor should produce the PF code number and ESI code number obtained from the respective authorities along with the technical bid.
15. The contractor and his workmen may avail the facilities provided in the canteen set up for the contract labour, they will not be allowed to avail the facilities set up for KIOCL employees.
16. Time of completion and Liquidated Damages:

The entire work under this Contract shall be completed within FOUR MONTHS (excluding monsoon months from June to September) from the date of issue of Letter of Intent/Work Order. If the contractor fails to complete the work within the stipulated completion time, the contractor shall pay to owner as liquidated damages for such default, for every day which shall elapse between the date prescribed thereof and the actual date of completion of the scope of work, the amounts determined on the basis of the percentage of the value of the work as specified herein.
Delay of 1st 20 days 0.1% per day
Delay of next 20 days 0.15% per day
subject to a maximum of 5% of the value of the work. The Owner/Engineer has the discretion to reduce or waive the Liquidated Damages.
17. Our Company comes under Factories Act, Rules, Regulations, byelaws and orders made thereunder. Hence the Contractors must abide by the same.
 - (i) No persons shall be employed without Initial Training on Safety as per vocational Training Rules.
 - (ii) Contractor must immediately after deploying the Contract Workers, get their Initial Medical Examination done at Company Hospital/Company recognised Hospital. The expenditure towards Medical Examination of Contract Workers shall be borne by KIOCL.

- (iii) A supervisor with experience should be deployed to ensure that the contract workers work safely and in accordance with all the provisions of Factories Act, Rules, Regulations, Byelaws and orders made thereunder.
- 18. The Contractor shall be responsible for all the safety measures as per the rules in the interest of safety of all the labourers working under him. Necessary safety appliances shall be provided to all the labourers at Contractor's cost.

Wherever it is observed that the contractor has not provided safety appliances to the workers engaged by him, the Management reserves the right to issue the necessary safety appliances to his workers on cost recoverable basis.

19. OBLIGATIONS OF THE AGEENY/CONTRACTOR WITH REGARD TO STATUTES:

The Agency shall be solely responsible as regards salary, wages and service conditions and terms extended by the Agency to his employees/workmen and shall in that connection maintain requisite records and comply with all laws, enactment, rules and regulations and orders dealing with employment of contract labour, payment of workmen's compensation, contribution under ESI Act, 1948 and PF/EPF Act 1952, payment of minimum wages, payment of bonus, fire and safety regulations, regulations relating to employment of female workforce, security requirements and such other and regulations as may be applicable at present made applicable hereafter. The wages prescribed by the appropriate Government under the Minimum Wages Act, 1948 and all provisions of the Contract Labour Regulation Act and Factories Act shall be complied with by the Agency. Agency shall insure all employees for accidents and third party losses and produce the policy before commencement of Contract. All employees of the Agency shall be covered under Workmen Compensation Insurance and Group Accident Insurance cover, by the Agency.

20. INDEMNIFICATION:

The Agency shall indemnify and keep indemnified the Company from and against all actions, claims, demands and/or liabilities whatsoever arising out of this agreement or consequent upon breach of any of provisions of this agreement and/or against any claim, action or demand by any of the Agency's Employees, person(s), firms, institutions under any law, rule or regulation having the force of law, including but not limited to, claims against the Company under Workmen's Compensation Act, 1923. The Employees State Insurance Act, the Employees Provident Fund Act, 1952, The Contract Labour (Abolition & Regulation) Act, 1970 and the Minimum Wages Act, 1948 and any amendments thereto.

- 21. The bids shall be valid for a period of three months from the due date of submission of the bid.
- 22. No additional conditions shall be inserted in "Schedule of Work"

CONTRACTOR

OWNER

SPECIAL CONDITIONS

1.0 Scope of work includes the following:

1.01 Surface preparation of the outer surfaces of the Furnace Oil (FO) main tanks and its accessories comprising of following:

- i) The Main MS Furnace oil tanks of three numbers of capacity 10,000KL each.
- ii) The Main MS pipelines running from the top of the tanks to the bottom of the tanks.
- iii) The accessories like incoming and discharge MS pipe lines, tank valves and drain valves.
- iv) The support structures like angles, channels and beams.
- v) Pipelines and valves inside Furnace oil pump house.
- vi) Pipeline, Prime tank and door of water pump house.
- vii) The Main pipeline from exchange pit to Furnace oil tanks.
- viii) The fire hydrants in and around the Furnace oil tank.
- ix) The roof structure and platform of water-oil separator unit.

1.02 Supply and application of paints for the above area, compatible with the existing paints according to the painting scheme enclosed at Annexure 'A'.

1.03 Cleaning/removal of mud/oil/grass/garbage materials from all trenches inside dyke and Furnace Oil Tank area.

1.04 Painting of details regarding furnace oil tanks, explosive license and display boards.

2.0 The contractor shall be responsible for the supply of paints in time for the timely execution and completion of the job. The paints shall be procured by the contractor strictly as per the brands specified by KIOCL. The paints shall be inspected by I&P Department., or his authorized representatives for quality and other standards at site before using it. The contractor has to inform the concern in writing on arrival of paints so as to arrange for inspection of paints at site. The rejected lot if any has to be replaced by the contractor. The Data sheet and the test report for the paints shall be furnished by the Contractor for the paints supplied.

3.00 Bidders shall visit the site of work to acquaint himself with location, type/nature of work involved, plant working conditions, site conditions available and other environments and related aspects prevailing in plant area which are contingent upon the scope of each work envisaged under this contract before submitting the tender. They are advised to discuss and fully acquaint with the type/nature of work, terms and conditions of the contract with the Engineer –in-charge before submitting the tender.

4.00 In addition to what has been described in the Schedule, Scope under this Tender includes all such works directly connected with the operation of Schedule items.

5.00 Mode of measurement

5.01 For item nos. 1 (a) & (b), the unit of measurement would be 'Sq.M.'. The area of the tank and its accessories are already measured and the quantities are indicated in Annexure 'B'. The maximum quantity payable for the works done against item no. 1 (a) & (b) shall be restricted to the total surface area indicated in Annexure 'B'. No claim for additional quantities for any reasons whatsoever will be entertained.

5.02 For item no. (2), the unit of measurement would be 'Lumpsum', completion of all works under this item would be reckoned as 'Lumpsum'.

5.03 For item no. (3), the unit of measurement would be 'Sq.Ft.'. The area considered for measurement would be background area of the matter/the size of the display board.

6.0 Paint Film thickness

- a) Film thickness shall be measured with ELCO METER.
- b) Thickness of existing paints after surface preparation and before application of primer coat of paint shall be measured.
- c) The film thickness shall be measured for each coat of paint.
- d) The number and position of measurements shall be determined by Engineer with due consideration to the size and shape of the sections to be painted.
- e) Measurement shall be carried out three times at each measuring point in the area of about 1.00 Sq.M. The average of three measurements shall be taken as the measured value of the concerned steel structure.
- f) The variation in film thickness shall be plus or minus five percent on the overall thickness as per Clause No.1.01 of Technical Specification.

7.00 Safety precaution

- 7.01 Contractor shall provide all tools and tackles necessary for the execution of work. Contractor shall provide for all safety appliances including safety belts/shoes/helmets goggles etc. Workers found with inadequate safety measures shall not be allowed to work.
- 7.02 The contractor shall ensure utmost safety of the workers in higher altitudes, especially while painting the structures on the top of the tank, hand rails and walk-ways. The safety belts are to be provided to all the workers who are working in higher altitudes in the tanks. Since the work is at heights, it is imperative on the part of the contractor that a qualified and experienced supervisor shall be posted at site of work to avoid any accidents due to haphazard manner of workmanship by the workmen.
- 7.03 The contractor has to employ only those workers who are qualified, trained and suited by their age, physique, state of health and skill. Satisfy themselves that all workers are informed and instructed in the hazards connected with their work and environment and trained in the precautions necessary to avoid accidents and injury to health.
- 7.04 The contractor shall organize for and remain always prepared to take immediate steps to stop the operation and evacuate workers as appropriate, where there is an imminent danger to the safety of workers.
- 7.05 The contractor shall provide appropriate first aid, training and welfare facilities to workers as per various factories act 1948 etc.. and whenever collective measures are not feasible or are insufficient, provide and maintain personal protective equipment and clothing inline with the requirement. They should also provide access to workers to occupational health services.
- 7.06 The contractor shall ensure that workers unless duly authorized, should not interfere with, remove, alter or displace any safety device or other appliances furnished for their protection or the protection of others, or interfere with any method or process adopted with a view to avoiding accidents and injury to health.
- 7.07 The contractor shall ensure that workers do not sleep, rest or cook etc.. in dangerous places such as scaffolds, railway tracks, garages, confined spaces or toxic substances, running machines and heavy equipments.
- 7.08 The contractor shall educate their workers about the danger places and display boards may be put where ever necessary in the work places.

- 8.0 Site for office cum storage shed shall be provided free of cost by Owner. Contractor shall construct storage cum office structure in the location shown by owner within the plant area at his cost. No site for labour camp or accommodations shall be provided by owner.
- 9.0 Site of work is within the prohibited area. All entries/exits for men and materials shall be through the main gate only which is manned by Central Industrial security force staff. Entry/gate passes duly countersigned by Owner are therefore required to be furnished at the main gate.
- 10.0 All materials brought to the site shall be properly safe guarded and protected against the theft and weather conditions. Necessary progress report/ register should be maintained by the contractor for recording the day-to-day progress of work with relevant details, in the respective locations, and other work related items like strength of labour deployed, materials brought to site etc.
- 11.0 Power/light point required for the work shall be made available at one point on free of cost. Contractor shall make his own arrangements for distribution lines. All equipments, tools and tackles including scaffoldings ladders and ropes required for the job shall be supplied and maintained in serviceable conditions by the contractor and strictly fulfill the structural/safety requirements of tools and equipments. Since the work is to be under taken at great heights all necessary precautions required for safe guarding the men and equipments (Owners equipment) shall be ensured at all times during execution of the work.
- 12.0 General working hours on all weekly days except Sundays and holidays are from 8:30AM to 5:00 PM. Necessary special permission from Owner has to be obtained in writing before execution during beyond working hours, Sundays and holidays. Contractor should carryout the work in running plant. Further hot & height permits will be given for working in certain critical areas, whenever the front is ready in such places. Contractor shall ensure that the completion of work in such areas during the permitted period/shut down period itself, irrespective of timings.
- 13.0 All materials brought to the site shall be properly safe guarded and protected against theft and weather conditions. Materials like paints, metal conditioning solutions, thinner and solvent/alkaline etc., shall be brought in sealed containers and the contractor shall maintain proper records/account of daily transaction.
- 14.0 All empty containers shall be the property of Contractor and shall be properly accounted for and shall not be removed from site till clearance is given by the Engineer.
- 15.0 Contractor shall furnish a work/time schedule/bar chart on issue of Letter of Indent and after mobilization indicating broadly regarding commencement and completion of the work within the time frame i.e. Four Months excluding monsoon months.
- 16.0 Contractor shall offer the work carried out at every stage of painting for inspection and approval before proceeding with the next stage. Such approvals shall be entered in a register and got signed by the Engineer. Any defects noticed during the various stages of inspection shall be made good by contractor to the satisfaction of the Engineer before proceeding further. Irrespective of the inspection, repair and approval at every stage of work, the contractor shall be responsible for making good any defects found during guarantee period. The defects includes mitering, flaking or scaling, peeling of paint, pitting.
- 17.0 **The contractor shall get approval for the colour and shade of the paint to be applied from the Engineer before manufacturing the paint.** The contractor shall intimate the owner in advance regarding the readiness of paints, which will be inspected by Inspection department of M/s. KIOCL. Control tests as indicated under Clause No.2.03 of Technical specification shall be carried out on the samples for each batch of paints and test certificates shall be furnished.

- 18.0 Guarantee for the performance of the paint/painted surfaces shall be for a period of **five years** from the date of completion the work. The work executed shall be maintained in good condition during the guarantee period, including repairs required if any at contractor's cost. If the Contractor fails to fulfill his obligation during the maintenance period specified, the same shall be got done through any other agency at contractor's risk and cost.
- 19.0 The Contractor shall provide suitable protection as necessary to prevent paint from splashing on the equipments, floors, walls etc. Any damage to owner's property caused by the contractor during the execution/maintenance of work, shall be charged to the contractor and amount to be deducted shall be decided at the sole discretion of the Engineer.
- 20.0 Any insects/ beehives formed by honeybees, if found anywhere at work spot, shall have to be removed with the help of experts before starting up the work since it is a health hazardous insect and may harm the people working in the higher altitudes. The cost towards this shall be borne by the Contractor.
- 21.0 Metal scaffolding, cleaning tools, paintbrush, water hoses and any other cleaning agents/ tools and tackles required for cleaning of tanks are to be arranged by the contractor.
- 22.0 The required labours, shovels and any other tools & tackles required for cleaning of trenches inside the dyke area of tanks and water-oil separator unit shall be arranged by the contractor. The cleaned materials (scrap/ garbage) shall be transported/ shifted to the designated places with suitable transportation arrangement at their cost and responsibility.

23.0 Progress of work and inspection

- 23.01 The progress of the work has to be informed to Asst Manager (I&P)., Mangalore, or his authorized representatives for carrying out inspection of the work as below.
- a) Ist stage inspection: The tanks/pipelines/MS structures (handrails, staircases and MS support structures) are to be offered for inspection after thorough cleaning of all the tanks as specified in the schedule of work and prior to application of primer coat.
 - b) 2nd stage inspection: The tanks/pipelines/MS structures (handrails, staircases and MS support structures) are to be offered for inspection after completion of primer coat, but before application of intermediate coat.
 - c) 3rd stage inspection: The tanks/pipelines/MS structures (handrails, staircases and MS support structures) are to be offered for inspection after completion of intermediate coat, but before application of finish coat.
 - d) Final inspection and certification : The final inspection will be done by Sr Manager (Stores) or his authorized representatives for certify the completion of work in all respects as per the work order.
- 23.02 A joint verification report will be prepared by Asst Manager (I&P) or his authorized representatives along with representatives of Contractor and Stores for receipt and quality of the materials supplied.

24.0 Other terms and conditions of the contract

- 24.01 The bamboo scaffolding should not be used and only metal scaffolding is recommended. The metal scaffolding shall be of suitable type and adequate for the job. The ropes, winches, pulleys or pulley blocks used for scaffolding purpose should be designed, assembled, used and maintained according to the requirements established for lifting gear adapted to the lifting of persons according to the national laws and regulations. Before use whole structure should be checked by the competent person.

- 24.02 Since the work is to be carried out in running locations also, the work is likely to be hampered/ delayed due to operational reasons. No claim on account of the above and any other reason whatsoever shall entertained by the Owner and work shall be completed by the Contractor within the stipulated period considering the above conditions. Also the Owner shall not pay any compensation whatsoever for idling of labour/ equipment.
- 24.03 Facilities dismantled/ damaged while executing the works shall be restored to its original condition without any extra cost to the company.
- 24.04 The contractor shall ensure that workers unless duly authorized, should not interfere with, remove, alter or displace any safety device or other appliances furnished for their protection or the protection of others, or interfere with any method or process adopted with a view to avoiding accidents and injury to health.
- 25.0 TAXES & DUTIES: This clause shall be applicable notwithstanding any other clause related to taxes & duties mentioned elsewhere in this tender document:
- i. The contract shall be deemed to a works contract and (property in the materials/equipments shall pass to the Owner only after their incorporation in the works and acceptance of the completed works by Engineer/Owner). Contractor's quoted rate shall be inclusive of all taxes and duties applicable for this work except service tax.
 - ii. The applicable service tax will be reimbursed on production of proof of remittance of Service Tax as per Rule 6(1) of Service Tax Rules for those contractors who do not have Service Tax Registration number.
 - iii. For contractors who are having Service Tax registration no., the Service tax will be paid extra based on claim of the contractor. However, the contractor shall produce a copy of half yearly return of Service tax filed at the office of the Superintendent of Central Excise. The final bill/SD will be released after production of the copy of half yearly return.
- 26.0 KIOCL Ltd. prefers to go for electronic mode of payment. Contractor shall furnish the required bank details to affect the electronic mode of payment.

Name of the Bank :
 Branch :
 Type of Account (Current/savings) :
 Account No. :
 MICR Number :
 (9 digit No.)
 ISFC Code :

 CONTRACTOR

 OWNER

TECHNICAL SPECIFICATIONS FOR PAINTING WORKS

1.0 PAINTING SPECIFICATION

1.01 This specification covers the general requirements for painting of steel structures of Furnace Oil Tanks and its accessories in Pellet Plant Unit, as existing involving surface preparation, supply, testing, delivery of all painting material at site and application of paints at site including providing scaffolding as required, tools and tackles, equipment and labour for surface preparation and application of paints.

Painting system as indicated as per technical data at 1.03 and surface preparation to manual cleaning conforming to Swedish standard St-2 shall be adopted. Total DFT will be 240 microns and overall DFT of the system shall be within (+)/(-) 5% variation. KIOCL's approved painting scheme is given in Annexure 'A' enclosed. Contractor shall adopt any one these specifications during execution of the work. However, in case contractor prefers to use any other scheme, such scheme shall be furnished along with full technical details along with the technical bid. KIOCL's reserves the right to accept or reject the scheme submitted by the contractor, which shall be final and binding on the contractor.

1.02 It is the contractors recommended painting system-covering 1.01 above, which gives adequate protection for steel structures from the saline/corrosive environment with good aesthetical appearance with a performance guarantee of **five years** minimum for supply and application of proposed painting scheme compatible to the existing finished paint detailed at 1.03. Performance Guarantee shall be furnished in KIOCL's prescribed format, which is enclosed as Annexure 'B'.

1.03 Contractor at his own cost shall conduct the test for each batch of paint and shall submit test Certificates with following details.

- i) Description of product,
- ii) Mixing ratio
- iii) Volume solids by weight
- iv) Filling viscosity
- v) Pot life
- vi) Dry film thickness
- vii) Application method
- viii) Touch dry & hard dry
- ix) Over coating internal
- x) Colour shade
- xi) Finish
- xii) Adhesion/simulated salt spray
- xiii) Wear resistant

Contractor shall furnish test certificates for every batch of paints dispatched and brought to site as per specification. Before start of painting, clearance has to be obtained from Engineer in charge with regard to compliance of supplier. However KIOCL reserve right to witness the testing of the paint at manufacturers work. All testing charges shall be to Contractors account.

2.0 SURFACE PREPARATION

2.01 Surfaces of old painted structural works, which are to be repainted, shall be thoroughly cleaned off loose scale, loose rust, loose paint, dirt, fines of iron ore, grease, oil and other foreign material by chipping, scraping, wire brushing, rubbing with abrasive paper/steel wool or any other suitable method to be offered by the contractor acceptable to owner. Workmanship shall generally conform to the requirements specified in IS: 1477 Part manual cleaning and shall conform to Swedish standard St-2.

- 2.02 The contractor where the other method specified above has not achieved the desired results shall resort to, cleaning by solvents. Cleaning with solvents shall be adopted only after obtaining approval of Engineer.
- 2.03 De-rusting and de-scaling by blasting is prohibited. Sand blasting is also not permitted. However air cleaning by compressor deployed by the contractor is permitted.
- 2.04 Surface preparation shall be examined/inspected by the Engineer and the contractor shall obtain a certificate from him stage wise to this effect before start of each coat painting.
- 3.0 PAINING
- 3.01 All the paints shall be of quality product. The application of paint film shall serve the twin purpose of protecting the steel from corrosion and decorative appearance aesthetically.
- 3.02 Colour and shade for painting shall be decided upon after trial painting in small patches in consultation with and as directed by Engineer. Each coat shall have different **tint** (shade) to distinguish the same from the other.
- 3.03 Workmanship for painting shall generally conform to the requirements specified in IS 1477 Part II.
- 3.04 An ELCOMETER shall be provided by the CONTRACTOR to the Engineer to measure the thickness of painting. The CONTRACTOR shall also furnish a latest certificate for the accuracy/calibration of the ELCOMETER. The thickness of the existing painting shall be measured after surface preparation and entered in a register/inspection certificate so that deducting the existing paint thickness can arrive at thickness of each coat of repainting.
- 3.05 Soon after the completion of surface preparation, primer coat of paint shall be applied with in shortest possible interval in order to prevent contamination of the surfaces in any way.
- 3.06 Application of primer and painting shall be by brush. However, in the exceptional cases, particularly junction between beams and columns and the like, where accessibility is a problem, spraying can be adopted for proper application and penetration of paint evenly to all the corners and spots. Contractor shall ensure proper and uniform dry film thickness (DFT) is achieved either by brush or spray application. Resorting to spray guns application shall be restricted to the barest minimum and shall be taken up only after obtaining clear instructions from the Engineer. Sufficient over coating interval shall be allowed while the application of 2nd and third coat of paint.
- 4.01 The thickness of each coat of paint shall be measured by the ELCOMETER and shall be as per the thickness recommended by the contractor/MANUFACTURER. Thickness of each coat of paint applied shall be stage passed by ENGINEER.
- 4.02 Paint shall not be used after the date of expiry.
- 4.03 Paint shall be applied only after the contents of the drum have been thoroughly mixed.

- 4.04 Thinner (such as mineral turpentine) shall not be added to the paints unless the MANUFACTURER recommends it.
- 4.05 Painting operation should be carried out in a well-ventilated place, free from dust. Draughts and direct sunlight should be avoided, as it will result in a poor flow and a patchy finish. It is essential that the surface to be painted shall be dry, free from moisture or otherwise corrosion and other paint defects may result due to moisture getting trapped in the paint film. Correct timing for the application of the primer as well as other coats is important and shall be maintained.
- 4.06 In coastal regions and areas with moderate or high humidity with appreciable difference in day and night temperatures, it is generally not safe to paint exterior steel work early in the morning due to the settlement of dew on the surface. In such places painting should be taken up later in the morning after dew has evaporated. For the same reasons, painting during monsoon shall be avoided.
- 4.07 Wherever dipping is observed due to the operational reasons, the CONTRACTOR shall intimate the ENGINEER in order to take advance action (about a week's time) to plug the leakage. The CONTRACTOR shall make all arrangements to make all the wet surfaces fit for painting which includes drying the area using blow lamps/hot air blowers, torch flame etc., wherever required, CONTRACTOR shall ensure the safety of existing electrical cables etc., from fire hazards and shall protect the dry area from dampness.

CONTRACTOR

OWNER

PERFORMANCE GUARENTEE

M/S.

(the Guarantor) guarantees M/s. KIOCL Limited, Panambur, Mangalore –575010 having their Registered and Head office at II Block, Koramangala, Bangalore- 560 034 (the owner) as here under. –

The owner has awarded a contract No..... to the Contractor for painting of steel structures in the owner’s Plant at Panambur, Mangalore. The contractor hereby guarantees the satisfactory performance of the contract in all respects, the satisfactory performance of their painting system/painted surfaces for a period of **five years** from the date of completion of application of the finishing coat of paint subject to the following terms and conditions in addition to the clauses/conditions mentioned in the technical specifications and Special conditions of the contract.

- 1) The Guarantor’s obligation under this guarantee shall be to repair defective areas (as defined below) with paint and labour free of cost during the performance guarantee period of **five years**. “Defective areas” shall mean area/areas where the following defects are observed during the guarantee period.
 - i) Corrosion to bare metal.
 - ii) De-lamination of paint from the surface.
 - iii) Cracking of paints.
- 2) The guarantee shall commence on the date of completion of application of the finishing coat (final coat) of the painting system to each building/unit.
- 3) The defects shall be rectified by the Guarantor providing extra coat of new paint as deemed necessary, so as to match with the original and damaged paint after thoroughly cleaning the damaged portion as per specifications, instructions and directions of the Engineer. So that the repaired/repainted surface shall not show any defects as defined above within the guarantee period of FIVE YEARS.
- 4) The guarantor shall rectify the defects within three weeks from the date of receipt of the notice from the Owner giving brief details of the nature of the defects.
- 5) If the guarantor fails to perform his obligation as per this guarantee, KIOCL reserves the right to rectify the defects through another agency at guarantor’s risk and cost.
- 6) The guarantor shall have no liability under this guarantee for the following:
 - i) Deterioration of paint and damaged to the coating systems caused by accidents, welding or other heating, fire, explosion, mechanical action, severe micro – climates such as moisture ponding.
 - ii) Deterioration of steel or the coating system caused by electro chemical action arising from the presence of metals which are cathodic to the metal of the guaranteed surfaces.
 - iii) Deterioration of the coating system caused by physical abuse.
 - iv) Loss/reduction in dry film thickness (DFT) and choking due to ultra violet (UV) radiation.
 - v) Chalking / discolouration of finish paint.
- 7) Forge majeure vide Clause 55 of the General Conditions of Contract shall be applicable during the guarantee period also.
- 8) The Bank Guarantee of DD or cash for the 10% of the contract value shall be deposited with Owner valid for five years towards performance guarantee after completion of total works.

CONTRACTOR

KIOCL'S APPROVED PAINTING SCHEME FOR PAINTING OF FURNACE OIL TANKS & ITS ACCESSORIES IN PELLET PLANT UNIT, KIOCL LIMITED.

Sl.No.	No. of coats	Type of paint to be used	No. of coat & film thickness in microns in DFT.
1	M/s. SHALIMAR PAINT LTD.		
	Primer Coat	Epiplus-556	1x100
	Intermediate coat	Epigard-5 HB MIO	1x100
	Finish Coat	Shalithane finish	1x40
		<u>Total microns in DFT</u>	240
2	<u>M/s. AKZONOBEL</u>		
	Primer Coat	Interseal -547	1x100
	Intermediate coat	Intergard – 475 HS MIO	1x100
	Finish Coat	Interthane – 138 Acrylic PU	1x40
		<u>Total microns in DFT</u>	240
3	M/s. BERGER PAINT LTD.		
	Primer Coat	Berger Protectomastic	1x100
	Intermediate coat	Epilux-455 HB MIO	1x100
	Finish Coat	Bergerthane – 41 SG Urethane paint	1x40
		<u>Total microns in DFT</u>	240
4	M/s. INTERNATIONAL PAINTS		
	Primer Coat	Interseal -574	1x100
	Intermediate coat	Intergard – 475 HB	1x100
	Finish Coat	Interthane – 990	1x40
		<u>Total microns in DFT</u>	240
5	M/s. KANSAI NEROLAC PAINTS LTD.		
	Primer Coat	Neromastic – 400	1x100
	Intermediate coat	Neropoxy – HB 6061	1x100
	Finish Coat	Nerothane – 460 GL	1x40
		<u>Total microns in DFT</u>	240
6.	M/s. Advanced Paints Pvt. Ltd.		
	Primer Coat	Advamastic 1280	1x70
	Intermediate coat	Advaguard 2260	2 x 65
	Finish coat	Advathane 3360	1x40
		<u>Total microns in DFT</u>	240
7	M/s. Sigma Coatings		
	Primer Coat	Sigmacover 630	1x100
	Intermediate coat	Sigmacover 410	1x100
	Finish Coat	Sigmadur Gloss	1x40
		<u>Total microns in DFT</u>	240
8.	Arcoy Industries (I) Pvt. Ltd.		
	Primer	<u>Arcozinc Silicate Primer</u>	1x50
	Intermediate coat	<u>Arocoflake</u>	1x150
	Finish coat	<u>Arcoset PU 9K</u>	1x40
		<u>Total microns in DFT</u>	240

Note : Recommended painting scheme of corroded structures can be chosen from any one of the above.

CONTRACTOR

OWNER

AREA CALCULATION SHEET

Sl. No.	Main Item	Sub Item	Shape	Radius	Length	Width	Circumfer	SURFACE AREA	No of Faces	No of pieces	No of Units	Total Surface Area (Sq.m)
1	Furnace oil Tank	Tank	C	14.00	18.00		88.00	1584.00	1.00	1	3	4752.00
		Tank top	X	14.00	6.00			670.39	1.00	1	3	2011.17
	Tank staircase	Walk Way	R		1.00	1.80		1.80	2.00	1	3	10.80
		Angle support	R		34.86	0.05		1.74	1.00	1	3	5.23
		flat support	R		2.26	0.05		0.11	1.00	1	3	0.34
		flat support	R		2.26	0.10		0.23	1.00	1	3	0.68
		step	R		0.80	0.26		0.21	2.00	90	3	112.32
		Angle support	R		1.05	0.05		0.05	4.00	1	3	0.63
		Angle support	R		4.00	0.08		0.30	4.00	1	3	3.60
		pipe supports	C		0.20		0.71	0.14	1.00	17	3	7.24
		square rods	S		0.19	1.90		0.36	4.00	97	3	420.20
		side plate (1)	R		0.84	0.76		0.64	2.00	1	3	3.83
		side plate (2)	R		31.10	0.70		21.77	2.00	1	3	130.62
		walk way (1)	S		0.80	0.80		0.64	2.00	1	3	3.84
		walk way (2)	S		1.00	0.80		0.80	2.00	1	3	4.80
	Tank top Handrails	angle ring ISA 50	R		85.35	0.10		8.54	4.00	1	3	102.42
		MS flat support	R		85.35	0.05		4.27	2.00	1	3	25.61
		flat support	R		85.35	0.10		8.54	2.00	1	3	51.21
	Air vent	Air vent	C		1.55		0.70	1.09	1.00	3	3	9.77
	Tank top Manhole	cover plate	O	0.37				0.43	1.00	2	3	2.58
		pipe	C	0.32	0.18		2.01	0.36	1.00	2	3	2.17
		cover plate	O	0.20				0.13	1.00	2	3	0.75
		pipe	C	0.15	0.09		0.94	0.08	2.00	1	3	0.48
	Level indicator	cover1	S		0.50	0.50		0.25	1.00	2	3	1.50
		cover2	R		0.54	0.40		0.22	8.00	1	3	5.18
		air vent pipe	C		29.00		0.14	4.06	1.00	1	3	12.18
		guage hole	R		0.27	0.43		0.12	1.00	1	3	0.35
	FO line from tank	Main pipe	C		20.76		1.14	23.67	1.00	1	3	71.00
	top	flange	R		0.27	0.38		0.10	1.00	1	3	0.31
		ISM 100	R		4.00	0.20		0.80	2.00	2	3	9.60
	Lamp post	ISM 100	R		0.77	0.20		0.15	2.00	2	3	1.85
		ISM 100	R		0.50	0.20		0.10	2.00	1	3	0.60
		ISM 100	R		1.31	0.20		0.26	2.00	1	3	1.57
		plate	O	0.32				0.31	1.00	1	3	0.94
	Tank to Tank	platform	R		9.70	1.00		9.70	2.00	1	2	38.80
	walk way	ISA 65	R		2.56	0.13		0.33	2.00	1	2	1.33
		ISA 65	R		9.70	0.13		1.26	2.00	40	2	201.76
		Flat	R		0.05	9.70		0.49	4.00	1	2	3.88
		ISM 100	R		1.90	0.20		0.38	2.00	12	2	18.24
		ISA 65	R		1.00	0.13		0.13	2.00	24	2	12.48
		ISA 65	R		0.84	0.13		0.11	2.00	24	2	10.48
		ISA 65	R		1.05	0.13		0.14	2.00	22	2	12.01
		web plate1	R		0.33	0.10		0.03	2.00	48	2	6.34
		web plate2	R		0.20	0.44		0.09	2.00	2	2	19.070
		web plate3	R		0.15	0.20		0.03	2.00	24	2	2.88

Sl. No.	Main Item	Sub Item	Shape	Radius	Length	Width	Circumfer	SURFACE AREA	No of Faces	No of pieces	No of Units	Total Surface Area (Sq.m)
	Tank edge	angle ring ISA 65	R		88.00	0.13		11.44	1.00	1	3	34.32
		flat ring	R		88.00	0.13		11.44	1.00	1	3	34.32
		flat ring	R		88.00	0.15		13.20	2.00	1	3	79.20
	Tank top platform	flat ring (H)	R		88.00	0.86		75.68	2.00	1	3	454.08
		flat ring (V)	R		88.00	1.70		149.60	2.00	1	3	897.60
	Tank top walk way	walk way	R		4.30	0.39		1.68	2.00	1	2	6.71
		support	R		0.85	0.09		0.08	2.00	92	2	28.15
		support ISA 65	R		0.85	0.13		0.11	3.00	33	2	21.88
		support ISA 65	R		1.20	0.13		0.16	4.00	33	2	41.18
	Tank drain valve	valve	R		0.44	0.26		0.11	1.00	1	3	0.34
		pipe	C		0.45		0.28	0.13	1.00	1	3	0.38
		valve	R		0.26	0.20		0.05	1.00	1	3	0.16
	Tank manhole	pipe	C	0.31	0.18		1.95	0.35	1.00	2	3	2.10
	cover	cover	O	0.41				0.52	1.00	2	3	3.09
	Cable tray support	support ISA 100	R		0.22	0.20		0.04	3.00	12	3	4.75
	Tank pipe supports	ISMC 125	R		5.16	0.23		1.16	2.00	5	3	34.83
		ISA 50	R		0.47	0.10		0.05	2.00	5	3	1.41
	Tank drain valve	Valve (2)	R		0.33	0.19		0.06	1.00	1	3	0.19
	Tank outlet valve	valve	R		1.30	0.85		1.11	1.00	1	3	3.32
	Outlet pipe	supports	C		1.50		0.54	0.81	1.00	2	3	4.86
		plate support	R		0.37	0.30		0.11	1.00	1	3	0.33
	MS pipelines at											
	the bottom of tank	pipelines	C		107.69		0.11	12.28	1.00	1	1	12.28
	Drainage valve	valve	R		1.00	0.45		0.45	1.00	1	1	0.45
	Main pipe line at										1	
	the bottom of tank	pipelines	C		794.55		0.11	87.40	1.00	1	1	87.40
	Main pipe inlet	vlave	R		1.25	0.50		0.63	1.00	3	1	1.88
		side plates	O	0.27				0.22	1.00	1	1	0.22
	MS pipelines	Pipe from top to										
		bottom	C		106.44		0.25	26.61	1.00	1	3	79.83
		support ISA 50	R		7.31	1.00		7.31	1.00	1	3	21.93
		pipe supports (1)	C		8.94		0.55	4.92	1.00	1	3	14.75
		pipe supports (2)	C		3.15		0.37	1.17	1.00	1	3	3.50
	pipe cross over	steps	R		0.48	0.26		0.12	2.00	8	1	2.00
	tank No:3	platform	R		1.00	0.48		0.48	2.00	1	1	0.96
		support ISA 65	R		6.80	0.13		0.88	2.00	1	1	1.77
		support ISA 65	R		1.22	0.13		0.16	3.00	1	1	0.48
		MS rod1	C		0.89		0.05	0.04	1.00	8	1	200.36
		MS rod2	C		0.90		0.05	0.05	1.00	4	1	0.18
		MS rod 3	C		0.98		0.05	0.05	1.00	4	1	0.20
		MS rod 4	C		0.67		0.05	0.03	1.00	4	1	0.13

Sl. No.	Main Item	Sub Item	Shape	Radius	Length	Width	Circumfer	SURFACE AREA	No of Faces	No of pieces	No of Units	Total Surface Area (Sq.m)
	pipe cross over tank No:2	steps	R		0.60	0.28		0.17	2.00	7	1	2.35
		platform	R		1.50	0.70		1.05	2.00	1	1	2.10
		support ISA 100	R		3.00	0.20		0.60	1.50	1	1	0.90
		support ISA 90X60	R		1.22	0.15		0.18	2.00	1	1	0.37
			R		0.70	0.20		1.50	1.00	1	1	1.50
	cable support		R		0.40	0.20		0.08	1.50	16	1	1.92
	Valves near pump house	valve	R		1.45	0.60		0.87	1.00	1	1	0.87
	Pump house	pipeline	C		12.00		0.37	4.44	1.00	1	1	4.44
	Water pump house	pipe (1)	C	0.35	2.20		2.20	4.84	1.00	2	1	9.68
		pipe (2)	C	0.28	6.30		1.73	10.89	1.00	1	1	10.89
		water tank	C		1.53		3.85	5.89	1.00	1	1	5.89
		pipe (3)	C		3.59		0.16	0.57	1.00	1	1	0.57
		handrail pipe	C		2.53		0.11	0.28	1.00	1	1	0.28
		support ISA 75	R		0.15	6.00		0.90	1.00	2	1	1.80
		support ISA 50	R		0.10	0.50		0.05	2.00	9	1	0.90
		support ISA 65	R		7.22	0.13		0.94	1.00	4	1	3.75
		support ISA 65	R		0.93	0.13		0.12	1.50	4	1	0.73
		pipe (4)	C		18.00		0.14	2.52	1.00	1	1	2.52
		pump house door	R		2.30	1.15		2.65	2.00	1	1	5.29
	FO pump house	pipe (1)	C		14.00		1.14	15.96	1.00	1	1	15.96
		pipe 2	C		2.40		0.88	2.11	1.00	2	1	4.22
		valve1	R		1.00	0.40		0.40	1.00	4	1	1.60
		plate	O	0.27				0.22	1.00	2	1	0.44
		pipe 3	C		9.51		0.70	6.66	1.00	1	1	6.66
		valve2	R		0.50	0.43		0.22	1.00	2	1	0.43
		pump	C		1.60		1.60	2.56	1.00	2	1	5.12
		support ISMC 200	C		0.68	0.40	0.00	0.00	1.00	4	1	0.00
		support ISA 90	R		0.92	0.18		0.17	1.00	1	1	0.17
	Pump house	frame, ISMC 125	R		2.95	0.27		0.80	1.00	2	1	1.60
		frame, ISMC 125	R		0.90	0.27		0.24	1.00	2	1	0.49
		frame, ISMC 125	R		0.90	0.27		0.24	1.00	4	1	0.97
		flat	R		0.90	0.04		0.04	1.00	2	1	0.07
	Oil sepeartor unit	pipe	C		1.82		0.55	1.00	1.00	8	1	8.01
		structure ISA 100	R		3.03	0.02		0.06	2.00	12	1	1.45
		web	R		0.32	0.32		0.10	2.00	6	1	21.23
		roof ISA 100	R		6.00	0.20		1.20	1.50	8	1	14.40
		roof ISA 100	R		6.80	0.20		1.36	2.00	4	1	10.88

PRICE BID
SCHEDULE OF ITEMS

Sl. No.	DESCRIPTION	Unit	Qty.	Rate	Amount (Rs)
1 a)	Mechanical/Manual cleaning of rusted surfaces of MS furnace oil tanks, main pipelines, stairs, hand rails, MS support structural, fire hydrants, lamps posts, manholes, platforms, tank valves, drain valves, etc.including cleaning the surface from grease, dirt, mill scales etc.by supplying & using brass wire brushes, Aluminium/brass scrappers, scrubbing with bristle brush, emery and sand paper. Check with the ferri cyanide papers for chlorides and salt free surfaces.	Sq.M.	10300	Rs. (In words: Rs.	
1 b)	Material and labour complete for supply and application paint according to system given as per Annexure B for Furnace Oil tanks and its accessories at any height or location as per the details given in Technical specifications including scaffolding – all as per the instructions of Engineer-in-charge.	Sq.M.	10300	Rs. (In words: Rs.	
2.	Cleaning/removal of mud/oil/grass/ garbage materials from all trenches inside dyke and FOT area surrounding the furnace oil tank and water-oil separator unit which includes deployment of labours, supply of tools & tackles, shifting/transportation of removed waste materials to the earmarked locations and other miscellaneous works related to trench cleaning, as per the instructions of Officer in Charge or his authorized representatives.	Lumpsum		Rs. (In words: Rs.	

Sl. No.	DESCRIPTION	Unit	Qty.	Rate	Amount (Rs)
3.	<p>Writing details about a) furnace oil tank and explosive license in the tanks and b) display boards (No smoking and instruction) as below,</p> <p>“Material and labour complete for painting of tanks and display boards with details of explosive licences, “No Smoking” and instruction through preparation of the surface, application of two coats of synthetic enamel paint yellow colour of approved make and shade for the background and painting of letters using two coats of enamel paint of red colour of approved make and shade by providing necessary scaffolding and removal of the same after completion of the work all as per the instructions of Officer in-charge or his authorized representatives”</p>	Sq. Ft.	500	Rs. (In words: Rs.	

TOTAL

(Rupees:

CONTRACTOR

OWNER