

PRE-QUALIFICATION REQUIREMENT

1	Submission of EMD as specified in NIT (copy of receipt to be enclosed)
2	Bidder should have successfully executed similar works for any of the following during the last seven years from the date of tender opening: - Three Similar work costing not less than the amount to Rs. 12.08 Lakh each or - Two Similar works costing not less than the amount to Rs. 15.10 Lakhs each or - One Similar work costing not less than the amount to Rs. 24.17 Lakhs each The values shown are basic values excluding GST. Actual executed value shall be considered based on work completion certificate from work contracting organization. Bidders to submit order and work execution certificate from the work contracting organization bearing its complete address, name of contact person and valid contact phone no(s) in support of this criteria. The value and nature of executed work shall only be considered for the qualifying criteria.
3	(a). Average Financials turnover during the last three years, ending 31st March 2022 should be at least 9.06 Lakhs. (b). Bidder must have earned profit in any of the three financial years as applicable in the last three financial years as furnished for (a) above. Note: PROFIT shall be PBT earned during any one year of last three financial years as in (a) above. The following documents should be submitted by the bidder: (i). Balance sheet and Profit & Loss Account (audited/issued by Chartered Accountant) of last three years ending on 31st March 2022 in support of the above. (ii). If financial statements are not required to be audited statutorily, then instead of audited financial statements, financial statements are required to be certified by Chartered Accountant.
4	Bidder to submit signed & stamped (on each page) copy of terms & conditions and scope of work unequivocal acceptance of all terms & conditions and scope of work of contract.
5	Note (i): The party should submit EMD as per Sl. 1, documents mentioned in Sl. NO. 2 & 3 and acceptance as per Sl. 4. These are mandatory qualifying criteria & non fulfillment of any one or more criteria shall render the offer as technically rejected. Note (ii). <u>Definition of similar work:</u> Construction or repair of RCC works.

Authorized Sign. With seal

Name of the Bidder

Address:

Contact of details

E-Mail Address:

Indent No.: 20220299

SCOPE OF WORK

Name of Work: Construction of RCC Drain at BHEL-CFP, Rudrapur

The scope of work shall be as follows:

- 1). Construction of new RCC drain including excavation and dismantling of existing old/deteriorated drain as per layout provided in Annexure – X at BHEL-CFP, Rudrapur site.
(Note: The layout shall be subject to modification as per site requirement / BHEL discretion. However, the overall quantity shall remain within BoQ).
- 2). Interconnection of drains through underground RCC pipes and maintenance of required slope for proper discharge of water through drains.
- 3). Stacking of serviceable materials during dismantling / excavation within 200 meters lead as per direction of BHEL, will be in contractor's scope. Disposal of unserviceable materials / excavated earth will be in contractor's scope.
- 4). Straightening, cutting, bending, placing in position and binding of Mild Steel TMT bars.
- 5). Centering and shuttering including strutting, propping etc. and removal of form work shall be in the scope of contractor.
- 6). Use of proper concrete vibrator during RCC pouring work.
- 7). Refilling of sides will be done in layers with proper compaction as per direction of BHEL.
- 8). Rectification of any work not found as per required specification & quality.
- 9). All materials, machinery, manpower, tools and tackle etc., except cement and reinforcement steel, shall be within the scope of the contractor for all works mentioned in the BOQ. The cement and reinforcement steel will be provided by BHEL free of cost.

TERMS & CONDITIONS**PART-A: General**

1. Work is to be executed strictly as per scope of work, Terms & conditions, special Terms & Conditions and BOQ stipulated in Annexure – I, Annexure – II & Annexure –III respectively.
2. The rate for individual activities shall be calculated as per Annexure-III (BOQ cum Price distribution sheet) from the total rates quoted by the bidder.
3. **Safety:** Adequate safety precautions & PPEs (safety belts, safety shoes, helmet, etc.) for workmen engaged by the contractor & taking work permit from BHEL as per Format F-HSE-18 (format shall be provided by BHEL) for working at height >7ft as required shall be the sole responsibility of contractor. It may be noted that wearing of safety shoes & face mask shall be the essential requirement for entering into BHEL premises. Contractor should ensure & provide valid test certificate of safety belt / other PPEs used by the contractor or its workmen. Contractor shall follow all preventive norms as applicable at BHEL premises regarding COVID-19.
4. **Site clearance:** Site clearance for commencement of work shall be provided by BHEL within 7 days of LOI / Work order whichever is earlier.
5. Water used in the work shall be provided by BHEL through the existing outlets within factory premises. Any other arrangement of water through tanker etc. / temporary extension of water line through flexible hose/pipes shall be made by contractor at its own cost. More over contractor has to ensure the availability of water before carrying out the work and if it is not possible to provide the water at site through existing outlet/extension, then contractor has to make borehole arrangement at its own cost for ensuring water availability at site and that too with prior written permission of BHEL. Free of cost AC power supply at 415 Volt / 230 Volt shall be given only at single point by BHEL. All extensions/ other arrangements required shall be in Contractor's scope.
6. **Delivery schedule:** Work shall be completed in all respect within 105 days from the date of site clearance by BHEL.
7. The contractor shall not sublet the work awarded by BHEL to another agency / firm.
8. **Quality of workmanship:** (i). All concreting works shall be Machine mixed and Machine vibrated and will have required levels of strength at the time of testing. The samples are casted, cured and tested for compressive strength conforming to IS 516:1989. Slump test will be done time to time at the time of pouring. Concrete work resulting into honeycombing, cavities & other deformities shall not be acceptable and have to be reconstructed (repair shall not be allowed). The cost incurred to BHEL on account of loss of material as a result of re-work / rejection, due to poor / sub-standard workmanship by the contractor shall be debited from the bills of contractor.
(ii). Shuttering boards/ Form work shall be of good quality ply boards, sheet metal or any other suitable material which will prevent loss of grout when the concrete is vibrated. **Form work** shall be free from defects likely to detract from the general appearance of the finished surface and the concrete shall be uniformly leveled and tamped. Rendering of defective concrete as a means of making good will not be permitted. In case of poor

finishing and levelling, the exposed area will have to be plastered free of cost by the contractor.

9. **Inspection:** (i) Coarse sand (crusher sand) grading zone-II shall be used for concreting work conforming to IS 383 and 2116.
(ii) Coarse aggregate (crusher) grading Zone-II shall be used for the concreting work confirming to IS 383.
(iii) 450 mm inner diameter of 2.5 meters long RCC Hume pipes confirming to IS 458 shall be used.
(iv) The mild steel binding wire confirming to IS 280 shall be used for binding of reinforcement steel.
(v) All materials will be inspected by at BHEL Rudrapur at the time of supply.

(vi) Inspection of work executed by the contractor shall be carried out by BHEL at site. Contractor shall ensure that the items be made strictly as per the specifications mentioned in Annexure – I & III. Items & work not as per the required specification during work progress or after completion of work has to be rectified / replaced by the contractor to the satisfaction of BHEL before site handover for takeover by BHEL. Item / Work not found as per specification shall be rejected.

(vii) Drain shall be inspected for proper discharge of water after completion of the work. In case of defect such as stagnant water in drain / undulations if found in any part of the drain, the same shall be rejected until the defect is rectified by the contractor and accepted by BHEL.
10. **Measurement of work:** The work executed by the contractor shall be measured, recorded & verified at site jointly by BHEL & Contractor representatives and the same shall be entered in measurement book (M.B.). Unit of measurement for individual items shall be as mentioned in Annexure-III. The contractor shall provide all required appliances, labour and other things as necessary for the measurement of work at site.
11. BHEL shall only provide Cement & reinforcement steel and remaining materials shall be in contractor's scope.
12. All tools & tackles, plant & machinery(P&M) and manpower required for the execution of work shall be in contractor's scope. All tool & tackles, P&M, temporary arrangements, staging, working platforms etc. shall be brought inside BHEL premises by the contractor through returnable challan duly stamped at BHEL security gate, a copy of which is also to be submitted to WEX/Civil deptt. of BHEL for records. The contractor shall also provide required manpower including detail of manpower engaged for the work.
13. **Handing over / Taking over document:** Contractor shall hand over the site to BHEL in writing after completion of work. BHEL shall take over the site after inspection based on satisfactory completion of work by contractor and measurement of work. The handing over / taking over document shall be duly signed & stamped by the respective contractor & BHEL representative.
14. **Payment terms:** Payment shall be subject to successful handing over / taking over as per cl. 13. Contractor shall raise GST invoice in duplicate with running / final bills. Payment

against satisfactory completion of work shall be made through e-payment to the contractor's account within 45 days for MSEs, 60 days for Medium Enterprises and 90 days for Non MSMEs as per following details:

- a) Running Bill Payment of 25 % of the work after successful completion of 35 % of the work.
 - b) Running Bill Payment of another 25 % (total 50%) of the work after successful completion of 70 % of the work.
 - c) Balance payment after successful completion of work.
15. **Risk Purchase:** BHEL reserves the right to exercise risk purchase in case of failure on the part of contractor to meet the contractual obligations under the contract w.r.t. unsatisfactory execution of work and / or quality, incomplete work carried out by the contractor & failure to meet delivery schedule. BHEL shall not be liable to compensate the contractor for any loss arising out of risk purchase action.
16. **Liquidated DAMAGES / PENALTY:** If the contractor fails to complete the work in stipulated time and there is delay in the completion of the work against delivery schedule, BHEL shall have the right to impose Liquidated Damage / Penalty at the rate of 0.5 % of the total order value, per week of delay or part thereof subject to a maximum of 10% of the contract value. For this purpose, the period of delay shall be the delay attributable to the Contractor for the completion of work as per contract.
17. **Time Extension :** In case, the work is delayed due to Force majeure conditions like, abnormally bad weather, serious loss or damage by fire, civil commotion, strike or lockout, flood, riots, cyclone, earthquake etc. or delay in site clearance by BHEL, which is in the absolute discretion of BHEL and beyond the contractor's control, request for extension of time along with reason(s) to be eligible for consideration, shall be made by the contractor in writing within seven days of the happening of the event causing delay but before expiry of scheduled date of completion. BHEL may or may not, at its discretion, give any extension after review of contractor's application and mere submission of application for extension shall not absolve the contractor of its obligation to complete the work within scheduled time or liable to be penalized for delay unless time extension is provided by BHEL. Status on grant / turndown of extension request shall be communicated to the contractor.
18. **Warranty & Security Deposit:** Onsite warranty of 18 months against defective workmanship shall be applicable after completion of work from the date of taking over of site by BHEL. Any defective workmanship during warranty period shall be rectified / replaced (includes cost of material, if any incurred to BHEL) free of cost by the contractor. Contractor shall be required to deposit an interest free security deposit @5% of contract value before start of the work, which shall be retained by BHEL up to successful completion of the warranty period.
19. Contractor shall take due care in carrying out the works so as not to cause damage to BHEL property. Any damage to BHEL property caused and attributed to the contractor or its workmen shall be repaired / 100% compensated by the contractor free of cost. In case, the contractor does not repair the damages, BHEL shall recover the cost of such damages from contractor's dues at contractor's risk & cost.
20. Bidder / contractor shall provide the following information:

Particulars	Requirement	Bidder's / Contractor's Remarks
EPF Registration No	Enclose a Copy	
ESI Registration No.	Enclose a Copy	
Pan Card No	Enclose a Copy	
GST Registration no.	Enclose a Copy	
Bank Account Details IFSC Code Account No. Bank Name Branch Name	Furnish details	
Acceptance to engage trained /qualified staff / workmen	Bidder's acceptance required	

21. The actual quantity used in the final work may vary up to $\pm 10\%$ for the individual activities vis-à-vis the quantity mentioned in Annexure-III.
22. **COMMENCEMENT OF WORK**
The contractor shall commence the work within 15 days from the date of site clearance. If the contractor fails to commence the work within the stipulated time, BHEL, at its sole discretion, will have the right to cancel the contract. In such case, the Earnest money and/or Security Deposit by the contractor shall be forfeited by BHEL.
23. Contractor shall carry out the work during normal working hours of BHEL i.e., 0700 hrs. to 1700 hrs. on all working days. The work may be carried out beyond normal working hours and on Sundays / Holidays with prior written permission from BHEL. The contractor shall make himself or his representative available at the site during execution of work for supervision of work, contractor's workmen and day to day co-ordination with BHEL w.r.t. progress of work.
24. Contractor shall maintain a daily work progress register / record in which the work executed on daily basis is to be recorded for ensuring the progress of work.
25. Water that may accumulate on the site during progress of the works or in trenches or at any excavated place of working site have to be evacuated from site by the contractor to the entire satisfaction of BHEL and at the Contractor's expense.
26. No road closure will be allowed during execution of the work and necessary traffic signal/road boards to be displayed at proper place by the Contractor at his own cost. The Contractor shall be wholly responsible for any accident arising out of non-fulfilment of this condition.
27. The bidder is advised to visit the site before participating in the tender to get familiar with the site conditions.
28. Contractor shall depute its supervisor at work site. It will be the responsibility of the contractor to regularly supervise the work and ensure co-ordination with WEX/Civil department for issuance of material, etc.

30. The contractor shall be fully and finally responsible for the correctness and quality of the work carried out by him as per scope, terms & conditions of contract and to the entire satisfaction of BHEL.
31. Contractor shall strictly follow all contractual and statutory obligations as stipulated in this tender.
32. L-1 shall be decided on overall cost basis.

PART B: HEALTH, SAFETY & ENVIRONMENT (HSE) POINTS:

The following safety measures which are not exhaustive to be followed by the contractor while carrying out the work:

1. It will be the Contractor's responsibility to fulfill all the legal compliances with respect to Health, Safety and Environmental aspects of the entire work (namely; the person employed, the equipment & PPEs used during the work, etc.) under the jurisdiction of the district of that state where it is operating. Ensure that sub-contractors (if any) hired by the contractor should comply with the same requirement as the contractor himself and shall be liable for ensuring compliance all HSE laws by the sub-contractors.
2. Every person deployed by the contractor must wear safety PPEs to be provided by the contractor. The Contractor shall provide proper Personnel Protective Equipment like safety boots, goggles, helmets and safety belts etc. to all the workers as per the hazard identified and risk assessed for the job and conforming to statutory requirement and company PPE schedule.
3. Any compensation arising due to accident of the contractor's workmen while carrying out the work at site, will be payable by the contractor.
4. The contractor shall have to report all incidents including near miss to the representative of WEX / Civil department of BHEL.
4. The contractor has to keep a register of the persons employed by him / her. The contractor's supervisor shall take and maintain attendance of his men every day for the work, punctually.
5. A contractor's employee must, while at work, take reasonable care for the health and safety of people who are at the employee's place of work and who may be affected by the employee's act or omissions at work.
6. A contractor employee must, while at work, co-operate with his or her employer or other persons so far as is necessary to enable compliance with any requirement under the act or the regulations that is imposed in the interest of health, safety and welfare of the employee or any other person.
7. In case Contractor is found non-compliant of HSE laws as required, BHEL will have the right for directing the contractor to take action to comply with the requirements, and for further non-compliance, the contractor will be penalized prevailing relevant Acts/Rules/Regulations.
8. When there is a significant risk to health, environment or safety of a person or place arising because of a non-compliance of HSE Measures, BHEL will have the right to direct the contractor to cease work until the non-compliance is corrected.

9. For any HSE matters not specified in the contract document, the contractor will abide the relevant and prevailing Acts/rules/regulations/ pertaining to Health, Safety and Environment.
10. Proper and necessary precautions shall have to be taken wherever the work involves breaking of reinforced cement concrete slab and dismantling of brick work.
11. Before excavation at any place, contractor has to ensure with electrical department that that there is no power cable running in the ground. In case of identification of any running live power cable or any other cable, proper shut down shall be taken before commencement of the work from the respective department.
13. Proper barricading / caution boards as required must be arranged by the contractor at construction work sites.

BOQ cum Price Distribution Sheet

Name of Work: Construction of RCC Drain at BHEL CFP Rudrapur

S.No.	Activity	UNIT	QTY	Activity wise percentage against total cost (without GST)	GST tariff to be quoted by bidder in %
	RCC DRAIN				
1	Carriage of Materials by Mechanical Transport including loading, unloading and stacking				-
A	Lime, moorum, building, rubbish	Cum	170.52	0.76%	
B	Earth	Cum	479.09	2.38%	
2	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 Sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.				-
	All kind of soil	Cum	617.18	3.30%	
3	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	138.09	0.30%	
4	Providing & laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level. (Cement will be provided by BHEL free of cost)				-
A	PCC 1:4:8	Cum	66.98	7.48%	
B	RCC 1:1.5:3	Cum	274.80	32.75%	
5	Centering and shuttering including strutting, propping etc. and removal of form work for				-
	Foundations, footings, bases for columns	Sqm	4122.00	39.40%	
6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level (Reinforcement steel will be provided by BHEL free of cost)				-
	Cold twisted bar	Kg	13740.00	3.75%	
7	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. Nominal concrete 1:4:8 or leaner mix (i/c equivalent design mix)	Cum	55.77	4.09%	
8	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. In cement mortar	Cum	51.75	1.09%	
9	Dismantling manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge				-
	Bitumenous Road	Sqm	63.00	0.70%	
10	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete.				-
	450 mm dia. R.C.C. pipe	RM	92.00	4.00%	
	TOTAL	-	-	100.00%	

Note: 1). Total amount quoted by the bidder in Price Bid shall be distributed & allocated to the individual activity as per above percentage. Basic rate (without GST) for individual line item shall be worked out as per respective amount for all activities.

2). Payment shall be made on actual GST rate or quoted rate, whichever is lower, on actual consumption.

3). The correctness of GST tariff and its payment to government shall be the sole responsibility of supplier. Accordingly, supplier has to ensure the tariff of GST quoted for the above activities.

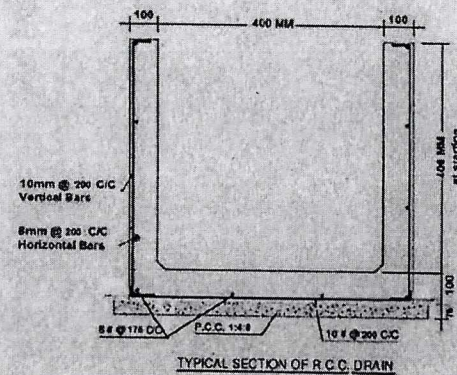
4) The actual quantity used in the final work may vary upto ± 10 % for individual activities vis-à-vis the quantity mentioned above.

5) L-1 shall be decided on overall cost basis.

6) Cement and reinforcement steel will be provided by BHEL free of cost.

[illegible]

ANNEXURE-Y



(Signature)
(Lalit Kumar)
Engineer (Civil)

GENERAL NOTES:

- ALL DIMENSIONS ARE IN MM
- DO NOT SCALE THE DRAWING, ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED
- USE CONCRETE MIX 1:1.5:3 HAVING CHARACTERISTIC COMPRESSIVE STRENGTH OF CONCRETE ≥ 20 N/MM² AS PER IS 456:2000.
- USE STEEL BARS CONFORMING TO IS 1786 HAVING GUARANTEED YIELD STRESS OF 410 N/MM²
- ALL LAP LENGTH SHALL BE PROVIDED 56D WHERE D IS DIA OF BARS
- ALL 'L' BENDS SHALL BE OF 300 MM (UNLESS NOTED OTHERWISE)
- NOMINAL COVER TO REINFORCEMENT (INCLUDING BENDS) SHALL BE AS FOLLOWS BUT NOT LESS THAN THE DIA OF MAIN BARS:
WALL - 30 MM, SLAB - 50 MM.
- ALL CONSTRUCTION WORK SHALL BE DONE AS PER TENDER SPECIFICATIONS.
- FOR LOCATION REFER SITE PLAN.
- ANY DEVIATION FROM STRUCTURAL DRAWINGS SHALL NOT BE ALLOWED WITHOUT WRITTEN PERMISSION OF CONSULTING ENGINEER.

NOTE: INITIAL SECTION OF DRAIN WILL BE 400*400 MM WITH A DOWNWARD SLOPE OF 1:1000

DRAWING: **TYPICAL SECTION OF R.C.C. DRAIN**

DATE	-	CHECKED BY		DRG. NO.
SCALE	-	DRAWN BY		

Name of work: Laying of Bituminous Road and Construction of RCC Drain at BHEL CFP Rudrapur