NIT

Name of Work	Periodically Repairing and Maintenance of Existing Water Supply G.I. & C.I. Pipe Line from Main Gate to Housing Complex, Distribution Lines up to Over Head Tanks at MGRC, Lines from Tube wells up to pump Houses etc. at IGNOU Campus & other Allied Related Works.
Estimated Cost	Rs. 8,18,603/-
Earnest Money	Rs. 16372 /-
Performance Guarantee	5% of tendered cost
Security Deposit	5% of tendered cost
Time Allowed	12 Months

Certified that this NIT contains 256 pages.

INDIRA GANDHI NATIONAL OPEN UNIVERSITY CONSTRUCTION AND MAINTENANCE DIVISION OPP TO HORTICULTURE NURSERY MAIDAN GARHI : NEW DELHI- 110 068

NOTICE INVITING TENDER

The Executive Engineer (C) Constructions and maintenance division invites on behalf of Vice Chancellor, Indira Gandhi National Open University, sealed Item rate tenders for the following work from the eligible contractors of CPWD and those of appropriate list of PWD/DDA/BSNL/DOT/MES/MCD or any other Govt/Autonomous body doing such type of works. The tenders will be sold only on production of Registration, TIN/PAN No., latest challans for VAT deposit and proof for satisfactory completion of three similar works each costing to 40% of our estimated cost or one work costing to 80% of our estimated cost during the last five years, duly certified by the competent authority of the client department. All the original documents must accompany by the agency while applying for issue of tenders.

Name of work	Estimated cost (Rs)	Earnest Money (Rs)	Cost of tender (N/R)	Last date of sale of tenders	Date of opening of tenders	Time allowed
Periodically Repairing and Maintenance of	8,18,603/-	16372/-	500/-	21.07.2014	23.07.2014	12
Existing Water Supply G.I & C.I. Pipe Line						months
from Main Gate to Housing Complex,						
Distribution Lines up to Over Head Tanks at						
MGRC, Lines from Tube wells up to Pump						
Houses etc. at IGNOU Campus & other Allied						
Related Works.						

Tender forms and conditions can be obtained from the office of the undersigned, Indira Gandhi National Open University, Construction and Maintenance Division, Maidan Garhi, New Delhi- 110 068 on any working day up to 2.30 p.m. on the date and time given above. The time for submission of tenders is up to 3.00 p.m. which shall be opened on the same day at 3.30 p.m. on the date given above.

INDIRA GANDHI NATIONAL OPEN UNIVERSITY CONSTRUCTION AND MAINTENANCE DIVISION OPP TO HORTICULTURE NURSERY MAIDAN GARHI : NEW DELHI- 110 068

Item Rate Tender

Periodically Repairing and Maintenance of Existing Water Supply G.I & C.I. Pipe Line from Main Gate to Housing Complex, Distribution Lines up to Over Head Tanks at MGRC, Lines from Tube wells up to Pump Houses etc. at IGNOU Campus & other Allied Related Works.

- (i) To be submitted by 3.00 p.m. on -----.
- (ii) To be opened in presence of tenderers who may be present at 3.30 p.m. on ------ in the office of the Executive Engineer.
 Issued to ------

Signature of the officer issuing the documents ------

Date of issue -----

TENDER

I/We have read and examined the Notice Inviting Tender, schedule A, B, C, D, E & F. Specifications applicable, drawings and design, General Rules and Directions of contract, clauses of contract, special conditions, Schedule of Rate and other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Vice Chancellor, IGNOU within the time specified in Schedule 'F' viz. schedule of quantities and in accordance in all respect with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and directions and in clause 11 of the conditions of the contract with such materials as are provided for, by, and in respect in accordance with, such conditions so far as applicable.

I/We agree to keep the tender open for ninety (90) days from the due date of its opening and not to make any modifications in its terms and conditions.

A sum of **Rs. 16372/-** has been deposited in Pay order/Demand Draft of a scheduled bank as earnest money. If I/We fail to furnish the prescribed Performance guarantee within prescribed period, I/We agree that the said Vice Chancellor, IGNOU or his successors in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/We agree that Vice Chancellor, IGNOU or his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, upto maximum of the percentage mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in clauses of the tender form.

Further, I/We agree that in case of forfeiture of earnest money or both earnest money and Performance guarantee as aforesaid, I/We shall be debarred for participation in the tendering process for three years in.

I/We hereby declare that I/We shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate information derived there from to any person other than a person to whom I/We am/are authorized to communicate the same or use the information in any manner prejudicial to the satisfy of the state.

Dated:

Signature and address of the contractor

Witness:

Address:

Occupation:

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the Vice Chancellor, IGNOU for a sum of Rs._____ (Rs.

The letters referred to below shall form part of this contract Agreement.

(a)

(b)

(c)

For and on behalf of Vice Chancellor, IGNOU Signature and Designation

INDIRA GANDHI NATIONAL OPEN UNIVERSITY CONSTRUCTION AND MAINTENANCE DIVISION OPP TO HORTICULTURE NURSERY MAIDAN GARHI : NEW DELHI- 110 068

NOTICE INVITING TENDER

Item rate tenders are invited on behalf of Vice Chancellor from approved and eligible contractors of CPWD (and those of appropriate list of PWD/DOT/MES/BSNL/MIES/ MCD) or any Govt. or Autonomous body for the work of Periodically Repairing and Maintenance of Existing Water Supply G.I & C.I. Pipe Line from Main Gate to Housing Complex, Distribution Lines up to Over Head Tanks at MGRC, Lines from Tube wells up to Pump Houses etc. at IGNOU Campus & other Allied Related Works.

- 1. The enlistment of the contractor should be valid on the last date of sale of tenders.
- 2. In case only the last date of sale of tender is extended, the enlistment of contractor should be valid on the original date of sale of tenders.
- 3. In case both the last date of receipt of application and sale of tenders are extended, the enlistment of contractor should be valid on either of the two dates i.e. original date of sale of tender or the extended date of sale of tenders.
- 4. The work is estimated to cost Rs. 8,18,603/- (Rs. Eight Lacs Eighteen Thousand Six Hundred Three Only). This estimate, however, is given merely as a rough guide.
- 5. The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the tenders. He will also nominate Division which will deal with all matters relating to the invitation of tenders. For composite tenders, besides indicating the combined estimated cost put to tender, should clearly indicate the estimated cost of each component separately. The eligibility of tenderer will correspond to the combined estimated cost of different components put to tender.
- 6. The tenders will be issued to eligible contractors provided they produce definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority of having satisfactorily completed similar works of magnitude as specified in the advertisement.
- 7. Agreement shall be drawn with the successful tenderer on prescribed Form No. CPWD-8 which is available as a Govt. of India publication. Tenderer shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
- 8. The time allowed for carrying out the work will be **Twelve months** from the date of start as defined in the Schedule 'F' or from the first date of handing over the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
- 9. The site for the work is available.

- 10. Applications for issue of forms shall be received and tender documents shall be issued by ------ (upto 2.30 p.m.). Tender documents consisting of plans, specifications, the schedule of quantities of various classes of work be done and the set of terms and conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents can be seen in the office of the Executive Engineer between hours of 11.00 a.m. & 4.00 p.m. up to 21.7.2014 everyday except on Saturdays/Sundays and Public Holidays. Tender documents, excluding standard for, will be issued from his office, during the hours specified above, on payment of Rs. 1000/- in cash (non-refundable) as cost of tender.
- 11. Earnest Money of **Rs. 16372/-** in shape of Pay Order/Demand Draft of a schedule Bank issued in favour of IGNOU, New Delhi should accompany the tender
- 12. Tenders, which should always be placed in sealed envelope, with the name of work and due date written on the envelopes, will be received by the 23.7.2014 up to 3.00 p.m. and will be opened by him or his authorized representative in his office on the same day at 3.30 p.m.
- 13. The contractor, whose tender is accepted, will be required to furnish Performance Guarantee of 5% (Five percent) of the tendered amount within the period specified in Schedule 'F'. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10,000/-) or Deposit at call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand draft of any scheduled bank/ Pay order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government securities of Fixed deposit receipts or Guarantee bonds of any Scheduled bank or the State Bank of India in accordance with the prescribed form.
- 14. Description of work is given at Page No. 1 may be seen. Copies of other drawings and documents pertaining to the works will be open for inspection by the tenderers at the office of the above mentioned officer. Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools and plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plants etc will be issued to him by the IGNOU and local conditions other factors having a bearing on the execution of work.
- 15. The competent authority on behalf of Vice Chancellor, Indira Gandhi National Open University does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all tenders received without assignment of any reasons. All tenders in which any of the prescribed condition is not fulfilled or any conditions including that of conditional rebate is put forth by the tenderer shall be summarily rejected.

- 16. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- 17. The competent authority on behalf of Vice Chancellor, Indira Gandhi National Open University reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
- 18. The contractor shall not be permitted to tender for work in IGNOU (responsible for award and execution of contracts) in which his near relative is posted as Divisional Accountant or as an officer in any capacity between the grade of Suptd Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relative to any gazetted officer in the University. Any breach of this condition by the contractor would render him liable to be removed from the approved list of the contractors of this department.
- 19. No Engineer of gazetted rank or other gazetted officer employed in Engineering or Administrative duties in an Engineering deptt of the University is allowed to work as a contractor for a period of one year after his retirement from service, without the previous permission of the University authorities in writing. The contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such person who had not obtained the permission of the University as aforesaid before submission of the tender or engagement in the contractor's service.
- 20. The tender for the works shall remain open for acceptance for a period of ninety (90) days from the date of opening of tenders. If any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the University shall, without any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the re-tendering process of the work.
- 21. This Notice Inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the Accepting authority, shall, within 15 days from the stipulated date of start of the work, sign the contract consisting of :
 - (a) The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, is forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
 - (b) Standard CPWD form 8.
- 24. For composite tenders
 - (i) The tenderer must associate with himself agencies of the appropriate class eligible to tender for the other components individually.
 - (ii) It will be obligatory on the part of the tenderer to sign the tender document for all the components. (The schedule of quantities, conditions and special conditions etc).
 - (iii) After the work is awarded, the contractor will have to enter into separate agreements for each component with the officer concerned.

- (iv) Executive Engineer in charge of minor component shall make interim payments in respect of minor component of work. Executive Engineer In charge of the major component shall make the payment against final bill of the composite work
- (v) The Executive Engineer In charge of the major component will call tenders for the composite work. The cost of tender document and earnest money will be fixed with respect to the combined estimated cost put to tender for the composite tender. Security deposit will be worked out separately for each component corresponding to the estimated cost of the respective component of woks. The earnest money will become part of the security deposit of the major component of work.
- (vi) On acceptance of composite tender by the competent authority, the letter of award will be issued by the Executive Engineer In charge of the major component on behalf of Vice Chancellor, IGNOU, making it clear in the letter of award that the contractor will have to execute separate agreements for different components of work with the concerned officers of the respective discipline.

EXECUTIVE ENGINEER (CIVIL) Engineer In charge For and on behalf of Vice Chancellor, IGNOU

SCHEDULE 'F'

Reference to General conditions of the contract.

Name of Work Periodically Repairing and Maintenance of Existing Water Supply G.I & C.I. Pipe Line from Main Gate to Housing Complex, Distribution Lines up to Over Head Tanks at MGRC, Lines from Tube wells up to Pump Houses etc. at IGNOU Campus & other Allied Related Works.

Estimated cost of work	Rs. 8,18,603/-	
(i) Earnest Money	Rs. 16372/-	
(ii) Performance Guarantee:	5% of tendered value	
(iii) Security deposit	5% of tendered value	
General Rules & Directions		
Officer Inviting tender	Executive Engineer	
Maximum percentage for quantity of Executed beyond which rates are to Accordance with Clauses 12.2 and 2	be determined in	30%
Definitions		
2(v) Engineer In charge		Executive Engineer
2(viii) Accepting Authority		Vice Chancellor
2(x) Percentage on cost of material Cover all overheads and profits		15%
2(xi) Standard Schedule of Rates		CPWD DSR'2013
2(xii) Department		CMD
9(ii) Standard CPWD contract form		CPWD form 8 as Modified up to date
 Clause-1 (i) Time allowed for submission of From the date of issue of letter o (ii) Maximum allowable extension I 	facceptance	10 days
in 1 (i) above		03 days

Clause-2

Material covered under this clause	Nearest material for which All India wholesale price index is to be followed
Component of labour expressed as percent of valu Clause 10-CA	ue of work 25% Not Applicable
Clause 10C	
Whether clause 10-B (ii) shall be applicable	No
Clause-10B	
3 4	
1 2 As per CPV	
List of testing equipments to be provided by the c	ontractor at site lab
Clause-10A	
Gross work to be done together with net payment of advances for material collected, if any, since th such payment for being eligible to interim payment	ne last
Clause-7	
Clause applicable (6 or 6-A)	6A
Clause 6, 6A	
Time allowed for execution of work	Twelve Months
Mile stone (s) as per table given below :	
Number of days from the date of issue of letter of For reckoning date of start	acceptance 10 days
Clause-5	
Whether clause 2-A shall be applicable	No
	N
Clause-2A	
Authority for fixing compensation under clause-2	Chief Project Officer

Material covered under this clause	Nearest material for which All India
	wholesale price index is to be followed

1. Not Applicable	
Clause-10CC	
Clause 10-CC to be applicable in contra period of completion exceeding the peri next column	1
Clause-11	
Specification to be followed for execution	on of work CPWD Specifications
Clause-12	
12.2 & 12.3 – Deviation limit beyond w 12.3 shall apply for buildin	
12.5 Deviation limit beyond wh 12.3 shall apply for founda	
Clause-16	
Competent authority for deciding reduce	e rates Vice Chancellor
Clause-18	
List of mandatory machinery, tools and at site.	plants to be deployed by the contractor
As per clarification and requirements with	th all safety devices.
Clause 36 (i)	
Requirement of Technical Representativ	e(s) and recovery rates Not Applicable
Clause-42	
 (i) (a) Schedule/statement for detern Quantity of cement & bitumen DSR 2007 printed by CPWD 	-
(ii) Variations permissible on theore	tical quantities.
(a) Cement for works with estima not more than Rs. 5 lakh	ted cost put to tender 3% plus/minus
for works with estimated cost than Rs. 5 lakh	put to tender more 2% plus/minus

(b) Bitumen All works	2.5% plus only and nil on minus side
(c) Steel reinforcement and structural steel sections for each diameter, section and category	2% plus/minus
(d) All other material	NIL

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

		Rate in figures and words at which recovery shall be made from the Contractor				
S.N.	Description of item	Excess beyond permissible variation	Less use beyond the permissible variation			
1	Cement					
2	Steel Reinforcement					
3	Structural sections					
4	Bitumen issued free					
5.	Bitumen issued at stipulated fixed price					

Name of Work :- Periodically Repairing and Maintenance of Existing Water Supply G.I & C.I. Pipe Line from Main Gate to Housing Complex, Distribution Lines up to Over Head Tanks at MGRC, Lines from Tube wells up to Pump Houses etc. at IGNOU Campus & other Allied Related Works.

SPECIFICATION AND SPECIAL CONDITIONS

- 1. Unless otherwise specified the work shall be carried out in accordance with the printed CPWD specification 2009 for the works at Delhi with correction slips issued till the date of opening of tender. In the event of any dispute the following shall be the order of priority to decide the issue:-
 - (a) Nomenclature of item read with special conditions of the contract and general specifications
 - (b) CPWD specifications
 - (c) BIS/ specifications
 - (d) Instructions of Engineer-in-charge.
- 2. Before quoting, the contractor shall inspect the site of work and shall fully acquaint himself about the conditions with regard to accessibility of site required for the satisfactory execution of work. No claim whatsoever shall be entertained by the deptt. on this account.
- 3. The scope of work is to repair/maintain the existing old pipe lines in campus as and when required, the agency has to arrange the required technical as well as specialized main power and ensure that the damaged pipe lines are repaired in time bound manner. Daily a supervisor of the agency will enquire from concerned engineers of university regarding complaints/requirement of work. Agency has to provide mobile telephone number of the supervisor to department and after attending the work written information to be provided to concern by the contractor.
- 4. The quantities shown in the schedule are tentative and may change as per site conditions. The contractor shall not claim anything extra on this account. The payment of additional/deviated quantities shall be made as per actual and as per the conditions of the contract/agreement.
- 5. The work executed under the contract shall be subject to inspection carried out by the departmental officers, any defects regarding workmanship or quality of material used as pointed out during or after the completion of work by the departmental officers shall have to be rectified by the contractor at his own cost and risk, and in case the contractor fails to do so, the same will be got rectified by the deptt. at the risk and cost of the contractor.
- 6. All precautionary measures should be adopted for the safety purposes for any accident during the execution of work occurring at site, the contractor shall be overall responsible for the same.
- 7. The contractor shall carry out the various tests as enumerated in CPWD/BIS specification. The contractor shall bear the cost of testing of materials, sample preparation and its cartage to approved laboratory. Nothing extra shall be paid by the deptt on this account. All tests shall be carried out from any Govt. approved laboratory.
- 8. After satisfactory completion of work in each flat a certificate in enclosed format duly signed by the occupant will be provided to Engineer-in-charge. Payment will be released for the work executed in the particular flat only after receipt of satisfactory completion of work from the bonafide occupant. If agency could not obtain a satisfactory completion certificate from occupant due to any other reason beyond the control of agency then the decision of Engineer-in-charge regarding quality & completion is for release of payment.

- 9. After the award of work, if agency fails to start the work or does not perform the awarded work properly and /or in time, the earnest money, security deposited and performance guarantee submitted by the agency will be forfeited 100% and the agency will be debarred for a period of three years to participate in any tender for IGNOU works.
- 10. Defect liability period shall be 12 (Twelve) Months from the date of completion of work as per completion certificate.
- 11. All Tools and Plants, equipment required for execution of work must be provided by the agency at site to assign labour for the work.
- 12. The electricity required for execution of work will be made available at free of cost at common meter of individual block and required wiring and safety measure has to be provided by agency.

NOTE

In this NIT/Agreement wherever the word mentioned under column 'A' appear the same may be construed to mean the word opposite to it in column 'B' as given below except for CPWD Contractor's labour Regulation, CPWD Safety Code, CPWD Specification and Delhi Schedule of Rates CPWD.

'A''	'B'
Central PWD, CPWD	Indira Gandhi National Open University
President of India	Vice Chancellor, IGNOU
Chief Engineer	Chief Project Officer
Superintending Engineer	Chief Project Officer
Divisional Officer Engineer In charge	Executive Engineer, CMD, IGNOU
Sub-Divisional Officer	Assistant Executive Engineer/Asstt. Engineer, CMD, IGNOU

SCHEDULE OF QUANTITIES

Estimated Cost:-Ernest Money :-Time Allowed:-Name of Work:- Rs.8,18,603/-Rs.16372/-

Twelve Months

Periodically Repairing and Maintenance of Existing Water Supply G.I & C.I. Pipe Line from Main Gate to Housing Complex, Distribution Lines up to Over Head Tanks at MGRC, Lines from Tube wells up to Pump Houses etc. at IGNOU Campus & other Allied Related Works.

Item	Sub-heads and Item of Work	Quantity	Unit	Rate	Amount
<u>No.</u> 1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil / Ordinary rock		cum		
2	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia / Pipes, cables etc. exceeding 80 mm dia but not exceeding 300 mm dia		mtr		
3	Providing and fixing ball valve (brass) of approved quality, High or lowpressure, with plastic floats complete :				
	(a) 15 mm nominal bore	50	each		
	(b) 20 mm nominal bore	50	each		
	(c) 25 mm nominal bore	50	each		
4	Providing and fixing G.I. pipes complete with G.I. fittings and clamps,i/c cutting and making good the walls etc.				
	(a) 20 mm dia nominal bore	100	mtr		

Item No.	Sub-heads and Item of Work	Quantity	Unit	Rate	Amount
	(b) 25 mm dia nominal bore	100	mtr		
	(c) 32 mm dia nominal bore	100	mtr		
5	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :				
	(a) 20 mm nominal bore	125	each		
	(b) 25 mm nominal bore	125	each		
	(c) 32 mm nominal bore	125	each		
6	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
	(a) 25 mm nominal bore	60	each		
	(b) 32 mm nominal bore	60	each		
7	Providing and laying Double Flanged (screwed / welded) Centrifugally (Spun) Cast Iron, Class B (IS : 1536) :				
	(a) 100 mm dia C.I. Double Flanged Pipe	20	mtr		
	(b) 150 mm dia C.I. Double Flanged Pipe	20	mtr		
	(c) 200 mm dia C.I. Double Flanged Pipe	20	mtr		
8	Providing and fixing C.I. sluice valves (with cap) complete with bolts, nuts, rubber insertions etc. (the tail pieces if required will be paid separately):				
	(a) 100 mm diameter Class I	5	each		
	(b) 150 mm diameter Class I	5	each		
	(c) 200 mm diameter Class I	5	each		
9	Providing lead caulked joints to spun iron or C.I. pipes and specials, including testing of joints but excluding the cost of pig lead :				
	(a) 100 mm diameter pipe	25	each		
	(b) 150 mm diameter pipe	25	each		
	(c) 200 mm diameter pipe	25	each		
10	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	15.00	cum		

Item	Sub-heads and Item of Work	Quantity	Unit	Rate	Amount
No.	12 mm cement plaster of mix : 1:6 (1 cement: 6 fine sand)	25.00			
11		25.00	sqm		
12	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer. Using flats 30x6mm for diagonal braces and central cross piece	50.00	sqm		
13	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size)	5.00	cum		
14	Providing and laying S&S C.I. standard specials such as tees, bends,collars, tapers, caps etc. (Heavy class) : Up to 300 mm dia	5.00	quintal		
15	Supplying pig lead at site of work.	1.00	quintal		
16	Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main :				
	(a) 15 mm nominal bore	20	each		
	(b) 20 mm nominal bore	20	each		
	(c) 25 mm nominal bore	20	each		
17	Structural steel work riveted, bolted or welded in built up sections, trussesand framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	300.00	kgs		
18	Providing and laying S&S C.I. Standard specials such as tees, bends, collars tapers and caps etc, suitable for flanged jointing as per IS : 1538 :Up to 300 mm dia	5.00	quintal		