DELHI DEVELOPMENT AUTHORITY PRESS TENDER NOTICE (FOR GENERAL WORKS)

PWD- 6 / NIT No2/EE/RPD1/2008-09

Sealed item Rate Tenders are invited for the following work by the Executive Engineer (RPD-1), DDA Rohini Office Complex, Sector-3, Deepali Chowk, Rohini upto 3.00 P.M. on behalf of DDA from the approved contractor of appropriate class of DDA, CPWD, Railways, MES and P & T which shall be opened on the same day at 3.30 P.M. at Vikas Sadan (Press Building) near INA market, New Delhi in the presence of intending purchaser or their authorized representative.

The tender documents can be had on any working day from the Tender Sale Counter, Vikas Sadan, DDA, New Delhi on any working day between 11.00 A.M. to 3.00 P.M. on payment of cost of tender (non refundable) on production of Valid Registration Certificate, STCC issued by Sales Tax Department in original. The issue of tender forms shall be stopped 4 days (including the date of opening) before the fixed for the opening of tender documents.

The Earnest Money will be deposited at the time of sale of tender in the form of Call Deposit Receipt, Fixed Deposit Receipt valid for a period of six months or demand draft of a schedule bank guaranteed by the Reserve Bank of India in favour of Sr. A.O. (CAU) Rohini, DDA

The tenderers whose tender is decided to be accepted by the competent authority shall be required to submit performance guarantee equals to 5% of the tender amount in the prescribed form in accordance with clause 1-A of the conditions of contracts mentioned in the NIT within 15 days from the issue of letter of intent failing which the earnest money deposited by him/them shall be forfeited absolutely . Other terms & conditions of PWD-6 shall remain unchanged.

S.No	Name and address of Division and NIT No.	Name of work	Estimated Cost of Composite Work/ Earnest Money/ Cost of Tender	
1	EE/ RPD -1 / DDA/ Rohini office complex, Sector 3, Rohini, Delhi 110085	M/o completed scheme in Rohini Zone. SH: Repair of 24m R/W road in Sector-27 & 28 Rohini Ph-IV & V. NIT No.3/EE-RPD-I/DDA/087-09	Rs.11,58,941/- Rs23,179/- Rs.500/-	21.05.2008 26.05.2008 2 months
2	EE/ RPD -1 / DDA/ Rohini office complex, Sector 3, Rohini, Delhi 110085	M/o completed scheme in Rohini Zone under Nazul A/c-II. SH: Repair of 80m R/W road from RD -00 to RD-700 upto junction of 60M R/W road (Rithala Road). NIT No.2/EE-RPD-I/DDA/08-09	Rs.4,03,704/- Rs.8074/- Rs. 500/-	21.05.08 26.05.08 1 Month

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3.	EE/RPD-1/DDA/ Rohini Office Complex, Sector 3, Rohini, Delhi-85	C/o 500 EWS Houses for Slum Rehabilitation in Sector-4, Rohini (Adjoining to 2016 One Room Tenements) SH: C/O 512 EWS Houses including internal Development and internal Electric Installations. NIT No.2/EE(P) -I/SE (P) R	Rs.9,79,50,189/- Rs.19,59,004/- Rs. 1500/-	28.05.2008 2.06.2008 19 Months

Eligibility Criteria for S.No.3:

- <u>a)</u> The tenders shall be issued to the firms/contractor who have satisfactorily completed similar nature of works costing as below during the last seven years ending 31.3.08. Must produce definite proof from the appropriate authority.
 - (i) Three similar completed works each of cost not less than the amount equal to 40% of the estimated cost put to tender or
 - (ii) Two similar completed works each of cost not less than the amount equal to 50% of the estimated cost put to tender or
 - (iii) One similar completed work not less than the amount equal to 80% of the estimated cost put to tender.

Note: Class II contractor of DDA & CPWD shall also be eligible if they satisfy the criteria as above

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<u>IN LIEU OF PWD 7,8 & 12</u>

DELHI DEVELOPMENT AUTHORITY ROHINI PROJECT DIVISION 1

(Due to shortage of PWD-7,8 & 12 the same has not appended to this tender documents. Tenderers are requested to see the NIT along with upto date correction slip in the office)

Name of the Contractor :

Date of issue of tender :	
Cost of tender :	Rs. 500/-
Date of opening of tender	26.05.08
Performance guarantee :	5% of the tender cost
Security :	5% of the tendered cost.
Earnest Money :	Rs. 23,179/-
Item /percentage rate Rate tender for the work of Estimated Cost	M/o Completed scheme in Rohini Zone SH: Repair of 24 Mtr. R/W road in Sect. 27 & 28 Rohini Ph. IV & V Rs.11,58,941/-
Time of completion	2 Months
the PWD-7,8 & 12 with am/are and conditions as contained in	Executive Engineer, RPD-1, died the draft NIT in the office of the EE/RPD-1, DDA Delhi on quoting my /our percentage rate on the basis of these terms the Draft NIT will form part of the act agreement to be of the above work rate per centage
tender for work shall be remai tenders if any tenderer with modifications in the terms and	Signature of the contractor hrough the amend clause 22 of PWD-6 which provided "The n open for a period of sixty days from the date of opening or ndraws his tender before the said period or makes any conditions of the tender which are not acceptable to the Deptt rejudice to other right or remedy be at liberty to forfeit the coney absolutely.
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ABSTRACT OF COST

NAME OF Work: M/o Completed scheme in Rohini Zone

SH: Repair of 24 Mtr. R/W road in Sect. 27 & 28 Rohini Ph. IV & V

S.No.	Description of item	Qty.	Unit	Rate	Amount
1.	Supplying and stacking at	168.00	cum		
	site	cum			
	a) 5mm to 22.4m size stone agg. `				
2.	Supplying & stacking at site				
۷.	a) 11.2mm stone screening	28.00	Cum		
	nominal size (Type B)	cum	Cum		
3.	Supplying and stacking at	12.00	Cum.		
3.	site	cum	Cuiii.		
	a)Red bajri	cum			
4.	Laying spreading and	135.00	Cum		
	compacting stone agg. Of	cum			
	specified sizes to				
	specifications, including				
	spreading in uniform				
	thickness, hand picking,				
	rolling with 3 wheeled				
	road/vibratory rolloer 8-10				
	tonne in stages to proper				
	grade and camber ,				
	supplying and brooming				
	requisite type of				
	screening/binding material				
	to fill up interstices of coarse aggregate watering and				
	compacting to the required				
	density.				
5	Providing and applying tack				
	coat using hot straight run				
	bitumen of grade 80/100				
	including beating the				
	bitumen, spraying the				
	bitumen boiler, cleaning and				
	preparing the existing road				
	a) On WBM @ 0.75 Kg.	1793.00			
	/sqm.	sqm.			

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	b) On bituminous	6164.00		
	surface @ 0.50	sqm		
	Kg./sqm.	34111		
6.	2.5cm premix carpet			
0.	surfacing with 2.25 cum and			
	· ·			
	1.12 cum of stone chippings			
	of 13.2mm and 11.2mm size			
	respectively per 100 sqm.			
	and 52 kg. and 56 kg. of hot			
	bitumen per cum of stone			
	chipping of 13.2,, and			
	11.2mm size respectively			
	including a tack coat with			
	hot straight run bitumen			
	including consolidation with			
	road roller of 6 to 9 tonne			
	capacity etc. complete (tack			
	coat to be paid for			
	separately).			
	a) With paying Asphalt	7957.00	sqm	
	80/100	sqm		
7.	Brick edging in full brick	282.50	Mtr.	
	width and half brick depth	Mtr.		
	including excavation, refilling			
	and disposal of surplus earth			
	lead upto 50 Mtrs.			
	a) with FPS bricks of class			
	designation 75.			
8	Surface dressing of the	3865.00	100	
	ground including removing	sqm.	sqm.Sqm.	
	vegetation and in qualities			
	not exceeding 15 cm deep			
	and disposal of rabbish lead			
	upto 50m and lift upto 1.5m			
	a) All kind of soil			

Note: If rate not quoted in words tender will be rejected.

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<u>IN LIEU OF PWD 7,8 & 12</u>

DELHI DEVELOPMENT AUTHORITY ROHINI PROJECT DIVISION 1

(Due to shortage of PWD-7,8 & 12 the same has not appended to this tender documents. Tenderers are requested to see the NIT along with upto date correction slip in the office)

Name of the Contractor

Date of issue of tender :			
Cost of tender :	Rs. 500/-		
Date of opening of tender	26.05.08		
Performance guarantee :	5% of the tender cost		
Security :	5% of the tendered cost.		
Earnest Money :	Rs. 8074/-		
Item /percentage rate Rate tender for the work of	M/o Completed scheme in Rohini Zone under N.A. II . SH: Repair of 80 Mtr. R/W road from R.P.DI, DDA-00 to R.P.DI, DDA-700 upto upto junction of 60M R/W road (Rithala Road)		
Estimated Cost Time of completion	Rs.403704/- 1 Month.		
the PWD-7,8 & 12 with am/are and conditions as contained in t	Executive Engineer, RPD-1, died the draft NIT in the office of the EE/RPD-1, DDA Delhi on quoting my /our percentage rate on the basis of these terms the Draft NIT will form part of the act agreement to be of the above work rate per centage		
Signature of the contractor Note: Tenderers are advised to go through the amend clause 22 of PWD-6 which provided "The tender for work shall be remain open for a period of sixty days from the date of opening of tenders if any tenderer withdraws his tender before the said period or makes any modifications in the terms and conditions of the tender which are not acceptable to the Deptt Then the DDA shall without prejudice to other right or remedy be at liberty to forfeit the entire amount of the earnest money absolutely.			
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ABSTRACT OF COST

NAME OF Work: M/o Completed scheme in Rohini Zone under N.A. II .

SH: Repair of 80 Mtr. R/W road from R.P.D.-I, DDA-00 to R.P.D.-I, DDA-700 upto junction of 60M R/W road (Rithala Road)

	junction of 60M R/W	_	ila Noauj	T	ı
S.No.	Description of item	Qty.	Unit	Rate	Amount
1.	Providing & applying tack coat using hot straight run bitumen of grade 80/100 including hearting the bitumen spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications				
	a) On bituminous surface @ 0.50 Kg. /sqm	301.00 Sqm	Sqm.		
	b) On WBM surface @ 0.75 kg/sqm	2707.00 sqm	Sqm.		
2.	2.5 premix carpet surfacing with 2.25 cum and 1.12 cum of stone chippings of 13.2mm and 11.2mm size respectively per 100 sqm. and 52 kg. and 56 kg. of hot bitumen per cum of stone chipping of 13.2mm and 11.2mm size respectively including a tack coat with hot straight run bitumen including consolidation with road roller of 6 to 9 tonne capacity etc. complete (tack coat to be paid for separately)with paving Ashphalt 80/100	3008.00 sqm.	Sqm.		
3.	Supplying and stacking at site. a) Stone agg. Of site range 53mm to 22.4	28.00 cum	Cum		

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	mm		
	b) Stone screening	5.00	cum
	/chipping 11.2 mm	cum	
	size.		
4	Laying spreading and		
	compacting stone aggregate		
	of specified sizes to specifications including		
	spreading in uniform		
	thickness hand picking,		
	rolling with 3 wheeled road		
	/vibracry roller 8 to 10 tonne		
	in stages to proper grade and		
	camber, applying and		
	brooming requisite type of		
	screening/binding material to	23.00	Cum.
	fill up to interstices of coarse	cum.	
	aggregate watering and		
	compacting to the required		
_	density.	4225.00	100.00 5
5.	Surface dressing of the	1225.00	100.00 Sqm.
	ground including removing vegetation and in equalities	Sqm.	
	not exceeding 15 cm deep		
	and disposal of rubbish, lead		
	utp 50m and lift upto 1.5m		
	a) All kind of soil.		

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Certified t	that this N.I.T. Contains Pages 1 to 214 i.e. (One to Two Hundred for	urteen only)
A.E.(P)	EE(P)-II SE(P)R Chief Engineer(Rohini).	
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INSTRUCTIONS TO EXECUTIVE ENGINEER

The Executive Engineer may kindly attend the following points before inviting tender.

- Executive Engineer before preparation of copies of tender documents for sale, shall go
 through the N.I.T. and in case any discrepancy is noticed, the same should be got
 corrected from this office immediately.
- 2. The detailed Structural & Architectural Drawings should be made available to the contractor at the time of issue of N.I.T.
- 3. Condition at S.No.2 (a) of PWD-6 regarding availability of site has been provided which Executive Engineer should confirm before issue of Press Tender Notice.
- 4. Press Notification given at **Page-3** is to be filled up by Executive Engineer before issue of NIT
- 5. Date and Time and other details are to be filled by Executive Engineer in PWD-6 and press Tender Notice.
- Executive Engineer should comply the order of the Chief Engineer issued vide no. CE (27)83/WAB/C/9/95 dated 4.1.83 before issuing the tender (Ref 4(a) Section-19 of the CPWD Manual Vol.II).
- 7. The Executive Engineer will obtain a guarantee bond as para 10 of Gen. Specification at page 76 of NIT for all items involving water proofing.
- 8. Action shall be taken for approval of service layout plans i.e. water supply, sewerage, storm water drains etc by the EE from local bodies well in time, so as to ensure that work is not hindered for want of approval of service plans.
- 9. The N.I.T has been approved, subject to the above remarks, for Rs. 9,79,50,189/-.

Note: This page contains Instructions to Executive Engineer, hence should not form part of tender document/Agreement.

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DELHI DEVELOPMENT AUTHORITY

PRESS TENDER NOTICE

		PRESS TEND	EK NOTICE			
Pre	ss Notice/NIT No					
to 3. CPW Build	Sealed Item rate tenders are invited for the following work by the Executive Engineer, RPD - 1, DDA, up to 3.00 PM on on behalf of DDA from the approved contractors of appropriate class of DDA, CPWD, MES, P & T & Railways which shall be opened on the same day at 3.30 PM at Ground Floor, Press Building, Vikas Sadan, near INA market, DDA Office, New Delhi in the presence of intending tenderers or their authorized representatives.					
cour on p Dept work	The tender documents can be had on any working day from the office of CAU Rohini Zone or Sale counter Vikas Sadan between 11.00 A.M. to 3.00 P.M. on payment of cost of tender (non–refundable) on production of valid enlistment certificate and valid registration with works contract cell of VAT Deptt. of GNCTD under Delhi Value Added Tax Act 2004 and tax clearance certificate issued by the works contract cell. Sale of tender forms will be stopped four days (including the date of opening) before the date fixed for the opening of tender documents.					
repr	manner of submission of tendesentatives to the place of oper sender documents. details of tender are also availa	ning shall be as pr	ovided in clau	se 3(a), (b) c		
S.N o	Name of work	Estt. Cost	Earnest Money	Cost of Tender	Time Allowed	Late date of issue / Receipt of Tender
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1.	C/o 500 EWS Houses for Slum rehabilitation in Sector-4, Rohini, adjoining to 2016, One-Room tenements. Sub-Head: Construction of 512 EWS Houses including internal development and internal Electric Installations.	Rs. 9,08,98,949/- for civil work and Rs.70,51,240/- for electrical work. Total: Rs.9,79,50,189/-	Rs. 19,59,004/-	Rs. 1500/-	19 months	
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2. Eligibility Criteria:

- (a) The firms/Contractor who have satisfactory completed similar nature of work costing as below during the last seven years ending 31.03.2008. Must produce definite proof from the appropriate authority.
- (i) Three similar complete works each of cost not less than the amount equal to 40% of the estimated cost put to tender.

OR

(ii) Two similar completed works each of cost not less than the amount equal to 50% of the estimated cost put to tender.

OR

(iii) One similar completed work costing not less than the amount equal to 80% of the estimated cost put to tender.

Note: Class 2 contractors of DDA and CPWD shall also be eligible if they satisfy the Criteria specified in 2 above.

EXECUTIVE ENGINEER

Rohini Project Divn-1/DDA

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DELHI DEVELOPMENT AUTHROITY

NOTICE INVITING TENDERS

DIVISION: RPD-

Sealed item rate tenders in the prescribed form are hereby invited on behalf of the DDA for the work:-

Name of work: Construction of 500 EWS Houses for Slum Rehabilitation in Sector-4, Rohini (Adjoining

to 2016 one room tenements).

Sub-Head: C/o 512 EWS Houses in Sector-4, Rohini including internal development and internal

Electric installations.

Estimated Cost: Rs. 9,79,50,189/-

1. From the approved and eligible contractors of DDA and CPWD and those on appropriate list of P&T, MES and Railways which shall be opened on the same day. The enlistment of the contractors should be valid on the last date of sale of tenders. In case the last date of sale of tender is extended, the enlistment of the contractor should be valid on the original date of sale of tenders. In case both the last date of receipt of application and sale of tenders are extended, the enlistment of the contractor should be valid on either of the two dates i.e. original date of sale of tender or on the extended date of sale of tender.

Eligibility Criteria:

(a) The firms/Contractor who have satisfactory completed similar nature of work costing as below during the last seven years ending 31.03.2008. Must produce definite proof from the appropriate authority.

(i) Three similar complete works each of cost not less than the amount equal to 40% of the estimated cost put to tender.

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(ii)	Two similar completed works each of cost not less than the amount equal to 50% of
	the estimated cost put to tender.

(iii) One similar completed work costing not less than the amount equal to 80% of the estimated cost put to tender.

Note: Class 2 contractors of DDA and CPWD shall also be eligible if they satisfy the Criteria specified in eligibility criteria above.

OR

- Contract documents consisting of the detailed plans, complete specification, the schedule of
 quantities of the various items of work to be done and a set of conditions of contract can be
 seen/purchased from the office of CAU (Rohini Zone)/Sale Counter Vikas Sadan between 11.00
 AM to 3.00 PM every day except on Second Saturday, Sunday and public holidays.
 - (a) The site of the work is available which may be seen before tendering.
 - (b) The **Time Allowed** for carrying out the work will be <u>19 months</u> from the 10th day after the date of written orders to commence the work or from the first day of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
- 3. (a) The tender shall be placed in sealed covers to be issued by the Division Office / CAU/Rohini Zone/DDA, Sale counter at Vikas Sadan, New Delhi duly prescribed the Name of work, Estimated Amount, Day and date of opening and Name of Contractor to whom the tender documents are sold. These tenders will be submitted by the contractor at Vikas Sadan, Press Building, Near INA Market, New Delhi for Rohini Zone Works.
 - (b) Offers can also be sent by the contractors through Registered post to the Executive Engineer concerned but such offers must reach at least one day before the date of opening of tenders.
- 4. Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to 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 RPD-1 / DDA between 11 AM to 3 PM on any working

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day. Tender documents will be issued during the above mentioned hours on any working day from offices of CAU, Rohini, Sale Counter Vikas Sadan, INA, on payment of the following amount:-

- i) Rs.1,500/-in cash as cost of tender (non refundable)
- **Earnest Money** of Rs. 19, 59, 004/- in cash up to Rs.10,000/- only/Receipt Treasury challan/Deposit at Call, Receipt of a Scheduled Bank/Fixed Deposit Receipt of a Scheduled Bank/Demand Draft of a Scheduled Bank issued in favour of Sr. AO (CAU) Rohini Zone, DDA shall be deposited at the time of submission of tender documents. 50% of earnest money or Rs.20 lacs whichever is less, shall be deposited in the form as described above & for balance amount of earnest money, Bank Guarantee issued by a Schedule bank will also be accepted in favour of Sr.AO (CAU) Rohini Zone, DDA.

It shall be ensured that Demand Draft/Fixed Deposit Receipt is valid for a period of Six months or more after the last date of receipt of tender and the same shall be in favour of Sr. AO, CAU (Rohini). No interest shall be paid on earnest money as deposited with DDA.

- 5. The contractor should quote in figures as well as in words the rate and amount tendered by them. The amount for each item should be worked out and the requisite totals be given.
- 6. When a contractor signs a tender in an Indian language, total amount tendered in the PWD form No.8 should also be written in same language. In the case of illiterate contractor the rate/amount tendered should be attested by a witness.
- 7. The issue of tender form will be stopped four days before (including date of opening) the date fixed for opening of tender.
- 8. Each tender must be submitted in sealed cover addressed to Executive Engineer, RPD-1.

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8	(a)	The contractor, whose tender is accepted, shall execute an Agreement on Rs.50/- non judicial stamp paper reiterating his acceptance of the execution of the work on the rates and conditions set in the contract document.
9.		ontractor, whose tender is accepted, shall be required to furnish by way of Performance ntee/Security Deposit for due fulfillment of his contract at the following rate:-
	a)	Performance Guarantee @ 5% (five percent) of the tendered amount for the proper performance of the contract agreement within fifteen days of issue of letter of intent. This period can be further extended by the Engineer-in-Charge up to a maximum period of seven days on written request of the contractor. This guarantee shall be in the form of Govt. Security or Fixed Deposit Receipt or Guarantee Bond of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto.
	b)	Security Deposit @ 5% (five percent) of the tendered value of the work by way of deduction from the running bills of the contractor @ 10% (ten percent) of gross amount of each running bill till the sum along with the sum already deposited as earnest money amounts to 5% of the tendered value of the work.
10.		petent authority on behalf of DDA does not bind himself to accept the lowest tender and re to himself the authority to reject any or all the tenders received without assigning any n.
11.		ssing in connection with tenders is strictly prohibited and the tender submitted by the actor who resorts to canvassing shall be liable to be rejected.
12.	All rat	es shall be quoted on the proper schedule of the tender (in figures & words)
13.	ltem r	ate tender containing percentage below/above will be summarily rejected.
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(a)	It may please be carefully noted that no condition, whatsoever, shall be accepted by
	the Department and the contractor is strictly prohibited from giving conditional
	tender and if any contractor is not prepared to execute the work at the terms and
	conditions contained in the tender documents, he is requested not to tender for this
	work. It may be noted that if any contractor chooses to submit conditional tender in
	spite of clear direction given above, his tender is liable to be summarily rejected and
	his full Earnest Money shall stand forfeited. He will also be liable for being debarred
	from tendering in DDA for a period of six months.

- (b) Monthly payment to the contractor will be made when gross amount of the work done during the previous months is not less than Rs 25,000/-.
- 14. On acceptance of the tender the name of the authorized representative of the contractor, who would be responsible for taking instructions from the Engineer- in-Charge, shall be communicated to the Engineer-in-charge.
- 15. Special care should be taken to write the rates in figures as well as in words and the amount in figures only in such a way that interpolation is not possible. Total amount should be written both in figures and in words. In case of figures, the word Rs. should be written before the figures of Rupees and P after the decimal figure e.g. Rs.2.15p and in case of words, the word Rupees should precede and the word paise should be written at the end, unless the rate is in whole Rupees and followed by the words only. The rate should invariably be in two decimal places.
- 16. DDA reserves to itself for accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
- 17. Sales tax/ VAT or any other tax on materials in respect of this contract shall be payable by the contractor and DDA will not entertain any claim whatsoever in this respect.
 - (a) Service tax wherever applicable shall however, be reimbursed to the contractor on production of proof of payment to the concerned department.
- 18. (a) Contractor must produce certificate of registration under Delhi Value Added Tax Act 2004 with Works Contract Cell of Sales Tax/VAT Department of GNCTD and Tax

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Clearance Certificate Sales Tax/VAT issued by the said Cell before the tender papers can be sold to him.

Labour Cess:

- (b) Cess under the provision of Building and Other Construction Workers (RE & CS) Act 1996 and the Building and Other Construction Workers Welfare Cess Act 1996 @ 1% of the cost of Construction/Project shall be deducted at source from the bill paid to the Contractor. DDA shall not bear any liability on account of cess being deducted and reimbursed to GNCTD in pursuance of Building and Other Construction Workers Welfare Cess Act, 1996 read with Delhi Building and Other Construction Workers (RE. & CS.) Rules, 2002.
- (c) T.D.S. @ 2% of total payment will be recovered under Delhi Value Added Tax Act 2004.
- 19. A Contractor shall not be permitted to tender for works in the DDA Zone (responsible for award and execution of contract) in which any of his near relative is posted as Divisional Accountant or as an officer in any capacity between the grades of CE and JE (both inclusive) in DDA. He shall intimate the name of his near relatives, if any, who are working as group A, B or C officer in DDA. He shall also intimate the name of the persons who are working with him in any capacity or who are subsequently employed by him and who are near relatives of any group A, B or C Officer in the DDA. Any breach of this condition by the contractor would render him liable to action under Clause 3 of the agreement. In addition, he would also be liable to be debarred from tendering in future.
- 20. The contractor shall give a list of non gazetted DDA employees related to him.
- 21. No engineer of gazetted rank or other gazetted officers employed in Engineering or Administrative duties in any Engineering Deptt. of the Govt. of India/DDA is allowed to work as contractor for a period of two years after his retirement from Govt. Service/DDA. The contract is liable to be cancelled, if either the contractor or any of his employees are found at any time to be such a person who had not obtained the permission from the Govt. of India/DDA as aforesaid, before the submission of the tender. The Engineering Deptt. of Govt. of India includes the Engineering Deptt. of CPWD, MES, Railway, P&T, DDA, NDMC, MCD, DJB and others.

22.	The tender for work shall remain open for acceptance for a period of sixty days from the date of opening of tenders. If any, tenderer withdraws his tender before the said period or issue of
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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 DDA shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid.

- 23. The tender for the work shall not be witnessed by a contractor or contractors who himself has/themselves have tendered for the same work. Failure to observe this condition would render the tender of tenderers as well as witnessing the tender liable to be summarily rejected.
- 24. Approved and eligible contractors of CPWD and those of appropriate class of DDA, Railways, P & T, and MES are also eligible to tender (refer press tender notice).
- 25. While quoting the rate in Schedule of Quantities the word 'only' should be written closely following the amount and it should not be written in the next line.
- 26. The tender for the composite work includes the Building portion, Sanitary, Water Supply, Drainage Works and Electrical Works.
- 27. The tenderer must associate with agencies of the appropriate class which are eligible to tender for Sanitary, Water Supply installation and Electrical Works.
- 28. The contractor shall submit the list of works which are in hand (in progress) in the pro forma given below.

Name of Work	Name and particulars of	Amount of	Position of	Remarks
	Division where the work	work in work		
	is being executed.	Progress		

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29. The tenderer shall inspect and study the drawings referred to in the tender documents in the office of the Executive Engineer before and for the purpose of submitting the tender.

30. Case of withdrawal of offer

Action to be taken

(i) If the contractors modify/withdraw their offer within 60 days of quoting the rates

The Earnest Money deposited by the contractor shall be forfeited to the extent of 50% and disciplinary action as deemed fit shall be taken by the department against the contractor.

(ii) If the contractor withdraws his offer after award of work

The Earnest Money deposited by the contractor shall be forfeited absolutely and disciplinary action shall be taken by the dept. against the contractor

(iii) If the contractor withdraw his offer after award of work and taking over possession of site.

It is deemed that the contractor has entered into

Agreement and action to penalize the contractor, for not completing the work within the stipulated period under Clause 2&3, will be taken against the contractor, if he abandons the site after taking over the possession of the site from the Engineerin-Charge. For taking action under Clause 2 & 3, the only documentary proof required will be the document showing signature of the contractor or his authorized representative for taking over the possession of site. It is further clarified that action under Clause 2 & 3 of the agreement attracted even though the Contractor fails to sign the agreement on Rs.50/- non-judicial stamp paper but do not start work from the tenth day after date on which the order to commence the work is issued to the contractor. The date of start of the work will be considered as date of taking over the possession of site. In case of tender for supply of material the documentary proof for start of work will be submission of samples for approval to Engineer-in-Charge i.e. in case the supply order

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is given to the contractor and he fails to supply the materials or submit the samples to Engineer-in-Charge then the action to be taken against the contractor is only the forfeiture of earnest money and if he submits the samples for supply and there after abandons the work or fails to supply the materials then action under Clause-2 & 3 is

	attracted.	
	Executive Engineer	
	Division –RPD-1	
	For and on behalf of DDA, New Delhi	
	Dated	
Name of Contractor		
Date of Application & Receipt		
Tender issued onCost of Tender Rs		
Tender issued at Vikas Sadan/CAU(Rohini)/Division	Office.	
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DELHI DEVELOPMENT AUTHORITY

Item Rate Tender For work

I/We hereby tender for the execution of the work for the DDA which is specified in underwritten memorandum within the time specified in such memorandum at the item rates entered in the schedule attached and in accordance with all aspects with the specifications, design, drawings and instructions in writing, referred to in clause-11 of the conditions of contract, and with such materials as are provided for, by and in all other respects in accordance with, such conditions so far as applicable.

Memorandum

(a) General Description

Name of work : Construction of 500 EWS Houses for Slum Rehabilitation in Sector-

4, Rohini (Adjoining to 2016 one room tenements).

SH: C/o 512 EWS Houses in Sector-4, Rohini, including internal

development and internal electric installations.

(b) Estimated Cost : Rs. 9,79,50,189/-

(c) Earnest Money : Rs.19,59,004/-

(d) Performance Guarantee : 5% of the Tendered value.

(e) Security Deposit : As per Clause 1

(f) Time allowed for the work from the 10th day after the date of written order to commence

: 19 Months

I/We hereby agree:

- (i) To abide by and fulfill all Terms and Provisions of the said Conditions annexed hereto and all the Terms and provisions contained in the Notice Inviting Tender so far as applicable and/or in default thereof to forfeit and pay to the DDA or their successors the sum of money mentioned in the said conditions.
- (ii) To execute all the works referred to in the tender documents on the Terms & Conditions contained or referred to therein and to carry out such deviations as may be ordered up to maximum of 20% and herein called the **Deviation Limit**, at the rates quoted in tender documents and those in excess of this limit at the rates to be determined in accordance with the provisions contained in clause 12-A of the tender form.

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A sum of Rs.19, 59, 004/- has been deposited in Cash/Receipt Treasury Challan/Deposit at Call Receipt of a Scheduled Bank/Fixed Deposit Receipt of a Scheduled Bank /Demand Draft of a Scheduled Bank/Bank Guarantee as earnest money as per provisions laid down in para 4 above in favour of Sr.AO/CAU/Rohini Zone. If I/We fail to furnish the prescribed Performance Guarantee within the prescribed period, I/we agree that the said DDA 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 DDA 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 & the Performance Guarantee absolutely, otherwise 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 & conditions contained or referred to therein & to carry out such deviations as may be ordered up to maximum of the percentage mentioned elsewhere in the tender documents & those in excess of that limit at the rates to be determined in accordance with the provisions contained in clause 12 & 12 A of the tender form. I/We hereby declare that I/We shall treat the tender documents, drawings & other records connected with the work as secret/confidential documents & shall not communicate information derived there from to any person other than

a person to whom I am/We are auth any manner prejudicial to the safety	orized to communicate the same or use the information in of the state.
Dated theday of	200
Signature of Witness	Signature of Contractor
Name of Witness.	Postal Address
Address	
Occupation	
ACCEPTAN	NCE
	vided in letters mentioned hereunder) is hereby accepted alf of the DDA for a sum of Rs(Rupees).
The letters referred to below shall form part o	of the Agreement.
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(a)	
(b)	
(c)	
	For and on behalf of DDA
	Signature :
	Name:
	Designation:
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General Rules and Directions

The facility of exemption for depositing the earnest money by virtue of executing the bond stands withdrawn w.e.f. 26.12.89 and all the bonds stand cancelled from this date and intending tenderer has to deposit the required earnest money with individual tender as mentioned in para 4 of form PWD-6.

- 1. All works proposed for execution by contractor will be notified in a form of invitation to tender pasted in public place signed by the Divisional Officer. This form will state the work to be carried out as well as the date for submitting and opening tenders and the time allowed for carrying out the work, the amount of earnest money to be deposited with the tender and the percentage at which the security deposit shall be deducted from the bills of the successful tenderer. Copies of the specifications, design, drawings and schedule of quantities and of rates of the various descriptions of work and any other document required in connection with the work assigned for the purpose of identification by the Divisional Officer shall also be open for inspection by the contractor at the office of Divisional Officer during office hours.
- 2. In the event of tender being submitted by a firm, it must be signed separately by each partner thereof, or in the event of the absence of any partner it must be signed on his behalf by a person holding a power of attorney authorizing him to do so. Such power of attorney to be produce with the tender and it must disclose that the firm is duly registered under the Indian Partnership act.
- 3. Receipt for payments made on account of work when executed by a firm must also be signed by the several partner except where the contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners or by some other person having authority to give effectual receipt for the firm.
- 4. Any person who submits a tender shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. Tender which proposes any alteration in the work specified in the said form of invitation to tender or in the time allowed for carrying out the work or which contains any other condition of any sort including conditional or unconditional rebates will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit a separate tender for each work. Tenders shall have the name and number of the work to which they refer written outside the envelope.
 - (a) The rate(s) and amount(s) must be quoted in decimal coinage. Amount must be quoted in full rupee ignoring fifty paisa and considering more than fifty paisa as Rupee one.

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- 5. The Divisional Officer or his duly authorized representative will open tenders in the presence of intending contractors who may be present at the time and will enter the amount of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the earnest money forwarded there with shall thereupon be given to the contractor who shall thereupon for the purpose of identification signed copies of the specifications and other documents mentioned in rule-1. In the event of tender being rejected the earnest money forwarded with such unaccepted tender shall thereupon be returned to the contractor remitting the same.
- 6. The officer inviting tenders shall have the right of rejecting all or any of the tender and will not be bound to accept the lowest tender.
- 7. The receipt of an accountant or clerk for money paid by the Contractor will not be considered as acknowledgement of payment to the Divisional Officer and the Contractor shall be responsible for seeing that he procure a receipt signed by Divisional Officer or duly authorized cashier of CAU(Rohini)DDA.
- 8. The memorandum of work tendered for the schedule of materials to be supplied by the DDA and their issue rates shall be filled in and completed in the office of the Divisional Officer before the tender form is issued. If a form issued to an intending tenderer without having been so filled in and completed, he shall request the office to have this done before he completes and delivers his tender.
- In the case of Item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the Contractor shall, unless otherwise proved, be taken as correct. If the amount of an item is not worked out by the Contractor or it does not correspond with the rates written either in figures or words, then the rates quoted by the Contractor in words shall be taken as correct. Where the rate quoted by the Contractor in figures or in words tally but the amount is not worked out correctly, the rates quoted by the Contractor will unless otherwise provided be taken as correct and not the amount. In the event of no rate has been quoted for any items(s), leaving space both in figure(s), word(s), and amount blank, it will be presumed that the Contractor has loaded the cost of this/these item(s) in other item(s) and the rate for such item(s) will be considered as Zero and work will be required to be executed accordingly.

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- 10. If it is found that the tender is not submitted in proper manner or contains too many corrections or absurd rates or amount it would be open for the DDA to reject the same.
- 11. The tenderer shall sign a declaration under the official secret Act for maintaining secrecy of the tender and shall return all the drawings or other records connected with the work given to them. The unsuccessful tenderer shall return all the drawings given to them.

DECLARATION

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

Signature of the Contractor
Address

CONDITIONS OF CONTRACT

Datin	ition:
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- 1. The **Contract** means the documents forming the tender and acceptance there of and formal agreement executed between the **Executive Engineer, DDA** and **the Contractor** together with the documents referred to therein including the conditions, specifications, design, drawing and instructions issued from time to time by the Engineer-in-Charge and all the documents taken together shall be deemed to form one contract and shall be complimentary to one another.
- 2. In the contract, the following expressions shall thereof, unless the context otherwise requires, have the meaning hereby respectively assigned to them.
 - (a) The expression Work shall, unless there be something either in the subject or context repugnant to such construction to be constructed and taken to mean the work by or by virtue of the contract to be executed whether temporary or permanent and whether original, altered, substituted or additional.
 - (b) The **Site** shall mean the land or other places or through which the work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land path of street which may be allotted or used for the purpose of carrying out the contract.
 - (c) The Contractor shall mean the individual or firm or company whether incorporated or not, undertaking the works and shall include the legal personal representative or such individual or the persons comprising such firm or company or the successors of such individual firms or company and the permitted assignees of such individual or firms or company.
 - (d) The **Authority** or DDA means the **Delhi Development Authority**.

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	(e)	The Engineer-in-Charge means the Divisional Officer who shall supervise and be incharge of the work and who shall sign the Contract on behalf of the DDA.
	(f)	The Chairman means the Lt. Governor of Delhi .
	(g)	The terms Chief Engineer means concerned Zonal Chief Engineer , DDA Words imparting the singular number include the plural number and vice-versa.
	(h)	The Chief Technical Examiner/Technical Examiner means the Chief Technical Examiner/Technical Examiner of Central Vigilance Commission of Govt. of India.
3.	correcti the Sch cover a	intractor shall be deemed to have satisfied himself before tendering as to the mess and sufficiency of his tender for the works and of the rates and prices quoted in medule of Quantities, which rates and the price shall, except as otherwise provided, all his obligations under the contract and all matters and things necessary for the proper tion and maintenance of the works.
4.	anothe	veral documents forming the contract are to be taken as mutually explanatory of one r, detailed drawings being followed in preference to small scale drawing and figured ions in preference to scale and special conditions in preference to General Conditions.
4.1		ase of discrepancy between the Schedule of Quantities, the specifications the drawings, the following order of preference shall be observed:
	a)	Description in Schedule of Quantities.
	b)	Particular specifications and Special Conditions, if any.
	c)	Drawings
	d)	CPWD Specifications
	e)	Indian Standard Specifications of BIS
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- 4.2 If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the documents and his decision shall be final and binding on the contractor.
- 4.3 Any error in description, quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the contract or release the contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.

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CLAUSES OF CONTRACT

Clause 1: Recovery of Security Deposit

The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit DDA at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 10% of the gross amount of each running bill till the sum along with the sum already deposited as earnest money, will amount to security deposit of 5% of the tendered value of the work. Such deductions will be made and held by DDA by way of security deposit unless he has/they have deposited the amount of security at the rate mentioned above in cash or in the form of Govt. Securities or FDR (FDRs). In case a FDR of any Bank is furnished by the Contractor to DDA as part of the Security Deposit and the Bank is unable to make payment against the said FDRs, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the DDA to make good the deficit.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from the interest arising therefrom, or from any sums which may be due to or may become due to the contractor by DDA on any account whatsoever and in the event of his security deposit being reduced by reason of any such deductions or sale as aforesaid, the contractor shall within 10 days make good in cash or FDR tendered by the State Bank of India(SBI) or by Scheduled Banks or Government securities (if deposited for more than 12 months) endorsed in favour of the Engineer-in-Charge, any sum or sums which may have been deducted from or raised by sale of his security deposit or any part thereof. The security deposit shall be collected from the running bills of the Contractor at the rates mentioned above and the earnest money, if deposited in cash at the time of tenders will be treated a part of the security deposit.

NOTE:

- Govt. papers tendered as security will be taken at the 5% (five percent) below its market price or at its face value, whichever is less. The market price of Govt. paper would be ascertained by the Divisional Officer at the time of collection of interest and the amount of interest to the extent of deficiency in value of the Govt. paper will be withheld, if necessary.
- Govt. Securities will include all forms of securities mentioned in rule no.274 of the G.F. Rules except fidelity bond. This will be subject to the observance of the conditions mentioned under the rule against each form of security.

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Clause1(a): Performance Guarantee

The contractor shall submit an irrevocable PERFORMANCE GURANTEE of 5% (five percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (notwithstanding and/or without prejudice to any other provisions in the contract) within 15 days of issue of the letter of intent. This period can be further extended by the Engineer- in-Charge up to a maximum period of 7 days on written request of the contractor stating the reason for delays in procuring the Bank Guarantee, to the satisfaction of the Engineer -in- Charge. This Guarantee shall be in the form of Govt. Securities or FDRs or Guarantee bonds of any Scheduled Bank or the SBI in accordance with the form annexed hereto (Annexure II). In case FDR of any Bank is furnished by the contractor to the DDA as part of the Performance Guarantee and the bank is unable to make payment against the said FDR, the loss caused hereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the DDA to make good the deficit.

ii) A letter of intent shall be issued in the first instance informing the successful tenderer by the competent Authority to accept his tender and the award letter shall be issued only after the Performance Guarantee in any of the prescribed form is received. In case of failure by the contractor to furnish the Performance Guarantee within the specified period, D.D.A. shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money absolutely.

iii) The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case the time for completion of works gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the Performance Guarantee shall be returned to the contractor, without any interest.

iv) The Engineer-in-Charge shall not make a claim under the Performance Guarantee except for amounts to which the DDA is entitled under the contract (notwithstanding and/or without prejudice to any other provisions in the contract agreement) in the event of :-

a) Failure by the contractor to extend the validity of the Performance Guarantee as described hereinabove, in which event the Engineer-in-Charge may claim the full amount of the Performance Guarantee.

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b) Failure by the contractor to pay DDA any amount due, either as agreed by the contractor or determined under any of the clauses/conditions of the agreement, within 30 days of

the service of notice to this effect by Engineer- in-Charge.

v) In the event of the contract being determined or rescinded under provision of any of the

clause/condition of the agreement, the Performance Guarantee shall stand forfeited in full

and shall be absolutely at the disposal of the DDA

NOTE: - Note 1 & 2 given under clause 1 shall be applicable for Clause 1(a) also.

Clause 2: Compensation for delay

If the contractor fails to maintain the required progress in terms of clause 5 or to complete the work

and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the DDA, on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the Superintending

Engineer(whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day/month (as applicable) that the progress remains below that

specified in Clause 5 or that the work remains incomplete.

This will also apply to Items or group of Items for which a separate period of completion has been

specified.

Compensation for delay of work @ 1.5% per month of delay to be computed on per day basis.

Provided always that the total amount of compensation for delay to be paid under this condition shall

not exceed 10% of the tendered value of work or of the tendered value of the item or group of items of

work for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set off against any sum payable to the contractor

under this or any other contract with the DDA. In case, the contractor does not achieve a particular milestone mentioned at **Page** or the rescheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the

final grant of extension of time.

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Withholding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in the subsequent milestone(s), the amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

Clause 3: When Contract can be determined.

The Engineer-in-Charge may, without prejudice to his any other right or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or in respect of any breaches of contract and without prejudice to any right or remedies under any of the provisions of this contract or otherwise, and whether the date for completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:-

- i) If the contractor having been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or unworkman like manner shall omit to comply with the requirements of such notice for a period of seven days thereafter.
- ii) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manger or which entitle the court to make a winding up order.
- iii) If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-Charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.
- iv) If the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and

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does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-charge

- v) If the contractor persistently neglects to carry out his obligations under the contract and/or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.
- vi) If the contractor commits any acts mentioned in **Clause 21** hereof.
- vii) If the work is not started by the contractor within 1/8th of stipulated time. When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the DDA shall have powers:
- To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of Engineer-in-Charge shall be conclusive evidence).
 Upon such determination or rescission, the earnest money deposit, security deposit already recovered and Performance Guarantee under contract shall be liable to be forfeited and shall be absolutely at the disposal of the DDA.
- b) Deleted
- c) After giving notice to the contractor to measure the work of the contractor and to take such whole, or the balance or part thereof, as shall be unexecuted out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined or rescinded as above, shall not be allowed to participate in the tendering process for the balance work.

In the event of above courses being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract.

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And in case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

Clauses 3A:

In case, the work cannot be started due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of work, either party may close the contract. In such eventually, the earnest money deposit and the Performance Guarantee of the contractor shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all.

Clause 4:

In any case in which any of the powers conferred upon the Engineer-in-Charge by Clause 3 thereof, shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such power shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for the compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor take possession of (or at the sole desecration of Engineer-in-Charge which shall be final and binding on the contractor) use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plants, materials and stores in or upon the works or the site thereof, belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work/or any part thereof, paying or allowing for the same in account at the contract rates or in the case of these not being applicable at current market rates to be certified by the Engineer-in-Charge whose certificate thereof shall be final and binding on the contractor, otherwise the Engineer-in-Charge by giving this in writing may order the contractor, or his clerk of the works, foreman or other authorized agent to remove such tools, plants, materials or stores from the premises (within a time to be specified in such notice) in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and at his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

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Clause 5: Time and Extension for delay.

The time allowed for execution of the work as specified at Page-...9.... of PWD-8 or the extended time in accordance with these conditions shall be the essence of the contract. The execution of the works shall commence from the 15th day or such time period as mentioned in letter of award after the date on which the Engineer-in-Charge issues written orders to commence the work or from the date of handing over of the site whichever is later. If the contractor commits default in commencing the execution of the work as aforesaid DDA shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the Earnest Money & Performance Guarantee absolutely.

5.1 As soon as possible after the contract is concluded, the contractor shall submit a Time & Progress Chart for each milestone and get it approved by the department. The chart shall be prepared in direct relation to the time stated in the contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and the contractor within the limitations of time imposed in the contract documents and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per milestones given at Page ...82.......

5.2 If the work be delayed due to any of the following reasons:-

- i) Force majeure
- ii) Abnormally bad weather,
- iii) Serious loss or damage by fire,
- iv) civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the works
- v) delay on the part of other contractors or tradesmen engaged by Engineer- in-Charge in executing work not forming part of the contract,

vi)	non availability of stores, which are the responsibility of DDA to supply,		
vii)	non availability or break down of tools and Plant to be supplied or supplied by Govt./DDA,		
viii)	any other cause which, in the absolute discretion of the authority mentioned in Clause - 2 is beyond the contractor's control.		
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Then upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in- Charge to proceed with the works.

- **5.3** Request for rescheduling of mile stones and extension of time, to be eligible for consideration, shall be made by the contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form. The contractor may also, if practicable, indicate in such a request the period for which extension is desired.
- 5.4 In any such case the authority mentioned in Clause 2 may give a fair and reasonable extension of time and reschedule the milestone for completion of work. Such extension shall be communicated to the contractor by the Engineer-in-charge in writing within 3 months of the date of receipt of such request. Non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-Charge and this shall be binding on the contractor.

Clause-6:

Within 10 days of the completion of the work the contractor shall give notice of such completion to the Engineer-in-Charge and within 10 days of the receipt of the such notice the Engineer-in -charge shall inspect the work and if there is no defect in the work, he shall furnish the contractor with a certificate of completion otherwise a provisional certificate indicating defects -

- (a) to be rectified by the contractor, and/or
- (b) for which payment will be made at reduced rates, be issued.

But no final certificate of completion shall be issued, nor shall the work be considered to be completed until the contractor shall have removed from the premises on which the work shall be executed all scaffolding surplus materials, rubbish and all huts and sanitary arrangement required for his work people on the site in connection with the execution of the work, which shall have been erected or constructed by the contractor and cleaned of the dirt from all wood work, doors, windows, walls floors or other parts of any building in, upon or about which work is to be executed or of which he may have

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had possession for the purpose of the execution thereof, and not unit the work shall have been measured by the Engineer-in-Charge. If the contractor fails to comply with the requirements of this clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangement as aforesaid and cleaning of dirt on or before the date fixed for the completion of the work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish etc. and dispose of same as he thinks fit and clean of such dirt as aforesaid and the contractor shall have no claim in respect of any such scaffolding or surplus materials as aforesaid accept for any sum actually released by the sale thereof.

Clause 6A:

When the annual repairs and maintenance work is carried out, the splashes and dropping from white washing colour washing, painting etc. on walls, doors, roofs, windows etc. shall be removed and the surface cleaned simultaneously with completion of these items of works in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of the other items of the work in contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the risk and cost of the contractor either departmentally or through another agency. Before taking such action the Engineer-in-Charge shall give two days notice in writing to the contractor.

Clause 6 B:

The contractor shall submit the completion plan required vide general specification for Electric works (Part 1 Internal) 2005 and (Part 2 External) 1994 as applicable within 30 days of the completion of work. In case the contractor fails to submit the completion plan as aforesaid he shall be liable to pay a sum equivalent to 1.0 % of the tendered cost of the work subject to a ceiling to Rs.25,000/-(Twenty Five Thousand only) as may be fixed by the Superintending Engineer (SE) concerned and in this respect the decision of the SE shall be final and binding on the contractor.

CLAUSE 6 C: SUPPLEMENTARY AGREEMENT

Notwithstanding the provisions contained in other clauses, the Engineer-in-Charge may decide to draw a Supplementary Agreement to the main agreement with the original contractor with whom the main Agreement had been executed, at the fag end of the contract for subsequent execution of the finishing

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items in full or part as per requirement shall be given in **Schedule 'B'** of the schedule of items which shall be drawn by Engineer-in-charge after substantial completion of main work.

- 1. The items contained in **Schedule 'B'** may be executed separately under the Supplementary Agreement with the contractor of the main work, in the eventuality of Engineer-in-Charge deciding to opt for the same once the work/obligations under **Schedule 'A'** are completed. If so decided, the contractor will execute the work covered by **Schedule 'B'** under a Supplementary Agreement as per terms and conditions contained therein.
- In the event of drawing up of the Supplementary Agreement, the main contract in respect of Schedule 'A" of the items shall be independently finalized by the Engineer-in-Charge as per the terms and conditions of the main agreement whereas the final bill, in respect of Schedule 'B' of the items shall be prepared after the completion of the work as per terms and conditions of the Supplementary Agreement.
- 3. Security Deposit for main agreement may be released retaining an amount equivalent to 50% of security deposit or 10% of the tendered cost of work to be executed under the Supplementary Agreement, whichever is more as security deposit till the completion of work covered by Supplementary Agreement and maintenance period thereafter.
- 4. During the operation of the Supplementary Agreement, the watch and ward of the entire work including that completed under the main agreement (as per **Schedule A**) shall continue to remain the responsibility of the contractor notwithstanding the fact that the main agreement work has been finalized. The contractor shall be paid extra on this account @ Rs. 6600/-(Rupees Six thousand & six hundred only) per month for 200 EWS houses. An additional payment shall be done Rs.1100/- per month for every additional 50 EWS houses or so. However, nothing extra will be paid for T&P and sundries required for watch and ward operation. This clause shall, however, be operative only after completing all obligations under main agreement irrespective of the specific provisions contained in **Schedule 'B'** of the schedule of items
- 5. During the operation of the Supplementary Agreement as well as the maintenance period thereafter, the contractor shall be liable to make good, any loss, or damage to the work executed under both the main as well as the supplementary agreement, for which nothing extra shall be payable to the contractor.

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- 6. The supplementary agreement shall be as per the enclosed draft (Annexure-IV) the terms of which are acceptable to the parties.
- 7. All other provisions of the Main Agreement, until and unless specifically mentioned otherwise in the Supplementary Agreement, shall be applicable during the operation of the Supplementary Agreement also.

Clause 7:

No payment shall be made for a work estimated to cost Rupees five thousand or less till after the whole of the work shall have been completed and certificate of completion given. But in the case of work estimated to cost more than Rs. Five thousand the contractor shall on submitting the bill be entitled to receive a monthly payment proportionate to the part of work executed to the satisfaction of the Engineer-in-Charge whose certificate of the sum so payable shall be final or conclusive against the contractor.

All such intermediate payments shall be regarded as payment by way of advanced against the final payment only and not as payment for work actually done and completed and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or recreated or be considered as an admission of the due performance of the contract on any part thereof, in any respect or the acquiring of any claims, nor shall it conclude, determine or affect in any way the powers of the Engineer-in-Charge under this conditions or any of them as to the final settlement and adjustments of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for completion of the work or of the date of the certificate of completion furnished by the Engineer-in-Charge and payment shall be made within three months, when amount of the contract plus that of additional items is up to Rs. 2 lacs and within six months, if the same exceeds Rs. 2 lacs, of the submission of such bill. If there shall be any dispute about any item of the work than the undisputed item or items only shall be paid within the said period of three months or 6 months or as the case may be. The contractor shall submit a list of the disputed items within thirty days from the disallowances thereof and if he fails to do this, his claim shall be deemed to have been fully waived and absolutely extinguished.

Whenever there is likely to be delay in recording detailed measurement for making running payment in the case of residential building, advance payment without detailed measurement for works done (other than foundation and finishing items) up to (a) lintel level (including sunshade etc.) and (b) slab level for each floor, worked out at 75% of the assessed value may be made in running accounts bill by the Engineer-in-Charge in his discretion of the basis of certificate from the Assistant Engineer to the

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effect that the work has been completed up to the level in question. The advance payment so allowed shall be adjusted in the subsequent running bill by taking detailed measurement there of final payment shall be made only on basis of detailed measurement.

Clause 8:

A bill shall be submitted by the contractor each month on or before the date fixed by the Engineer-in-Charge for all work executed in the previous month and the Engineer-in-Charge shall take or cause to be taken the requisite measurement for the purpose of having the same verified, and the claim as far as admissible adjusted as far as possible before the expiry of ten days from the presentation of the bill, if the contractor does not submit the bill within the time fixed as aforesaid, the Engineer-in-Charge may depute, with in seven days of the date fixed, as aforesaid, his subordinate to measure the said work in presence of the contractor whose counter signature to measurement list will be sufficient warrant and the Engineer-in-Charge may prepare a bill from such list.

Clause 8 A:

Before taking any measurements of any work as has been referred to in Clause 6, 7 & 8 thereof the Engineer-in-Charge or a subordinate deputed by him shall give reasonable

notice to the contractor. If the contractor fails to attend the measurement, after such notice or fails to countersign or to record the difference with in a week from the date of measurement in the manner required by the Engineer-in-Charge then in any such event

the measurement taken by the Engineer-in-Charge or by a subordinate deputed by him as the case may be shall be final and binding on the contractor and the contractor shall have no right to dispute the same.

Clause 9:

The contractor shall submit all bills on the printed forms to be had on application at the office of the Engineer-in-Charge and the charges in the bills shall always be entered at rates specified in the tender or in the case of any extra work, ordered in pursuance of these conditions and not mentioned or provided for in the tendered, at the rates here in after provided for such work.

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Clause 9 A:

Payments due to the contractor may if so desired by him be made to his bank instead of direct to him provided that the contractor furnishes to Engineer-in-Charge (i) An authorization in the form of a legally valid documents such as a power of attorney conferring authority on the Bank, to receive payment and (ii) his own acceptance of the correctness of amount made out as being due to him by DDA or his signature on the bill or other claim preferred against DDA, before settlement by the Engineer-in-Charge of the account or claim by payment to the bank. While the receipt given by such bank shall constitute a full and sufficient discharge for the payment, the contractor should whenever possible present his bill duly receipted and discharged through his bankers. Nothing herein contained shall operate to create in favour of the bank, any right or equities vis-a-vis the authority.

Clause 10: Stores to be supplied by Delhi Development Authority.

If the specification or schedule of items provides for the use of any special description of materials to be supplied from Engineer-in-Charge stores or if it is required that the contractor shall use certain stores to be provided by the Engineer-in-Charge as shown in the schedule of materials here to annexed at page 109 the contractor shall be bound to procure and shall be supplied such materials and stores, as are from time to time required to be used by him for the purpose of the contract only, and the value of the full quantity of materials and stores so supplied at the rates specified in the said schedule of materials may be set off or deducted from any sums then due, or there after to become due to contractor under the contract, or otherwise or against or from the security deposit, or the proceeds of the sale there of if the same is held in Govt. Securities, the same of sufficient portion thereof being in this cases sold for the purposes. The contractor shall bear the cost of getting the material issued, loading, transporting to site, unloading storing as required cutting, assembly and joining the several parts together as necessary. Not withstanding any thing to the contrary contained. If in any other clause of the contract and (or the CPWD Code, all stores / Materials so supplied to the contractor or procured with the assistance of the Delhi Development Authority, shall remain the absolute property of Delhi Development Authority and the contractor shall be trustee of the store / materials and the said store / materials shall not be removed / disposed off from the site of the work on any account and shall be at all times open to the inspection by the Engineer-In-Charge.

Any such stores / materials remaining unused shall be returned to the Engineer-in-Charge at a place directed by him if by a notice he shall so require, but in case it is decided not to take back the stores / materials the contractor shall have no claim for compensation on any account of such stores / materials so supplied to him as aforesaid and not used by him or for any wastage in or damage to in such stores / materials.

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On being required to return the stores / materials the contractor shall hand over the stores / materials on being paid or credited such price as the Engineer-in-Charge shall determine, having due regard to the condition of the stores / materials. The price allowed to the contractor, however shall not exceed the amount charged to him excluding the storage charge if any. The decision of the Engineer-In-Charge shall be final and conclusive. In the event of breach of the aforesaid condition the contractor shall in addition to throwing himself to open to account of contravention of the terms of the licences or permit and / or criminal breach of trust be liable to Delhi Development Authority for all advantages of profits resulting or which in the usual course would having resulting or which in the usual course would having resulted to him by reason of such breach. Provided that the contractor shall in no case be entitled to any compensation or damage on the account of the delay in supply or non-supply there of all or any such materials and stores. Provided further that the contractor shall be bound to execute the entire work if the materials are supplied by the DDA with in the schedule time for the completion of the work plus 50% there of (Schedule time plus 6 months if the time of the completion exceed 12 months) but if a part only of the materials has been supplied with in the aforesaid period then the contractor shall be bound to do so much of the work as may be possible with the materials and the stores supplied in the aforesaid period for the completion of the rest of the work contractor shall be entitled to such extension of the times as may be determined by the Engineer-in-Charge whose decision in this regard shall be final.

Clause 10 A:

The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default, the Engineer-in-Charge shall be at liberty to employee at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full power to require other proper material to be substituted there of and in case of default the Engineer-in-Charge may cause the same to be supplied and all costs which may arise due to such removal and substitution shall be borne by the contractor

Clause 10 B:

The contractor on signing an indenture in the form to be specified by the Engineer-in-Charge shall be entitled to be paid during the progress of the execution the work up to 75% of estimated value of any materials which are in opinion of the Engineer-in-Charge nonperishable, non-fragile and non-combustible and are in accordance with the contract and which have been brought on the site in connection, therewith and are adequately stored and protected against damage by weather or other causes but which have not at the time of

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advance been incorporated in the works. When materials on account of which an advance has been made under this sub clause are incorporated in the work, the amount of such advance shall be deducted from the next payment made under any of the clause or clauses of this contract. Such secured advance shall also be payable on other items of perishable nature, fragile and combustible with the approval of the Engineer-in-Charge provided the contractor provides a comprehensive insurance cover for the full cost of such materials. The decision of the Engineer-in-Charge shall be final and binding on the contractor in this matter. No secure advance shall however, be paid on high risk materials such as ordinary glass, sand, petrol, diesel etc.

ii) Mobilization advance not exceeding 10% of the tendered value or estimated cost put to tender or Rs.1.00 crore which ever is less may be given, if requested by the contractor in writing within one month of the order to commence the work. In such a case, the contractor shall execute a bank guarantee bond from a scheduled nationalized bank as specified by the Engineer-in-Charge for the full amount of such advance before it is released. Such advance shall be in two or more installments to be determined by the Engineer-in-Charge in his absolute discretion. The first installment of such advance shall be released by the Engineer-in-Charge to the contractor on a request made by the contractor to the Engineer-in-Charge in this behalf. The second and subsequent instalment shall be released by the Engineer-in-Charge only after the contractor furnishes a proof of the satisfactory utilization of the earlier instalments to the entire satisfaction of the Engineer-in-Charge.

Mobilization advance shall be admissible only for works where estimated cost put to tender is Rupees Two Crores and above.

An advance for Plant and Machinery required for the work and brought to site by the Contractor may be given if requested by the Contractor in writing within one month of bringing such Plant and Machinery to site. Such advance shall be given on such Plant and Machinery, which in the opinion of the Engineer-in-Charge will add to the expeditious execution of work and improve the quality of the work. The amount of advance shall be restricted to 5% of tendered value. In the case of new Plant and equipment to be purchased for the work, the advance shall be restricted to 90% of the price of such new Plant and equipment paid by the contractor for which the contractor shall produced evidence satisfactory to the Engineer-in-Charge. No such advance shall be paid on any Plant and equipment of perishable nature and on any Plant and equipment of a value less than Rs.50,000/-. Seventy five percent of such amount of advance shall be paid after the Plant and equipment is brought to site and balance twenty five percent on successfully commissioning of the same.

This advance shall further be subject to the conditions that such Plant and equipment :-

(a)	are considered by the Engineer-in-Charge to be necessary for the work.
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- (b) and are in and are maintained in working order,
- (c) hypothecated to the DDA as specified by the Engineer-in-Charge before the payment of advance is released. The Contractor shall not be permitted to remove from the site such hypothecated Plant and equipment without the prior written permission of the Engineer-in-Charge. The Contractor shall be responsible for maintaining such Plant and equipment in good working order during the entire period of hypothecation failing which such advance shall be entirely recovered in lump sum. The Contractor shall insure the Plant and Machinery for which mobilization advance is sought and given, for a sum sufficient to provide for their replacement at site. Any amount not recovered from the insurer will be borne by the Contractor.
- iv) The mobilization advance and Plant and Machinery advance in (ii) and (iii) above bear simple interest at the rate of 10% per annum and shall be calculated from the date of payment to the date of recovery, both days inclusive, on the outstanding amount of advance. Recovery of such sums advanced shall be made by the deduction from the Contractor's bill commencing after first ten per cent of the gross value of the work is executed and paid, on pro rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time 80% of the gross value of the Contract is executed and paid, together with interest due on the entire outstanding amount up to the date of recovery of the instalment.
- v) If the circumstance are considered reasonable by the Engineer-in-Charge the period mentioned in (ii) and (iii) on request by the Contractor in writing for grant of mobilization advance and Plant and equipment advance may be extended in the discretion of the Engineerin-Charge.
- vi) The said bank guarantee for advances shall initially be made for the full amount and valid for the Contract period, and be kept renewed from time to time to cover the balance amount and likely period of complete recovery together with interest.

Clause 10 C: DELETED

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Clause 10 CC:

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If the prices of material (not being materials supplied or services rendered at fixed prices by the Department in accordance with clause 10 & 34 thereof) and/or wages of labour required for execution of the work increases, the Contractor shall be compensated for such increase as per provisions detailed below and the amount of the Contract shall accordingly be varied, subject to the condition that such compensation for escalation in prices shall be available only for the work done during the stipulated period of the Contract including the justified periods extended under the provision of Clause-5 of the contract without any action under Clause-2. However, for the work done during the justified periods extended as above, the compensation as detailed below will be limited to prices/wages prevailing at the time of stipulated date of completion or as prevailing for the periods under consideration whichever is less. No such compensation shall be payable for a work for which the Stipulated Period of Completion is 18 months or less. Such compensation for escalation in the prices of materials and labour, when due shall be worked out based on the following provisions.

(i)	The base date for working out such escalation shall be the last date on which tenders were stipulated to be received.		
(ii)	The cost of work on which the escalation will be payable shall be reckoned as	below:	
(a)	Gross value of work done up to this quarter	(A)	
(b)	Gross value of work done up to the last quarter	(B)	
(c)	Gross value of work done since previous quarter (A-B)	(C)	
(d)	Full assessed value of secured advance fresh paid in this quarter	(D)	
(e)	Full assessed value of secured advance recovered in this quarter	(E)	
(f)	Full assessed value of secured advance for which escalation is		
	payable in this quarter (D-E)		
(g)	Advance payment made during this quarter	(G)	
(h)	Advance payment recovered during this quarter	(H)	
(i)	Advance payment for which escalation is payable in this quarter (G-H) (I)		
(j)	Extra items paid as per Clause 12 & 12 A based on prevailing		
	market rates during this quarter	(J).	
	Then, M= C <u>+</u> F <u>+</u> I-J		
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N=0.85M

(k)	Less cos	et of material supplied by the Department as per Clause 10	
	and reco	overed during the quarter	(K).
(I)	Less cos	et of services rendered at fixed charges as per Clause 34	
	and reco	overed during the quarter	(L)
	Cost of	work for which escalation is applicable:	
	W=N - ((K+L)	
(iii)	Component of cement, steel, materials, labour, POL etc. shall be predetermined for every work and incorporated in the conditions of Contract attached to the tender papers (in para X) and the decision of the Engineer-in-Charge in working out such percentage shall be binding on the Contractor.		
(iv)	The compensation for escalation for cement, steel, materials and POL, shall be worked as per the formula given below:-		
(a)	Adj	ustment for component of "Cement" $Vc = \frac{W \times Xc \times (CI-Clo)}{100}$	
Vc	=	Variation in cement cost i.e. increase or decrease in the amount in Frecovered.	Rs. to be paid or
W	=	Cost of work done worked out as indicated in sub-para (ii) of clause 10	O(cc)
Xc	=	Component of cement expressed as percent of the total value of work	a. (para x)
CI	=	All India whole sale price index for cement for the period under a published by the Economic advisor to Govt. of India, Ministry Commerce in respect of the justified period extended under the provided the contract without any action under clause 2, the index prevailing stipulated date of completion or the prevailing index of the consideration, whichever is less, shall be considered.	of Industry and sions clause 5 of g at the time of
Clo	=	All India Whole sale Price index for cement as published by the Ecor Government of India, Ministry of Industry & Commerce as valid on the date of receipt of tenders including extensions, if any.	
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(b) Ad	justment for cor	mponent of "Steel".
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 $Vs = W \times Xs \times (SI-SIO)$

100 Slo

Vs = Variation in steel cost i.e. increase or decrease in the amount in Rs. to be paid or recovered.

W = Cost of work done worked out as indicated in sub-para (ii) of clause 10(cc)

Xs = Component of steel expressed in percent to the total value of the work. (para x)

SI = All India whole sale price Index for Steel for (bars and rods) for the period under consideration as published by Economic Advisor to Govt. of India, Ministry of Industry and Commerce, New Delhi. However, the price index shall be minimum of the following

i) Index for the month, when the consignment of steel reinforcement for the work is procured or

ii) Index for the month by which half of the stipulated contract period is over.

iii) Index for the period under consideration for the justified period extended under the provision of clause 5 of the contract, without any action under clause 2, same principle as for the period within stipulated period of completion will apply.

Slo = All India Wholesale Price Index for Steel (bars & rods) published by the Economic Advisor to Govt. of India., Ministry of Industry & Commerce as valid on the last stipulated date of receipt of Tenders including extension, if any.

(c) Adjustment for component of "Materials"

 $Vm = W \times Xm \times (MI-MIO)$

100 Mlo

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Vm = Variation in materials cost i.e. increase or decrease in the amount in Rs. to be paid or recovered.

W = Cost of work done worked out as indicated in sub-para (ii) of clause 10 (cc)

Xm = Components of "Materials" expressed as percent of the total value of the work.(para x)

MI = All India whole sale Index for material for the period under consideration as published by the Economic Advisor to Government of India, Ministry of Industry & Commerce in respect of the justified period extended under the provision of clause 5 of the contract without any action under clause 2, the index prevailing at the time of stipulated date of or the prevailing index of the period under consideration, whichever is less shall be considered.

Mio = All India whole sale price Index for material valid on the last stipulated date of receipt of tenders including extension, if any as published by the Economic Advisor to Government of India, Ministry of Industry & Commerce.

(d) Adjustment for component of "POL"

 $VF = W \times Z \times (FI-FIO)$

100 Flo

VF = Variation in cost of fuel, oil and lubricants i.e. increase or decrease in the amount in rupees to be paid or recovered.

W = Cost of work done worked out as indicated in sub para (ii) and clause 10 (cc)

Z = Component of fuel, oil and lubricants expressed as percent of total value of work. (Para x).

FI = All India whole sale price Index for fuel, oil and lubricants for the period under consideration as published by the Economic Advisor to Government of India, Ministry of Industry & Commerce, New Delhi.

Flo = All India whole sale price Index for fuel, oil and lubricants published by Economic Advisor to Govt. of India, Ministry of Industry and Commerce, New Delhi valid on the last stipulated date of receipt of tenders including extension, if any.

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(v)	The following principles shall be followed while working out the indices mentioned in para (iv)
	above

- (a) The compensation for escalation shall be worked out (at quarterly intervals) and shall be with respect to the cost of work done during the three calendar months of the said work. The first such payment shall be made at the end of three months after the month excluding in which the tender was accepted and thereafter at three months intervals. At the time of completion of the work, the last period for payment might become less than 3 months, depending on the actual date of completion.
- (b) The index (MI/FI etc.) relevant to any quarter/period for which such compensation is paid shall be the arithmetical average of the indices relevant to the three calendar months. If the period upto date of completion after the quarter covered by the last such installment of payment, is less than three month index MI and FI shall be the average of the indices for the month falling within that period.
- (vi) The compensation for **escalation of labour** shall be worked out as per the following formula given below:

 $VL = W \times Y \times (LI-LIO)$

100 LIo

- VL = Variation in Labour cost i.e. increase or decrease in the amount in rupees to be paid or recovered.
- W = Value of work done, worked out as indicated in sub-para (ii) of Clause 10 (cc).
- Y = Component of labour expressed as percentage of the total value of work.(para x)
- LIO = Minimum daily wage in rupees of an unskilled adult male mazdoor, fixed under any law, statutory rule or order as on the last stipulated date of receipt of tender including extension, if any.
- LI = Minimum wage in rupees of an unskilled adult male mazdoor, fixed under any law, statutory rule or order as applicable on the last date of the quarter previous to the one under consideration in respect of the justified period extended under the provisions of clause 5 of the contract, without any action under clause 2, the index prevailing on the last date of quarter previous to the quarter pertaining to stipulated date of completion or the index prevailing on the last date of quarter previous to the one under consideration, whichever is less, shall be considered.

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(vii)	The following principle will be followed while working out the compensation as per sub para
	(vi) above.

- (a) The minimum wage of an unskilled male mazdoor mentioned in sub-para (vi) above shall be the higher of the following two figures namely those notified by Govt. of India, Ministry of labour and those notified by the local administration, both relevant to the place of work and the period of reckoning.
- (b) The escalation for labour shall also be paid at the same quarterly interval when escalation due to increase in cost of materials and/or POL is paid under this clause. If such, revision of minimum wages takes place during any such quarterly intervals, the escalation compensation shall be payable for work done in all quarters subsequent to the quarter in which the revision of minimum wages takes place.
- (c) Irrespective of variation in minimum wages of any category of labour for the purpose of this clause, the variation in the rates for an unskilled adult male mazdoor alone shall form the basis for working out the escalation compensation payable on the labour component.
- (viii) In the event of the price of the material and/or wages of labour required for execution of the work decreases, there shall be downward adjustment of the cost of the work so that such prices of the materials and/or wages of labour shall be deductible from the cost of work under this Contract and in this regard the formula herein stated under this clause 10(CC) shall mutatis-mutandis apply, provided that:
 - (a) No such adjustment for the decease in, the price of materials and/or wages of labour aforementioned would be made in a case of Contract in which the stipulated period of completion of the work is 18 months or less.
 - (b) The Engineer-in-Charge shall otherwise be entitled to lay down the principles on which the provision of this sub-clause shall be final and binding.

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(ix) Provided always that the provisions of the proceeding clause 10 C & 10 CA shall not be applicable for Contracts where provisions of this clause are applicable, but in cases where provisions of this clause are not applicable, the provision of Clause 10 C & 10 C A will become applicable.

(x) Schedule of component of Cement, Steel, other materials, Labour etc. for price escalation under Clause 10 CC:

Component of Cement Xc

Expressed as per cent of total value of work: 13.50% (Thirteen point five percent)

Component of Steel Xs

Expressed as per cent of total value of work: 11.50% (Eleven point five percent)

Component of Materials Xm

Expressed as per cent of total value of work: 50% (Fifty percent)

Component of Labour Y

Expressed as per cent of total value of work: 25% (Twenty Five percent)

Component of POL Z

Expressed as per cent of total value of work: Nil.

Clause 10 D:

The Contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work etc. as DDA's property and such materials shall be disposed off to the best advantage of DDA according to the instructions in writing issued by the Engineer-in-Charge

Clause 11: Work to be executed in accordance with Specifications, Drawings, Orders etc.

The Contractor shall execute the whole and every part of the work in the most substantial and workman like manner and both as regards materials and otherwise in every respect in strict accordance with the Specifications. The Contractor shall also conform exactly, fully and faithfully to the designs, drawings and instructions in writing in respect of the work signed by the Engineer-in-Charge and the Contractor shall be furnished free of charge one copy of the Contract documents together with Specifications and of all such design drawing and instruction as are not included in the Specifications. The Contractor shall also conform exactly, fully and faithfully to the designs, drawings and instructions in writing in respect of the work signed by the Engineer-in-Charge and the Contractor shall be furnished free of charge one copy of the Contract documents together with Specifications and of all such design drawing and instruction as are not included in the Central Public Works Department compilation entitled CPWD Specification for work at Delhi 1996 volume 1 to VI and revised CPWD specifications 2002 for cement mortar, cement concrete & R.C.C. works (which supercede the Chapter 3, 4, 5 of CPWD specifications 1996, Vol.-II) with correction slips upto date of receipt of tender or in any Bureau of Indian Standard or any other, published Standard or Code or, schedule of rates or any printed publications, or General Specification referred to elsewhere in the Contract and or CPWD General Specifications for Electrical works Part-I (Int). 2005 and Part-II(Ext.)1994 with upto date Correction Slips.

Clause 12: Alteration on Specification and Drawing.

The Engineer-in-Charge shall have power (i) to make any alteration in, omission from, addition to or substitution for the original specifications drawings and instructions that may appear to him to be necessary or advisable during the progress of the work and (ii) to omit a part of the work in case of non availability of a portion of the site or for any other reason and the Contractor shall be bound to carry out the work in accordance with any instruction which may be given to him in writing signed by the Engineer-in-Charge and such alterations, omission, additions or substitutions shall not invalidate the Contract and any altered, additional, substituted work, which the Contractors may be directed to do in the manner above specified, as part of the work, shall be carried out by the Contractor on the same conditions in all respects on which he agreed to do the main work.

The time for the completion of the work shall be extended in the proportion that the altered, additional or substituted work bears to the original Contracts work and certified by the Engineer-in-Charge shall be conclusive as to such proportion. Over and above this, a further period to the extent of 25% of such extension so extended shall be allowed to the Contractor. The rates for such additional, altered or substituted work under this Clause shall be worked out in accordance with the following provisions in their respective order:-

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- (i) If the rates for additional, altered or substituted work are specified in the Contract for the Work, the Contractor is bound to carry out the additional, altered or substitute work at the same rates as are specified in the Contract for the work.
- (ii) If the rates for the altered, additional or substituted work are not specifically provided in the Contract for the work. The rates will be derived from the rates for a similar class of work as are specified in the Contract for the work.
- (iii) If the rates for altered, additional or substituted work includes any work for which no rate is specified in the Contract or the rate can not derived from the similar class of work in the Contract, then such work shall be carried out at the rates entered in the current CPWD Schedule of Rates for Delhi 2007 with Correction Slips upto the date of receipt of tender plus/minus percentage which the total tendered amount bears to the Estimated Cost of the entire work put to tender or CPWD Schedule of Rates Pt.I (Int) 2007 for Electrical Works with up to date correction slips.
- (iv) If the rates for the altered, additional or substituted work can not be determined in the manner specified in sub-clause (i), (ii) & (iii) above then rates for such shall be worked out on the basis of the current C.P.W.D. Schedule of Rates for Delhi 2007 or CPWD Schedule of Rates Pt.1 (Int) 2007 for Electrical works with Correction Slips upto the date of receipt of tenders plus/ minus percentage which the total tendered amounts bear to the Estimated Cost of the entire work put to tender. Provided always that if the rate for a particular part or parts of the items is not in the schedule of rates for such parts or parts will be determined by the Engineer-in-Charge on the basis of prevailing market rates when the work was done.
- (v) If the rates for any altered, additional or substituted item of work cannot be determined in the manner specified in Sub-clause (i) to (iv) above, then the Contractor shall, within seven days from the date of receipt of the order to carry out the said work, inform the Engineer-in-Charge of the rate which he proposed to claim for such item of work, supported by the analysis of the rate claimed, and the Engineer-in-Charge shall within three months thereafter, after giving due consideration to the rates claimed by the Contractor, determine the rate on the basis of prevailing market rates and pay the Contractor accordingly. However, the Engineer-in-Charge by giving notice in writing will be at liberty to cancel his order to carry out such class of work and arrange to carry it out in such manner as he may consider advisable, but under no circumstances the Contractor shall suspend the work on the plea of non-settlement of rate of items falling under the clause.
- (vi) Except in case of items relating to foundations, provisions contained in sub-clause (i) to(v) above shall not apply to Contract or substituted items as individually exceed the percentage set out in the tender documents (referred to herein below as deviation limit) subject to the following restrictions:

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- (a) The deviation limit referred to above is the net effect (algebraic sum) of all additions and deduction ordered.
- (b) In no case shall the addition/deductions (arithmetical Sum) exceed twice the deviation limit.
- (c) The deviation ordered on items of any individual trade included in the Contract shall not exceed plus/minus 50% of the value of that trade in the Contract as a whole or half the deviation limit: whichever is less.
- (d) The value of additional items, of any individual trade not already included in the Contract, shall not exceed 10% of the deviation limit.
- (vii) For the purpose of operation of clause 12 (vi) the following work shall be treated as work relating to foundations.
 - (a) For building: plinth level or 1.2 meters above ground level whichever is lower excluding items of flooring and DPC but including base concrete below the floor.
 - (b) For abutment, piers, retaining walls or culverts and bridges, walls of water reservoirs: the bed of floors level
 - (c) For retaining walls where floor level is not determinate: 1.2 meters above the average ground level or bed level.
 - (d) For roads: all items of excavations and filling including treatment of sub base and soling work.
 - (e) For water supply lines, sewer lines, underground storm water drains and similar works: all items of work below ground level except items of pipe work and masonry work.
 - (f) For open storm water drains : all items of work except lining of drains.

Note: Individual trade means the trade sections into which schedule of quantities annexed to the Agreement at Page 103 to 212. has been divided or in the absence of any such divisions the individual sections of the CPWD Schedule of Rates specified above such as earth work concrete work, wood work etc. The rates of any such work except the items relating to foundation which is in excess of the deviations limits shall be determined in accordance with the provisions contained in clause 12 A of additional items.

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paid in accordance with the rates so fixed. The Engineer-in-Charge shall however be at liberty to cancel his order to carry out such increased quantities of work by giving notice in writing to the Contractor and arrange to carry it out in such a manner as he may consider advisable but under no circumstance the Contractor shall suspend the work on the plea of not settlement of rates of items falling under this clause.

All the provisions of the preceding paragraph shall equally apply to the decrease in the rates of items or quantities in excess of the deviation limit notwithstanding the fact that the rates for such items exist in the tender for the main work or can be derived in accordance with the provisions of the preceding Clause 12, and the Engineer-in-Charge may revise such rates having regards to the prevailing market rates.

Clause 13:

If at any time after the commencement of the work the Authority shall for any reason whatsoever not require the whole work or part of work thereof, as specified in the tender, to be carried out, the Engineer-in-Charge shall give notice in writing of the fact to the Contractor who shall have no claim to any payment to compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of the full amount of the work not having been carried out neither shall be have any claim for compensation by reason of any alteration having been made in the Original Specifications, drawings, designs and instructions which shall involve any curtailment of the work as originally contemplated. Provided that the Contractor shall be paid the charges on the cartage only of materials actually and bonafiedly brought to the site of the work and had rendered surplus as a result of the abandonment or curtailment of the work or any portion thereof and then taken back by the Contractor. Provided, however, that the Engineer-in-Charge shall have in all such cases, the option of taking over all or any such material at their purchase price or at local current rates, whichever may be less. In the case of such stores having been issued from DDA Stores and returned by the Contractor to DDA Stores, credit shall be given to him by the Engineer-in-Charge at the rates not exceeding those at which they where originally issued to him after taking into consideration and deduction for claim on account of any deterioration or damage while in the custody of the Contractor and in this respect the decision of the Engineer-in-Charge shall be final.

Clause 14:

If it shall appear to the Engineer-in-Charge or any officer deputed as his authorized subordinate-in-charge of the work, Chief-Engineer, Superintending Engineer, Chief Technical Examiner/Technical Examiner of Central Vigilance commission or any officer deputed & Chief Engineer (QAC) /

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Superintending Engineer (QAC) / Executive Engineer (QAC) DDA or by an Officer of the vigilance of the Authority, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of any inferior description or that any materials or articles provided by him for the execution for the work are unsound or of quality inferior to that contracted for, otherwise or not in accordance with the contract, the contractor shall on demand in writing, which shall be made within six months of the completion of the work, from the Engineer-in-Charge specifying the work, materials or articles complained of, notwithstanding that the same may have been passed, certified and paid for, will rectify or remove and reconstruct the work so specified in whole or in part as the case may require or as the case may be, remove the material or article so specified and provide other proper suitable material or articles at his own charge and cost and in the event of his failing to do so within a period to be specified by the Engineer-in-Charge in his demand aforesaid, then the Contractor shall be liable to pay compensation at the rate of one percent on the estimated amount put to tender for every day not exceeding ten days while his failure to do shall continue and in the case of any such failure, the Engineer-in-Charge may rectify or remove and re-execute the work or remove and replace with others, the materials, or articles complained, as the case may be at the risk and expense in all respects of the Contractor.

Clause 15:

All work under or in course of execution or pursuance of the Contract shall at all times be open to the inspection and supervision of the Engineer-in-Charge and his authorized subordinates and the Central vigilance commission or by the Chief Engineer (QAC) DDA or his authorized subordinate officer, and the Contractor shall at all times during the usual working hours and at all others times for which reasonable notice of the intention of the Engineer-in-Charge or authorized to visit the works has been given, the Contractor either himself be present to receive the orders and instructions or have a responsible agent duly accredited in writing present for that purpose. Orders given to the Contractor agent shall be considered to have the same force as if they had been given to the Contractor himself. The work during its progress can also be inspected by the Chief Technical Examiner / Technical Examiner of the Central Vigilance Commission or by Chief Engineer (QAC) DDA or by an officer of the Vigilance Cell of the Authority on behalf of the Engineer-in-Charge (or any Technical Officer such as C.E.(Q.A.C.), SE(Q.A.C.), E.E.(Q.A.C.) or any officer of higher level.

Clause 16:

Contractor shall give not less than seven days notice, in writing to Engineer-in-Charge or his authorized subordinate in charge of the work, before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimension there of be taken before the same is so covered up or placed beyond the reach of measurement and shall not cover up any work without the consent in writing of the Engineer-in-Charge or his authorized subordinate in charge of the work. The Engineer-in-Charge or his authorized subordinate- in-charge of work shall within the aforesaid period of seven days inspect the work, and if any work shall be covered or placed

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beyond the reach of measurement without such notice having been given to the Engineer-in-Charge, consent being obtained the same shall be uncovered at the Contractor's expense or in default there of no payment or allowance shall be made for such work or the materials with which same was executed.

Clause 17: Contractor liable for Damages done and for imperfection notice during maintenance period.

If the Contractor or his working people or servants shall break, deface injure or destroy any part of building in which they may be working or any building, road, kerb, fence, enclosure, water pipe, cables, drains, Electric or Telephone post or wires or trees, grass or grassland, or cultivated ground continuous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress from any causes whatever or if any defect, shrinkage or other faults appear in the work within 12 months (6 months in case of any work other than road work costing Rs.10,00,000/and below) after a certificate final or otherwise of its completion shall have been given by the Engineerin-Charge as aforesaid arising out of defect or improper materials or workmanship the Contractor shall upon receipt of a notice in the writing on that behalf make the same good at his own expense or in default, the Engineer-in-Charge cause the same to be made good by other workman and deduct the expense from any sums that may be due or at any time thereafter may become due to the Contractor, or from his Security Deposit except for the portion pertaining to asphaltic work which is governed by sub-para(iii) of clause 35 or the proceeds of sale thereof or of a sufficient portion thereof the Security Deposit except of the Contractor except the portion pertaining to asphaltic work is governed by subpara (iii) of clause 35 shall not be refunded before the expiry of 12 Months (Six months is case of any work other then road work costing Rs.10 Lacs and below) after the issue of the certificate final or completion of work or till the final bill has been prepared and passed whichever is later.

Clause 17 A: Refund of Security Deposit in road works

Provided that in the case of road work if in the opinion of the Engineer-in-Charge, half of the Security Deposit is sufficient to meet all the liabilities of contractor under this contract, half of the Security Deposit will refundable after six months the remaining half after twelve months of the issue of the said certificate of completion or till the Final bill has been prepared and passed whichever is later.

Clause 17B: Defects relating to work of leakage of Roof

Provided further that for defects relating to leakage from the roof, the Contractor shall be responsible for rectification of the same within a period of one year or two rainy seasons (ending October) whichever is later, after the physical date of completion of the work as a whole to be recorded by the

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Deptt. and 10% of the Security Deposit of the Contractor will be refunded after expiry of the above period.

Clause 18: Contractor to supply Tools & Plants etc.

The Contractor shall provide at his own cost all materials (except such materials, if any as may in accordance with the Contract be supplied from the Engineer-in-Charge stores) Plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specification or other documents forming part of the Contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge as to any matter as to which under these conditions he is entitled to be satisfied or which is entitled to require together with carriage thereof to and from the work. The Contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out work and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing the same may be provided by the Engineer-in-Charge at the expenses of the Contractor and expanses may be deducted from any money due to the Contractor or otherwise and/or from his Security Deposit or the proceeds of sale thereof or a sufficient portions thereof.

Clause 18 A: Recovery of Compensation paid to Workman

In every case in which by virtue of the provisions of section 12 sub-section (i) of the workman's compensation Act 1923 DDA is obliged to pay compensation to a workman employed by the Contractor, in execution of the works, DDA will recover from the Contractor the amount of the compensation so paid, and without prejudice to the rights of DDA under section 12 sub-section (ii) of the said Act DDA shall be at liberty to recover such amount or any part there of, by deducting it from the Security Deposit or from any sum due by DDA to the Contractor whether under this Contract or otherwise. DDA shall not be bound to contest any claim made against it under section 12 sub-section (i) of the said Act, except on the written request of the Contractor and upon his giving to DDA full security for all cost for which DDA might become liable in consequence of contesting such claim.

Clause 18 B: Ensuring payment and Amenities to Workers if Contractor fails

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In every case which by virtue of the provisions of the Contract labour (Regulation & Abolition) Act, 1970 and of the Contract Labour (Regulation & Abolition) Central Rules 1971, DDA is obliged to pay any amounts of wages to a workman employed by the Contractor in the execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under clause 19-H or under the DDA Contractor's Labour Regulations, or under the rules framed by the government from time to time for protection of health and sanitary arrangements for workers employed by DDA Contractors, DDA will recover from the Contractor the amount of wages so paid or the amount of expenditure so incurred and without prejudice to the rights of the DDA under section 20. Sub-section (2) and Section (21), Sub-section (4) of the Contract Labour (Regulation &Abolition) Act, 1970, DDA shall be at liberty to recover such amount or any part thereof by deducted it from the Security Deposit or from any due by DDA to the Contractor, whether under this Contract or otherwise, DDA shall not be bound to contest any claim made against it under section 20, sub-section (i) and Section 21, Sub Section (4) of the said act.

Clause 19: Labour Laws to be complied with by the Contractor

The Contractor shall obtain license under the Contract Labour (R&A), Act 1970, and the Contract Labour (Regulation & Abolition) Central Rules 1971, before the commencement of the work and continue to have a valid license until the completion of the work The Contractor shall also abide by the provision of child labour prohibited and Regulation Act 1986

The Contractor shall comply with all the provisions of the Delhi Building and other construction workers (Regulations of Employment and conditions of Service) Rule-2002 framed Under Section 62 of the Building and other construction workers (Regulation of employment and Condition of service) Act, 1996 of Govt. of India as notified by the govt. of NCT of Delhi vide notification No. DLC/CLA/BCW/01/19 dt. 10.1.2002 which, inter alia, provides that a Cess @ 1% of the cost of construction/project or as revised by the competent Authority from time to time shall be leviable and shall be deducted at source from the bills paid to the Contractor. All other term/conditions as per the Act, mentioned hereinabove as well as rules made thereunder and modification issued from time to time would also apply.

Any failure to fulfill this requirement shall attract the panel provisions of this Contract arising out of the resultant non-execution of the work.

Clause 19 A: No Labour below the age of Fourteen Years shall be employed on the work

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Clause 19 B: Payment of wages to labour:

(a) The Contractor shall pay not less than fair wages to labourers engaged by him on the work.

Explanation: "Fair Wages" means wage, whether for time or piece work, notified at the time of inviting tenders for the work, where such wages have not been so notified the wages prescribed by the D.D.A. for the district in which the work is done it will be notified/prescribed by D.D.A. in consultation with the officers of the Industrial Relation Machinery located in the respective areas and will not be less than the minimum rates of the wages fixed by the Govt. of N.C.T. Delhi for that class of employee engaged on the same type of the work in the same area.

- (b) The Contractor shall, notwithstanding the provisions of any Contract to the contrary, cause to be paid fair Wage to labourers indirectly engaged on the work, including any labour engaged by his sub-Contractors in connection with said work, as if the labourer had been immediately employed by him.
- (c) In respect of all labour directly or indirectly employed in the works for performance of the Contractor's part of this Contract, the Contractor shall comply with or cause to be complied with the D.D.A. Contractor's labour regulations made by the Govt. of N.C.T. Delhi from time to time payment of wages, period of deductions from wages, recovery of wages not paid and deductions unauthorized made, maintenance of wage books or wage slip, publication of scale of wages and other items of employment inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract labour (Regulation and Abolition) Act 1970 and Contract labour (Regulation & Abolition) central rules, 1971, whichever is applicable.
- (d) The Engineer-in-Charge concerned shall have right to deduct form the money due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the Contract for the benefit of the workers, non-payment of wages or of deductions made from his / their wage which are not justified by the terms of the Contract or non-observance of the Regulations.
- (e) Under the provision of the Minimum Wages Act 1948 and the Minimum Wages (Central) Rule 1950, the Contractor is bound to allow or cause to be allowed to the labourers directly employed in the works one day rest for six days continuous works and pay wages at the same rate as for duty. In the event of default the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labourers and pay the same to the persons entitled thereto from any money due to the Contractor by the Engineer-in-Charge concerned, in the case of the N.C.T. of Delhi, however as the all inclusive minimum daily wages fixed under Delhi Government Notification No F12(142)02/MW/LAB/3436 dt 11.09.07 or as amended or recommended from time to time.

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- (f) Vis-à-vis the DDA and the Contractor shall be primarily liable to all payment to be made under and for the observance of the Regulation aforesaid without prejudice to his right to claim indemnity from sub contractors.
- (g) The regulation aforesaid shall be deemed to be a part of this Contract and any breach thereof shall be deemed to be a breach of this Contract.

Clause 19 C: Penalty for each default to provide facilities:-

In respect of all labour directly or indirectly employed in the work for the performance of the Contractor's part of this Contract, the Contractor shall at his own expense arrange for the safety provision as per Safety Code framed form time to time and shall at his own expense provide for all facilities in connection therewith. In case the Contractor fails to make arrangement and does not provide necessary facilities as aforesaid he shall be liable to pay a penalty of Rs.200/- for each default and in addition the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs, incurred in that on behalf of the Contractor.

Clause 19 D: Statement of Staff employed by Contractor

The Contractor shall by the 4th and 19th of every month, submit to the Engineer-in-Charge, a true Statement showing, in respect of the second half of the preceding month and the first of the current month respectively:-

- 1. The number of labourers employed by him on the work,
- 2. Their working hours,
- 3. The wages paid to them,
- 4. The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and.
- 5. The number of female workers who have been allowed Maternity Benefit according to clause 19F and the amount paid to them failing which the Contractor shall be liable to pay to D.D.A. sum not exceeding Rs. 50/- for each default or materially incorrect statement. The decision of the Divisional Officer shall be final in deducting from any bill due to the Contractor and the amount levied as fine shall be binding on the Contractor.

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In respect of all labourers directly or indirectly employed in the works for the performance of the Contractor's part of this Agreement, the Contractor shall comply with or cause to be complied with all rules by Government from time to time, for the protection of health and sanitary arrangement for workers employed by the DDA and its Contractors.

Clause 19 F: Leave and pay during leave shall be regulated as follows:

1. Leave

- (i) In the case of delivery, maternity leave not exceeding 8 weeks, 4 weeks up to and including the day of delivery and four weeks following that day
- (ii) In case of miscarriage -upto three weeks form the date of miscarriage.

2. Pay

- (i) In case of delivery leave pay during maternity leave will be at the rate of the women's average daily earnings, calculated on total wages earned on the days when full time work was done during a period of three months immediately preceding the date on which she given notice that she expects to be confined or, at the rate of rupees one only day whichever is greater.
- (ii) In case of miscarriage leave pay at the rate of average daily earning calculated on the total wages earned on the days when full time work was done (during a period of 3 months immediately preceding the date of such miscarriage.
- 3. Conditions for the grant of maternity leave: No maternity leave benefit shall be admissible to a woman unless she has been employed for a total period of not less than Six months immediately preceding the date on which she proceeds on leave.
- 4. The Contractor shall maintain a register of maternity (benefit) in the prescribed form as shown below and the same shall be kept at the place of work.

Register of Maternity Benefit (Clause 19 F of the conditions of Contract)

Name and address of the Contractor(s)

Name and location of work,

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	Name of	Father's/ Husband's	Nature of	Period of Actual	Date on which notice
	Employee	Name	Employment	Appointment	of Confinement given
	(1)	(2)	(3)	(4)	(5)
	<u>Date on v</u>	vhich maternity leave	e commenced ar	<u>nd ended</u>	
	Date of D Miscarria	elivery/ In case of D	=	In case of miscarr	=
	(6)	ge <u>Commenced</u> (7)		(9) (10)	
	(0)	(7)	(0)	(3) (10)	
		<u>Lea</u>	ve pay paid to th	ne Employee	
	In case of	Delivery	In case of N	Niscarriage	
	Rate of le	ave pay Amount pa	aid Rate of lea	ve pay Amount	paid Remarks
	(11)	(12)	(13)	(14)	<u>(15)</u>
		Specimen form o admissible	_	garding maternit labour in DDA wo	-
1.	Name of the	e work	Name of Co	ontractor	
2.	Name of the	e woman and her hus	band's name		
3.	Designation	4.	Date of appointr	nent	
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5.	Date with Month & Year in which she is employed
6.	Date of discharge/dismissal, if any
7.	Date of production of certificate in respect of pregnancy
8.	Date on which woman informs about expected delivery
9.	Date of delivery/miscarriage/death
10.	Date of production of certificate in respect of delivery/miscarriage
11.	Date with the amount of maternity/death, death benefit, if paid in advance of expected delivery
12.	Date with the amount of subsequent payment of maternity benefit
13.	The name of the person nominated by the women to receive the payment of the maternity benefit after her death
14. the	If woman dies, the date of her death, the person to whom Maternity benefit amount was paid, month thereof and the date of payment
15.	Signature of the Contractor authenticating entries in the register
16.	Remarks column for the use of inspecting officer
Claus	e 19G: MODEL RULES
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In the event of the Contractor (s) committing a default or breach of any of the Provisions of the DDA Contractor's labour Regulation and Model Rules for Protection of Health and sanitary arrangements for workers as amended form time to time or furnishing any information or submitting or filing any statement under the provisions of the above Regulations and Rules which is materially incorrect, he/they shall without prejudice to any other liability, pay to the Delhi Development. Authority a sum not exceeding Rs.50/-per day for each day, default, breach or furnishing, making, submitting, filing such material incorrect statements and in the event of the Contractor(s) defaulting continuously in this respect, the penalty may be enhanced to Rs.50/- per day for each day of default subject to a maximum of five percent of the Estimated Cost of the work put to Tender. The decision of the Engineer-in-Charge shall be final and binding on the parties.

Should it appear to the Engineer-in-Charge that the Contractor is not properly observing and complying with the provisions of DDA. Contractor's Labour Regulations and model rules and the provisions of the Contract (Labour Regulation & Abolition) Act 1970, and the Contract labour (Regulation & abolition) Central Rules 1971, for the protection of health and sanitary arrangements for work people employed by the Contractor, hereinafter referred a "The said Rules", the Engineer-in-Charge shall have power to give notice in writing to the Contractor (s) requiring that the said rules be complied with and the amenities prescribed therein be provided to the work people within a reasonable time, to be Specified in the notice. If the Contractor(s) fail within the period specified in the notice to Comply with and/observe the said rules and to provides the amenities to work people as aforesaid, the Engineer-in-Charge shall have the power to provide the amenities herein before mentioned at the cost of the Contractors(s). The Contractor (s) shall construct, make and maintain at his/their own expenses and according to approved standards all necessary huts and sanitary arrangement required at for his/their work people on the site in-connection, with the execution of the works, and if the same shall not have been erected or constructed according to approved standards, the Engineer-in-Charge shall have power to give notice in writing to the Contractor's requiring that the said huts and sanitary arrangements be remodeled and/or reconstructed according to approved standards, and if the Contractors shall fails to remodel or reconstruct such huts and sanitary arrangement according to approved standards within the period specified in the notice, the Engineer-in-Charge shall have the power to remodel such huts and sanitary arrangements, according to approved Standards at the cost of the Contractor(s).

Construction of labour huts near work sites shall be avoided as far as possible Whenever labour huts are constructed the Engineer-in-Charge will prepare a plan of the area to be occupied by the labour of the construction agency reflecting thereupon the huts to be constructed. The Engineer-in-Charge shall obtain an undertaking from the Contractor that the site of the labour huts shall be cleared of the labour huts after the work has completed in the following Performa.

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- 1. Full site free from any encroachment has been handed over to me/ us on......
- 2. The labour huts......in nos. constructed by me/us at site as shown on the site plan and duly signed by me/us, belong to me/us. These shall be removed from the site before the completion of the work. In case of failure to do so the Department can get the same removed at my risk and cost. The Contract bill shall not be finalized till the Engineer-in-Charge given a certificate that the area occupied by the labour of the Contractor has been cleared/vacated.

Signature of the Contractor

Clause 19H: Specifications for labour camp.

The Contractor (s) shall at his/their own cost provide his/their labour with a sufficient number of huts (herein after referred to as the camp) of the following specifications on a suitable plot of land to be approved by the Engineer-in-Charge.

- 1 (a) The minimum height of each hut shall be 2.10 meters and the floor area to be provided at the @.2.7sqm. for each member of the worker's family staying with labourer.
 - (b) The Contractor(s) shall in addition construct suitable cooking place having minimum area of (1.8M x1.5M) adjacent to the hut for each family.
 - (c) The Contractor(s) shall also construct temporary Latrines and Urinals for the use of the labour each at the scale of not less than four pan for each one hundred of the total strength. Separate latrines and Urinals shall be provided for women.
 - (d) The Contractor(s) shall also construct sufficient number of bathing & washing places, one unit for every 25 persons residing in the camp. Theses bathing & washing places shall be suitable screened.
- 2 (a) The floor of huts shall be in bricks and shall be at least (0.15m) above the surrounding ground. The roof of the huts shall be of canvas cloth (water proof) as may be approved by the Engineer-in-Charge and the Contractor shall ensure that through out the period of their occupation the huts remain water tight.
 - (b) There shall be kept an open space of at least 7.2M between the rows of huts which may be reduced to 6m according to the availability of site with the approval of the Engineer-in-Charge. Back to back construction will be allowed.

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3. Water Supply:

The Contractor shall provide adequate supply of water for the use of labourers. Provision shall not be less than two gallons of pure and wholesome water per head per day for drinking purpose and three gallons of clean water per head per day for batching & washing purposes, where piped water supply is available supply shall be at stand posts and where the supply is from wells or river, tanks, which may be of metal or masonry, shall be provided. The Contractor (s) shall also at his/their cost make arrangement for laying pipe lines for supply to his/their labour camp from the existing mains wherever available and shall pay all fees and charges there of.

4. The site selected for the camp shall be on high ground, removed from jungle.

5. **Disposal of Excreta:**

The Contractor (s) shall make necessary arrangement for the disposal of excreta from latrines by trenching or incineration which shall be according to the requirements laid down by local Health Authority. If trenching or incineration is not allowed the Contractor(s) shall make arrangement for the removal of the excreta through the Municipal Committee/Authority and inform it, the number of labourers employed so that arrangements may made by such Committee / Authority for the removal of the excreta. All charge on this account shall, be borne by the Contractor and paid directly by him to the Municipality / Authority. The Contractor shall provide one sweeper for every 8 seats in case of dry system.

6. Drainage:

The Contractor shall provide efficient arrangement for draining away sullage water so as to keep the camp neat and tidy.

7. The Contractor shall make necessary arrangement for keeping the camp area sufficiently lighted to avoid accident to the workers.

8. Sanitation:

The Contractor(s) shall make arrangement for conservancy and sanitation in the labour camps accordingly to the rule of the Local Public Health and Medical Authorities.

9. Wherever electric connection from NDPL/BSES is readily available the Contractor would provide sufficient street-lights for the labour camp as per directions of the Engineer-in-Charge.

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Clause 19 I:

The Engineer–In-Charge may require the Contractor to dismiss or remove from the site of the work any person or persons in the Contractor (s) employment on the work who may be incompetent or misconduct himself and the Contractor shall forth with comply with such requirements.

Clause 19 J:

It shall be the responsibility of the Contractor(s) to see that the building under construction is not occupied by any body unauthorizedly during construction, and is handed over to the Engineer-in-Charge with vacant possession of complete building. If such building, though completed is occupied illegally, then the Engineer-in-Charge will have the option to refuse to accept the said building/buildings in that position. Any delay in acceptance on this account will be treated as delay in completion and for such delay a levy up to 5% of the Estimated Cost put to tender may be imposed by the Superintending Engineer, whose decision shall be final both with regards to the justification and quantum and shall be binding on the Contractor. However, the Superintending Engineer may require the Contractor, through a notice, to remove the illegal occupation any time on or before reconstruction and delivery.

Clause 20:

The Contractor shall comply with all the provisions of the minimum wages Act 1948, and Contractor Labour (regulation & Abolition Act 1970), amended from time to time & rules framed thereunder & other labour laws affecting the Contract labour that may be brought **into force from time to time**.

Clause 21:

Work not to be sublet: Contract may be rescinded and Security Deposit forfeited for sub-letting. The Contract or if Contractor becomes insolvent. The Contract shall not be assigned or sublet without the written approval of the Engineer-in-Charge and if the Contractor shall assign or sublet his Contract or A...........

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attempt to do so or become insolvent or commence an insolvency proceeding or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given promised, or offered by the Contractor or any of his servants or agents or any public officer or persons in the employment of DDA in any way relating to his office or employment or if any such officer or person shall become in any way indirectly or directly interested in the Contract, the Engineer-in-Charge on behalf of the Authority shall have power to adopt any of the courses specified in clause 3, thereof as he may deem best suited to the interest of DDA and in the event of any these courses being adopted the consequence specified in the said clause 3 shall ensue.

Clause 22: Reasonable compensations without references to actual loss

All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of DDA without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

Clause 23: Change in firms constitution to be intimated

Where the Contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before any change is made in the constitution of the firm. Where the Contractor is an individual or a Hindu undivided family business concern, such approval as aforesaid shall likewise be obtained before the Contractor enters into any partnership Agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the Contractor. If previous approval as aforesaid is not obtained, the Contract shall be deemed to have been assigned in contravention of clause 21 hereof and the same action may taken, and same consequences shall ensure as provided in the said clause 21.

Clause 24:

All works to be executed under the Contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge who shall be entitled to direct at what point or points and in what manner they are to be commenced and time to time carried on.

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The decision of the Superintending Engineer/Chief Engineer regarding the quantum of reduction as well as justification thereof in respects of rates for sub standard work below specification which may be decided to be accepted will be final and would not open to arbitration.

Clause 26: Contractor to Indemnify D.D.A. against patent rights

The Contractor shall fully indemnify and keep indemnified the DDA against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any realities which may be payable in respect of any article or part thereof included in the Contract. In the event of any claims made under or action brought against DDA in respect of any such matters as aforesaid, the Contractor shall be immediately notified, thereof, and Contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise there from, provided that the Contractor shall not be liable to indemnify the DDA if the infringement of the patent or design or any alleged patent or Design right is the direct result of an order passed by the Engineer-in-Charge, in this behalf.

Clause 27: Deleted

Clause 28:

In the case of any class of work for which there is no such Specifications as referred to in Rule-1, such work shall be carried out in accordance with the B.I.S./district Specifications. In case there is no B.I.S./District Specifications, then in such case the work shall be carried out as per manufacturers Specification. In case, there are no such Specifications, as required above, the work shall be carried out in all respect in accordance with the instructions and requirements of the Engineer-in-Charge.

Clause 29 (1) Withholding and lien in respect of sums from Contractor

Wherever any claims for payment of any sum / money arise out of or under Contract or against the Contractor, the Engineer-in-Charge or D.D.A. shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from security, if any deposited by the Contractor and for the purpose aforesaid, the Engineer-in-Charge or the D.D.A. shall be entitled to withhold the Security

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Deposit, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the Contractor, the Engineer-in-Charge or the D.D.A. shall be entitled to withhold and have lien to retain to the extent the such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the Contractor under the same Contract or any other Contract with the Engineer-in-Charge or the D.D.A or any Contracting person through the Engineer-in-Charge pending finalization of adjudication of any such claim. It is an agreed term of the Contract that the sum or sums of money so withheld or retained under the lien referred to above by the Engineer-in-Charge or D.D.A. till the claim arising out of or under the Contract is determined by the competent court, and that the Contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the Contractor. For the purpose of this clause, where the Contractor is a partnership firm or a limited company, the Engineer-in-Charge or the D.D.A. shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/Limited company as the case may be, whether in his individual capacity or otherwise.

Clause 29 (ii)

DDA shall have right to cause an audit and technical examination of the works and the final bills of the Contractor, including all supporting voucher, abstract etc. to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been over paid in respect of any work done by the Contractor under the Contract or any work claimed to have been done by him under the Contract and found not to have been executed, the Contractor shall be liable to refund the amount of overpayment and it shall be lawful for DDA to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible, and if it is found that the Contractor was paid less than what was due to him under the Contract in respect of any work executed by him under it the amount of such under payment shall, be duly paid by DDA to the Contractor, without any interest there on whatsoever Provided that DDA shall not be entitled to recover any/some overpaid, not the Contractor shall be entitled to payment of any sum paid short where payment has been agreed upon between the Chief-Engineer or Executive Engineer on the one hand and the Contractor on the other hand under any term of the Contract permitting payment for work after assessment by the Chief-Engineer or the Executive Engineer

Clause 30 : Lien in respect of any D.D.A. Works/Contract

Any sum of money due and payable to the Contractor (including the Security Deposit refundable to him) under the Contract may be withheld or retained by way of lien by the Engineer–In-Charge or the

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D.D.A. or any other Contracting persons or persons through Engineer-in-Charge against any claim. The Engineer-in-Charge or D.D.A. or such other person or persons in respect of payment of a sum of money arising out of or under any Contract made Contractor with the Engineer-in-Charge or the D.D.A. or with such other person or persons. It is an agreed term of the Contract that sum of money so withheld or retained under this clause by Engineer-in-Charge or the D.D.A. will be kept withheld or retained as such by Engineer-In Charge or the D.D.A. or till his claim arising out of the same Contract or any other Contract is either mutually settled or determined by the competent Court, and that the Contractor shall have no claim for interest or damages whatsoever on this account or any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the Contractor.

Clause 31:

The Contractor (s) shall make his/their own arrangement for unfiltered water required for the work and nothing extra will be paid for the same. This will subject to the following conditions:

- (a) That the water used by the Contractor shall be fit for construction purpose to the satisfaction of the Engineer-In Charge.
- (b) The cost of testing shall be paid by the Contractor.

Clause 32: (i)

The Contractor shall be allowed to construct temporary wells in DDA land for taking water for construction purposes only after he has got permission of the Engineer-in-Charge in writing. No charge shall be recovered from the Contractor on this account, but the Contractor shall be required to provide necessary safety arrangements to avoid any accidents or damage to adjacent building, roads and service lines. He shall be responsible for any accidents or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work.

Clause 32: (ii) Contractor to repair the wells/head pump at sites

Where there is no piped water supply arrangement and the water is to be taken by the Contractor from the wells or hand pumps constructed by the DDA no charge shall be recovered from the Contractor on that account. The Contractor shall, however, draw water at such hours of the day that it does not interfere with normal use for which the hand pumps and wells are intended. He shall also be

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responsible for all damage and abnormal repairs arising out of his use, the cost of which shall be recoverable from Contractor on this account. The Engineer-in-Charge shall be the final Authority to determine the cost recoverable from Contractor on this account and his decision shall to binding on the Contractor.

Clause 33: Return of surplus materials

Notwithstanding any thing contained to the contrary in any or all of the clauses of this Contract, where any materials for the execution of the Contract are procured with the assistance of DDA either by issue from DDA stock or purchase made under order of permits or licenses issued by DDA, the Contractor shall hold the said materials economically and solely for the purpose of the Contract and not dispose of them without the permission of the D.D.A. and return, if required by the Engineer-in-Charge all surplus materials or unserviceable materials that be left with him after the completion of the Contract or at its termination for any reason whatsoever on being paid or credited such price at the Engineer-in-Charge shall determine having due regard

to the condition of the materials. The price allowed to the Contractor however shall not exceed the amount charged to him excluding the element of storage charges. The decision of the Engineer-in-Charge shall be final and conclusive. In the event of breach of the aforesaid condition the Contractor shall in addition throwing himself open to action for contravention of the term of the Licenses or permit and or for criminal breach of trust be liable to D.D.A. for all moneys, advantages or profit resulting or which in the usual course would have resulted to him by reason of such breach.

Clause 34: DELETED

Clause 35: Condition relating to use of Asphaltic Materials

- (i) The Contractor undertakes to make arrangements for the supervision of the works by the firms supplying the tar or bitumen used. .
- (ii) The Contractor shall collect the total quantity of tar or bitumen required for the work as per standard formula before the process of painting is started and shall hypothecate it to the Engineer-in-Charge. If any bitumen or tar remains unused on completion of the work on account of lesser use of material in actual execution for reason other than Authorized changes of specification and abandonment of portion of work, a corresponding deduction equivalent to the cost of unused materials as determined by the Engineer-in-Charge shall be made and material returned to the Contractors. Although the material are hypothecated to D.D.A. the Contractors undertakes the responsibility for their proper watch, safe custody and protection

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against all risk. The material shall not be removed form site of work without the consent of the Engineer-in-Charge in writing.

(iii) The Contractor shall be responsible for rectifying defects noticed within a year from the date of completion of the work. The Security Deposited relating to a asphaltic work shall refunded after expiry of this period.

Clause 36: Contractor 'Superintendence, Supervision Technical Staff & Employees.

(i) The Contractor shall provide all necessary superintendence during execution of the work and as long thereafter as may be necessary for proper fulfilling of the obligations under the Contract. The Contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-Charge the name, qualification, experience, age, address, and other particulars along with certificates of the Principal Technical representative to be in charge of the work. Such qualification and experience shall not be lower than specified in clause 36(iv). The Engineer-in-Charge shall within 15 days of receipts of such communication intimate in writing his approval or otherwise of such representative to the Contractor. Any such approval may, at any time be withdrawn and in case of such withdrawal the Contractor shall appoint another such representative according to the provisions of this clause. Decision of the tender accepting Authority shall be final and binding on the Contractor in this respect. Such principal Technical Representative shall be appointed by the Contractor soon after receipt of the approval from Engineer-in-Charge and shall be available at site within fifteen days of start of work.

If the Contractor (or any partner in case of firm/company) who himself has such qualifications, it will not be necessary for the said Contractor to appoint such a principal technical representative but the Contractor shall designate and appoint a responsible agent to represent him and to be present at the work whenever the Contractor is not in a position to be so All the provisions applicable to the principle technical representative under the clause will also be applicable in such a case to Contractor or his responsible agent. The principal technical representative and/or the Contractor shall on receiving reasonable notice from the Engineer-in-Charge or his designated representative (s) in charge of the work in writing or in person or otherwise, present himself to the Engineer-in-Charge and/or at the site of work as required, to take instruction. Instruction given to the principal technical representative or the responsible agent shall be deemed to have the same force as if these have been given to the Contractor. The principal technical representative and/or the Contractor or his responsible authorized agent shall be actually available at site at least on two working days every week, these days shall be determined in consultation with the Engineer-in-Charge as well as fully during important stage of execution of works, during recording of measurement of work and whenever so required by the Engineer-in-Charge by a notice as aforesaid and shall also note down instruction conveyed by the Engineer-in-Charge or his designated representative in the site order book and shall affix his signature in token of noting

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down the instructions and in token of acceptance of measurement. There shall be no objection if the representative/ agent looks after more than one work and not more than three work in same station provided these details are disclosed to the Engineer-in-Charge and he shall be satisfied that the provisions and the purpose of this clause are fulfilled satisfactorily. If the Engineer-in-Charge, whose decision in this respect is final and binding on the Contractor, is convinced that no Technical representative or agent is effectively appointed or is effectively attending or fulfilling the provision of this clause, a recovery shall be effected from the Contractor as specified in clause 36 and the decision of the Engineer-in-Charge as recorded in the site order book and measurement recorded in Measurement book shall be final and binding on the Contractor. Further if the Contractor fails to appoint a suitable technical representative or responsible agent and if such appointed persons are not effectively present or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date a suitable agent appointed and the Contractor shall be held responsible for the delay so caused to the work. The Contractor shall submit a certificate of employment of the technical representative/responsible agent alongwith every on account bill/Final bill and shall produce evidence, if at any time, so required by the Engineer-in-Charge.

- (ii) The Contractor shall provide and employ on the site only such Technical Assistants as are skilled and experienced in their respective fields and such foremen and supervisors as are competent to give proper supervision to the work. The Contractor shall provide and employ skilled, semiskilled and unskilled labour as if necessary for proper and timely execution of the work.
- (iii) The Engineer-in-Charge shall be at liberty to object to and require the Contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge to be undesirable. Such person shall not be employed again at work site without the written permission of the Engineer-in-Charge and the persons so removed shall be replaced as soon possible by competent substitutes.

Clause 36(iv): Minimum qualification and experience required for principal technical representative

(a) For works with Estimated Cost put to tender more than

(a)i oi v	vorks with Estimated Cost put to tender more than	
(i)	Rs.10 Lacs for Civil Work	Graduate or retired AE
(ii)	Rs.5 Lacs for Elect /Mech. Works	possessing recognized Diploma
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(b)	For works with Estimated Cost put to tender.	
(i)	More than Rs.5 Lacs but less than	
	Rs.10 Lacs for Civil Works	
(ii)	More Than Rs.1 Lakh but less then	Recognized Diploma Holder
	Rs.5 Lacs for Elect./ Mech. Works	
(c)	Discipline for which the Principal	
	Technical Representative should belong	Civil/Elect/Mech.
(d)	Minimum experience of works	10 years
(e)	Recovery to be effected form the	
	Contractor in the event of not fulfilling the	
	provisions of clause 36.(i)	i) Rs.25,000/-pm for Graduate
		ii) Rs.15,000-pm for Diploma Holder
Clause	37	
	nole work may be split up between two or more contracto	rs or accepted in part and not in
entirely	rif considered expedient.	
Claa	20.	
Clause	38:	
In nure	uant to or under any law notification or order any Royalty C	ass or the like become navable by
In pursuant to or under any law, notification or order any Royalty, Cess or the like become payable by the D.D.A. and does not at any time becomes payable by the Contractor to the state Government/Local		
Author	ity in respect of any materials used by the Contractor, in the w	orks then in such a case, it shall be
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lawful to the D.D.A. and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the Contractor.

Sales tax or any other tax on material, Tax/Duty in respect of this Contract shall be payable by the Contractor and DDA shall not entertain any claim whatsoever in this respect.

Clause 39:

Without prejudice to any of the rights or remedies under this contract if the contractor dies, Divisional Officer on behalf of the DDA shall have the option of terminating the Contract without compensation to the 'heirs' of the Contractor

Clause 40: If any relative working in D.D.A. such Contractors not allowed to tenders.

The Contractor shall not be permitted to tender for works in D.D.A. Zone (responsible for award and execution of Contractors) in which any of his near relatives is posted as divisional accountant or as officer in any capacity between grades of CE and J.E. (both inclusive) in D.D.A. He shall intimate the names of his near relatives, if any who are working as group A, B or C officer in D.D.A. He shall also intimate the names of these persons who are working with him in any capacity or are subsequently employed by him and near relatives of any groups A, B or C officers in D.D.A. Any breach of this condition by the Contractor would render him liable to action under **Clause-3** of the Agreement. In addition, he would also liable to be debarred form tendering in future in D.D.A.

Note: By the terms near relatives is meant wife, husband, parents and grand parents, children, brothers, sisters, uncles, aunts, cousin and their corresponding in-laws.

Clause 41:

No Engineer of Gazetted rank or other Gazetted officer employed in Engineering or Administrative duties in an Engineering Department of the DDA is allowed to work as a contractor or employee of a contractor for a period of two years after his retirement from Authority's service without prior permission of DDA in writing. This contract is liable to be cancelled if either the Contractor or his

employee is found at any time to be such a person who had not obtained the permission of the DDA as aforesaid, before submission of tender or engagement in the Contractor's service as the case may be.

Clause 42:

- (i) The Contractor shall see that only required quantities of material are got issued. Any such materials remaining unused and in perfectly good condition at the time of completion or termination of the Contract shall be returned to the Engineer-in-Charge at a place where directed, directly by him by notice in writing under his hand if he shall so require, credit for such materials will be given at the prevailing market rate not exceeding the amount charged from him excluding the element of storage charge @ 2.0% levied at the time of issue of materials to him. The Contractor shall also not be entitled to cartage and incidental charges for returning the surplus material from and to the above said stores where these were issued.
- (ii) After completion of the work the theoretical quantity of cement to be used in work shall be calculated on the basis of statement showing quantity of cement to be used in different items of work provided in Delhi Schedule of Rate 2007 with Correction Slips issued upto the date of receipt of tender. In case any item is executed for which the standard constants for the consumption of cement are not available in the above mentioned statement or can not be derived, the same shall be calculated on the basis of standard formula to be laid down by the Superintending Engineer of the circle concerned. Over this theoretical quantity of cement shall be allowed a variation up to 3% plus/minus for work up to the Estimated Cost of which put to tender is less than Rs.5 Lacs and 2%+/- for works the Estimated Cost of which put to tender is more than Rs.5 Lacs. The difference of the quantity of the cement actually issued to the Contractor and theoretical quantity including authorized variation, if not returned by the Contractor, shall be recovered at twice the issue rate without prejudice to the provision of the relevant conditions regarding return of materials governing the Contracts. In the event of it being discovered that the quantity of cement used is less than the quantity ascertained allowing variation on the minus side (as stipulated above), the cost of quantity of cement not so used shall be recovered from the Contractor on the basis of Stipulated Issue rates and cartage to site.
- (iii) The provisions of foregoing sub-clause shall apply mutatis mutandis in the case of steel section, reinforcement of structural steel (each diameters/section or category shall be considered separately) except that theoretical quantity of the steel shall be taken as the quantity required as per design or as authorized by the Engineer-in-Charge including authorized lap pages plus 3% wastage due to cutting into pieces. Over this theoretical quantity 2%plus/minus shall be allowed as variation due to wastage being more or less.

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- (iv) After the completion of the work the actually quantity of cables (other than underground cables)wire conduit/ GI, SCI pipes GI/MS sheets used in the various items of work shall be calculated on the basis of measurements recorded in the Measurement Books for purpose of payment and for assessing the consumption of materials used on works. Over this quantity a variation of 5% plus shall be allowed for wastage of materials during execution in case of cable, wire, conduit pipes/GI/CI/SCI pipes and 10% plus in case of GI/MS sheets. The difference in quantity recorded in the measurement book including authorized variation as states above, if not returned by the Contractors, shall be recovered at twice the issue rates plus cartage to site, with out prejudice to the provisions of the relevant condition regarding return of materials governing the Contract.
- (v) After completion of the work the theoretical quantity of bitumen to be used on works shall be calculated on the basis of CPWD statement showing quantity of bitumen to be used in different items of work provided in the Delhi Schedule of Rates 2007 with up to date Correction Slips. The theoretical quantity of bitumen to be used in the work shall be calculated on the basis of standard formula laid down by Superintending Engineer of the concerned circle for items other then DSR items. Over the said theoretical quantity of Bitumen a variation up to plus (excess) 2.5% shall be allowed.

The difference in the quantity of bitumen actually issued to the Contractor and the theoretical quantity shall be recovered at twice the Issue Rate of Bitumen without prejudice to the provision of the relevant conditions in the Agreement regarding return of materials governing the Contract. In the event of it being discovered that the quantity calculated in the manner aforesaid (no variation) is on the lower side, the cost of quantity of bitumen not so used shall be recovered by the Contractor on the basis of stipulated issued rate + cartage thereof up to site.

- (vi) The provision made above are without prejudice to the rights of the DDA to take action against the Contract under the condition of the Contractor for not doing the work according to the prescribed specification.
- (vii) The material shall be issued to the contractor at the place of delivery as mentioned in the schedule. If these are delivered at any other site, the difference due to cartage will adjusted accordingly. The contractor shall have to cart the materials at his own cost to the site of the work as soon as these are issued. The material shall be issued between the working hours and as per rules of the DDA's godown as framed from time to time.

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- (viii) The Contractor shall bear all incidental charges, storage and safe custody of materials.
- (ix) M.S. Round bars and TMT/ Tor Steel shall be issued in lengths as available in the Stores. No claim on this account shall be entertained.
- (x) The Contractor shall construct suitable godowns at the site of work for storing the materials safe against damages from sun, rain dampness fire, theft etc. He shall also employ necessary watch and ward established for this purpose.
- (xi) Cement bags shall be stored in separate godowns as per typical godowns sketch attached, with pucca floor and weather proof roof and walls. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with D.D.A. Junior Engineer-in-Charge of work, and that of the other lock with the authorized agent of the Contractor at the site of work, and that the cement is removed from the godown according to the daily requirement with the knowledge of both the parties. The cement bags shall stacked on proper floor consisting of two layers of dry bricks laid on well consolidated, at a level of at least one foot above ground level. These stacks shall be in rows of 2 bags and 10 bags high with a minimum 2'-9" clear space around. The bags should be placed horizontally continuous in each line as shown in the accompanying sketch. The day to day receipts and issue accounts of cement shall be maintained by the Junior Engineer-in-Charge and signed daily by the Contractor or his authorized agent (stipulated materials shall not be issued on 2nd Saturday, Sunday & Gazetted holidays).

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Clause 44: Compensation during war like situation

The work (whether fully constructed or not) and all materials, tools and Plants, scaffolding, temporary building and other things connected therewith shall be at the risk of the Contractor until the work has been delivered to the Engineer-in-Charge of work, and a certificate from him to that effect obtained. In the event of the work, any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or war like operation, the Contractor shall, when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack and remove in store all serviceable materials salvaged from the damaged work and shall be paid at the Contract rates in accordance with provision of this Agreements for the work of clearing the site of debris, stacking or removal of serviceable materials and for the reconstruction of all works ordered

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by the Engineer-in-Charge, such payment being in addition to compensation up to the value of work originally executed before being damaged or destroyed and paid for.

In case of work damaged or destroyed but not already measured and paid for, the compensation shall be assessed by the Divisional Officer up to Rs.5000/- and by the Chief Engineer for a higher amount. The Contractor shall be paid for the damages/destruction suffered and for restoring the material at the rate, based on the analysis of rates tendered for, in accordance with the provisions of this Agreement. The certificate of the Engineer-in-Charge regarding the quantity of material and the purpose for which they were collected shall be final and binding on all parties to this Contract. Provided always that no compensation shall be payable for any loss in consequence of hostilities or war-like operations.

- (a) Unless the Contractor had taken all such precaution against air-raid deemed necessary by the A.R.P. Officer of the Engineer-in-Charge.
- (b) For materials etc. not on site of the work or for any tools and Plants, Machinery, scaffolding, temporary buildings and other things not intended for the work. In the event of the Contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of times for its completion as is considered reasonable by the Divisional Officer.

Clause 45:

The Contractor shall deposit royalty and obtain necessary permit for supply of red bajri, stone, kankar etc. from local Authority.

Clause 46:

Security Deposit for the work shall not be refunded till clearance from the labour officer is obtained by the Contractor.

Clause 47: DELETED

Clause 48:

The Contractor shall comply with the provisions of the apprentice Act, 1961 and the rules and order issued there under from time to time. If he fails to do so, his failure will be a breach of the Contract and the Engineer-in-charge may in his discretions cancel the Contract. The Contractor shall be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

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Clause 49: Anti Malaria Measures

The Contractor shall at his expenses make necessary arrangement for undertaking anti-malaria measures including drainage at places as abandoned haudies, Water tanks, excavated sites etc where water is likely to stagnate and cause mosquito breeding. The Contractor shall comply with every reasonable directions of the Engineer-in Charge.

SAFETY CODE

- 1. Suitable scaffolds should be provided for workmen for all works that cannot be safely done from the ground or from solid construction except such short period works as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying material as well, suitable foot-holds and handholds shall be provided on the ladder and ladder shall be given an inclination not steeper than ¼ to 1(1/4 horizontal and 1 vertical).
- Scaffolding or Staging more than twelve feet above the ground or floor, swung or suspended from an overhead support or erected with stationery support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 3 feet high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside ends thereof with only such opening as may be necessary for the delivery of the materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- 3. Working platforms, gangways and stair ways should be so constructed that they should not sag unduly or unequally and if the height of the plate form or the gangway or the stairway is more than 12 feet above ground level or floor level, they should be closely boarded and should have adequate width and should be suitable fastened as described in (2) above
- 4. Every opening in floor of a building or all working platforms shall be provided with suitable means to prevent the fall of persons or materials. The opening can be protected by providing suitable fencing or railing whose minimum height shall be 90cm.
- 5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m in length, while the width between side rails in hung ladder shall in no case less than 29 cm, for ladder up to and including 3.05m in length. For longer ladder this width should be increased at last 6mm for each additional foot of length. Uniform step spacing shall not exceed 30cm. Adequate precautions shall be taken to prevent danger from Electrical equipment. The materials on any of the site of work shall not be so stacked or placed as to cause danger or inconvenience to any person or public. The Contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses to defend every suit, action or other proceeding at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit, action or proceeding to any such person or which may, with the consent of the Contractor, be paid to compensate and claim by any such person.

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6. Excavation and Trenching:-

All trenches four feet or more in depth, shall at all times be provided with at least one ladder for 100 feet /30 m in length or fraction thereof. Ladder shall extend from bottom of the trench to at least 90 cm. above the surface of the ground. The sides of the trenches which 1.5 metre or more in depth shall be stepped back to give suitable slope or securely held by timber bracing so as to avoid the danger of sides to collapse. Excavated materials shall not be placed within 1.5 metre of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.

7. Demolition:

Before any demolition works is commenced and during its progress following safety measures shall be taken.

- (a) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
- (b) No Electric cable or apparatus which is liable to be source of danger or a cable or apparatus used by the operator shall remain electrically charged.
- (c) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other parts of the building shall be so overloaded with debris or materials as to render it unsafe.
- 8. All necessary personal safety equipments, as considered adequate by the Engineer-in-Charge, should be kept available for the use of the persons employed on the site and maintained in a condition suitable for immediate use and the Contractor should take adequate steps to ensure proper use of equipment by those concerned.

The following safety equipments shall invariably be provided.

- (a) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
- (b) Those engaged in whitewashing and mixing or stacking of cement bags or any material which is injurious to the eyes shall be provided with protective goggles.
- (c) Those engaged in welding works shall be provided with welder's protective eyes shields.
- (d) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- (e) When workers are employed in Sewers, Storm water piped drains and manholes, which are in active use, the Contractor shall ensure that the following safety measures are adhered to:-
- (i) Entry for workers into the line shall not be allowed except under supervision of the J.E or any other higher officers.

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- (ii) At least 5 to 6 manholes at upstream and downstream should be kept open for at least 3 to 4 hours before any man is allowed to enter into the manhole for working inside.
- (iii) Before entry, presence of toxic gases should be tested by inserting wet lead acetate paper, which changes colour in the presence of such gases and gives indication of their presence.
- (iv) Presence of oxygen should be verified by lowering a detector lamp into the manhole. In case, no oxygen is found inside the sewer line, workers should be sent only with oxygen kit.
- (v) Safety belts with rope should be provided to the workers. While working inside the manhole, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.
- (vi) The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
- (vii) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
- (viii) No smoking or open flames shall be allowed near the blocked manholes being cleaned.
- (ix) Workers should not be allowed to work inside the manhole continuously. They should be given rest intermittently. The Engineer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.
- (x) Gas mask with oxygen cylinder should be kept at site for use in Emergency.
- (xi) Air blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be water proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 meters away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
- (xii) The workers engaged for the cleaning the manholes and sewers should be properly trained before allowing to work in the manhole.
- (xiii) The workers shall be provided with gumboots or non-sparking shoes, bump helmets and gloves, non-sparking tools, safety lights and gasmasks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working
- (xiv fully before putting his n of the rung fixed to

	inside the sewer lines.
(xiv)	Workman descending a manhole shall try each ladder step or rung carefull weight on it to guard against insecure fastening due to corrosion manhole wall.
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- (xv) If a man has received a physical injury he should be brought out the sewer immediately and adequate medical aid should provided to him.
- (xvi) The extent to which these precautions are be taken depend on individual situation, but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard, in an individual case, will be final.
- 9. The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 years are employed on the work of lead painting the following precautions should be taken.
 - (i) No paint containing lead or lead products shall be used except in the form of paste or ready made paint.
 - (ii) Suitable face masks should be supplied for use by the workmen when paint is applied in the form of spray on a surface having lead paint is dry rubbed and scrapped.
 - (iii) Overalls, equipments (all safety equipments) shall be supplied by the Contractors to the Workmen when paint is applied in the form of spray on a surface having lead paint dry rubbed and scrapped.
 - (iv) Overalls shall be supplied by the Contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during the execution of works.
 - White lead, sulphate of lead, or product containing these pigments shall not be used (v) in painting operation except in the form of pastes or paint ready for use.
 - (vi) Precautionary measures shall be taken whenever required to prevent damage arising from the application of a paint in the form of pastes or paint ready for use, in the form of spray
 - (vii) Precautionary measures shall be taken whenever required in order to prevent danger arising out form dust caused by dry rubbing down and scrapping.
 - (viii) Overalls shall be worn by working painters during the whole working period.
 - (ix) Suitable arrangement shall be made to prevent clothing put on during working hours being spoiled by painting materials.

	(x)	subsequently verified by medical man appointed by the competent Authority of D.D.A.
	(xi)	D.D.A. may require necessary medical examination of the workers.
	(xii)	Instruction with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
(10)		the work is done near any place where there is risk of drowning, all necessary ents should be provided and kept ready for use and all necessary steps to be taken for
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prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatment of all injuries likely to be sustained during the course of work.

- (11) Use of hosting machines and tools including their attachments, anchorage and supports shall conform to the following standards or conditions.
- (i) (a) These shall be of good mechanical construction, sound material and adequate strength and free from patent defect and shall kept repaired and in good working order.
 - (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength and free from patent defects.
- (ii) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be In-Charge of any hoisting machine including any scaffolding which gives signal to operator.
- (iii) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means.
 - Every hoisting machine having all gears referred to above shall be plainly marked with safe working load. In case of a hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
- (iv) In case of Departmental machines, the safe working load shall be notified by the Electrical Engineer-in-Charge. As regards Contractor's machines the Contractor shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any Machinery to site of work and get it verified by the Electrical Engineer concerned.
- (12) Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguard. Hoisting appliance should be provided with such means as will reduce to the minimum risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum risk of any part of a suspended load becoming accidentally displaced. When workers employed on electrical installation which are already energized, insulating mask, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any ring, watches and carry keys or other materials which are good conductors of electricity.
- (13) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe conditions and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.

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- (14) These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for the compliance of the safety code shall be named therein by the Contractor.
- (15) To ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangements made by the Contractor shall be open to inspection by the Labour Officer or Engineer-in-Charge of the Authority or their representative.
- (16) Notwithstanding the above Clause (1) to (15) there are nothing in these to exempt the Contractor from the operating of any other Act or rule in force in the Republic of India.

MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITRY ARRANGEMENTS FOR WORKERS EMPLOYED BY D.D.A. OR ITS CONTRACTORS

1. Application

These rules shall apply to all building and construction works in-charge of DDA in which twenty or more workers are ordinarily employed in any day during which the Contract work is progress.

2. Definitions

"Work place" means a placed where at an average fifty or more workers are ordinarily employed in connection with construction work.

"Large work place" means a place where at an average 500 or more workers are ordinarily employed in connection with construction work.

3. First Aid Facilities:

(a) At every work place there shall be provided and maintained, so as to be easily accessible during working hours, first aid appliances including an adequate supply of sterilized dressing cotton wool. The appliances shall be kept in good order and in large work place, they shall be

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placed under the charge of a responsible person who shall be readily available during working hours.

- (b) At large work place where hospital facilities are not available within easy distance from the work, First Aid posts shall be established and run by a trained compounder.
- (c) Where large work place are at remote from regular hospitals, an indoor ward shall be provided with one bed for every 250 employees.
- (d) Where large work places are situated in cities, town or in their suburbs and no beds are considered necessary owning to the proximity of city or town hospitals, suitable transport shall be provided to facilitate removal of urgent cases to the hospitals at other work places. Some conveyance facilities, such as a car, shall be kept readily available to take injured person or persons suddenly serious to the nearest hospital.

4. Drinking Water

- (a) In every work place, there shall be provided and maintained at suitable places, which is easily accessible to labour, a sufficient supply of cold water fit for drinking.
- (b) Where drinking water is obtained from an intermittent public water supply, each work place shall be provided with storage where drinking water shall be stored.
- (c) Every water supply or storage shall be at distance of not less than 50 feet from any latrine, drain or other source of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn form it for drinking. All such well shall be entirely closed in and be provided with a trap-door which shall be dust and water proof.
- (d) A reliable pump shall be fitted to each covered well, the trap-door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.
- (e) The Contractor shall supply only potable water in the labour camps. Samples of water shall be drawn from the sources of water supply in the labour camps every month and got tested from MCD lab by the Contractor. Wherever drinking water is supplied to the labour camps through water tankers, samples shall be drawn from the tanker and got tested. In water storage tanks chlorine tablets shall be added from time to time as per requirements so that potability of water remains intact. No extra payment shall be made on this account to the Contractor. The testing charges shall be borne by the contractor.

5. Washing and Bathing place:

- (i) Adequate washing and bathing places shall be provided separately for man and
- (ii) Such facilities shall be conveniently accessible and places shall be kept clean, hygienic and in dried condition

6. Scale of accommodation in Latrines and urinals

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(i) Latrines and urinals shall be provided within the premises of every work, on the following scale:

No. of seats

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(a) Where the number of persons does not exceed 50.(b) Where the number of persons exceeds 50, but does

Where the number of persons exceeds 50, but does Not exceed 100.

(c) For every additional 100 persons 3 per 100
In particular cases the Executive Engineer shall have the powers to vary scale where necessary.

(ii) Latrines and urinal for women:

If women are employed, separate latrine and urinals, screened those for men and marked in vernacular in conspicuous letter "For women only" shall be provided on the scale laid in rule 6 (i).

(iii) Latrines and urinals

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Except in work- places provided with water flushed latrines, connected with a water borne sewage system, all latrines shall be provided with receptacles on dry earth system which shall be cleaned at least four times daily and at least twice during working hours and kept in a strictly sanitary condition. The receptacles shall be tarred inside and outside at least once a year.

(iv) Construction of latrines

The inside well shall be constructed of masonry of some suitable heat-resisting, non-absorbent materials and shall be cement washed inside and outside at least once a year. The dates of cement washing shall be maintained for this purpose and kept available for inspection. Latrine will not be of standard lower than borehole system and should have thatched roof.

(v) Disposal of Excreta:

Unless otherwise arranged for by the Local Sanitary Authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator approved by the Assistance Director of Public Health or the Municipal Medical Officer of Health as the case may in whose jurisdiction the work place is stated. Alternatively excreta may be disposed off by putting a layer of night soil at the bottom of pucca tank prepared for the purpose and covering it with a 6" layer of waste or refuse and then covering with a layer of earth for a fortnight (when it will turn into manure).

7. Provision of shelter during rest:

At every work place there shall be provided free of cost two suitable sheds, one for meals and the other for rest separately for the use of men and women. The height of each of the shelter shall not be less than 3.35m. from the floor level to the lowest part of the roof. The sheds should be of thatched roof and mud flooring will be provided with dwarf wall around not less than 76cm. Sheds should be kept clean and the space provided shall be on the basis at least 0.46sqm. per head.

8. Creches:

- (a) At every work place, where 50 or more women workers are ordinarily employed, there shall be provide two huts for the use of children under the age of 6 years belonging to such women. One hut should be used for infant's games and play and other as their bed room. The hut shall not be constructed on a lower standard than the following:
 - (i) Thatched roof
 - (ii) Mud floor.
 - (iii)Planks spread over the mud floor and covered with matting.

The huts shall be provided with suitable and sufficient opening for light and ventilation. There shall be adequate provision of sweeper to keep the places clean. There shall be two dais in attendance. Sanitary utensils shall be provided to the satisfaction of the Health Officer of the area concerned. The use of the hut shall be restricted to children, their attendants and mother of the children.

(b)	Where the number of women workers is more than 25 but less than 50, the Contractor shall
	provide at least one hut and one dais to look after the children of women workers.

(c)	The size of crèche shall vei	v according to the nu	mber of women worke
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(d)	The crèche	shall be	e properly	maintained	and	necessary	equipment	like	toys	etc.	shall	be
	provided.											

9. Canteen

A cooked food canteen on a moderate scale shall be provided for the benefit of workers whenever it is considered expedient of the Contracts.

CONTRACTOR'S LABOUR REGULATIONS

SHORT TITLE

These regulation, may be called the "DDA Contractor's Labour Regulations".

1. DEFINITION

In these regulations, unless otherwise expressed or indicated, the following words and expression shall have the meaning hereby assigned to them respectively i.e..

- (i). "Labour" means workers employed by DDA or its Contractor directly or indirectly though sub Contractor or other persons or by an agent on his behalf, on a payment as per the minimum wages act and will not include supervisory staff like Overseers etc.
- (ii). "Fair Wages" means wages, whether for time or piece work fixed and notified at the time of inviting tenders under the provision of the minimum wages act from time to time not be less than minimum rates of wages fixed by the Govt. of N.C.T. Delhi vide Notification No.F.12(142)/02/MW/Lab./3436 dated 11-9-2007 or as amended from time to time (plus consumer price index)
- (iii). "Contractor" shall include every person whether a sub-Contractor or head man agent employing labour on the work taken on Contract.
- (iv). "Wages" shall have the same meaning as defined in the payment of wages act and includes time and piece rate wages.
- 2(a) Normally working hours of an employee should not exceed 8 hours a day. Working day shall be so arranged that inclusive of intervals for rest, it shall not spread over more than 12 hours on any day.
- (b) When the worker is made to work for more than 9 hours on any day or for more than 48 hours in any week, he shall be given overtime for the extra hours put in by him at double the ordinary rate of wages and children shall not be made to work extra.
- (c) Every worker shall be given a weekly holiday normally on Sunday in accordance with the provision of the minimum wages (Central) Rules 1950 as amended from time to time irrespective of whether such worker is governed by the minimum wages act 1948.
- 3. Display of notice regarding wages etc.
 - (a) The Contractor shall before he commences his work on Contract, display and correctly maintain and continue to display and correctly maintain in a clear and legible condition in conspicuous place on the work, notice in English and in the local Indian Language spoken by the majority of the workers giving the minimum rate wages which have been certified by the Executive Engineer, the Chief Engineer or Regional Labour commissioner as fair wages and the hours of work which such wages are earned and the actual wages being paid. (and other relevant in formation)

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(b) Send a copy of such note to the certifying officer as EE/CE and required Labour commissioner

4. Payment of Wages

- (i) Wages due to every worker shall be paid him directly or though other person authorized on this behalf.
- (ii) All wages shall be paid in current coin or in currency or in both.
- (iii) Arrears claimed after 3 months after the completion of the work shall not be entertained.

5. Fixation of wage periods

The contractor shall fix the wage periods in respect of which wages shall be payable

- (i) No wages period shall exceed one month.
- (ii) The wages of every worker employed on the Contract shall be paid
 - (a) in case of establishment in which wage period is one week, within three days from the end of the wage period and
 - (b) in the case of other establishments before the expiry of 7th day or 10th day from the end of the wage period.
- (iii) Where the employment of any worker is terminated by or on behalf of the Contractor, the wages earned by him shall be paid before the expiry of the day succeeding the one on which his/her employment is terminated.
- (iv) All payment of wages shall be made on a working day except when the work is completed before the expiry of the wage period in which case final payment shall be made 48hours of the last working day at work site and during the working time.

Note: - The term "Working day" means a day on which the work for which the labour employed is in progress.

6. Wage book and wage Slip etc.

- (i) The Contractor shall maintain a wage book of each worker in such a form as may be convenient, at the place of work but the same shall include the following particular-
 - (a) Name of the worker.
 - (b) Rate of daily or monthly wages.
 - (c) Nature of work on which employed.
 - (d) Total number of days worked during each wage period.
 - (e) Dates and period for which worked overtime.

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- (f) Gross wages payable for the during wage period.
- (g) All deduction made from the wage with an indication. In each case of the ground for which the deduction is made
- (h) Wage actually paid for each wage period.
- (ii) Signature or thumb impression of the worker.

The Contractor shall also issue a wage slip containing the aforesaid particulars to each worker, employed by him on the work at least a day prior to the day of disbursement of wages.

- (iii) The Contractor shall issue an Employment Card in the prescribed form III to each worker on the day of work or entry into his employment. If the worker has already any such card from the previous employer, the contractor shall merely endorse that employment card with relevant entries. On termination of employment the employment card shall again be endorsed by the Contractor and returned to the worker.
- (iv) "The Contractor shall issue an Attendance cum Wage Card as per Form IV enclosed to each worker on the day of work on entry into his employment"

7. Register of Unpaid wages:

The Contractor shall maintain a Register of unpaid wages in such form as may be convenient at the place of work but the same shall include the following particulars:

- (a) Full particulars of the labourers whose wages have not been paid.
- (b) Reference number of the muster roll and wage register.
- (c) Rate of wages.
- (d) Wage period.
- (e) Total amount not paid,
- (f) Reason for not making payment.
- (g) How the amount of unpaid wages was utilized.
- (h) Acquaintance with date

8. Register of Accidents

The Contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same include the following particulars:

- (a) Full particulars of the labourers who met with accident.
- (b) Rate of wages.
- (c) Sex

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- (d) Age
- (e) Nature of accident and cause of accident.
- (f) Time and date of accident.
- (g) Date & time when admitted in hospital
- (h) Date of discharge from the hospital
- (i) Period of treatment and result of treatment.
- (j) Percentage of loss of earning capacity and disability as assessed by Medical Officer.
- (k) Claim required to be paid under Workmen's Compensation Act.
- (I) Date of payment of details of the person to whom the same paid.
- (m) Amount paid with details of the person to whom the same was paid.
- (n) Authority by whom the compensation was assessed.
- (o) Remarks.

9. Fines and deductions which may be made from Wages

The wages of a worker shall be paid to him without any deductions of any kind except the following.

- (a) Fines. (List of acts and Omission for which fine can be imposed)
 - (i) Willful subordination or disobedience, whether alone or in combination with another.
 - (ii) Theft, fraud dishonesty in connection with Contractor's business or property of the D.D.A.
 - (iii) Taking or giving bribes or any illegal gratification.
 - (iv) Habitual late attendance
 - (v) Drunkenness', fighting, riotous or indecent behavior.
 - (vi) Smoking near or around the area where combustible or other materials are, stacked.
 - (vii) Habitual negligence.
 - (viii) Habitual indiscipline.
 - (ix) Causing damage to work in progress or to property of the D.DA. or the Contractor.

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	(x)	Sleeping on duty.
	(xi)	Malingering or slowing down work.
	(xii)	Giving false information regarding name, age, father's name etc.
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- (xiii) Habitual loss of wages cards supplied by the employers.
- (xiv) Unauthorized use of employer's property or manufacturing, or making of unauthorized articles at the work place.
- (xv) Bad workmanship in constructions and maintenance by skilled workers

 which is not approved by the Department and for
 which Contractors are compelled to undertake rectification.
- (xvi) Making false complaints and or misleading statements.
- (xvii) Engaging in trade with in the premises of the establishment.
- (xviii) Any unauthorized divulgence of business affairs of the employers
- (xix) Collection or canvassing for the collection of any money within the premises of any establishment unless authorized by the employers.
- (xx) Holding Meeting inside the premises without previous sanction of the employer.
- (xxi) Threatening or intimidating any workman or employee during the working hours within the premises.
- (b) Deduction for absence from the duty, i.e. from the place or places, where by the terms of his employment, he is required to work. The amount of deduction shall be in proportion to the period for which he/she was absent.
- (c) Deduction for damage or loss of goods expressly entrusted to the employed person, for custody, or for loss of money or any other deduction which he is required to account, where such damages or loss is directly attributable to his neglect or default.
- (d) Deduction for recovery of advances or for adjustment of over payment of wages, advances granted shall be entered in a register.
- (e) (i) any other deduction, which the Central Government may from time to time allow.
 - (ii) No fine should be imposed on any worker save in respect of such acts and omissions on his part as have been approved by the Chief Labour Commissioner.
 - (iii) No fine shall be imposed on a worker and no deduction for damageor loss shall be made from his wags until worker has been given an opportunity for showing cause against such fines or deductions.

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- (iv) The total amount of fine which may be imposed in any one wage period on a worker, shall exceed an amount to three paise in a rupees of the total wages, payable to him in respect of that period.
- (v) No fine imposed on any worker shall be recovered from him by installment or after the expiry of sixty days from the day on which it was imposed.
- (vi) Every fine shall be deemed to have been imposed on the day of the Act or omission in respect of which it as imposed.

10 Register of fines, etc.

- (i) The Contractor shall maintain a register of fines and a register of deduction for damage or loss in form Nos. 1 and 2 respectively which should be kept at the place of work.
- (ii) The Contractor shall maintain, both in English and the local Indian Language, a list approved by the Chief Commissioner, clearly stating the Act of Omission for which penalty, or fine can be imposed on a workman and display it in a good condition in a conspicuous place on the work.

11 Preservation of Registers.

The wage book, the wages slips, the register of unpaid wages, the registers of accidents, the registers of fines, reduction required to be maintained under these regulations shall be preserved for 12 months after the date of last entry made in the end and shall be made available for inspection by the Engineer-in-Charge, or Labour Welfare Officer or any other officer, authorized by Ministry of Urban affairs & Employment Government of India in this behalf.

12 Power of Labour Welfare Officer to make investigations or Enquiry

The Labour Welfare Officer or any other person authorized by the Central Government on their behalf shall have power make enquiries with a view to ascertaining and enforcing due and proper observance of the fair wage clauses and provisions of these regulations. He shall investigate into any complaint regarding the default made by the Contractor or Sub-Contractor in regard to such provisions.

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The Labour Welfare Officer or any other person authorized as aforesaid shall submit a report of his investigation or enquiries to the Executive Engineer concerned indicating the extent, if any to which the default has been committed with a note that necessary deduction from the Contractor's bill be made and the wages and other dues be paid to the labourers concerned. In case an appeal is made by the Contractor under clause 14 of these regulations actual payment of labourers will be made by the Executive Engineer after the Regional Labour Commissioner has given his decision on such appeal.

The Executive Engineer shall arrange payment to the labourers concerned within 45 days from the receipt of the report from the Labour Welfare Officer or the Regional Labour Commissioner as the case may be.

14. Appeal against decision of Labour Welfare Officer.

Any person aggrieved by the decision and recommendations of the Labour Welfare Officer or other person so authorized may appeal against such decision to the Regional Labour Commissioner within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the Executive Engineer concerned but subject to such appeal, the decision of the Officer shall be final and binding upon the Contractor.

15. Prohibition regarding representation through Lawyer.

- (i) A workman shall be entitled to be represented in any investigation or enquiry under these regulations by:
 - (a) An officer of the Registered Trade Union of which he is a member.
 - (b) An officer of federation to Trade Unions to which the trade referred to in clause (a) is affiliated.
 - Where the employer is not a member of any registered trade union, by an officer of a (c) Registered Trade Unions, connected with the Industry in which the worker is employed or any other workman employed in the Industry in which the worker is employed.
- (ii) An employer shall be entitled to be represented in any investigation or enquiry under regulations by:

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(a)	An officer of an association of employers of which he is a member.
(b)	An officer of federation of associations of employers to which association referred to in clause (a) is affiliated.
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- (c) Where the employer is not a member of any association of employers by an officer of Association of employer connected with the industry in which the employer is engaged or other employer, engaged in the Industry in which the employer is engaged.
- (iii) No party shall be entitled to be represented by a legal practitioner in any investigation or Enquiry under these regulations.

16. Inspections of books and slip

The Contractor shall allow inspection of the wages books and the wage slips, the register of unpaid wages, the register of accidents, and the register of fines and deduction to any of his workers, or to his agent at a convenient time and place after due notice is received from the Labour Welfare Officer or any person authorized by the Central Govt. on his behalf.

17. Submission of Returns:

The Contractor shall submit periodical returns as may be specified from the time to time.

18. Amendments:

The Central Government may from time to time add to or amend the regulations and or any questions as to the application/interpretation or effect of those regulations, decision of the Chief Labour Commissioner or Deputy Labour Commissioner the Government of the India or any persons authorized by the Central Government on that behalf shall be final.

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GENERAL CONDITIONS

- Before tendering, the tenderer shall inspect the site of work and shall fully acquaint himself about the conditions with regard to site, nature of soil, availability of materials, extent of leads and lifts involved in the work(over the entire duration of Contract) including local conditions, traffic restrictions, obstructions and other conditions for satisfactory execution of the work. He should take into consideration all such factors and contingencies, while quoting his rates. No claim whatsoever shall be entertained by the Department on this account.
- 2. Periphery of works area shall be the area shown in the lay out plan of the scheme.
- 3. The Contractor must study the Specifications and conditions carefully before tendering themselves with the work to be executed.
- 4. The Architectural, structural and other services drawings for the work shall at all time be properly correlated before executing any work and no claim whatsoever shall be entertained in this respect.
- 5. The Contractor shall have to make approaches, to the site, if so required and keep them in good condition for transportation of labour and materials as well as inspection of works by the Engineer–in-Charge. Nothing extra shall be paid on this account.
- 6. The building work shall be carried out in the manner so as to comply in all respects with the requirement of relevant bye-laws of the local body under the jurisdiction of which the work is to be executed. The work of water supply and internal sanitary installation, external water supply, drainage and Electrical Work shall be carried out as per bye-laws of the local body and the Contractor shall produce necessary completion certificate whenever required from such Authority after completion of work. Nothing extra shall be paid on this account. The Contractor shall associates specialized agencies for sanitary and water supply. The work is to be carried out through licensed plumber and sanitary installation agency. For electrical work, special conditions for electrical work may be seen.
- 7. The work shall be carried out in such manner so as not to interfere or effect or disturb other works, being executed by other agencies, if any. He shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it, in proper sequence to the complete satisfaction of the Engineer-in-charge. Any damage done by the contractor to any existing work shall be made good by him at his own cost. Otherwise the same shall be got done at his risk and cost.
- 8. The Contractor or his authorized representative should always be available at the site of work to take instructions from Departmental officers, and ensure proper execution of work.

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- 9. All work and materials brought and left upon the ground by the Contractor or by his orders for the purpose of forming part of the works, are to be considered to be the property of the DDA and the same are not to be removed or taken away by the Contractor or any other person without consent in writing of the Engineer –in-Charge but the D.D.A is not to be in any way responsible for any loss or damage which may happen to or in respect of any such work or materials either by the same being lost or damaged by weather or otherwise.
- 10. Royalty at the prevalent rates and all other incidental expenditure shall have to be paid by the Contractor on all the boulders, metal shingle, earth sand bajri etc. collected by him for the execution of the work directly to the concerned revenue Authority of the State or Central Government. His rates are deemed to include all such expenditure and nothing extra shall be paid.
- 11. The Contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants of adjacent properties and to the public in general and to prevent any damage to such properties and any pollution of smoke, streams and waterways. He shall make good at his cost and to the satisfaction of the Engineer-in-Charge, any damage to roads, paths, cross-drainage works or public or private property whatsoever caused by the execution of the work or by traffic brought thereon by the Contractor. Utmost care shall be taken to keep the noise level to the barest minimum so that no disturbance as far as possible is caused to the occupants/users of adjoining buildings.
- 12. Existing drains, pipes, cables, overhead wires, sewer lines, water lines and similar services encountered in the course of the execution of the work shall be protected against the damage by the Contractor at his own expense. The Contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.
- 13. The work shall be executed and measured as per metric dimensions given in the Schedule of Quantities, drawings etc. (FPS units wherever indicated are for guidance only).
- 14. One flat as directed by Engineer-in-Charge will be selected as sample flat in which samples of all items taken in schedules of quantities shall be executed by Contractor and got it approved by Engineer-in-Charge before such items are executed on the project. However he shall complete one sample unit within <u>Six</u> months from the date of start of the work.
- 15. The Contractor shall give the following undertaking in respect of taking over of land in the following proforma.

I/We herby undertake that:

(i) Full site free from any encroachment has been handed over to me/us of)n
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(ii)	The labour huts in nos. constructed by me/us at site as shown on the site plan
	duly signed be me/us belong to me/us

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- (iii) The site office, casting yard, laboratory, cement Godown etc., will be constructed as per the plan attached.
- (iv) Construction of labour huts near the work sites shall be avoided as far as possible.

 The final bill shall not be paid unless all the huts are cleared & removed from the site.
- 16. All the above land is handed over only for the execution of above mentioned work.
- 17. The above site will be given on temporary basis. After the completion/foreclosure/rescission of the work, clear site shall have to be handed over to the Engineer-in-Charge. Similarly the site for labour camp given to the agency shall be returned after the completion/foreclosure/rescission of the work free from all the occupation.
- 18. If the agency delays the vacation of occupied area of land after the completion recorded/ stoppage/ rescission of the work, he will be charged at the rate of Rs.1,50,000/- per month per hectare. The decision of the SE will be final and binding.
- 19. The Engineer-in-Charge shall not be precluded or stopped for taking any measurements, and framing of estimates or detaining any certification made either before or after the completion and acceptance of the work and payment, from showing the true amount and character of the works performed any materials furnished by the Contractors and from showing that by such measurements, estimates or certificates in nature are incorrectly made, such that the Engineer in-charge shall not be precluded or stopped from recovering from the Contractor such damages as it may be sustained by reason of his failure to comply with the terms and conditions of the Contract.
- 20. Engineer-in-Charge shall have full powers to send workmen employed on the premises to execute fittings and other work not included in the Contract for whose operation the Contractor is to afford every reasonable facility during ordinary working hours provided that such operations shall be carried on in such manner as not to hinder the progress of the work included in the Contract.
- 21. The Contractor shall execute his work, so as not to interfere with or hinder the progress of completion of the work being performed by other Contractors or piece meal workers or by the Engineer-in-Charge and shall as far as possible arrange his work, shall place and dispose off the materials; being used or removed, so as not to interfere with the operations of the other Contractor, piece meal workers, or of DDA or other Departments. He shall arrange his work with that of the others in an acceptable manner and shall perform it in proper sequence to complete satisfaction of Engineer-in-charge.
- 22. Any permission, if required from police authorities or other Departments for closing or cutting of the road will be obtained by the Contractor at his own. He will have no claim for any financial loss or extension of time on this account.

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Restaurants, Tea shops or kiosks shall not be allowed to put up by the Contractor in the works area/labour huts area. Temporary kiosks(s) put up by the Engineer-in-Charge shall be taken by the Contractor on lease which is to be determined on the date of completion or termination of Contract whichever is earlier, and the rate of Rs.500 per kiosks per month shall be recovered from the Contractor from the bills paid. On date of completion of the work or termination of Contract whichever is earlier, the kiosk(s) shall be vacated by the Contractor and a vacant possession shall be given over to the Engineer-in-Charge failing which penalty shall be levied on the Contractor at the rate of Rs.150 per day of delay involved.

24. Levy of Taxes.

- 24.1. Tendered rates are inclusive of all taxes and levies payable under the respective statutes. However, pursuant to the Constitution Act, 1982. if any, further tax or levy is imposed by statute after date of receipt of tenders and the Contractor thereupon necessarily and properly pays such taxes/levies, the Contractor shall be reimbursed the amount so paid provided such payment, if any, is not in the opinion of SE (whose decision shall be final and binding) attribute to delay in execution of work under the control of the Contractor.
- 24.2 The Contractor shall keep necessary books of account and other document for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of DDA and further he shall furnish such other information/documents as the Engineer –in-charge may require.
- 24.3. The Contractor shall within a period of 30 days of imposition of any further tax or levy, pursuant to this Constitution Act,1982 give a written notice thereof to the Engineer-in-Charge that the same is given pursuant to this condition together with all necessary information relating thereto.
- 25. The Contractor shall leave such recesses, holes, openings etc. as may be required for the electric, air-conditioning and other related works for which inserts, sleeves, brackets conduits, base plates, clamps etc. shall be supplied free of cost by the Contractor unless otherwise specifically mentioned and the Contractor shall fix the same at the time of casting of concrete, stone work and brick work, if required and nothing extra shall be payable on this accounts unless otherwise mentioned in the item/Contract.
- 26. The Contractor shall make his own arrangements for obtaining electric connections, if required, and make necessary payments directly to the Department concerned. The Department will however, make all reasonable recommendations to the Authority concerned in this regard.
- 27. No foreign exchange shall be made available by the Department for the purpose of procurement of equipment, Plants, Machinery, materials of any kind or any other items required to be carried out in execution of work.

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- 28. The Contractor shall be required to do the work of development simultaneously along with building work, as per the direction of Engineer-in-Charge.
- 29. No payment will be made to the Contractor for damage caused by rains, or other natural calamities during the execution of the works and no such claim on this account will be entertained unless specified otherwise.
- The empty containers shall not be removed from the site of work till the relevant item of work has been completed and permission obtained from the Engineer-in-Charge.
- 31. The malba/garbage removed from the site shall be disposed off by the Contractor at any suitable place as directed by the Engineer in-charge. Nothing extra shall be payable for this.
- 32. The surplus soil/earth shall be disposed off as per directions of Engineer-in-Charge.
- 33. Barricading of excavated trenches on both sides of the trench shall be done by the contractor to a height of 1.60 meters with galvanized steel plain sheet of 1.00mm thick (Class-I) fixed with nails etc. on 100mm dia. Sal ballies, fixed 3m apart as a safety measure. He will also provide red strips on sheets with aluminum paint 75mm wide alternatively on outside of sheets vertically and no extra payment will be made on this account.
- 34. The Contractor shall, during the currency of the Contract, when called upon by the Engineer-in-Charge, engage and also ensure engagement of sub-Contractors and other employee by the Contractor in connection with the works, apprentices for such periods as may be required by the Engineer-in-Charge. The Contractor shall then train them as required under the Apprentices Act, 1961 and the rules made thereunder and shall be responsible for all obligations of the employer under the said Act, including the liability to make payment(s) to apprentices as required under the said Act.
- 35. The Contractor is to provide at all times during the progress of the work and the maintenance period, proper means of access with ladders, gangways etc. and other necessary attendant to move and adopt as directed for the inspection or measurements of the works by the Engineer in-charge or his authorized representative.
- 36. The layout, alignment and the orientation of the different members of the structural works should be carried out after thoroughly checking the drawing and obtaining clarification, if any from the Engineer-in-Charge. The setting out work should be carried out by the precision surveying instruments and got approved from the Engineer-in-Charge. The Contractor shall arrange the necessary equipment and instruments.
- 37. Where directed by the Engineer-in-Charge, the Contractor shall provide permanent bench marks. Likewise, any other levels or line or points specifically required by the Engineer-in-Charge shall be built-in. The Contractor shall carefully protect and preserve such important marks during execution of work.

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- 38. The Contractor shall be responsible for getting the necessary tests certificates from the concerned branch of Municipal Corporation and also to get connection for the drainage and water supply from the concerned branch of Municipal Corporation.
- 39. The work shall be done in conformity with the plans and within the requirements of the general Architectural, Air Conditioning, Electrical and Structural Plans. This work shall be properly coordinated with the work of the other trades. Hangers and sleeves, structural opening shall be furnished in time for their installations as other work proceeds.
- 40. (a) The plumbing drawings are diagrammatic, but shall be followed as closely as actual construction and work permits.
 - (b) The Architectural drawing shall be co-related with the plumbing drawings for all dimensions and shall be followed.
- 41. (a) The recommended positions of the fittings, fixtures, control valves, tanks etc. as shown on the drawing will be adhered to as far as possible.
 - (b) If there is discrepancy due to incomplete description/ ambiguity or omission in the drawing and other documents, whether original or supplementary, forming the Contract, either found on completion or during progress of the work, the Contractor shall immediately, on discovering the same, brought to the notice of the Engineer-in-Charge and the decision of the Engineer-in-Charge shall be final and binding on the Contractor.
- 42. The Contractor shall submit the complete set of original and further two copies of additional drawings to the Engineer-in-Charge after completion of the work. The drawings must give with the following information.
 - (a) Run of all pipe and diameter on all floors and the vertical stacks.
 - (b) Location and sizes of all control valves, access panels and other equipments.
 - (c) I.L. of all manholes including I.L. at outfalls.

No completion certificate will be issued until the drawings as aforesaid are submitted by the Contractor.

- 43. During the progress of the work, completed portions of the building may be occupied and put to use by the D.D.A. but the Contractor shall remain fully responsible for maintenance of the installations till the entire work covered by the Contract is satisfactorily completed.
- 44. (a) Separate godowns shall be provided for OPC & PPC storage.

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- (b) No P.P.C. should be used in R.C.C. framed structure specially in the exposed portion like chajjas, balconies, open terraces, top roofs, extended beams, open staircases and slab, beams in toilets.
- 45. The Contractor shall be responsible for any activity, authorized or Unauthorized, going on within the site area handed over to him by the Department for construction/development/maintenance or for any other purpose. The Contractor shall also be responsible for informing the Engineer-in-Charge, in writing, wherever their supervision is essential. Further this shall not be a ground for seeking time extension in completion of the work and/or for claiming any loss and/or damage by the Contractor, if at all this causes prolongation of completion of work.

46. **SAFETY OF WORKERS:**

In respect of all labourers directly or indirectly employed in the work for the performance of the Contractor's part of this Agreement, the Contractor shall at his expense arrange for the safety provisions as per the latest edition of India Standard Safety Codes shown below and shall at his own expenses, provide

for all facilities in connection therewith. In case the Contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay penalty prescribed under relevant clauses of these tender documents for each default and in additional the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the cost incurred in on that behalf from the Contractor and no claims shall be entertained.

- i) I.S: 3006 Part I Safety code for Scaffolds and Ladders.
- ii) I.S: 3696 Part II Safety code for Scaffolds and Ladders Part II Ladders.
- iii) I.S: 76 Safety code for Excavation work.
- iv) I.S: 4031 Safety code for Blasting and Drilling operations.
- v) I.S: 4138 Safety code for working in Compressed air.
- vi) I.S: 5121 Safety code for piling and other deep foundations.
- vii) I.S: 5916 Safety code for constructions involving use of

Bituminous materials.

- viii) I.S:7293 Safety code for working construction Machinery.
- ix) I.S: 7969 Safety code for storage and handling of building materials.

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x) Any other code as per directions of Engineer-in-Charge.

47 QUALITY CONTROL:

- 47.1 Contractor shall be fully responsible for the quality of work being executed as per prescribed specification, relevant BIS codes and drawings. All work under or in course of execution or executed, in pursuance of the contract shall at all time be open to the inspections and supervision of the Quality Control Wing/ Vigilance of DDA & CTE. Contractor shall be required to uncover the hidden item whenever it is required by CE (QC) or CTE for checking measurements, quality of work and Specifications etc.
- 47.2 The Divisional Officer (Civil) of DDA will also examine the work executed from the point of view of scope of work, inventory of fittings and fixtures and Specifications for the various item before the work is finalized. If in the opinion of the CE (QC) or CTE, any of the work has been executed with improper material or defective workmanship, failure to do so will make him liable for penalty and other actions under clause 14 of PWD-8 of Agreement. If during any of the visits, use of sub-standard material or improper workmanship is noted by the Divisional Officer or his Superiors or CE(QC) or any of the authorized representative or his supervisors, the same shall also be promptly rectified on getting a written notice to do so.
- 48. No work shall commence in the absence of Contractor's engineers and they shall certify in writing about the correctness of layout, alignment of structure and shall ensure stability of all structural and other building items.
- 49 All materials which are specified to be tested at the manufacturer's works shall satisfactorily pass the test in presence of the authorized representative of Engineer-in-Charge before being used in the work. In case all requisite testing facilities are not available at the manufacturer's premises, such testing shall be conducted at laboratory approved by the Engineer-in-Charge.
- 50. The Contractor shall make available Theodolite, Dumpy level with staff, steel tapes, stop watch, platform type weighing machine of 200 Kg Capacity, steel balance with weights, spring balance, slump cone with tamping rod, 15 cm cube moulds (sufficient), Plumb bob, spirit level, Vernier calipers/ Micrometer, Calibrated cylinder, hammers, thermometers etc readily and in good working condition at site to ensure proper quality of work.

51. Sewerage Works:

- 51.1 The Contractor shall carry out the work of sewer lines in close co-ordination with works of the services in the area. The Contractor shall have no financial or other claims arising out of lack of co-ordination.
- No payment shall be made for the excavation for RCC pipe lines for the portions covered by excavation for construction of manholes.

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- 51.3 Earth excavated from trenches shall be stacked at a distance equal to depth of the trench below ground level or equal to1.5m whichever is greater from the top edge of excavation.
- 52. Where ever necessary the S.C.I. pipes and G.I. pipes shall be fixed in R.C.C. columns, beams etc. with scrub plugs and nothing extra shall be paid for it.
- 53. Where the Contractor is required to provide materials of certain sizes or weights which may have gone out of market due to change over to metric standard, substitutes conforming to the nearest equivalents on the higher side, as approved by the Engineer-in-Charge, shall be used. No claim of extra payment shall be entertained on this account.
- 54. The Engineer-in-Charge shall require (where he deems so necessary) to provide grooves of approved pattern between various surfaces such as timber/ plaster, exposed aggregate/ plaster/ concrete/ exposed concrete/ brick work, ceiling/ walls, skirting/ plaster between various concreting operations of same or different members (particularly in the exposed concrete work) or as required etc. such grooves shall be provided without extra charges and the Contractor's rate for various items are deemed to include the cost of all labour, tools and materials required for making such grooves.
- 55. Large sized details shall take precedence over small sized drawings. The Contractor shall verify all dimensions at site.
- 56. Whenever directed by the Engineer-in-Charge with a view to obtain exposed face concrete by itself, form work shall have to be provided by the Contractor in specific pattern as required and instructed. A sample of the exposed face finish shall be made by the Contractor and the same shall be got approved before the work is started. Due care shall be taken while removing the formwork. Time allowed for such shuttering shall be as per decision of Engineer-in-Charge. On removal of formwork, the surface shall be rubbed with carborandum stone, so as to give a smooth finish and to match the surrounding surface. No patching up with cement plaster or otherwise shall be allowed. If however, any honey combs, broken edges, or ugly off sets etc. are found, the Contractor shall have to re-do the work without any extra charges. The material used for shuttering for exposed concrete shall be only timber with freshly sawn surfaces or as approved by the Engineer-in-Charge.
- 57. The item of External plastering shall be taken after getting the approval of the Engineer-in-Charge. The item of external finishing if got executed from another agency may need a close co-ordination between the items of external plastering and finishing for which the Contractor shall have to work in close liaison with the second agency as per the direction of Engineer-in-Charge.

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- 58. In the event of any difference of opinion among site representative in carrying out the item of work in accordance with the Agreement, the Engineer-in-Charge shall decide the issue and his decision shall be final and binding on the Contractor and the Contractor shall be bound to carry out the instruction to complete the work in time. At no point of time the Contractor shall stop execution of the work on any ground whatsoever.
- 59. Unless stated otherwise, rates quoted by the Contractor shall hold good for work at all heights and depths. The Contractor shall not be paid any thing extra for maintaining in good condition all the work executed till completion of the entire work; nor on account of damage to the works caused by rains or other natural phenomenon during the execution of works.
- 60. Payment for work in different floors, extra for items for RCC, brick work above different floor levels shall be made at rates provided for these items. For operations of these rates, the floor level shall be considered as the top of main structural RCC slab in that floor viz. top of RCC slab in main room and not the top of any sunken or depressed floor for lavatory slabs.
- 61. The rate shall be inclusive of working under water and adverse conditions and including pumping out or bailing out water, unless otherwise specified in the nomenclature. This will include water encountered from any source such as rains, floods, sub-soil water table being high or any cause whatsoever.
- 62. Lowest Rate of the item shall be paid in case the item appears at more than one places in Schedule of Quantities of the same Contract.
- 63. Cutting of holes in walls, floors, chhajjas, R.C.C. slabs etc. The tendered rates shall include the cost of cutting holes wherever required and making good the same, nothing extra shall be paid for this.
- 64. All chases shall be cut mechanically and nothing extra shall be paid on this account. The rate shall also include making good the same.

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SPECIAL CONDITIONS

- 1. The site for the work is available.
- 2. Sub-soil water table at work site is reported to be about 5.25 meter below the general ground level as per soil investigation report. The water level is likely to rise during rainy reason, but nothing extra shall be paid for the work under sub-soil water.
- 3. (a) A detailed programme in the form of precedence network diagram is to be submitted to the Engineer-in-Charge within 15 days of the award of work. Any modification suggested by the Engineer-in-Charge shall be incorporated in the Bar Chart. It will be ensured by the Contractor that the time schedule laid down in the aforesaid Bar Chart is adhered to. In case of any slippage, the time lost will have to be made good by the Contractor by speeding up the activities. In such case, he shall be bound to follow the revised programme decided by the Engineer-in-Charge. The programme chart should include the following.
 - Descriptive note explaining sequence of various activities.
 - ii) Network (bar chart/precedence network)
 - iii) Programme for procurement of materials by the Contractor.
 - iv) Programme of mobilization of Machinery/equipment.
 - v) Programme for deployment of labour, time schedule for the requirement of material to be supplied by the Department, if any.
 - vi) Cash flow statement.

If the Contractor fails to submit the Bar chart, the Engineer-in-Charge shall get it prepared at the risk and cost of the Contractor

- Contractor shall give the Engineer-in-Charge on the 4th day of each month, the progress report (b) of the work done during the previous month. The progress of work will be reviewed periodically by the Engineer-in-Charge with the Contractor and shortfalls, if any, will be sorted out. The Contractor shall there upon take such action as may be necessary to bring back his work to schedule without additional cost to the Department.
- 4. The submission of detailed programme, for approval by the Engineer-in-Charge, or the furnishing of such particulars shall not relieve the Contractor from any of his duties or responsibility under the Contract. This is, without prejudice to the right of the Engineer-in-Charge to take action against Contractor as per terms and condition of the Agreement.

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- 5. In order to adhere the programme, if the work is to be carried out in more than one shift and no claim on this account shall be entertained. Contractor will have to give advance notice in writing to Engineer-in-Charge for executing any work in odd hours i.e. beyond normal working hours between 9 AM to 5 PM. Contractor shall arrange suitable, to and fro transportation for DDA site staff to their residences, in case the site staff is required to stay beyond office hours.
- 6. Contractor shall be allowed 15 days for mobilization from the date of issue of letter of award for the work. During this period Contractor will mobilize Plant & equipment and complete other preliminaries like approval of quarry, mix design, trial mix etc.
- 7. (a)The Contractor shall provide and maintain C.G.I. sheet barricading not less than 2.5m in height from ground level duly painted in white and green as required according to the rules around the work site. Wherever, compound wall/fencing exists this provision will not be insisted upon. Nothing extra shall be paid for the same.
 - (b)The Contractor shall take all necessary measures for the safety of traffic during construction and provide, erect and maintain such barricades, including signs, marking, flags, lights and flagman as necessary, at either end of the excavation/embankment and at such intermediate points, as directed by the Engineer-in-Charge for the proper identification of construction area. He shall be responsible for all damages and accidents caused due to negligence on his part. These provisions are in addition to the safety measures already mentioned in PWD-8.
- 8. Contractor shall provide one signboard of size 3m x 5m, displaying name of the Department, and the project, architects, consultants and main Contractor, as approved by the Engineer-in-Charge. Nothing extra shall be paid on this account.
- 9. Some restrictions may be imposed by the security staff/Delhi Police on the working and for movement of labour, materials etc.
 - i) The movement of trucks and vehicles shall be regulated in accordance with rules and regulations as approved by competent Authority.
 - ii) The Contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on this account.
 - iii) No claim whatsoever will be entertained by the Department on account of any restrictions (including temporary suspension of work) imposed by the security agencies in execution of work.

10. **QUALITY ASSURANCE**

- 10.1 The Contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted.
- 10.2 The Contractor shall intimate the source of various raw materials namely aggregate, cement, sand, water etc. to be used on the work and get it approved from the Engineer-in-Charge. Trial

	saild, water etc. to be used on the work and get it approved from the
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mixes for controlled concrete shall be prepared using the approved materials. The Contractor shall stick to the approved source unless it is absolutely unavoidable. The change if any, shall be done with the prior approval of the Engineer-in-Charge for which tests etc. shall be carried out by the Contractor at his own cost.

SAMPLES OF MATERIALS:

11.1 The Contractor shall submit to the_Engineer-in-Charge samples of all materials to be used in the work for approval before procuring bulk supplies and before commencing the work. These approved samples shall be preserved and retained in the custody of the Engineer-in-Charge as standards of materials and workmanship till the completion of the work. The cost of such samples shall be borne by the Contractor and nothing shall be payable on this account. Preference shall be given to those articles which bear ISI certification mark. In case articles bearing ISI Certification mark are not available, the quality of samples brought by the Contractor shall be judged by the standard laid down in the relevant ISI specifications. All materials and articles brought by the contractor to the site for use shall conform to the samples approved which shall be preserved till the completion of the work.

11.2 SUB STANDARD MATERIAL/WORK:

In case any material/work is found sub standard the same shall be rejected by the Engineer-in-Charge and the same shall be removed from the site of work within 48 hours, failing which the same shall be got removed by the Engineer-in-Charge at the risk & cost of the Contractor without giving any further notice and time.

11.3 <u>TESTING OF MATERIALS:</u>

Even ISI marked materials may be subjected to quality test at the discretion of the Engineer-in-Charge besides testing of other materials as per the specification described for the item/materials. Whenever ISI marked materials are brought to the site of work the Contractor shall if required by the Engineer-in-Charge, furnish manufacturer test certificate or test certificate from approved testing laboratory to establish that the material procured by the Contractor for incorporation in the work satisfy the provisions of IS Codes relevant to the material and/or the work done.

11.4 The Contractor shall arrange to carry out all tests as required under the Agreement from the laboratories as approved by the Engineer-in-Charge and shall bear all charges in connection therewith including fee for testing. However, no testing charges will be payable by the Contractor for the tests conducted in DDA laboratories, if the materials passed in testing. In all cases, cost of samples and to & fro carriage shall be borne by the Contractor. Allowing to establish the laboratory at site shall not absolve the Contractor from fulfilling the criteria of getting the test done in independent lab. The decision of the Engineer-in-Charge for allowing any test in the site laboratory or any other laboratory shall be final. The above condition shall not hold good for cement and steel.

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- 11.5 In case there is any discrepancy in frequency of testing as given in the list of mandatory tests and that in individual sub-heads of work as per C.P.W.D. Specifications 1996/Vol.1 to VI with Correction Slips issued upto date of tender & 2002 for cement mortar, cement concrete & R.C.C. work with up to-date correction slips up to the date of receipt of tenders (lower of two frequencies of the testing i.e. higher number of tests shall be followed) and nothing extra shall be payable to the Contractor on this account.
- 11.6 The quality of cement concrete and RCC shall be tested during the execution of the item of work as prescribed in CPWD Specifications.
- 12. Any cement slurry added over base surface or for continuation of concreting for better bond is considered to have been included in the item (unless otherwise specifically stated) and nothing extra shall be payable or extra amount considered in consumption in this account.
- Factory made materials shall be procured only from reputed & approved manufacturers or their authorized dealers. List of such approved manufacturers is available at **ANNEXURE I.**For the items/materials not appearing in the list, the decision of Engineer-in-Charge shall be final and binding.
- Wherever specialized work is to be executed or materials are to be procured through specialized agencies, their names shall be got approved well in advance from Engineer-in-Charge. Failure to do so shall not justify delay in execution of work. It is suggested that immediately after award of work , contractor should negotiate with concerned specialized agencies and send their names for approval to Engineer-in-Charge. Any material procured without prior approval of Engineer-in-Charge in writing is liable to be rejected. Engineer-in-Charge reserves his right to get the materials tested in laboratories of his choice before final acceptance. Non standard material shall not be accepted.
- The tenderer shall indicate the names of at least 3 specialized agencies with whom they are likely to be associated for sanitary, water supply and electrical works. The Engineer-in-Charge reserves the right to select any one to whom the work could be assigned.
- 16. The Contractor shall necessarily use the surface vibrator for compaction of concrete in floor slab etc. For placement of concrete at various levels tower crane of appropriate size, capacity and boom length or concrete pump shall necessarily be deployed by the Contractor. However, mechanical hoist can be used by the Contractor for lifting other construction materials.
- 17. The term machine batched, machine mixed and machine vibrated design mix concrete used anywhere in Agreement shall mean the concrete produced in automatic concrete batching & mixing Plant and if necessary transported by transit concrete mixers, placed in position by the concrete pumps and vibrated by surface vibrator/needle vibrator/plate vibrator, as the case may be, to achieve required strength and durability. In no case double handling will be allowed.

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- 18. The tenderer will indicate the system of centering and shuttering, he proposes to adopt for easy erection and de-shuttering. Based on this system, the type of material to be used in shuttering will be determined.
- 19. The Contractor shall carry out disc test on all sewer lines and satisfy the Engineer-in-Charge that the lines are absolutely clear. Any obstruction shall be removed by the Contractor without any claim for extras. Decision of the Engineer-in-Charge with regard to disc test and cleaning of the lines shall be final.

20. **CONDITIONS OF CEMENT:**

- (a) The Contractor shall procure 43 grade (conforming to IS: 8112) ordinary Portland cement as required in the work, from reputed manufacturers of cement, having production capacity of 1 million tonnes or more per annum, such as ACC, L&T, JP Rewa, Vikram, Shree Cement, Birla Jute and Cement Corporation of India, as approved by Ministry of Industry, Government of India, and holding licence to use ISI certification mark for their product. Supply of cement shall be taken in 50 kg bags bearing manufacturer's name and ISI marking. Samples of cement arranged by the Contractor shall be taken by the Engineer-in-Charge and got tested in accordance with provisions of relevant BIS Codes. In case test results indicate that the cement arranged by the Contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the Contractor at his own cost within a week's time of written order from the Engineer-in-Charge to do so.
- (b) The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer-in-Charge.
- (c) The two cement godowns, one for the untested and the other one for cement that has been tested & approved, of capacity to store a minimum 2000 bags of cement shall be constructed by the Contractor at site of work for which no extra payment shall be made. Double lock provision shall be made to the door of cement godowns. The keys of the one lock shall remain with Engineer-in-Charge or his authorized representative and the key of the other lock shall remain with the Contractor. The Contractor shall be responsible for the watch and ward and safety of the cement godowns and no extra payment shall be paid for the same. The Contractor shall facilitate the inspection of the cement godowns by the Engineer-in-Charge or his authorized representatives at any time.
- (d) The cement shall be got tested by Engineer-in-Charge and shall be used on work only after test results have been received. The Contractor shall supply free of cost the cement required for testing. The cost of tests shall be borne by the Contractor/Department in the manner indicated below:
 - (i) By the Contractor, if results show that the cement does not conform to relevant BIS codes.

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- (ii) By the Department, if the results show that the cement conforms to relevant IS Codes.
- (e) Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-Charge.
- (f) Damaged cement shall be removed from the site immediately by the Contractor on receipt of a notice in writing from the Engineer-in-Charge. If he does not do so within three days of receipt of such notice, the Engineer-in-Charge shall get it removed at the cost of the Contractor.
- (g) The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 10 of the Contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in **Special Conditions at SI.No.24** of the Contract and shall be governed by conditions laid therein. No payment for excess consumption of cement will be allowed. However, for lesser consumption beyond permissible theoretical variation recovery shall be made in accordance with conditions of Contract without prejudice to action for acceptance of work/item at reduced rate or rejection as the case may be.
- (h) For non-schedule items, the decision of the Superintending Engineering regarding theoretical quantity of cement which should have been actually used, shall be final and binding on the Contractor.

21. **CONDITIONS OF STEEL:**

i) The Contractor shall procure steel reinforcement of Thermo Mechanically Treated Bars conforming to relevant BIS Codes directly from the main producers ie SAIL, TISCO, IISCO and RINL. The Contractor shall have to submit documentary proof to the satisfaction of the Engineer-in-Charge of having procured the steel reinforcement from the main producers. In exceptional circumstances of non-availability of particular diameter for limited quantity and for a limited period, procurement of steel from secondary producers having valid BIS licence and having thermax/tempcore Plant for production of TMT bars will be allowed with the prior approval of Chief Engineer in writing and who shall satisfy himself independently about the nonavailability of particular diameter of steel for which request has been made by the Contractor for procurement from the secondary producers. The Contractor shall necessarily produce documentary evidence regarding non-availability of particular diameter of steel from the main producers.

In case, of use of TMT bars from secondary producers, reduction in rate of Rs.2.00 (Rupees two only) per kg from the quoted rate of Item No. 3.5 and 14.9 shall be made for the quantity procured from secondary producers and used on the work. The Contractor shall have to obtain and furnish test certificates to the Engineer-in-Charge in respect of all supplies of steel brought by him to the site of work. Samples

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shall also be taken by the Engineer— in-Charge and got tested in accordance with provisions of relevant specifications. In case, test results indicate that the steel arranged by the Contractor does not conform to the Specifications, the same shall stand rejected and shall be removed from the site of work by the Contractor at his own cost within 7 days of written order from the Engineer-in-Charge to do so.

- (ii) The steel reinforcement bars shall be brought to the site in bulk supply of 10 tonnes or more or as decided by the Engineer-in-Charge.
- (iii) The steel reinforcement shall be stored by the Contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
- iv) For checking nominal mass, tensile strength, bend test, rebend test, etc. specimen of sufficient length shall be cut from each size of the bar at random at frequency not less than that specified below:

Size of bar	For consignment below	For consignment over
	100 tonnes.	100 tonnes.
Under 10mm dia	One sample for each	One sample for each 40 tonnes
Davis	25 town as an weathly see of	or part thereof.
Bars.	25 tonnes or part thereof	
10mm to 16mm.dia	One sample for each 35 tonnes	One sample for each 45 tonnes
	or part thereof.	or part thereof.
bars.		
Over 16mm dia	One sample for each 45 tonnes	One sample for each 50 tonnes
D	or part thereof.	or part thereof.
Bars.		

- (v) The Contractor shall supply free of charge the test pieces of steel bars required for testing. The cost of tests shall be borne by the Contractor/Department in the manner indicated below:
 - a) By the Contractor, if results show that the steel does not conform to relevant IS Codes.
 - b) By the Department, if the results show that the steel conform to relevant IS Codes.

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- vi) The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the Contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in **Special Conditions at SI.No. 24** of the Contract and shall be governed by conditions laid therein.
- 22. The agency shall have to provide cement slurry coating on the reinforcing bars as soon as the same are brought at site of work and shall be stacked on brick/timber platform above 30-40 cm height from ground level. Nothing extra shall be paid on this account.

23. **CONDITIONS FOR WATER:**

- 23.1 The Contractor shall make his own arrangement for providing water for construction and drinking purposes. Contractor shall have to get the water tested from any laboratory approved by the Engineer-in-Charge at regular interval as per the revised CPWD Specifications 2002 for cement mortar, cement concrete and RCC works (which supercedes the chapter 3,4&5 of CPWD Specifications 1996 Vol II). All expenses towards collection of samples, packing, transportation and testing charges, etc. shall be borne by the Contractor.
- 23.2. If the source of water is not suitable, the Contractor shall arrange suitable water from municipal or any other source at his own cost and nothing extra shall be paid to the Contractor on this account. The water shall be got tested at frequency specified in latest BIS Code/CPWD Specifications.

24. <u>Conditions for Theoretical Consumption of Materials</u>

For the materials, which are not stipulated/issued from the store of Engineer-in-Charge, **Clause 42 will not be applicable** and following conditions shall apply.

(i) After the completion of the work the theoretical quantities of the following materials, duration of equipment to be used in different items of work shall be calculated on the basis of statement showing quantities of materials to be used in different items of the work provided in the DSR 2007 with up to date Correction Slips. In case any of the items is executed for which the standard constants for the consumption of the materials/duration of equipment cannot be derived from the statement, the same shall be calculated on the basis of standard formula to be laid down by the Superintending Engineer of the Circle concerned. Over these theoretical quantities of the materials/duration of equipment shall be allowed a variation up to a percentage as given below. In the event it is being discovered that the quantities of the materials/duration of equipment used is less than the materials/duration of equipment as

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ascertained as here before said, provided (allowing variation on the minus side as stipulated above). The cost of quantities of the materials and equipment not so used shall be recovered from the Contractor on the basis of double of the market rates. The market rates of such materials/duration of equipment shall be ascertained and to be approved by the Suptdg. Engineer of the Circle concerned and the same shall be final and binding on the Contractor. The above procedure will also be repeated along with each and every running account bill and recovery, if any, shall be made simultaneously.

<u>S.No</u> .	<u>ltem</u>	Variation on minus side
1.	Cement	2%
2.	Steel	Nil
3.	Bitumen	Nil
4.	All other Materials	Nil

- (ii) The provisions made above are without prejudice to the rights of the D.D.A. to take action against the Contractor under the conditions of the Contract for not doing the work according to the prescribed Specifications.
- (iii) The contractor shall construct suitable godowns at site of work for storing the materials safe against damages from Sun, rain, dampness, fire, thefts etc. He shall also employ necessary watch & ward establishment for this purpose.
- (iv) Cement bags shall be stored properly so that these are not be affected by weather or by any other cause. The day to day receipt and issue statement verifiable should be s ubmitted to the Asstt. Engineer daily showing the work done against the cement issued duly signed by the Contractor or his authorized agent. The statement must show the consumption variation as per above Clause(i).
- (v) The same criteria of test mentioned above shall apply Mutatis-Mutandis in case of other materials brought at site by the Contractor.
- (vi) Cement bags shall be stored in separate godown as per typical godown sketch attached, with pucca floor and whether proof roofs & walls. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with D.D.A's Junior Engineer-in-Charge of work and that of the other look with the authorized agent of the Contractor at the site of work, so that the cement issued from the godown according to the daily requirement with the knowledge of both the parties. The cement bags shall be stacked on proper floor consisting of two layers of dry bricks laid on well consolidated earth at a level of at least one foot above ground level. These stacks shall be in rows of 2 bags and 10 bags high within minimum 2'-9" clear space around. The bags should be placed horizontally continuous in each line shown in the accompanying sketch. The day

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to day receipt and issue accounts of cement shall be maintained by the Junior Engineer-in-Charge and signed daily by the Contractor or his authorized agent. Materials will be issued to the Contractor during working hours as per rule of D. D. A. frame from time to time.

- (vii) The Contractor shall bear all incidental charges, storage and safe custody for the materials.
- 25. Nothing shall be extra paid for providing SCI Collars wherever required.

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GENERAL SPECIFICATIONS

1. **Specification:**

Specification to be followed for execution of work shall be :-

- The entire work shall be executed as per description of item, specifications attached, CPWD Specifications 1996 Vol.I to VI with Correction slips issued upto date of tender and Revised CPWD specification 2002 for Cement Mortar, Cement Concrete and RCC works (which supercedes the chapter 3,4 & 5 of CPWD Specifications 1996 Vol. II) with correction slips up to date of tendering herein referred as CPWD specification and particular Specifications attached herewith, till the date of opening of the tender. However, in case of any discrepancy in the description of any items as given in the schedule of quantities appended with the tender and the specification relating to the relevant item that shall be sorted out as per CPWD Specifications 1996 Vol. I to VI with Correction Slips issued upto date of tender & revised CPWD specification 2002 for Cement Mortar, Cement Concrete & R.C.C. work with up to date correction slips up to the date of receipt of tenders, the former shall prevail over, If the Specification for any items are not available in CPWD Specifications referred above, relevant BIS Specifications shall be followed. In case BIS Specifications are also not available, the decision of the Engineer-in-Charge shall be final.
- 1.2 Samples of all building materials, doors and windows fitting, sanitary wares and other articles required for execution of works shall be got approved from Engineer-in-Charge. Articles classified as First quality by the manufacture shall be used unless otherwise specified.
- 1.3 The Contractor shall give a performance test such as smoke test/pressure test of the entire installations as per standard Specifications before the work is finally accepted and nothing extra whatsoever shall be payable to the Contractor for the test.
- 1.4. The weep holes, expansion joints, wherever required in S.W.drains, may be provided at suitable intervals as per specification and nothing extra shall be paid on this account.

2.0 Brick Work:

- 2.1 Contractor shall procure cement fly ash bricks from reputed manufacturers.
- 2.2 All mortars shall be mixed in Mechanical mixtures. No hand mixing shall be allowed for mixing of mortar.

3.0	FORMWORK:
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3.1 Cleaning and Treatment of Works:

All rubbish, particularly chipping, shaving and saw dust shall be removed from the interior of the forms before the concrete is placed. The formwork in contact with the concrete shall be cleaned and thoroughly wetted or treated with an approved composition to prevent adhesion between form work and concrete. Care shall be taken that such approved composition is kept out of contact with the reinforcement.

3.2 For the execution of centering and shuttering, the Contractor shall use propriety "Reebole" chemical mould release agent of FOSROC or equivalent as shuttering oil as recommended by the manufacturer and nothing extra shall be paid on this account.

4.0 **DESIGN MIX (Ready Mix)**

4.1 Design mix (Ready Mix) concrete shall be used in the work for all structural members. A computerized automatic batching Plant of minimum capacity 150 cum per day (8 hours working) shall be installed at site or Ready Mixed concrete with O.P.C. from reputed manufacturer to be approved by Engineer-in-Charge shall be allowed.

Concrete for all reinforced concrete works in columns, wall, footing, beams, slab and the like shall be laid and well consolidated by vibrating using portable mechanical vibrator. The rest of the concrete such as chajjas and shelves etc. shall be laid and well consolidated by pouring & tamping. Care shall be taken to ensure that concrete shall be poured through concrete pumps.

4.2 The minimum quantity of cement for M-25 & M-35 grade R.C.C. will be 360 Kg per Cum. In case cement used is more than 410 Kg. and 428 Kg. per cum. of M-25 and M-35 grade RCC respectively nothing extra shall be payable whereas recovery shall be effected, for cement is used less than above quantities i.e. 410kg. and 428kg per cum of M-25 and M-35 grade RCC respectively at market rates to be decided by Engineer-in-charge whose decision shall be final and binding on the contractor. The Admixtures conforming to I.S. 9103 can be used for improving workability and their performance shall be monitored as per clause 5.5 of I.S. 456-2000 and clause 4.1.3 of C.P.W.D. specification 2002. Admixtures should not impair durability of concrete nor combine with the constituent to form harmful compounds nor increase the risk and corrosion of reinforcement. Nothing extra shall be paid for use of admixtures for improving the workability of concrete. Nothing extra will be paid for pumping the concrete as well.

The maximum water cement ratio for a particular concrete grade shall be kept as specified in IS: 10262 and shall not exceed the values given in Table

IS: 456-2000 which are as follows:

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M25 - 0.50 M30 - 0.45

M35 - 0.45

- 4.3 The concrete mix design with and without admixture will be carried out by the Contractor through one of the following laboratories/Test houses and ready mix concrete shall conform to accepted design mix.
 - (i) IIT, Delhi.
 - (ii) National Council for Cement & Building Materials, Ballabhgarh.
 - (iii) CRRI, Delhi.
- 4.4 In the event of all the three laboratories being unable to carry out the requisite design/testing the Contractor shall have to get the same done from any other laboratory with prior approval of the Engineer-in-Charge.
- 4.5 The Contractor shall submit the mix design report obtained from any of above approved laboratories for approval of Engineer-in-Charge within 30 days from the date of issue of award letter. No concreting shall be carried out until the mix design is approved.
- 4.6 The cost of packaging, sealing, transportation, loading, unloading, cost of samples and the testing charges for Mix design in all cases shall be borne by the Contractor.
- 4.7 For procurement of ready mix concrete from RMC Plants, the Contractor shall, within 15 days from award of the work, submit list of at least three RMC Plant companies of repute along with details of such Plants including details of transit mixer, pumps etc. to be deployed indicating name of owner/company, its location, capacity, technical establishment, past experience and text of MOU proposed to be entered between purchaser (the Contractor) and supplier (RMC Plant) to the Engineer-in-Charge who shall give approval in writing (subject to drawl of MOU). The Contractor shall draw the MOU with approved RMC Plant owner/company and submit to Engineer-in-Charge within a week of such approval. The Contractor will not be allowed to purchase ready mixed-concrete without completion of above stated formalities for us in this project.
- 4.8 Notwithstanding, the approval granted by Engineer-in-Charge in aforesaid manner, the Contractor shall be fully responsible for quality of concrete including input control, transportation and placement etc.

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- 4.9 The Engineer-in-Charge will reserve right to inspect the RMC Plant at any stage and reject the concrete if he is not satisfied about quality of product. The Contractor should, therefore, draw MOU/Agreement with RMC owner/company very carefully keeping all terms and conditions/Specifications forming a part of this tender document.
- 4.10 The Engineer-in-Charge reserves the right to exercise control over the:
 - (i) Ingredients, water and admixtures procured, stored and to be used in the concrete including conducting of tests for checking quality of materials, recordings of test results and declaring the materials fit or unfit for use in production of mix.
 - (ii) Weighing and quantity check on the ingredients, water and admixtures added for batch mixing.
 - (iii) Time of mixing of concrete.
 - (iv) Testing of fresh concrete, recordings of results and declaring the mix fit or unfit for use. This will include continuous control on the workability during production and taking corrective action.

For exercising such control, the Engineer-in-Charge shall periodically depute his authorized representative at the RMC Plant. It shall be responsibility of the Contractor to ensure that all-necessary equipment manpower & facilities are made available to Engineer-in-Charge/or his authorized representative at RMC Plant.

- 4.11 Ingredients, admixtures & water declared unfit for use in production of mix shall not be used.

 A batch mix found unfit for use shall not be loaded into the truck for transportation.
- 4.12 All required relevant records of RMC shall be made available to the Engineer-in-Charge or his authorized representative. Engineer-in-Charge shall as required, specify guidelines & additional procedures for quality control & other parameters in respect of materials and production & transportation of concrete mix, which shall be binding on the Contractor & the RMC Plant.
- 4.13 43 grade OPC (Conforming to IS-8112) of brand/make/source as approved by Engineer-in-Charge shall only be used for production of concrete.
- 4.14 The RMC produced concrete shall be accepted by Engineer-in-Charge at site after receipt of the same after fulfilling all the requirements of mix mentioned in the tender documents.
- 4.15 The item of Design Mix cement concrete shall be inclusive of all the ingredients including admixtures if required, labour, Machinery T&P etc. (Except shuttering which will be measured & paid for separately) required for design mix concrete of required strength and workability. The rate quoted by the agency shall be net & nothing extra shall be payable on account of change in quantities of concrete ingredients like cement and aggregates and admixtures etc. as per the approved mix design.
- 4.16 Ready mix concrete shall be arranged in quantity as required at site of work. The ready mix concrete shall be supplied as per the pre-agreed schedule approved by Engineer-in-Charge.

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4.17 Precast cover blocks in cement mortar 1:2 mix (1 cement: 2 coarse sand) of about 4x4cm section will be placed between form-work and reinforcement to achieve uniform and required cover of concrete in slab and beam bottom. For beam side and columns factory made round type cover blocks shall be used.

5.0 SCAFFOLDING:

- 5.1 Double steel scaffolding for doing the brickwork for all external walls shall be done from outside.
- 5.2 The contractor shall be responsible for providing and maintaining sufficiently strong scaffolding so as to withstand all loads likely to come upon it. Nothing extra is payable on this account.
- 5.3 Double steel scaffolding having two sets of vertical supports shall be provided for external wall finish, cladding etc.
- 5.4 The contractor will arrange at least 2335 Sqm of steel shuttering for this work.

6.0 BRICKWORK

Due care shall be taken by the contractor to ensure the execution of brick masonry walls in plumb. The outer face of the building shall be kept as true face.

7.0 WOOD WORK:

7.1 Factory made shutters as specified, shall be procured from factories to be approved by the Engineer-in-Charge and shall conform to relevant IS Code. The Contractor shall inform well in advance to the Engineer-in-Charge the names and address of the factory from where the Contractor intends to procure/get the shutters manufactured. The Contractor will place order for manufacturing of shutters only after written approval of the Engineer-in-Charge in this regard is given. The Contractor is bound to abide by the decision of the Engineer-in-Charge and recommend a name of another factory from the approved list in case the factory already proposed by the Contractor is not found competent to the manufacture quality shutters. Shutters will however, be accepted only if they meet the specified tests.

7.2 For paneled shutters

The Contractor will also arrange stage wise inspection of the shutters at factory by the Engineer-in-Charge or his authorized representative. The Contractor will have no claim if the shutters brought at site are rejected by the Engineer-in-Charge in part or in full lot due to bad workmanship/quality. Such shutters will not be measured and paid. The Contractor shall remove the same from the site of work within 7 days after the written instructions in this regard are issued by the Engineer-in-Charge.

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7.3 All fittings & fixtures shall be got approved from the Engineer-in-Charge before procurement well in advance and the approved samples shall be kept at site till completion of work.

8.0 **STEEL WORK:**

- 8.1 The names of suitable workshops having technical capability and experience in executing similar work shall be submitted well in advance for approval of the Chief Engineer.
- 8.2 10 mm dia M.S. tie bar shall be provided at the bottom end of pressed steel/Tee iron frames to maintain them in true alignment and nothing extra is to be paid for the same.
- 8.3 The railing height shall be clear height above the finished floor/tread. The height of vertical bars at the turning points of the stair case railing shall be adjusted so as to provide smooth curvature to the railing.
- 8.4 All the welded joints for Doors and windows shutters and frames shall have continuous arc/flash butt welding. The welding joints shall be properly finished by grinding before applying coat of primer.
- 8.5 The hinges of door shutters shall be welded to angle iron/ tee iron frames in full length of contract area. Eyes and hooks shall be provided to such frames as per requirement. Nothing extra shall be paid for this work or for providing wooden padding for fixing the fitting the door shutter to suit angle iron frames.
- 8.6 The rate of M.S. Grills shall cover all work provided. No distinction shall be made between plain and ornamental grills for payment. The grill should be welded along the full length of the structure with M.S. frames of doors & windows.
- 8.7 Welding wherever required in the structure like grill, railing and frames shall be done in full length along the contract area of the member. Tuck welding is not allowed.

9.0 WATER SUPPLY AND SANITARY INSTALLATIONS:

9.1 For various fitting in internal services, the dimensions given in the following table shall be generally maintained unless otherwise provided in the architectural/plumbing drawing.

	Item		Height above	Distance from
		Fl	oor level <u>+</u> 10(mn	n) face of wall <u>+</u> 5 (mm)
	Bath Room			
A	Bib Cock	800		200
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130

Shower Rose

2100

500

Stop Cock for Shower Rose. 1100

w.c.

Bib Cock 250

100

Other fittings

Wash basin front Edge 800

Mirror: Bottom 1260

Top 1800

Towel Rail 1100

- 9.2 The SCI/CI/PVC and G.I .pipe etc. wherever necessary shall be fixed to RCC columns, beams etc. with rawlplugs and nothing extra shall be paid for this.
 - i) The Contractor shall submit completion plans for water supply, internal sanitary installations and building drainage work within thirty days of the completion. These plans are to be submitted on drawings prepared preferably by computers (1 original copy plus 3 Photostat) on suitable scales to show the general arrangement and desired details. In case the Contractor fails to submit the completion plans as aforesaid, the Security Deposit shall not be released.
 - ii) The variation in consumption of material shall be governed as per CPWD specification and clauses of the Contract to the extent applicable.
 - iii) The pig lead to be consumed for 100 mm, 75mm, SCI pipe joints shall not be less than 0.98kg and 0.88 kg. per joint respectively. However, in case of less consumption of pig lead by more than 5% of quantity of pig lead specified above shall be recovered from the Contractor at market rate to be determined by Engineer-in-Charge whose decision in the matter will be final.
 - iv) The Contractor shall bear all incidental charges for cartage, storage and safe custody of materials and shall construct suitable godowns, yards at the site of work for storing materials so as to be safe against damage by sun, rain, fire or theft etc. at his own cost and also employ necessary watch and ward establishment for the purpose at his own cost.

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v) Sanitary fixtures shall be of the best quality approved by the Engineer-in-Charge. Wherever particular makes are mentioned, the same shall be provided as per the tender specification after approval of Engineer-in-Charge.

vi) All fixtures and fittings shall be provided with all such accessories as are required to complete the item in working condition whether specifically mentioned or not in the Schedule of Quantities, Specifications, elsewhere in this tender document & drawings. The quoted rates shall be deemed to be all inclusive for a complete item fit for use including all materials, labour T&P, specials, equipment, testing & commissioning etc. Accessories shall include proper fixing arrangement, brackets, nuts, bolts, screws and required connection pieces. Nothing extra whatsoever shall be payable on this account.

vii) All fittings and fixtures shall be fixed in a neat workmanlike manner, true to required level and heights and in accordance with the manufacturers recommendations and as per directions of Engineer-in-Charge. Care shall be taken to fix all inlet and outlet pipes at correct positions.

Clamps:

9.3 Structural clamps shall be fabricated from M.S. structural members i.e. rods, angles, channels flats as per detailed drawing or as directed. Contractor shall provide all nuts, bolts, welding material and paint the Clamps with one coat of red oxide and two or more coats of black enamel paint.

9.4 Whereas M.S. clamps are required to be anchored directly to brick walls, concrete slabs, beams or columns, nothing extra shall be payable for clamping arrangement and making good with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) or as the mix of element (beam or column) as directed by the Engineer-in-Charge.

9.5 Unplasticised PVC Pipes & Fittings:

UPVC pipes and fittings shall conform to IS: 13592 of specified class. Jointing shall be done as per the manufacturers recommendations. The pipes and fittings must have matching dimensions for a perfect joint. Loose or excessively tight joints in the system shall not be accepted. .UPVC pipes shall be clamped to the wall with approved type UPVC or Galvanized Iron saddle clamps. Rates for all items quoted shall be inclusive of all work and items given in

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the above mentioned Specifications and Schedule of Quantities and applicable for the work under floors, in shafts or at ceiling level at all heights and depths. All rates are inclusive of cutting holes and chases in RCC and masonry work and making good the same. All rates are inclusive of pre-testing and on site testing of the installation, materials and commissioning. All UPVC rain water pipes shall be measured net when fixed correct to a centimeter including all fittings along its length. No allowance shall be made for the portions of pipes lengths entering the sockets of the adjacent pipes or fittings. The above will apply to both case i.e. whether pipes are fixed on wall face or pillars or embedded in masonry or pipes running at ceiling level. Rate for providing and fixing of P trap inlet fitting shall include all items and operations stated in the respective Specifications and Schedule of Quantities to provide a complete item fixed for use and nothing extra is payable. Rates for all items under Specifications paras above shall be inclusive of cutting holes and chases and making good the same, any fixing arrangements required including testing and commissioning etc. complete.

9.6 **Special Fittings:**

C.P. Brass bib cocks and stop cocks as specified in the schedule shall be provided. All floor, trap grating in toilets and shower areas & kitchen shall be of SCI.

9.7 The H.D.P.E. water storage tanks should be F.D.A. (Food Drug Addition) approved and tested by C.B.R.I. Roorkee and Public Health Engineering Laboratory. If necessary the Engineer-in-Charge will be at liberty to get the tanks tested for the various tests laid down by test house approved by the Engineer-in-Charge to ensure their strength and suitability for storing potable water. The testing and other incidental charges shall, however be borne by the Contractor and the Contractor shall also provide the guarantee covered by the manufacturer and the same shall duly endorsed to the DDA with manufacturer's guarantee for all the above materials.

Measurements:

Rates for all items quoted shall be inclusive of all work and items given in the above mentioned Specifications and Schedule of Quantities and applicable for the work under floors, in shafts or at ceiling level at all heights and depths. All rates are inclusive of cutting holes and chases in RCC and masonry work and making good the same.

All rates are inclusive of pre testing and on site testing of the installations, materials and commissioning.

10. WATER PROOFING:

i) Water proofing wherever required shall be got done through firms specialized in water proofing. The item of water proofing in schedule of quantities pertaining to the building works, shall be guaranteed against seepage/leakage for a period of ten years.

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The Contractor shall have to execute a performance bond in the prescribed Performa enclosed in the tender documents.

ii) The proportion of the water proofing compound of approved makes to be used in cement shall be as recommended by the manufacturer.

GUARANTEE BOND:

Ten years Guarantee Bond in prescribed proforma attached at **Annexure III** herewith shall be submitted by the Contractor which shall also be signed by both the specialized agency and the Contractor to meet their liability/liabilities under the guarantee bond. However, the sole responsibility about efficiency of water proofing treatment shall rest with the building Contractor.

10% (Ten per cent) of the cost of water – proofing work shall be retained as additional Security Deposit and the amount so withheld would be released after ten years from the date of completion of the entire work under the Agreement, if the performance of the work done is found satisfactory.

If any defect is noticed during the guarantee period, it shall be rectified by the Contractor within seven days of receipt of intimation of defects in the work. If the defects pointed out are not attended within the specified period, the same will be got done from another agency at the risk and cost of the Contractor.

However, the Security Deposit deducted may be released in full against bank guarantee of equivalent amount in favour of Engineer-in-Charge, if so decided by the Engineer-in-Charge.

The Security Deposit against this item of work shall be in addition to the Security Deposit mentioned elsewhere in Contract form.

11. CLEANING AND DISINFECTION OF PIPELINES:

On completion of hydraulic tests and before a pipe is disinfected, it shall be proved to be free from obstruction, debris and sediment by scouring or by any other process which the Engineer-in-Charge may prescribe. Upon satisfactory completion of testing and cleaning, the pipe lines shall be disinfected as under:

Chlorine solution shall be applied at the charging point as the pipe line is being filled and dosing shall be continued until the pipe line is full and at least 50 parts of chlorine per million

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parts of water have been made available and distributed evenly. If ordinary bleaching powder is used, proportion will be 150 gms of powder to 1000 litres of water. If a proprietary brand is used, the proportion shall be as specified by the manufacturers. The treated water shall be left in pipe line for a period as directed but not exceeding 24 hours. Residual chlorine tests shall be taken at various points along the pipe line. The disinfection process shall be repeated until the samples of water taken from the pipe line are declared fit for human consumption by a recognized laboratory.

12. SPECIFICATIONS FOR WATER SUPPLY, SEWERAGE & DRAINAGE:

General:

- 12.1 The scope of work comprises supply, laying, installation, `commissioning and testing of water supply, sewerage and drainage works including sanitary fixtures and fittings. These works shall be executed as per the Specifications of items attached and CPWD Specifications (1996) Volume I & VI and CPWD specifications 2002 Chapter 3, 4 & 5 with up to date Correction Slips up to the date of receipt of tenders.
- 12.2 All the water supply and sanitary works shall be carried out by the licensed plumbers approved by the M.C.D. and skilled workman, experienced in the trade.
- 12.3 The Contractor shall be responsible for coordinating the work with works of other trades sufficiently ahead of time to avoid unnecessary hold ups. Hangers, sleeves, recesses, etc. shall be left in time as the work proceeds whether or not these are shown in drawings.
- Only materials of specified make subject to the approval of the sample by Engineer-in-Charge shall be used.
- 12.5 The Contractor shall submit, as directed by the Engineer-in-Charge, samples, manufacturer's drawings, equipment characteristics and capacity, date etc. of all the equipment, accessories, devices etc. that he proposes to use in the installation to the Engineer-in-Charge for approval.
- 12.6 Before the work is handed over the Contractor shall clean all fixtures removing all plaster, stickers, rust stains and other foreign matter, leaving every part in acceptable condition and ready for use to the satisfaction of the Engineer-in-Charge.
 - i) All sanitary wares and fittings shall be ISI marked and if ISI marked is not available it should conform to I.S. standards. The Contractor shall submit samples of all fittings and fixtures proposed to be used to the Engineer-in-Charge for his approval. The approved samples shall remain with the Engineer-in-Charge till the completion of the work.

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ii) The G.I.fittings including nipples shall be of same grade and specification as prescribed for G.I.pipe. All the workmanship shall confirm to Indian Standard Codes of practice. The fixing and finishing shall be neat, true to level and plumb. Manfacturer's instruction shall be followed closely regarding installation and commissioning. All fixtures shall be protected throughout the progress of the work from damage. Special care shall be taken to prevent damage and scratching of the fittings. Tool marks on exposed fixtures shall be removed with hot water only after the final completion of the work.

13. CONSTRUCTION JOINTS:

- 13.1 The Contractor shall give his proposal for location and treatment of construction joints. The construction joints shall be provided only at places and in the manner as approved by Engineer-in-Charge.
- 13.2 Except where shown otherwise on the drawing, reinforcement shall continue through construction joints.
- 13.3 The foreign matter and laitance shall be cleaned properly by compressed air before starting further work.

14. **EXTERNAL FINISHING:**

The external finishing with plaster shall be done as per CPWD Specification and as per item of Schedule of Quantity and sample of such plaster should be prepared by the Contractor and got approved by Engineer-in-Charge before undertaking mass work.

15. The contractor shall submit the completion plan for water supply, sewerage and drainage.

Table for working out the minimum rolling time period in respect of various materials of road surfacing:

S.No.	Materials of surfacing	Quantities
1.	Consolidation of earth sub-grade	
2.	Consolidation of sub base with 90mm to 45mm graded stone metal.	1860 Sqm.
3	Consolidation of wearing coat of stone ballast 7.5 cm. to 11.5 cm. thick.	42 Cum.

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S.No.	Materials of surfacing	Quantities
4	Consolidation of wearing coat of brick ballast 10 cm. thick.	30 Cum.
5	Spreading and consolidation of red bajri 6mm.	60 Cum.
6	Painting one coat using stone aggregate 13.2mm nominal size	930 Sqm.
	(a) @ 1.65 cum. per 100 Sqm. and paving bitumen A-90 or S-90 @ 2.25 Kg. per sqm. or	
	(b) @ 1.5 cum. per 100 sqm. bitumen emulsion or road tar @ 1.95 Kg. per sqm.	
7	Painting two coats using:	600 Sqm.
	 (a) For first stone aggregate 13.2mm. nominal size. (i) @ 1.5 cum. per 100 sqm. with paving bitumen A-90 or S-90 @ 2 kg./sqm. 	
	(ii) @ 1.35 cm. per 100 sqm. with paving bitumen emulsion @ 2kg/sqm. or	
	(iii) @ 1.5 cm. per 100 sqm. with tar @ 2.25 Kg./sqm.	
	(b) For 2 nd coat, stone aggregate 11.2mm nominal size 1.0 cumper 100 Sqm. with	100 Sqm.
	(i) One kg.of paving bitumen A-90 or S-90 or bitumen emulsion per sqm.of	
	(ii) 1.25 Kg.of bitumen emulsion per sqm.	
8	Repainting with stone aggregate 11.2mm nominal size 0.9 cum. per 100 sqm. with	1670 Sqm.
	(a) 1.10 Kg. of paving bitumen A-90 or S-90 or bitumen emulsion per sqm. or	
	(b) 1.22 Kg. of bitumen emulsion per sqm.	
9	2 cm. premix carpet surfacing using 2.4 cum. of stone aggregate 11.2mm. nominal size per 100 sqm. and binding including tack-coat the binder being paving bitumen S-90 or hot cut back bitumen or bitumen emulsion @ 96 Kg. / cum.of agg. in specified quantities.	930 Sqm.

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S.No.	Materials of surfacing	Quantities
10	2.5 cm thick premix carpet surfacing using 3 cm. of stone aggregate 11.2mm nominal size per 100 sqm. and binder including tack-coat the binder being paving bitumen S-90 or not cut back bitumen emulsion in specified quantities.	930 Sqm.
11	4 cm. thick concrete surfacing using stone aggregate 3.8 cum. (69% 20mm nominal size and 40% 12.5mm nominal size) per 100 sqm. and coarse sand 1.90 cum. per 100 sqm. and hot cut back bitumen over a tack coat of hot cut back bitumen.	370 Sqm.
12	5 cm. thick bitumen concrete surfacing using stone aggregate 4.8 cum. (60% 40mm nominal size and 40% 20mm nominal size) per 100 Sqm. and coarse sand 2.4 cum.per 100 sqm. and hot cut back bitumen over a tack coat of hot cut back bitumen.	370 Sqm.
13	6mm thick bitumen concrete surfacing using stone aggregate 5.8 cum. (60% 40mm nominal size and 40% 25mm nominal size) per 100 sqm. and coarse sand 2.9 cum. per 100 sqm. and hot cut back bitumen over a tack coat of hot cut back bitumen @ 50 Kg. per cum pf aggregate.	280 Sqm.
14	7.5 cum. bitumen concrete surfacing using stone aggregate, 7.3 cum. (60% 50mm nominal size and 40% 40mm nominal size), per 100 sqm. and hot cut back bitumenover a tack-coat of hot cut back bitumen, and coarse sand @ 3.6 cum. per 100 sqm.	230 Sqm.
15	2.5 cum. bitumastic sheet using stone aggregate 1.65 cum. (60% 13.2 mm nominal size, 40% 11.2mm nominal size) per 100 sqm. and coarse sand 1.65 cum. plr 100 sqm. and hot cut bitumen over a tack-coat of hot cut back bitumen.	230 Sqm.
16	4 cm. bitumastic sheet using stone aggregate 2.6 cum. (60% 13.2mm nominal size 40% 11.2mm nominal size) per 100 sqm. coarse sand 2.6 cum. per 100 sqm. and hot cut back bitumen over a tack coat of hot bitumen.	560 Sqm.
17	Laying full grouted surface using stone aggregate 40mm nominal sixze 6.10 cum. per 100 sqm. with binder, binding with 40mm nominal size 1.83 cum. pr 100 sqm. and seal coat of binder and stone grit 11.2mm nominal size 1.07 cum. /100 sqm. the binder being hot bitumen or tar, as specified.	460 Sqm.

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S.No.	Materials of surfacing	Quantities
18	Laying full grouted surface using stone aggregate 50mm nominal size 9.14 cum. per 100 sqm. with binder, binding with 40mm nominal size 1.83 cum. per 100 sqm. and seal coat of /binder and stone grit 11.2 mm nominal size 1.07 cum/100 sqm. the binder being hot bitumen or tar.	370 Sqm.
19	4cm. thick premix macadam surfacing using stone aggregate 25mm nominal size 4.57 cum. per 100 sqm and bitumen binding with stone aggregate 13.2 mm nominal size 1.52 cum. per 100 sqm. and seal coat of hot bitumen stone aggregate 11.2 mm nominal size. 1.07 cum. per 100 Sqm.	560 Sqm.
20	5 cm. thick premix macadam surfacing with stone aggregate 25mm nominal size 6.10 cum.per 100 sqm. and hot bitumen binding with stone aggregate 13.2 nominal size 1.52 cum. per 100 sqm. and seal coat of hot bitumen and stone aggregate 11.2mm nominal size 1.07 cum. /100 Sqm.	460 Sqm.
21.	Seal coat to premix and with paving bitumen S-90 using 128 kg.of bitumen per. cum of sand and 0.75 cubic m. sand per hundred sqm. of road surface.	1860 Sqm.
22.	Consolidation of granular sub base course with power vibratory roller.	133 cum.
23.	Consolidation of CC 1:4:8 base course with power vibratory roller.	133 cum.

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Name of the work: Construction of 500 EWS houses for slum rehabilitation in sector 4 Rohini adjoining to 2016 one room tenements.

S.H.:- Construction of 512 EWS houses i/c internal development and internal electrical installations.

S.No.	Description of Item	Qty.	Unit	Rate in Unit	Place of delivery
1.	Ordinary Portland/Pozzolana Cement		M.T.	M. Tonne	Any DDA Store at Delhi, New Delhi
2.	Twisted Deformed bars		M.T.	M. Tonne	- do -
3.	M.S. Round Bars		M.T.	M. Tonne	- do -
4.	S.C.I. Pipes (a) 100 mm dia		Meter	Meter	- do -
	(b) 75 mm dia		Meter	Meter	- do -
	(c) 50 mm dia		Meter	Meter	- do -
5.	G.I. Pipes (a) 15 mm dia	19500 Metre	Meter	@38.50 per Meter	- do -
	(b) 20 mm dia	18000 Metre	Meter	@Rs.49.50 per Meter	- do -
	(c) 25 mm dia		Meter	Meter	- do -
	(d) 32 mm dia		Meter	Meter	- do -
	(e) 40 mm dia		Meter	Meter	- do -
6.	C.I. Pipe Class L.A.		Meter	Meter	- do -
7.	White Glazed Tiles 108* 108mm.		Nos.	Meter	- do -
8.	Bitumen		MT.		- do -

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1.	The materials shall be issued to the contractor at the place of delivery mentioned against each item shown as above Nothing shall be paid for cartage of the same to different sites as required and as directed by the Engineer-in-Charge.
2.	The issue rates mentioned in schedule of materials to be issued are inclusive of 2% storage charges.
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TABLE OF MILESTONE (S)

S.No.	Financial Progress	Time Allowed in Months (From Date of Start)	Amount to be withheld in case of non achievement of Milestone.
1.	1/8 th (of the whole work)	1/4 th (of the whole work.	In the event of not achieving the necessary progress as assessed from the running payment, 1% of the Tendered Value of work will be withheld for failure of each Milestone.
2.	3/8 th (of the whole work	½ (of the whole work)	- do -
3.	3/4 th (of the whole work	3/4 th of the whole work	- do -
4.	Full	Full	- do -

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Annexure-I

List of Approved make of materials.

(For Civil Works).

Specification/brands names of materials (Refer materials, whichever are applicable for the scope of work) and finishes approved by the Architect are listed below. However, approved equivalent materials and finishes of any other specialized firms may be used, in case it is established that the brands specified below are not available in the market and subject to approval of the alternate brand by the Engineer-in-Charge (also see Conditions of Contract).

S.No.	Materials	Approved Make
1.	POLY-SULPHID SEALANT	PIDILITE, TUFFSEAL, CHOKSY CHEMICALS.
2.	T.M.T. STEEL	SAIL, TISCO, RINL, IISCO
3.	STRUCTURAL STEEL	TATA,SAIL, LLOYD METAL, SUPREME
	SECTIONS	
4.	ADMIXTURE	FOSFORC BY M/S. S.G. FOUNDARY AIDS MC- BY BAUCHEMIE INDIA PVT. LTD. ROFFEE CONSTRUCTION CHEMICAL & CICO.
5.	PORTLAND CEMENT(GRADE-43)	L & T, ACC, J.K., J.P.REWA, VIKRAM, BIRLA JUTE, CEMENT CORPORATION OF INDIA, SHREE CEMENT
6.	WATER PROOFING COMPOUND	TAP CRETE, CICO, ACCOPROOF
7.	BITUMEN	I.O.C.,H.P.C.L.,B.P.C.L.

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8.	PLYWOOD/FLUSH DOOR/ PLY BOARD	DURO,KITPLY, SWASTIC, HANSO SUNMICA, JYOTI.

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FORM OF PERFORMANCE SECURITY

BANK GUARANATEE BOND

	on of the Lt. Gover	·			·		
having agreed und	ler the terms and c					dated	
	made between	Executive Engine	er	Divisi	on and		
{	hereinafter called t	the said Contracto	r(s)}for the	work			_
		(hereinafter ca	lled the sai	d Agreemen	t) having a	greed to prod	luction of a
irr	ecoverable Bank gu	uarantee for Rs		only)	as a Securi	ity/Guarantee	from the
Co	ntractor (s) for con	npliance of his ob	ligations in	accordance	with the T	erms & Cond	itions in the
sai	d Agreement, We				(herein	after referred	I to as "the
Ва	nk")						
	(Indicate the name	of the Bank)					
hereby undertake	to pay to the DDA	an amount not e	exceeding I	Rs			
(Rupees		only) o	on demand	by the DDA			
				,			
	do he me of the Bank)	reby undertake t	o pay the	amounts du	e and pay	able under (Indicate the
	without any demu	-			_		
·	et the recoveries d	•				•	
	all be conclusive a	_			-		
	liability under	this guarantee	shall be	restricted	to an	amount not	exceeding
Rs	only.						
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3. We, the said bank further undertake to pay to the DDA any money so demanded not withstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding, pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor (s) shall have no claim against us for making such payment.

4.	We		_ further agree that the guarantee herein contained shall (Indicate the
		name of the bank)	

remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the DDA under or by virtue of said Agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge on behalf of the DDA certified that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor (s) and accordingly discharge this Guarantee.

5. We _____further agree with the DDA that (Indicate the name of the Bank)

The DDA shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the power exercisable by the DDA against the said Contractor(s) and to for bear or enforce any of the terms & conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor or for any forbearance, act of omission on the part of the DDA or any indulgence by the DDA to the said Contractor (s) or by any such mater or thing whatsoever which under the law relating to sureties would, but for this provisions, have effect of so reliving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor (s).

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the Bank) Guarantee except with the previous consent of the DDA in writing. 8 This Guarantee shall be valid upto	7. We	li	astly undertake n	ot to revoke this (Indicate the name of
DDA, Not-with-standing anything mentioned above, our liability against this Guarantee is restricted at Rs				iting.
DDA, Not-with-standing anything mentioned above, our liability against this Guarantee is restricted at Rs				
DDA, Not-with-standing anything mentioned above, our liability against this Guarantee is restricted at Rs	0 71: 0			
Rs				
writing is lodged with us within six months of the date of expiry or the extended date of expiry of the guaranteed all our liabilities under this guarantee shall stand discharged. Dated the				
guaranteed all our liabilities under this guarantee shall stand discharged. Dated the				
For				
For	Datad the	day of 20	0	
(Indicate the name of the Bank)	Dated the	day of,20	U	
(Indicate the name of the Bank)				
(Indicate the name of the Bank)				
(Indicate the name of the Bank)				
			For	
			(Indicate the r	name of the Bank)
	<i>I</i>			

ANNEXURE-III

• GUARANTEE BOND TO BE EXECUTED BY CONTRACTOR FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATER PROOFING WORKS.
The Agreement made thisday ofTwo thousand andbetweenbetweenson of(hereinafter called the Guarantor of the one part) and the Delhi Development Authority (hereinafter called the DDA of the other part).
WHEREAS THIS Agreement is supplementary to a Contract (hereinafter called the Contract) datedand made between the GUARANTOR OF THE ONE part and the D.D.A. of the other part, whereby the Contractor, inter alia, undertook to render the buildings and structures in the said Contract recited completely water and leak- proof.
AND WHEREAS THE GUARANTOR agreed to give a Guarantee to the effect that the said structures will remain water and leak -proof for Ten years to be reckoned from the date after the Maintenance Period prescribed in the Contract.
NOW THE GUARANTOR herby guarantees that water proofing treatment given by him will render the structures completely leak- proof and the minimum life of such water proofing treatment shall be Ten years to be reckoned from the date after the maintenance period prescribed in the Contract.
Provided that the Guarantor will not be responsible for leakage caused by earthquake or structural defects or misuse of roof or alteration and for such purpose:
 misuse of roof shall mean any operation which will damage water proofing treatment, like chopping of firewood and things of the same nature, which might cause damage to the roof;
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- b) alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby water proofing treatment is removed in parts;
- c) the decision of the Engineer-in-Charge with regard to cause of leakage shall be final.

During this period of guarantee, the Guarantor shall make good all defects and in case of any defects being found, render the building water proof to the satisfaction of the Engineer-in-Charge at his cost and shall commence the work for such rectification within seven days from the date of issue of the notice from Engineer-in-Charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other Contractor at the GUARANTOR'S cost and risk. The decision of the Engineer-in-Charge as to the cost, payable by the Guarantor shall be final and binding.

That if, Guarantor fails to execute the water proofing or commits breach thereunder then the Guarantor will indemnify the Principal and his successors against all loss, damage, cost, expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this Supplementary Agreement. As to the amount of loss and/or damage and/or cost incurred by the DDA, the decision of the Engineer-in-Charge will be final and binding on the parties.

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abov	ve written.											
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SIGN	NED for and o	on behalf of Ti	HE DELHI	DEVELOPME	ENT AUTI	HORITY	by	i	n the pr	esence c	of –	
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ANNEXURE-IV

FORM OF SUPPLMENTARY AGREEMENT

This	,
	hereinafter, called the First Party which expression shall include his heirs, cutors and administrators/ their successors and assigns and the Chairman, DDA through hereinafter, called the Second Party, which expression shall include his successors and gns. The terms of the Agreement shall be as under:
1.	That this Agreement shall be called as Supplementary Agreement to the Agreement Norelated to the Construction of, entered into by the parties to this Agreement.
2.	That WHEREAS the First Party has substantially completed the execution of the work described in and covered by the Schedule 'A' of Items of the Agreement Noand Whereas the items of the work mentioned in the Schedule 'B' annexed to this Agreement cannot now be executed, and Whereas both the parties are desirous that the items mentioned in this Schedule 'B' annexed to the Agreement should be executed by the First Party at the time of actual handing over of the physical possession of the flats to the Allottees or as and when otherwise desired by the Engineer –in-Charge, it is, hereby, further agreed as under:-
a)	That the First Party shall and execute the works covered by the items mentioned in the Schedule 'B' annexed to this Agreement (in parts)at the rates and as per the terms and conditions of the Main Agreement Nowhenever called upon to do so by the Second Party.
b)	That the time period for the execution of entire work covered under Schedule 'B' would be or as extended from time to time by the Engineer-in-Charge with mutual consent of both the Parties.
c)	That the First Party shall complete the execution of all the items mentioned in Schedule 'B' as well as any other work emanating from the execution of items covered by Schedule 'A' under the Original Agreement in a particular flat/ flats within the period fixed by the Engineer-in-Charge, on the receipt of letters written /verbal instructions to that effect from time to time.
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d)	That the total time period specified under Para 'b' shall automatically get reduced, if the Second Party, by virtue of provisions contained in para 'c' instruct the First Party from time to time in a manner which may result in the completion of all the flats before the time so Stipulated therein.
e)	That the First Party shall have absolutely no claim of whatsoever nature against the Second Party for doing the work mentioned in Schedule 'B' annexed to this Agreement as required under sub-clause(a) above, except that to which he would be entitled under the Original Agreement No
f)	That the First Party shall be liable to execute all other items arising out of the Original Agreement No which in the opinion of the Engineer-in-Charge, are necessary.
g)	That the Final bills relating to the works cover under Schedule 'A' and Schedule 'B' shall be prepared independently after the completion of the respective parts of the work as per the terms and conditions of Main Agreement and/or Supplementary Agreement as applicable.
h)	That on the due execution of this Supplementary Agreement by the parties, the bill of the First Party in relation to the work already done by him under Schedule 'A' of the Original Agreement, if completed in all respects as per the terms and conditions of the Agreement, shall be finalized by the Second Party, subject, however, to fulfillment of all other obligations as per terms and conditions of the Agreement by the First Party, and due payment shall be made to the First Party as per the terms and conditions of the Original Agreement.
i)	Security Deposit for Original Agreement may be released, retaining an amount equivalent to 50% of Security Deposit or 10% of the Tendered Cost of work to be executed under the Supplementary Agreement, whichever is more i.e. Rsas Security Deposit till the completion of work covered by Supplementary Agreement and maintenance period thereafter. The Second Party shall have a right to deal with the said amount of Security Deposit as it thinks proper under the terms and conditions of the Original/Supplementary Agreement. Further, on the due execution and completion of this Supplementary Agreement, to the satisfaction of the Engineer –in-Charge, the first party shall be entitled to refund of this amount of Security Deposit relating to the work in question, subject to the right of the Second Party to retain such amount as it thinks reasonable as mentioned in above, soon after the maintenance period, as mentioned in Clause 17 of the Original Agreement, is over.
j)	That during the operation of Supplementary Agreement, the watch and ward of the entire work including that completed under the Original Agreement shall continue to remain the responsibility of the First Party. The First Party shall be paid extra on this account at quoted / predetermined rates.
k)	The first party shall be liable to make good any loss or damage to the work executed under both, original as well as Supplementary Agreement during the operation/currency of Supplementary Agreement as well as subsequent maintenance period, for which nothing extra shall be paid to the First Party.
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3.	Except as modified by this Agreement, the said Original Agreement No shall remain in Full Force an effect in all respects including Technical Audit, Defect Liability etc.
	IN WITNESS WHEREOF THE ABOVE MENTIONED PARTIES HAVE PUT THEIR SIGNATURE ON THIS DAY THE
Con	ntractor Executive Engineer
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ADDITIONAL CONDITIONS & SPECIFICATIONS FOR I. E. I.

Conditions:

1. The Contractor must get acquainted with the proposed site for work and study specifications and conditions carefully before tendering. The work shall be executed as per programme approved by the Engineer-in-charge. The work shall be executed in close coordination with the progress of the building work. If the site for electrical work is not available in part or in full for any reason whatsoever, the time for the execution of the electrical work shall be correspondingly extended. No claim for any idle labour or compensation (except as provided under clause 10C/10CC as applicable in the printed conditions of contract) shall be entertained.

2. The contractor shall submit completion certificate as per appendix 'E' of the general specifications for electricalwork (Part-I) Internal-2005 within one month after actual date of completion, failing which an amount @ 1% of the tendered cost subject to maximum of Rs.25,000/- shall be deducted from any amount due to the contractor from DDA.

3. The Contractor shall issue test report form duly filled and signed for obtaining electric meter connection from DISCOM if required by Engineer-in-charge.

4. Drawings showing the layout of internal electrical installation are attached herewith. The Engineer-in-Charge reserves its right to make any modifications to the layout at any stage during the execution of

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work. No extra claims shall be entertained on account of the same except under the provisions of clause 12 and 12A in he printed conditions of the contract.

- 5. After the award of work, the contractor shall produce samples of all the materials to be used in the work for approval of the Engineer-in-charge. The contractor shall also produce test certificates for conformity with relevant IS Specification, if required by the Engineer-in-charge. Only materials conforming to the approved samples shall be used in the work. If required, the sample installation shall be executed by the contractor in selected sample unit at the appropriate time as required and as per instructions of Engineer-in-charge.
- 6. Whenever required, by the Engineer-in-charge, the contractor shall, for the purpose of testing, supply the samples of any material proposed to be used in the work. Suitable package to contain in the sample shall be provided free of charge by the contractor. The testing charges, if any, shall be borne by the department.
- 7. The contractor shall be fully responsible for watch and ward of the material brought/work executed at site till the same is completed and taken over by the department.
- 8.1 After the work is awarded, the contractor will enter into a separate agreement for electrical work with the concerned Ex. Engineer (Electrical) and it will be obligatory on the part of the tenderer to sign the tender documents for electrical works.
- 8.2 The contractor shall engage/associate with himself, agency of appropriate class eligible to tender for electrical works for execution of electrical works with electrical license.

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8.3 Contractor shall provide his own storage at site with locking arrangement for which space will be provided by department. The watch and ward of the stores and their safe custody shall be the responsibility of the contractor till final taking over of the installation by the department.

SPECIFICATIONS:

- 9. The work as indicated in the schedule of quantities attached herewith including any modifications, additions alterations ordered subsequently shall be carried out as per specifications given below:
- 9.1 C.P.W.D. Specifications for Electrical works part-I (Internal) 2005 and Part-II (External) 1994 with amendments up to the date of opening to tenders.
- 9.2 Indian Electricity Rules 2005 as amended upto date.
- 9.3 A table indicating the makes, governing specifications and other details in respect of some of the important materials to be used in the work is attached. These specifications shall have precedence over those indicated in 9.1 above.
 - (a) Only material bearing ISI/BIS Certifications mark shall be used in the work. Where articles of different designs/makes bearing ISI/BIS certification mark are available, the decision of Engineer-in-charge above the design/make to be used in the work shall be final and binding on the contractor.
 - (b) Where material bearing ISI/BIS certification marks are not available, material conforming to relevant BIS/ISI shall be used with prior approval of Engineer-i-charge.
 - (c) If the specifications of any item are not available then the decision of the Engineer-in-charge regarding quality shall be final and binding on the contractor.

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10. In case of any discrepancy in the description of any item given in the schedule of quantities and the

specifications, the former shall prevail.

ADDITIONAL SPECIFICATIONS:

Additional specifications are indicated in the following clauses. These additional specifications given below shall

have precedence over those indicated in Para 9 above in case of deviations between the two.

11. Chase/recess cut in the masonry for embedding the conduit, boxes and DB's etc. shall be improper line

and to the required depth by chase cutting machine. Any consequential damages shall be made good to

the satisfaction of the Engineer-in-charge. After the conduit/boxes etc. are fixed, the chases/recess shall

be filled with cement mortar 1:4 (1 cement: 4 coarse sand) and made flush with masonry surface and

cured adequately.

12. After plastering by civil agency, the edges for switch/fan boxes and junction boxes etc. shall be neatly

finished by electrical contractor with 1:4 cement, sand mortar.

13. The contractor shall ensure that conduit laid is free from any concrete slurry or building material etc. and

for this purpose thorough checking will be carried out soon after conduits are laid/shuttering is removed

to avoid difficulty at a later stage in wiring and possible damage to the roof/slab/walls. After checking, GI

fish wire of 1.6/1.2mm dia (16/18 SWG) shall be drawn which shall be removed at the time of wiring. No

payment to contractor shall be released for conduit work till the fish wire in conduit is drawnproperly.

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14.	Any ordinary or special accessories i.e. metal boxes etc. if required for the purpose of branching of conduits shall, form part of the sub-main/circuit/point wiring.
15.	Horizontal chase more than 60 cms. shall not be allowed.
16.	The metal boxes including fan boxes to be used in the work shall be made galvanized MS sheet.
17.(a)	For light points, fan points, call bell points, light plug points and power plug points; piano type switch / socket outlet / bell bush (as the case may be) shall be provided.
screws	The screws for fixing phenolic laminated sheet to cover metal boxes shall be provided to adequate length it covers the full thickness of the treaded portion of the box. For this only cadmium plated round headed with flat washers will be acceptable. All other screws for the covers of junction, boxes, loose wire boxes, covers shall also be cadmium plated.
18.	Six pin socket outlet shall be provided for power plug points.
19.	The light points where no fittings are to be provided under this contract shall be provided with extended wires for phase, neutraland earth at least 10 cm. in length with connectors.
20.	Phenolic laminated sheet cover 3mm thick shall be provided on all light points fan points and junction boxes etc.
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21.	Minimum 25cms. length of phase, neutral and earth wires of circuit/sub main wiring on each end shall be extended for proper future maintenance and proper connection in distribution board/main switch board.
22.	Connectors to be used any where in the installation shall be screw less or captive screw type and made of flame retardant polyimide material.
23.	Earthing work i.e. embedding of earth electrode and testing of installation shall be carried out in the presence of the Assistant Engineer (Elect.).
24.	Suitable rain protection cover made of 16 SWG galvanized MS sheet wherever required shall be provided by the contractor within the quoted rates.
25.	The dimensions of items indicated in drawings attached (MDBs, etc.) are minimum.
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TABLE INDICATING GOVERNING SPECIFICATION ETC.

IN RESPECT OF MATERIAL TO BE USED AT WORK

S.No.	Item	Governing Specifications	Remarks		
1.	PVC Conduit	IS:9537 Part-III (Medium)	For termination of PVC conduit pipe in boxes, no check nut and bushes are to be provided.		
2.	PVC Insulated Copper Conductor Wires (FR)	IS: 694/1990	 (a) Wires of size 2.5mm and above shall be stranded type. (b) End termination of all stranded wires shall be done by means of crimped copper lugs wherever required. (c) All cable lugs should be PVC taped/sleeves at end terminals. 		
3.	MCB's	IS: 8828-1996	Minimum breaking capacity 10 KA at 240/415 volts.		
4.	Phenolic Laminated Sheet	IS: 2036-1974	The Sheet shall be 3mm thick. The sheet shall be cut vertical and edges rounded off.		
5.	PVC Junction Boxes	IS: 3419:1989	Junction boxes for use in ceiling shall be minimum 55mm deep and on wall minimum 25mm deep.		
6.	PVC Bends, Coupler and Elbow	IS: 3419-1989	These shall be push fit/grip type and jointing with PVC conduit pipe shall be done with an approved PVC cement.		
7.	Piano switches/bell push 6/16A.	IS: 3854-1997	Shall be white inn colour.		

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S.No.	Item	Governing Specifications	Remarks		
8.	Piano three/six pin socket outlets 6/16A	IS: 1293 – 1989	Shall be white in colour.		
9.	Metal Boxes	Galvanized Class P- I, as per IS: 277- 1977	 (a) Shallbe made out of 18 SWG galvanized M.S. sheet up to size of 200mm x 300mm and above this size, boxes shall be made out of 16 SWG galvanized M.S. Sheet. (b) The earth terminals of suitable size nut and spring washers shall be provided for the earthing of boxes. 		
10.	Telephone Cables	ITD Spec. No.WZ- 113B			
11.	Prewired Sub distribution Board MCB Type	IS: 13032-1991	Enclosure shall be factory fabricated and shall be of same make as that of MCB.		

Note: ISI Specifications (mentioned against Governing Specification) amended up to date of supply of material shall be applicable.

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<u>List of acceptable makes (For Internal Electrical works).</u>

1. Piano type Switch/Bell Push/Socket 1. Anchor 2. CPL 3. Precision 4. Cona 2. PVC Insulated Copper wire/Telephone wire 1. Skytone 2. National 3. Eco 4. Havell's 3. PVC Conduit 1. BEC 2. AKG 3. Precision 4. MCB's & DB's 1. Standard 2. L&T 3. Legrand 4. Indokopp 5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack 2. B.E.C. Plast	S.No.	Item	Makes (Manufacturer's Name/Brand Name		
3. Precision 4. Cona 2. PVC Insulated Copper wire/Telephone wire 1. Skytone 2. National 3. Eco 4. Havell's 3. Precision 4. MCB's & DB's 1. Standard 2. L&T 3. Legrand 4. Indokopp 5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack 2. Polypack 3. Precision 4. Polypack 4. Polypack 5. Polypack 5. Polypack 6. Polypack 6. Polypack 6. Polypack 6. Polypack 7. Polypack 9. Polypack	1.	Piano type Switch/Bell Push/Socket	1. Anchor		
2. PVC Insulated Copper wire/Telephone wire 1. Skytone 2. National 3. Eco 4. Havell's 3. PVC Conduit 1. BEC 2. AKG 3. Precision 4. MCB's & DB's 1. Standard 5. Phenolic Laminated Sheet 1. Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 7. PVC Cement Resin 1. Polypack 9. National 1. Skytone 2. AKG 3. Precision 4. Standard 5. Action 6. Havell's 7. PVC Cement Resin 1. Polypack 7. PVC Cement Resin 1. Polypack 1. P			2. CPL		
2. PVC Insulated Copper wire/Telephone wire 1. Skytone 2. National 3. Eco 4. Havell's 3. Precision 4. MCB's & DB's 1. Standard 2. L&T 3. Legrand 4. Indokopp 5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			3. Precision		
2. National 3. Eco 4. Havell's 3. PVC Conduit 1. BEC 2. AKG 3. Precision 4. MCB's & DB's 1. Standard 2. L&T 3. Legrand 4. Indokopp 5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			4. Cona		
3. Eco 4. Havell's 3. PVC Conduit 1. BEC 2. AKG 3. Precision 4. MCB's & DB's 1. Standard 2. L&T 3. Legrand 4. Indokopp 5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack	2.	PVC Insulated Copper wire/Telephone wire	1. Skytone		
4. Havell's 3. PVC Conduit 1. BEC 2. AKG 3. Precision 4. MCB's & DB's 1. Standard 2. L&T 3. Legrand 4. Indokopp 5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack 7. PVC Cement Resin 1. Polypack 7. Polypack 8 CC 9 CC 1. Hylam 1. Hylam 2. Surya 3. Tata 4. Polypack 5 CC 6 CC 7 CC 7 CC 8 CC 9 CC			2. National		
3. PVC Conduit 1. BEC 2. AKG 3. Precision 4. MCB's & DB's 1. Standard 2. L&T 3. Legrand 4. Indokopp 5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			3. Eco		
2. AKG 3. Precision 4. MCB's & DB's 1. Standard 2. L&T 3. Legrand 4. Indokopp 5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			4. Havell's		
4. MCB's & DB's 1. Standard 2. L&T 3. Legrand 4. Indokopp 5. Action 6. Havell's 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack	3.	PVC Conduit	1. BEC		
4. MCB's & DB's 1. Standard 2. L&T 3. Legrand 4. Indokopp 5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			2. AKG		
2. L&T 3. Legrand 4. Indokopp 5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			3. Precision		
3. Legrand 4. Indokopp 5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack	4.	MCB's & DB's	1. Standard		
4. Indokopp 5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			2. L&T		
5. Action 6. Havell's 5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			3. Legrand		
5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			4. Indokopp		
5. Phenolic Laminated Sheet 1. Hylam 2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			5. Action		
2. Formica 3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			6. Havell's		
3. Caprihans 4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack	5.	Phenolic Laminated Sheet	1. Hylam		
4. Super Hylam 6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			2. Formica		
6. G.I. Earth Pipe 1. Jindal (Hissar) 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack			3. Caprihans		
 2. Surya 3. Tata 7. PVC Cement Resin 1. Polypack 			4. Super Hylam		
7. PVC Cement Resin 1. Polypack	6.	G.I. Earth Pipe	1. Jindal (Hissar)		
7. PVC Cement Resin 1. Polypack			2. Surya		
			3. Tata		
2. B.E.C. Plast	7.	PVC Cement Resin	1. Polypack		
			2. B.E.C. Plast		

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3.	PVC Conduit	1.	BEC
		2.	AKG
		3.	Precision
4.	MCB's & DB's	1.	Standard
		2.	L&T
		3.	Legrand
		4.	Indokopp
		5.	Action
		6.	Havell's
5.	Phenolic Laminated Sheet	1.	Hylam
		2.	Formica
		3.	Caprihans
		4.	Super Hylam
6.	G.I. Earth Pipe	1.	Jindal (Hissar)
		2.	Surya
		3.	Tata
7.	PVC Cement Resin	1.	Polypack
		2.	B.E.C. Plast
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8.	Connector/Terminal Block	1. Wago/Phoenix Contact or	
			equivalent make.

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ABSTRACT OF COST

Name of Work : C/o 500 EWS Houses for slum rehabilitation in Sector-4, Rohini.

(Adjoining to 2016 one room tenements)

SUB – HEAD : C/o 512 EWS Houses in Sector – 4, Rohini

S. No.	Description of Item	Qty.	Unit	Rate
1.0	EARTH WORK :-			
1.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth 1.5m in width as well as 10sqm. on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be leveled and neatly dressed. (a) All kinds of soil			
		703 Cum	Cum	
1.2	Extra for every additional lift of 1.5m or part thereof in :			
	All kinds of soil.	293 Cum	Cum	
1.3	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 & watering, lead up to 50m & lift upto 1.5 m			
		42 Cum	Cum	

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1.4 Supplying and filling in plinth with Jamuna sand under floors including, watering, ramming, consolidating & dressing complete. 30 Cum Cum S. No. **Description of Item** Qty. Unit 2.0 **CONCRETE WORK** 2.1 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level. (a) 1:4:8 (1 Cement: 4 Fine sand: 8 graded stone aggregate 40mm nominal size) 55 Cum Cum 1:5:10 (1 Cement: 5 Fine sand: 10 graded stone aggregate 40mm nominal size) 31 Cum Cum

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	-			
2.2	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7 kg per square Metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	78 Sqm	Sqm	
2.3	Providing and laying damp proof course 40 mm thick with cement concrete 1 : 2 : 4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size)	78 Sqm	Sqm	
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S. No.	Description of Item	Qty.	Unit	
2.4	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillar, posts, struts, buttresses, strings or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets etc upto floor five level, excluding the cost of centering, shuttering and finishing (a) 1:2:4 (1 Cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size)			
		18.50 Cum	Cum	
2.5	Extra for Concrete work in super structure above plinth level to floor 5 level for each 4 floors or part thereof.	41.00 Cum	Cum	
3.0	REINFORCED CEMENT CONCRETE WORK			
3.1	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to the site of lying but excluding the cost if centering, shuttering, finishing and reinforcement including Admixture in recommended proportion as per IS - 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge M-25 grade reinforced cement concrete by using 410 kg of cement per cum of concrete. (a) All work upto floor V level.			

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S. No.	Description of Item	Qty.	Unit	
		376 Cum	Cum	

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3.2	Centering and shuttering including strutting, propping etc. and removal of form for: (a) Foundations, footings, bases of columns etc. for mass Concrete.	191 Sqm	Sqm.	
	(b) Suspended floors, roof, landings, balconies and access platform	1278 Sqm	Sqm.	
	(c) Lintel, beams, plinth beams, girders, bressumers and Cantilevers	635 Sqm	Sqm.	
	(d) Stairs (excluding landings) except spiral – staircases(e) Columns, Pillars, Piers, Abutments, Posts and Struts	47 Sqm	Sqm.	
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			Sqm.	
		109 Sqm		
	(f) Weather shade, Chajjas, corbels etc. including edges			
	(1) Weather shads, charges, sold size and size an		Cam	
			Sqm	
		74 Sqm		
S. No.	Description of Item	Qty.	Unit	
3.3	Extra additional height in centering, shuttering where ever required			
	with adequate bracing, propping etc. including cost of de-shuttering & de-centering at all levels, over a height of 3.5 m, for every additional			
	height of 1 m or part thereof (Plan area to be measured)			
	(a) Suspended floors, roofs, landings, beams and balconies (Plan area			
ĺ	to be measured)			
l i	·	1		
		22 Sqm	Sqm	
3.4	Add or deduct for plaster drip course / groove in plastered surface or	22 Sqm	Sqm	
3.4	Add or deduct for plaster drip course / groove in plastered surface or moulding to RCC projections	22 Sqm 708	Sqm Metre	

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		Metre		
3.5	Reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding complete.			
	(a) Thermo – Mechanically Treated bars	33,000 Kg.	Kg.	
3.6	Providing and fixing sheet covering over expansion joints with iron screws as per design to match the colour / shade of wall treatment			
	(a) Non asbestos fiber cement board 6 mm thick as per IS 14862 150 mm wide.			
		60 Metre.	Metre	
3.7	Extra for RCC / BMC ./ RMC work above floor 5 level for each 4 floors or part thereof.	4.5 Cum	Cum.	
S. No.	Description of Item	Qty.	Unit	

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4.0	BRICK WORK			
4.1	Brick work with FPS bricks of class designation 75 in foundation and plinth in: (a) Cement mortar 1 : 6 (1 Cement : 6 Coarse sand)	323 Cum	Cum	
	(b) Cement mortar 1:4 (1 Cement: 4 Coarse sand)	9 Cum	Cum	
4.2	Brick work with FPS bricks of class designation 75 in superstructure above plinth level upto floor V level in all shapes and size in:			
	(a) Cement Mortar 1 : 6 (1 Cement : 6 Coarse sand)	655 Cum	Cum	
4.3	Extra for Brick work in superstructure above floor 5 level for each 4 floors or part thereof by mechanical means by lifting material using mobile crane.			
		12 Cum	Cum	
4.4	Half brick masonry with FPS bricks of class designation 75 in superstructure above plinth level upto floor V level.			
	(a) Cement Mortar 1 : 4 (1 Cement : 4 coarse sand)	374 Sqm	Sqm	

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S. No.	Description of Item	Qty.	Unit	
4.5	Brick work with FPS bricks of class designation 75 in cement mortar 1:3 (1 Cement : 3 coarse sand) in triangular portions of steps in stair cases of all floors complete as per direction of Engineer-in-charge.			
		3 Cum	Cum	
5.0	WOOD WORK			
5.1	Providing and fixing ISI marked flush door shutters conforming to IS 2202 (Part I) non - decorative type, core of block board construction with frame of 1 st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters: (a) 30 mm thick including ISI marked stainless steel butt hinges with necessary screws.			
		444 Sqm	Sqm	

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Providing and fixing ISI marked oxidized M.S. sliding door bolts with 5.2 nuts and screws etc. complete: (a) 250 x 16 mm 130 Nos. Each 5.3 Providing and fixing ISI Marked 85 mm x 42 mm oxidized MS pull bolt lock confirming to $\ensuremath{\mathsf{IS}}$: 7534 with necessary screws bolts, nut and washers etc. complete 128 Nos. Each S. No. **Description of Item** Unit Qty. 5.4 Providing and fixing ISI marked oxidized M.S. tower bolts black finish, (Barrel type) with necessary screws etc. complete (a) 250 x 10 mm 130 Nos. Each (b) 150x 10 mm

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128 Nos. Each Providing and fixing ISI marked oxidized M.S. handles confirming to IS 5.5 4992 with necessary screws etc. complete 125 mm (a) 516 Nos. Each Deduct if fixed shutters (without hinges are provided instead of 5.6 openable shutters for doors, windows or clerestorey windows with stainless steel butt hinges with stainless steel screws for second class teak wood and other inferior class of wood shutters. 444 Sqm Sqm

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S. No.	Description of Item	Qty.	Unit	
6.0	STEEL WORK			
6.1	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitered and welded with 15 x 3 mm lugs 10cm long embedded in cement concrete blocks 15 x 10 x 10 cm of 1:3:6 (1 Cement: 3 Coarse Sand: 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with dash fastener or with fixing clips or with bolts and nuts as require including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.			
		3983 kg.	Kg.	
6.2	Providing and fixing factory made ISI marked steel glazed doors, windows and ventilators side /top/ centre hung with beading and all members such as K11 B and K12 B etc. complete of standard rolled steel sections, joints mitred and flash butt welded and sash bars tenoned and riveted with 15 x 3 mm lugs, 10cm long, embedded in cement concrete blocks 15 x 10 x 10 cm of 1 : 3 : 6 (1 Cement : 3 Coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips			

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or with bolts and nuts has required, including providing and fixing of hinges , pivots, float glass panes with glazing clips and special metal sash putty of approved make and a priming coat of approved steel primer excluding the cost of metal beading and other fittings accept necessary hinges or pivots complete as per approved designs. 2,294 Kg Kg. S. No. **Description of Item** Unit Qty. 6.3 Providing and fixing oxidized M.S. casement stays (straight peg type) with necessary screws etc complete (a) 300mm weighing not less than 200 gms. 256 Nos. Each

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6.4	Providing and fixing M.S. grills of required pattern in frames of windows etc with M.S. flats, square or round bars etc. all complete			
	(a) Fixed to steel windows by welding			
		2381 Kg.	Kg.	
6.5	Providing and fixing handrail of approved size by welding etc to steel ladder railing, balcony railing and staircase railing including applying a priming coat of approved steel primer.			
	(a) M.S. tube	1870 Kg.	Kg.	
6.6	Providing and fixing 1 mm thick M.S. sheet door with frame of 40 x 40 x 6 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. (a) using flats 30 x 6mm for diagonal braces and central			
	cross piece.	7.56 Sqm	Sqm	
6.7	Providing and fixing MS oxidized casement window fasteners 150mm long not less than 200gms weight.	256 Nos	Each	
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Description of Item S. No. Qty. Unit **FLOORING** 7.0 Cement concrete flooring 1:2:4 (1 Cement: 2 coarse sand: 4 graded 7.1 stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of noising of steps etc. complete

	cement starry, but excluding the cost of holsing of steps etc. complete			
	(a) 40 mm thick with 20 mm nominal size stone			
	aggregate			
		1098 Sqm	Sqm.	
7.2	Cement plaster skirting (upto 30 cm height) with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement.			
	(a) 18 mm thick			
		157.60 Sqm	Sqm	
7.3	Providing and fixing glass strips in joints of terrazzo / cement concrete floors. (a) 40mm wide and 4mm thick	2008 Metre.	Metre	
7.4	40 mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 34 mm thick cement concrete 1 : 2 : 4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size) and top A			
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layer 6 mm thick with white, black, chocolate, grey, yellow, or green marble chips of sizes from 1 mm to 4mm nominal size laid in cement marble powder mix 3:1 (3 cement: 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix: 7 marble chips) by volume including cement slurry etc. complete (a) Ordinary cement without any pigment 227 Sqm Sqm S. No. **Description of Item** Unit Qty. 7.5 Marble chips skirting (upto 30 cm height) rubbed and polished to granolithic finish, top layer 6mm thick with, white, black, chocolate, grey, yellow or green marble chips of size from smallest to 4 mm nominal size laid in cement marble powder mix 3:1 (3 cement:1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix: 7 marble chips) by volume: (a) 18 mm thick with under layer 12 mm thick cement plaster 1:3 (1 Cement: 3 coarse sand) ordinary cement without any pigment. A.....

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		46 Sqm	Sqm	
7.6	Providing and fixing Ist quality ceramic glazed tiles conforming to IS:	-	_	
	15622 (Thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of			
	any size as approved by Engineer-in-charge in skirting , risers of steps			
	and dados over 12 mm thick bed of cement mortar 1 : 3 (1 cement : 3			
	coarse sand) and jointing with grey cement slurry @ 3.3 kg. per Sqm			
	including pointing in white cement mixed with pigment of matching			
	shade complete.			
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	ļ ļ	474 Sqm	Sqm	
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8.0	ROOFING			
8.1	• 10cm thick (average) mud phaska of damped brick			
	earth on roofs laid to slope consolidated and plastered with			
	25 mm thick mud mortar mixed with bhusa at 35 Kg per cum of earth and gobri leaping with mix 1:1 (1 clay: 1			
	cowdung) and covered with flat tile bricks of class			
	designation 100 grouted with cement mortar 1:3 (1 cement :			
	3 fine sand) mixed with 2% of integral water proofing compound by weight of cement and finished neat.			
	a) With FPS brick tiles			
	l l			
	ļ ļ	1246 Sqm	Sqm.	
		12 10 34	34	
8.2	Making khurras 45x45cm with average minimum thickness of 5 cm			
	cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone	1	1	
ļ	1	'	1	ļ
	aggregate of 20mm nominal size) over P.V.C. sheet 1mx1mx400			

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	micron, finished with 12mm cement plaster 1:3 (1 cement : 3 sand) and a coat of neat cement rounding the edges and making finishing the outlet complete.		10 Nos.	Each	
S. No.	Description of Item		Qty.	Unit	
8.3	Providing gola 75 x 75mm in cement concrete 1:2:4 (1 Cements Coarse Sand: 4 stone aggregate 10mm & down gauge) i/c find with cement mortar 1:3 (1 Cement: 3 Find Sand) as per standesign A) In 75 x 75mm deep chase.	nishing	125 Metre	Metre	
8.4	Providing and laying brick tiles of class designation 100 over roofs grouted with cement mortar 1:3 (1 Cement: 3 fine sand) with 2% of integral water proofing compound by weight of cover a 12mm layer of cement mortar 1:3 (1 Cement: 3 fine san finished neat with FPS brick tiles.	mixed ement,			
			13 Sqm	Sqm	
8.5	Painting top of roofs with bitumen of approved quality at 17 10sqm impregnated with a coat of coarse sand at 60 cudm per including cleaning the slab surface with brushes and finally piece of cloth lightly soaked in kerosene oil complete. a) With residual type petroleum bitumen of penetration 80/100	10sqm with a			
			1259 Sqm	Sqm	
8.6	Providing and fixing on wall face unplasticised – Right PVC rain water pipes confirming to IS: 13592 Type A including jointing with seal ring confirming to IS: 5382 leaving mm gap for thermal expansion.	,			
	i) Single socketed pipes 110mm diameter	125	Metre.	Metre	
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3. 140.	Description of item	Qty.	Oilit	
8.3	Providing gola 75 x 75mm in cement concrete 1:2:4 (1 Ceme Coarse Sand: 4 stone aggregate 10mm & down gauge) i/c fini with cement mortar 1:3 (1 Cement: 3 Find Sand) as per star design A) In 75 x 75mm deep chase.	shing	Metre	
8.4	Providing and laying brick tiles of class designation 100 over m roofs grouted with cement mortar 1:3 (1 Cement: 3 fine sand) r with 2% of integral water proofing compound by weight of cer over a 12mm layer of cement mortar 1:3 (1 Cement: 3 fine sand finished neat with FPS brick tiles.	nixed nent,		
		13 Sqr	m Sqm	
8.5	Painting top of roofs with bitumen of approved quality at 17k 10sqm impregnated with a coat of coarse sand at 60 cudm per 1 including cleaning the slab surface with brushes and finally w piece of cloth lightly soaked in kerosene oil complete. a) With residual type petroleum bitumen of penetration 80/100.	0sqm		
		1259 Sc	qm Sqm	
8.6	Providing and fixing on wall face unplasticised – Right PVC rain water pipes confirming to IS: 13592 Type A including jointing with seal ring confirming to IS: 5382 leaving mm gap for thermal expansion.			
	i) Single socketed pipes 110mm diameter	125 Metre.	Metre	
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S. No. **Description of Item** Qty. Unit Providing and fixing on wall face unplasticised - PVC 8.7 moulded fittings / accessories for unplasticised - Rigid PVC rain water pipes confirming to IS: 13592 Type A including jointing with seal ring confirming to IS: 5382 leaving 10mm gap for thermal expansion. (i) Single tee with door 110 x 110 x 110 mm 30 Nos. Each (ii) Bend 87.5° 110 mm bend 11 Nos. Each (iii) Shoe (Plain) 110 mm shoe 11 Nos. Each

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8.8 Providing and fixing unplasticised - PVC pipe clips of approved design to unplasticised - PVC rain water pipesby means of 50 x 50 x 50 mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement: 4 coarse sand) and making good the walls etc complete. (a) 110 mm 82 Nos. Each 9.0 **FINISHING** 9.1 12 mm cement plaster of mix: (a) 1:6 (1 cement: 6 fine sand) 961 Sqm Sqm 9.2 15 mm cement plaster on the rough side of single or half brick wall of mix: (a) 1:6 (1 cement: 6 fine sand) 2667 Sqm Sqm 9.3 6 mm cement plaster of mix: 1:3 (1 cement:3 fine sand) 1239 Sqm Sqm 9.4 Extra for plastering exterior walls of height more than 10m from ground level for every additional height of 3m or part thereof. 1493 Sqm Sqm 9.5 White washing with lime to give an even shade: 5867 Sqm Sqm (a) New work (three or more coats) S. No. **Description of Item** Unit Qty. 9.6 Finishing walls with Acrylic Smooth exterior paint of required shade:

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	(a) New work (Two or more coat applied @ 1.67 ltr. / 10 Sqm over and including base coat of water proofing cement paint applied @ 2.20 kg. / 10sqm)			
		1706 Sqm	Sqm	
9.7	Applying priming coat :			
	(a) With ready mixed pink or grey primer of approved brand and manufacture on wood work (hard and soft wood)	976 Sqm	Sqm	
9.8	Painting with synthetic enamel paint of approved brand			
9.8	and manufacture to give an even shade :	457 Sqm	Sqm	
	(a) Two or more coats on new work.			
9.9	Applying priming coat with ready mixed red oxide Zinc chromate primer of approved brand and manufacture on steel galvanized iron/ steel works.			
		135 Sqm	Sqm.	
9.10	Rough cast plaster up to 10m height above ground level with a mixture of sand and gravel or crushed stone from 6mm to 10mm nominal size dashed over and including the fresh plaster in two layer, under layer 12mm cement plaster 1:4 (1cement: 4 coarse sand) and top layer 10mm cement plaster 1:3 (1cement: 3 fine sand) mixed with 10% finely grouted hydrated lime by volume of cement. a) Ordinary cement finish using ordinary cement.			
	Δ	1706 Sqm	Sqm	

	1706 Sqm	Sq
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S. No.	Description of Item	Qty.	Unit	
10.0	SANITARY INSTALLATIONS			
10.1	Providing and fixing water closet squatting pan (Indian type W. C. pan) with 100mm sand cast iron P or S trap, 10 litre low level white P.V.C flushing cistern with manually controlled device (handle lever) confirming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required. (a) White Vitreous china Orrisa pattern W.C. pan of size 580x440mm with integral type foot rests			
		64 Nos.	Each	
10.2	Providing and fixing soil, waste and vent pipes			
	(a) 100 mm dia centrifugally cast (spun) iron socketed pipe as per IS 3989.	148 Metre.	Metre	
		264 Metre		
	(b) 75 diameter Centrifugally cast (spun) iron socketed pipe as per IS 3989		Metre	
10.3	Providing and fixing bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts			

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	complete.			
	(a) 100 mm dia Sand cast iron S&S as per IS 3989			
		64 Nos.	Each	
	(b) 75 mm dia Sand cast iron S&S as per IS 3989	0 1 1 1001		
		64 Nos.	Each	
10.4	Providing and fixing plain bend of required degree.			
	(a) 100 mm dia Sand cast iron S & S as per IS 3989 (b) 75 mm dia Sand cast iron S&S as per IS 3989	64 Nos.	Each	
		48 Nos.	Each	
10.5	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3mm thick, bolts and nuts complete.			
	(a) 100x100x100mm sand cast iron S&S as per IS 3989			
		48 Nos.	Each	
S. No.	Description of Item	Qty.	Unit	
10.6	Providing and fixing double equal plain junction of required			
	degree with access door, insertion rubber washer 3mm			
	thick, bolts and nuts complete.			
	(a) 75x75x75x75mm Centrifugally cast (spun) iron S&S			
	as per IS 3989	48 Nos.	Each	
10.7	Providing and fixing terminal guard.			
	(a) 100 mm sand cast iron S & S as per IS 3989	8 Nos.	Each	
	1		<u> </u>	

	as per IS 3989	48 Nos.	Each
	Providing and fixing terminal guard.		
	(a) 100 mm sand cast iron S & S as per IS 3989	8 Nos.	Each
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	(b) 75 mm Sand cast iron S&S as per IS 3989	16 Nos.	Each	
10.8	Providing and fixing M. S. stays and clamps for sand cast iron/centrifugally cast (spun) iron pipes of diameter. (a) 100 mm			
		8 Nos.	Each	
	(b) 75 mm			
		16 Nos.	Each	
10.9	Providing and fixing heel rest sanitary bend			
	(a) 100 mm dia Sand cast iron S&S as per IS 3989.	8 Nos.	Each	
10.10	Providing and fixing M.S. holder- bat clamps of approved design to sand cast iron / cast iron (spun) pipe embedded in and including cement concrete block 10x10x10cm of 1: 2: 4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) including cost of cutting holes and making good the walls etc.			
	(a) For 100 mm dia. pipe			
	(b) For 75 mm dia. Pipe	32 Nos.	Each	
		64 Nos.	Each	
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S. No.	Description of Item	Qty.	Unit	Rate
10.11	Providing lead caulked joints to sand cast iron / centrifugally cast (spun) iron pipes and fittings of diameter.			
	(a) 100 mm			
	(4) 100 11111			
	(b) 75 mm	312 Nos.	Each	
	(6) 73 11111			
		512 Nos.	Each	
10.12	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm			
	complete, including cost of cutting and making good the			
	walls and floors			
	(a) 100 mm inlet and 75 mm outlet, Sand Cast Iron S&S as per IS 3989			
		128 Nos.	Each	
10.13	Painting sand cast iron / Centrifugally cast (spun) iron soil waste, vent pipes and fitting with paint of any colour such			
	as chocolate, grey, or buff etc. over a coat of primer (of			
	approved quality) for new work :			
	(a) 100 mm diameter pipe			
	(1) 75	148 Metre	Metre	
	(b) 75 mm diameter pipe			
		264 Metre	Metre	
11.0	WATER SUPPLY			

		512 Nos.	Each	
	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors (a) 100 mm inlet and 75 mm outlet, Sand Cast Iron S&S as per IS 3989			
		128 Nos.	Each	
	Painting sand cast iron / Centrifugally cast (spun) iron soil waste, vent pipes and fitting with paint of any colour such as chocolate, grey, or buff etc. over a coat of primer (of approved quality) for new work: (a) 100 mm diameter pipe			
	(b) 75 mm diameter pipe	148 Metre	Metre	
	(b) 73 mm diameter pipe	264 Metre	Metre	
	WATER SUPPLY			
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11.1	Providing and fixing G.I. pipes complete with G.I. fittings			
	and clamps, including cutting and making good the walls			
	etc. (internal work) Exposed on wall			
	(a) 15 mm dia. Nominal bore			
		1168 Metre	Metre	
		1100 Wietre	IVIEUE	
	(b) 20 mm dia. Nominal bore			
		1293 Metre	Metre	
		1233 Metre	ivietie	
11.2	Providing and fixing G.I. pipes complete with G.I. fittings			
11.2	including trenching and refilling etc. (external work)			
	metading trending and remining etc. (external work)			
	(a) 20 mm dia. Nominal bore			
		192 Metre	Metre	
S. No.	Description of Item	Qty.	Unit	
3.110.	Description of Item	વાયું.	Oilit	
11.3	Painting G.I. pipes and fittings with two coats of anti-			
	corrosive bitumastic paint of approved quality			
	(a) 15 mm diameter pipes			
	(a) 15 mm diameter pipes	432 Metre	Metre	
	(b) 20 mm diameter pipes	192 Metre	Metre	
		192 MEHE	ivietie	
11.4	Providing and filling sand of grading zone V or coarser			
	grade alround the G. I. pipes in external work.			
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	(a) 20 mm diameter pipe	192 Metre	Metre	
11.5	Painting G.I. pipes and fitting with synthetic enamel white paint over a ready mixed priming coat, both of approved quality for new work.			
	(a) 20 mm diameter pipe			
		1293 Metre	Metre	
	(b) 15 mm diameter pipe	736Mt.		
			Metre	
11.6	Providing and fixing brass stop cock of approved quality			
	(a) 15 mm nominal bore			
		128 Nos.	Each	
	(b) 20 mm nominal bore			
		64 Nos.	Each	
11.7	Providing and fixing brass bib cock of approved quality.			
	(a) 15 mm nominal bore			
		192 Nos.	Each	
11.8	Providing and fixing unplasticised PVC connection pipe with brass unions			
	(a) 30 cm length 15 mm nominal bore	128 Nos.	Each	

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S. No. Description of Item Qty. Unit 11.9 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 192 Nos. Each 11.10 Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI: 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and over flow pipes but without fittings and the base support for tank. (a) Tank of capacity 300 Ltr.				1	T .
11.9 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 192 Nos. Each 11.10 Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI: 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and over flow pipes but without fittings and the base support for tank.					
and threading the pipe and making long screws etc. complete (new work) (a) 20 mm nominal bore 192 Nos. Each (b) 15 mm nominal bore 64 Nos. Each 1.10 Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI: 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and over flow pipes but without fittings and the base support for tank.	S. No.	Description of Item	Qty.	Unit	
(b) 15 mm nominal bore (b) 15 mm nominal bore 64 Nos. Each 11.10 Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI: 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and over flow pipes but without fittings and the base support for tank.		and threading the pipe and making long screws etc.			
(b) 15 mm nominal bore 64 Nos. Each 11.10 Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI: 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and over flow pipes but without fittings and the base support for tank.		(a) 20 mm nominal bore			
11.10 Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI: 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and over flow pipes but without fittings and the base support for tank.			192 Nos.	Each	
polyethylene water storage tank ISI: 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and over flow pipes but without fittings and the base support for tank.		(b) 15 mm nominal bore	64 Nos.	Each	
		polyethylene water storage tank ISI: 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and over flow pipes but without fittings and the base support for tank.			
19200 Litre Per litre			19200 Litre	Per litre	
Providing and fixing brass ferrule with C.I. mouth cover including boring and tapping the main					
(a) 15 mm nominal bore 64 Nos. Each		(a) 15 mm nominal bore	64 Nos.	Each	
11.12 Providing and fixing ball valve (brass) of approved quality, High or low pressure with plastic floats complete.					
(a) 20 mm nominal bore		(a) 20 mm nominal bore			

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		64 Nos.	Each	
11.13	Providing and fixing C.I. water meter chamber with box of thickness 6 mm on wall face (37.5x37.5x11.6 cm.) for water			
	meter with locking arrangement (Meter box) construction as per the direction of Engineer-in-charge.			
		64 Nos.	Each	
12.0	DRAINAGE			
12.1	Providing, laying and jointing glazed stoneware pipes grade			
	'A' with stiff mixture of cement mortar in the proportion of			
	1:1 (1 cement :1 fine sand) including testing of joints etc complete:			
	(a) 150 mm diameter			
		24 Metre	Metre	
	(b) 200 mm diameter			
		16 Metre	Metre	
S. No.	Description of Item	Qty.	Unit	
12.2	Providing and laying cement concrete 1:5:10 (1 cement : 5			
	coarse sand : 10 graded stone aggregate 40 mm nominal			
	size) all round S.W. pipes including bed concrete as per standard design:			
	(a) 150 mm diameter S.W. pipe			
	(b) 200 mm dia meter SW pipe	24 Metre	Metre	

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		16 Meter	Meter	
12.3	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) R.C.C top slab with 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finishing with a floating coat of neat cement complete as per standerd design : (a) Inside size 90x80 cm and 45cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg. (weight of cover 23kg and weight of frame 15 kg) with F. P. S. bricks with class designation 75.			
		8 Nos.	Each	
12.4	Providing and fixing square—month S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300x300 mm size (inside) the weight of cover to be not less than 4.50kg and frame to be not less than 2.70 kg as per standard design: (a) 100x100 mm size P type with F.P.S. bricks class designation 75			

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		16 Nos.	Each	
13.4	MISCELLANEOUS			
13.1	Brick edging 7 cm wide 11.4 cm deep to plinth protection with bricks of class designation 75 including grouting with cement mortar 1:4 (1 cement : 4 fine sand)			
		160 Metre	Metre	
13.2	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of: (i) Ist course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound confirming to IS: 2645 in recommended proportions including rounding off junctions of vertical and horizontal surface. (ii) IInd course of 20 mm cement plaster 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off			
	junctions of vertical and horizontal surface. (iii) Illrd course of applying blown or residual bitumen applied hot at 1.7 kg per sqm of area. (iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and			

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pasted to each other with bitumen @ 1.7 kg/sqm).

394 Sqm Sqm

S.No.	Description of Item	Qty.	Unit	Rate
	DRAINAGE			
14.1	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. (a) All kinds of soil	421 cum.	cum.	

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S.No.	Description of Item	Qty.	Unit	Rate
14.2	Filling available excavated earth (excluding rock) in			
11.2	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			
		126 cum.	cum.	
14.3	Providing and laying in position cement concrete of			
15	specified grade excluding the cost of centering and			
	shuttering - All work upto plinth level			
	(a) 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone			
	aggregate 20 mm nominal size)	6 cum.	cum.	
	(b) 1:5:10 (1 Cement : 5 coarse sand : 10 graded stone			
	aggregate 40 mm nominal size)	77 cum.	cum.	
14.4	Brick work with FPS bricks of class designation 75 in			
	foundation and plinth in			
	(a) Cement mortar 1:6 (1 cement: 6 coarse sand)			
		165 cum.	cum.	
14.5	12mm cement plaster of mix 1:4 (1 cement: 4 coarse	1310 Sqm.	Sqm.	
14.5	sand)			
14.6	Neat cement punning	1528 Sqm.	Sqm.	
14.6		-	-	
14.7	Providing and laying in position specified grade of			
	reinforced cement concrete excluding the cost of			
	centring, shuttering, finishing and reinforcement - All			
	work upto plinth level			
	(a) 1:1.5:3 (1 Cement : 1.5 coarse sand : 3 graded			
	stone aggregate 20 mm nominal size)			
		9.50 cum.	cum.	

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S.No.	Description of Item	Qty.	Unit	Rate
14.8	Centering and shuttering including strutting, prooping etc. and removal of form for			
	(a) Foundation, footings, bases of columns etc. for mass concrete.	55 Sqm.	Sqm.	
14.9	Reinforcement for RCC work including straightening, cutting, bending, placing in position and binding all complete.			
	(a) Thermo Mechanically Treated bars.	950 Kg.	Kg.	

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S.No.	Description of Item	Qty.	Unit	Rate
	WATER SUPPLY:			
15.1	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 50m all kinds of soil.			
	(a) Pipes cables etc. exceeding 80mm dia but not			
	exceeding 300mm dia.			
		838 meter	Meter.	
15.2	Providing and laying S&S Centrifugally cast (Spun) iron			
	pipes (Class LA) conforming to IS: 1536			
	(a) 100mm dia pipe.			
		746 Metre	Metre.	
	(b) 150mm dia pipe	92 Metre	Metre	
15.3	Providing and laying S&S CI standard specials such as			
	tees, bends, collars, tapers, caps etc. (heavy class)			
	(a) Upto 300mm dia.			
		14.50 Qtls.	Qtls.	

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S.No.	Description of Item	Qty.	Unit	Rate
15.4	Providing and laying S&S CI standards specials such as			
	tees, bends, collars, tapers and caps etc. suitable for flanged jointing as per IS 1538			
	a) up to 300mm dia			
		3 Qtls	Qtls	
15.5	Providing and fixing C.I. sluice valve (with cap) complete			
	with bolts, nuts rubber insertions etc. (the tail pieces if required will be paid separately)			
	(a) 100mm diameter Class-I			
		7 Nos.	Each	
	(b) 150mm diameter Class-I	2 Nos.	Each	
15.6	Constructing masonry Chamber 60x60x75 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement :4 coarse sand) for sluice valve, with C.I. surface box 100mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement :5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement :3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design. (a) With FPS bricks			
		9 Nos.	Each	

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S.No. **Description of Item** Qty. Unit Rate 15.7 Constructing masonry Chamber 60x60x75 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement: 4 coarse sand) for fire hydrants, with C.I. surface box 350x350 mm. top and 165 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1

	mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement :5 fine sand:10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement :3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design. (a) With FPS bricks			
		3 Nos.	Each	
15.8	Supplying pig lead at site of work	2.50 Qtls.	Qtls.	
15.9	Providing lead caulked joints to spun iron or CI pipes and specials including testing of joints but excluding the cost of pig lead (a) 100mm diameter pipe			
		73 Nos.	Each	
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S.No.	Description of Item	Qty.	Unit	Rate
	(b) 150mm. diameter pipe	16 Nos.	Each	
	(c) 250mm diameter pipe	6 Nos.	Each	
15.10	Providing and fixing spindle fire hydrant with 65mm outlet complete with bolts nuts and rubber insertion etc.	3 Nos.	Each	
15.11	Providing push on joints to Centrifugally (Spun) cast iron pipes or ductile iron pipe including testing of joints i/c. the cost of rubber gaskets.			
	(a) 100mm dia pipes.	150 Nos.	Each	
	(b) 150mm dia pipes.	19 Nos.	Each	

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S.No. **Description of Item** Qty. Unit Rate 15.12 Disinfecting CI water mains by flushing with water containing bleaching powder at 0.5 gm per litre of water and cleaning the same with fresh water, operation to be repeated 3 times including getting the sample of water from disinfecting mains, tested in municipal laboratory. a) 100mm diameter CI pipe. 746 meter 100 meter b) 150mm diameter CI pipe. 92 meter 100 meter **SEWERAGE:**

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S.No.	De	escription of Item	Qty.	Unit	Rate
16.1	etc including excava- sides, ramming of bo- getting out the exca- soil as required, in la including consolidati ramming, watering e excavated soil as dire kinds of soil:	of required width for pipes, cables, cion for sockets, and dressing of ottoms, depth upto 1.5 m including vated soil, and then returning the yers not exceeding 20 cm. in depthing each deposited layer by etc. and disposing of surplus ected within a lead of 50m. All exceeding 80mm dia but not a.			
			448 Metre	Metre	
16.2	RCC pipes spigot and cement mortar in th	non pressure NP2 class (light duty) I socket jointed with stiff mixture of e proportion of 1:2 (1 cement: 2 testing of joints etc. complete. R.C.C. pipe			
			386 Metre	Metre	
	(b)	300mm dia R.C.C. pipe	74 Metre.	Metre	

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S.No.	Description of Item	Qty.	Unit	Rate
16.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering all work up to plinth level: (a) 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size)	80 Cum	Cum	
16.4	Extra for excavating trenches for pipes, cables etc. in all kind of soil for depth exceeding 1.5 m. but not exceeding 3.00 m.	80 Metre.	Metre	

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S.No.	Description of Item	Qty.	Unit	Rate
16.5	Constructing brick masonry circular type manhole 0.91m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement: 4 coarse sand), in side cement plaster 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement: 3 coarse sand: 6 graded stone aggregate 40mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design:			
	(a) 0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182kg, fixed in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid for separately) (i) with FPS bricks class designation 75			
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C		25 Nos.	Each	
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S.No.	Description of Item	Qty.	Unit	Rate
16.6	Constructing brick masonry circular manhole 1.22m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement: 4 coarse sand), in side cement plaster 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 40mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard			
	(a) 1.68m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182kg. fixed in cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately)			
	(i) with FPS bricks class designation 75			
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ow		7 Nos.	Each	
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S.No.	Description of Item	Qty.	Unit	Rate
16.7	Extra depth for circular type manhole 0.91m internal			
	dia (at bottom) with beyond 0.91m. to 1.67m.			
	(a) With FPS bricks class designation 75	3.25 Metre.	Metre	
16.8	Extra depth for circular type manhole 1.22m internal			
10.0	dia (at bottom) beyond 1.68m. to 2.29m.			
	(a) With FPS bricks class designation 75	0.98 Metre.	Metre	
16.9	Earthwork in excavation by mechanical means			
	(Hydraulic excavator/ manual means)over area			
	(exceeding 30 cm. in depth 1.5 in width as well as 10 Sqm. on plan) including disposal of excavated earth,			
ı	lead upto 50m and lift upto 1.5m. Disposed earth to be			
	leveled and neatly dressed.			
	(a) All kinds of soil.			
		73 Cum.	Cum.	
16.10	Extra for every additional lift of 1.5m. or part thereof in:			
	(a) All kinds of soil.			
		41 Cum.	Cum.	
16.11	Filling available excavated earth (excluding rock) in			
	trenches, plinth, sides of foundations etc. in layers not			
ı	exceeding 20 cm. in depth: consolidating each deposited layer by ramming and watering, lead upto			
İ	50m and lift upto 1.5 m.			
		38 Cum.	Cum.	

S.No.	Description of Item	Qty.	Unit	Rate
16.12	Providing orange colour safety foot rest of minimum		Each	
	6mm thick plastic encapsulated as per IS : 10910 on			
	12mm dia steel bar conforming to IS: 1786 having			
	minimum cross section as 23 mmx25mm and over all			
	minimum length 263mm and width as 165mm with			
	minimum 112mm space between protruded legs having			
	2 mm tread on top surface by ribbing or chequering			
	besides necessary and adequate anchoring projections			
	on tail length on 138 mm as per standard drawing and			
	suitable to withstand the bend test and chemical			
	resistance test as per specifications and having			
	manufacture's permanent identification mark to be			
	visible even after fixing, including fixing in manholes			
	with 30x20x15 cm cement concrete block 1:3:6 (1			
	cement :3 coarse sand :6 graded stone aggregate 20			
	mm nominal size) complete as per design.			
		20 N		
		39 Nos.		

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S.No.	Description of Item	Qty.	Unit	Rate
16.13	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary for the drain etc. complete: (a) For pipes 250mm to 300mm diameter.			
		1 No.	Each	
	ROADS AND PATHS			
17.1	Preparation and consolidation of sub-grade with power road roller of 8 to 12 Tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub-grade and disposal of surplus earth lead upto 50 meters.	357 Sqm.	Sqm.	
17.2	Supplying and stacking at site:			
	(a) 90mm to 45mm size stone aggregate			
		45 Cum.	Cum.	

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S.No.	Description of Item	Qty.	Unit	Rate
	(b) 63mm to 45mm size stone aggregate	31 Cum.	Cum.	
	(c) 53mm to 22.4mm size stone aggregate	31 Cum.	Cum.	

	(b) 63mm to 45mm size stone aggregate	31 Cum.	Cum.	
	(c) 53mm to 22.4mm size stone aggregate	31 Cum.	Cum.	
17.3	Supply and stacking at site:			
	a) Stone screening 13.2mm nominal size Type-(A)	10 Cum.	Cum.	
	(b) Stone screening 11.2mm nominal size Type-(B)	10 Cum.	Cum.	
17.4	Supplying, stacking and spreading 6mm thick red Bajri, watering and rolling complete including preparation of the surface and rolling: a) with road- roller / hand roller.	1071 Sqm.	Sqm	
17.5	Laying, spreading and compacting stone aggregate of specified sizes to WBM specifications including spreading in uniform thickness, hand picking, rolling with three wheeled road / vibratory roller 8-10 tonne in stages to proper grade and camber, applying and brooming requisite type of screenings / binding material to fillup interstices of coarse aggregate watering and compacting to the required density.			
		86 Cum.	Cum.	

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S.No.	Description of Item	Qty.	Unit	Rate
17.6	Providing and applying tack coat using hot straight run bitumen of grade 80 / 100 including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications a) On WBM @ 0.75 kg. per Sqm.			
		330 Sqm	Sqm	
17.7	2cm premix carpet surfacing with 1.80 cum and 0.90 cum. of stone chipping of 13.2mm size and 11.2mm size respectively per 100 sqm.and 52 kg. and 56 kg. of hot bitumen per cum of stone chipping of 13.2mm and 11.2mm size respectively including a tack coat with hot straight run bitumen including consolidation with road roller of 6 to 9 tone capacity etc. complete (tack coat to be paid for separately). (a) With paving asphalt 80/100 heated and then mixed with solvent at the rate of 70 gms per kg. of asphalt.			
		330 Sqm.	Sqm.	

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S.No. **Description of Item** Qty. Unit Rate 17.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering. All work upto plinth level. (a) 1:5:10 (1 cement: 5 coarse sand: 10 graded stone aggregate with 40mm nominal size). 280 Cum. Cum. 17.9 Cement concrete pavement with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) including finishing complete. 280 cum Cum.

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Name of Work : C/o 500 EWS Houses for slum rehabilitation in Sector-4,

Rohini.(Adjoining to 2016 one room tenements)

SUB – HEAD : C/o 512 EWS Houses in Sector – 4, Rohini

Abstract of Cost (Building work)

S.No.	Sub-heads of building work	Amount in Rs.
1.	Earth Work	
2.	Cement Concrete	
3.	R.C.C.	
4.	Brick Work	
5.	Wood Work	
6.	Steel Work	
7.	Flooring	
8.	Roofing	
9.	Finishing	
10.	Sanitary Installation	
11.	Water Supply	
12	Drainage	
13	Miscellaneous	
	Total (Cost for 64 Nos Flats in One Block)	
	Cost for 512 Flats (8 Blocks of 64 Units	
	each) 8 x 1,08,35,487.00	

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Name of Work

C/o 500 EWS

Houses for slum rehabilitation in

Sector-4,

Rohini.(Adjoining to 2016 one room tenements)

SUB – HEAD : C/o 512 EWS Houses in Sector – 4, Rohini

Abstract of Cost (Internal work)

S.No	Description of sub head	amount
1.	S.W. Drains	
2.	Internal Sewerage	
3.	Internal Water Supply	
4.	Road Work	
	Total	

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Name of Work

C/o 500 EWS Houses for slum rehabilitation in Sector-4,

Rohini.(Adjoining to 2016 one room tenements)

SUB – HEAD : C/o 512 EWS Houses in Sector – 4, Rohini

ABSTRACT OF COST

S.No.	Items	Amount in Rs.
1.	Building Work	
2.	Internal Development	
	Total	
	Add 3% Contingencies	
	G. Total	

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Name of Work : C/o 500 EWS houses for slum rehabilitation in Sector-

4,

Rohini.(Adjoining to 2016 one room tenements)

SUB – HEAD : C/o 512 EWS Houses in Sector – 4, Rohini

ABSTRACT OF COST

S.No.	Items	Amount in Rs.
1.	Building Work	
2.	Internal Development	
3.	Internal Electrification	
	TOTAL	

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SCHEDULE OF WORK

Name of Work: C/O 512 EWS houses for slum re-habilitation in Sector 4, Rohini (Adjoining to 2016 one room tenements(SH:I.E.I)

SI.No.	Description of Item	Qty	Unit	Rate
1.0	Sub Head – I Points & Wiring Wiring for light point/fan point/Exhaust fan pint/call bell point/with 1.5 sq.mm. FR PVC insulated copper conductor single core cable in recessed PVC conduit with piano type switch, phenolic laminated sheet, suitable size G.I.Box & earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc. as required (Group – A)	5840Point.	Point	
1.2	Wiring for twin control light point with 1.5 sq.mm. FR PVC insulated copper			

1.2	Wiring for twin control light point with		
	1.5 sq.mm. FR PVC insulated copper		
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conductor single core cable in recessed
PVC conduit, 2 way piano type switch,
phenolic laminated sheet, suitable size
G.I. box and earthing the point with 1.5
sq.mm. FR PVC insulated copper conductor single core cable etc. as required.

SI.No.	Description of Item	Qty	Unit	Rate
1.3	Wiring for light/power plug with 2 x 4 Sq.mm FR PVC insulated copper conductor single core cable in recessed PVC conduit along with 1 No. 4 sq.mm. FR PVC insulated copper conductor single core cable for loop earthing as required.	11,600Mtr	Meter	
1.4	Wiring for light/power plug with 4 x 4 sq.mm FR PVC insulated copper conductor single core cable in recessed PVC conduit along with 2 Nos. 4 Sq.mm FR PVC insulated copper conductor single core cable for loop earthing as required.	1700Mtr	Meter	
1.5	Wiring for circuit wiring alongwith earth wire with the following sizes of PVC insulated copper conductor single core cable in recessed PVC conduit as required.			

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(a) 2 x 1.5 Sq. mm. + 1 x 1.5 sq.mm. 7000Mtr Meter earth wire.

SI.No.	Description of Item	Qty	Unit	Rate
1.6	Wiring for submain wiring along with earth			
	wire with the following sizes of PVC insulated			
	copper conductor single core cable in			
	recessed PVC conduit as required.			
	a) 2 x 6 sq.mm. + 1 x 6 sq.mm. earth wire.	8000 Mtr.		
2.0	Sub Head – (II Fittings & Accessoreies)			
1			1	

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2.1	Supplying & fixing G.I. box of 150 mm x 75		
	mm x 60 mm deep (nominal size) in recess		
	with suitable size of phenolic laminated sheet		
	cover in the front including providing & fixing 3		
	pin 5/6 Amps Socket outlet and 5/6 Amps.	1024 Nos.	
	Piano type switch, connections etc. as		
	required (For Light Plugs).		

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SI.No.	Description of Item	Qty	Unit	Rate	Amou
2.2	Supplying & Fixing G.I. box of 180 mm x 100 mm x 60 mm deep (normal size) in recess with suitable size of phenolic laminated sheet cover in the front including providing and fixing 6 pin, 5/6 & 15/16 Amps socket outlet and 15/16 Amps piano type switch, connections etc. as required.	512Nos.	Each		
2.3	Supplying and fixing fan box (hexagonal type) as per drawing attached 75mm side, 75mm deep, made out of 16 Swg galvanized sheet having 6 Nos. knock outs of size 20/25 mm for conduit entry including fan hook made of 12 mm dia galvanized MS rod with bottom cover of 3 mm thick phenolic laminated sheet etc. as required.	1024Nos.	Each		
3.0	Sub Head-III (Switch Boards and Meter				

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3.1 Boards) Supplying & Fixing following way single pole and neutral prewired sheet steel MCB distribution board, 240 volts in recess complete with loose wire box, terminal blocks, duly prewired with suitable size FR PVC insulated copper conductor upto terminal blocks, tinned 528Nos Each copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, phosphatized and powder painted including earthing etc. as required (but without MCB). a) 2 + 4 way single door.

SI.No.	Description of Item	Qty	Unit	Rate
3.2	Supplying and fixing 5A to 32 A rating			

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240 volts, miniature circuit breaker of following poles suitable lighting/inductive loads in the existing MCB DB Complete with connections, testing & commissioning etc. required. a) 6 Amps. SP MCB (B – Series) 544 Nos. Each b) 16 Amps SP MCB (C – Series) 1024Nos. Each c) 32 Amps SP & N, MCB (C – Series) 1024Nos. Each d) 10 Amps SP & N, MCB (B – Series) 32. Nos. Each 3.3 Supplying and fixing single blanking plate in the existing MCB. DB 544Nos. Each complete etc. as required.

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SI.No.	Description of Item	Qty	Unit	Rate
3.4	Providing and fixing recess/surface mounted			
	main distribution board having hinged			
	gasketted cover with cam type knob and			
	locking arrangement as per drawing attached			
	made out of 16 SWG thick C.R.C.A.M.S.			
	Sheet duly powder coated including supply			
	and fixing suitable size of din – bar and 25			
	mm x 5 mm thick G.I. strip for earthing,			
	numbering, making earth connection and			
	suitable to accommodate the following			
	accessories etc. as required.			
	a) 32 Amps.SP & N, MCB – 8Nos.			
	b) (i) 32 Amps. SP & N,MCB – 8Nos.	48Nos.	Set	
	(ii) 10 Amps. SP & N, MCB – 1Nos.			

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4.2 Supplying and drawing following pair 0.5 sq.mm. FR PVC insulated copper conductor unarmoured telephone cable in the existing recessed PVC conduit as required.

a) One Pair

7000Mtr. Mtr.

SI.No.	Description of Item	Qty	Unit
4.3	Supplying and fixing G.I. Box of size 75 mm x 75 mm x 60 mm deep (nominal size) in recess with suitable size of phenolic laminated sheet cover in front as required.	1024Nos.	Each
4.4	Supplying and fixing following piano type socket on the existing switch box/cover including connection etc. as required. a) Telephone socket outlet.	512Nos.	Each
	b) T.V. Antenna socket outlet.		

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		512Nos.	Each
4.5	Supplying and fixing G.I. box of following size		
	in recess with suitable size of phenolic laminated sheet cover in front etc. as		
	required.		
	·		
	a)200mmx 250mmx75mm (Nominal Size)		
		64Nos.	Each
	b)180mmx100mmx60mm(Nominal size)		
	b) roomina roomina size)		
		64Nos.	Each

SI.No.	Description of Item	Qty	Unit	Rate

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4.6	Supplying and fixing of Telephone box of size 250 mm x 250 mm x 75 mm (nominal size) in recess made out of 1.22mm thick G.I. Sheet with hinged gasketed cover, screwed knob etc. complete as required.	32Nos.	Each	
5.0	Head – V (Earthing & Loop Earthing)			
5.1	Earthing with G.I. earth pipe 4.5mtr Long 40 mm dia including accessories and providing masonary enclosure with cover plate having locking arrangement & watering pipe etc. with charcoal or coke and salt as required.	32set	Set	
5.2	Providing & fixing 25mmx 5mm G.I. strip on surface or in recess for connections etc. as required.	260mtr	Mtr.	
5.3	Providing & fixing 25 mm x 5mm G.l. strip in 40mm dia G.l. pipe from earth electrode etc. as required.	130mtr	Mtr.	

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