



*DELHI TRANSIT*

**Delhi Integrated Multi Modal Transit System Ltd.**

( A Joint Venture of Govt. of Delhi & IDFC Ltd.)

**Construction of Pedestrian Foot Over Bridge at Park Street (Near RML  
Hospital), New Delhi in NDMC Area**

**CONTRACT NO: FOBUS-2**

**BID DOCUMENTS**

**VOLUME 3**

**BILL OF QUANTITIES**

**Delhi Integrated Multi Modal Transit System Ltd.**

(A Joint Venture of Government of Delhi & IDFC Ltd.)

**1<sup>st</sup> Floor, Maharana Pratap Inter State Bus Terminus,  
Kashmere Gate, Delhi-110006**

**001**

**SECTION-A**  
**FORM OF BID**

To,  
The Engineer-in-Chief,  
Delhi Integrated Multi Modal Transit System Ltd.  
1<sup>st</sup> Floor, Maharana Pratap I.S.B.T.,  
Kashmere Gate, Delhi-1100061.

Sub: Bid for Construction of Pedestrian Foot Over Bridge at Park Street(Near RML Hospital), New Delhi (Contract FOBUS-2)

Sir,

1. Having visited the site and examined the General as well as Special conditions of contract, current CPWD specifications with updated correction slip, MoRTH Specifications, Special/Additional Specifications, Instructions to Bidders, Bid Drawings, Addenda etc. for the execution of above named works, we the undersigned, offer to execute and complete such works and remedy defects therein in conformity with the said Conditions of Contract, Specifications, Bid Drawings and Addenda for the sum \_\_\_\_\_ of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) (Amount in figures and words) for Construction of Pedestrian Foot Over Bridge at Park Street (Near RML Hospital), New Delhi (Contract FOBUS-2).
2. We acknowledge that the Appendix to Bid forms an integral part of the Bid.
3. We undertake, if our Bid is accepted, to commence the works within 7 days of issue of the Letter of Acceptance and to complete the whole of the Works comprised in the Contract within 10(Ten) months + 7 days calculated from the date of issue of the Letter of Acceptance, as indicated in the Appendix to Bid.
4. If our Bid is accepted, we will furnish a Bank Guarantee for Performance Guarantee for the due performance of the Contract. The amount and form of such guarantee or bond will be in accordance with requirements of tender documents/contract and as indicated in the Appendix to Bid.
5. We have independently considered the amount shown in Clause 3 of the General Conditions of Contract as liquidated damages and agree that they

represent a fair estimate of the damages likely to be suffered by you in the event of the work not being completed in time.

6. We agree to this Bid valid for a minimum period of 90 days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiry of that period or any extended period mutually agreed to.
7. Unless and until a formal Agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
8. We declare that the submission of this Bid confirms that no agent, middleman or any intermediary has been, or will be engaged to provide any services, or any other item of work related to the award and performance of this Contract and that we have not breached or will be breaching the Clause 37 of Instructions to Bidders. We acknowledge the right of the Employer, if he finds to the contrary, to declare our Bid to be non-compliant and if the Contract has been awarded, to declare the Contract null and void.
9. We understand that you are not bound to accept the lowest or any bid you may receive.
10. If our Bid is accepted we understand that we are to be held solely responsible for the due performance of the Contract.

Dated this.....day of..... 2009

Signature .....

Name..... in the capacity of

duly authorized to sign Bids for and on behalf of.....

Address .....

Company Seal

- Note :
- i. The Appendix forms part of the Bid and (ii)
  - ii. Bidders are required to fill up all the blank spaces in this form of Bid and Appendix.

**SECTION-B**  
**APPENDIX TO BID**

S. No.	Items	Conditions of Contract  Clause/ Sub-clause	Particular Condition for this Contract
1	Determination of market rates	A II(viii)	Contractor's profit and overheads @ 15% shall be applied while determining market rates on the basis of cost of material & labour at site
2	Performance Guarantee	1.1	Performance guarantee to be submitted within 14 days from the date of issue of letter of acceptance
3	Performance Guarantee	1.1	Maximum allowed extension beyond the period specified in S.No. 2 above : 3 days
4	Compensation for Delay	3	Authority for deciding compensation for delay : MD & CEO, DIMTS Ltd
5	Milestones to be achieved during execution	3	No intermediate milestones. Work to be completed within the stipulated period as per contract
6	Incentive for early completion	4	The provisions of clause 4 of GCC shall not be applicable for this contract.
7	Time and Extension for delay	8	Time allowed for execution of works:10 months  Date of commencement of works: 7 days from the date of issue of Letter of Acceptance
8	Milestones to be achieved during execution	8.1	No intermediate milestones. Work to be completed within the stipulated period as per contract
9	Payment on Intermediate Certificate	11	Min. Gross amount of work done together with net payment/adjustment of advances for material collected, if any, since the last such payment for being eligible for interim payment : Rs. 10 lakhs
10	Mobilisation advance	18.2	Will be provided on fulfillment of all conditions stipulated in contract in this regard
11	Plant, Machinery & Shuttering Material Advance	18.3	Will be provided on fulfillment of all conditions stipulated in contract in this regard
12	Payment due to	21	Provisions of this clause shall not be applicable

	Increase/Decrease in prices/wages after receipt of tender for works		as the stipulated period of completion is less than 18 months
13	Deviation, Deviated Quantities, Pricing	24.4 & 24.5	<p>Schedule-A of Bill of Quantities :</p> <p>i. The quantities of items shown in schedule-A of the Bill of Quantities are approximate, and liable to vary during the actual execution of the Work. Some items / group of items may have to be altered, added or omitted . The Contractor shall be bound to carry out and complete the stipulated work as instructed by DIMTS irrespective of the magnitude of variations including additions, alternations or omissions in the Bill of Quantities, individual items specified in the Bill of Quantities.</p> <p>ii. Variations in individual BOQ items shall be paid at BOQ rates except in the situation as provided for below:</p> <p>If the quantum of variation in any BOQ item is such that, in the opinion of DIMTS/Contractor , the rate in the contract for any BOQ item, by reason of such variation, is rendered inappropriate, then, after due Consultation by Engineer with the Employer and Contractor, a suitable revised rate shall be agreed upon between Contractor &amp; DIMTS. In the event of disagreement, DIMTS shall fix such other revised rate as in his opinion, appropriate and shall notify the Contractor accordingly and the same shall be binding on Contractor.</p> <p>However, the provisions of this clause shall be subject to following:</p> <p>(a) No change in the rate for any item contained in BOQ shall be considered in case of any decrease in the actual quantity of work executed. Similarly, in case of deletion of a particular BOQ item or a group of BOQ items, no claim for loss of profit or revision of rates of any other BOQ item shall be considered.</p> <p>(b) In case of positive variation in any BOQ item, the change in the rate of BOQ item shall be effected only if the total actual quantity executed is more than 1.25 times the BOQ</p>

			<p>quantity and also the amount of variation beyond BOQ quantity is more than 2% of contract value (calculated as per BOQ rate)(both the conditions to be satisfied). In case this condition is satisfied, the revised rate shall be applicable only to the quantities exceeding 1.25 times BOQ quantity.</p> <p>Schedule-B of Bill of Quantities : Irrespective of the quantum of work involved, the works shall be executed and paid for as per the percentage above/below/at par rates quoted by Contractor and no rate revision shall be affected in any case.</p>
14	Suspension of work - Compensation for loss suffered by Contractor on account of delay in supply of materials by Employer	27(iii)	No material shall be supplied by DIMTS
15	Action in case work not done as per specifications- Authority to accept work at reduced rates	28	MD & CEO, DIMTS Ltd.
16	Defects Liability Period	29	For 12 months(365 days) after completion of works
17	Contractor's Superintendence, Supervision, Technical Staff & Employees	47(i)	Minimum requirement, of technical representatives, their qualification & experience are as given in Form T-7 of Instructions to Bidders
		47(i)	Penalty/Recovery from Contractor for non-fulfilment of provisions of clause 47 is Rs. 10,000/- Per month

Signature &amp; Company Seal

Date .....

Name .....

Place .....

Address .....

## SECTION-C

### Bill of Quantities

#### PREAMBLE

1. The Bill of Quantities shall be read in conjunction with Instructions to Bidders, General and Special Conditions of Contract, Invitation for Bid, Technical Specifications and Drawings.
2. The bill of quantities is sub-divided in two schedules as under :

- (i) Schedule 'A' of Bill of Quantities: Schedule 'A' comprises of Item rate Bill of Quantities consists of various works related to foundations, structural work, traffic management/ traffic safety, finishing, electrical works, drainage works, landscaping works & other miscellaneous works to be executed on item rate basis. The bidder has to quote the rate (in words and figures) against each item in Schedule "A". The payment shall be made as per the quantum of work executed at the rates quoted by Contractor for individual BOQ item. Contractor will have no right for any claims whatsoever like loss of profit etc.in case the actual quantum of work executed against any BOQ item is less than the quantities given in BOQ. In case of increase in quantities beyond BOQ provisions, rate revision shall be affected as per the provisions in general conditions of contract and appendix to bid.
- (ii) Schedule 'B' of Bill of Quantities: This schedule comprises of DSR 2007 items related to shifting/relocation of existing utilities from the work area, which have to be identified by Contractor and will have to be executed by Contractor(excluding electrical cables/OFC). This schedule also comprises of DSR 2007 items related to cutting of trees, disposal of timber etc. and any other necessary work identified during course of execution, which may have to be executed during the execution of work. The basic amount of work considered under this schedule is Rs. 30, 00,000/-[Rs. Thirty Lakhs only]. The bidder has to quote percentage above/below/at par rates against schedule 'B'.

The basic amount of work indicated above is provisional. The value of work executed under this schedule may be less than this amount. In such an eventuality, Contractor will have no right for any claims whatsoever like loss of profit etc. Similarly, the value of work to be executed under this schedule may be more than the amount mentioned above. However, irrespective of the quantum of work involved, the works shall be executed and paid for as per the percentage above/below/at par rates quoted by Contractor and no rate revision shall be affected in any case.

3. The quoted rates and prices in Priced Bill of Quantities will be deemed to include all plant, labour, supervision, materials, transport, all temporary works, erection, maintenance, taxes and duties, contractor's profit and establishment/overheads, together with preparation of design and drawings, all general risks, insurance liabilities, compliance of labour laws and obligations set out or implied in the contract.

4. If the bidder fails to quote rate against any item (for which quantity has been provided) in Schedule "A" of bill of quantities, the same will not be paid for by DIMTS when executed and shall be deemed to have been included by the bidder in the rates and prices for other items in the bill of quantities. Similarly, if the bidder fails to quote percentage above/below/at par rates against schedule 'B', it will be deemed to have been quoted " at par" and payment for any work undertaken under this schedule shall be made at DSR, 2007 rates.
5. General directions and descriptions of work and materials are not necessarily repeated, nor summarized in the Unit Priced Bill of Quantities. Reference to the relevant sections of the contract documentation including technical specifications shall be made before entering prices against each item in the Unit Priced Bill of Quantities.
6. Bidders shall fill the Unit Priced Bill of Quantities in Rupees only.
7. Errors will be corrected by the employer for any arithmetic errors in computation or summation as per contract conditions.
8. All the unit rates should be filled both in figures and words and amounts should be filled in figures only.
9. All columns in the Bill of Quantities shall be filled in indelible ink or type written and the total tender amount shown in the bottom. The person authorized to sign on behalf of the Bidder shall sign in full with company seal and date at the bottom of all pages and at the end of summary sheet, schedules 'A' & 'B'. Any corrections shall be made by clearly striking out the previous data, writing the correct figure/data and putting signature of the authorized signatory at the place of correction. Use of correction fluid is not allowed.
10. The works executed against the BOQ items in Schedule A and DSR items under schedule 'B' would be paid on measurement basis.
11. The payment under the Payment Schedule will cover all work specified in the tender drawing and / or provided in the scope of work. The Schedule of Payment will not get modified due to alterations of any type so far as the modifications/alterations are within the scope of work and/or provided for in the tender drawings.
12. The Contractor may raise their 'On Account' payments on monthly basis as per the status of work on the last day of the respective month.

**Bill of Quantities****ABBREVIATIONS**

<u>Abbreviations</u>		<u>For</u>
Rs or RS	:	Indian Rupees
LS or L.S or SUM	:	Lump Sum
Nr. or No. or Nos.	:	Number(s)
Lm or LM or lm	:	Linear Metre
M	:	Metre
KM or km	:	Kilometre
Hct. Or Hct	:	Hectare
m <sup>2</sup> or sq.m or sqm	:	Square Metre
m <sup>3</sup> or cum or cu.m or Cum	:	Cubic Metre
cc. or c <sup>3</sup> or cu.cm or cucm	:	Cubic Centimetre
cum. Km. Or cum km	:	Cubic Metre Kilimetre
KG or kg or Kg	:	Kilogram
mt or t or T or tone	:	Metric Tonne
HP	:	Horse Power
IRC	:	Indian Roads Congress
IS	:	Indian Standard
P.O.L. or POL	:	Petroleum, Oil & Lubricants

Construction of Pedestrian Foot Over Bridge at Park Street(Near R.M.L.Hospital), New Delhi in NDMC Area , Contract Package FOBUS-2		
Bill of Quantities		
Summary of Schedules A and B		
S.No	Description	Amount (in Rs.)
		(In figures) (in words)
1	Schedule A	
2	Schedule B	
	Total Tender Sum(in Figures)[1+2]	
	Total Tender Sum(in Words)[1+2]	
	Rebate/Discount Offered , if any =	%
	Total Tender Sum after Rebate	
	(i) In figures	
	(ii) In Words	

Construction of Pedestrian Foot Over Bridge at Park Street, New Delhi in NDMC Area , Contract Package FOBUS-2						
Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
<b>Section1 - Civil Work</b>						
1.1	Earth work in excavation for all kind of soil except hard rock by mechanical means /manual means over areas/exceeding 30 cm in depth, 1.5 meter in width as well as 10sq. m on plan) as per drawing and technical specification, including setting out, removal of stumps and other deleterious matter etc. complete	Cum	850.00			
1.2	Close timbering in trenches including strutting, shoring and packing cavities (wherever required) complete as per technical specifications and as directed by DIMTS. Measurement shall be taken of the face area timbered.					
	a) For depth upto 1.5 m	Sqm	420.00			
	b) For depth exceeding 1.5 m but not exceeding 3.0 m	Sqm	285.00			
1.3	Filling available excavated earth in trenches, plinth, sides of foundations etc. in layers not exceeding 15 cm in depth, consolidating each deposited layer by mechanical means and watering to achieve the desired compaction as per specification.					
	a) For depth upto 1.5m	Cum	430.00			
	b) For depth exceeding 1.5 m	Cum	245.00			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
1.4	Cement concrete M-15 grade in foundation/levelling course and below approach slab etc. including centering and shuttering all complete as per drawing and Technical Specifications.	Cum	28.00			
1.5	Providing and laying and compaction in position Ready Mix Concrete manufactured in fully automatic batching plant and transported to site of work in transit mixers having continuous agitated mixture for a lead up to 30 KM, manufactured as per the mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying and cost of admixtures in recommended proportions as per IS:9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability but excluding cost of centring, shuttering and reinforcement steel complete as per drawing and Technical Specifications. - M30 grade	Cum	120.00			
1.6	Centring and shuttering including strutting, propping etc. and removal of form as per technical specifications and as per directions of DIMTS for : For Foundations, Walls and Slabs	Sqm	375.00			
1.7	Thermo-Mechanically Treated (TMT) bars for reinforcement for RCC works including supply, straightening, cutting, bending, placing in position and binding all complete(Fe 500) as per drawings and technical specifications.	MT	19.00			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
1.8	<p>Providing and laying integral cement based treatment for water proofing on horizontal surfaces at all levels as directed by DIMTS and as per drawings &amp; technical specifications and consisting of</p> <p>i) First layer of 22mm to 25mm thick approved and specified rough kota stone slab over 25 mm thick base of cement concrete mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound 'impermo' of snowcem or equivalent conforming to IS:2645 in the recommended proportion. Joint sealed and grouted with cement slurry mixed with water proofing compound and</p> <p>ii) 2nd layer of 25 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in the recommended proportion and</p> <p>iii) Finishing top with stone aggregate of 10 to 12 mm nominal size spreading @ 8 cum/m/sqm thoroughly embedded in the second layer.</p>	Sqm	58.00			
1.9	<p>Providing and laying integral cement based treatment for water proofing on the vertical surfaces by fixing specified rough kota stone slab 22mm to 25mm thick with cement slurry mixed with water proofing compound 'impermo' of snowcem or equivalent conforming to IS:2645 in the recommended proportion with a gap of 20 mm (minimum) between the stone slab and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3 (1 cement : 3 coarse sand) 20 mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels as per drawings &amp; technical specifications and as directed by DIMTS.</p>	Sqm	98.00			
1.10	<p>Brick work with FPS brick of class designation 75 in superstructure above plinth level upto floor V level in all shapes and sizes in cement mortar 1:4 (1 cement : 4 coarse sand) as per drawings &amp; technical specifications.</p>	Cum	20.00			
1.11	<p>Structural Steel works in built up sections, trusses and framed work including cutting, fixing in position and applying a priming coat of approved steel primer all complete (Grade 310) as per drawings and technical specifications</p>	Kg	31189.00			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
1.12	Structural Steel works in built up sections, trusses and framed work including cutting, welding, fixing in position and applying a priming coat of approved steel primer all complete (Grade 250) as per drawings and technical specifications	Kg	51980.00			
1.13	Structural Steel works in decking chequered plate etc., (Grade 250) as per drawings and technical specifications	Kg	15779.00			
1.14	Finishing with epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc., complete as per drawings and technical specifications and as per directions of DIMTS - On Structural Steel Work	Sqm	2080.00			
1.15	Providing and fixing brushed finish stainless steel railing 1000 high, including cutting fabricating, welding, handling, hoisting and fixing in position at all levels, consisting of 50 mm diameter SS pipes top rail welded to 2 No. 40x8 thk SS flat vertical welded to SS plate at base @ 975 c/c or as/ drawing/ site conditions with intermediate horizontal 5 No. pipe rails of 12 dia 16 gauge SS pipe equally spaced and 50x6 thk SS flat bottom rail Complete as / detail drawing and design and as per direction of DIMTS(Grade S 304)	Kg.	1250.00			
1.16	Providing and fixing brushed finish stainless steel railing 1205 high, including cutting fabricating, welding, handling, hoisting and fixing in position at all levels, consisting of 50 mm diameter twin SS pipes top rail with interconnecting support of 25 dia SS pipe welded to 2 No. 50x8 thk SS flat vertical welded to SS plate at base @ 2495/c/c or as/ drawing/ site conditions with lower rail panel consisting of outer horizontal top and bottom members of 50 x 6 thk. SS flats and diagonal bracing of 15 dia 16 gauge SS pipe Complete as / detail drawing and design and as per direction of DIMTS(Grade S 304)	Kg.	1250.00			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
1.17	Providing and fixing GI lamp cover, including cutting fabricating, handling, hoisting and fixing in position at all levels, consisting of 16 gauge powder coated G.I. sheet, bend to specified shape, with hinged openable lid fixed with lock and key arrangement. 1350 mm long fitting with 150 long 5 nos oblong openings fixed to steel structure with suitable arrangement and joints sealed with silicon sealant Complete as / detail drawing and design and as per direction of DIMTS	Nos.	14			
1.18	Providing and laying 25 mm thick granite(polished or sand blasted) stone flooring as per drawings and design and of combination of two colours and required shade as per approval of the DIMTS(colour/pattern) to be decided/approved by DIMTS at the time of execution) laid over 20 mm thick (average) base of cement mortar 1: 4(1 cement : 4 coarse sand) with grey cement slurry and with joints treated with white/grey cement, mixed with matching pigment complete - for FOB walkway, landings etc.	Sqm	130.00			
1.19	Providing and laying 25 mm thick granite stone(polished or sand blasted) flooring bolted to M.S plate below/(including nuts, bolts & washers as per technical specifications) as per drawings and design and of combination of two colours and required shade as per approval of the DIMTS(colour/pattern) to be decided/approved by DIMTS at the time of execution) - for staircase steps	Sqm	159.00			
1.20	Providing and laying 20 mm thick granite stone(polished or sand blasted) Drain flooring as per drawings and design and of combination of two colours and required shade as per approval of the DIMTS(colour/pattern) to be decided/approved by DIMTS at the time of execution) laid over 20 mm thick (average) base of cement mortar 1: 4(1 cement : 4 coarse sand) with grey cement slurry and with joints treated with white/grey cement, mixed with matching pigment complete.	Sqm	15.00			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
1.21	Providing and fixing dry cladding upto 10m height with 30mm thick gang saw cut stone with( Machine cut edges) of uniform colour and size upto 1mx1m including fixing to structural steel framework with the help of cramps, pins etc. and sealing the joints with approved weather sealant to make joints water/air proof as per architectural drawing and direction of DIMTS - Red or white sand stone(colour/pattern to be decided/approved by DIMTS at the time of execution)( excluding cost of SS cramps which shall be paid extra)	Cum	62.00			
1.22	Extra for fixing cramps of required size and shape in RCC/CC backing with cement mortar 1:2 (1 cement : 2 coarse sand) or fixing to Structural Steel framework including drilling necessary hole in stones and embedding the cramp in the hole.  a)Stainless steel cramps	Kg	33.00			
1.23	Supply and installation of suspended glass glazing for lift shaft having 6mm clear toughened glass +1.52 PVB + 6mm clear toughened glass with ozone make or equivalent spider fittings(spiders to be of SS 316 grade) with all standard fittings and accessories like routeels, bolts and fasteners etc. complete in all respects including Dow Corning or Walker make silicon to make the glazing air and water tight as per BIS standards or applicable international specifications as per drawings and as per directions of DIMTS( The Contractor shall submit complete working drawings and load/design calculations for approval from DIMTS before executing the work).	Sqm	59			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
1.24	Providing and fixing trail (flooring tiles) for visual impaired as per drawing and design complete.	Sqrm	51.00			
1.25	Design, supply and erection of skylight cover consisting of 10 mm compact clear( 112) with a special UV protected, easy clean coated polycarbonate sheet of GE Plastic or approved equivalent, fire retardant conforming to IS:1444 with specially designed duty powder coated aluminium Alcox leak proof fixing system conforming to IS:733, Alloy 6063 T6, including EPDM gaskets, GE silicone sealant, cold forged fasteners etc. complete as per drawings and technical specifications.					
	a) Clear 112	Sqrm	57			
	b) Opal White	Sqrm	57			
1.26	Cutting existing road and making good the same including supply of extra quantities of materials i.e. aggregates, GSB, WMM, BM, DBM, BC in the required thickness as per existing road crust conforming to technical specifications	Sqrm	105			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
1.27	<p>Providing 2.0 m high temporary barricade and arrangement for traffic diversion such as traffic signals during construction at site, for day and night as per requirement and drawings. During construction, barricading and arrangement for traffic diversion has to be kept continuously and maintained properly till the completion of all the activities. The construction barricading will have different width in different portion of the alignment as directed by the DIMTS keeping in view the movement of traffic at the ground level and minimum inconvenience to and safety of public. Dismantling and re-erecting the above barricading and other arrangements at the new location as per instruction of DIMTS is included in this item. Nothing extra shall be payable. Note : The payment schedule for item shall be as follows:</p> <p>(i) Providing barricading for a given stage and approval of the same by DIMTS : 85% of the accepted rate</p> <p>(ii) After completion of all activities of stage for which barricading was erected : 15% of the accepted rate</p>	Metre	300.00			
1.28	<p>Deployment of adequate manpower for 8 hrs. shift for day and night management of traffic in intersection, roadway influenced by contractor and traffic diversions at various levels.</p> <p>i) Supervisor</p> <p>ii) Traffic Guards/Marshals</p> <p>Note : The deployment to be done with prior approval of DIMTS. The personnel above should be familiar with traffic rules and regulations, should be in uniform and should be equipped with reflective jackets/hand flashers etc. especially during night operations.</p>	Shifts	900.00			
		Shifts	3600.00			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
1.29	Providing & fixing of retro-reflective (high intensity grade) traffic sign boards (informational, mandatory, cautionary) as per IRC guidelines/MoRTH specifications and using materials conforming to relevant applicable specifications (payment to be made as per the area of main sign board only and support structure/fixing shall be considered incidental to work)	Sqm	9.00			
1.30	Manufacturing supplying and fixing signage boards made of 2mm thick aluminum sheets face to be covered with etching/ as per design and as approved by DIMTS in silver white pasted on substrate by adhesive backing and fixing the same to the plate of structural frame work by means of suitable sized aluminum alloys, rivets bolts or nuts @ 300mm c/c all along periphery as well as in two vertical rows along with their resistant measures. The rate includes cost of rounding off the corners, lowering down the structural frame work, fixing and erecting the same in position all complete as per drawings and specifications and direction of DIMTS.	Sqm	4.00			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
1.31	<p><b>ESCALATOR</b>                      Design, supply, installation, testing and commissioning of Heavy Duty application reversible type Escalators (suitable for outdoor operations) having a capacity of 9000 persons per hour at an operating speed of 0.5m/sec. with width not less than 1000 mtr between interior panels with 4 Nos. flat steps at both ends with inclination 30 degree rise from floor to floor 6.0 mtrs. approx. with electric motor, control panel, latest safety devices, cable for connections including stainless steel cladding as required, for operations on 415 volts, 3 phase, 50 HZ AC with auto start and stop and other accessories/features as per technical specifications and approval of DIMTS including one year comprehensive warranty/maintenance services -confirming to all requirements of technical specifications .</p>	Nos.	2			
1.32	<p><b>LIFT</b>                      Design, supply, installation, testing and commissioning of Heavy duty application (suitable for outdoor application and fixing to steel shaft 2500mmx2000mm) passenger Lift (15 passenger , 1020 kg capacity) , 900 mm door width, 2000 mm door height, gearless/ frequency controlled and without machine room with all accessories/features/facilities as per technical specifications. The subject elevator shall be MRL with 2 stops and both openings on same side. Interiors as selected by DIMTS - confirming to all requirements of technical specifications .</p>	Nos.	2			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
	<p><b>Section 2 - Electrical Work</b></p> <p>2.1 Supplying, installation, testing and commissioning of M.V. cubical type totally enclosed dust, dump and vermin proof Main Distribution Boards complete with bus bars, MV danger notice plate, Digital type Multifunction meter, Ammeter, Ammeter selector switch, voltmeter, Voltmeter selector switch, indicating lamps, cast resin C.T.'s, interconnection with suitable capacity aluminium strips / rods, connection of incoming and outgoing cables with thimbles, stove enamelled painted and having following incoming and outgoing switch fuse/ fuse and MCBs MCBs complete as per requirement, drawing and specification.</p>					
(1)	<p><b>MAIN DISTRIBUTION BOARD</b></p> <p><b>INCOMER :</b></p> <p>1 no. 200A, 415V, lcs= 25kA, 4P MCCB with variable O/C &amp; S/C releases.</p> <p>1 no. Digital type multifunction meter to show 0-500V voltage with phase selector switch, 0-200A current with phase selector switch, kWh and KVA with set of cast resin C.T.'s 200/5A</p> <p>1 set of LED type Phase indicating lamp with MCB</p> <p><b>BUS BARS:</b></p> <p>300A TPN bus bars of aluminium alloy.</p> <p><b>OUT GOING:</b></p> <p>4 nos. 25A, 415 V, lcs = 10 kA, 4P MCB.</p> <p>4 nos. 40A, 415 V, lcs = 10 kA, 4P MCB.</p> <p>4 nos. 100A, 415 V, lcs = 25 kA, 4P MCB.</p>	Set	1			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
ii.	<p><b>LDB - A</b></p> <p><b>INCOMER :</b> 1 no. 25A, 415 V, Ics = 10 kA, 4P ELCB .</p> <p><b>BUS BARS:</b> 100A TPN bus bars of Copper.</p> <p><b>OUT GOING:</b> 7 nos. 10A, 220 V, Ics = 10 kA, SP MCB with Contactor and timer.</p> <p>3 nos. 10A, 220 V, Ics = 10 kA, SP MCB.</p>	Set	2			
	<b>POINT WIRING</b>					
2.2	Wiring for light point /exhaust fan point point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface/recessed G.I conduit,with modular plate, suitable GI box and earthing the point with 1.5sq.mm FR PVC insulated copper conductor single core cable etc as required .	Points	78			
2.3	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface/recessed G.I conduit,2 way modular type switch,modular plate, suitable GI box and earthing the point with 1.5sq.mm FR PVC insulated copper conductor single core cable etc as required.	Points	4			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
2.4	Wiring for circuit/submain wiring alongwith earth wire with the following size of FR PVC insulated copper conductor, single core cable in existing surface/ recessed GI conduit as required					
	i) 2 x 2.5 sq.mm + 1 x 2.5 sq.mm	Metre	300			
	ii) 2 x 4.0 sq.mm + 1 x 4.0 sq.mm	Metre	200			
	iii) 2 x 6.0 sq.mm + 1 x 6 sq.mm	Metre	250			
	iv) 4 x 4.0 sq.mm + 2 x 4 sq.mm	Metre	200			
2.5	v) 4 x 6 sq.mm + 2 x 6 sq.mm	Metre	150			
	Supplying and fixing of following sizes of GI Conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required.					
	i) 20mm dia.	Metre	200			
	ii) 25mm dia	Metre	400			
	iii) 32mm dia.	Metre	100			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
2.6	Supply and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16 amp modular socket outlet and 15/16 amp modular switch, connection, painting etc as required.	Each	4			
	<b>SUPPLYING OF LIGHT FIXTURES &amp; FANS</b>					
	Supplying, installation, testing and commissioning of following light fixture with Electronic ballast, capacitor, lamp, reflector, diffuser, MS body/housing holder etc. complete with all fixing accessories as required.					
2.7	1 x 28 watt box type surface mounting type fluorescent light fixture complete with all accessories as required (eq to Philips Cat. No. TMS 122 / 128 HF).	Nos.	14			
2.8	Supplying, installation, testing and commissioning of 1 x 70 watts PL concealed light fixture with reflector and toughned glass cover as required including lamp and all accessories as required eq. to Kaslec cat np. (TITAN S2 IP65/IK 10+3/120J).	Nos.	6			
2.9	Supplying, installation, testing and commissioning of wall mounted up - down light fixture , die cast construction with single reflector toughened glass cover IP65 grade protection with 70 watts CDMT lamp (equipment to Ankur cat no XOL-IP/0083)	Nos.	12			

Item No.	Description of item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
2.10	Supplying, installation, testing and commissioning of Driveover decorative walkover/driveover floor burial light fixture with toughened glass cover, 9 no. 1.2 watt each LED as per required.(eq. To Katholic ledos)	Nos.	34			
2.11	Supplying, installation, testing and commissioning of Outdoor light pole of total 3.9 mtrs high light column made out of Aluminium profile diffused light perforation at the center of the column with painted fibre glass reflector for diffused light the fixture shall be suitable for 2 x 40 watts FTL Lamp and 1 x 150 watts MH / CDMT lamp. complete as per requirement and all accessories including lamps as required (eq. To Ankure lights cat no. TFAL 301.)	Nos.	4			
2.12	Supplying, installation, testing and commissioning of 1x60 watts Compact vandal-proof and decorative light fitting, with die-cast aluminium shield, UV stabilized and 5mm thick opal diffuser, anti-lever base and built-in tamperproof screws. including lamp and all accessories as required eq. to Keselec Securilite cat no. (AKI IP65/K10+3/120J).	Nos.	8			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
2.13	<b>LT CABLE</b> Supply of the following size XLPE insulated PVC sheathed aluminium conductor armoured cables as per IS 7098(part-1)	Metre	250			
				i) 3.5c x 150 sq.mm		
				ii) 4c x 50 sq.mm		
2.14	Laying and fixing of following sizes XLPE insulated and PVC sheathed aluminium armoured conductor cable of 1.1 KV grade in following sizes on surface as required.	Metre	100			
				iii) 2c x 10sq.mm		
		Metre	200			
				i) upto 25 sq.mm		
		Metre	450			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
2.15	Supplying and making end termination with brass compression glands and aluminium lugs for following sizes of PVC insulated and PVC Sheathed/XLPE aluminium conductor cable of 1.1. kv grade as required.					
	i) 3.5cX 150sq.mm	Set	5			
	ii) 3.5 cX 50sq.mm	Set	5			
	iii) 2c x 10 sq.mm	Set	5			
	<b>EARTHING AND MISCELLANEOUS ITEMS.</b>					
2.16	Earthing with G.I. earth plate 600mm x 600mm x 6mm thick including accessories & providing masonry enclosure with cover plate having locking arrangement and watering pipe etc ( but without or coke and salt). complete as required.	Each	6			
2.17	Extra using charcoal and salt for G.I. or copper plate earth. electrode as required.	Each	6			
2.18	Providing and fixing 25 mm x 5mm GI strip on surface for connection etc. as required.	Metre	300			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
<b>Section3 - Plumbing &amp; Drainage Work</b>						
3.1	<p>Supply, installing, testing and commissioning drainage pumping system in the subway sump comprising of the following:</p> <p>a) 2 Nos. Vertical fully floodable type submersible Duty                      Discharge of each pump : 150 LPM                      Working Head : 10 M                      Material of Construction (M.O.C):                      Corrosion Resistant in general                      Bearings — Anti friction,                      Pre-lubricated ball bearings, packed with grease for life.                      Motor: — Dry Motor with built in over Protection - IP68.                      Insulation Class - F                      b) Electric control panel for automatic operation of pumps as per the water level in the sump. The pump operation shall be controlled with magnetic float type level controller. The Panel shall comprise of incoming MCB, voltmeter &amp; ammeter, On-Off lamps, starters with circuit breakers for each pump, rotating start sequence, both pumps to work simultaneously to meet peak flow                      There shall be an audio-visual alarm, if any pump fails to start.                      c) Power cabling between panel and pumps.                      d) Pump suspension system with Stainless Steel Sling wire with 'U' clamp.                      1) The pump shall be capable of developing the required total head at rated capacity for continuous operation. The pumps shall operate satisfactorily at any point on the Head-Discharge (H-Q) characteristic curve over a range of 50% to 130% capacity                      2) The total head capacity curve shall be continuously rising towards the shut off. The shut off head shall be at least 110% of the total head. The pump should deliver at least 125% of its rated capacity at 75% of the specified total head                      3) Wherever mechanical seal has been asked for, it must be 'factory fitted' at pump manufacturer's works.</p>	Set	2.00			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
3.2	Providing and fixing in position the sump pumps risers in medium class G.I. pipes (IS:1236) with all fittings, specials & clamps effecting proper connections, cutting chases in walls and floors and making good, including painting with two coats of anti-corrosive bituminastic paint on buried and concealed pipework and with two coats enamel paint of approved quality and shade over a coat of zinc chromate primer on exposed pipework(Tata or Jindal) a) 65 mm dia	Metre	84.00			
3.3	Providing and fixing Cast iron butterfly valve as per IS: 13095 of Class PN 10, having epoxy coated disc, carbon steel shaft, EPDM / nitrile rubber field replaceable body lining and of approved make, including a set of MS flanges, required nos. of nut & bolts all complete(KSB or Advance or Audco). a) 65 mm dia ( with lever)	Nos.	4.00			
3.4	Providing and fixing Dual plate (Wafer type) check valve (non return valve) of Class PN 16, having cast iron body, stainless steel disc ( AISI 316), trim and spring of approved make, including a set of MS flanges, required nos. of nut & bolts all complete ( Leader or Advance). a 65 mm dia	Nos.	4.00			
3.5	Providing and fixing unplasticised - Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS :5382 leaving 10 mm gap for thermal expansion and necessary clamps etc. for fixing of pipes to structure. (75mm dia pipe)	Metre	26.00			
3.6	Providing and fixing unplasticised - PVC moulded fittings/ accessories of various types for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS :5382 leaving 10 mm gap for thermal expansion. 75 mm dia nominal Dia pipes	Nos.	12.00			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
3.7	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 channels for the drain etc complete For pipes upto 250 mm diameter	Nos.	4.00			
3.8	Providing and laying non-pressure NP2 class RCC pipes with collars joined with stiff mixture of cement mortar 1:2(1 cement : 2 fine sand) including bed concrete and testing of joints etc. complete.(250 dia pipe)	Metre	105.00			
3.9	Constructing brick masonry road gully chamber 50x45x60cm with bricks of class designation 75 in cement mortar 1:4(1 cement : 4 coarse sand) including 500x450mm precast RCC horizontal grating complete as per standard design & specifications	Nos.	4.00			
3.10	Providing & fixing 40mm thick granite/sand stone grating( shade & finish of granite/sand stone to be decided/finalised by DIMTS at the time of execution of work) including cutting, making machine drilled holes, providing hoisting arrangement/hook and fixing in position as per directions of DIMTS - for fixing over road gully chambers to match with the flooring in landscape area)	Sqm	4.00			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
<b>Section 4 - Landscaping Work</b>						
4.1	Preparation of subgrade by excavating/loosening earth to an average of 22.5cm depth, dressing to camber and consolidating with mechanical compactor including making good the undulating etc. and disposal of surplus earth .	Sqrm	630.00			
4.2	Providing and laying in position cement concrete of grade 1:2:4(1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) 100mm thick below stone flooring in landscape area	Cum	63.00			
4.3	Providing and laying 25 mm thick granite stone(polished or sand blasted and machine cut) flooring as per drawings and design and of combination of two colours and required shade as per approval of the DIMTS(colour/pattern to be decided/approved by DIMTS at the time of execution) laid over 20 mm thick (average) base of cement mortar 1: 4(1 cement : 4 coarse sand) with grey cement slurry and with joints treated with white/grey cement, mixed with matching pigment complete. in land scape area	Sqrm	378.00			

Item No.	Description of Item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				In figures	In words	
4.4	Providing and laying 40 mm thick fine dressed sand stone(red or white) flooring over 20 mm thick (average) base of cement mortar 1:5(1 cement : 5 coarse sand) with joints finished flush and pointing with cement mortar 1:2 (1 cement : 2 stone dust) with an admixture of pigment to match the shade of stone(colour of sand stone/pattern to be decided/approved by DIMTS at the time of execution).	Sqm	252.00			
4.5	Providing and fixing at or near ground level precast concrete 1:2:4 in kerbs, edgings etc. as per approved pattern and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand) including the cost of required centering, shuttering and finishing smooth with 6mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces and painting etc. complete - in landscape area & median/footpath edges etc.	Cum	15.00			
4.6	Providing and fixing hand chisel dressed red sandstone benches on soft ground with bed concrete, stainless steel pins and 1:2 pigmented cement sand mortar as shown in drawings complete.	Nos.	5.00			
4.7	Fabrication & supply of Stainless Steel Dustbin with single bins with pivot system (Conforming to SS-304 Grade, Satin finish) of size 470X300X1147 mm as per drawing/visuals( Ref No. DB-4 . Jindal)	Nos.	5.00			

Item No.	Description of item	Unit	Quantity	Rate (Rs.)		Amount (Rs.)
				in figures	In words	
<b>Section 5 - ALUMINIUM COMPOSITE PANEL CLADDING</b>						
5.1	<p>Providing and fixing aluminum composite panels of Alpoic / Alcobond/Alucobond or any other approved equivalent for external wall cladding at all heights and elevation( on columns, beams, pylons, sides &amp; soffits of walkway/staircase/landings etc.) including necessary aluminum frame work. The aluminum composite panel should consist of 3mm thick thermoplastic core of anti oxidant LDPE sandwiched between 2 skins of 0.5mm thick aluminum alloy sheet making a total panel thickness of 4 mm. The surface shall be finished with PVDF based coating on the topsides and services coating on the reverse side shall be with polymer paint. Coating shall conform to ECCA or AAMA.</p> <p>The system shall be designed to withstand a wind pressure of 200kg/Sq. m and shall be fixed to be structural steel sections with necessary clamps, brackets and anchor fasteners. All clamps and brackets shall be Hot dip galvanized minimum 80 microns thick and shall conform to IS: 4759 – 1996. The extruded aluminium section shall be anodized in approved colour with a anodic coating of minimum 20 microns. Extruded section shall be 6063 T5 or T6 alloy conforming to ASTM B221. Any other fastening straps, nuts, bolts, rivets, washers etc. shall be in stainless steel SS 304 grade. All materials shall be submitted for approval before erection. The work shall include making vertical louvers and horizontal ledges clad in aluminum composite panels complete as per manufacturer's specifications and directions of DIMTS. The rate shall include to provide EPDMgaskets, open cell polyethylene backer rods, weather sealants etc. The weather sealant shall be Dow Coming 991.</p>	Sqm	730.00			
				Total Amount(Rs.)\In figures)		
				Total Amount(Rupees)\ in words)		

Authorised Signatory with Company Seal

Construction of Pedestrian Foot Over Bridge at Park Street(Near R.M.L.Hospital), New Delhi in NDMC Area , Contract Package FOBUS-2

Bill of Quantities  
Schedule B

The tenderer has to quote a single percentage above/below/at par for following items

S. No.	Description	Unit	Basic Amount(Rs.)	% above/below/at par	Amount(in figures)(Rs.)
1	All items of work related to Relocation/Shifting of all Utilities(like Sewer Lines, Storm Water lines, Water supply lines etc. but excluding electrical cables/QFC, items of work related to cutting of Trees, disposal of timber, and any other necessary work identified during course of execution, under DSR 2007 - Any DSR 2007 items	LS	30,00,000/-		

Total cost of schedule B

in figures Rs

in words Rupees

Authorised Signatory with Company Seal