

AFDG: CIVIL: INQ_20170402

28th April 2017

To,

Sub: - Inquiry for Civil, Structural and Plumbing work for ASRS side Toilet with driver rest room at Amulfed Dairy, Gandhinagar.

We invite your most competitive offer, quoting your lowest rate and shortest execution period for item mentioned as under. Your offer must be sent in sealed reply envelope attached herewith by registered post/courier or by person. Mention, "QUOTATION for **Civil, Structural and Plumbing work for ASRS side Toilet with driver rest room at Amulfed Dairy, Gandhinagar.**" on top of the offer reply envelope.

Detailed Technical Specification & Schedule of Quantities as per Enclosed Annexure: - I

Last date of receipt of Quotation: 8th May 2017.

➤ **General Terms & Conditions.**

1. Contractor has to quote rates considering work is to be carried out at AmulFed Dairy, Gandhinagar.
2. Your rates should be including of all material cost, labour cost, octroi, loading, unloading at AmulFed Dairy.
2. The Contractor will have to bring his own tools, tackles, ladders, accessories, scaffolding etc.
3. Specify Tax Condition. Service Tax, VAT, Work Contract Tax will be applicable or not. If tax condition is not specified your rates shall be considered as inclusive of all taxes.
4. Basic Rate: -
 - * 50 Kg OPC cement bag Rs. 260 / Bag. (53 Grade, Make: - Ultratech, JK Laxmi, Birla,)
 - * Reinforcement Steel FE 500 TMT Bar Rs. 51 / Kg. (Make: - TATA, Vaizag, SAIL)
 - * Structural rolled steel sections, tubular section & Plates: Rs. 52000 / MT. (Make: - TATA, SAIL, VAIZAG)
5. Rate variations beyond specified basic rate shall be reimbursed/recovered at actual on submission of Necessary Documentary evidences.
6. If work is to be carried out in emergency basis or during Shutdown period, contractor should Carry out work on emergency basis, night work shall be permitted under such intervention to meet production schedule.

7. Payment terms: 30 days after submission of bill based on JMS / JMR.
8. Quantity indicated here is estimated; it may vary on either side however payment shall be made as per the actual work executed at site based on JMS / JMR.
9. To the extent possible extra item shall be avoided. If however is necessary done as per site condition & is not envisaged in the current SOR we shall fix the rate base on competitive offers from the market which shall be binding to the contractor. Contractor should inform well in advance about the requirement of the extra item to us to get enough time to collect comparative offers.
10. All the legal/administrative records like muster roll, salary register, labour license, PF, ESI etc. to be maintained & submitted as and when required and contractor is responsible for labour laws and rules/regulations etc.
11. It is advisable to visit the site before quoting your rates.
12. Cleaning of site must be required after day-to-day work.
13. Your workmen should wear the identity card of your company while executing jobs at AFD, Gandhinagar.
14. In case, any of your workmen get injured due to Accident, while working within premises of AFD, or any damage to our equipment or property has taken place due to your workmen, you will repay the damages/losses.
15. We are ISO 9001:2004 QMS (Quality Management System), ISO 14001:2004 (Environmental Management System) ISO 22000:2005 FSS (Food & Safety System) certified unit. We expect you to follow eco-friendly process in your Company such as waste minimization, reduction in air pollution, waster pollution and soil Contamination etc.
16. Chewing pan masala, tobacco & smoking is strictly prohibited in AFD premises & Penalty (Rs. 5000/-) is huge if any of your team is observed in duality in there action.
17. You shall be working in running factory and ensure that the day to day operations of the factory are not hampered in any way due to your activities. Any damages occurred by you shall be recovered. Proper barricading of the work area should be done to prevent dust dirt etc. in the environment.
18. Water and Electricity will be provided by AFD with 0.5 % Charges in your Running bills.
19. Safety is the utmost priority inside the premises & Contractor must ensure your team to follows all the safety norms (like use of PPE Personal Protective Equipments, fall protection, secured & safe staging, scaffolding etc.) A safety hand book shall be provided for ready reference if required.
20. Contractor shall indemnify AFD from any kind of losses due to the activities of the contractor.
21. Contractor shall take sufficient insurance policy to safe guard himself from liability, workman compensation etc.
22. Security deposit 10% of the total cost of the project, which will be submitting in the form of bank guarantee at time of acceptance of order and will be released after 12 month after completion date.
23. Defect liability for the work would be 12 month after completion date.
24. Contractor may appoint their independent engineer for supervise the work at site and it is mandatory.

AmulFed Dairy shall not accept the offer, received later than the date mentioned above.

Yours faithfully,

For AmulFed Dairy, Gandhinagar.

Name of the Project: Construction of Toilet block at AmulFed Dairy, Gandhinagar.					
Client: AmulFed Dairy, Bhat, Gandhinagar					
Sub: BOQ for Civil and Plumbing works for Toilet Block.					
Sr.no.	Item Description	Unit	Quantity	Rate	Amount
A)	CIVIL WORKS				
	1.0 EARTH WORK				
1.01	Earth work in excavation by mechanical means / manual means in foundation, trenches, drains, pipe, under ground sump, septic tanks, soak wells, manhole, storm water channel etc. including necessary shoring & strutting, dewatering (if required), getting out the excavated soil, sorting and stacking of useful material, dressing of the sides, ramming of bottom and disposal of surplus excavated earth within the campus/ site as directed by engineer-in-charge. For all civil, electrical and plumbing works. For All kinds of soil.				
	a) Depth upto 1.5	Cum	114.00		
	b) Depth upto 1.5 to 3m	Cum	99.00		
1.14.b	Filling with available selected approved quality excavated earth (excluding rock and black cotton soil) brought from anywhere within the campus (client's earth) in plinth and sides of foundations, in layers not exceeding 30 cm. in depth with optimum moisture conditions to give at least 95% of the maximum dry density (proctor density) including watering, ramming and compacting using mechanical vibrator (static / pneumatic) of required capacity, including freight, transportation, loading, unloading, screening, passes etc. all complete as directed by the Engineer-in-charge (Consolidated measurements of fill shall be paid for under this item). The rates shall include for all leads and lifts including transporting using mechanical / manual means within the campus area. Note: Using excess available excavated earth from foundations and dressing of the plot area. (For all civil, plumbing and electrical works).	Cum	128.00		
1.15.b	Supplying and Filling in foundation, plinth with murrum/ good yellow or selected soil brought from outside in plinth and sides of foundations, in layers not exceeding 30 cm. in depth with optimum moisture conditions to give at least 95% of the maximum dry density (proctor density) including watering, ramming and compacting using mechanical vibrator (static / pneumatic) of required capacity, including freight, transportation, loading, unloading, screening, passes etc. all complete as directed by the Engineer-in-charge (Consolidated measurements of fill shall be paid for under this item). The rates shall include for all leads and lifts including transporting using mechanical / manual means within the campus area. (For all civil, plumbing and electrical works). (Royalty shall be paid by contractor and supporting document submitted to client for verification)	Cum	53.00		

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
1.16	Filling in plinth with good quality river sand under floors including watering, ramming, consolidating and dressing complete for all lead and lift/ depth as directed by engineer in charge.	Cum	5.00		
1.20	<p>Providing and injecting Chemical emulsion for PRE - CONSTRUCTIONAL anti-termite treatment and creating a chemical barrier on the top surface of plinth filling, inside junction of wall and floor, on top of damp proof course (DPC) or on masonry at level of plinth filling as per IS 6313 (Part-2)-1981 using chemical like chloropyripos emulsifiable, Biflex TC, lindane (IS 8944-1978) 20EC mixed with water in 1:19 ratio (1 liter chemical : 19 liters of water). The emulsion shall mentioned below, all as per specification and directions of Engineer-in-charge. Plinth area in plan at GF shall only be measured and paid. A guarantee bond of 10 years shall be furnished. Rate shall be inclusive of material required for Anti Termite Treatment and labour and equipments required for applying all etc complete as directed by engineer in charge.</p> <p>A1) Bottom surface and the sides of the excavation made for masonry foundations at the rate of 4 liters/sqm (wherever applicable)</p> <p>A2) At the rate of 7.5 liter/ sqm to the backfill at the depth of 500mm below the original ground level. The soil in the immediate contact with the vertical surface of RCC column/ Masonry shall be treated.</p> <p>B) Top surface of the plinth filling including damp proof courses at the rate of 5 liter/sqm of internal plinth area etc. complete.</p> <p>C) At the rate of 7.5 liter/ sqm to the internal vertical surface from original Ground level to top of the earth filled in the plinth.</p> <p>D) At the rate of 7.5 liter/ sqm to the external vertical surface.</p>	Sqm	105.00		
	2.0 PCC AND RCC WORK				
	<p><u>General Note</u> : All Concrete shall be machine batched, machine mixed and machine vibrated design mix fair finish / smooth finish reinforced cement concrete design for severe condition with minimum cement content as per grade (with fly ash, content<15%) and as per latest IS 456 for all PCC & RCC elements of all shape, all size, at all places and heights/ depths including transporting, laying of concrete to site by any means like pumping or tower crane etc., finishing and curing etc. and including Admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete as per direction of Engineer-in-charge. Rate shall be inclusive of providing grooves, drip moulds, ghisis, pockets, cutouts etc. and labour for insert sleeves if any wherever required while casting. Rate also to include lift charges and scaffolding for all heights / depths from FFL / GL. (unless otherwise specified)</p>				

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
2.01	Providing and laying in position machine mixed, machine vibrated plain cement concrete (PCC) of specified grade including all necessary dewatering, casting in panels of any size and thickness wherever necessary, to shape and depth as specified at all locations and with all leads and lift/depth, compaction, vibration, curing, transporting and pumping wherever necessary etc. complete as directed by the Engineer.				
2.01.4	1:4:8 (1 Cement: 4 coarse sand : 8 graded stone aggregate 20/40 mm nominal size)	Cum	61.00		
	REINFORCED CEMENT CONCRETE				
2.13	Providing and laying in position machine mixed, machine vibrated design mix - (as per IS-10262) onsite manufactured cement concrete for all RCC elements of specified grade using graded black trap stone aggregates of maximum 20mm nominal (down graded) size obtained from approved quarry including fine aggregates conforming to latest IS 383 with minimum cement content for durability shall be followed as per approved design mix and latest IS 456 (whichever is higher) for all elements of any shape and size, at all places and heights/ depths including transporting, laying of concrete to site by any means like pumping etc., vibrating, finishing and curing etc. and including admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, to improve workability without impairing strength and durability as per direction of Engineer-in-charge. Rate shall be inclusive of providing grooves, drip moulds, ghisis, pockets, cutouts etc. and labour for insert sleeves if any wherever required while casting. Rate also to include lift charges and scaffolding for all heights / depths from FFL / GL. In case of any failure to produce machine mixed concrete, contractor shall use ready mix concrete as per specification from approved manufactureres after obtaining prior approval of engineer in charge.				
2.13.2	Excluding the cost of centering, shuttering and cost of reinforcement				
2.13.2.1	Upto Plinth level				
2.13.2.1.2	M25	Cum	43.00		
2.13.2.2	Above Plinth level				
2.13.2.2.2	M25	Cum	45.00		

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
2.17.a	Supplying, fabricating and placing in position reinforcement bars conforming to IS-1786 reinforcement for RCC structure/ items as per design including transporting steel to the work site, handling wastage, decoiling, cutting, bending, cranking, fabricating to required shape, placing in position, binding with 18 guage (1.22 mm) GI wires, welding if necessary by using approved welding rods etc. for all levels, all place, all height as per drawing etc. complete as directed by the engineer-in-charge. The quoted rate should be inclusive the cost of binding wire, chairs, pins, brackets and the same will not be measured and paid separately. (rolling margin's and wastage shall not be paid.) Measurement will be made on the length basis and converted into weight by using standard co-efficient). The reinforcement shall be				
2.17.a.6	TMT bars Fe- 500, yield stress not less than 500 N/mm2	Kg	8,800.00		
2.20	Providing in position PVC pipe sleeves of 6Kg/cm2 and length as per design for following diameters for services wherever pipes pass through walls / slabs / beam. All pipes shall be accurately cut to the required sizes, laid as per drawing, kept in the position while concreting, and burrs removed before laying. Open ends of the pipe shall be closed as the pipe is installed to avoid clogging while concreting. Measurement should be taken up to two decimal. (minimum 0.01 mt.). Rate shall be inclusive of removal of sleeves before water proofing or grouting. For all floors / all levels / all heights.				
2.20.3	110mm Diametre	Rmt	5.00		
2.20.4	75mm Diametre	Rmt	5.00		
2.26	Charges for making holes in RCC wall, slabs or any other RCC members by diamond core cutting machine of HILTI or equivalent including disposing the debris. Measurement will be taken for the depth of holes in numbers. For, disposal of the debris as per the disposal item. For all floors / all levels / all heights. with necessary supporting frame structure.				
	A) Diameter of holes upto 100 mm clear	Nos.	4.00		
	B) Diameter of holes from 100 to 150 mm clear	Nos.	4.00		
	C) Diameter of holes from 150 to 300 mm clear	Nos.	6.00		
	3.0 FORM WORK				
3.01	Form Work (Centering and shuttering) including strutting, propping, bracing etc. complete to give fair / smooth finish using best quality ordinary timber planking, shuttering plywood (plain or laminated) or steel plates with MS adjustable steel props, H frames with bracing, adjustable spans, etc. including removal of forms for foundations, footings, bases of columns, walls, slabs beams, sills, lintels, coping, staircases, arches, chajjas etc. in all shapes at all levels etc. complete as directed by engineer-in-charge. The Height of propping and centering from supporting floor to ceiling should not exceed 4.5 meter.	Sqm	598.00		
	4.0 MASONRY WORK				

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
4.02	Providing and laying brick work using common burnt clay conventional building bricks conforming to IS 1077-1992 having compressive strength not less than 35 Kg/cm ² in any shape and thickness including finishing, curing, scaffolding for all height all level etc. complete as directed by engineer-in-charge.				
4.02.1	In foundations and Plinth				
(ii)	CM 1:5 (1 Cement : 5 coarse Sand)	Cum	71.00		
4.02.1	Super Structure above plinth for all levels				
(ii)	CM 1:5 (1 Cement : 5 coarse Sand)	Cum	73.00		
4.04.a	Providing and laying half brick masonry with common burnt clay building bricks having compressive strength not less than 50 Kg/cm ² at all heights, levels, locations and shapes etc. including finishing, curing, scaffolding etc. complete as directed by the engineer-in-charge.				
4.04.a.2	Without Reinforcement				
(A)	115 mm thick				
(ii)	CM 1:4 (1 Cement : 4 coarse Sand)	Sqm	66.00		
	5.0 DOORS/WINDOWS WORKS				
5.01	Providing and fixing partly panelled and partly glazed door shutters / fixed partition with 20 microns SS finish anodising. Aluminium frame of size - 100 x 44.5mm. Styels and rails as per the drg. with 5mm thick wired glass as top panel and 8 mm thick both side prelaminate exterior grade compact sheet as bottom panel. Rate shall be inclusive of weather strip / wool pile, SS heavy duty hinges, ISI make Door Closer, SS 304 handle of 25 mm dia. and 300 mm long of KICH or equivalent make, concealed dead lock, baby latch of SS, concealed stoppers of 300 mm size on sides of the vertical member shall be provided. Rate shall be inclusive of all accessories and rough ground of supreme becker rod, neutral grade silicone sealant etc. complete. Samples of all the materials and anodised sections are to be approved from Architect / Engineer in-charge prior to procurement.	Sqmt.	13.00		
5.02	Providing and fixing three track sliding aluminium windows with aluminium frame and intermediate members with 20 micron SS finish anodising with 5mm thick wired glass and ss mosquito. net jali.All aluminium sections shall be of square sectiond with size of 50 + 3 mm and having wall thickness of minimum 2 mm. Rate shall be inclusive of supreme PU becker rod on all sides with neutral grade silicone sealant of approved shade. Rate shall be inclusive of all accessories and rough ground, neutral grade silicone sealant etc. complete. Samples of all the materials and anodised sections are to be approved from Architect / Engineer in-charge prior to procurement.	Sqmt.	18.00		
5.05	Providing and fixing ISI make door closer including necessary fittings and accessories etc. complete.	Nos.	9.00		

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
5.07	Providing and fixing Lowers - Type ventilators made out of standard heavy duty aluminium sections frame, having 6mm thick wired glass strips as per drawing including necessary fitting etc. complete as directed.	Sqmt.	4.00		
5.08	Providing, making and fixing FRP door of approved make size of door fame of 100mm x 65mm and 35mm thick shutter, polish finish including necessary hardware fixture fitting like Aldrap, Handle, Hinges, Tadi, Stopper, Anchor fastner, screw and nail etc. complete as directed.	Sft.	240.00		
7.0 PLASTERING AND POINTING WORK					
7.01.b	Providing and laying average 10 mm thick single coat mala finish (finished smooth with steel trowel) plaster in CM 1:3 (1 cement : 3 Coarse sand), on ceilings and stair soffits at all floors, all shapes and all heights with necessary scaffolding, finishing, curing, making grooves, forming pattas, hacking properly to RCC surface (144 nos. of hacks per sqft) etc. complete as directed by Engineer-in-charge.	Sqm	100.00		
7.02.b	Providing and laying average 15 mm thick single coat mala finish plaster in CM 1:3 (1 cement : 3 Coarse sand) on sides of brick work/ blocks wall/ RCC work at all floors, all shapes and all heights with necessary scaffolding, finishing, curing, making grooves, forming pattas, hacking properly RCC surface etc. complete as directed by the Architect and Engineer-in-charge.	Sqm	180.00		
7.03.a	Providing & laying average 18 mm thick mala finish cement plaster in two coats on sides of masonry work / block wall / RCC wall at all heights, all shapes and all levels with 12 mm thick under coat in CM 1:4 (1 cement : 4 coarse sand) rough wired finish and 6 mm thick finishing coat in CM 1:3 (1 cement : 3 fine sand) mala finish (finished with steel trowel) including scaffolding, finishing, curing, making grooves, forming pattas and drip mould, hacking RCC surface etc. complete, as directed by Engineer-In-charge.	Sqm	400.00		
7.04.a	Providing and laying average 18-20 mm. thick Sand faced cement plaster on masonry work / RCC wall upto any height above ground level and for all shapes consisting of first coat (backing coat) average 12-15 mm. thick with CM 1:4 (1 cement: 4 coarse sand) rough wired finish and second coat of average 6 mm. thick uniform grained textured by using wooden Gutka, in CM 1:2 (1 cement: 2 sand), including scaffolding, hacking to RCC surface, forming grooves, drip moulds, pattas, curing etc. complete as directed by engineer-in-charge.	Sqm	336.00		

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
7.10	Providing and fixing G.I. hexagonal chickenmesh of size 20mm x 20mm of 22 gauge at junction of concrete and brick work or between different materials after making "V" groove between two different material surface and filled with rich cement mortar and @ 100mm on each side of surfaces including necessary "U" nails / screws / washers with cleats for fixing, overlaps, scaffolding at all floors / all levels / all heights / all shapes etc. complete as per drawing / specifications and direction of Engineer-in-charge. For civil, plumbing, electrical & infrastructure works.	Sqm	75.00		
8.0 WATERPROOFING WORKS					
8.01	<p>Note: All the waterproofing treatment shall be executed through a water- proofing agency approved by the Engineer In Charge. A written guarantee on non-judicial stamp paper shall be submitted by the main Contractor and his sub contractor who has carried out work for a minimum period of ten years from the certified date of completion for the satisfactory performance of the entire water-proofing system.</p> <p>Providing and laying Indian type brickbat coba terrace water proofing treatment average 115mm thick and minimum thickness at khurra as 65 mm including preparation of surface as required for treatment on roofs, balconies, terraces etc at all floors consisting of following operations and furnishing a guarantee bond of 10 years on stamp paper in prescribed format.</p> <p>1) Cleaning and applying a cement slurry at the rate 2.75 Kg per Sqm with mixed with water proofing compound as manufacture's specification as directed by engineer-in-charge over the slab including adjoining walls up to 300 mm height including cleaning the surface before the treatment.</p>	Sqm	48.00		

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
	<p>2) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 as per manufacturer's specification and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls up to 300 mm height including rounding of junctions of walls and slabs. 3) After three days of proper curing applying a second coat of cement slurry at the rate 2.75 Kg per Sqm admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. Finishing the surface with 20 mm thick joint less cement mortar of mix 1:4 (1 cement :4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and nylon or poly propylene or glass fiber/ fibercloth as approved by Engineer-he surface before the treatment.clude lift charges and scaffolding for all heights / depths from FFL / GL.</p> <p>In case of any failure to produce machine mixed concrete, contractor shall use ready mix concrete as per specification from approved manufactureres after obtaining prior approval</p>				
	9.0 PAVING WORKS				
9.03.a	<p>Providing & laying double charge, first quality Vitrified tiles of size upto 600 X 600 and 8 -10 mm thick of approved make, colour and finish (fully polished, Matt, Satin, Satin Guard, anti skid) in desired pattern in floor areas with residue and skirting as per drawing/ specification. The tiles shall have minimum scratch hardness of 7 on Moh's scale with a density of 2.2 to 2.3 & bonding strength of 250 kg/sqcm. The tiles shall be set with white cement slurry (3.3 kg. cement/m2.) over a minimum 25 mm. thick cement sand mortar (1:6) bedding on average 40 mm thick (1:3:6 - 6mm down aggregates) wired finish screed & laid to proper gradient. Finishing to be done with flush pointing in white cement & matching approved pigment including curing & cleaning with mild oxalic acid etc. complete for all floors/ all levels, as per drawing/ specification and or as per direction of Engineer in Charge for flooring, skirting or channel work etc. complete. The rate should be inclusive of protection of flooring until the handling of the project by covering the joints with plastic bubble sheet of approved make.</p>	Sqm	128.00		

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
9.03.b	Providing and laying in position double charge, first quality vitrified wall tiles of size upto 600 x 600 and 8-10 mm thick of approved make, color, Size and surface finish (Matt, Satin, Glossy) for dado of toilet, kitchen, pantry etc as per design and drawing. The tiles shall be fixed after applying cement slurry (3.3 kg. cement/Sqm), with 1:1 cement fine sand mortar 6 mm thick (butter to tiles) in dado line level and as per drawing/ specification and / or directed by Engineer in Charge. Rate shall be inclusive of jointing with matching color pigment and white cement and 15 mm thick wired finish plaster in CM 1:4 and filling flush joints.	Sqm	282.00		
9.10.a	Providing and laying minimum 25 mm (25 to 30 mm) thick hand dressed/ machine cut green polished kotah stone of approved quality, selected and sorted for uniform colour, including fine smooth, and scratchless semi mirror polishing, (without waxing), and having thin paper joints as per sample approved by Architect, for floor, otta, skirting etc. of required sizes up to 600 mm size as per design in normal pattern (square or rectangular) with staggered joint/ continuous joints and residues/ bands of the same material as per drawing for all places/ all levels/ all heights, including 1:6 (1 cement : 6 sand) cement mortar bedding of average 40mm thickness, jointed with grey cement etc as per drawing/ specification and/ or as directed by EIC. The rate shall be inclusive scratch free semi mirror polishing using different grades of Emery, protecting the flooring uptill handing over etc. including curing, buffing after final polishing up to the satisfaction of the Architect or Engineer-in-charge etc. complete. (NO WAXING WILL BE PERMITTED).	Sqm	9.00		
9.10.d	Providing and laying minimum 25mm (25 to 30 mm) thick machine cut green polished kotah stone of approved quality, selected and sorted for uniform colour, including fine smooth, and scratchless semi mirror polishing (without waxing) and having thin paper joints as per sample approved by Architect, for platforms, staircases, sinks, shelves, morry, parapet top, window sill, door window jambs, residue etc. in floor or facia etc. 1000mm to 1500mm long including necessary machine - cut (uniform thickness), chamfered and polished edges, necessary cement mortar bedding in CM 1:3 of required thickness and jointed with grey cement as per drawing/ specification and/ or as directed by EIC. The rate shall be inclusive of making rebates of 10x10mm in risers to form grooves between treads and risers, and fine polishing of top surface and all edges, rebates, grooves and protecting the flooring uptill handing over etc. including curing, finishing, buffing after final polishing up to the satisfaction of the Architect or Engineer-in-charge etc. complete.	Sqm	28.00		

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
9.24.c	Providing & laying 18 to 20 mm mirror polished granite counter for wash basin/ SS sink in required sizes and shapes including chasing /cutting as per drawing and sample approved for all places and all heights. The rate shall be inclusive of making holes for taps and cutting the granite for counter type wash basin, lab sink/ SS sink. The front edge 36 to 40 mm thick shall be made by pasting 50 mm wide granite strip with epoxy. The supporting structure shall be SS 304 grade SS box of size 25mm x 50mm x 2.6 mm pipe with hilti or equivalent fasteners.The rate shall be inclusive of granite, labour, EPDM rubber between granite and supporting pipe, tools tackles, making moulding, mirror polishing of moulding, edges, chasing the walls and making good after completion, curing, finishing etc complete to the satisfactin of Architect and EIC. The only top surface shall be measured in smt. The cost of sink/ wash basin/ SS frame work shall be measured and paid seperately in relevent tender item. (Basic rate of Granite-Rs.1600/Smt)	Sqm	11.00		
9.24.d	Providing & laying 18 to 20 mm thick both side mirror polished granite of approved shade and quality, seleted and sorted for uniform color for urinal partition/ division plate as per design and in required sizes and shapes after chasing plastered wall /cutting of dado with cutter machine fixing shall be carried out in white cement sand mortar (1:1) with matching pigment and/ or necessary adhesive. (Only finished granite work shall be measured). The rate includes rounding, champhering and mirror polishing of edges, curing, finishing etc. The work shall be carried out as per the approval of architect and engineer-in-charge. (Basic rate of Granite-Rs.1600/Smt)	Sqm	17.00		
9.15	Providing & fixing 2.5 cm wide roughened strip to form antiskid surface on any type Flooring including granite as per drawing, specification and/ or as instructed by Architect and Engineer in Charge including forming straight deep two number gishi (groove), 6 mm. Wide & 4mm deep & roughened strip by chisel in between as per sample approved by Architect including polishing on two sides of the roughened area and in grooves as per drawing for all places/ all levels/ all heights etc. complete as directed by engineer in charge.	Rmt	25.00		
9.04.a	Providing and laying cement concrete pavement (IPS) of average 50mm thickness with 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 6-12mm nominal size) in alternate panel of approx. 1.5 meter in any direction, including finishing with a floating coat of neat cement and false grid marking of 300mm X 300mm square with string, etc., complete pavement / flooring in required gradient as per drawing/ specification and/ or as directed by Engineer in Charge etc. complete for all places/ all levels/ all heights.	Sqm	28.00		

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
9.09.a	Providing & laying broken china mosaic flooring for plain and curved surfaces, comprising of 12 to 20 mm. size broken pieces of glazed tiles (one or more colours, as directed) of Somany, Asian, Jonson or equivalent, laid over cement mortar 1:3 bedding including applying cement slurry at the rate of 2.75 kg per sqm on plain or sloped surfaces. The flooring/ dado shall be tampered with wooden rammer not exceeding 2 Kg in weight to bring the mortar up to the surface, including rounding of the junctions and extending them upto 15 cm. along the parapet wall. The rate shall include any type of bands, vata, any colour, any pattern or design as per drawing, curing, cleaning with water and oxalic acid etc. complete as sample approved by Architect/ EIC. (Only plan area shall be measured and paid. No Vata shall be measured). Rates should be inclusive of acid washing and vata.	Sqm	98.00		
9.10	Providing and fixing white glazed tiles	Sqm	50.00		
9.26	Providing and laying interlocking/ Non- interlocking Colored paver blocks of high density 80 mm thick M-50 grade for footpath, parking areas, Road, service lanes and other areas as mentioned in the drawing. Including providing and laying 50 to 80 mm thick average bedding layer of coarse sand below paver block as per required grading and specification. Laid paver block shall be mechanically compacted. The work of the paving blocks shall be executed in line and level by skilled mason of flooring work only. It should be laid in such a way that the no cutting of the paver block to be necessary. Cutting of paver block by machine cut only and laying to be done by skilled flooring mason. The Finished surface of the Paver Block shall have Coarse Sand Texture Finish. Paver blocks shall be compacted and shall be re-laid if necessary.	Sqm	48.00		
	10.0 IRON AND STEEL WORKS				
10.01.b	Structural steel work in riveted, bolted or welded in built up sections framed work including supplying, fabricating, cutting, assembling, hoisting and fixing in position at all heights of all shapes and size with all leads and lifts as per latest IS 4923, IS 1161, IS 806 for the work of monkey ladder, all types of staircase, handrail, railing, grill, gate, duct platform, insert plate, grating, brackets, facade sub structure, framing for parking shed, MS post and frame work for fencing and similar works. It should be including necessary rolled joists, channels, angles, tees, flats, angle cleats, gusset plates, position hip and jack lifters, purlins, etc. including cutting and welding the members as per detailed drawing and design.				

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
	<p>The rate shall include dry sanding, degreasing (wet cleaning) & preparation of rustfree surface manually or mechanically, metal putty to make the surface even and smooth, 1 coat of zinc chromate primer of approved make and 2 top coats of enamel Paint of approved shade and make as per manufacture's specification over all the surfaces of the steel sections or as specified in the drawing. (Only standard measurements will be paid for as actual cut length used at site). Shop drawings for the connection details shall be prepared for the approval of the architect. Rate shall be inclusive of cutting, wastage, welding, bending (shop at site), bolting wherever necessary, in position welding of required length, grinding, finishing edges, filling the welded spots with metal putty, hot deep galvenizing and PU paint with primer. It should also include the cost of approved ISI make and size zinc coated nut-bolt and Anchor fasteners of Hilti or Fisher as approved by engineer-in-charge.</p> <p>The fabrication work shall start after approval of finished sample as per drawing by Architect. Fabrication works to be carried out as per relevant IS standards.</p>				
10.01.b.1	Rolled steel sections (equal and unequal angles, square or round bars, flats, angles, tees, channels, plates of different sizes etc.), Solid flats, bars, RHS, SHS, tubular hollow sections of specified thickness & yield strength of TATA or equivalent as approved by EIC & as per drawing	Kg	100.00		
10.09.a	Fabricating and fixing SS railing of 304 grade made out of round pipes, square or rectangle sections in satin / brush finish including supporting fittings made out of SS 304 grade, anchor fastener of stainless steel, SS base plate, argon arc welding etc. on concrete surface, brick surfaces or floor including bending and bends as per the drawing with best (high) quality finish as per the approval of Architect and as directed by engineer-in-charge	Kg	100.00		
11.0 PAINTING AND POLISHING WORKS					
11.03.a	<p>Providing and applying three coats of plastic emulsion paint from following of approved make, color & shade (first two coats with brush and final coat with roller), on newly dry interior plastered surface at all heights give an even shade, including required coats (minimum two coats) white cement based putty of Birla white / Acrylic putty of Asian paint or equivalent after thoroughly brushing the surfaces free from mortar dropping and other foreign matter and also including preparing the surface even and sand papered smooth etc. after applying every coat of putty. Priming coat of alkali resistant cement primer (water or solvent based) is to be applied on putty etc. complete as directed by engineer-in-charge. Sample to be approved before starting of the work. The rates shall include the cost of filler for filling the cracks on surface.</p>	Sqm	780.00		

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
11.05.a	Providing & applying External Acrylic Paint from following of desired shed from ICI or equivalent in minimum three coats (1 coat of exterior grade primer and 2 coats of paint) to give an even shade with brush on exterior sand faced plastered surfaces / mala plastered surfaces / textured surface or any surfaces at all heights including scaffolding, thoroughly brushing the surfaces with sand paper to make it free from mortar dropping and other foreign matter etc. complete as per the manufacture's specification and up to the satisfaction of Engineer in charge. The rate shall include the cost of filler for cracks on the surfaces. (Rate shall be inclusive of minimum 1 coat of exterior grade cement based putty on Mall finish surface and coat of exterior grade primer).	Sqm	336.00		
	15.0 GENERAL DEVELOPMENT WORKS				
15.14.2	Pre cast concrete kerb	Rmt	25.00		
15.18.1	Providing and fixing FRC Heavy Duty Man Hole Cover with frame 600mm x 600mm or 600mm clear opening dia with 100x2mm MS flat allround, 16mm ø plain round bar for lifting the cover & should be fitted with plastic cups etc complete as directed by engineer in charge. On the upper periphery of frame 25 x 3 mm wide MS flat with hot dip galvanizing should be well embed in concrete to protect the edges of frame.	Nos.	10.00		
	Net Amount for Civil Works (Rs.) = A				

B)	PLUMBING WORKS				
	Section 1.00 - Water supply				
1.01.b	Providing and fixing galvanised iron (GI) mild steel tube (Medium grade Class B) of Tata make or equivalent , conforming to IS: 1239, including tube fittings of R Brand such as sockets, unions, reducers, long or short bends, elbows, nipple, flanges, check-nuts, tees, etc., complete in proper line and level, including necessary supports viz., clamps, brackets, as specified, jointing with screw joints, using hold tight and jute for pipes and Teflon tape for fittings and fixtures, concealed to wall, ceiling and floor including making them good, testing and wrapping the pipes and fittings with Hessian cloth and painting with 2 coats of approved paint - (bituminous paint) and then wrapping the same with plastic etc., complete of the following nominal bore (NB) size:				
	1) 65 mm	rmt	60.00		
	2) 50 mm	rmt	40.00		
	3) 40 mm	rmt	40.00		
	4) 25 mm	rmt	50.00		
	5) 15 mm.	rmt	80.00		

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
1.07.e	Providing, fixing and testing, heavy quality gun metal or full way wheel valve of Zoloto make or from the list of approved make, with screwed / flanged end confirming to IS 778 bearing ISI mark, factory tested at 20 kg/m2., on GI lines including union of R Brand on either side of valve if screwed end or pair of GI flange & EPDM washer with GI coated nut bolt if flanged end for the following nominal bore (NB) size:				
	3) 65 mm	no.	2.00		
	4) 50 mm	no.	2.00		
	5) 40 mm	no.	2.00		
	7) 25 mm	no.	2.00		
	Section 2.00 - Sanitary installation				
2.01.a	Providing and fixing glazed vitreous chinaware Orissa Pan water closet including all necessary fixing accessories including cutting and making good the wall and floor etc. complete as per drawing and direction and satisfaction of Engineer in Charge with following or equivalent : - Color : White - WC - Hindware - cat no 20042 - eco - Size - 580mm x 440mm - CP heavy duty metropole flush valve with CP wall flange - Cat. No. FLV1085	no.	3.00		
2.02.a	Providing and fixing white glazed vitreous china wall hung type European WC pan intergrated 'P' or 'S' trap with or without vent (Hindware ,CERA) with concealed pipes M.S. chair brackets including heavy duty plastic toilet sheet, jet spray and other accessories etc. complete as directed.	no.	2.00		
2.03.b	Providing & fixing vitreous china under counter type wash basin including all necessary fixing accessories, filling the gap between counter and wash basin with approved make and shade neutral cure sanitary grade silicone sealant including cutting and making good the wall and floor etc. complete as per drawing and direction and satisfaction of Engineer in Charge with following or equivalent : a) Color - White b) Wash basin - under counter type - Hindware - cat no 10049 - Zen c) Waste coupling - Jaquar- cat no: 709 d) Bottle trap - Jaquar - cat no 769 e) Bracket with necessary fixing accessories f) Braided hose - Jaquar - cat no ALD-803B	no.	6.00		

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
2.04.a	Providing & fixing vitreous china urinal flate back large including all necessary fixing accessories, filling the gap between urinal and wall with approved make and shade neutral cure sanitary grade silicone sealant including cutting and making good the wall and floor etc. complete as per drawing and direction and satisfaction of Engineer in Charge with following or equivalent : a) Color - White b) Urinal - HINDWARE- 60002 c) Waste coupling - Jaquar- Allied - 709 d) Bottle trap - Jaquar - Allied - 769 e) Necessary fixing accessories viz spreader, brass cp connection ,CI brackets ,brass screws etc.	no.	15.00		
2.06.d	Providing and fixing brass CP URINAL FLUSH VALVE for urinal of approved make as per drawing and direction and satisfaction of Engineer in Charge with following or equivalent a) JAQUAR-PRESSMATIC - 077	no.	15.00		
2.07.a	Providing and fixing brass CP bib cock with wall flange of approved make as per drawing and direction and satisfaction of Engineer in Charge with following or equivalent a) Jaquar CON 037KN	no.	4.00		
2.10.d	Providing and fixing a surface type soap dish / tray of Jaquar make Continental series Cat. No. 1131N or equivalent complete with clean surface to original conditions, etc., complete. As approved by architect and Engineer in charge	no.	6.00		
2.12.a	Providing and fixing brass chromium plated heavy quality pillar-taps/cocks on water supply pipelines of 15mm dia with or without extension piece but with a flange, as approved by the Consultants etc., complete.	No.	6.00		
2.12.b	Providing and fixing brass CP Pressmatic Pillar cock / bib cock with wall flange of approved make like Jaquar as per drawing and direction and satisfaction of Engineer in Charge with following or equivalent.	No.	6.00		
Section : 03 Traps and Drain					
3.01.c	Providing and fixing a cast iron 'P' trap of self-cleansing design conforming to relevant IS with a water seal not less than 50mm, with or without vent of chilly make and 100 mm inlet X 100 mm outlet, including setting the trap in 1:2:4 CC, etc., complete as per drawing and direction and satisfaction of Engineer in Charge for the following sizes ;	nos.	6.00		
3.03.a	Providing and fixing in position stainless steel floor drain grating 156mm x 156mm overall size for 100mm dia pipe of approved make including making necessary cutting of floor and making it good etc complete as per drawing and direction and satisfaction of Engineer in Charge or equivalent. (A) Chilly - Cat. No. CCT-S-156 (cockroach trap)	nos.	12.00		
Section 5.00 - External drainage					

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
5.01.a	Providing and laying salt glazed stone-ware pipes of 150 mm diameter (to the level and slope) and jointing with stiff mixture of CM 1:1, at a depth from 1.5 m up to 3 m including testing of pipes and joints, etc., The rates also includes necessary excavation and filling of trenches etc. complete.	rmt	15.00		
5.01.a	Providing and laying salt glazed stone-ware pipes of 100 mm diameter (to level and slopes) and jointing with stiff mixture of CM 1:1, upto 1.5 m depth including testing of pipes and joints, etc., The rates also includes necessary excavation and filling of trenches etc. complete.	rmt	15.00		
5.01.b	Providing and fixing a salt-glazed stoneware gully trap, class 'A' of 230 mm dia inlet and 150 mm outlet with CI grating at the top, etc., complete.	no.	6.00		
5.01.b	Providing and fixing a salt-glazed stoneware gully trap, class 'A' of 150 mm dia inlet and 100 mm outlet with CI grating at the top, etc., complete.	no.	3.00		
5.02.a1	Providing and laying in trench reinforced concrete non-pressure IS class NP-2 pipes of 230 mm internal diameter upto 1.5 m depth on RCC cradle if specified (to the level and slope) and jointing with collars and butt-ends prepared for collar joints; including filling the joints with CM 1:1 and testing them etc., complete (RCC cradle shall be measured and paid in the relevant items of tender for civil works.).	rmt	80.00		
5.02.a2	Providing and laying in trench reinforced concrete non-pressure IS class NP-2 pipes of 230 mm internal diameter at a depth from 1.5 m to 3 m on RCC cradle if specified (to the level and slope) and jointing with collars and butt-ends prepared for collar joints, including filling the joints with CM 1:1 and testing of joints, etc., complete (RCC cradle and excavation and backfilling shall be measured and paid in the relevant items of tender for civil works.).	rmt	50.00		
5.05.a	Providing and fixing a cast iron grating, frame and cover of NECO make of specified clear size, shape and weight, including carting from store to site of work, fixing in CC and finishing with 3 coats of anti-corrosive paint etc. complete. For grating, IC, GT, MH, storage tank cover hinged etc.	kg	100.00		
5.05.b	Providing and fixing, CI steps of 5.3 kg in manhole, water tank, septic tank, etc., of size 500 mm x 150 mm x 22.5 mm and painting with 3 coats of anti-corrosive paint, etc., complete.	no.	40.00		
Section 6.00 - Miscellaneous					

Sr.no.	Item Description	Unit	Quantity	Rate	Amount
6.01.a	Providing and fixing an approved quality supreme make or equivalent heavy duty 6kg/sqcm of 200mm dia PVC pipes. Concealed complete jointing with rubberising and airtight joints. With necessary specials. Bends such as ' Y ' juncton. ' T ' junction (both single and double) including plugs shoes cowls. flange compression type fittings. wall clips. etc lubricant or jointing material. including testing, cutting, making good the wall, ceiling and floor etc complete as directed	rmt	12.00		
1	Labour charges for 300mm dia Drilling/Auguring of Road crossing for drain line laying work upto 1.40mtr depth including necessary excavation of both side of road as requirement, specials tools tackles for drilling / auguring work, earth filling etc. complete as directed as per engineer in charge.	Rmt	12.00		
2	Providing and Fixing 5000 Ltr Capacity Sintex make PVC tank including necessary inlet and outlet connections and placing at any height etc. completed as directed.	No	1.00		
Net Amount for Plumbing Works (Rs.) = B					
Total Amount C = (A+B)					