

AFD: CIVIL: INQ: 20250301

March 03, 2025

To,

Sub: - Inquiry for Civil & structural work for Freeze drying Plant at AmulFed Dairy Village Bhat, 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, "Civil & structural work for Freeze drying Plant at AmulFed Dairy Village Bhat, 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: 13th March 2025.

TERMS & CONDITIONS:-

- 1. Your rates should be including of all material cost, labour cost, octroi, loading, unloading at AFD site.
- 2. Specify Tax Condition. GST will be applicable or not. If tax condition is not specified your rates shall be considered as inclusive of all taxes.
- 3. It is advisable to visit the site before quoting your rates.
- 4. If work is to be carried out in emergency basis or during Shutdown period, contractor is bide to carry out work on emergency basis, night work, as per production schedule.
- 5. Payment terms: Within 30 days after submission of bill.
- 6. Quantity indicated here is estimated; it may vary on either side up to any extent however payment shall be made as per the actual work executed at site.
- 7. If any extra item is to be executed as per site condition, this will be paid as per actual rate analysis Plus 15 % profits and overheads to contractor.
- 8. All the legal/administrative records like muster roll, salary register, labour license, PF, ESI etc. to be maintain & submitted as and when required and contractor is the responsible for labour laws and rules/regulations etc.
- 9. Cleaning of site must be required after day-to-day work.
- 10. Your workmen should compulsory wear the identity card and uniform of the company while executing jobs in AmulFed Dairy if not follow then penalty would be Rs. 1000/-.

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- 11. 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.
- 12. We are ISO 22000 and 14000 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.
- 13. Chewing pan masala, tobacco & smoking is strictly prohibited in AFD premises and if any person is catch then penalty would be Rs. 5000/- each.
- 14. 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.
- 15. Water and Electricity will be provided by AFD at one point and it will be chargeable basis 0.5% for electricity and 0.5% for Water will be recovered from your bills.
- 16. During the work contractor must depute /appoint at least one year experienced one Diploma Civil Engineer as site engineer and shall remain responsible for the quality workmanship, timey execution the job as per the drawings and instructions of our engineers and liasioning with our engineers for satisfactory execution of the jobs in time and desired quality.
- 17. Follow the Safety rules and regulations including the personal protective equipments like Helmet, safety belt and other accessories if require, if any person not following the safety rules and regulations penalty would be Rs. 1000/- from the Bill.
- 18. Cement supply is in your scope and shall be OPC 53 Grade, Make: Ultratech, JK Laxmi, Binani
- 19. Reinforcement Steel FE 500 TMT Bar and structural steel supply is in your scope and Make: TATA, Vaizag, SAIL/ reputed ISI mark makes pre-approved by AFDG.
- 20. No price variation or price adjustment will be applicable for supply of cement and steel
- 21. All jobs executed must remain under one year defect liability period pertaining to defects due to bad workmanship, use of sub-standard materials, improper methods of application etc. and must be attended free of charge during this period.
- 22. Security deposit 5% 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 months from completion date.
- 23. Completion of the said work in 90 Days from Site Handover.

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

"Thanking you"

Yours faithfully,

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For AmulFed Dairy, Gandhinagar.

SUMMARY Civil & structural work for Freeze drying Plant at Amul Fed Dairy Village Bhat Gandhinagar AMOUNT SR.NO. DESCRIPTION EARTHWORK. PLAIN AND REINFORCED CEMENT CONCRETE 2 MASONRY WORK WOOD WORK, DOORS, WINDOWS 4 5 **ALUMINIUM WORKS** WALL FINISHES, FALSE CEILING 6 WATER-PROOFING 7 PAVING AND FLOOR FINISHING 8 9 IRON AND STEEL WORKS **ROOFING WORKS** 10 MISCELLANEOUS WORKS 11 PLUMBING WORKS SANITATION & FAUCET 2 SOIL & WASTE 3 WATER SUPPLY SYSTEM SEWERAGE AND DRAINAGE SYSTEM Rs. Total Amount of civil work Rebate if any Rs. **Total Amount After Rebate** Rs. Add @ 18% GST Rs. **Total Amount with GST** Rs.

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	Civil & structural work for Freeze drying Plant at Amul Fed	Daily VI	nage bhat		
tem No.	Item Desccription	Unit	Rate	Qty	Amount
	SECTION - 1.00				
1.0	EARTHWORK.				
1.1	Earth work in excavation in all types of soil, including murum by mechanical means (Hydraulic excavator) / manual means for foundations of wall, columns, plinth beam, basement, raft, ducts, trenches, underground sumps, septic tanks etc. including shoring strutting, bailing out water/ pumping of water if required, refilling the trenches, foundation pits, ramming, watering consolidating in 15 cms to 20 cms layers, lift upto 1.5 metre from existing ground level including removing and stacking simultaneously the surplus excavated stuff as directed within the site area and/or spreading soils in layers for site development filling in plinth in the same building and consolidating etc. complete as directed. The rate shall include the basic lead of 500 m from the site of excavation.	Cum		151.00	
1.2	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
1.2.1	All kinds of soil	Cum		151.00	
1.2.2	Extra for every additional lift of 3.0 m or part thereof in excavation / banking excavated or stacked materials.	Cum			
1.3	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 in layers of 15 cms to 20 cms. 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 (stsatic / pneumatic) of required capacity, including freight, transportation, loading, unloading,	Cum		91.00	
1.4	Providing and filling approved local sand in trenches, plinth, under sub base surrounding areas including watering and consolidation, transportation, loading, unloading, spreading etc. complete as directed.	Cum		10.00	
1.5	Providing and laying in a compact manner rubble soling in plinth or	Cum		12.00	
1.5	else where in 15 cm layers with specified stone aggregates using average 65 to 150 mm size stones including covering and leveling the surface with a layer of sand after filling the voids (upto 25%) with a largest possible stone speallings with smaller sized black trap stones 20-40mm, 40-63mm size and murram, consolidating each layer with vibro-rollers, etc complete as per detailed drawings including watering, leveling and compaction of soil layer below as per directin of Engineer in-charge etc complete as directed.	Cum		12.00	



	Civil & structural work for Freeze drying Plant at Amul Fed	l Dairy Vi	llage Bhat	Gandhinag	
tem No.	Item Desccription	Unit	Rate	Qty	Amount
1.6	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. A1) Bottom surface and the sides of the excavation made for masonry foundations at the rate of 4 liters/sqm (wherever applicable) 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. B) Top surface of the plinth filling including damp proof courses at the rate of 5 liter/sqm of internal plinth area etc. complete. 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. D) At the rate of 7.5 liter/ sqm to the external vertical surface below finished Ground level to the full depth of the filling complete. E) 1 liter / linear meter along the junction of wall and floor at all stages	Sqm		74.00	
1.8	Supplying and Filling in foundation, plinth with murrum/ good yellow or selected soil brought from outside in plinth, 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 (stsatic / pneumatic) of required capacity, including freight, transportation, loading, unloading, screening, passes etc. all complete as directed by the Engineer-incharge (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.	cum		27.00	
1.0	Carting away / Filling the excavated surplus earth / debris generated	cum		20.00	
1.9	out of dismantling of brick work / concrete as specified in the schedule of the quantities anywhere within the site/out side site within 5 KM area including loading at site, transportation, unloading, spreading, statutory approval for dumping if required etc complete as directed. Mode of measurement: The lower quantity worked out on the basis of a & b mentioned below shall be considered for payment. a) Quantity carted away shall be measured in CuM. Length, breadth and depth of the pit /dismantled element/structure shall be measured from where quantity of excavated earth/debris is carted away. OR	cum		20.00	
	b) 80% fill measurement of earth/debris in truck.				
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Date: 03/03/2025

Annexure: I

Technical Specification and Scope of work for Civil structural work for Freeze drying Plant at Amul Fed Dairy Village Bhat Gandhinagar.

	Civil & structural work for Freeze drying Plant at Amul Fed	d Dairy V	illage Bhat	Gandhina	gar
tem No.	Item Desccription	Unit	Rate	Qty	Amount
	SECTION -2.00		200 Mil Cross A 1927		COLUMN COLUMN COLUMN
	PLAIN AND REINFORCED CEMENT CONCRETE				
	General Note: 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 (without fly ash, content) 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-incharge. 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)				
2.1	Providing and laying machine mixed cement concrete in volumetric proportion 1:4:8 (1 cement: 4 coarse sand: 8 stone aggregates 40mm and down) for specified thickness 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 for foundations below walls, column footings, for sunk floor, raft at any depth below floors, pavements roads, plinth protection, etc. including centering and shuttering if required etc. complete as directed by the Engineering in charge.			16.00	
2.5	Providing and laying damp-proof course 50 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	Sqm		19.00	
2.6	Extra for providing and mixing water proofing material in cement concrete work @ 1 kg per 50 kg of cement approved make and quality as per requirement and manufacturer's specification.			40.00	
2.7	Providing & Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil etc. complete as directed.			19.00	
2.8	Providing and erecting in position formwork shuttering and boxing including strutting, propping using steel/ plywood shuttering materials of approved quality for concrete elements vertical, horizontal or inclined in all shapes as per drawing at any level upto plinth including necessary scaffolding, bolts fastener nails, wires keeping in position till concrete is laid and members have acquired required strength, removal of formwork thereafter, applying shuttering oil etc. complete as directed by Engineer.(Nothing extra shall be paid for erection of false staging, if any)				
2.8.1	At all levels below ground level and upto highest plinth level for column	sqm		180.00	
	foundations, pedestals, wall, wall footings, plinth beams, coping etc.				

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Item No.	Item Desccription	Unit	Rate	Qty	Amount
2.8.2	(-do-) as item No. 2.8 but in superstructure upto floor V level for columns, walls, beams, lintels, bond beams, suspended slabs, landing, shelves, folded plates, staircase including steps and waistslab, hangers, mullions, facias, parapets, pergola beams, trellis etc. for form work height 5.2 M.	sqm		327.00	33.1.03.1.03.1.03.1.03.1.03.1.03.1.03.1
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2.11.1 2.11.1.1	All works upto plinth level Concrete of M25 grade with minimum cement content of 330 kg /cum	Cum		55.00	
2.11.2	All works above plinth level upto floor V level				· · · · · · · · · · · · · · · · · · ·
	Concrete of M25 grade with minimum cement content of 330 kg /cum	Cum		60.00	
2.14	Providing, fabricating and fixing in position steel reinforcement for RCC structures as per design including unloading and incidental charges for handling cutting, bending, and binding with 16 gauge GI wires (to be supplied by the contractor at his own cost). Welding if necessary etc. complete as directed for all the heights. Payment will be made on the length basis and converted into weight by using standard IS coefficient. All work upto All level.				
2.14.1	Thermo-MechanicallyTreated bars of grade Fe-500D or more.	kg		12000.00	
	January 11			1,200,000	
2.15	Providing, fabricating and fixing in position steel reinforcement for RCC structures as per design including unloading and incidental charges for handling cutting, bending, and binding with 16 gauge GI wires (to be supplied by the contractor at his own cost). Welding if necessary etc. complete as directed for all the heights. Payment will be made on the length basis and converted into weight by using standard IS coefficient. All work above plinth level.				
2.15.1	Thermo-MechanicallyTreated bars of grade Fe-500D or more.	kg			
2.24.1	Providing and Fixing of reinforcement steel dowel bar in the existing RCC elements by re-bar method including machine drilling (minimum drilling hole dia. shall be 1.5 times of the dia. of dowel bar to be inserted and up to suitable inset depth as directed), supply of necessary anchoring chemicals such as epoxy based resin and hardener of approved make like HILTI India or equivalent approved and work to be carried through the competent agency including all materials, labours, tools, etc complete as directed for 8 mm dia bars. (Reinforcement shall be paid under relevant item of this tender), complete as directed.	each		50.00	
2.24.2	Providing and Fixing of reinforcement steel dowel bar in the existing RCC elements by re-bar method including machine drilling (minimum drilling hole dia. shall be 1.5 times of the dia. of dowel bar to be inserted and up to suitable inset depth as directed), supply of necessary anchoring chemicals such as epoxy based resin and hardener of approved make like HILTI India or equivalent approved and work to be carried through the competent agency including all materials, labours, tools, etc complete as directed for 10 mm dia bars. (Reinforcement shall be paid under relevant item of this tender), complete as directed.	each		20.00	

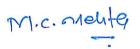


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Item No.	Item Desccription	Unit	Rate	Qty	Amount
2.24.3	Providing and Fixing of reinforcement steel dowel bar in the existing RCC elements by re-bar method including machine drilling (minimum drilling hole dia. shall be 1.5 times of the dia. of dowel bar to be inserted and up to suitable inset depth as directed), supply of necessary anchoring chemicals such as epoxy based resin and hardener of approved make like HILTI India or equivalent approved and work to be carried through the competent agency including all materials, labours, tools, etc complete as directed for 12 mm dia bars. (Reinforcement shall be paid under relevant item of this tender), complete as directed.	each		20.00	
2.24.4	Providing and Fixing of reinforcement steel dowel bar in the existing RCC elements by re-bar method including machine drilling (minimum drilling hole dia. shall be 1.5 times of the dia. of dowel bar to be inserted and up to suitable inset depth as directed), supply of necessary anchoring chemicals such as epoxy based resin and hardener of approved make like HILTI India or equivalent approved and work to be carried through the competent agency including all materials, labours, tools, etc complete as directed for 16 mm dia bars. (Reinforcement shall be paid under relevant item of this tender), complete as directed.	each		20.00	
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	SECTION - 3.00 MASONRY WORK				
3.1.1 3.2	Providing and constructing brick masonry with common burnt clay F.P.S. bricks of class designation 75 of best approved quality, well set and shaped bricks having minimum crushing strength 75 Kg/cm² in wall foundation, trenches and plinth including cost of necessary scoffolding, filling & racking out of joints up to 15 mm deep rubbing and cleaning the surface, curing etc complete as directed. With cement mortar 1:6 (1 cement: 6 coarse sand). Providing and constructing brick masonry with common burnt clay	cum		60.00	
	F.P.S. bricks of class designation 75 of best approved quality, well set and shaped bricks having minimum crushing strength 75 Kg/cm² for super structure above plinth level up to floor V level in all shapes and sizes including cost of necessary scoffolding, racking out of joints up to 15 mm deep rubbing and cleaning the surface, curing etc complete as directed.				
3.2.1	With cement mortar 1:6 (1 cement : 6 coarse sand)	cum		35.00	
3.4.1	Providing and constructing average 115 mm thick brick masonry for partition etc. in superstructure above plinth level up to floor V level with common burnt clay F.P.S. bricks of class designation 75 having minimum crushing strength 75 Kg/cm2 including scaffolding, racking out joints,curing etc complete as directed: With cement mortar 1:4 (1 cement: 4 coarse sand)	sqm		10.00	
3.11	Providing and constructing Autoclaved Aerated (Cellular) Concrete block masonry works for all walls 100 to 230 mm thick in CM 1:6 by using Autoclaved Aerated (Cellular) Concrete blocks confirming to IS 2185-Part 3 - 1984 and manufactured with cement, lime, sand/fly ash, gypsum for all walls, wall foundations, trenches, water tank wall, compound wall, parapet wall, stair cabin wall, gable wall, load walls, curved walls, machine	cum		70.00	



	Civil & structural work for Freeze drying Plant at Amul Fed	d Dairy Vi	llage Bhat	Gandhinag	ar
Item No.	Item Desccription	Unit	Rate	Qty	Amount
建 原口电发物的	foundations, columns etc. as per drawing in line, level and plumb with necessary independent double raw (legged) scaffolding, as per IS 6041 - 1985 in specified course of approved bond with uniform joint thickness less than 10mm, racking out joints, rubbing and cleaning the surface, curing etc. complete and as directed, at all levels below and above plinth level.				
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	SECTION - 4.00				
	WOOD WORK, DOORS, WINDOWS				
	Providing and fixing glazing in aluminium door, window, ventilator				
4.4					
	shutters and partitions etc. with PVC/ neoprene gasket etc. complete				
	as per the architectural drawings and the directions of engineer-in-				
	charge . (Cost of aluminium snap beading shall be paid in basic item)				
4.4.1	With 6 mm thick toughened glass	sqm		40.00	
4.9	Providing and fixing satin stainless steel grade 304 pull handle of approved quality including the necessary stainless steel screws and other incidental charges complete as per detailed Architectural Drawings and as directed by Engineer-in-charge: Manufacturer's warranty/guarantee card needs to be submitted.				
4.9.1	22 mm dia x 300 mm long (Dorma : TGDI-D 300. Hafle:- 903.05.700).	Pair		6.00	
4.11	Providing and fixing stainless steel grade 304 brush/satin finish tower bolts including the necessary Stainless steel screws and other incidental charges complete as per detailed Architectural Drawings and as directed by Engineer-in-charge: , Manufacturer's				
4.11.1	warranty/guarantee card needs to be submitted. 150 mm long (Dorma :3200-2, Hafle 911.81.080)	each			
4.11.2	300 mm long (Dorma : 3200, Hafle 911.81.083)	each		6.00	
4.16	Providing and fixing M.S. grills of required pattern in frames of windows				
	etc. with M.S. flats, square or round bars etc, all complete as directed				
	including applying a priming coat of approved steel primer.				
4.16.1	Fixed to openings / wooden frames with rawl plugs screws etc.	Kg		600.00	
		Control of the last last last last last last last last		William San Perfect National Action	
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	SECTION - 5.00				
5.0	ALUMINIUM WORKS				
				450.00	
5.1	Providing and fixing to walls, columns, lintels and such to receive doors, windows, partitions, ventilators, Sub-frame of Polyester powder coated aluminium extruded standard tubular sections of alloy conforming to IS designation HE 9/HV 9 WP alloy with chemical composition and technical properties in accordance with IS-733 and IS 1285 respectively, (Polyester Powder coated aluminium (minimum thickness of powder coating 50 micron)), joints mitred and jointed with heavy duty aluminium angle pieces using self tapping nickel plated hardened steel screws (Nettlefold or equivalent) and fixed with W.E. (Wedge expansion type) Fasteners 10mm dia. 40 long of approved manufacture at 450mm centre to centre to masonry and concrete surfaces as per design and profile at all locations, as called for, as per approved drawings or as directed complete as directed.			150.00	

	Civil & structural work for Freeze drying Plant at Amul Fed	Dairy V	illage Bhat	Gandhinag	ar
Item No.	Item Description	Unit	Rate	Qty	Amount
5.2	Providing and fixing composite units of windows and ventilators as per architectural drawings fabricated out of Polyster powder coated aluminium built-up extruded sections of alloy conforming to IS designation HE 9 WP/HV 9 WP alloy with chemical composition and technical properties in accordance with IS 733 and IS 1285 respectively (Polyster powder coated aluminium (minimum thickness				
	approved EPDM gaskets of Anand Lescuyer make or approved equivalent to suit the size and profile and at locations as called for, silicon sealant of G.E., Dow Corning or approved equivalent make, hinges, pivots, expansion bolts, cleats, clamps, bolts, nuts, screws, rivets and other accessories as required and all incidentals complete. Rate for all openable shutters shall also include heavy duty stainless steel (SS 304 grade) adjustable heavy duty friction windows stays of approved make at top and bottom, shutter cleats, shutter EPDM, pressure die-cast handles duly powder coated "PULSE"(PL205H / Model) of LGF Sysmac (I) Pvt. Ltd. or equivalent make. Rate for all sliding shutters shall also include concealed sliding handles with self locking latch arrangements, shutter cleats, shutter EPDM, woolpile manufactured by Anand Reddiplex or approved equivalent and with all accessories and also other hardware items. Supply and installation of ONLY glass NOT included in this item. (Item to carry guarantee for a period of two years against faulty structural design, water leakage, unsound material and workmanship and defective powder coating as per guarantee bond)				
5.2.1	Fully Fixed Windows and Ventilators (measured outer to outer of frame)	Kg			
5.2.2	- Do - as per item no. 5.2.1 for Fully openable windows and ventilators, top hung, side hung & sliding shutter (measured outer to outer of shutter area)	Kg		300.00	
5.3	Providing and fixing door frames as per architectural drawings fabricated out of Polyster powder coated aluminium extruded sections of alloy conforming to IS designation HE 9 WP/HV 9WP alloy with chemical composition and technical properties in accordance with IS 733 and IS 1285 respectively (Polyster powder coated aluminium (minimum thickness of powder coating 50 micron)), joints mitred and jointed with heavy duty aluminium angle pieces with fins to match the sections of the frame by crimping and fixed with nickel plated steel				
	The item shall include providing and fixing hardware of Earl Bihari or approved equivalent, silicon sealant of G.E., Dow Corning or approved equivalent, hinges, pivots expansion bolts, cleats, clamps, bolts, nuts, screws, rivets and other accessories as required and all incidentals complete.(Item to carry guarantee for a period of two years against faulty structural design, water leakage, unsound material and workmanship and defective powder coating as per guarantee bond)				
5.3.1	Door frames	Kg		50.00	
5.6	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete.	sqm		20.00	



Technical Specification and Scope of work for Civil structural work for Freeze drying Plant at Amul Fed Dairy Village Bhat Gandhinagar.

	Civil & structural work for Freeze drying Plant at Amul Fed	Dairy Vi	llage Bhat		
Item No.	Item Desccription	Unit	Rate	Qty	Amount
	Fly proof stainless steel net having 50 micron pure polyster powder coating of approved make and shade for aluminium sliding shutter / fixed shutter or in front of aluminium louvers as per shop drawing prepared by contractor and sample as approved by consultants, at all floors, all levels, all heights. Only installed area of mosquito net shall be measured and paid in Sqm without considering any westage. All aluminium sections shall be paid under relevant tender item. Sample shall be approved before execution the work.	33.50			
	Fly proof stainless steel net having 50 micron pure polyster powder coating of approved make and shade for aluminium sliding shutter / fixed shutter or in front of aluminium louvers as per shop drawing prepared by contractor and sample as approved by consultants, at all floors, all levels, all heights. Only installed area of mosquito net shall be measured and paid in Sqm without considering any westage. All aluminium sections shall be paid under relevant tender item. Sample shall be approved before execution the work.				
16 H	TOTAL CARRIED TO SUMMERY	Posteros	Martin State	RS.	Billion University
	SECTION 6.00				
-	WALL FINISHES, FALSE CEILING				
6.1	Providing and applying 6 mm thick plain cement plaster finish at all heights above and below highest plinth level to beams, ceiling, stairs, columns, pardies, moulds, pattas, grooves etc over any brick or concrete surface of any shape as specified including scaffolding, curing and finishing smooth etc complete as directed.		a		
6.1.1	With CM 1:3 (1 cement : 3 parts sand- 50% coarse and 50% fine)	Sqm		150.00	
6.3	Providing & laying 15mm. thick cement plaster in single coat, in C.M. 1:4 (1 cement :4 coarse sand) at all the heights up to floor -V level with cement mala finish (finished with steel trowel) including scaffolding, curing, making grooves, forming pattas and drip mould, etc. complete as directed.	sqm		600.00	
6.4	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement: 5 coarse sand) and a top layer 6 mm thick cement plaster 1:3 (1 cement : 3 coarse sand) finished rough with sponge at all the heights up to floor -V.	Sqm		400.00	
6.5	Providing & applying on new work three coats (first two coats are with brush and final coat is with roller) of Glossy, satin or Matt/luster enamel paint of desired shade, of approved make, shade, brand and manufacture, on any surfaces i.e., steel work, wall dado over plaster etc., at all heights, to give an even shade, including thoroughly brushing the surface free from mortar droppings and other foreign	sqm		100.00	
6.6	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade at all the heights up to floor - V etc complete as directed.	Sqm		400.00	
6.6.1	New work (Two or more coats applied @ 1.43 ltr/ 10 sqm. over and including base coat of water proofing cement paint applied @ 2.20 kg/ 10 sqm).	Sqm		361.00	
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	Civil & structural work for Freeze drying Plant at Amul Fed	Dairy Vi	llage Bhat	Gandhinag	
tem No.	Item Desccription	Unit	Rate	Qty	Amount
6.9	Providing and fixing approved galvanized chicken wire mesh (24 gauge 12 mm size) to junction of concrete and masonry work and other locations where called for at all the heights with necessary scaffolding etc. including cutting to required sizes, side laps of minimum 75 mm and fixing in position with galvanized wire nails as approved complete.	Sqm		36.00	
6.18	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sqm	,	666.00	
6.19	Providing & applying on new works three coats (first two coats are with brush and final coat is with roller) of plastic emulsion paint of desired shade, of approved make, brand and manufacture, on any surfaces, at all heights, to give an even shade, including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth. The paint shall be applied after applying a coat of primer and white cement putty (Birla white wall care Or JK) of approved company like Asian.	-		666.00	
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	SECTION 7.00				
	WATER-PROOFING				
7.1	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc. consisting of following operations:a) Applying a slurry coat of neat cement using 2.75 kg/sqm. Of cement admixed with water proofing compound conforming to IS.2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment.				·
	b) Laying brick bats with morter using broken bricks/brick bats 25mm to 115 mm 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 20mm thick layer of cement mortar of mix 1:5 (1 cement: 5 coarse sand) admixed with water proofing compound conforming to IS:2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.				
	c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS:2645 and approved by Engineer-incharge.d) Finishing the surface with 20mm thick jointless cement mortar of mix 1:4 (1cement :4 coarse sand) admixed with water proofing compound conforming to IS:2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making of 300 X 300 mm square 3mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the				
7.1.1	Engineer-in-Charge. With average thickness of 120mm and minimum thickness at khurra			69.00	
	as 65 mm.				
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Item No.	Item Desccription	Unit	Rate	Gandhinaga Qty	Amount
item No.	item Descenption	Oilit	rate	ac,	, and and
7.3	Providing & applying water proof cement plaster finished with a floating coat of neat cement in double coat on any surface, at all heights below and above the plinth level, finished even and smooth in mix C.M. 1:3 (1 cement : 3 course sand), including scaffolding, curing, making grooves, forming pattas and drip mould, etc. complete as directed. This item include providing and mixing water proofing materials such as Pidilite or equivalent as approved by the Architect and Engineer-incharge, in cement mortar in proportion recommended by the manufacturer.				
7.3.1	20 mm thick	sqm		12.00	
7.15	Providing and laying China Mosaic flooring work over the water proofing surfaces in slope using broken equal pieces of white glazed tiles not more than 25 to 37 mm wide and long and colored glazed tiles equal pieces for making pattas, vattas etc. as per details with necessary bedding in CM (1:4) laid in required slope, consolidating with wooden hammer, filling joints with Birla white cement, cleaning the surface and acid washing etc. complete as directed at any height. 1. The Work to be carried out at all the heights. The individual rates shall be inclusive of all lifts, lead and handling of materials, necessary scaffolding and staging, 2. Rates shall be inclusive of the slopes to be provided in all the above flooring items as directed and as per the drawings,	sqm		69.00	
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	SECTION 8.00				
	PAVING AND FLOOR FINISHING				



	Civil & structural work for Freeze drying Plant at Amul Fed		Ilage Bhat	Gandhinag	ar
Item No.	Item Desccription	Unit	Rate	Qty	Amount
8.10	Providing & applying Flow / Trowel applied topping in average thickness of 6 mm (1 mm Scratch Coat + 5 mm Top Coat) of a 4 component, single layer, seamless, solvent-free, moisture insensitive and food-safe Ucrete MF(6MM) polyurethane concrete flooring system or approved equivalentmake of density more than 1950 kg/cu.mtr to have a smooth & even matt finish matching below mentioned performance properties:, Surface Preparation: Concrete substrates must be mechanically prepared by using Surface Grinder, Scarifier, Grit or Shot Blasting, so that the large aggregate of the concrete is exposed, The dust and debris to be removed by Industrial Vacuum Cleaner. Anchor Grooves: Must be provided along the perimeter of floor area, around columns, open drains, along construction joints, cable trenches, etc. To be cut of size 1.5 to 2 times the thickness of the floor topping at approximately 100 mm away parallel from wall and adjacent to doorways, covering not more than 20 Sqm. Open up all the cracks in to anchor grooves. Fill all the anchor grooves with Ucrete MF or approved equivalent make, mixed with heavy duty slow speed drilling machine fixed with mixing paddle, prior to application of scratch coat. Scratch Coat: After-12-24 hours of Anchor Grooves filling, apply average 1 mm thick scratch coat of four-component, Cementitious Polyurethane Screed topping of Ucrete MF or approved equivalent make using flat trowel by mixing all components and colour pigment in mixing vessel using heavy duty slow speed drilling machine fixed with mixing paddle, etc and complete as per manufacturer's specification. Top Coat: After 12-24 hours of the scratch coat, apply average 5 mm thick top coat of heavy duty, four component Polyurethane concrete floor topping of Ucrete MF or approved equivalent make using flat trowel by mixing all components and colour pigment in mixing vessel using heavy duty slow speed drilling machine fixed with mixing paddle, etc and complete as per manufacturer's specification. Allow to cure for the necessary period, n	sqm		250.00	
	ASTM C469/C469M / Coefficient of thermal expansion of 3.6 x 10^-5 /oC as per ASTM C531 / Shore D hardness of 80 / Tensile strength of >7Mpa / Flexural strength of >20Mpa / Adhesion to concrete of more than 2Mpa or until concrete fails / slip resistance classification 35 as				
8.11	Providing & applying of a textured finish 75 mm x 75 mm coving at junctions of floor and wall using a Polyurethane concrete moisture insensitive coving mortar UcreteRG or approved equivalent make matching the following performance requirement. 1. Moisture tolerant 2. Zero Absorption as per CP.BM2/67/2 3. Density >2000kg/cu.mtr 4. Flexural Strength >15Mpa as per EN 13892 part 2 Applied over a polyurethane primer including surface preparation.			100.00	
8.17	Providing and fixing 18 mm thick gang saw cut mirror polished (premoulded and prepolished) machine cut for kitchen platform, vanity counters, window sills, facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement: 4 coarse sand) with joints treated with white				
	cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing moulding and polishing to edge to give high gloss finish etc. complete at all levels. (Basic rate of Granite Rs. 2000/- per sqm).				

Technical Specification and Scope of work for Civil structural work for Freeze drying Plant at Amul Fed Dairy Village Bhat Gandhinagar.

metels for a source	Civil & structural work for Freeze drying Plant at Amul Fed	Unit	Rate	Qty	Amount
tem No.	Item Desccription	Unit	Kale	diy	Amount
	Granite of any colour and shade				
8.17.1	Area of slab over 0.50 sqm	sqm		13.00	
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	SECTION 9.00				
	IRON AND STEEL WORKS				
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9.1	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 shed, MS post and frame work for fencing, holding down bolts 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. 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 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 and primer and paint. 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. 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.				
9.1.1	Rolled steel sections (equal and unequal angles, square or round bars, flats, angles, tees, channels, plates of different sizes etc.),	Kg.		2200.00	
9.1.2	Solid flats, bars, RHS, SHS, tubular hollow sections of YST 310 grade of specified thickness & yield strength of TATA or equivalent as approved by EIC & as per drawing	Kg.		800.00	
9.20	Providing, cutting to shape and fixing in position M.S. chequered plates in slab shuttering, stair steps, landing, platforms etc. including tag welding to steel members complete as per drawings including painting with one coat of red oxide paint etc., complete as directed.	Kg.		750.00	

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	Civil & structural work for Freeze drying Plant at Amul Fed	d Dairy V	illage Bhat	T	gar
Item No.	Item Description	Unit	Rate	Qty	Amount
9.3	Providing, fabricating and fixing in position MS inserts such as nosing, corner angles of columns, plates, flats, tees, protection channels of reception dock, provision for pipe hangers, supports, brackets and monorails, hooks, frame around cut-out,MS pipe sleeves etc. as per drawings and specifications, in true line and level including embedding the same into the permanent works at the time of casting of RCC works or fixing the same into the existing work by using anchor / desh fastener of size as mentioned in drawing or as directed by Engineering in charge, with necessary welding, grinding,bolting and painting with two coat of first quality synthetic enamel paint of approved make over a coat of primer etc. complete as directed.			150.00	
9.5.2	In gratings, frames, guard bar, ladders, railings, brackets, gates, compound wall grills and similar works complete as per Architectural Drawing.	Kg.		450.00	
9.9.1	Providing fabricating and installing in position exposed SS Grade-304	Kg		600.00	
5.5.1	pipes for drainages including cutting, bending, welding, grinding, drilling, tapping, weep hole and all other incidentals and approved buffing to stainless steel members etc. complete as directed.			330.00	
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	SECTION 40 00				
	SECTION 10.00 ROOFING WORKS				
	I Cook and the coo				
10.2	Making Khurras 45 x 45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand :4 graded stone aggregate of 20 mm nominal size) over PVC sheet 1m x 1m x 400 micron, finished with 12 mm cement plaster 1:3(1 cement : 3 coarse sand) and a coat of neat cement rounding the edges and making and finishing the outlet complete.	Each		1.00	
10.3	Providing and fixing 65 mm dia GI spout 400 mm long at all levels and locations including cutting & making good the walls and painting the spout and all incidentals complete.	Each		6.00	
10.83	Dismantling roofing including ridges, hips valleys and gutters etc. at all heights including scaffolding and stacking within the premises up to a lead of 350m as directed.	Sqm		40.00	
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	SECTION 11.00				
	MISCELLANEOUS WORKS				
11.3.2	Providing and laying cement concrete vatas in proportion 1:2:4 (1 cement :2 course sand :4 10 mm or down graded stone aggregate) finish with good surface etc. as directed.	Rmt		50.00	
11.9	Dismantling brick masonry walls and partitions, plastered or unplastered as per instructions including finishing the broken surface to match with the surrounding, removing the debris as directed within site, cutting if any etc. complete as directed. The dismantling of stone masonary, BBCC, Stone pitching would be measured under this item.	CUM		5.00	

	Civil & structural work for Freeze drying Plant at Amul Fed	Dairy Vi	llage Bhat	Gandhinag	ar
Item No.	Item Desccription	Unit	Rate	Qty	Amount
11.10	Dismantling the RCC beams, slabs, lintels, columns, pardi walls, platform etc. including finishing the broken surface to match with the surrounding, removing the debris within site, including cutting the reinforcement if any etc. complete as directed.	CUM		10.00	
11.11	Dismantling IPS concrete in flooring /pavement etc. as per instruction and disposing the debris/muck within the site at approved location.	Sqm		50.00	
11.13	Dismantling PCC in floor as per instructions including finishing the broken surface to match with the surroundings. Disposing debris/muck as directed within the site or as directed by Eng. Incharge etc. complete as directed.	CUM		5.00	
111.20	Dismantling C.I./ G.I./ PVC rain water pipe of all diameters with fittings and clamps etc., at all heights including scaffolding and stacking within the premises upto a lead of 350m as directed.	Rmt		50.00	
11.22	Dismantling steel work in built up sections in angles, tees, flats, pipes, chain link, barbed wire, baseplate and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. at all heights including dismembering and stacking within the premises upto a lead of 350m. and scaffolding complete as directed.	KG		3000.00	
11.23	Dismantling / scrapping and removing existing plain/sand faced/grit	Sqm		94.00	
11.25	cement plaster of any thickness from the brick/RCC works including necessary scaffolding at all heights and levels and disposing the debries within the site etc. complete as directed.	- 1			
11.30	P/F special Stain less steel floor drains (Amul Trap) as per the sample approved by the AMUL DAIRY and fixing the same as per detailed drg. Sketch, the same in floor at required levels including necessary excavation, providing and laying 75 mm thick PCC 1:4:8 - 230 mm thick brick masonary so as to form a chamber of size 30 x 20 cms. or as directed, inside plaster 12 mm thick in CM 1:4 (1cement: 4 coarse sand), IPS flooring 38 mm thick in floor of chamber, fixing the trap and jointing the same with the HDPE/SW pipe with CM 1:1 (1 cement: 1 coarse sand) and jute fiber, matching the top of floor drain with the finished floor level etc. all complete. The vertical connecting pipe shall be paid under the relevant items. [The rate includes cost of all the required material including of SS floor drains which will be supplied by contractor as per sample approved by Dairy.]	kg		6.00	
11.31	Providing fabricating and installing in position exposed SS Grade-304 pipes for drainages including cutting, bending, welding, grinding, drilling, tapping, weep hole and all other incidentals and approved buffing to stainless steel members etc. complete as directed.			200.00	
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	PLUMBING WORKS		9227 (1987) 7 (17) 1 (17) 1 (17)		
3.00	SECTION C (WATER SUPPLY SYSTEM)				
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Annexure: I

A CONTRACTOR AND A STATE OF	Civil & structural work for Freeze drying Plant at Amul Fed				
Item No.	Item Desccription	Unit	Rate	Qty	Amount
3.04	Providing and fixing UPVC rain water pipes of 6 kg./cm² conforming to IS: 4985 including all fittings with or without access door i.e bends, junctions, cowls, offsets, etc., and jointing with solvent cement and excavation, refilling and disposal of surplus earth, including cutting holes in walls and floors, wherever required and making good the same, complete as directed by the Engineer-in-Charge.				
3.04.8	160mm dia	Metre		11.00	
3.14	Providing and fixing M.S structural work fabricated from standard sections e.g. M.S. rounds, angles, channels, plates including cutting to size, welding, drilling with concrete drilling bits and fixing dash fasteners in RCC structural members including cutting and making good the walls, ceilings and floors (for all types of pipe supports, clamps, etc.) complete, as directed by the Engineer in charge.	Kg.		100.00	
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4.00	SECTION D (SEWERAGE AND DRAINAGE SYSTEM)			-	
4.03	Providing, Laying and Fixing HDPE Pipe (PE-80 grade) IS: 14333 of 10 kg / cm2 including all fittings with or without access door i.e. bends, junctions, cowls, offsets etc. and jointing with Butt welding complete to the satisfaction of the Engineer-In-Charge.				
4.03.2	200 mm OD	Metre		27.00	
4.03.3	250 mm OD	Metre		10.00	
4.09	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with RCC Top slab with 1:2:4 mix (1 cement : 2 coarse sand: 4 graded stone aggregate 20mm nominal size) foundation concrete 1:4:8 mix (1 cement :4 coarse sand: 8 graded stone aggregate 40 nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of	Each		2.00	
4.10	Extra for above item for additional depth of manholes of size 90x80cms beyond 60cms depth.	Metre		1.00	
4.21.2	Size 600x600x600mm inside with precast S.F.R.C. grating of approved design and sample fixed in RCC slab in cement 1:2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) including centering, shuttering all complete as per site conditions.	Each		2.00	
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建	TOTAL OF TREAD WISE		Mark and the	R.S.	

