



**The Bhagirathi Co-operative Milk Producers' Union Limited**  
(A Govt. of West Bengal Project)

**BU/DAIRY/PM/1742**

**Date: 30.01.2026**

**CORRIGENDUM**

1. The declaration as per Annexure-B may be uploaded by interested bidders in their letter heads rather than executing the same in Non-Judicial Stamp paper.
2. Proprietorship Company may furnish Udhyam Certificate instead of MOA& AOA.
3. The Technical Specification A are changed to Annexure C.
4. Last date of bid and EMD submission has been extended to 05.02.2026.
5. Rest terms and conditions as per BU/DAIRY/PM/1546 dated 23.12.2025 shall remain unaltered.

**Sd/-**  
**Managing Director**  
The Bhagirathi Cooperative Milk  
Producers' Union Limited

## ANNEXURE-C

### TECHNICAL SPECIFICATION

#### EXPANSION OF FERMENTED MILK PRODUCTION CAPACITY - DAHI INCUBATION ROOM, DAHI BLAST FREEZER ROOM & DAHI STORAGE COLD ROOM

ANNEXURE – I (A)	BASIS OF DESIGN- CURD / DAHI INCUBATION ROOM
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SL. NO.	DESCRIPTION	DAHI INCUBATION ROOM
1)	Refrigerant	NA
2)	Nominal Room Size in Meter [External]	<b>5 (W) X 5 (L) X 3.5 (H)</b>
3)	Capacity [ <b>TOTAL STORAGE CAPACITY</b> ]	<b>Liquid Dahi - 4500KG - 5000KG</b>
4)	Room Temperature	(+) 42Deg C. TO (+) 45Deg.C
5)	Ambient Temperature	<b>(+) 42Deg C. [ MAX ]</b>
6)	Product	Liquid Dahi & Cup Dahi
7)	Total Products Capacity in Crates.	450 - 500CRATES*
8)	Daily Product Load	<b>1000KG X 10BATCH = 10000KG/DAY</b>
9)	Product Incoming Temp.	(+) 38Deg C. TO (+) 40Deg.C
10)	Incubation Time	4 Hours
11)	Wall and Ceiling Insulation	80 mm thick PUF Panel with PPGL lamination both side, PUF density must be 40kg (+/-) 2 Kg/m3 [Make- Lloyd / Suchi Foam / Blue Star]
12)	Floor Insulation	60 mm thick PUF Slab with bitumen & tarfelt sheet insulation with two layer vapor barrier. [ <b>3 - 4 inch PCC with 25 mm Kota/Mandana Stone Finish – Agency's Scope</b> ]
13)	Door Size [ <b>Sliding Type</b> ] x 1 No.	<b>1200mm (W) x 2200mm (H) x 80MM Thick</b> [ <b>Both side PPGL without View Port</b> ] [Make- Metaflex Assa Abloy / Infracra / Blue Star]
14)	No. of Machines / Room	<b>Heating Devices with Controller Devices with Blowing Fans 2 Nos – Capacity 4.5 KW x 2SETS = 9KW</b> [ <b>Heating Devices – SS304 Housing</b> ]
15)	Power Consumption	<b>2NOS HEATING DEVICES X 4.5KW = 9KW</b>
16)	Air Curtain x 1 No.	<b>Air Curtain with Al. housing and auto cut limit switch</b> <b>Size- 1200mm</b>
17)	Power Supply	<b>415V/3Ph/50Hz</b>
18)	Inside Light Fittings	<b>Agency's Scope</b>

**\*POUCH DAHI CRATE SIZE - 22" X 12" X 6"[H] = AREA 2SQ FT X .5FT[H] = 1CFT = 10KG**

**\*CUP DAHI CRATE SIZE - 21" X 15" X 12"[H] = AREA 2.2SQ FT X 1FT[H] = 2.2CFT = 12KG**

<b>ANNEXURE – I (B)</b>	<b>BASIS OF DESIGN- CURD / DAHI BLAST FREEZER</b>
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Sl. No.	Description	DAHI BLAST FREEZER
1)	Refrigerant	<b>R – 404A [ NON CFC ]</b>
2)	Nominal Room Size in Meter [External]	<b>5 (W) X 5(L) X 3.5 (H)</b>
3)	Capacity <b>[ TOTAL STORAGE CAPACITY ]</b>	<b>Liquid Dahi - 4500KG - 5000KG</b>
4)	Room Temperature	<b>(-) 8 Deg C. TO (-) 12 Deg. C</b>
5)	Ambient Temperature	<b>(+) 42 Deg C. [ MAX ]</b>
6)	Product	Liquid Dahi & Cup Dahi
7)	Total Products Capacity in Crates.	450 - 500CRATES*
8)	Daily Product Load	<b>1000KG X 10BATCH = 10000KG/DAY</b>
9)	Product Incoming Temp.	<b>(+) 38Deg C. TO (+) 40Deg.C</b>
10)	<b>Product Incoming Rate</b>	<b>1000KG / HR</b>
11)	<b>Pull Down Time</b>	<b>2.5HR – 3HR</b>
12)	<b>Final Product Temperature</b>	<b>(+) 15Deg C - (+) 18Deg C [ Surface ]</b>
13)	Wall and Ceiling Insulation	120 mm thick PUF Panel with PPGL lamination both side, PUF density must be 40kg (+/-) 2 Kg/m3 [Make- Lloyd / Suchi Foam / Blue Star]
14)	Floor Insulation	100 mm thick PUF Slab with bitumen & tarfelt sheet insulation with two layer vapor barrier. <b>[ 3 - 4 inch PCC with 25 mm Kota/Mandana Stone Finish – Agency's Scope ]</b>
15)	Door Size [ Sliding Type ] x 2 Nos.	<b>1200mm (W) x 2200mm (H) x 120mm Thick</b> <b>[ Both side PPGL without View Port ]</b> [Make- Metaflex Assa Abloy / Infracra / Blue Star]
16)	Air Curtain x 1 No.	<b>Air Curtain with Al. housing and auto cut limit switch</b> <b>Size- 1200mm</b>
17)	No. of Machines / Room	<b>2 NOS X 5.5 TR</b>
18)	IDU Details	<b>Capacity- 5.5 TR X 2 SETS with Electronic Defrost System</b> <b>Refrigerant- 404A [Non CFC</b> <b>IDU Housing Material: SS 304 Grade</b> <b>Heater- Coil Heater &amp; Tray Heater</b> <b>Make: Star Cooler / Luve / Blue Star</b>
19)	CDU Details	<b>Capacity- 5.5 TR X 2 SETS [Air Cooled System]</b> <b>CDU Model- RUAHOS 8014-O</b> <b>Refrigerant- 404A [Non CFC]</b> <b>CDU Housing Material: PPGL</b> <b>Compressor Model: ZB76-KQE (Scroll Type, Make- Emerson)</b> <b>Make: Blue Star / Emerson / Bitzer</b>
20)	Power Consumption	<b>15KW X 2SETS = 30KW</b>
21)	Power Supply	<b>415V/3PH/50Hz</b>
22)	Inside Light Fittings	<b>Agency's Scope</b>

**\*POUCH DAHI CRATE SIZE - 22" X 12" X 6"[H] = AREA 2SQ FT X .5FT[H] = 1CFT = 10KG**

**\*CUP DAHI CRATE SIZE - 21" X 15" X 12"[H] =AREA 2.2SQ FT X 1FT[H] = 2.2CFT = 12KG**

<b>ANNEXURE – I (C)</b>	<b>BASIS OF DESIGN – CURD / DAHI STORAGE COLD ROOM</b>
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<b>Sl. No.</b>	<b>Description</b>	<b>DAHI STORAGE COLD ROOM</b>
1)	Refrigerant	<b>R – 404A[ NON CFC ]</b>
2)	Nominal Room Size in Meter [External]	<b>5 (W) X 8(L) X 3.5 (H)</b>
3)	Capacity <b>[ TOTAL STORAGE CAPACITY ]</b>	<b>Liquid Dahi - 10000KG – 13000KG</b>
4)	Room Temperature	<b>(+) 1 Deg C. TO (+) 5 Deg. C</b>
5)	Ambient Temperature	<b>(+) 42Deg C. [ MAX ]</b>
6)	Product	Liquid Dahi & Cup Dahi
7)	Total Products Capacity in Crates.	<b>1000 – 1300 CRATES[POUCH]</b>
8)	Daily Product Load	<b>8000KG - 10000KG/DAY</b>
9)	Product Incoming Temp.	DAHI – (+) 15DEG C. TO (+) 18DEG.C
10)	Pull Down Time	24HR
11)	Wall and Ceiling Insulation	80mm thick PUF Panel with PPGI lamination both side, PUF density must be 40kg (+/-) 2 Kg/m3 [Make- Lloyd / Suchi Foam / Blue Star]
12)	Floor Insulation	60 mm thick PUF Slab with bitumen & tarfelt sheet insulation with two layer vapor barrier. <b>[ 3 - 4 inch PCC with 25 mm Kota/Mandana Stone Finish – Agency's Scope ]</b>
13)	Door Size [ Sliding Type ] x 1 No.	<b>1200mm (W) x 2200mm (H) x 80MM Thick</b> <b>[ Both side PPGI without View Port ]</b> [Make- Metaflex Assa Abloy / Infrac / Blue Star]
14)	Air Curtain x 1 No.	<b>Air Curtain with Al. housing and auto cut limit switch</b> <b>Size- 1200mm</b>
15)	No. of Machines / Room	<b>2 NOS X 5 TR</b>
16)	IDU Details	<b>Capacity- 5TR X 2 SETS with Air Defrost System</b> <b>Model- RUAHI-6014</b> <b>Refrigerant- 404A [Non CFC]</b> <b>IDU Housing Material: SS 304 Grade</b> <b>Make: Star Cooler / Luve / Blue Star</b>
17)	CDU Details	<b>Capacity- 5TR X 2 SETS [Air Cooled System]</b> <b>CDU Model- RUAHOS 6014-O</b> <b>Refrigerant- 404A [Non CFC]</b> <b>CDU Housing Material: PPGI</b> <b>Compressor Model: ZB58-KQE (Scroll Type, Make- Emerson)</b> <b>Make: Blue Star / Emerson / Bitzer</b>
18)	Power Consumption	<b>11.5KW X 2SETS = 23KW</b>
19)	Power Supply	<b>415V/3PH/50Hz</b>
20)	Inside Light Fittings	<b>Agency's Scope</b>

**\*MILK/POUCH DAHI CRATE SIZE - 22" X 12" X 6"[H] = AREA 2SQ FT X .5FT[H] = 1CFT = 10KG**

**\*CUP DAHI CRATE SIZE - 21" X 15" X 12"[H] = AREA 2.2SQ FT X 1FT[H] = 2.2CFT = 12KG**

<b>ANNEXURE – II</b>	<b>PANEL &amp; DOOR SPECIFICATION</b>
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**PANEL :-**

1	Manufacturer	Lloyd / Suchi Foam / Blue Star
2	Insulation	CFC Free Foamed In-place POLY URETHENE FOAM ( PUF )
3	Co-efficient of Heat Transfer	0.366 W/M-C
4	Density	40 +/- 2 kg/m3
5	K-value of Insulation	< 0.02 kcal/m2.hr. C
6	Thermal conductivity	< 0.02 kcal/m2.hr. C
7	Compressive strength	1.3 kg/cm2 (min)
8	Adhesion strength(PUF to steel)	150 PSI
9	Closed Cell contents	95% (min)
10	Fire resistance	Will not sustain fire in absence of source
11	Water absorption	2% (max)
12	Vapour permeability	less than 2%
13	Thickness of outer sheets	<b>0.4MM</b>
14	Material of outer sheets	Prepainted GI
15	Amount of Zinc Coating	90 GSM or above
16	Type of camlock for panel locking	NA
17	Type of sealant	Silicone
18	Ozone friendly R-141 blown foam at 32-36Kgs/Cubic Mtr.	Yes
19	Structural stability within 2% after 48 Hrs. of foaming	Yes
20	Radiused wall to impede bacterial growth	Yes
21	Panel joints	Pre-fabricated with the panels to make leak proof joints). On floor, U-profile will be grouted for holding wall panels and ensuring anti-dampness . Continues Panel

**DOOR :**

1	Manufacturer	[Make- Metaflex Assa Abloy / Infracra / Blue Star]
2	Size	Sliding Door - 1200 x 2200 x 80mm / 120mm Thk
3	Other Features	<b>Positive Cam Lift Hardware</b> <b>Vinyl gasket on all sides &amp; with SS brackets at the bottom of door</b> <b>Safety Release Exit Device for opening door from inside</b>
4	Display	NA

## ANNEXURE – III

## DETAIL BOQ OF CIVIL CONSTRUCTION WORK

**Necessary Civil Construction Work for Dahi Cold Room Project at Bhagirathi Milk Union  
Campus, Berhampore, Murshidabad, WestBengal**

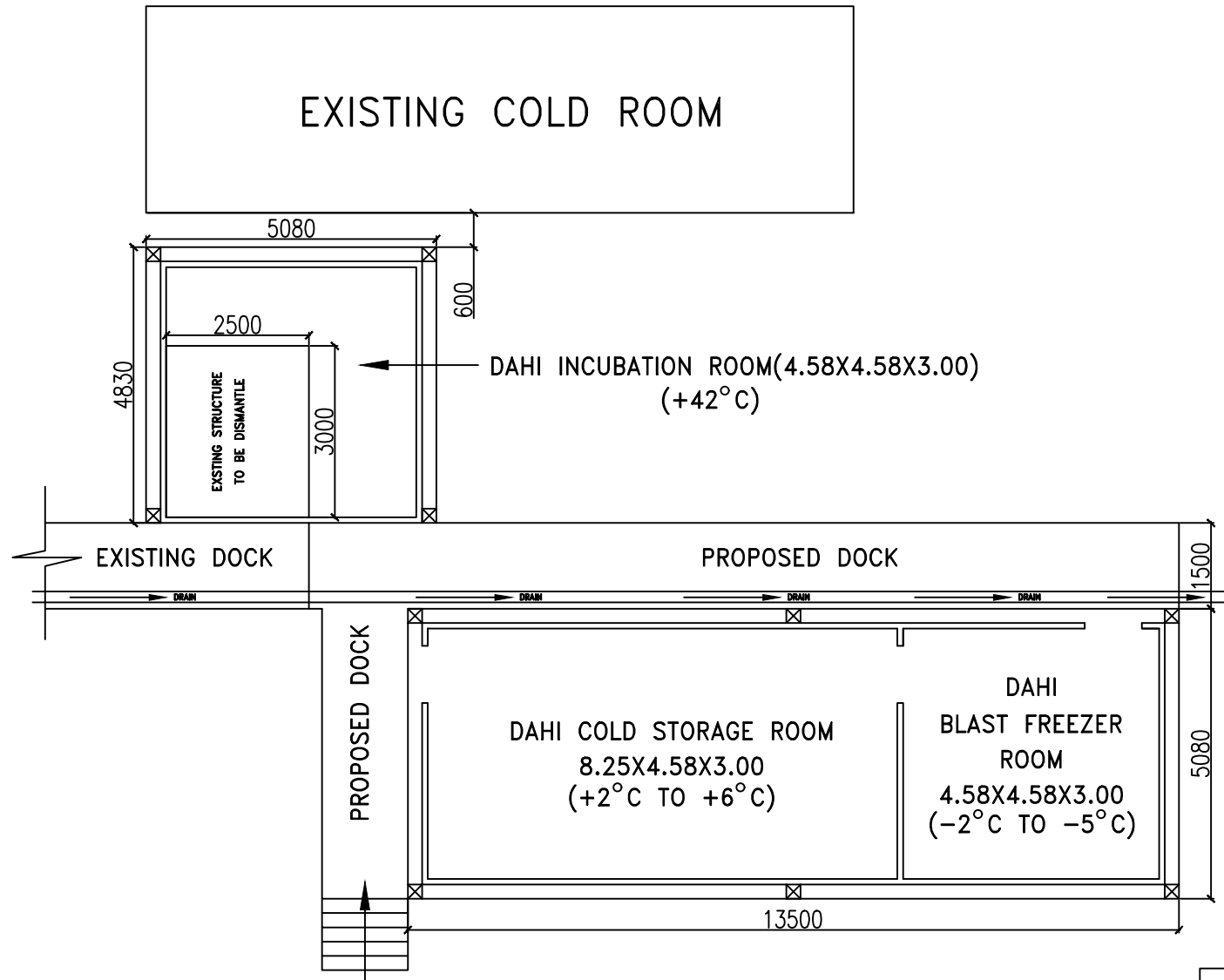
SL. No.	Description of item	Unit	Qty
1	Dismantling all types of masonry excepting cement concrete plain or reinforced, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m.	Cum	6.60
2	Dismantling R.C. floor, roof, beams etc. including cutting rods and removing rubbish as directed within a lead of 75 m. including stacking of steel bars.	Cum	1.57
3	Earthwork in excavation of foundation trenches or drains, in all sorts of soil(including mixed soil but excluding laterite or sandstone) including removing, spreading or stacking the spoils within a lead of 75m as directed. The item includes necessary trimming the sides of trenches, levelling,dressing and ramming the bottom,bailing out water as required complete.	Cum	43.62
4	Earthwork in filling in foundation trenches or plinth with good earth,in layers not exceeding 150 mm including watering and ramming etc. layer by layer complete.	Cum	21.81
5	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary (Ground floor).[Excluding cost of chipping over concrete surface]		
	(ii) With 1:4 cement mortar		
	(b) 15 mm thick plaster	Sqm	111.14
6	Neat cement punning about 1.5mm thick in wall,dado>window sill,floor etc. NOTE: Cement 0.152 cu.m per 100 sq.m.	Sqm	111.14
7	Filling in foundation or plinth by silver sand in layers not exceeding 150 mm as directed and consolidating the same by thorough saturation with water, ramming complete including the cost of supply of sand.	Cum	159.70
8	Supplying and laying Polythene Sheet (150gm / sq.m.) over damp proof course or below flooring or roof terracing or in foundation or in foundation trenches.	Sqm	135.55
9	Plain Cement Concrete(mix 1:3:6) with graded stone chips(20 mm nominal size) excluding shuttering and reinforcement,if any, in ground floor as per relevant IS codes.a)Pakur variety	Cum	26.71
10	Ordinary Cement concrete (mix 1:1.5:3) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement,if any, in gound floor as per relevant IS codes.	Cum	24.26
11	Reinforcement for reinforced concrete work in all sorts of structures including distribution bars, stirrups, binders etc initial straightening and removal of loose rust (if necessary), cutting to requisite length, hooking and bending to correct shape, placing in proper position and binding with 16 gauge black annealed wire at every intersection, complete as per drawing and direction.	M.T	2.75
12	Hire and labour charges for shuttering with centering and necessary staging upto 4 m using approved stout props and thick hard wood planks of approved thickness with required bracing for concrete slabs, beams and columns, lintels curved or straight including fitting, fixing and striking out after completion of works (upto roof of ground floor)	Sqm	166.05
13	Single Brick Flat Soling of picked jhama bricks including ramming and dressing bed to proper level and filling joints with local sand	Sqm	127.18
14	Brick work with 1st class bricks in cement mortar(1:6) (a) In foundation and plinth	Cum	30.76
15	18 mm. to 22 mm. thick, kota stone slab set in 20 mm thick (avg) cement mortar (1:4) in floor, stair & lobby including pointing in cement slurry with admixture of pigment matching the stone shade, including grinding & polishing as per direction of Engineer - in - charge to match with the existing work. [Slurry for bedding @ 4.4 kg/Sq.m and pointing @2.0 kg/Sq.m]	Sqm	137.08
16	M.S structural works in column,beams etc. with simple rolled structural members (e.g.joists,angle,channel sections conforming to IS:226, IS:808 & SP(6)-1964 connected to one another with bracket,gussets,cleats as per design, direction of Engineer-in-charge complete including cutting to requisite shape and length,fabrication with necessary bolting,metal arc welding conforming to IS:816-1969 & IS:1995 using electrodes of approved make and brand conforming to IS:814-2004, haulage,hoisting and erection all complete.The rate includes the cost of rolled steel section.	M.T	2.75
17	Supplying,fitting & fixing Zn-Al alloy (55% Al & 45% Zn) coating of 150 grams per sq.metre(followed by colour coated on both side) steel sheet work having minimum yield strength of 550 Mpa of trapizoidal profile approved make(excluding the supporting frame work ) fitted and fixed with 55 mm & 25 mm self	Sqm	196.96

	tapping screw, EPDM washer 16 mm dia & 3 mm th. washer etc. complete with 150 mm end lap and one corrugation minimum side lap. (Payment to be made on area of finished work). a) With 0.5 mm thick sheet		
18	Priming one coat on steel or other metal surface with synthetic oil bound primer of approved quality including smoothening surfaces by sandpapering etc.	Sqm	203.50
19	Painting with best quality synthetic enamel paint of approved make and brand including smoothening surface by sand papering etc. including using of approved putty etc. on the surface if necessary: (b) On steel or other metal surface: (ii) Two Coats	Sqm	203.50

<b>ANNEXURE – IV</b>	<b>DETAIL BOQ OF ELECTRICAL WORK</b>
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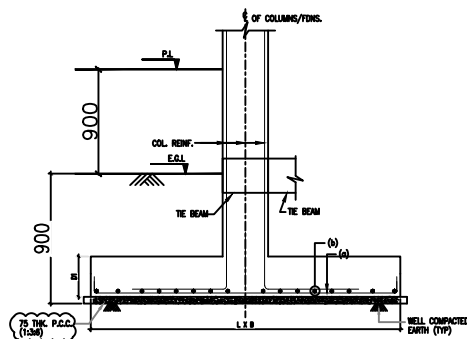
<b>Necessary EI work for for Dahi Cold Room Project at Bhagirathi Milk Union Campus, Berhampore, Murshidabad, WestBengal</b>			
<b>SL. No.</b>	<b>Description of item</b>	<b>Unit</b>	<b>Qty</b>
1	Supply & Laying of required capacity and required quantity electrical armored cable along with necessary arrangements from existing Electrical Control Panel / Busbar to VTPN	Lot	1
2	S&F of required capacity and required quantity VTPN, MCB, Switch, Fuse etc.	Lot	1
3	Supply & Laying of required capacity and required quantity electrical cable from VTPN to each CDU / equipment for power source of each item	Lot	1

EXISTING OLD PLANT



PROPERTY OF BHAGIRATHI MILK UNION	
PROJECT	PROPOSED DRAWING FOR CONSTRUCTION OF DAHI COLD STORE ROOM AT BHAGIRATHI MILK UNION CAMPUS, BERHAMPORE, MURSHIDABAD
TITLE	CIVIL AND MECHANICAL DRAWING





SCHEDULE OF FOUNDATIONS						
FDN. MKD.	SIZE		THICKNESS	REINFORCEMENT		TYPE OF FOUNDATION
	L	B	D1	(a)	(b)	
F1	900	900	200	12Ø Ø200 C/C	12Ø Ø200 C/C	ISOLATED FOOTING

PROPERTY OF BHAGIRATHI MILK UNION	
PROJECT	DRAWING FOR CONSTRUCTION OF DAHI COLD STORE ROOM AT BHAGIRATHI MILK UNION CAMPUS, BERHAMPORE, MURSHIDABAD
TITLE	CIVIL AND MECHANICAL DRAWING