



मा. बाळासाहेब ठाकरे कृषि व्यवसाय व ग्रामीण परिवर्तन (स्मार्ट) प्रकल्प

गोडाऊन 450 मेट्रिक टन चे कोटेशन

उपप्रकल्पाचे नाव

मिश्र शेतमालाची स्वच्छता, वर्गीकरण व दर्जा सुधार पथदर्शी प्रकल्प

सादरकर्ते

चंदनखेडा फारमर प्रोड्यूसर कंपनी लिमिटेड समुदाय आधारित संस्था,

चंदनखेडा तालुका- भद्रावती जिल्हा- चंद्रपुर

संपर्क: 8766849267; 9850473540

गोडाऊन 450 मेट्रिक टन चे कोटेशन - भाग 3

अनुक्रमणिका

समुदाय आधारीत संस्थेचे नाव:

चंदनखेडा फारमर प्रोड्यूसर कंपनी लिमिटेड, चंदनखेडा तालुका भद्रावती जिल्हा चंद्रपुर

जबाबदार व्यक्तीचे नाव व संपर्क क्रमांक :

श्री. संतोष खडतकर मोबाईल क्रमांक : 8766849267

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1. RECAPITULATION SHEET


NANDORI FARMER PRPDUCER COMPANY

WAREHOUSE 450 MT

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CHANDANKHEDA FARMERS PROUCER CO. LTD.						
AT POST CHANDANKHEDA,TAL- BHADRAVATI , DIST- CHANDRAPUR.						
RECAPULATION SHEET						
FINAL						
NAME OF WORK :- PROPOSED CONSTRUCTION OF 450 MT CAP.WH BLDG WITH ANCILLARY WORKS						
Based on E SSR -2021-22						
PARTICULARS	Capacity	Unit		AMOUNT	Cost per MT	Cost per SqM
Sub Work I :- Const. of 450 MT WH Bldg.	450	MT	Rs	4384013	9742.25	16606
Sub Work II :- Internal Bituminous Roads	659	SqM	Rs	1431579		2174
Sub Work III :- Electrification		2.5%	Rs	109600		
Sub Work IV :- Royalty Charges			Rs	79916		
Sub work V:- Material Lab Testing charges			Rs	35020		
Tender Cost			Rs	6040128	13423	
Add 3 % Contigencies	3%		Rs	181204		
Add GST 12 %	12%		Rs	724815		
Add 0.5 % Labour Insurance	0.5%		Rs	30201		
Grand Total			Rs	6976348	15503	
			Say Rs	6976350		


B. M. TITRE
B. E. (Civil)
STATE/R/2022/APL/02905
ENGINEER

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2. ABSRTACT SHEET

NANDORI FARMER PRPDUCER COMPANY

WAREHOUSE 450 MT

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CHANDANKHEDA FARMERS PROUCER CO. LTD.									
AT POST CHANDANKHEDA,TAL- BHADRAVATI , DIST- CHANDRAPUR.									
NAME OF WORK :- PROPOSED CONSTRUCTION OF 450 MT CAP.WH BLDG WITH ANCILLARY WORKS AT POST CHANDANKHEDA,TAL- BHADRAVATI , DIST- CHANDRAPUR.									
LEADS & RATES OF MATERIALS		Based on E SSR -2021-22							
S.N.	MATERIAL & LOCATION	UNIT	LEADS	CHARGES	INITIAL	LEAD	Pay load		
			KM	ACTUAL	DIFF	Factor			
1	SAND	CU M	25.00	489.23	0.00	489.2	1.00		
2	METAL UPTO 40MM crushed	CU M	10.00	299.83	0.00	299.8	1.00		
3	METAL ABOVE 40 MM Road	CU M	10.00	287.34	0.00	287.3	1.00		
4	RUBBLE	CU M	10.00	287.34	0.00	287.3	1.00		
5	BRICKS (475 bricks per Cum)	Cum	15.00	812.99	0.00	386.2	1.00		
6	HARD MURUM/Soft Murumn	CU M	3.00	192.42	0.00	192.42	1.00		
7	Royalty	1	0						
8	Cement	MT	1	95.07	0.00	95.07	0.00		
9	Steel	MT	1	95.07	0.00	95.07	0.00		
				Natural		Artifical			
			QTY	RATE	AMOUNT	Rate	Amount		
1	C.C. M-10 for foundation & bedding	SAND	0.47	489.23	229.94	299.83	140.92		
		METAL	0.94	299.83	281.84	299.8	281.84		
					511.78		422.76		
2	P & C U.C.R masonry	SAND	0.4	489.23	195.69	299.8	119.932		
		RUBBLE	1.25	287.34	359.18	287.3	359.175		
		Cement	1.78	0.00	0.00		479.107		
					554.87		958.214		
3	P & C B.B. masonry in plinth & S.S	SAND	0.32	489.23	156.55	299.8	95.9456		
		BRICKS	0.475	386.17	183.43	386.17	183.4309		
					339.98		279.38		
4	P & L R.C.C. (M-20) M-20	SAND	0.425	489.23	207.92	299.83	127.43		
		METAL	0.85	299.83	254.86	299.83	254.86		
					462.78		382.28		
4-A	P & L R.C.C. M-15	SAND	0.44	489.23	215.26	299.83	131.93		
		METAL	0.88	299.83	263.85	299.83	263.85		
					479.11		395.78		
5	P & A 25mm tk plaster	SAND	0.024	489.23	11.74				
		METAL	0.22	299.83	65.96				
					77.70				
								The centre under MIDC area	
								percentage required to be added will be percen	0.00%
6	P & A 20mm tk plaster	SAND	0.024	489.23	11.74			BLDG.WORKS	0.00%
					11.74				
7	P & F ploished shahabad for sills & dado	SAND	0.024	489.23	11.74			SERVICE CHARGES.	0.00%
					11.74			Labour cess	0.00%
8	P & C half brick wall	SAND	0.036	489.23	17.61			TOTAL:	0.00
	120 bricks per cum	BRICKS	1	386.17	386.17				
					403.78				

B. M. Titre
B. M. TITRE
B. E. (Civil)

STATE/R/2022/APL/02905
ENGINEER

CHANDANKHEDA FARMERS PROUCER CO. LTD.													
AT POST CHANDANKHEDA,TAL- BHADRAVATI , DIST- CHANDRAPUR.													
Sub Work :-I Const. of 450 MT WH Bldg.													
I.N.	DESCRIPTON OF ITEM	QTY.	UNIT	I.N./ P.N	BASIC	LEAD CHARGES		TS	Add 0 %	TOTAL OF	ADD %	TOTAL OF	AMOUNT
					RATE	SAND	METAL	&	C Area	RATES	FOR	RATES	
						HM	Bricks	R.A.	Charges	6 TO 10	CHARGES	6 TO 12	
									0.00		0.00		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5 m.) By Mechanical Means.	49.00	Cum	21.02/115	193.00					193.00	0.00	193.00	9457
2	Excavation for foundation in earth, soils of all types, sand, gravel and soft murum, including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5m to 3.0m) By Mechanical Means.	1.00	Cum	21.04/115	241.00					241.00	0.00	241.00	241
3	Excavation for foundation in hard murum including removing the excavated material upto distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.50 m) By Mechanical Means.	17.00	Cum	21.06/148	200.00					200.00	0.00	200.00	3400

4	Excavation for foundation in Hard murum including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 to 3.0m.) By Mechanical Means.	1.00	Cum	21.08/115	265.00					265.00	0.00	265.00	265
5	Excavation for foundation in hard murum and boulders including removing the excavated material up to a distance 50 metres, beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5m.) By Mechanical Mean.	14.00	Cum	21.10/115	235.00					235.00	0.00	235.00	3290
6	Excavation for foundation in Hard murum and boulders including removing the excavated material upto a distance of 50 metres, beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 m to 3.0 m.) By Mechanical Means.	1.00	Cum	21.12/115	291.00					291.00	0.00	291.00	291
7	Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed.	39.00	Cum	2.11/23	104.00					104.00	0.00	104.00	4056
8	Excavation for roadway in hard murum and boulder including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed.	1.00	Cum	2.13/23	121.00					121.00	0.00	121.00	121

9	Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade).	34.00	Cum	24.01/129	5538	422.76	-120.00			5840.76	0.00	5840.76	198586
10	Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually , striking joints on un exposed faces and watering etc.complete.	1.00	cu m	28.01/146	4757					4757.00	0.00	4757.00	4757
11	Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in foundations and plinth of inner walls/ in plinth external walls including bailing out water manually , striking joints on unexposed faces, raking out joints on exposed faces and watering etc. Complete.	22.00	Cum	27.01/144	7343	279.38				7622.38	0.00	7622.38	167692
12	Providing & laying 35 cms wide single layer tarfelt by applying initial coat of shalibond @1kg/sqm fixing in place by wire nails for D.P.C. at plinth as directed by Engineer in charge.	22.00	Sqm	R.A.	349.25					349.25	0.00	349.25	7684

13	Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.	7.00	MT	26.33/139	71778.00					71778.00	0.00	71778.00	502446
14	Providing and laying in situ /Ready Mix cement concrete M-20 of trap / granite /quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering formwork, laying/pumping cover blocks, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor based PLC with out SCADA enabled reversible Drum Type mixer/ concrete Batch mix.	11.00	Cum	25.11/133	6666.00	382.28	-120.00			6928.28	0.00	6928.28	76211
15	Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel),with fully automatic micro processor based PLC with Out SCADA enabled.	16.00	Cum	25.31/134	12987.00	382.28	-120.00			13249.28	0.00	13249.28	211988

16	Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction and roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade).	29.00	Cum	25.50/135	11483.00	382.28	-120.00			11745.28	0.00	11745.28	340613
17	Providing and laying Cast in situ/Ready Mixcement concrete M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C. chajja as per detailed design and drawings including steel centering, formwork, cover blocks, laying/pumping, compacting and roughening the surface if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade).	1.00	Cum	26.05/137	13111.00	382.28	-120.00			13373.28	0.00	13373.28	13373
18	Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete. With fine aggregate (Crushed sand VSI Grade).	1.00	Cum	25.70/135	13943.00	382.28	-120.00			14205.28	0.00	14205.28	14205

19	Providing second class Burnt Brick masonry with conventional / I.S.type brick since mentmortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding etc. Complete.	57.00	Cum	27.05/144	7570.00	279.38				7849.38	0.00	7849.38	447415
20	Providing and laying Cast in situ/Ready Mix cement concrete M-15 of trap/ granite/quartzite/gneiss metal for coping to plinth or parapet, moulded or chamfered as per drawing or as directed including steel centering, plywood/ steel formwork compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be covered).	1.00	Cum	24.16/132	6030.00	395.78	-120.00			6305.78	0.00	6305.78	6306
21	Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1Kilogramper cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc.complete.	467.00	Sqm	32.11/153	599.00	11.74				610.74	0.00	610.74	285216
22	Providing internal cement plaster 12 mm thick in Single coats in cement mortar 1:4 without neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc.complete.	356.00	Sqm	32.04/153	264.00	11.74				275.74	0.00	275.74	98163
23	Providing internal cement plaster 20mm thick in Single coats in cement mortar 1:4 with neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc.complete.	71.00	Sqm	32.04/153 /32.21/154	332.00	11.74				343.74	0.00	343.74	24406

24	Providing and applying three coats of water proof cement paint of approved manufacture and of approved colour to new plastered surfaces including scaffolding if necessary, cleaning and preparing the surface, watering for two days etc. complete.	335.00	Sqm	35.15/165	97.00					97.00	0.00	97.00	32495
25	Providing and applying two coats of exterior acrylic emulsion paint conforming to corresponding I.S. of approved manufacture and of approved colour to the plastered surfaces including cleaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc complete.	368.00	Sqm	35.25/165	240.00					240.00	0.00	240.00	88320
26	Providing and applying two coats (exterior quality) of flat oil paint of approved colour and shade to the plastered surface in buildings and workshops including scaffolding if necessary, cleaning the surface and preparing surface etc. complete. (excluding primer coat)	79.00	Sqm	35.11/164	83.00					83.00	0.00	83.00	6557
27	Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.9 mm with lock plate of 3.15 mm thickness reinforced with 35 x 35 x 5 mm angle section fitted with sliding bolts and handles for both sides, deep M.S. channel section of depth and thickness not less than 65 mm and 3.15 mm respectively with hold fast arrangements, M.S. Bracket plate 300 x 300 x 3.15 with hold fast arrangements, M.S. Bracket plate 300 x 300 x 3.15 mm minimum size and shape with square bar, suspension shaft of minimum 32 mm diameter, hood cover of M.S. sheet not less than 0.9 mm thickness and of any size at top and safety devices including mechanical gear operation arrangement.	11.00	Sqm	39.24/181	4310.00					4310.00	0.00	4310.00	47410


28	Providing and fixing mildsteel grill work for windows, ventilators etc. 20 Kilogram / Square Metre as per drawing including fixtures, necessary welding and painting with one coat's of anticorrosive paint and two coats of oil painting complete.	13.00	Sqm	40.01/192	1845.00					1845.00	0.00	1845.00	23985
29	Providing structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates etc. as per detailed designs and drawings or as directed including cutting, fabricating, hoisting, erecting fixing in position, Making riveted/ bolted/ welded connection and one coat of anticorrosive paint and over it 2 coats of oil painting approved quality and shade etc. complete.	7.00	M T	23.04/129	105909.00					105909.00	0.00	105909.00	741363
30	Providing and fixing colour coated Zinalume (R) AZ150 (min 150 gms/sq.mt. total on each side) profiled sheets for roofing. The feed material is manufactured out of nominal 0.45 mm Base Metal Thickness (BMT) (0.5 mm TCT), Hi-strength steel with min.550 MPa yield strength, metallic hot dip coated with Aluminium-Zinc alloy (55% aluminium 43.4% zinc 1.6% silicon) with COLORBOND (R) steel quality super durable polyester paint coat (with inorganic pigment).	302.59	Sqm	38.34/173	1095.00					1095.00	0.00	1095.00	331336
31	Providing and fixing of colour Zinalume (R) AZ150 (Min150gms/Sq.mt. total on each sides) profiled sheets for Ridges. The feed material is manufactured out of nominal 0.45mm Base Metal Thickness (BMT) (0.5mmTCT), Hi- strength steel with min 550 MP a yield strength, metallic hot dip coated with Aluminum- Zinc alloy (55% aluminium 43.4 % zinc 1.6 % silicon) with COLORBOND (R) steel quality super durable polyester paint coat (with inorganic pigment). The paint shall have a total coating thickness of noiminal 35 um, comprising of nominal 25 um exerior.	18.10	Rum	38.35/174	702.00					702.00	0.00	702.00	12706

32	Providing and fixing wind oppareted tarbo S. S. ventiletar system (24 inch dia.) over exsiting roof including cutting of sheet ,propar fixing in position to true line & level with all fixtures & fastning, providing 0.8mm thick FRP sheet for covering area between roof and fan so as to provide waterfoof joints with approved water proffing compound making good the roof surface including cleaning etc. complete (General application for all types of roofs for ventilation & day light parpose at terrace [As directed by Engineer in charge]. (Jalgaon D.S.R.304 /123)	8.00	Nos	42/374	8680.00					8680.00	0.00	8680.00	69440
33	Providing & constructing parapet coping of size 35 x 35 cms in cement mortar 1:4 with conical top and side drops and round finish at A.C. sheet joints including finishing the whole with 20 mm thick cement plaster 1:4 with cement finish, 1.	32.60	RMT	R A	1179.00					1179.00	0.00	1179.00	38435
34	Filling in plinth with approved excavated stuff obtained from departmental land including watering, compacting etc. complete as directed. (Bd. A.10/262)	78.00	Cum	21.36/117	113.00					113.00	0.00	113.00	8814
35	Providing Hard Murum cohesive non-swelling materials in plinth in layers of 20 cms etc. complete as directed. [Only compacted thickness is payable][Rd.23/202 & Rd.28/205].	144.00	Cum	RA	480.42					480.42	0.00	480.42	69180
36	Compacting the Hard Murum, cohesive non swelling materials in plinth upto 200 mm loose with power roller 8 to 10 tonee capacity including artificial watering etc. complete as directed.[Rd.38/210]	718.00	Sqm	2.31/24	19.00					19.00	0.00	19.00	13642
37	Providing & laying stone metal layer of 20 cm thickness with 60 mm over size metal 65% and 40 mm size metal 35% with sand or stone chips spreading & leveling handpacking complete.[Rd.22/201,Rd.20/200 &Rd.20/205]	100.00	Cum	RA	1233.89					1233.89	0.00	1233.89	123389

38	Compacting oversize & size metal layers combindaly with power roler not less than 8 tonnes including artificial watering & leveling etc. complete as directed (Rd.35/209)	479.00	Sqm	MR	20.00					20.00	0.00	20.00	9580
39	Providing and laying in situ cement concrete M20 with tremix treatment for 100 mm thickness for flooring with groove cutting of 4mm wide and 20mm deep with necessary refilling with bitumen and including vaccum dewatering etc. complete.	259.00	Sqm	33.30/158	746.00					746.00	0.00	746.00	193214
40	Providing treatment of TREMIX vaccum dewatering over prelaid cement concrete 1:2:4 surface including fixing of M.S.Channel formwork as per required size and placing of dowel rod, vibrating the concrete by needle vibrator and leveling by leveler.	1.00	Sqm	R A	50.00					50.00	0.00	50.00	50
41	Providing & fixing ISMC 150 with weight @ 16.80 Kgs/Rmt 20 mm dia & 0.50 m long bolts & nuts @ 1.00 mc/c, M.S. angles for stands of fire bucket including chain fixing in wall applying three coats of oilpaint etc. complete.	0.49	MT	23.01/129	89181.00					89181.00	0.00	89181.00	43699
42	Providing & Fixing in position M.S. ladder of 45 cms width made out 50 x 50 x 6 mm two angles for rails and M.S. angle stiffeners at three places as directed with M.S. round bars of 20 mm dia for steps @ every 30 cm c/c including fixing.	10.00	RMT	RA	805.80					805.80	0.00	805.80	8058

43	Providing and fixing lightening conductor system comprising of erecting Air-Termination consisting of tubular copper rod of 25 mm dia. 1.2 mm thick with multiple point shead 1.2 mt. long (HeavyDuty) welded or clamped to G.I .pipe pole B grade 50 mm dia of requiired length with M.S. round base plate 25 Cm diamand 10mm thick at bottom embeded in cement concrete 1:3:6 d foundation of size 45 cm diam x 45cm Height and providing earthing with copper earth plate of size 60x60x0.3cms with cadmium plated nut bolts to fix earthing strip burried inspecially prepared earth pits 1.5 metre below ground level with 40 Kilogram charcoal and salt with altemate layers of charcoal and salt and G.I.pipe 40 mm dia 2 meter length burried in earth upto earthing plate remining portion above ground level for watering and refilling comppete. Note- Copper strip from lightening conductor is not considered in this item.	1.00	Nos	44.18/214	22189.00					22189.00	0.00	22189.00	22189
44	Conveying the materials obtained from excavation including all lifts, laying in layers, breaking clods, dressing to the required lines, curves, grades and section for a lead over 50m to 300m from the site of excavation to the site of dep.	50.00	Cum	2.25/24	177.00					177.00	0.00	177.00	8850
45	Conveying the materials obtained from excavation including laying in layers, breaking clods, dressing to the required lines, curves, grades and section for all leads & lifts from the site of excavation to the site of deposition away from building as directed engineer in charge.	25.00	Cum	5 KM lead stat.	220.46					220.46	0.00	220.46	5512
46	Providing pre-constructional Anti-termite treatment as per I.S. 6313 (Part-II) - 1973 by treating the top surface of plinth filling at the rate of 5 litres of emulsion concentrates of 0.5 percent of Hephoclore per square meter of surface.	265.00	sq m	21.24/117	94.00					94.00	0.00	94.00	24910

47	Providing and fixing in position powder coated aluminium louvered windows / ventilator of various sizes with powder coating as per detailed drawing and specifications including aluminium frames 80 x 38 mm x 1.22 mm box type, 5 mm thick sheet glass louvers, of approved quality etc. complete.	13.00	sq m	39.68/188	3107.00					3107.00	0.00	3107.00	40391
		TOTAL FOR W.H.BLDG							TOTAL RS			4383707	


B. M. TITRE
B. E. (Civil)
STATE/R/2022/APL/02905
ENGINEER

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3. MEASUREMENT SHEET OF BUILDING


NANDORI FARMER PRODUCER COMPANY

WAREHOUSE 450 MT

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CHANDANKHEDA FARMERS PROUCER CO. LTD.													
AT POST CHANDANKHEDA,TAL- BHADRAVATI , DIST- CHANDRAPUR.													
NAME OF WORK :- PROPOSED CONSTRUCTION OF 450 MT CAP.WH BLDG WITH ANCILLARY WORKS													
CAPACITY		450	MT	SIZE									
LONG WALLS--2		OUTER		1	X	17.57	X	15.70			275.85		
SHORT WALLS--2		INNER		1	X	17.22	X	15.00			258.30		
										Av.			
FOUNDATION DEPTHS										Depth			
1	EARTH SOIL 0 TO 1.50										0.70		
2	EARTH SOIL 1.50 to 3.00										0.00		
3	H.M. (0 to 1.50)										0.60		
4	H.M. (1.50 to 3.00)										0.00		
5	H.M.& BOULDER 0 TO 1.50										0.50		
6	H.M.& BOULDER 1.50 to 3.00										0.00		
7	SOFT ROCK										0.00		
8	HARD ROCK										0.00		
										TOTAL	1.80		
CUTTING IN PLINTH										0.15			
Asper vision at site													
Ex. Column Footings													
Column C1		2	X	3	X	1.20	X	1.20					
Column No. C3		2	X	2	X	1.30	X	1.50					
Column No.C2 MIDDLE		2	X	2	X	1.20	X	1.20					
Column No. C4 RS		1	X	3	X	0.00	X	0.00					
Column Platform (CP)		2	X	2	X	1.20	X	1.20					
Ex. Ground Beam PANEL													
C1-C1 middle		2	X	2	X	4.21	X	0.70					
C1-C3 END WALL		2	X	2	X	4.21	X	0.70					
C3-C2		2	X	2	X	5.15	X	0.70					
C2-C2 M		2	X	1	X	5.05	X	0.70					
APRON long		1	X	1	X	20.67	X	1.28					
APRON short		1	X	1	X	16.44	X	1.28					
Column Nos. & Size													
Column C1		2	X	3	X	0.30	X	0.45	X	5.15			
Column No.C2		2	X	2	X	0.45	X	0.30	X	5.15			
Column No. C3		2	X	2	X	0.30	X	0.45	x	5.15			
Column No.Platform		2	X	2	X	0.45	X	0.30					
Column near R.S.		1	X	3	X	0.15	X	0.23	X	2.50			
PCC, Tarfelt, BBM, BEAMS PANELS													
C1-C1 middle		2	X	2	X	3.91	X	0.35					
C1-C3 END WALL		2	X	2	X	3.91	X	0.35					
C3-C2		2	X	2	X	4.85	X	0.35					
C2-C2 M		2	X	1	X	4.75	X	0.35					
PB 1		2	X	1	X	3.91	X	0.35	X	0.45			
PB2		2	X	1	X	3.91	X	0.30	X	0.45			
PB3		2	X	2	X	1.20	X	0.30	X	0.30			
Rolling shutters													
V1		2	X	7	X	0.60			X	0.60			
V2		1	X	14	X	1.00			X	0.60			
V3 Up Side of Shutter		1	X	2	X	1.30			X	0.45			
TK. OF C.C. FLOORING						0.15							
Plat From		1	X	1	X	4.90			X	1.80			
SheetSize		1	X	2	X	17.57			X	8.15	=	286.39	
Turbo @ Roffing		2	X	3									


B. M. TITRE
B. E. (Civil)
STATE/R/2022/APL/02905
ENGINEER

CHANDANKHEDA FARMERS PROUCER CO. LTD.												
AT POST CHANDANKHEDA, TAL- BHADRAVATI , DIST- CHANDRAPUR.												
NAME OF WORK :- PROPOSED CONSTRUCTION OF 450 MT CAP.WH BLDG WITH ANCILLARY WORKS												
Sub Work :-I Const. of 450 MT WH Bldg.												
MEASUREMENT SHEET												
Item Nos & Description of Items	NO.S			LENGTH	BREDTH	DEPTH / HIGHT	TOTAL QTY	Unit				
	1	X	2									
1	Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5 m.) By Mechanical Means									Cum		
Column footing												
Column C1	2	X	3	X	1.20	X	1.20	X	0.70	=	6.05	
Column No. C3	2	X	2	X	1.30	X	1.50	X	0.70	=	5.46	
Column No.C2 MIDDLE	2	X	2	X	1.20	X	1.20	X	0.70	=	4.03	
Column No. C4 RS	1	X	3	X	0.00	X	0.00	X	0.70	=	0.00	
Column Platform (CP)	2	X	2	X	1.20	X	1.20	X	0.70	=	4.03	
For Ground Beam PANEL												
C1-C1 middle	2	X	2	X	4.21	X	0.65	X	0.70	=	7.67	
C1-C3 END WALL	2	X	2	X	4.21	X	0.65	X	0.70	=	7.67	
C3-C2	2	X	2	X	5.15	X	0.65	X	0.70	=	9.37	
C2-C2 M	2	X	1	X	5.05	X	0.65	X	0.70	=	4.60	
									Total		48.87	
									say		49.00	Cum
2	Excavation for foundation in earth, soils of all types, sand,gravel and soft murum, including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5m to 3.0m) By Mechanical Means									Cum		
Column footing												
Column C1	2	x	3	x	1.20	X	1.20	X	0.00	=	0.00	
Column No. C3	2	x	2	x	1.30	X	1.50	X	0.00	=	0.00	
Column No.C2 MIDDLE	2	x	2	x	1.20	X	1.20	X	0.00	=	0.00	
Column No. C4 RS	1	x	3	x	0.00	X	0.00	X	0.00	=	0.00	
Column Platform (CP)	2	x	2	x	1.20	X	1.20	X	0.00	=	0.00	
For Ground Beam PANEL												
C1-C1 middle	2	x	2	x	4.21	X	0.70	X	0.00	=	0.00	
C1-C3 END WALL	2	x	2	x	4.21	X	0.70	X	0.00	=	0.00	
C3-C2	2	x	2	x	5.15	X	0.70	X	0.00	=	0.00	
C2-C2 M	2	x	1	x	5.05	X	0.70	X	0.00	=	0.00	
									=		0.00	
									say	=	1.00	Cum

3	Excavation for foundation in hard murum including removing the excavated material upto distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.50 m) By Mechanical Means											Cum
	Column footing											
	Column C1	2	x	3	x	1.20	X	1.20	X	0.60	=	5.18
	Column No. C3	2	X	2	x	1.30	X	1.50	X	0.60	=	4.68
	Column No.C2 MIDDLE	2	X	2	x	1.20	X	1.20	X	0.60	=	3.46
	Column No. C4 RS	1	X	3	x	0.00	X	0.00	X	0.60	=	0.00
	Column Platform (CP)	2	X	2	x	1.20	X	1.20	X	0.60	=	3.46
	For Ground Beam PANEL											
	C1-C1 middle	2		2	x	4.21	X	0.70	X	0.00	=	0.00
	C1-C3 END WALL	2	X	2	x	4.21	X	0.70	X	0.00	=	0.00
	C3-C2	2	X	2	x	5.15	X	0.70	X	0.00	=	0.00
	C2-C2 M	2	X	1	x	5.05	X	0.70	X	0.00	=	0.00
										Total	=	16.78
										say	=	17.00
												Cum
4	Excavation for foundation in Hard murum including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 to 3.0m.) By Mechanical Means											Cum
	Column footing											
	Column C1	2	x	3	x	1.20	X	1.20	X	0.00	=	0.00
	Column No. C3	2	X	2	x	1.30	X	1.50	X	0.00	=	0.00
	Column No.C2 MIDDLE	2	X	2	x	1.20	X	1.20	X	0.00	=	0.00
	Column No. C4 RS	1	X	3	x	0.00	X	0.00	X	0.00	=	0.00
	Column Platform (CP)	2	X	2	x	1.20	X	1.20	X	0.00	=	0.00
	For Ground Beam PANEL											
	C1-C1 middle	2	°	2	x	4.21	X	0.70	X	0.00	=	0.00
	C1-C3 END WALL	2	X	2	x	4.21	X	0.70	X	0.00	=	0.00
	C3-C2	2	X	2	x	5.15	X	0.70	X	0.00	=	0.00
	C2-C2 M	2	X	1	x	5.05	X	0.70	X	0.00	=	0.00
										Total	=	0.00
										say	=	1.00
												Cum
5	Excavation for foundation in hard murum and boulders including removing the excavated material up to a distance 50 metres, beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5m.) By Mechanical Mean											Cum
	Column footing											
	Column C1	2	x	3	x	1.20	X	1.20	X	0.50	=	4.32
	Column No. C3	2	X	2	x	1.30	X	1.50	X	0.50	=	3.90
	Column No.C2 MIDDLE	2	X	2	x	1.20	X	1.20	X	0.50	=	2.88
	Column No. C4 RS	1	X	3	x	0.00	X	0.00	X	0.50	=	0.00
	Column Platform (CP)	2	X	2	x	1.20	X	1.20	X	0.50	=	2.88
	For Ground Beam PANEL											
	C1-C1 middle	2	x	2	x	4.21	X	0.70	X	0.00	=	0.00
	C1-C3 END WALL	2	X	2	x	4.21	X	0.70	X	0.00	=	0.00
	C3-C2	2	X	2	x	5.15	X	0.70	X	0.00	=	0.00
	C2-C2 M	2	X	1	x	5.05	X	0.70	X	0.00	=	0.00
										Total	=	13.98
										say	=	14.00
												Cum

6	Excavation for foundation in Hard murum and boulders including removing the excavated material upto a distance of 50 metres, beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 m to 3.0 m.) By Mechanical Means											Cum
	Column footing											
	Column C1	2	x	3	x	1.20	X	1.20	X	0.00	=	0.00
	Column No. C3	2	X	2	x	1.30	X	1.50	X	0.00	=	0.00
	Column No.C2 MIDDLE	2	X	2	x	1.20	X	1.20	X	0.00	=	0.00
	Column No. C4 RS	1	X	3	x	0.00	X	0.00	X	0.00	=	0.00
	Column Platform (CP)	2	X	2	x	1.20	X	1.20	X	0.00	=	0.00
										Total	=	0.00
										Say	=	1.00
												Cum
7	Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed.											Cum
	For Wh bldg.	1	X	1	X	17.22	X	15.00	X	0.15	=	38.75
										TOTAL	=	38.75
										SAY	=	39.00
												Cum
8	Excavation for roadway in hard murum and boulder including dressing section to the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stacking as directed.											Cum
	For Wh bldg.	0	X	1	X	17.22	X	15.00	X	0.30	=	0.00
										TOTAL	=	0.00
										SAY	=	1.00
												Cum
9	Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)											Cum
	Bed concrete in WH.	1	X	1	X	17.22	X	15.00	X	0.10	=	25.83
	Column footing											
	Column C1	2	x	3	x	1.20	X	1.20	X	0.10	=	0.86
	Column No. C3	2	X	2	x	1.30	X	1.50	X	0.10	=	0.78
	Column No.C2 MIDDLE	2	X	2	x	1.20	X	1.20	X	0.10	=	0.58
	Column No. C4 RS	1	X	3	x	0.00	X	0.00	X	0.10	=	0.00
	Column Platform (CP)	2	X	2	x	1.20	X	1.20	X	0.10	=	0.58
	For Ground Beam PANEL											2.80
	C1-C1 middle	2	x	2	x	4.21	X	0.70	X	0.10	=	1.18
	C1-C3 END WALL	2	X	2	x	4.21	X	0.70	X	0.10	=	1.18
	C3-C2	2	X	2	x	5.15	X	0.70	X	0.10	=	1.44
	C2-C2 M	2	X	1	x	5.05	X	0.70	X	0.10	=	0.71
										Total	=	33.13
										say	=	34.00
												Cum
10	Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually , striking joints on un exposed faces and watering etc.complete											Cum
	APRON long	0	X	2	X	20.67	X	0.45	X	0.35	=	0.00
	APRON short	0	X	1	X	16.44	X	0.45	X	0.35	=	0.00
	U.C.R. of ramp	0	X	2	X	7.50	X	0.45	X	1.25	=	0.00
										Total	=	0.00
	Provision									say	=	1.00
												Cum

11	Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in foundations and plinth of inner walls/ in plinth external walls including bailing out water manually , striking joints on unexposed faces, raking out joints on exposed faces and watering etc. Complete.												Cum
	For PANEL In Plinth												
	C1-C1 middle	2	X	2	X	3.91	X	0.35	X	1.00	=	5.48	
	C1-C3 END WALL	2	X	2	X	3.91	X	0.35	X	1.00	=	5.48	
	C3-C2	2	X	2	X	4.85	X	0.35	X	1.00	=	6.79	
	C2-C2 M	2	X	1	X	4.75	X	0.35	X	1.00	=	3.33	
										Total	=	21.07	
										say	=	22.00	Cum
12	Providing & laying 35 cms wide single layer tarfelt by applying initial coat of shalibond @1kg/sqm fixing in place by wire nails for D.P.C. at plinth as directed by Engineer in charge.												Sqm
	For PANEL In Plinth												
	C1-C1 middle	2	X	2	X	3.91	X	0.35	X		=	5.48	
	C1-C3 END WALL	2	X	2	X	3.91	X	0.35	X		=	5.48	
	C3-C2	2	X	2	X	4.85	X	0.35	X		=	6.79	
	C2-C2 M	2	X	1	X	4.75	X	0.35	X		=	3.33	
										Total		21.07	
										say		22.00	Sqm
	TMT Steel												
13	Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete..												MT
	Footing	11.00											
	Column	16.00				6350.43						6.35	
	Beams And Lintels	29.00								Total		6.35	
	weathersheds & canopies	1.00								say		7.00	MT
	R.C.C.slab	0.73											
		57.73	x	110									
	Footing												
14	Providing and laying in situ /Ready Mix cement concrete M-20 of trap / granite /quartzite/ gneiss metal for R.C.C. work in foundations like raft, strip foundations, grillage and footings of R.C.C. columns and steel stanchions etc. including bailing out water, Steel centering formwork, laying/pumping cover blocks, compaction and curing roughening the surface if special finish is to be provided (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor based PLC with out SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)												Cum
	Column footing												
	Column C1	2	X	3	x	1.10	X	1.10	X	0.45	=	3.27	
	Column No. C3	2	X	2	x	1.20	X	1.40	X	0.45	=	3.02	
	Column No.C2 MIDDLE	2	X	2	X	1.10	X	1.10	X	0.45	=	2.18	
	Column No. C4 RS	1	X	3	x	0.00	x	0.00	X	0.00	=	0.00	
	Column Platform (CP)	2	X	2	x	1.10	X	1.10	X	0.45	=	2.18	
										Total		10.65	
										say		11.00	Cum

Column												
15	Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawing or as directed including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete,(Excluding reinforcement and structural steel).with fully automatic micro processor based PLC with Out SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)											Cum
Column up to plinth												
	Column C1	2	X	3	x	0.30	X	0.45	X	2.15	=	1.74
	Column No.C2	2	X	2	x	0.45	X	0.30	X	2.15	=	1.16
	Column No. C3	2	X	2	X	0.30	X	0.45	X	2.15	=	1.16
	Column No.Platform	2	X	2	x	0.45	X	0.30	X	2.15	=	1.16
	Column near R.S.	1	X	3	x	0.15	X	0.23	X	0.00	=	0.00
Column above plinth												
	Column C1	2	X	3	x	0.30	X	0.45	X	5.15	=	4.17
	Column No.C2	2	X	2	x	0.45	X	0.30	X	5.15	=	2.78
	Column No. C3	2	X	2	X	0.30	X	0.45	X	5.15	=	2.78
	Column No.Platform	2	X	2	x	0.45	X	0.30	X	0.00	=	0.00
	Column near R.S.	1	X	3	x	0.15	X	0.23	X	2.50	=	0.26
										Total		15.22
										say		16.00
Beams And Lintels												Cum
16	Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap / granite /quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering, formwork, cover blocks, laying/pumping, compactionand roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)											Cum
Ground Beam												
	C1-C1 middle	2	X	2	X	4.21	X	0.35	X	0.60	=	3.54
	C1-C3 END WALL	2	X	2	X	4.06	X	0.35	X	0.60	=	3.41
	C3-C2	2	X	2	X	5.00	X	0.35	X	0.60	=	4.20
	C2-C2 M	2	X	1	X	5.05	X	0.35	X	0.60	=	2.12
Platform beam												
	PB 1	2	X	1	X	3.61	X	0.30	X	0.45	=	0.98
	PB2	2	X	1	X	3.61	X	0.30	X	0.45	=	0.98
	PB3	2	X	2	X	1.20	X	0.30	X	0.30	=	0.43
	OFFSET	1	X	2	X	3.61	X	0.21	X	0.15	=	0.22
	OFFSET	2	X	2	X	1.20	X	0.21	X	0.15	=	0.15
LINTELS												
	OVER V1	2	X	7	X	1.50	X	0.35	X	0.10	=	0.74
DOOR BEAM												
	C1-C1 middle	2	X	2	X	4.21	X	0.30	X	0.30	=	1.52
	C1-C3 END WALL	2	X	2	X	4.06	X	0.30	X	0.30	=	1.46
	C3-C2	2	X	2	X	5.00	X	0.30	X	0.30	=	1.80
	C2-C2 M	2	X	1	X	4.75	X	0.30	X	0.30	=	0.86
EAVES BEAM												5.63
	C1-C1 middle	2	X	2	X	4.21	X	0.30	X	0.30	=	1.52
	C1-C3 END WALL	2	X	2	X	4.06	X	0.30	X	0.30	=	1.46
	C3-C2	2	X	2	X	5.00	X	0.30	X	0.30	=	1.80
	C2-C2 M	2	X	1	X	5.05	X	0.30	X	0.30	=	0.91
AT GABLE												5.69
	C2-C3 @ 1.50 MTR	1	X	2	X	4.50	X	0.30	X	0.30	=	0.81
	C2-C2 @3.00 MTR	1	X	2	X	0.00	X	0.35	X	0.45	=	0.00
										Total		28.89
										say		29.00
												Cum

weathersheds & canopies												
17	Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap/ granite/ quartzite/ gneiss metal for R.C.C. chajja as per detailed design and drawings including steel centering, formwork, cover blocks, laying/pumping, compacting and roughening the surface if special finish is to be provided and curing complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)										Cum	
	Ventilators - V1 Long side	1	X	7	X	1.50	x	0.52	x	0.10	= 0.55	
										Total	0.55	
										Say	1.00	Cum
R.C.C.slab												
18	Providing and laying Cast in situ/Ready Mix cement concrete M-20 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete. With fine aggregate (Crushed sand VSI Grade)											
	PLATFORM SLAB	1	X	1	X	4.06	X	1.20	X	0.15	= 0.73	
										Total	0.73	
										say	1.00	Cum
BBM												
19	Providing second class Burnt Brick masonry with conventional/I.S.type brick since mentmortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding etc. Complete										Cum	
	For PANEL UP TO 2.50											
	C1-C1 middle	2	X	2	X	3.91	X	0.23	X	2.50	= 9.00	
	C1-C3 END WALL	2	X	2	X	3.91	X	0.23	X	2.50	= 9.00	
	C3-C2	2	X	2	X	4.85	X	0.23	X	2.50	= 11.16	
	C2-C2 M	2	X	1	X	4.75	X	0.23	X	2.50	= 5.46	
	Above DB to Below AC Sheet											
	C1-C1 middle	2	X	2	X	3.91	X	0.23	X	2.50	= 9.00	
	C1-C3 END WALL	2	X	2	X	3.91	X	0.23	X	2.50	= 9.00	
	C3-C2	2	X	2	X	4.85	X	0.23	X	2.50	= 11.16	
	C2-C2 M	2	X	1	X	4.75	X	0.23	X	2.50	= 5.46	
	Gable	2	X	0.5	X	15.70	X	0.23	X	2.55	= 9.21	
	Deduction for									Total	78.43	
	Rolling shutters	2	X	1	X	2.10	X	0.23	X	2.50	= 2.42	
	V1	2	X	7	X	0.60	X	0.35	X	0.60	= 1.76	
	V2	1	X	14	X	1.00	X	0.23	X	0.60	= 1.93	
	V3	1	x	3	X	1.30	X	0.23	X	0.45	= 0.40	
	V2 in gable	0	X	2	X	1.00	X	0.23	X	0.60	= 0.00	
	Beams & Lintels at											
	V1,V2										= 0.74	
	Door beam										= 5.63	
	Eaves beam										= 5.69	
	C2 in gable										= 2.78	
	Bed block below V1 ,purlin etc										= 0.22	
										Total deduction	21.57	
										Net	56.86	
										Say	57.00	Cum

Bed block below V1 ,purlin etc												
20	Providing and laying Cast in situ/Ready Mix cement concrete M-15 of trap/ granite/quartzite/gneiss metal for coping to plinth or parapet, moulded or chamfered as per drawing or as directed including steel centering, plywood/ steel formwork compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.) With fine aggregate (Crushed sand VSI Grade)											Cum
	Below V1	2	X	7	X	0.60	X	0.35	X	0.08	=	0.22
										Total		0.22
										say		1.00
												Cum
21	Providing sand faced plaster externally in cement mortar using approved screened sand, in all positions including base coat of 15 mm thick in cement mortar 1:4 using waterproofing compound at 1Kilogramper cement bag curing the same for not less than 2 days and keeping the surface of the base coat rough to receive the sand faced treatment 6 to 8 mm thick in cement mortar 1:4 finishing the surface by taking out grains and curing for fourteen days scaffolding etc.complete.											Sqm
	Outside											
	Long wall	1	X	2	X	17.57	X	6.15			=	216.11
	short wall	1	X	2	X	15.70	X	6.15			=	193.11
	Gable wall	1	X	2	X	15.70	X	0.95			=	29.83
	Column offset C1	2	X	3	X	0.22	X	6.15			=	8.12
	C3 offcet	2	X	2	X	0.22	X	6.15			=	5.41
	C2 offcet	2	X	2	X	0.22	X	6.15			=	5.41
	C2 in gable	1	X	2	X	0.22	X	1.50			=	0.66
	C2 in gable	0	X	2	X	0.22	X	3.00			=	0.00
	Weather sheds over											
	V1 top, bottom	2	X	7	X	1.55	X	0.65			=	14.11
	Sides	1	X	7	X	0.45	X	0.08			=	0.24
	V 2 top, bottom	1	X	14	X	1.10	X	0.67			=	10.32
	Sides	1	X	14	X	0.45	X	0.08			=	0.47
										Total		483.31
	Deduction											
	Rolling shutters	2	X	1	X	2.10	X	2.55			=	10.71
	V1	0.5	X	7	X	0.60	X	0.60			=	1.26
	V2	0.5	X	14	X	1.00	X	0.60			=	4.20
	V3	0.5	x	2	X	1.30	X	0.45			=	0.59
										Total		16.76
										Net		466.56
										say		467.00
												Sqm
22	Providing internal cement plaster 12 mm thick in Single coats in cement mortar 1:4 without neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc.complete.											Sqm
	Inside											
	Long wall	1	X	2	X	17.57	X	5.15			=	180.97
	short wall	1	X	2	X	15.70	X	5.15			=	161.71
	Gable wall	1	X	2	X	15.70	X	0.95			=	29.83
	Deduction									Total		372.51
	Rolling shutters	2	X	1	X	2.10	X	2.55			=	10.71
	V1	0.5	X	7	X	0.60	X	0.60			=	1.26
	V2	0.5	X	14	X	1.00	X	0.60			=	4.20
	V3	0.5	x	3	X	1.30	X	0.23	X		=	0.45
										Dedu.		16.62
										Net		355.89
										say		356.00
												Sqm

23	Providing internal cement plaster 20mm thick in Single coats in cement mortar 1:4 with neeru finish, to concrete, brick surface, in all positions including scaffolding and curing etc.complete.												Sqm
	Plinth												
	Long wall	1	X	2	X	17.57	X	1.00		=		35.14	
	Short wall	1	X	2	X	15.70	X	1.00		=		31.40	
	Platforms Taper side	1	X	1	X	3.61	X	0.30		=		1.08	
	Bottom	1	X	1	X	3.61	X	0.80		=		2.89	
											Total	70.51	
											Say	71.00	Sqm
24	Providing and applying three coats of water proof cement paint of approved manufacture and of approved colour to new plastered surfaces including scaffolding if necessary, cleaning and preparing the surface, watering for two days etc. complete.												Sqm
	Inside												
	Long wall	1	X	2	X	17.22	X	5.15		=		177.37	
	Short wall	1	X	2	X	15.00	X	5.15		=		154.50	
	Gable	1	X	2	X	15.00	X	1.00		=		30.00	
	Dedu.										Total	361.87	
	Rolling shutters	2	X	1	X	2.10	X	2.55		=		10.71	
	V1	2	X	7	X	1.00	X	0.60		=		8.40	
	V2	1	X	14	X	1.00	X	0.60		=		8.40	
											Total	27.51	
											Net	334.36	
											Say	335.00	Sqm
25	Providing and applying two coats of exterior acrylic emulsion paint conforming to corresponding I.S. of approved manufacture and of approved colour to the plastered surfaces including cleaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc. complete.												Sqm
	Outside												
	Long wall	2	X	1	X	17.57	X	5.25		=		184.49	
	short wall	2	X	1	X	15.70	X	5.25		=		164.85	
	Gable wall	2	X	0.5	X	15.70	X	1.00		=		15.70	
	Column offset C1	2	X	3	X	0.22	X	6.15		=		8.12	
	C3 offset	2	X	2	X	0.22	X	6.15		=		5.41	
	C2 offset	2	X	2	X	0.22	X	6.15		=		5.41	
											Total	383.98	
	Deduction												
	Rolling shutters	2	X	1	X	2.10	X	2.55		=		10.71	
	V1	0.5	X	7	X	0.60	X	0.60		=		1.26	
	V2	0.5	X	14	X	1.00	X	0.60		=		4.20	
											Dedu.	16.17	
											Net	367.81	
											Say	368.00	Sqm
26	Providing and applying two coats (exterior quality) of flat oil paint of approved colour and shade to the plastered surface in buildings and workshops including scaffolding if necessary, cleaning the surface and preparing surface etc. complete. (excluding primer coat)												Sqm
	Plinth												
	Long wall	2	X	1	X	17.57	X	1.00		=		35.14	
	Short wall	2	X	1	X	15.70	X	1.00		=		31.40	
	Stack lines												
	Long	2	X	4	X	6.00	X	0.10		=		4.80	
	Short	2	X	4	X	9.00	X	0.10		=		7.20	
											Total	78.54	
											Say	79.00	Sqm

27	Providing and fixing rolling shutter fabricated from steel laths of minimum thickness 0.9 mm with lock plate of 3.15 mm thickness reinforced with 35 x 35 x 5 mm angle section fitted with sliding bolts and handles for both sides, deep M.S. channel section of depth and thickness not less than 65 mm and 3.15 mm respectively with hold fast arrangements, M.S. Bracket plate 300 x 300 x 3.15 mm minimum size and shape with square bar, suspension shaft of minimum 32 mm diameter, hood cover of M.S. sheet not less than 0.9 mm thickness and of any size at top and safety devices including mechanical gear operation arrangement consisting of worm gear wheels and worms of high grade cast iron or mild steel and one coat of red lead primer etc. complete. (I.S. 62481979) (Without mechanical gear)																			Sqm
	Rolling shutters	2	X	1	X	2.10	X	2.55	x	1.00										10.71
										Total										10.71
										Say										11.00
																				Sqm
28	Providing and fixing mildsteel grill work for windows,ventilatorsetc. 20Kilogram/Square Metre as per drawing including fixtures,necessary welding and painting with one coat s of anticorrosive paint and two coats of oil painting complete.																			Sqm
	V1	1	X	7	X	0.60	X	0.60			=									2.52
	V2	1	X	14	X	1.00	X	0.60			=									8.40
	V3 Up Side of Shutter	1	X	2	X	1.30	X	0.45			=									1.17
										Total										12.09
										Say										13.00
																				Sqm
	Steel Work in Angular & Purline																			
29	Providing structural steel work in trusses, other similar trussed purlins and members with all bracing, gusset plates etc. as per detailed designs and drawings or as directed including cutting, fabricating, hoisting, erecting fixing in position, Making riveted/ bolted/ welded connection and one coat of anticorrosive paint and over it 2 coats of oil painting approved quality and shade etc. complete.																			MT
	Total Area Godown																			
	Main bldg.	17.57	X		=	275.85	X	25.00			=									6896.23
		15.70				Sq Area		KG		Total										6.90
										Say										7.00
																				MT
30	Providing and fixing colour coated Zinalume (R) AZ150 (min 150 gms/sq.mt. total on each side) profiled sheets for roofing. The feed material is manufactured out of nominal 0.45 mm Base Metal Thickness (BMT) (0.5 mm TCT), Hi-strength steel with min.550 MPa yield strength, metallic hot dip coated with Aluminium-Zinc alloy (55% aluminium 43.4% zinc 1.6% silicon) with COLORBOND (R) steel quality super durable polyester paint coat (with inorganic pigment). The paint shall have a total coating thickness of nominal 35 um, comprising of nominal 25 um exterior coat on top surface and nominal 10 um reverse coat on back surface. Profile sheet shall have nom. 950-1050 mm effective cover width and nominal 25-30 mm deep ribs with subtle square fluting in the five pan at nominal 180-250 mm centerto-center. The end rib shall be designed for anti-capillary groove. and return leg.The feed material should have coil manufacturers product details marked a regular interval. Including fasteners with min. fastened with min. 25 um Zinc-Tin alloy coated, Hex head, self-drilling screw etc. complete. (weight of profile 4.52 Kilogram/Square Metre)																			Sqm
	Main bldg.	1	X	2	X	17.57	X	8.15			=									286.39
	Platform	1	X	2	X	4.50	X	1.80			=									16.20
										Total										302.59
										Say										302.59
																				Sqm

31	Providing and fixing of colour Zinalume (R) AZ150 (Min150gms/Sq.mt. total on each sides) profiled sheets for Ridges. The feed material is manufactured out of nominal 0.45mm Base Metal Thickness (BMT) (0.5mmTCT), Hi- strength steel with min 550 MP a yield strength, metallic hot dip coated with Aluminum-Zinc alloy (55% aluminium 43.4 % zinc 1.6 % silicon) with COLORBOND (R) steel quality super durable polyester paint coat (with inorganic pigment). The paint shall have a total coating thickness of noiminal 35 um, comprising of nominal 25 um exerior coat on top surface & nominal 10 um reverse coat on back surfaces. Profile sheet shall have nom 950-1050 mm effective cover width & nominal 25-30 mm dip ribs with suitable square fluting in the 5 pan @ nominal 180-250 mm c/c. The end rib shall be designed for anticapillary groove & return leg. The fid material should have coil manufacturers product detailes marked at regular interval. including fasteners with minimum fastened with minimum 25 um Zink- tin alloy coated, hex headed, self drilling screw etc. complete. [As directed by Engineer in charge]. (D.S.R.33 A /71) (For 0.60 m wide Ridge)												Rum
	Main bldg.	1	X	1	X	18.07	X	1.00			=	18.07	
											Total	18.07	
											Say	18.10	Rum
32	Providing and fixing wind oppareted tarbo S S. ventiletar system (24 inch dia.) over exsiting roof including cutting of sheet ,propar fixing in position to true line & level with all fixtures & fastning, providing 0.8mm thick FRP sheet for covering area between roof and fan so as to provide waterfoof joints with approved water proffing compound making good the roof surface including cleaning etc. complete (General application for all types of roofs for ventilation & day light parpose at terrace [As directed by Engineer in charge]. [Jalgaon D.S.R.304 /123)												Nos
	For WH Bldg	2	x	4	x	1.00	x	1.00			1.00	8.00	
											Total	8.00	
											say	8.00	Nos
33	Providing & constructing parapet coping of size 35 x 35 cms in cement mortar 1:4 with conical top and side drops and round finish at A.C. sheet joints including finishing the whole with 20 mm thick cement plaster 1:4 with cement finish 1:1												RMT
	parapet coping	2	X	2	X	8.15					=	32.60	
											Total	32.60	
											Say	32.60	RMT
34	Filling in plinth with approved excavated stuff obtained from departmental land including watering, compacting etc. complete as directed.(Bd. A.10/262)												Cum
	Qty received from excavation	1	X	1	X	17.22	X	15.00	X	0.30	=	77.49	
	item no 3	17.00				2.80				14.20			
	item no 5	14.00				16.22				-2.22			
											Total	77.49	
											Say	78.00	Cum
35	Providing Hard Murum cohesive non-swelling materials in plinth in layers of 20 cms etc. complete as directed. [Only compacted thickness is payable][Rd.23/202 & Rd.28/205].												Cum
	Main bldg.	1	X	1	X	16.62	X	14.40	X	0.60	=	143.60	
	Apron										Total	143.60	
											Say	144.00	Cum
36	Compacting the Hard Murum , cohesive non swelling materials in plinth upto 200 mm loose with power roller 8 to 10 tonee capacity including artificial watering etc. complete as directed.[Rd.38/210]												Sqm
	Main bldg.	1	X	3	X	16.62	X	14.40			=	717.98	
											Total	717.98	
											Say	718.00	Sqm

37	Providing & laying stone metal layer of 20 cm thickness with 60 mm over size metal 65% and 40 mm size metal 35% with sand or stone chips spreading & leveling handpacking complete.[Rd.22/201,Rd.20/200 & Rd.20/205]											Cum
	Main bldg.	1	X	1	X	16.62	X	14.40	X	0.40	=	95.73
	Main bldg. Inner Periferi	1	X	1	X	17.22	X	0.60	X	0.20	=	2.07
		1	X	1	X	14.40	X	0.60	X	0.20	=	1.73
										Total		99.53
										Say		100.00
												Cum
38	Compacting oversize & size metal layers combindaly with power roler not less than 8 tonnes including artificial watering & leveling etc. complete as directed (Rd.35/209)											Sqm
	Main bldg.	1	X	2	X	16.62	X	14.40			=	478.66
										Total		478.66
										Say		479.00
												Sqm
39	Providing and laying in situ cement concrete M20 with tremix treatment for 100 mm thickness for flooring with groove cutting of 4mm wide and 20mm deep with necessary refilling with bitumen and including vaccum dewatering etc. complete.											Sqm
	Main bldg.	1	X	1	X	17.22	X	15.00	X	1.00	=	258.30
										Total		258.30
										Say		259.00
												Sqm
40	Providing treatment of TREMIX vaccum dewatering over prelaid cement concrete 1:2:4 surface including fixing of M.S.Channel formwork as per required size and placing of dowel rod, vibrating the concrete by needle vibrator and leveling by											Sqm
	Main Bldg.	1	X	1	X	17.22	X	15.00			=	1.00
	Provision									Total		1.00
										Say		1.00
												Sqm
41	Providing & fixing ISMC 150 with weight @ 16.80 Kgs/Rmt 20 mm dia & 0.50 m long bolts & nuts @ 1.00 mc/c, M.S. angles for stands of fire bucket including chain fixing in wall applying three coats of oilpaint etc. compl											MT
	For Platforms	2	X	2	X	6.01	X	16.80	Kg/M.		=	404.01
	@ 12.10 kg/m											
	Holdfasts 20 mm dia	4	X	12	X	0.50	X	2.50	Kg/M.		=	60.00
	@ 2.50 kg/m											
	L50x50x6 mm for fire bucket.										=	25.00
	@ 4.50 kg/m									Total		0.49
										Say		0.49
												MT
42	Providing & Fixing in position M.S. ladder of 45 cms width made out 50 x 50 x 6 mm two angles for rails and M.S. angle stiffeners at three places as directed with M.S. round bars of 20 mm dia for steps @ every 30 cm c/c including fixing											RMT
	Provision	1	X	1	X	10.00					=	10.00
										Total		10.00
										Say		10.00
												RMT
43	Providing and fixing lioghtening conductor system comprising of erecting Air-Termination consisting of tubular copperrod of 25 mm dia.1.2 mm thick with multiple point shead 1.2mt.long (HeavyDuty)welderor clamped to G.I .pipe pole Bgrade 50 mm dia of requiredl ength with M.S.round bnase plate 25 Cmdiamand 10mm thick at bottom embeded in cement concrete 1:3:6 d foundation of size 45 cm diam x 45cm Height and providing earth ing with copper earth plate of size60x60x0.3cms with cadmiumpl at ed nut bolt sto fixe arthing strip burried inspecially prepared earth pits1.5metre below ground level with 40 Kilogram charcoal and salt with altemate layers of charcoal and salt and G.I.pipe 40 mm dia2meter length burried inearthe up to earthling plateremining portion above ground level forwatering and refillingc omcpete Note-Copper strip fropmlightening conductor is not considered in this item.											Nos
	For Main Bldg.	1	X	1	X	1.00					=	1.00
	Provision									Total		1.00
										Say		1.00
												Nos

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4. MEASUREMENT SHEET OF ROAD

NANDORI FARMER PRPDUCER COMPANY

WAREHOUSE 450 MT

CHANDANKHEDA FARMERS PROUCER CO. LTD.													
AT POST CHANDANKHEDA, TAL- BHADRAVATI , DIST- CHANDRAPUR.													
STANDARD ESTIMATE FOR CONSTRUCTION OF 1/450 MT CAPACITY PRE ENGINEERED WH BLDG WITH ANCILLARY WORKS													
Sub Work No:-III :-Bituminious Road													
<u>MEASUREMENT SHEET</u>													
Item Nos	Description of Items	Nos		Length	Breadth	Depth / Hight	Total Quantity	Unit					
		1	x	2									
	New Road												
1	Long Side	1	x	1 X	36.90	X	6.50	=	239.85				
2	Long Side	1	x	1 X	36.90	X	6.50	=	239.85				
3	short Side	1	x	1 X	14.90	X	6.00	=	89.40				
4	Short Side	1	x	1 X	14.90	X	6.00	=	89.40				
1	Excavation for roadway in earth, soil of all sorts, sand, gravel or soft murum including cum dressing section to the required grade, camber and side slopes and conveying the excavated materials outside the complex including all leads & lifts.								cum				
	Road formation												
	New Road												
	Long Side	1	x	1 X	36.90	X	6.50	X	0.60	=	143.91		
	Long Side	1	x	1 X	36.90	X	6.50	X	0.60	=	143.91		
	Short Side	1	x	1 X	14.90	X	6.00	X	0.60	=	53.64		
	Short Side	1	x	1 X	14.90	X	6.00	X	0.60	=	53.64		
	Approach Road	1	X	1 X	2.74	X	6.50	X	0.60	=	10.69		
							Total	Net		405.79			
								Say		406.00	cum		
2	Picking the road surface including sectioning etc. complete (WBM surface.)								Sqm				
	Existing Road												
	Long Side A- B, D-E	0	x	0 X	0.00	X	0.00	=	0.00				
	Short Side A-D	0	x	0 X	0.00	X	0.00	=	0.00				
							Total	Net					
							Total	Net					
								Say					
3	Excavation for roadway in hard murum and boulder including dressing section to the cum required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m.and spreading for embankment or stacking as directed.												
	New Road												
	Long Side	0	x	1 X	41.19	X	6.50		0.40	=	0.00		


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Long Side	0	x	1	X	41.19	X	6.50	X	0.40	=	0.00
Short Side	0	x	2	X	25.39	X	6.00	X	0.40	=	0.00
Short Side	0	x	3	X	25.39	X	6.00	X	0.40	=	0.00

Total	Net	1.00
Total	Net	1.00
	Say	1.00 cum

- 4 Excavation for roadway in soft rock, including dressing section to the required grade, cum camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading or stacking

Road formation

Provision											1.00	
											Total	1.00
											Net	1.00
											Say	1.00 cum

- 5 Excavation for roadway in hard rock by controlled blasting including dressing section to cum the required grade, camber and side slopes and conveying the excavated materials with all lifts upto a lead of 50m. and spreading for embankment or stocking as directed.

Road formation

Provision												1.00
											Total	1.00
											Net	1.00
											Say	1.00 cum

- 6 Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with cum Crushed sand/grit, ramming, watering etc. complete.

Road formation

New Road

Long Side	1	x	1	X	41.19	X	6.50	X	0.23	=	61.58
Long Side	1	x	1	X	41.19	X	6.50	X	0.23	=	61.58
Long Side	1	x	1	X	25.39	X	6.00	X	0.23	=	35.04
Short Side	1	x	1	X	25.39	X	6.00	X	0.23	=	35.04

Total	Net	193.25
	Say	193.00 cum

- 7 Supplying **80 mm trap stone** metal at the road side including conveying & stacking etc. cum complete.

New Road

Long Side	1	x	1	X	41.19	X	6.50	X	0.15	=	40.16
Long Side	1	x	1	X	41.19	X	6.50	X	0.15	=	40.16
Short Side	1	x	1	X	25.39	X	6.00	X	0.15	=	22.85
Short Side	1	x	1	X	25.39	X	6.00	X	0.15	=	22.85

											Total	126.03
Add 32. % Voids												40.33
											Say	166.36
											Say	167.00 cum

8 Supplying **40 mm trap stone metal** at the road side including conveying & stacking etc. cum complete.

New Road

Long Side	1	x	1	X	41.19	X	6.50	X	0.10	=	26.77
Long Side	1	x	1	X	41.19	X	6.50	X	0.10	=	26.77
short Side	1	x	1	X	25.39	X	6.00	X	0.10	=	15.24
Short Side	1	x	1	X	25.39	X	6.00	X	0.10	=	15.24

Total 84.02

Add for Compaction factor
32 %

26.89

Total 110.91

Say **111.00** cum

9 **Spreading 80 mm trap stone metal** including sectioning as directed etc. complete. cum

Qty. as per item 6 = **167.00**

Total 167.00

Say **167.00** cum

10 **Spreading 40 mm trape stone metal** including sectioning as directed etc. complete. cum

Qty. as per item 7 = **111.00**

Total 111.00

Say **111.00** cum

11 Supplying hard murum/ kankar at the road site, including conveying and stacking cum complete.

Long Side	1	x	2	x	41.19	x	6.5	x	0.05	=	26.77
Short Side	1	x	2	x	25.39	x	6	x	0.05	=	15.24

For side Shoulder

Long Side	1	x	1	X	41.19	X	0.50	X	0.25	=	5.15
Long Side	1	x	1	X	41.19	X	0.50	X	0.25	=	5.15
Short Side	1	x	1	X	25.39	X	0.50	X	0.25	=	3.17
Short Side	1	x	1	X	25.39	X	0.50	X	0.25	=	3.17

Total 58.66

add for compaction 20% 11.73

Net 70.39

Say 70.00 cum

12 Spreading hard murum/ soft murrum/ gravel or kankar for side width complete cum

Qty. as per item 10 = 70.00

Total 70.00

Say **70.00** cum

13 **Compacting oversize metal layer** with H. M. with power roller including artificial sqm watering & necy. Labour etc. complete.

For Rubble soiling	1	X	840.20	=	840.2
For 80mm	1	X	840.20	=	840.2
For 40mm	1	X	840.20	=	840.2

Total 2520.60

Say **2520.60**

Total = 840.20
Say = **841.00** sqm

- 18 9 MM SEAL COAT: Providing and laying of Type A 9 mm premix seal coat with HMP of Sqm appropriate capacity crushed stone chipping 6.7 mm size and penetration bitumen of specified grade @ 1.2 kg/Sq.m, preparing existing road surface by mechanical means, spreading chips and rolling, by static roller having weight 8 to 10 MT etc. complete. (VG-30 bulk bitumen rates are considered to arrive at rates)

1.00 x 840.20 x = 840.20

Total = 840.20
Say = **841.00** sqm

- 19 Providing & fixing R. C. C. 1:2:4 guard stones as per type design including painting Nos numbering fixing in std. Size C. C. 1:4:8 block complete.

Lumpsum considered 75.00

Total 75.00
Say **75.00** Nos

PART II :- CROSS DRAINAGE WORKS

- 20 Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to adistance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5 m.) By Mechanical Means

cum

C D Works 1 x 2 x 10.00 x 1.50 x 0.75 = 22.50 cum
C D work Head wall 1 x 2 x 2.00 x 0.75 x 0.15 = 0.45

Total 22.95 cum
Say **23.00** cum

- 21 Excavation for foundation in hard murum including removing the excavated material upto distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.50 m) By Mechanical Means

cum

C D Works 1 x 2 x 10.00 x 1.50 x 0.15 = 4.50 cum
App. C D work Head wall 1 x 2 x 2.00 x 0.75 x 0.15 = 0.45

Total 4.95 cum
Say **5.00** cum

- 22 Excavation for foundation in Hard murum including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift from 1.5 to 3.0m.) By Mechanical Means

cum

C D Works 1 x 2 x 10.00 x 1.50 x 0.10 = 3.00 cum

App. C D work Head wall	1	x	2	x	2.00	x	0.75	x	0.10	=	0.30	
											Total	3.30 cum
											Say	3.00 cum

- 23 Excavation for foundation in Hard rock by chiselling, wedging, line drilling, etc. including trimming and levelling the bed, removing the excavated material upto a distance of 50 metres beyond the building area stacking as directed, dewatering and back filling with available earth/ murum watering, ramming etc. complete. (Lift upto 1.5 m). By Mechanical Means
- | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|-------|-----|-----------------|
| | | | | | | | | | | | | cum | |
| | | | | | | | | | | | | = | 1.00 |
| | | | | | | | | | | | Total | Net | 1.00 |
| | | | | | | | | | | | | Say | 1.00 cum |

- 24 Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Crushed sand VSI Grade)

												cum
C D Works	1	x	2	x	10.00	x	1.50	x	0.10	=	3.00 cum	
App. C D work Head wall	1	x	2	x	2.00	x	0.75	x	0.10	=	0.30	
											Total	3.30 cum
											Say	4.00 cum

- 25 Providing uncoursed rubble masonry of trap / granite / quartzite / gneiss stones in cement mortar 1:6 in foundation and plinth of inner walls / in plinth of external walls including bailing out water manually , striking joints on un exposed faces and watering etc. complete. (Crushed sand VSI Grade)

C D Works	2	x	2	x	10.00	x	0.445	x	0.35	=	6.23	
App. C D work Head wall	1	x	2	x	2.00	x	0.45	x	1.2	=	2.16	
											Total	8.39 cum
											Say	9.00 cum

- 26 Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.

												MT
at 210Kgs / CuM	6.0		1		210							1.26 MT
											Total	1.26 MT
											Say	1.30 MT

- 27 Providing and laying Cast in situ/Ready Mix cement concrete M-25 of trap/ granite / quartzite/ gneiss metal for R.C.C. slabs and landings as per detailed designs and drawings including steel centering, formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete, (Excluding reinforcement and structural steel). With fine aggregate (Crushed sand VSI Grade)

Slab	1.00	2.00	10.00	1.30	0.20	5.20	
					Total	5.20	cum
					Say	6.00	cum
28 Providing cement plaster 20 mm thick in two coats in C. M. 1 : 4 with slurry finish to concrete or brick surface or U. C. R surface in all positions including scaffolding & curing smooth cement slurry finish of 1.5 mm thickness etc. complete as directed. (Crushed sand VSI Grade)							
							sqm
C D Works	1 x	2 x	10.00 x	1.2		24.00	sqm
App. C D work Head wall	1 x	2 x	2.0 x	0.65		2.60	
	2 x	2 x	0.45 x	0.1	=	0.18	
					Total	26.78	sqm
					Say	27.00	sqm
29 Providing flush grooved pointing with cement mortar 1:3 for brick work including scaffolding and curing etc. complete.							
							sqm
	2 x	2 x	2.00 x	0.65 x	.=	5.20	sqm
	2 x	2 x	2.00 x	0.45 x	.=	3.60	
					Total	8.80	sqm
					Say	9.00	sqm
30 Providing and laying cement concrete pipe of IS 458:2003 NP-2 class of 600mm diameter in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.							
							Rmt
I S N P III Class pipe	1 x	1 x	10.00		=	10.00	Rmt
					Total	10.00	Rmt
					Say	10.00	Rmt
31 Supplying & spreading Hard mumrum for cushioning of R C C pipe including watering ramming & leveling etc complete.							
							cum
I S N P III Class pipe	1 x	1 x	10.00 x	1.5 x	0.9 =	13.50	cum
					Net	13.50	cum
					Say	14.00	cu m
32 Providing and casting in situ / ready mix PCC M15 grade of trap metal for coping to head walls / parapet including centering, form work, compaction and curing etc. complete. (Crushed sand VSI Grade)							
							cum
App. C D work Head wall	1 x	2 x	2.00 x	0.45 x	0.1 =	0.18	cum
Above C.C. pipe	1 x	1 x	10.00 x	1.5 x	0.15 =	2.25	
					Total	2.43	cum
					Say	3.00	cu m
33 Providing earth work in embankment with approved materials obtained from departmental land upto lead of 50m. including all lifts,laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller to achieve not less than 97 % of standard proctor density etc. complete. (Material obtained from departmental Land)							
							cum
Provision						10.00	
					Total	10.00	cum
					Say	10.00	cum

- 34 Providing earth work in embankment with approved materials obtained from other sources upto lead of 50m. including all lifts, laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades & section, watering and compaction with vibratory roller with V-Sat attachment to achieve not less than 97 % of standard proctor density etc. complete (Material obtained from Other sources)

cum

Road formation

New Road

Long Side I-J	1	x	1	X	41.19	X	6.50	X	0.45	=	120.49
Long Side G-H	1	x	1	X	41.19	X	6.50	X	0.45	=	120.49
Long Side B-C, E-F	1	x	2	X	25.39	X	6.00	X	0.45	=	137.12
Short Side C-F, G-I, H-J	1	x	3	X	25.39	X	6.00	X	0.45	=	205.68

Net 583.77
Say 584.00 cum

- 35 Conveying materials obtained from road cutting including all lifts, laying in layers of 20cm to 30cm. breaking clods, dressing to the required lines, curves, grades and section, watering and compacting to not less than 97% of standard Proctor density for a lead of over 50m.to 300m. inclusive from the site of excavation to the site of deposition as directed.

cum

Provision											10.00	
											Total	10.00
											Say	10.00 cum

- 36 Conveying the materials obtained from excavation including all lifts, laying in layers, breaking clods, dressing to the required lines, curves, grades and section for all leads & lifts from the site of excavation to the site of deposition as directed.

Qty. as per item No- 1												515.00 cum
											Total	515.00
											Say	515.00 cum

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5. ROYALTY SHEET

NANDORI FARMER PRPDUCER COMPANY

WAREHOUSE 450 MT

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CHANDANKHEDA FARMERS PROUCER CO. LTD.								
AT POST CHANDANKHEDA,TAL- BHADRAVATI , DIST- CHANDRAPUR.								
NAME OF WORK :- PROPOSED CONSTRUCTION OF 450 MT CAP.WH BLDG WITH ANCILLARY WORKS								
Royalty Charges Recovery Statements								
Sr. No	Particular	Requar Quantity in Cum	Requar Quantity in Brass	Royalty	Surcharge	Distt. Mineral Foundat ion Cess	Royalty Charges @ Rs SAND&144.160 Oth,Min	
			2.83		2%	10%	237.18	
1	SAND	59.06	20.87	211.95	4.24	21.20	237.384	14020.73
2	METAL Hand broken	132.00	46.64	211.95	4.24		216.189	28536.95
3	MURUM	172.80	61.06	211.95	4.24		216.189	37357.46
4	RUBBLE	0.00	0.00	211.95	4.24		216.189	0.00
Total Amount							79915.14	
						Say	Rs.	79916.00


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6. LABORATORY TESTING SHEET

NANDORI FARMER PRPDUCER COMPANY

WAREHOUSE 450 MT

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CHANDANKHEDA FARMERS PROUCER CO. LTD.								
AT POST CHANDANKHEDA,TAL- BHADRAVATI , DIST- CHANDRAPUR.								
Sub work IV:- Material Lab Testing charges								
NAME OF WORK :- PROPOSED CONSTRUCTION OF 450 MT CAP.WH BLDG WITH ANCILLARY WORKS								
Statement Showing the details of requirement of Lab. Tests to be carried out:-								
Sr. No.	Particulars	Quantity	Unit	Tests to be carried out	Nos. of tests	Rate per test	Amount	Remarks
1	Cement	1025	MT	Fineness, Consistency, Setting Time, Compressive strength, Specific gravity.	1	7540	15080	one tesr per 1000 Bag
2	Concrete M-20	58.00	cum	i)Mix Design with all tests on basic materials	0	-	---	One set for mix design
				ii)Concrete cube compressive strength	4	1380	11040	Up to 50 Cum 4 & thereafter for each 50 Cum one additional set
3	Bricks	79	cum	Water Absorption (Set of 5 Bricks), Compressive strength (Set of 5 Bricks), Efflorescence (Set of 5 Bricks)	1	1900	3800	one test per 50000 Nos. of bricks
6	Sand	59.06	cum	Fineness Modulus, silt content.	1	1950	3900	1 test per source
7	Murum	172.80	cum	i) Gradation	1	600	1200	1 test per 400 Cum.
				ii) Atterberg Limit	0	1100	0	1 test per 400 Cum.
				iii) Moisture content prior to compaction	0	800	0	1 test per 400 Cum.
				iv) Density of compacted layer	0	1000	0	1 test per 1000 Sq.m
				v) Proctor Test	0	1650	0	1 test per 3000 Cum.
				TOTAL			35020	


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7. RA SHEET OF BUILDING

NANDORI FARMER PRPDUCER COMPANY

WAREHOUSE 450 MT

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CHANDANKHEDA FARMERS PROUCER CO. LTD.						
AT POST CHANDANKHEDA,TAL- BHADRAVATI , DIST- CHANDRAPUR.						
NAME OF WORK :- PROPOSED CONSTRUCTION OF 450 MT CAP.WH BLDG WITH ANCILLARY WORKS						
R A Sheet						
Item No						
35.00	Providing Hard Murum cohesive non-swelling materials in plinth in layers of 20 cms etc. complete as directed. [Only compacted thickness is payable][Rd.23/202 &					
	Consider 1.00 cu m quantity					
	1 - Basic rate 25/383	1.00	288.00	288.00		
	2 - Lead Charges	3.00	192.42	192.42		
	3 - Spreading charges 9	0.00	49.00	0.00		
	Total Rs			480.42		
	4 - For compaction 20 % OF H.M.cost					
	Grand total Rs.			480.42		
	Deduction for stacking charges					
	IN 3/255	1.20	0.00	0.00		
	Net Rs			480.42		
	Therefore rate per cu m will be say Rs			480.42		
Item No	Providing & laying stone metal layer of 20 cm thickness with 60 mm over size metal 65% and 40 mm size metal 35% with sand or stone chips spreading & leveling					
37.00	P oversize & size metal filling in plinth					
	Consider 1.00 cu m quantity of 80 mm O.S.metal					
	1 - Basic rate	1.00	885.00	885.00		
	2 - Lead Charges	10.00	287.34	287.34		
	3 - Spreading charges	0.00	49.00	0.00		
	Total Rs			1172.34		
	4 - Add for compaction 15 %					
	Grand Total Rs.			1172.34		
	Deduction for stacking charges					
	2./255	1.32	0.00	0.00		
	Net Rs			1172.34		
	Therefore rate per cu m will be say Rs			1172.34	762.02	
	Consider 1.00 cu m quantity of 40 mm O.S.metal					
	1 - Basic rate	1.00	885.00	885.00		
	lead charges-	1.00	287.34	287.34		
	3 - Spreading charges	0.00	49.00	0.00		
	Total Rs			1172.34		
	4 - Add for compaction 15 %					
	Grand Total Rs.			1348.19		
	Deduction for stacking charges					
	2./255	1.32	0.00	0.00		
	Net Rs			1348.19		
	Therefore rate per cu m will be say Rs			1348.19	471.87	
					1233.89	
	Say Rs				1233.89	

Item No	Providing treatment of TREMIX vacuum dewatering over prelaid cement concrete 1:2:4						
40.00	Laying charges for form work, running vibrator,						
	laying suction matt, dewatering etc.						
	Consider 1.0 sq m area						
	1 - Market rate as per .q	1.00	55.00	50.00			
	2 - Transportation charg	0.00	0.83	0.00	2000.0	2406.69	0.83
	3- Generator Hire charg	0.00	4.16	0.00	5.00	2000.00	10000.00
	Total Rs.			50.00			
	4. Diesel charges 5 day	0.00	1.88	0.00	100.00	45.24	4524.00
	5 - Overheads & contractors pfofit	10 %		0.00			


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8. RA SHEET OF ROAD

NANDORI FARMER PRPDUCER COMPANY

WAREHOUSE 450 MT

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CHANDANKHEDA FARMERS PROUCER CO. LTD.					
AT POST CHANDANKHEDA, TAL- BHADRAVATI , DIST- CHANDRAPUR.					
STANDARD ESTIMATE FOR CONSTRUCTION OF 1/1080 MT CAPACITY PRE ENGINEERED WH BLDG WITH ANCILLARY WORKS					
RATE ANALYSIES					
I.NO					
	BT road				
14	Providing and constructing 75 mm. thick Modified Penetration Macadam (MPM) road surface includin				
	Consider 1.00 Sq m quantity				
	1 - Basic rate I NO 3.35b/ P NO 29		1.00	239.00	239.00
	a) bitumen 1.75 kg/ Sq M	1.75	1.75	6.82	11.94
	Heating		1.75	0.12	0.20
	b) Crushed metal		0.075	0.00	0.00
	3) Dedc. For picking the surface 2.32/25		1.000	28.00	-28.00
	Net Rs				223.14
	Therefore rate per Sq m will be say Rs				223.14
15	Providing and applying tack coat on the prepared surface heating by fames in Boiler and spraying bitu				
	Consider 1.00 Sq m quantity				
	1 - Basic rate I NO 3.30/ P NO 28		1.00	13.00	13.00
	2) As 2.50kg / 10 sqm	0.25			
	(from Mumbai refinery) 720 KM		0.25	6.82	1.71
	Heating		0.25	0.12	0.03
	Grand total Rs.				14.73
	Therefore rate per Sq m will be say Rs				14.73
16	Open Graded Premix Surfacing- Providing and Laying OGC 20 mm thickness composed of 13.2 mm				
	1 - Basic rate I No 4.12/ P No 33		1.00	142.00	142.00
	2) Add lead of butimen 156kg / 100 sqm	1.56			
	(from Mumbai refinery) 720 KM		1.56	6.82	10.64
	Heating		1.56	0.12	0.18
	b) Crushed metal		0.029	0.00	0.00
	2)Dedc. For Scada as 60 Rs/Cum	6.00	Per Sqm		-6.00
	3) Dedc. For picking the surface 2.32/25		1.000	28.00	-28.00
	Grand total Rs.				118.82
	Therefore rate per Sq m will be say Rs				118.82
17	9 MM SEAL COAT: Providing and laying of Type A 9 mm premix seal coat with HMP of aproprate cap				
	Consider 1.00 Sq m quantity				
	1 - Basic rate I NO 4.13/ P NO 33		1.00	76.00	76.00
	2) As 1.20kg / sqm	1.20			
	(from Mumbai refinery) 270 KM		1.20	6.82	8.19
	Heating		1.20	0.12	0.14
	3) Chipping 6.70 mm 0.009 Cum for 1 Sqm	0.009	0.009	0.00	0.00
	Grand total Rs.				84.32
	Therefore rate per Sq m will be say Rs				84.32


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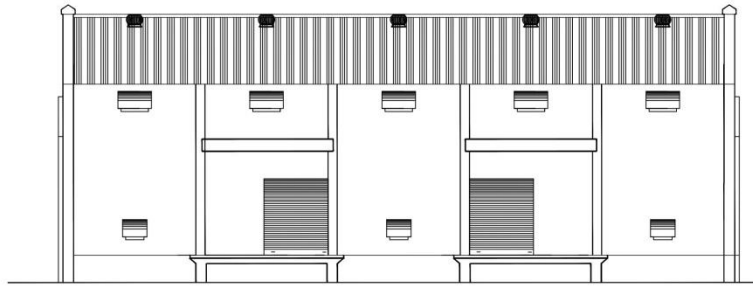
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9. DRAWING SHEET

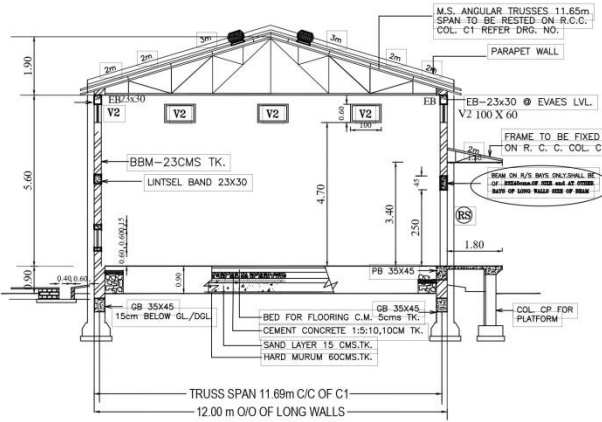
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WAREHOUSE 450 MT

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ELEVATION



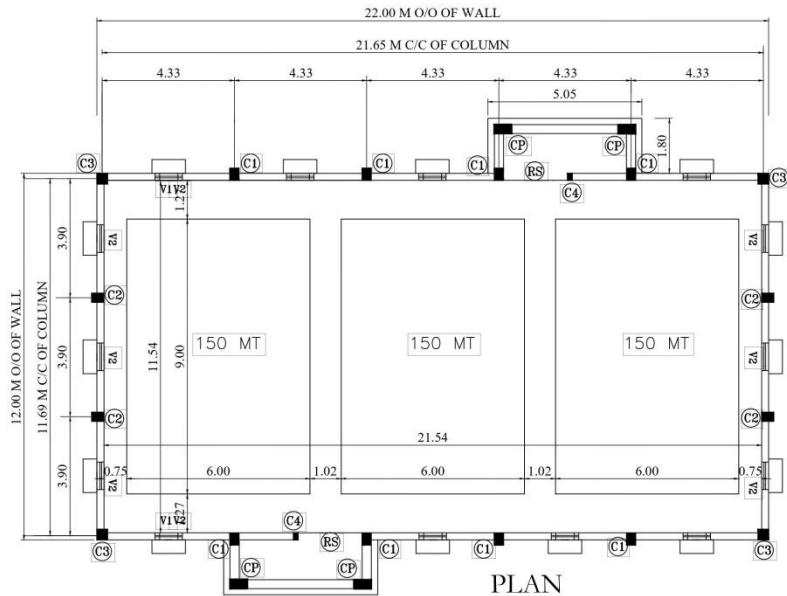
SECTION 'A'-A'

SCHEDULE OF REINFORCEMENT OF COLUMNS FOOTINGS

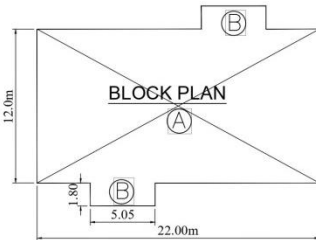
SR.NO.	DESCRIPTION	STEEL		SHORT SIDE LONG SIDE	
		FOOTING SIZE	SIZE	FOOTING	REINFORCEMENT FOR
				MAIN	TRANSVERSE
1.	1.30X1.80X0.45	12 MM # 10 NO BOTHWAYS	C1 30X45	8 NOS 16MM # TMT FS 500 BARS	5MM # 4 LEGGED STIRRUPS AT 150MM C/C
2.	1.30X1.80X0.45	12 MM # 10 NO BOTHWAYS	C2 30X45	8 NOS 12MM # TMT FS 500 BARS	5MM # 4 LEGGED STIRRUPS AT 150MM C/C
3.	1.30X1.80X0.45	12 MM # 10 NO BOTHWAYS	C3 30X35	8 NOS 16MM # TMT FS 500 BARS	5MM # 4 LEGGED STIRRUPS AT 150MM C/C
4.	1.30X1.80X0.45	12 MM # 10 NO BOTHWAYS	C4 15X35	8 NOS 16MM # TMT FS 500 BARS	5MM # 4 LEGGED STIRRUPS AT 150MM C/C
5.	1.10X1.10X0.45	12 MM # 10 NO BOTHWAYS	CP 07X30	8 NOS 16MM # TMT FS 500 BARS	5MM # 4 LEGGED STIRRUPS AT 150MM C/C

SCHEDULE OF REINFORCEMENT OF BEAM, DROP, BAND, LINTEL, W. SHED

SR.NO.	SECTION	REINFORCEMENT		DISTRIBUTION
		STRAIGHT	BENT-UP	
1.	BEAM OVER DOOR 0.30 X 0.45	TOP - 3 NOS 12 MM # BARS BOTY - 3 NOS 16 MM # BARS	2 NOS 10MM # MS BARS BENT-UP WARDS	8 MM # STIRRUPS AT 150 MM C/C
2.	SAVED BAND 0.30 X 0.30	TOP - 4 NOS 12 MM # BARS BOTY - 4 NOS 12 MM # BARS	---	8 MM # STIRRUPS AT 150 MM C/C
3.	LINTEL OVER VENTILATORS 0.34 X 0.15	4 NOS 10 MM # BARS MS BARS	---	8 MM # STIRRUPS AT 150 MM C/C
4.	WEATHER SHED FOR VENTILATORS	12 MM BARS AT 150 MM C/C TO BE ANCHORED IN LINTEL/BAND	---	8 MM # STIRRUPS AT 150 MM C/C
5.	COPING FOR PLATFORMS	12 MM # BARS AT 150 MM C/C	---	12 MM # MS BARS AT 150 MM C/C



PLAN



BUILT UP AREA CALCULATIONS

MAIN BUILDING SIZE (PROPOSED) SQ. M.
 22.00m X 12.00m = 264.00

PLATFORMS : B
 2 NO X5.05m X 1.80m = 18.18

TOTAL B / UP = 282.18 sq. m.

SCHEDULE OF R. C. C. COLUMNS.

TYPE	SIZE	NO.	REMARKS
C1	30 X 45	8	LONG WALLS
C2	30 X 45	4	GABLE WALLS
C3	30 X 35	4	GABLE WALLS
C4	15 X 35	2	TO BE POSTED ON DO & RS PANELS
CP	57 X 30	4	FOR PLATFORMS BELOW BEAM

SCHEDULE OF ROLLING SHUTTERS/VENTILATORS

TYPE	SIZE (IN CMS)	NO.	DISCUSSION
RS	180 X 240	2	PULL AND PUSH TYPE FIXED FORM INSIDE
V1	80 X 80	8	STEEL VENTILATORS FULLY GLAZED WITH SHUTTERS (BEG. HINGES) 6mm SQ. MESH 18 MM. TO BE FIXED BY 12mm SQ. M.S. PLAT. # 12mm SQ. BARS (# NOS) IN VERTICAL POSITION @ 150mm C/C FIXED TO FRAME FROM OUTSIDE.
V2	100 X 60	16	12MM SQ. BARS (11 NOS) IN VERTICAL POSITION @ 100MS C/C FIXED TO FRAME FROM OUTSIDE.

PROPOSED CONSTRUCTION OF 1/450 MT CAPACITY WH. BUILDING

OWNER

B. M. TITRE
B. E. (Civil)
 STATE/R/2022/APL/02905
ENGINEER

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मा. बाळासाहेब ठाकरे कृषि व्यवसाय व ग्रामीण परिवर्तन
(स्मार्ट) प्रकल्प

Prepared By : Madhusudhan Dadaji Tiple, Business Consultant, 93074 68451