

ESTIMATE

NAME OF WORK

Name of Work :- Construction of Shed for Durgsavangi
Farmers Producer Company Limited on Gut No.6/1
At :- Durgsavangi Tq. & Dist. Hingoli - Year 2022 -2023

COST OF ESTIMATE RS. = 48,12,536.00

CIVIL WORK e- S.S.R. YEAR -2022-2023

GENERAL ABSTRACT

Name of Work :- Construction of Shed for Durgsavangi Farmers
Producer Company Limited on Gut No.6/1 At :- Durgsavangi Tq.
& Dist. Hingoli - Year 2022 -2023

Sr. No.	Description	Rs.	Amount
1	Cost of Civil Work	Rs.	3946882.31
2	Quality Control Charges	Rs.	6900.00
3	Royalty Charges	Rs.	107246.67
4	Add 1 % Insurance	Rs.	39468.82
5	Add 18% G.S.T.	Rs.	710438.82
Total Rs.			4810936.62
Say			4810937.00
Add For Contengency L/S Rs.			1599.00
Grand Total Rs.			4812536.00



D.H. Balkhande
D.H. BALKHANDE
Architectural & Civil
Engineering Consultant
Cont.No. 8007831105

Name of Work :- Construction of Shed for Durgsavangi Farmers Producer Company Limited on Gut No.6/1 At :- Durgsavangi Tq. & Dist. Hingoli - Year 2022 -2023

ABSTRACT

SR. NO.	DESCRIPTION OF ITEM	QTY.	RATE	UNIT	TOTAL AMOUNT
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 I no 21.02	86.40	207.00	Cu.M.	17884.80
2	Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete. I no 21.38	74.88	1903.04	Cu.M.	142499.64
3	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, 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 natural sand/V.S.I. quality Artificial Sand I no 24.01	28.15	6394.88	Cu.M.	180015.87
4	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, 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 SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand I no 25.11	16.85	7693.86	Cu.M.	129641.54
5	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 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 SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand I no 25.31	14.90	14372.86	Cu.M.	214155.61

6	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 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 natural sand/V.S.I. quality Artificial Sand I no 25.5	10.67	12858.86	Cu.M.	137204.04
7	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 (Natural Sand / Crushed sand VSI Grade finely washed etc) I no 26.05	0.65	14521.86	Cu.M.	9439.21
8	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.(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) I no 25.70	0.40	14527.86	Cu.M.	5811.14
9	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. Complete. I no 27.01	16.10	8664.29	Cu.M.	139495.07
10	Filling in plinth and floors with contractors material/brought from outside and approved by Engineer incharge in layers of 15 cm to 20 cm including watering and compaction etc. complete. I no.21.37	262.08	818.98	Cu.M.	214638.28
11	Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding etc. Complete I no 27.05	39.49	8903.29	Cu.M.	351590.92
12	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, arches, 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.I no 26.33	3.30	90218.21	M.T.	297720.09

13	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 1 kg per 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. I no 32.11	324.57	653.74	Sq.M.	212184.39
14	Providing internal cement plaster 12mm thick in single coat in cement mortar 1:4 without neeru finish to concrete or brick surfaces, in all positions including scaffolding and curing etc. complete. I no 32.04	202.86	310.11	SQM	62908.91
15	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) I no 24.16	56.16	6931.50	CUM	389273.04
16	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) I no 39.24	7.20	4829.00	SQM	34768.80
17	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. I no 35.15	324.57	104.00	SQM	33755.28
18	Providing and applying washable oil-bound distemper of approved colour and shade to old and new surfaces in two coats including scaffolding, preparing the surfaces. (excluding the primer coat.) etc. complete.. I no 36.11	202.86	48.00	SQM	9737.28
19	Providing and fabricating structural steel work in rolled sections, fixed with connecting plates or angle cleats in main and cross beams, hip and jack rafters, purlins connecting to truss members and the like, as per detailed designs and drawing or as directed including cutting, fabricating, hoisting, erecting, fixing in position, making riveted/ bolted/ welded connections and one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete. I no 23.02	6.96	98274.21	MT.	683988.50

20	Providing and fixing corrugated galvanised iron sheets of 0.63mm thick (24 B.W.G.) for roofing without wind tiles including fastening with galvanised iron screws and bolts, lead and bitumen washers as per drawing etc. complete.(Weight of 5.5 Kilogram/sq.m.). I no 38.04	751.87	870.00	Sqm	654125.16
21	Providing and fixing mild steel grill work for windows, ventilators etc. 20 Kilogram/Square Metre as per drawing including fixtures, necessary welding and painting with one coats of anticorrosive paint and two coats of oil painting complete. I no 40.01	12.42	2097.00	Sqm	26044.74
				TOTAL Rs.	3946882.31
22	Quality Control Charges				
	i) Cube Testing	5.00	690.00	Nos	3450.00
	ii) Brick Testing	1.00	2175.00	Nos	2175.00
	iii) Steel Testing	1.00	1275.00	Nos	<u>1275.00</u>
				TOTAL Rs.	6900.00
23	Royalty Charges				
	Royalty for Sand	98.34	237.37	Cum	23342.97
	Royalty for Murum & Metal	388.12	216.18	Cum	<u>83903.70</u>
				TOTAL Rs.	107246.67



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MEASUREMENT SHEET.

Description	No.	Length	Breadth	Depth	Quantity
Item No.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 I no 21.02					
Columns	24	1.50	1.60	1.50	= 86.40
					<u>86.40</u> Cum.

Item No.2					
Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete. I no 21.38					
Below Flooring	1	12.00	31.20	0.20	= 74.88
					<u>74.88</u> Cum.

Item No.3					
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, 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 natural sand/V.S.I. quality Artificial Sand I no 24.01					
Below Footings C1	24	1.50	1.60	0.15	= 8.64
below Flooring	1	12.00	31.20	0.05	= 18.72
	1	3.30	2.40	0.10	= 0.79
					<u>Total = 28.15</u> CUM

Item No. 4					
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, 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 SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand I no 25.11					
Footings C1	24	1.20	1.30	0.45	= 16.85
					<u>Total = 16.85</u> Cum.

Item No.5					
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 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 SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand I no 25.31					
Column C1	24	0.30	0.45	4.60	= 14.90
					<u>14.90</u> Cum.

Item No. 6
 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 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 natural sand/V.S.I. quality Artificial Sand I no 25.5

Description	No.	Length	Breadth	Depth	Quantity
Horizontal Beams	2	3.00	0.23	0.30	0.41
	4	4.05	0.23	0.30	1.12
Vertical Beams	18	3.10	0.23	0.30	3.85
Lintel Level Beams	4	4.05	0.23	0.30	1.12
	18	3.10	0.23	0.30	3.85
	2	3.00	0.23	0.30	0.32
				Total =	10.67 Cum.

Item No. 7
 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 (Natural Sand / Crushed sand VSI Grade finely washed etc) I no 26.05

Ventilators For -V1	23	0.90	0.45	0.07	0.65
				Total =	0.65 Cum.

Item No. 8
 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, (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) I no 25.70

For Platform	1	3.30	1.20	0.10	0.40
				Total =	0.40 Cum.

Item No. 9
 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. I no 27.01

Horizontal Beams	4	4.05	0.23	0.70	2.61
	2	3.00	0.23	0.70	0.97
	18	3.10	0.23	0.70	8.98
	2	1.20	0.23	0.70	0.39
Otta Steps	1	3.30	0.30	0.15	0.15
	1	3.30	0.30	0.30	0.30
	1	3.30	0.30	0.45	0.45
	1	3.30	0.30	0.45	0.60
	1	3.30	0.30	0.45	0.75
	1	3.30	0.30	0.45	0.90
				Total =	16.10 Cum.

Description	No.	Length	Breadth	Depth	Quantity
Item No. 10					
Filling in plinth and floors with contractors material/brought from outside and approved by Engineer incharge in layers of 15 cm to 20 cm including watering and compaction etc. complete. I no 21.37					
Below Flooring	1	12.00	31.20	0.70	262.08
				Total =	262.08 Cum.

Item No. 11
Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding etc. Complete I no 27.05

Horizontal Beams					
	4	4.05	0.23	2.40	8.94
	2	3.00	0.23	2.40	3.31
Vertical Beams					
	18	3.10	0.23	2.40	30.80
				Total =	43.05 Cum.
Deductions					
Rs	1	3.00	0.23	2.40 =	1.66
V	23	0.60	0.23	0.60 =	1.90
				Total = -	3.56 Cum.
				Net Total =	39.49 Cum.

Item No.12
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, parrdis, 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. I no 26.33

Footin	16.85	@	40.00 =	674.000
Colum	14.90	@	100.00 =	1490.000
Beam	10.67	@	100.00 =	1067.000
Chhaja	0.65	@	60.00 =	39.000
Slab	0.40	@	75.00 =	30.000
				3300.00 Kg.

$$3300.00 / 1000 = 3.30 \text{ M.T.}$$

Item No. 13
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 1 kg per 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. I no 32.11

	2	12.90	3.85	=	99.33
	2	31.80	3.85	=	244.86
Deductions					
R/S	-1	3.00	2.40	=	-7.20
V	-23	0.60	0.90	=	-12.42
				Neta Total =	324.57 Sqm.

Item No. 14
Providing internal cement plaster 12mm thick in single coat in cement mortar 1:4 without neeru finish to concrete or brick surfaces, in all positions including scaffolding and curing etc. complete. I no 32.04

	2	10.00	2.70	=	54.00
	2	31.20	2.70	=	168.48
Deductions					
R/S	-1	3.00	2.40	=	-7.20
V1	-23	0.60	0.90	=	-12.42
				Neta Total =	202.86 Sqm.

Item No. 15

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) I no 24.16

For Flooring	1	12.00	31.20	0.15	<u>56.16</u>	
					Neta Total =	<u><u>56.16</u></u> <u>Cum.</u>

Item No. 16

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) I no 20.24

	1	3.00		2.40	= 7.20	
					Total =	<u><u>7.20</u></u> <u>Sqm.</u>

Item No. 17

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. I no 35.15

External	Qty. as per Item No. 9				= 324.57 <u>Sqm.</u>	
					Total =	<u><u>324.57</u></u> <u>Sqm.</u>

Item No. 18

Providing and applying washable oil-bound distemper of approved colour and shade to old and new surfaces in two coats including scaffolding, preparing the surfaces. (excluding the primer coat.) etc. complete.. I no 36.11

Internal	Qty. as per Item No. 10				= 202.86 <u>Sqm.</u>	
					Total =	<u><u>202.86</u></u> <u>SQM</u>

Item No.19

Providing and fabricating structural steel work in rolled sections, fixed with connecting plates or angle cleats in main and cross beams, hip and jack rafters, purlins connecting to truss members and the like, as per detailed designs and drawing or as directed including cutting, fabricating, hoisting, erecting, fixing in position, making riveted/ bolted/ welded connections and one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete. I no 23.02

Size of Angle	Truss Angle No.	Nos	L	Per Rgm Weight	Total Weight
50x50x5 Straight Angle		2	12.50	3.80	95.00
50x50x5 Cross Angle		4	6.42	3.80	97.58
50x50x5 Vertical Angle		4	0.25	3.80	3.80
		4	0.50	3.80	7.60
		4	0.75	3.80	11.40
		4	1.00	3.80	15.20
		4	1.25	3.80	19.00
		2	1.50	3.80	11.40

Description	No.	Length	Breadth	Depth	Quantity	
40x40x5 Cross Angle	4	1.00	3.00		12.00	
	4	1.25	3.00		15.00	
	4	1.50	3.00		18.00	
	4	1.40	3.00		16.80	
	4	1.76	3.00		21.12	
45x45x4- Middle Angle	2	1.10	2.70		5.94	
					349.84	
					10 trusses weight	3498.40 Kg
Purlins						
50x50x5 Straight Angle	1	14	31.40	3.80	1670.48	Kg
Columns Angle	1	48	3.80	3.80	693.12	Kg
Horizontal Angles						
45x45x4 Straight Angle	1	6	12.60	2.70	204.12	Kg
	1	6	31.40	2.70	508.68	Kg
Gaset Plate						
300x300x6mm	Bottom ####	4.24		Per nos	101.76	
200x200x6	Top ####	1.88		Per nos	45.12	
Nut Bolt 20mm dia	96		1.00	2.47	237.12	
					Total weight	6958.80 Kg
					=	6.960 MT.

Item No. 20

Providing and fixing corrugated galvanised iron sheets of 0.63mm thick (24 B.W.G.) for roofing without wind tiles including fastening with galvanised iron screws and bolts, lead and bitumen washers as per drawing etc. complete. (Weight of 5.5 Kilogram/sq.m.). I no 38.04

Top	2	6.75	31.80	=	429.30	
Sides	2	12.60	3.40	=	85.68	
Sides	2	31.66	3.40	=	215.29	
	4	1/2	6.00	=	21.60	
					751.87	Sqm

Item No. 21

Providing and fixing mild steel grill work for windows, ventilators etc. 20 Kilogram/Square Metre as per drawing including fixtures, necessary welding and painting with one coats of anticorrosive paint and two coats of oil painting complete. I no 40.01

VI	23	0.60	0.90	=	12.42	
					12.42	Sqm



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Name of Work :- Construction of Shed for Durgsavangi Farmers Producer Company Limited on Gut No.6/1 At :- Durgsavangi Tq. & Dist. Hingoli - Year 2022 -2023

Rate Analysis

Item No.1

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 I no 21.02

State e- S.S . R. -2022-23

207.00 Cum

Item No.2

Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete. I no 21.38

State e- S.S . R. -2022-23

= 1382.00 Cum

Ded Royalty charges of sand

-0.15 237.37

-35.61

Add Lead for Metal

1.00 483.34

483.34

Add Lead for Sand.

0.15 488.73

73.31

1903.04 Cum.

Item No.3

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, 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 natural sand/V.S.I. quality Artificial Sand I no 24.01

State e- S.S . R. -2022-23

5830.00 Cum

Ded SCADA

-126.00

Ded Royalty charges of sand

-0.47 237.37

-111.56

Add Lead For Metal

0.70 483.34

338.34

Add Lead for Sand.

0.24 504.36

121.05

Add Lead For Cement.

0.47 488.73

229.7

0.22 515.21

113.35

6394.88 Cum

Item No. 4

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, 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 SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand I no 25.11

State e- S.S . R. -2022-23

7104.00 Cum

Ded SCADA

-126.00

Ded Royalty charges of sand

-0.425 237.37

-100.88

Add Lead for metal

0.85 504.36

428.71

Add Lead for Sand.

0.425 488.73

207.71

Add Lead For Cement.

0.35 515.21

180.32

7693.86 Cum

Item No. 5

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 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 SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand I no 25.31

State e- S.S . R. -2022-23

Ded SCADA			13783.00	Cum
Ded Royalty charges of sand			-126.00	
Add Lead for metal	-0.425	237.37	-100.88	
Add Lead for Sand.	0.85	504.36	428.71	
Add Lead For Cement.	0.425	488.73	207.71	
	0.35	515.21	<u>180.32</u>	
			14372.86	Cum

Item No. 6

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 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 natural sand/V.S.I. quality Artificial Sand I no 25.50

State e- S.S . R. -2022-23

Ded SCADA			12269.00	Cum
Ded Royalty charges of sand			-126.00	
Add Lead for metal	-0.425	237.37	-100.88	
Add Lead for Sand.	0.85	504.36	428.71	
Add Lead For Cement.	0.425	488.73	207.71	
	0.35	515.21	<u>180.32</u>	
			12858.86	Cum

Item No. 7

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 (Natural Sand / Crushed sand VSI Grade finely washed etc) I no 26.05

State e- S.S . R. -2022-23

Ded SCADA			13932.00	Cum
Ded Royalty charges of sand			-126.00	
Add Lead for metal	-0.425	237.37	-100.88	
Add Lead for Sand.	0.85	504.36	428.71	
Add Lead For Cement.	0.425	488.73	207.71	
	0.35	515.21	<u>180.32</u>	
			14521.86	Cum

Item No. 8

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, (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) I no 25.70

State e- S.S . R. -2022-23

Ded SCADA			13932.00	Cum
Ded Royalty charges of sand			-120.00	
Add Lead for metal	-0.425	237.37	-100.88	
Add Lead for Sand.	0.85	504.36	428.71	
Add Lead For Cement.	0.425	488.73	207.71	
	0.35	515.21	<u>180.32</u>	
			14527.86	Cum

Item No. 9

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. I no 27.01

State e- S.S . R. -2022-23

Ded Royalty charges of sand			7755.00	Cum
Add Lead for Bricks	-0.32	237.37	-75.96	
Add Lead for Sand.	0.475	1659.28	788.16	
Add Lead For Cement.	0.320	488.73	156.39	
	0.079	515.21	40.70	
			8664.29	Cum

Item No. 10

Filling in plinth and floors with contractors material/brought from outside and approved by Engineer incharge in layers of 15 cm to 20 cm including watering and compaction etc. complete. I no 21.37

State e- S.S . R. -2022-23

Add Lead for Murum .	1.00	219.98	599.00	
			219.98	
			<u>818.98</u>	Cum.

Item No. 11

Providing second class Burnt Brick masonry with conventional/ I.S. type bricks in cement mortar 1:6 in superstructure including striking joints, raking out joints, watering and scaffolding etc. Complete I no 27.05

State e- S.S . R. -2022-23

Ded Royalty charges of sand			7994.00	Cum
Add Lead for Bricks	-0.32	237.37	-75.96	
Add Lead for Sand.	0.475	1659.28	788.16	
Add Lead For Cement.	0.320	488.73	156.39	
	0.079	515.21	<u>40.70</u>	
			8903.29	Cum

Item No.12

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. I no 26.33

State e- S.S . R. -2022-23

Add Lead For Steel/ Cement.	1.000	515.21	89703.000	MT
			<u>515.21</u>	
			90218.21	MT

Item No. 13

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 1 kg per 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. I no 32.11

State e- S.S . R. -2022-23

Ded Royalty charges of sand			639.00	Sqm
Add Lead for Sand.	-0.033	237.37	-7.83	
Add Lead For Cement.	0.033	488.73	16.13	
	0.0125	515.21	<u>6.44</u>	
			653.74	Sqm

Item No. 14

Providing internal cement plaster 12mm thick in single coat in cement mortar 1:4 without neeru finish to concrete or brick surfaces, in all positions including scaffolding and curing etc. complete. I no 32.04

State e- S.S . R. -2022-23

Ded Royalty charges of sand			278.00	Sqm
	-0.015	237.37	<u>-3.56</u>	
Add Lead for Sand.			274.44	
Add Lead For Cement.	0.015	488.73	7.33	
	0.0550	515.21	<u>28.34</u>	
			310.11	Sqm

Item No. 15

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) I no 24.16

State e- S.S . R. -2022-23

Ded SCADA			6359.00	Cum
Ded Royalty charges of sand			-126.00	
Add Lead for metal	-0.425	237.37	-100.88	
	0.56	483.34	270.67	
	0.33	504.36	166.44	
Add Lead for Sand.	0.425	488.73	207.71	
Add Lead For Cement.	0.30	515.21	<u>154.56</u>	
			6931.50	Cum

Item No. 16

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) I no 39.24

State e- S.S . R. -2022-23

4829.000 Sqm

Item No. 17

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. I no 35.15

State e- S.S . R. -2022-23

Item No. 18

Providing and applying washable oil-bound distemper of approved colour and shade to old and new surfaces in two coats including scaffolding, preparing the surfaces. (excluding the primer coat.) etc. complete.. I no 36.11

State e- S.S . R. -2022-23

Total = 104.00 Sqm.

Item No.19

Providing and fabricating structural steel work in rolled sections, fixed with connecting plates or angle cleats in main and cross beams, hip and jack rafters, purlins connecting to truss members and the like, as per detailed designs and drawing or as directed including cutting, fabricating, hoisting, erecting, fixing in position, making riveted/ bolted/ welded connections and one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete. I no 23.02

State e- S.S . R. -2022-23

Add Lead For Steel/ Cement.

1.000

515.21

97759.00

515.21

98274.21

MT.

Item No. 20

Providing and fixing corrugated galvanised iron sheets of 0.63mm thick (24 B.W.G.) for roofing without wind tiles including fastening with galvanised iron screws and bolts, lead and bitumen washers as per drawing etc. complete.(Weight of 5.5 Kilogram/sq.m.)I no 38.04

State e- S.S . R. -2022-23

Total = 870.00 Sqm.

Item No. 21

Providing and fixing mild steel grill work for windows, ventilators etc. 20 Kilogram/Square Metre as per drawing including fixtures, necessary welding and painting with one coats of anticorrosive paint and two coats of oil painting complete. I no 40.01

State e- S.S . R. -2022-23

Total = 2097.00 Sqm.



Balkhande
D.H. BALKHANDE
Architectural & Civil
Engineering Consultant
Cont.No. 8007831105

ROYALTY STATEMENT

Name of Work :- Construction of Shed for Durgsavangi Farmers Producer
Company Limited on Gut No.6/1 At :- Durgsavangi Tq. & Dist. Hingoli - Year 2022
-2023

Sr. No	item Executed	Qty. in this Estimate	Sand		Murum		Metal		Crusher Metal	
			Factor	Qty	Factor	Qty	Factor	Qty	Factor	Qty
1	2	3	6	7	8	9	10	11	12	13
1	Rubble Solling	74.88	0.15	11.23	0	0.00	1.00	74.88	0.00	0.00
2	M-10 Foundation	28.15	0.470	13.23	0	0.00	0.70	19.71	0.00	0.00
3	M-20 Foundation	16.85	0.425	7.16	0	0.00	0.00	0.00	0.00	0.00
4	M-20 Column	14.90	0.425	6.33	0	0.00	0.00	0.00	0.00	0.00
5	M-20 beams & Lintel	10.67	0.425	4.53	0	0.00	0.00	0.00	0.00	0.00
6	M-20 Chajja	0.65	0.425	0.28	0	0.00	0.00	0.00	0.00	0.00
7	M-20 Slab	0.40	0.425	0.17	0	0.00	0.00	0.00	0.00	0.00
8	BBM Plinth	16.10	0.320	5.15	0	0.00	0.00	0.00	0.00	0.00
9	Filling in Plinth	262.08	0.00	0.00	1	262.08	0.00	0.00	0.00	0.00
10	BBM Superstructure	39.49	0.320	12.64	0	0.00	0.00	0.00	0.00	0.00
11	12 mm internal plaster	202.86	0.015	3.04	0	0.00	0.00	0.00	0.00	0.00
12	Sand Faced Plaster	324.57	0.033	10.71	0	0.00	0.00	0.00	0.00	0.00
13	M-15 Flooring	56.16	0.425	23.87	0	0.00	0.56	31.45	0.00	0.00
				98.34		262.08		126.04		0.00
							Total Qty	388.12		Cubic Metre



D.H. Balkhande
D.H. BALKHANDE
Architectural & Civil
Engineering Consultant
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LEAD CHART

Name of Work :- Construction of Shed for Durgsavangi Farmers
Producer Company Limited on Gut No.6/1 At :- Durgsavangi Tq. &
Dist. Hingoli - Year 2022 -2023

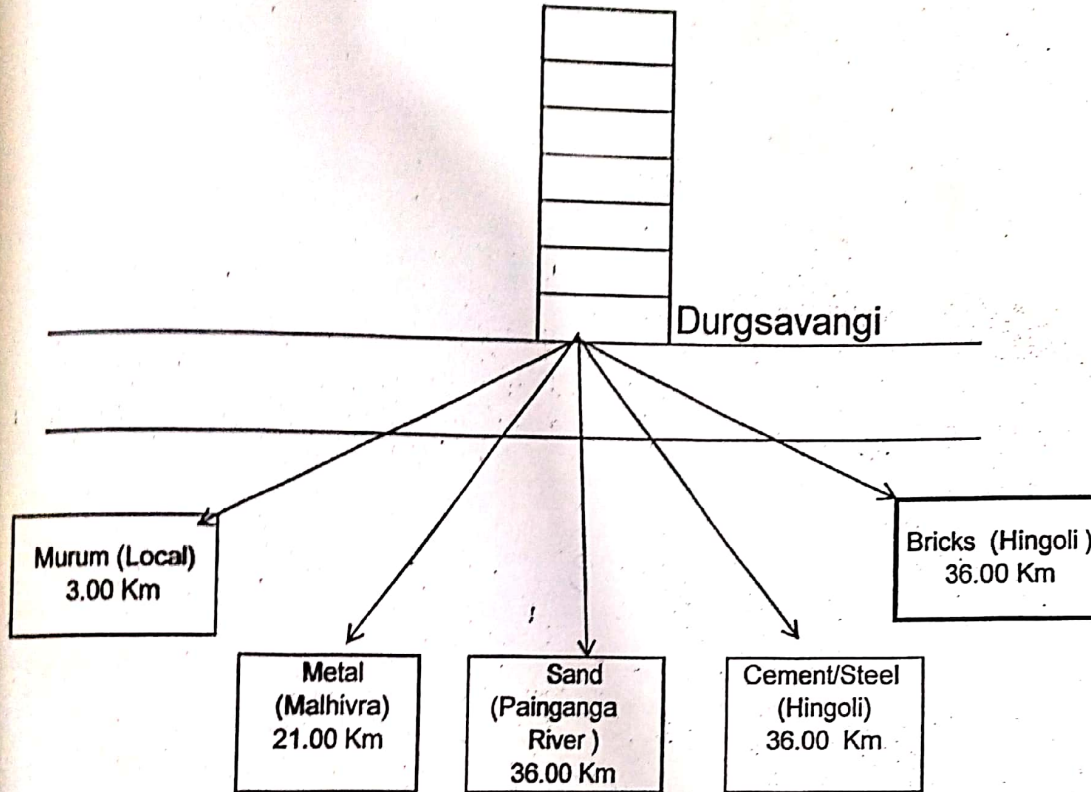
KM	MATERIAL	LOCATION OF QUARRY	LEAD IN KM	LEAD CHARGES
	Metal 40mm & Above	21 KM Away From Site Malhivra	21.00	483.34
	Metal 40mm & Below	21 KM Away From Site Malhivra	21.00	504.36
	Murum	3.00 KM Away From Site	3.00	219.98
	Sand	20.00 KM Away From Painganga	20.00	488.73
	Bricks	36.00 From Hingoli	36.00	1659.28
	Cement & Steel	36.00 Away From Hingoli	36.00	515.21



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QUARRY CHART

**Name of Work :- Construction of Shed for Durgsavangi Farmers
Producer Company Limited on Gut No.6/1 At :- Durgsavangi Tq. & Dist.
Hingoli - Year 2022 -2023**



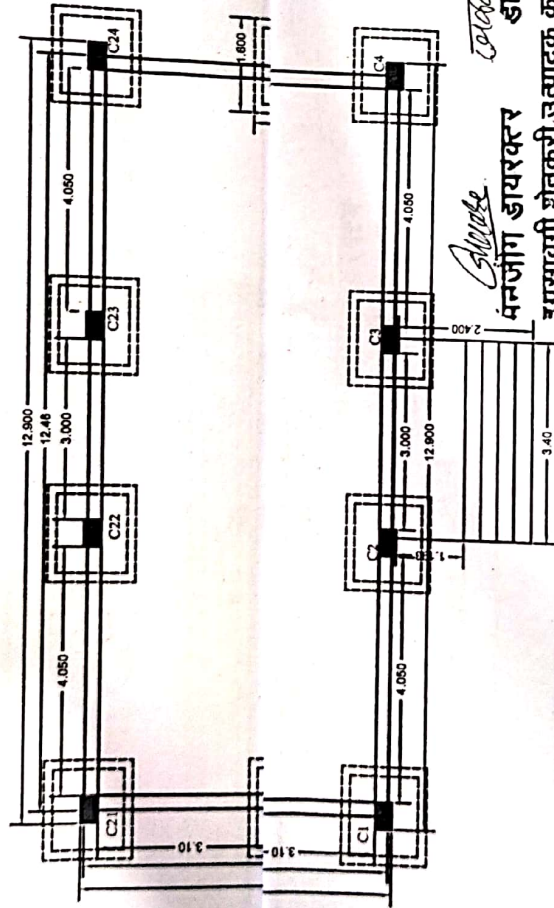
CERTIFICATE

Certified that the Quarries have been personally inspected by me and that they contains sufficient material of good quality for the road works. The distance of the quarries measured and shown on the quarry chart are along the shortest cart track.



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Plan Showing the Construction of Shed for Durgsavangi Farmers Producer Company Limited on Gut No.6/1 At :- Durgsavangi Tq. & Dist. Hingoli



SCHEDULE OF COLUMN & FOOTING

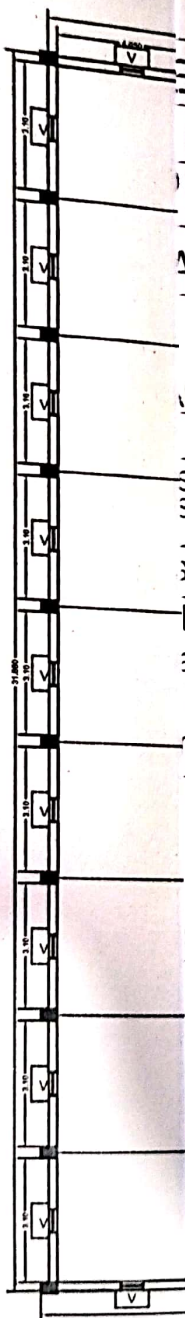
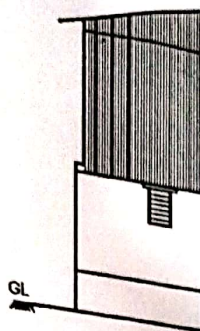
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Shri. Balkhande
 संजोग डायरेक्टर
 दृगसावगी शेतकरी उत्पादक कंपनी लि
 दृगसावगी ता लि हिंगोळ

STRUCTURAL LAYOUT OF COLUMN & FOOTING

S OF SHEET - 1/1



OF OPENING

DOORS

R/S - 3.00 X 2.40

STATEMENT

= SQ.M.
= 394.48 SQ.M.
AREA = SQ.M.

SHOWN AS - BLACK THICK
STRUCTIO SHOWN AS - RED THICK
LINE SHOWN AS - BLACK DOTTED
SHOWN AS - RED DOTTED

he Construction of Shed for
armers Producer Company
No.6/1 At :- Durgsavangi
ngoli

RISED :-


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