

GOVERNMENT OF ODISHA
DIRECTORATE OF AGRICULTURE AND FOOD PRODUCTION, ODISHA
KRUSHI BHAWAN, BHUBANESWAR

Letter No. 2M(12)19/2021-26173 /Agril. Dt. 23.08.2021

To,

The Additional Secretary to Govt.
Department of Agriculture & Farmers' Empowerment
Govt. of Odisha, Bhubaneswar.

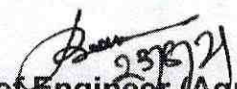
Sub: Model estimates for construction of structure for Hoarding.

Sir,

In inviting a reference to the subject cited above & as per the decision taken in the meeting on dt.10.08.2021 under the chairmanship of Hon'ble Minister A & FE Department, the model estimates for construction of Hoarding of size 20' X 10' & 15' X 10' is hereby submitted for taking further action.

The plan & estimates have been prepared by the Engineering personnel of the O/o Superintending Engineer (Agril.), Central Zone, Bhubaneswar with current schedule of rates, current labour rate & without overhead charges.

Yours faithfully

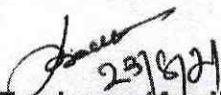

Chief Engineer (Agril.)

Memo No.

26174

Dt. 23.08.2021

Copy forwarded to P.S to Hon'ble Minister, A & FE Department with the copy of estimates for kind information of Hon'ble Minister.


Chief Engineer (Agril.)

DD(S)
Pl. put up at me.

23.8.2021



DEPARTMENT OF AGRICULTURE AND FARMERS EMPOWERMENT

MODEL ESTIMATE

**CONSTRUCTION OF STRUCTURE FOR
HOARDING SIZE (15' x 10')**

**Estimated Cost: - Rs.44,500.00
(Rupees Forty Four Thousand Five Hundred) only**

**Abstract of cost for
CONSTRUCTION OF STRUCTURE FOR HOARDING (15ft x 10ft)**

Sl. No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
					(Rs.)
1	Earth work in hard soil or gravelly soil within 50m. Initial lead and 1.5m initial lift including rough dressing and breaking clods to maximum 5cm to 7cm laying in layers not exceeding 0.3m in depth and as per the direction of the Engineer-in-charge For foundation				
		2.54	cum	162.08	412.00
2	Filling foundation and plinth with sand watered and rammed				
		0.16	cum	320.99	51.00
3	Cement concrete (1:4:8) with 40 mm size hard granite metal				
		0.16	cum	3,631.41	581.00
4	Supplying / Providing and fixing JOIST POLE- I SECTION(150mmx75mmx5mm) steel work welded in built up sections, and framed work including cutting, hoisting, fixing Joist and truss and placing in position and applying a priming /painting coat of approved steel primer etc complete including all cost of labour, T & P, hire charges of drilling machine, etc. complete with door stoper, handle, lock & floor spring as per specification and direction of Engineer-in-charge.				
		160.53	KG	94.62	15,189.00
5	Iron work wrought and put up in trusses and record racks Supplying / Providing and fixing M S ANGLE structural steel work welded in built up sections, trusses and framed work including cutting, hoisting, fixing Joist and truss and placing in position and applying a priming coat of approved steel primer etc complete including all cost of labour, T & P, hire charges of drilling machine, etc. complete as per specification and direction of Engineer-in-charge.				
		165.41	KG	94.62	15,651.00
6	Cement concrete (1:2:4) with 12 mm size hard granite chips				
		1.50	cum	5,078.48	7,618.00
Sub Total				Rs	39,502.00
7	Add for OGST	6%		Rs.	2,370.00
8	Add for CGST	6%		Rs.	2,370.00
9	Works Contingency	1%	L.S.	Rs.	258.00
GRAND TOTAL				Rs.	44,500.00

(Total Rupees Forty Four Thousand Five Hundred) Only


**Asst. Executive Engineer (Agril.)
Bhubaneswar Sub-Division**


**Superintending Engineer (Agril.)
Central Zone, Satyanagar,
Bhubaneswar**

Detailed Estimate for CONSTRUCTION OF STRUCTURE FOR HOARDING (15 ft x 10 ft)

- 1 Earth work in hard soil or gravelly soil within 50m. Initial lead and 1.5m initial lift including rough dressing and breaking clods to maximum 5cm to 7cm laying in layers not exceeding 0.3m in depth and as per the direction of the Engineer-in-charge For foundation

POLE	2 x	3.00 ft. x	3.00 ft. x	5.00 ft =	90.00	Cft.	
Total =					90.00	Cft.	
Net Total=					90.00	Cft.	2.540 Cum.

- 2 Filling foundation and plinth with sand watered and rammed

POLE	2 x	3.00 ft. x	3.00 ft. x	0.33 ft =	5.94	Cft.	
Total =					5.94	Cft.	
Net Total=					5.94	Cft.	0.160 Cum.

- 3 Cement concrete (1:4:8) with 40 mm size hard granite metal

POLE	2 x	3.00 ft. x	3.00 ft. x	0.33 ft =	5.94	Cft.	
Total =					5.94	Cft.	
Net Total=					5.94	Cft.	0.160 Cum.

- 4 Supplying / Providing and fixing JOIST POLE- I SECTION(150mmx75mmx5mm) steel work welded in built up sections, and framed work including cutting, hoisting, fixing Joist and truss and placing in position and applying a priming /painting coat of approved steel primer etc complete including all cost of labour, T & P, hire charges of drilling machine, etc. complete with door stoper, handle, lock & floor spring as per specification and direction of Engineer-in-charge.

JOIST POLE	2 x	19.00 ft =	38.00	ft		
Add waistaige	5%		1.90	ft		
		Net =	39.90	ft		
		@	13.20	kg/m	160.530	KG
		12.162 m				

- 5 Iron work wrought and put up in trusses and record racks
Supplying / Providing and fixing M S ANGLE structural steel
work welded in built up sections, trusses and framed work
including cutting, hoisting, fixing Joist and truss and placing
in position and applying a priming coat of approved steel
primer etc complete including all cost of labour, T & P, hire
charges of drilling machine, etc. complete as per
specification and direction of Engineer-in-charge.

FRAME for hording	horizontal	4 x	15.00 ft =	60.00	rft	
	vertical	4 x	10.00 ft =	40.00	rft	
	Angular	2 x	18.02 ft =	36.04	rft	
				136.04	rft	
	Waistage	0.050		6.80	rft	
			Total	142.84	rft	
				43.53	m	
			@	3.8	kg/m	165.41 KG

- 6 Cement concrete (1:2:4) with 12 mm size hard granite chips

POLE	2 x	3.00 ft. x	3.00 ft. x	2.16 ft =	38.88	Cft.	
	2 x	1.83 ft. x	1.83 ft. x	2.16 ft =	14.46	Cft.	
				Total =	53.34	Cft.	
				Net Total=	53.34	Cft.	1.500 Cum.

[Signature]
18/08/21
Asst. Executive Engineer (Agril.)
Bhubaneswar Sub-Division

[Signature]
18/08/21
Superintending Engineer (Agril.)
Central Zone, Satyanagar,
Bhubaneswar

ANALYSIS OF RATE - 2021

(With revised POST GST SR 2014 w.e.f 10.11.2014 Labour 30.10.18 VDA effective from-1.4.21 Royalty 14.12.2016) LEAD

STATEMENT

Name of Area

Bhubaneswar

3330.811

Sl. No.		Name of Building Materials	Unit	Name of Quarry	LEAD (in Km.)	Carraige	Basic rate of Materials	Carriage + Basic Rate	Royalty effective from 14.12.16	Total	Carraige+ Royalty
1	131(b)	Cement 5/2021	Qntl.	Local	5	5.50	521.29	526.79		526.79	5.50
2	133(b)	Steel 6/2021	Qntl.	Local	5	0.00	61206.78	61206.78		61206.78	0.00
3	18	Sand for Mortar	Cum	Daya	11	202.47	46.67	249.14	35.00	284.14	237.47
4	19	Sand for Filling	Cum	Daya	11	202.47	41.90	244.37	35.00	279.37	237.47
5	3	K.B.Brick	1000 Nos.	Harirajpur	12	622.31	4638.30	5260.61	0.00	5260.61	622.31
6	7	Fly Ash Brick (25x 12x 8 cm)	1000 Nos.	Patia	15	681.74	3914.89	4596.63	0.00	4596.63	681.74
7		Fly Ash Brick (23x 11x 8 cm)	1000 Nos.	Patia	15	545.39	3787.23	4332.62	0.00	4332.62	545.39
8	10	Brick Khoa	Cum	Harirajpur	12	211.27	322.55	533.82	0.00	533.82	211.27
9	15	Moorum	Cum	Local	17	255.27	45.71	300.98	35.00	335.98	290.27
10	55	Laterite Stone (Rough Dressed)	Cum	Patrapada	17	255.27	544.76	800.03	180.00	980.03	435.27
11	50	Soling stone other than granite (40 to 90 mm)	Cum	Patrapada	17	255.27	181.90	437.17	180.00	617.17	435.27
12	45	Soling stone boulder granite (15 cm & above)	Cum	Patrapada	17	255.27	141.90	397.17	180.00	577.17	435.27
13	51	IRC Grade-I Metal	Cum	Tapanga	43	484.07	597.14	1081.21	130.00	1211.21	614.07
14	52	IRC Grade-II Metal	Cum	Tapanga	43	484.07	661.90	1145.97	130.00	1275.97	614.07
15	53	IRC Grade-III Metal	Cum	Tapanga	43	484.07	704.76	1188.83	130.00	1318.83	614.07
16	29(a)	50 mm size C B H G Metal	Cum	Tapanga	43	484.07	619.05	1103.12	130.00	1233.12	614.07
17	31(a)	40 mm size C B H G Metal	Cum	Tapanga	43	484.07	706.67	1190.74	130.00	1320.74	614.07
18		26.5mm size C B H G Metal	Cum	Tapanga	43	484.07	758.10	1242.17	130.00	1372.17	614.07
19	33(a)	25 mm size C B H G Metal	Cum	Tapanga	43	484.07	770.48	1254.55	130.00	1384.55	614.07
20		22.4 mm size C B H G Metal	Cum	Tapanga	43	484.07	789.52	1273.59	130.00	1403.59	614.07
21	35(a)	20 mm size C B H G Chips	Cum	Tapanga	43	484.07	1007.62	1491.69	130.00	1621.69	614.07
22		13.2 mm size C B H G Chips	Cum	Tapanga	43	484.07	1024.76	1508.83	130.00	1638.83	614.07
23	37(a)	12 mm size C B H G Chips	Cum	Tapanga	43	484.07	1047.62	1531.69	130.00	1661.69	614.07
		11.2 mm size C B H G Chips	Cum	Tapanga	43	484.07	1049.52	1533.59	130.00	1663.59	614.07
24	39(a)	10 mm size C B H G Chips	Cum	Tapanga	43	484.07	1066.67	1550.74	130.00	1680.74	614.07
25	40	6 mm size C B H G Chips	Cum	Tapanga	43	484.07	704.76	1188.83	130.00	1318.83	614.07
26		Granite Stone broken Chips 6.7 mm size	Cum	Tapanga	43	484.07	704.76	1188.83	130.00	1318.83	614.07
27		2.36mm size C B H G Chips	Cum	Tapanga	43	484.07	628.57	1112.64	130.00	1242.64	614.07
28		4.75mm size C B H G Chips	Cum	Tapanga	43	484.07	638.10	1122.17	130.00	1252.17	614.07
29	16	Quarry rubbish Screened	Cum	Tapanga	43	484.07	76.19	560.26	35.00	595.26	519.07
30	29(b)	50 mm size H B H G Metal	Cum	Tapanga	43	484.07	493.33	977.40	130.00	1107.40	614.07
31	31(b)	40 mm size H B H G Metal	Cum	Tapanga	43	484.07	564.76	1048.83	130.00	1178.83	614.07
32	33(b)	25 mm size H B H G Metal	Cum	Tapanga	43	484.07	585.71	1069.78	130.00	1199.78	614.07
33	35(b)	20 mm size H B H G Hhips	Cum	Tapanga	43	484.07	763.81	1247.88	130.00	1377.88	614.07
34	37(b)	12 mm size H B H G Hhips	Cum	Tapanga	43	484.07	811.43	1295.50	130.00	1425.50	614.07
35	39(b)	10 mm size H B H G Hhips	Cum	Tapanga	43	484.07	838.10	1322.17	130.00	1452.17	614.07
36		Maxphalt (OSICL) 60/70	Qntl.	Haladia							
37		Maxphalt (OSICL) 80/100	Qntl.	Haladia							
38		Emulsion (M/S) M / S	Qntl.	Haladia							
37		Hallow Brick	300Nos		10	1165.37	20.47	1185.84	0.00	1185.84	1165.37
38		White Cement	Qntl.	Local	5	16.17	0.00	16.17	0.00	16.17	16.17

Certified that the lead provided are minimum and correct to the best of my knowledge


Asst. Executive Engineer (Agril.)
Bhubaneswar Sub-Division

Analaysis of Rates

- 1 Earth work in hard soil or gravelly soil within 50m. Initial lead and 1.5m initial lift including rough dressing and breaking clods to maximum 5cm to 7cm laying in layers not exceeding 0.3m in depth and as per the direction of the Engineer-in-charge (per 100 Cum.)

Man mulia	21.5 No. @ Rs	311.00 Per day	6686.50
Female Mulia	21.5 No. @ Rs	311.00 Per day	6686.50
Add Overhead C	7.50%		0.00
Add Contractor l	7.50%		0.00
			0.00
		A	Rs. <u>13373.00</u> per 100 cum
Add Cess	1%		<u>133.73</u>
			<u>13506.73</u> per 100 cum
		Add 20% extra For Foundation Rs.	2674.60 A
			Rs. <u>16047.60</u> per 100 cum
Add Cess	1%		<u>160.48</u>
			<u>16208.08</u> per 100 cum

- 2 Filling foundation and plinth with sand watered and rammed (per Cum.)

Female Mulia	12.36 No. @ Rs	311.00 Per day	3843.96
Sand	100 Cum @ Rs	41.90 Cum	4190.00
Add Overhead C	7.50%		0.00
Add Contractor l	7.50%		0.00
		Rate per Cum	<u>8033.96</u> per 100 cum
		Add Carriage Royalty of Sand Rs.	Rs. <u>80.34</u>
			<u>237.47</u> Per cum
			Rs. <u>317.81</u> Per cum
Add Cess	1%		<u>3.18</u>
			<u>320.99</u> Per cum

- 3 Cement concrete (1:4:8) with 40 mm size hard granite metal (per Cum)

Granite metal	0.96 Cum @ Rs.	706.67 Per Cum.	Rs. 678.40
Sand	0.48 Cum @ Rs.	46.67 Per Cum.	Rs. 22.40
Cement	1.72 Qntl @ Rs.	521.29 Per Qntl.	Rs. 896.62
Mason 2 nd			
Class	0.18 No. @ Rs.	401.00 Per day	Rs. 72.18
Man mulia	1.8 No. @ Rs.	311.00 Per day	Rs. 559.80
Female Mulia	1.4 No. @ Rs.	311.00 Per day	Rs. 435.40
Man mulia for mixing	0.7 No. @ Rs.	311.00 Per day	Rs. 217.70
Add Overhead			
Charges	7.50%		Rs. 0.00
Add Contractor l	7.50%		0.00
			Rs. <u>2882.50</u> per cum
Royalty & Carriage			
Granite metal	0.96 Cum @ Rs.	614.07 Per Cum.	589.51
Sand	0.48 Cum @ Rs.	237.47 Per Cum.	113.99
Cement	1.72 Cum @ Rs.	5.50 Per Qntl.	9.46
			3595.46
Add Cess	1%		35.95
			<u>3631.41</u> per cum

4 Cement concrete (1:2:4) with 12 mm size hard granite chips (per Cum)			
Granite chips 12	0.9 Cum @ Rs.	1047.62 Per Cum.	Rs. 942.86
Sand	0.45 Cum @ Rs.	46.67 Per Cum.	Rs. 21.00
Cement	3.23 Qntl @ Rs.	521.29 Per Qntl.	Rs. 1683.77
Mason 2 nd			
Class	0.68 No. @ Rs.	401.00 Per day	Rs. 272.68
Man mulia	1.8 No. @ Rs.	311.00 Per day	Rs. 559.80
Female Mulia	1.4 No. @ Rs.	311.00 Per day	Rs. 435.40
Man mulia for mixing	1.4 No. @ Rs.	311.00 Per day	Rs. 435.40
Add Overhead			
Charges	7.50%		Rs. 0.00
Add Contractor l	7.50%		0.00
			Rs. 4350.91 per cum
Royalty & Carriage			
Granite metal	0.9 Cum @ Rs.	614.07 Per Cum.	552.66
Sand	0.45 Cum @ Rs.	237.47 Per Cum.	106.86
Cement	3.23 Cum @ Rs.	5.50 Per Qntl.	17.77
			5028.20
Add Cess	1%		50.28
			5078.48 per cum

- 5** Iron work wrought and put up in trusses and record racks Supplying / Providing and fixing JOIST POLE /M S ANGLE structural steel work welded in built up sections, trusses and framed work including cutting, hoisting, fixing Joist and truss and placing in position and applying a priming coat of approved steel primer etc complete including all cost of labour, T & P, hire charges of drilling machine, etc. complete as per specification and direction of Engineer-in-charge.

A/R P-224 ITEM - 3

Data for 0.508 Qtl

MATERIALS

JOIST /M S

ANGLE

including

4	Cement concrete (1:2:4) with 12 mm size hard granite chips (per Cum)			
	Granite chips 12	0.9 Cum @ Rs.	1047.62 Per Cum.	Rs. 942.86
	Sand	0.45 Cum @ Rs.	46.67 Per Cum.	Rs. 21.00
	Cement	3.23 Qntl @ Rs.	521.29 Per Qntl.	Rs. 1683.77
	Mason 2 nd			
	Class	0.68 No. @ Rs.	401.00 Per day	Rs. 272.68
	Man mulia	1.8 No. @ Rs.	311.00 Per day	Rs. 559.80
	Female Mulia	1.4 No. @ Rs.	311.00 Per day	Rs. 435.40
	Man mulia for mixing	1.4 No. @ Rs.	311.00 Per day	Rs. 435.40
	Add Overhead			
	Charges	7.50%		Rs. 0.00
	Add Contractor l	7.50%		Rs. 0.00
				Rs. <u>4350.91</u> per cum
	Royalty & Carriage			
	Granite metal	0.9 Cum @ Rs.	614.07 Per Cum.	552.66
	Sand	0.45 Cum @ Rs.	237.47 Per Cum.	106.86
	Cement	3.23 Cum @ Rs.	5.50 Per Qntl.	17.77
				5028.20
	Add Cess	1%		50.28
				5078.48 per cum

- 5 Iron work wrought and put up in trusses and record racks Supplying / Providing and fixing JOIST POLE / M S ANGLE structural steel work welded in built up sections, trusses and framed work including cutting, hoisting, fixing Joist and truss and placing in position and applying a priming coat of approved steel primer etc complete including all cost of labour, T & P, hire charges of drilling machine, etc. complete as per specification and direction of Engineer-in-charge.

A/R P-224 ITEM - 3

Data for 0.508 Qtl

MATERIALS

JOIST /M S

ANGLE

including

5%waistage

0.53 qtl	Each	5100.00	Rs	2703
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LABOUR

Black smith

(2nd class)

1.25 Nos	Each	401.00	Rs	501.25
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Fitter (2nd class

1.00 Nos	Each	401.00	Rs	401.00
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)

Helper to black

smith

1.00 Nos	Each	351.00	Rs	351.00
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Man mulia

2.50 Nos	Each	311.00	Rs	777.50
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4733.75

OHC &

Contractor's

Profit 15%

Rs	0.00
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Carriage and

conveyance

cost

0.53 qtl	Each	16.17	Rs	8.57
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TOTAL

Rs	4742.32
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Rate per Qtl

Rs	9335.28 /Qtl
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Rate per kg

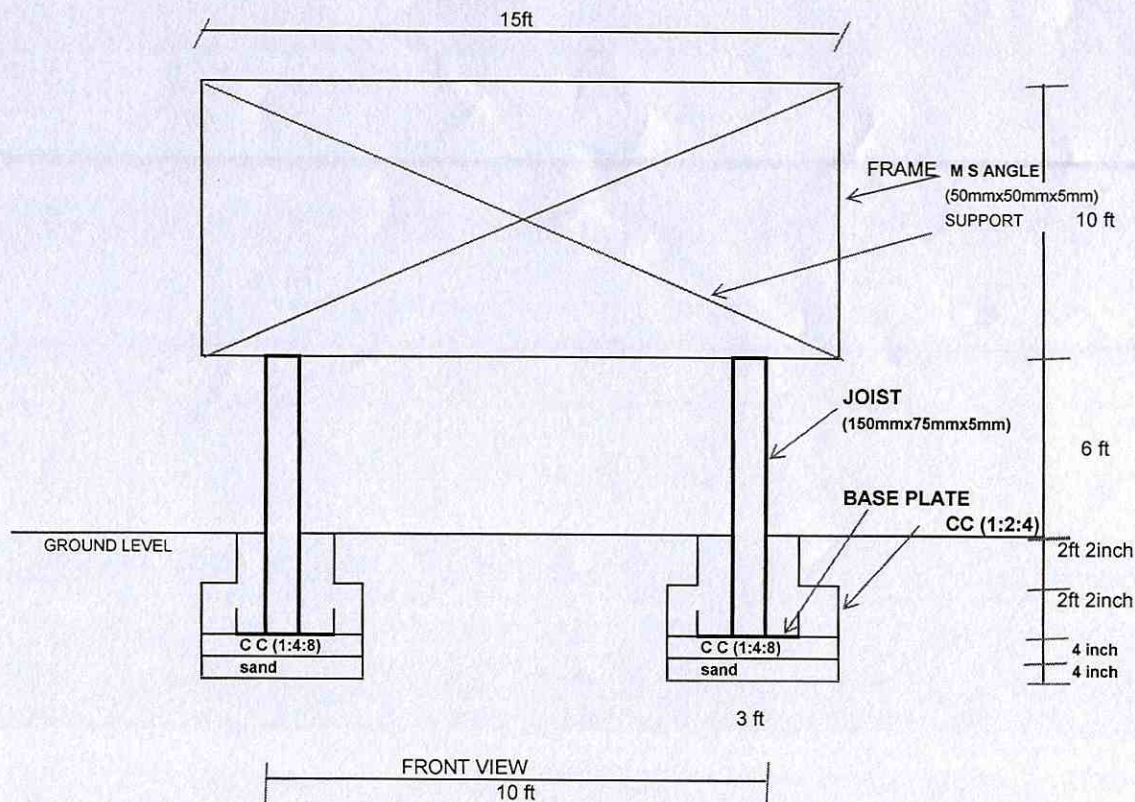
93.35

Add 1% labour cess

1.27

Rate per kg

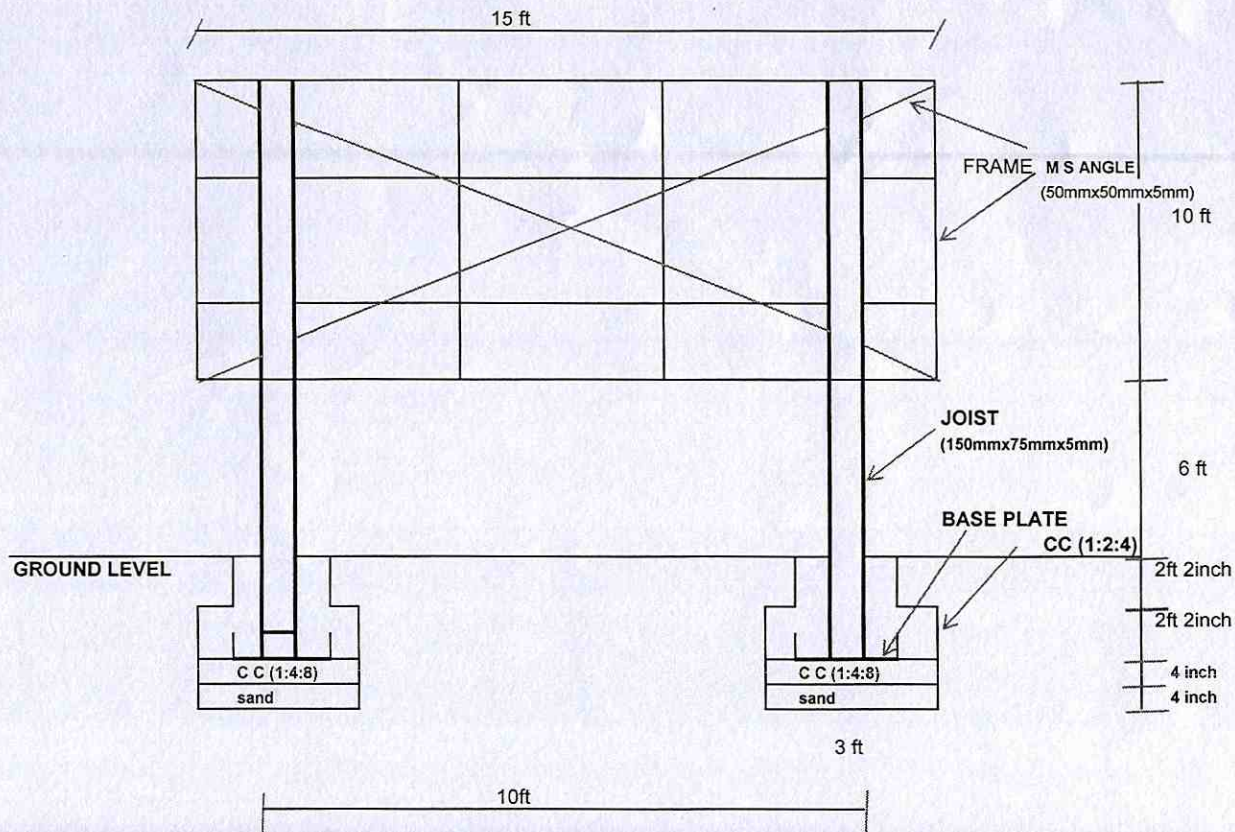
TOTAL 94.62 /KG



CONSTRUCTION OF STRUCTURE FOR HOARDING (15 ft x 10 ft)

10/08/21
 Asst. Executive Engineer (Agril.)
 Bhubaneswar Sub-Division

18/08/21
 Superintending Engineer (Agril.)
 Central Zone, Satyanagar,
 Bhubaneswar



BACK SIDE VIEW
CONSTRUCTION OF STRUCTURE FOR HOARDING (15 ft x 10 ft)

[Signature]
18/08/24
Asst. Executive Engineer (Agril.)
Bhubaneswar Sub-Division

[Signature]
18/08/24
Superintending Engineer (Agril.)
Central Zone, Satyanagar,
Bhubaneswar