

Jugrahi to Coxmipura

Measurement Book

Schedule XLV-Form No. 134

Baagha-2

DIVISION

Bhithra

SUB-DIVISION

Name of Work -
 Situation of work -
 Agency by which work is executed -
 Date of measurement -
 No. and date of agreement -
 (These four lines should be repeated at the commencement of the measurements relating to each work).

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Name of work: Jygnahi to Laxmipura					
South					
Agency: M/s Om Shri Sai Construction,					
West Champaran					
Agreement No.: 24 SBD of 20-21					
Agreement Amount: Rs 12297617 = 00					
Ag Date of Start: 01/06/2020					
Date of Complete: 31/05/2021					
Revised measurement					

1	Cleaning and grading of road bed				
	2x 44x 30.00 x 1.50				= 3960 m ²
	2x 1x 25.00 x 1.50				= 75 m ²
	Total				= 40.35 m ²
	Say				0.40 Hg
2	Const of reference working Bm				1.345 km
3	Const of reference pillar				1.345 km
4	Const. of embankment				
	44x 30.00 x $\left(\frac{6+7.2}{2} - \frac{2+4.3}{2}\right)$				x 0.51 = 1248.06
	1x 25.00 x $\left(\frac{6+7.1}{2} - \frac{3.1+4.2}{2}\right)$				x 0.51 = 21.75
	Total				1269.81 m ²

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Const. of embankment - lead up to					
1000 m (20% of total) =					380.94 m ²
Const. of embankment - lead up to					
100 m (70% of total) =					888.87 m ²
Construction of subgrade					
-	23X	10.00X	7.48X	0.22	1651.58 m ²
	1X	10.00X	7.48X	0.22	22.94 "
			Total as		1675.52 m ²
6 ¹ / ₂ providing and fixing manhole					
sign board					22 m ²
2 providing and fixing manhole					
board					2 m ²

Accepted by
14/06/2000
PC

Revised measurement

1 Box culvert (2 nos)
(2X200X600)

1 Earth work in Excavation

Rift : 2X2.50X5.20X0.55 = 14.30 m³

Cut off wall and return wall : 2X2X6.50X0.50X1.50 = 9.50 "

Pile driving : 2X8.50X1.50X0.60 = 15.40 m³

D/S : 2X8.50X2.20X0.60 = 22.40 "

Site clearance & levelling : 28.00 m²

Total = 109.60 m³

Continuation

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10/07/2020	
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1. Supplying, Fitting and placing

Hydro	Cal	rem	for	en
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125	main bar in cut off well
110	10mm ϕ bar up to bed level @ 200 mm c/c

$$2 \times 2 \times 2 \times 12 \times 1.36 = 130.56 \text{ m}$$

125	Main bar in return wall
1500	10 mm ϕ bar up to slab

ms. Book 200 ms c/c

2x4x2x11x2.5	624.80
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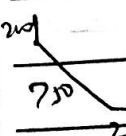
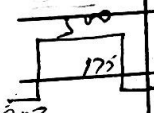
Distribution bar in cut-off

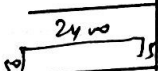
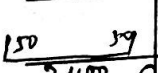
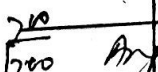

 wall of return wall
 up to level 10mm
 @ 200mm c/c

2x	2x	2x	6x	6x	v	=	312.00
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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Distribution bar in return wall					
above bed level 10 mm ϕ					
2a @ 200 mm c/c					
2X 4X 2X 13X 2.25					2468.75 m
Main bar (upper & lower side) in Rft					
10 mm ϕ bar @ 150 mm c/c					
2X 2X 40 X 2.50					400 m
Distribution bar in					
Rft 10 mm ϕ bar @					
200 mm c/c					
2X 2X 11 X 6.00					264.00 m

Main bar in Abutment					
inner side of Box					
10 mm ϕ bar @ 200 mm c/c					
2X 2X 30 X 2.50					300.00 m
Main bar in Abutment					
outer side of Box					
10 mm ϕ bar @ 150 mm c/c					
2X 2X 40 X 2.80					608 m
Distribution bar in					
Abutment 10 mm ϕ bar					
200 mm c/c					
2X 4X 11 X 6.00					528 m
Angle bar connecting					
to Rft and abutment					
10 mm ϕ bar 150 mm c/c					
2X 2X 40 X 1.40					224 m

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
	Huntch bar connecting to Rftt and column				
	8 mm ϕ bar @ 150 mm C/L				
	2X 2X 40 X 1.15				= 27.6 m
	10 mm ϕ Over lap bar				
	2X 34 X 0.40				= 27.20 m
	Column ϕ bar chain				
	5 m				
	2X 2X 40 X 1.25				= 20 m
$\frac{1}{2}$ portion Rftt cut off return length	$2 \times 6.00 \times 2.50 \times 0.25 = 7.50 \text{ m}$ $2 \times 6.50 \times 0.30 \times 0.85 = 3.28 \text{ m}$ Total 14.78 m				
	12/07/20				

<u>Reinforcement measurement</u>			
↓ Supplying, fitting and placing HYSD bar in			
Slab (lower side) 12 mm			
	ϕ bar @ 150 mm C/L $2 \times 1 \times 40 \times 2.50 = 200 \text{ m}$		
	Main bar in slab (upper side) 10 mm ϕ bar @ 150 mm C/L $2 \times 2 \times 40 \times 2.00 = 200 \text{ m}$		
Distribution bar in slab			
10 mm ϕ bar @ 150 mm C/L			
$2 \times 2 \times 11 \times 6.00 = 264 \text{ m}$			
	Angle bar connecting to slab and column 8 mm ϕ bar @ 150 mm C/L $2 \times 2 \times 40 \times 1.40 = 224 \text{ m}$		

Continuation

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
200 750 200	Huntch Lar Connecting to slab and above				
	8 mm ϕ bar @ 150 mm c/c				
	2X 2X 40X 1.15				= 184 m
200	Providing R.C.C M25 in				
	Assume: 2X 2X 6.0X 0.25X 2.00				= 12.00 m ³
	Rein wall: 2X 4X 2.00X $\left(\frac{0.25 \times 1.25}{2}\right)$ X 2.25				= 9.80 "
	Huntch: 2X 4X $\frac{1}{2}$ X 6.0X 0.15X 0.15				= 0.54 "
	Total				22.44 m ³
200	Provide weep hole in Culvert				
	2X 2X 5X 2				= 40 m

Accepted by
14/07/2015
PC

Refer memo

1 Main bar in parapet
10 mm ϕ bar @ 200 mm c/c

200 2X 2X 2X 12X 1.00 = 96 m

200 Distribution bar in

50 501 parapet 10 mm ϕ bar
2400 200 mm c/c

2X 2X 2X 4X 2.50 = 80 m

200 Provide R.C.C M25 in

1.5X culvert

Deck slab: 2X 1X 6.0X 2.50X 0.25 = 7.50 m³

parapet: 2X 2X 2.50X 0.25X 0.60 = 1.50 "
	Total:				9.00 m³

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Total length of 8mm ϕ bar					592 m
Wt @ 0.40 kg/m					236.80 kg
Total length of 10mm ϕ bar					4546.56 m
Wt @ 0.617 kg/m					2805.22 kg
Total length of 12mm ϕ bar					200 m
Wt @ 0.89 kg/m					178 kg
Total weight					3220.02 kg
					Say = 3.22 MT
Accepted by					
15/07/20					
SR					

Revised measurement					
1 Primary back filling behind Abutment					
					$2 \times 2 \times 6 \text{ m} \times 2 \text{ m} \times 0.6 \text{ m} = 28.80 \text{ m}^3$
2 Construction of granular Sub-base					
					$23 \times 10 \text{ m} \times 4.05 \text{ m} \times 0.200 = 558.90 \text{ m}^3$
					$1 \times 10 \text{ m} \times 4.05 \text{ m} \times 0.200 = 8.10 \text{ m}^3$
less left over					$2 \times 2 \times 4.05 \text{ m} \times 0.200 = 3.24 \text{ m}^3$
Total					563.76 m ³

Accepted by					
16/07/20					
SR					

Sch. XLV-Form No. 134					
Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
	<u>Material Statement</u>				
1 Earth work =			2945.33 m ²	(1.71/m ²)	
2 Stone metal =			473.558 m ²	(576.44/m ²)	
3 Crushed Sand =			202.954 m ²	(188.4/m ²)	
4 Stone chips =			46.926 m ²	(550.85/m ²)	
5 Coarse Sand =			29.268 m ²	(614.17/m ²)	
6 Cement =			20.429 t	(5002.4/t)	
<u>Prepared by</u>					
16/07/20					
JR					

Abstract of cost

1/	Construction of reference pillars			
	BM vide TMB page 1 =			
	1.345 km @ 11909 = 73/km	Rs	16019 =	0
2/	Const. of reference pillar vide			
	TMB page no. 1.345 km @			
	Rs. 13190.55 / km	Rs.	17741 =	00
3/	Clearing & grubbing road bed			
	vide TMB page 1 = 0.40 Hg			
	@ Rs. 49496 = 70/Hg	Rs	19799 =	00
4/	Const. of embankment ... 1200'			
	up to 1000 m vide TMB page			
	no 2 = 380.94 m ² @ Rs			
	174.83 / m ²	Rs	66500 =	00

Total Rs 120159 = 00

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
5 Construction of side drains of earthen shoulder side TMA page no 2 = 1675.52 m ² @ Rs 176.47/m ²					Rs. 295679.20
6 Const. of embankment --- lead up to 100 m = 888.87 m ² @ Rs 58.55/m ²					Rs 52080.20
7 Const. of G.S.R side TMA page no 7 = 563.76 m ² @ Rs. 3699.68/m ²					Rs 2085732.00
8 Providing and fixing MNGW sign board side TMA page no. 2 = 2 nos. @ Rs. 11694.50 /each					Rs 23389.00
9 Providing and fixing maintenance board side TMA page no. 2 = 2 nos @ Rs 11694.50/each no					23389.00
10 Earth work in Excavation side TMA page no 2 = 109.60 m ² @ Rs. 260.59/m ²					Rs. 28561.00
11 Sand filling in foundation side TMA page no. 3 = 5.20 m ² restricted to 4.88 m ² @ Rs. 3975.34/m ²					Rs. 1935.00
12 Providing P.C.C M/S side TMA page no 3 = 7.95 m ² @ Rs. restricted to 7.56 m ² @ Rs 7074.552/m ²					Rs. 53483.00
Total Rs 2684411.20					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
13 39 Booring Mrs M box wall					
vide TMA page no. 5 = 14.12 m					
vide TMA page no. 6 = 22.44 "					
vide TMA page no. 6 = 9.00 "					
Total 45.56 m					
restricted to 45.42 m @					
Rs. 8789 = 51 / m ²					Rs 399238:00
14 40 Rock filling behind					
above vide TMA					
page no 7 = 28.80 m ² @					
Rs. 3560 = 88 / m ²					Rs 102552:00
15 41 provide weep holes					
vide TMA page no. 6 =					
40 m @ Rs 83 = 35 / m ² Rs.					3336:00
16 43 Supply, filling and laying					
HYD box vide TMA page					
no 7 = 2.22 m ² @ Rs.					
5388 = 40 / m ²					Rs 172877:00
Total Rs					3362415:00
Add 12% G.T. = Rs.					403490:00
Add 1% Cess = Rs					33624:00
Total =					3799529:00
less 0.11% as per grant Rs					4179:00
Payable Amount Rs					3795350:00
Accepted by					
16/07/20					
12					