

Jatlahin Mishrauli PMGSy to
Mishrauli SC tols

Measurement Book

Schedule XLV-Form No. 134

(mmgs-SC)

Bagha-2

DIVISION

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: Const. of road from Jalleh					
Mishrauli PMGSY to Mishrauli se to 18					
Agency: Matirangjan Gidvari, West Champaran					
Agreement No: 12 SDD of 20-21					
Agreement Amount = Rs 4615862 = 100					
Date of Start: 28/05/2020					
Date of Completion: 28/02/2024					
Revised measurement					

1. Construction of working B.M. = 0.54 km	
2. Construction of reference pillar = 0.54 km	
3. Clearing and grubbing of road land	
$2 \times 18 \times 30.00 \times 1.50 = 1620.00 \text{ m}^3$	
4. Construction of embankment	
$18 \times 30.00 \times \left(\frac{6.75}{2} - \frac{3.45}{2} \right) \times 0.5 = 756.50 \text{ m}^3$	
Construction of embankment level	
up to 100 m = (28% total) = 238.95 m	
Construction of embankment ...	
... level up to 100 m = 557.55 m	
5. Excavation for roadwork	
$2 \times 13 \times 30.00 \times 0.50 \times 0.10 = 40.95 \text{ m}^3$	
$2 \times 1 \times 15.00 \times 0.50 \times 0.10 = 1.58 \text{ m}^3$	

Continuation Total = 42.53 m

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
					$2 \times 4 \times 30 \times 0.375 \times 0.175 = 15.75 \text{ m}^3$
					$2 \times 1 \times 15 \times 0.375 \times 0.175 = 1.97 \text{ m}^3$
				Total =	60.25 m ³
Revised for					
14/06/2020					
Te					
Revised measure					
					Box Culvert (1m)
					(1 x 2m x 2m)
Earth work in Excavation					
Ref:	1	2.50	5.20	0.55	7.15 m ³
cut off wall & RW	1	2	6.50	0.50	1.50 = 5.75 m ³
Pitch of	8.50	1.00	0.60		7.70 m ³
D/S	8.50	2.20	0.60		11.20 m ³
Site clearance					19.80
				Total =	54.80 m ³
Sand filling in foundation					1.95 m ³
Ref:	2	5.00	5.00	0.15	2.02 m ³
cut off wall and return	2	6.50	0.50	0.30	0.65 = 1.95 m ³
				Total =	3.97 m ³
				Residual to	2.60 m ³
					3.78 m ³
2 provide p.c.c. M15 in open foundation					
Ref:	2	5.00	5.00	0.15	2.02 m ³
cut off wall and return	2	6.50	0.50	0.30	1.95 m ³
				Total =	3.97 m ³
				Residual to	2.78 m ³

Continuation.

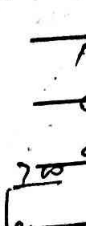
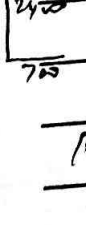
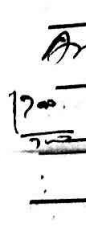
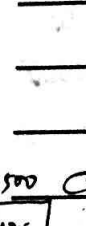
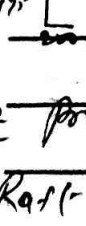
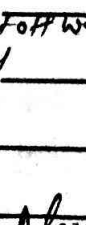
Revised for
16/06/2020

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>Revised measurement</u>					
Supplying, fitting and placing					
HySD bar reinforcement main					
bar in cut off wall 10mm ϕ					
bar up to bed level @ 200mm					
2X4X12X	1.36				= 65.28 m
main bar in return wall					
10mm ϕ bar up to ^{slab} bed level					
@ 200mm c/c					
125	4X2X11X	3.55			= 312.4 m
3500					
100	Distribution bar in cutoff				
100					
Wall and return wall up to bed					
level 10mm ϕ bar @ 200mm c/c					
150	2X2X6X	6.50			= 156 m
6400					
Distribution bar in cutoff					
Wall and return wall up to					
bed as per bed level					
150	10mm ϕ bar @				
2150	200mm c/c				
	4X2X13X	2.45			= 234 m
2400					
50	main bar (upper floor)				
50	in left 10mm ϕ bar				
2400	@ 150mm c/c				
	2X40X	2.50			= 200 m
150	Distribution bar in				
5500	left 10mm ϕ bar @ 200mm				
	c/c				
	2X11X	6.00			= 132 m

Continuation

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
 Main bar in Abutment Side of Box 10 mm ϕ bar @ 200 mm c/c $2 \times 20 \times 2.50 = 150 \text{ m}$					
 Main bar in abutment Side of Box 10 mm ϕ bar @ 200 mm c/c $2 \times 40 \times 3.80 = 304 \text{ m}$					
 Distribution bar in abutment 10 mm ϕ bar @ 200 mm c/c $4 \times 11 \times 6.00 = 264 \text{ m}$					
 Angle bar connecting to Raft and abutment $10 \text{ mm } \phi \text{ bar } 150 \text{ mm c/c}$ $2 \times 40 \times 1.40 = 112 \text{ m}$					
 Hunter bar connecting to Raft and abutment 8 mm ϕ bar 150 mm c/c $2 \times 40 \times 1.15 = 92 \text{ m}$					
 Over lap bar 10 mm ϕ bar $2 \times 40 \times 1.40 = 112 \text{ m}$					
 Chair bar 10 mm ϕ bar $2 \times 40 \times 1.40 = 112 \text{ m}$					
 Pouring RCC in Raft $6.00 \times 2.50 \times 0.25 = 3.75 \text{ m}^3$ Cut off wall $2 \times 6.50 \times 0.10 \times 0.85 = 3.315 \text{ m}^3$ Total = 7.065 m ³					

Continuation

Particulars	Details of actual measurement				Contents of area	
	No.	L.	B.	D.		
<u>Reinforcement</u>						
<u>Supplying, Fitting and placing</u>						
Hyd bar main bar in slab						
(lower side) 12 mm ϕ bar						
150 mm c/c						
	40	2.50			= 100 m	
Main bar in slab (upward side)						
10mm ϕ bar @ 150mm c/c						
	40	2.50			= 100 m	
Distribution bar in slab						
10 mm ϕ bar @ 150 mm c/c						
	2	11	6.00		= 132 m	
Angle bar connecting to slab						
and abutment 8 mm ϕ bar						
@ 150 mm c/c						
	2	40	1.40		= 112 m	
Plinth bar connecting to slab						
and abutment 8 mm ϕ bar						
@ 150 mm c/c						
	2	40	1.15		= 92 m	
Provide RCC grade Mas in						
Abutment:	2	6.00	0.25	2.00	= 6.00 m ³	
Return wall:	4	2.00	$\left(\frac{0.50 \times 0.25}{2}\right)$	2.00	= 4.95 "	
Plinth	4	$\frac{1}{2}$	6.00	0.15	0.15	= 0.27 "
Total					= 11.22 m ³	
Provide weep hole in abutment						
	2	5	2		= 20 m	

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>Rebar measurement</u>					
1. Main bar in parapet round					
. bar @ 200 mm c/c					
	2X	2X	12X	1.00	= 48.00 m
<u>Distribution bar in parapet</u>					
10 mm ϕ bar @ 200 mm c/c					
	2X	2X	4X	2.5	= 40 m
<u>2. Providing R.C.C. grade mes-</u>					
Deck Slab	6.00X	2.50X	0.25		= 3.75 m ²
Parapet	2X	2.50X	0.25X	0.60	= 0.75 "
					4.50 "
					Reinforced " 9.45 m ²

2. Providing Beech filling sheet					
about					
	2X	6.00X	2.00X	0.60	= 14.40 m ²
Total length of 8 mm ϕ bar					296 m
wt @ 0.40 kg/m					= 118.40 kg
Total length of 10 mm ϕ bar					= 2273.28 m
wt @ 0.617 kg/m					= 1402.61 kg
Total length of 12 mm ϕ bar					100 m
wt @ 0.89 kg/m					= 89 kg
Total rebar					1610.01 kg
Sag					= 1.61 m
Algebraic					
01/07/2020					
TE					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>Reveal measure</u>					
1. <u>Providing and fixing masonry</u>					
<u>Sign board</u>					= 200 1/2
2. <u>Providing and fixing plaster</u>					
<u>board</u>					= 200 1/2
3. <u>Construction of granular</u>					
<u>SUB-base</u>					
	2X13X30.00X	0.525X0.100			= 1365 m ³
	2X1X15.00X	0.525X0.100			= 1.575 "
	13X30.00X	4.050X0.100			= 157.95 "
	1X15.00X	4.050X0.100			= 6.075 "
	NO 2X4X0.375X				
	2X4X30.00X	0.375X0.100			= 9.00 "
	2X1X15.00X	0.375X0.100			= 1.125 "
	Total R.				177.09 m ³
<u>less length of Culvert</u>					
	1X2.00X	4.050X0.100			= 0.81 m ³
	Total				176.28 m ³
<u>Alleged by</u>					
<u>TS/07/2000</u>					
<u>TR</u>					

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
	Modernized Station				
1 Earth work			796.50 m ²		(1.71/ha)
2 Stone metal			148.075 m ²		(516.44/ha)
3 Crushed Sand			63.46 m ²		(188.40/ha)
4 Stone chips			23.663 m ²		(550.85/ha)
5 Course Sand			12.034 m ²		(614.17/ha)
6 Cement			10.214 t		(5002.4/t)
Repeat for					
12/07/2000					
OK					

Abstract of cost

1 Construction of working dam					
vide TMA page no. 1 = 0.54 km					
@ Rs. 11922.42/km				Rs. 6428 =	∞
2 Const of reference pillar					
vide TMA page no. 1 = 0.54 km					
@ Rs. 13419.58/km				Rs. 7247 =	∞
3 clearing and grubbing ground					
vide TMA page no. 1 = 0.1649					
@ Rs. 51133.76/ha				Rs. 8181 =	∞
4 Const of embankment ... land					
up to 100m vide TMA page no.					
1 = 238.95 m ² @ Rs. 202.52					
per m ²				Rs. 48392 =	∞
Total Rs.					70258 = ∞

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
5/8 Const. of embankment... with lead up to 100 m wide TMB page no 1 = 557.55 m ² @ Rs.					Rs 93339 = ∞
967 = 41/m ²					
6/7 Excavation for road way wide TMB page 2 = 60.25 m ² @ Rs. 74 = 16/m ²					Rs. 4468 = ∞
7/9 Const. of granular sub-base wide TMB page no 7 = 176.22 m ² @ Rs. 222 = 10/m ² 3840 = 83/m ²					Rs 677061 = ∞ Rs 40915 = ∞
8/23 Prov. and fixing mm G.I. sign board wide TMB page no 7 = 2 nos.					Rs.
11771.79/Each					Rs. 23544 = ∞
9/27 Prov. & fixing maintenance board wide TMB page no. 7 = 2 nos @ Rs. 11771 = 79/Each					Rs. 23544 = ∞
10/31 Earth work in excavation wide TMB page no 2 = 54.80 m ² @ Rs. 269 = 32/m ²					Rs. 14759 = ∞
11/32 Sand filling in foundation wide TMB page no 2 = 2.44 m ² @ Rs. 400 = 59/m ²					Rs. 97 = 00
12/24 Prov. p.c.c M15 wide TMB page no 2 = 3.78 m ² @ Rs. 7016 = 18/m ²					Rs. 26521 = ∞
Total Rs					298325 = ∞
					934471 = ∞

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
13 39 Prov. R.C.C. Mrs. Vile					
TMB page no. 4 = 7.065 m					
Wide TMB page no. 5 = 11.220 m					
Wide TMB page no. 6 = 4.50 m					
Total = 22.785 m					
Restricted to 22.71 m ² @ Rs					
8627.04 / m ²					Rs. 195920 = ∞
14 40 Rock Allay School Abutment					
Wide TMB page no. 6 = 14.40 m					
@ Rs. 2674.48 / m ²					Rs. 52913 = ∞
15 41 Prov. weep hole wide TMB					
TMB page no. 5 = 20 m ²					
@ Rs 83.11 / Each					Rs. 16622 = ∞
16 42 Supply fitting and Allay					
HYSD bar wide TMB page					
G = 1.61 MT @ Rs. 46422.86					
per MT					Rs. 74741 = ∞
Total Rs.					1259707 = ∞
Add 12% GST					Rs. 151165 = ∞
Add 1% Cess					Rs. 12597 = ∞
Add seigniorage fee					Rs. 132852 = ∞
Total Rs.					1436754 = ∞
less 2.25% O/S per agreement					Rs. 32327 = ∞
Payable Amount					Rs. 1404427 = ∞
12/07/20					