

Measurement Book

Schedule XLV-Form No. 134

DIVISION

SUB-DIVISION

M.B.NO-3222

0.05x.2

3rd & Final bill

22

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
N/W:—	Construction of Road & C/D				
	Works from NH-85 to Samhauli				
	Gram me Sunder Lal Srivastava				
	Ke Ghar to Chanda tola				
	tak Duhai Bazar Nofe				
	huye under mmGSF (2)				
	at block Jalalpur.				
N/Agency—	Sri Rajbhusan Singh				
Ass. NO—	50/SB/D/2019-20				
Date of start—	15.10.2019				
Date of completion—	14.10.2020				
Date of measurement—	14.10.2020				

Items of work-

① Earth work calculation.					
Sl. No	chainage	C/S Area	Mean C/S Area	Dist	Volume
	(m)	(m ²)	(m ²)	(m)	(m ³)
1	0	1.414	0.707	0	0.00
2	50	1.745	1.579	50	78.95
3	100	2.159	1.952	50	97.60
4	150	1.644	1.901	50	95.05
5	200	1.931	1.787	50	89.35
6	250	1.712	1.821	50	91.05
7	300	2.164	1.938	50	96.90
8	350	1.709	1.936	50	96.80
9	400	1.860	1.784	50	89.20
10	450	5.178	3.519	50	175.95

Qty of = 910.85 m³

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Sl. No	chainage	c/s Area	mean c/s Area	Dist	volume
	(m)	(m ²)	(m ²)	(m)	(m ³)
			Qty	B/F =	910.85 m ³
11	500	6.813	5.995	50	299.75 m ³
12	550	5.901	6.357	50	317.85 m ³
13	600	5.646	5.773	50	288.65 m ³
14	650	5.780	5.713	50	285.65
15	700	7.066	6.423	50	321.15
16	750	6.904	6.985	50	349.25
17	800	5.633	6.268	50	313.40
18	850	5.798	5.715	50	285.75
19	900	1.927	3.862	50	193.10
20	950	1.760	1.943	50	92.15
21	1000	1.646	1.703	50	85.15
22	1050	1.737	1.691	50	84.55
23	1100	1.964	1.850	50	92.50
24	1150	1.965	1.964	50	98.20
25	1200	1.965	1.965	50	98.25
26	1250	1.290	1.627	50	81.35
27	1300	6.169	3.729	50	186.45 m ³ 163.95
28	1350	6.194	6.181	50	309.05
29	1400	5.726	5.960	50	298.00
30	1450	5.322	5.524	50	276.20
31	1500	5.726	5.524	50	276.20
32	1550	6.705	6.215	50	310.75
33	1600	5.849	6.277	50	313.85 m ³
			Qty c/o =		6145.55 m ³ 6168.05 m ³

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
			Qty	B/F =	6168.05 m ³
Less for G.S.B-I				= (-)	1534.23 m ³
Less for W.B.M-3				= (-)	1457.86 m ³
Less for P.C.C.				= (-)	477.33 m ³
Less for P.M.C.				= (-)	62.73 m ³
Net Qty of E/W =					4635.90 m ³
Less for Earthen shoulder					821.96 m ³
Net Qty of E/W in embankment =					3813.94 m ³
E/W in embankment with a lead up to 100 m =					919.26 m ³
Already paid =					1861.65 m ³
Net Payable Qty =					57.61 m ³
Qty with a lead up to 100 m =					9894.68 m ³
Already paid Qty =					2584.94 m ³
Net Payable Qty =					309.74 m ³

(2) P.V. & applying Primer coat with bitumen emulsion - SS-1					
10	30.00 m	3.75 m			1125.00 m ²
10	30.00 m	3.75 m			1125.00 m ²
7	30.00 m	3.75 m			787.50 m ²
1	10.00 m	3.75 m			37.50 m ²
Extra widening at H-curve					
2	2.50 m	2.10 m			10.50 m ²
4	5.80 m	0.600 m			13.92 m ²
2	3.10 m	2.25 m			13.95 m ²
4	6.20 m	0.580 m			14.38 m ²
2	5.50 m	0.50 m			5.50 m ²
4	5.75 m	0.550 m			12.65 m ²
2	3.10 m	2.15 m			13.33 m ²

Total = 3145.90 m²Continuation
Qty limit = 3136.50 m²

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
③ P.V. & applying Tack Coat with bitumen emulsion RS-1					
Qty = As per Primer Coat					
					= 3136.50 m ²
④ P.V., laying & rolling of close-graded prime surfacing material, down thickness.					
Qty = As per tack coat					
					= 3136.50 m ²

⑤ Construction of Subgrade & Earthen shoulder.					
For B.T. Portion,					
Sides of G.S.B,					
2 x 5 x 30.00 m x 1.400 m x 0.200 m = 84.00 m ³					
2 x 5 x 30.00 m x 1.400 m x 0.200 m = 84.00 m ³					
2 x 5 x 30.00 m x 1.400 m x 0.200 m = 84.00 m ³					
2 x 1 x 30.00 m x 1.400 m x 0.200 m = 16.80 m ³					
Sides of W.B.M-3					
2 x 5 x 30.00 m x 1.200 m x 0.075 m = 27.00 m ³					
2 x 5 x 30.00 m x 1.200 m x 0.075 m = 27.00 m ³					
2 x 5 x 30.00 m x 1.200 m x 0.075 m = 27.00 m ³					
2 x 1 x 30.00 m x 1.200 m x 0.075 m = 5.40 m ³					
Qty c/o = 355.20 m ³					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
				Qty Blf =	355.20 m ³
For C.C. Parson.					
Sides of C.S.B.					
2 x 10 x 30.00 m x		0.625 m	0.100 m		= 37.50 m ³
2 x 10 x 30.00 m x		0.625 m	0.100 m		= 37.50 m ³
2 x 2 x 30.00 m x		0.625 m	0.100 m		= 7.50 m ³
Sides of W.B.M-3					
2 x 10 x 30.00 m x		0.625 m	0.075 m		= 28.12 m ³
2 x 10 x 30.00 m x		0.625 m	0.075 m		= 28.12 m ³
2 x 2 x 30.00 m x		0.625 m	0.075 m		= 5.62 m ³
Sides of R.C.C.					
2 x 10 x 30.00 m x		0.625 m	0.160 m		= 60.00 m ³
2 x 10 x 30.00 m x		0.625 m	0.160 m		= 60.00 m ³
2 x 2 x 30.00 m x		0.625 m	0.160 m		= 12.00 m ³
				Total =	631.56 m ³

⑥ Plv & fixing of R.C.C. MIS

④ { grade Kilometre stones = 03 Nos

⑦ Plv & fixing of 200 m stones = 06 Nos

⑧ Plv & fixing of R.C.C. MIS

grade boundary pillar =

④ { on Turning & Near H.P. Culvert.

4 x 20.00 Nos = 80 Nos

⑨ Plv & fixing of Retro-reflecto-
-rised traffic sign board.

600 mm Circular (speed limit) = 12 Nos

⑩ 900 mm equi lateral &
triangle (left/right curve) = 6 Nos

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(11) 600mm x 450mm rectangular (sheet & plate) = 6 Nos.					
(12) Plv & Laying of hot applied thermoplastic compound 2.5mm thick For B.T. portion					
	2	10 x 30.00m	0.100m		$= 60.00 m^2$
	2	10 x 30.00m	0.100m		$= 60.00 m^2$
	2	7 x 30.00m	0.100m		$= 42.00 m^2$
	2	1 x 30.00m	0.100m		$= 2.00 m^2$
					Total = 164.00 m ²
(13) Plv & Laying of hot applied thermoplastic compound 2.5mm thick For C.C. portion					
	2	10 x 30.00m	0.100m		$= 60.00 m^2$
	2	10 x 30.00m	0.100m		$= 60.00 m^2$
	2	6 x 30.00m	0.100m		$= 36.00 m^2$
					Total = 156.00 m ²
(14) Plv & Laying of R.C.C. pipe dia 300mm dia					
	2	3 x 2.50m			$= 15.00 kg$
(15) Plv & Laying of direction & place identification sign board					01 NO

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(16) Plv & fixing of typical mm GSY information sign board with logo = 04 Nos					
(17) Painting two coats including primer coat H.P. culvert (P x 600mm) - 01 NO 2.5 x 2 x 3.60m x 3.380m = 60.84 m ²					
Ticks checked & checked & initialed. Vishnu 14/10/20 (J.E) 14/10/20 (J.E) 27/11/2020 R. S. B. 20 14/11/2020					
Work has been completed as per Agreement & specification - M. R. S. B. (J.E)					
Abstract of Cost.					
1. Plv & fixing of working bench mark pillars					
02 Nos, vide TMBP-16					
① Rs 3787.81/NO - Rs 7576 = Rs					
2. Plv & fixing of reference pillars.					
06 Nos, vide TMBP-16					
① Rs 1739 = 14 / NO - Rs 10,435 = Rs					
3. Clearing & grubbing of road land.					
1.042 Hect, vide TMBP-16					
① Rs 49174 = 86 / Hect - Rs 51,240 = Rs					
				40, Rs 69,251 = Rs	

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
				B1 Fr. Rs	69,251=00
$\frac{4}{4}$ Box cutting - Excavation for roadway in soil using manual means.					
144.60 m ³ , vide TMBP-16					
(2) Rs 75 = 43/m ³ — Rs					10,907=00
$\frac{5(a)}{5}$ Construction of Embank- ment with a lead upto					
1000 m.					
861.65 m ³ , vide TMBP-16					
57.61 m ³ , vide TMBP-24					
919.26 m ³					
(2) Rs 129 = 381 m ³ — Rs					1,64,897=00
$\frac{5(b)}{6}$ Construction of embank- ment with a lead					
upto 100 m.					
2584.94 m ³ , vide TMBP-17					
309.74 m ³ , vide TMBP-24					
2894.68 m ³					
(2) Rs 150270 / m ³ — Rs					4,36,228=00
$\frac{6}{8}$ Construction of granule sub-base by providing coarse graded material.					
451.57 m ³ , vide TMBP-17					
(2) Rs 2728 = 51 / m ³ — Rs					12,32,113=00
				40, Rs	19,13,396=00

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
				B/F, B	19,13,396=0
<u>7</u> <u>9</u> Plv, laying, spreading					
8 Compacting of WBM-3					
235.24 m ³ , vide TMBP-17					
① Rs 3972=55/m ³					Rs 9,34,503=0
<u>8</u> <u>13</u> Construction of granular					
sub-base by providing					
Coarse graded material,					
82.66 m ³ , vide TMBP-17					
② Rs 2728251/m ³					Rs 2,25,539=0
<u>9</u> <u>14</u> Plv, laying, spreading					
8 Compacting of WBM-3					
222.62 m ³ , vide TMBP-17					
③ Rs 3972=55/m ³					Rs 8,84,369=0
<u>10</u> <u>7</u> Construction of sub-grade					
8 Earthen shoulder					
190.40 m ³ , vide TMBP-18					
631.56 m ³ , vide TMBP-26					
821.96 m ³ ,					
④ Rs 222=54/m ³					Rs 1,82,919=0
<u>11</u> <u>27</u> Plv & fixing of typical					
mm 654 intermediary sign					
board with logo					
02 Nos, vide TMBP-18					
04 Nos, vide TMBP-28					
06 Nos					
⑤ Rs 9920=55/NO					Rs 59,523=0
⑥ Rs 42,00,249=0					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
					B/F, $154200, 249 = 60$
<u>12</u> <u>15</u> Construction of un-reinforced plain cement concrete channel as per technical specification					
477.33 m^3 , vide T.M.B.P-18					
(W) $157770 = 12/\text{m}^3$ — $\rightarrow$					$37,08,911 = 6$
<u>13</u> <u>25</u> P/V & Laying of R.C.C. pipe dual of 300mm dia across the road					
45.00 m , vide T.M.B.P-18					
15.00 m , vide T.M.B.P-27					
(W) $15885 = 85/\text{m}^3$ — $\rightarrow$					$53,152 = 60$
<u>14</u> <u>28</u> Earthwork in excavation for foundation of structure (H.P. culvert)					
15.65 m^3 , vide T.M.B.P-19					
(W) $15258 = 89/\text{m}^3$ — $\rightarrow$					$4,052 = 60$
<u>15</u> <u>29</u> P/V M/S R.C.C. (1:2.5:5) as levelling course in foundry					
2.84 m^3 , vide T.M.B.P-19					
(W) $155389 = 02/\text{m}^3$ — $\rightarrow$					$15,305 = 60$
<u>16</u> <u>30</u> Brick masonry work in cement mortar (1:4) in Head well & parapet					
13.86 m^3 , vide T.M.B.P-19					
(W) $155850 = 82/\text{m}^3$ — $\rightarrow$					$81,092 = 60$

Continuation

 $40, 1580, 62, 761 = 60$

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
					B/P, 580,62,761=0
<u>17</u> 31. P/V & Laying of R.C.C.					
pipe 4PS of dia. 600mm.					
7.50 m, vide TMBP-19					
(Q) R 4084=53/m					B 30,634=0
<u>18</u> 32. Plastering with cement					
mortar (1:4) on brickwork					
38.47 m ² , vide TMBP-19					
(Q) R 156297/m ²					R 6,039=0
<u>19</u> 33. P/V 1.5 mm cement painting					
9.12 m ² , vide TMBP-20					
(Q) R 48=52/m ²					R 442=0
<u>20</u> 10. P/V & applying primer					
coat with bitumen emulsion					
SS-1					
3136.50 m ² , vide TMBP-24					
(Q) R 48=82/m ²					B 1,53,124=0
<u>21</u> 11. P/V & applying of					
tack coat with bitumen					
emulsion RS-1					
3136.50 m ² , vide TMBP-25					
(Q) R 16=32/m ²					R 51,188=0
<u>22</u> 12. P/V & Laying & rolling					
of close graded premix					
sustaining material of 20mm					
thick					
3136.50 m ²					
(Q) R 245=34/m ²					B 7,69,509=0

Continuation 40 R 90,73,697=0

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
			BIF	Rs	90,73,697.00
<u>23</u> 17.	Plv & fixing of R.C.C. misgrade kilometre stones				
	03 NOS, vide TMBP-26				
	(Q) Rs 2261267/NO — Rs				6785.00
<u>24</u> 18.	Plv & fixing of 200m stones				
	06 NOS, vide TMBP-26				
	(Q) Rs 641249/NO — Rs				3849.00
<u>25</u> 19.	Plv & fixing of R.C.C. misgrade boundary pillars				
	80 NOS, vide TMBP-26				
	(Q) Rs 513296/NO — Rs				41,117.00
<u>26</u> 20.	Plv & fixing of Retro reflective traffic sign board 600mm Circular (speed limit)				
	12 NOS, vide TMBP-26				
	(Q) Rs 562011/NO — Rs				67,441.00
<u>27</u> 21.	900mm equilateral & triangle (L/R curve)				
	6 NOS, vide TMBP-26				
	(Q) Rs 626504/NO — Rs				37,590.00
			40	Rs	92,30,479.00

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
					BIF, Rs 92,30,479=∞
<u>28</u> <u>22</u>		600 m x 450 mm rectangular			
		(school & place)			
		06 Nos, vide Tmp P-27			
		(a) Rs 5464=98/NO			Rs 32,790=∞
<u>29</u> <u>23</u>		Plv & tamping of hof			
		applied thermo plastic			
		Compound 2.5 m thick			
		164.00 m ² vide Tmp P-27			
		(u) Rs 924259/m ²			Rs 1,51,633=∞
<u>30</u> <u>24</u>		Plv & tamping of hof			
		applied thermo plastic			
		Compound of 2.5 m thick			
		156.00 m ² vide Tmp P-27			
		(u) Rs 1027=72/m ²			Rs 1,60,324=∞
<u>31</u> <u>25</u>		Plv & fixing of chisolation			
		& place ident's location			
		Sign board			
		01 NO, vide Tmp P-27			
		(u) Rs 3417=82/NO			Rs 3418=∞
<u>32</u> <u>34</u>		Painting two coats including			
		primer coat			
		60.84 m ² , vide Tmp P-28			
		(u) Rs 108250/m ²			Rs 6601=∞
					Rs 95,85,245=∞

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
				BIF	Rs 95,85,245.00
				Total	Rs 95,85,245.00
Less 10% (belas)	(-)			Rs	9,58,525.00
				Rs	86,26,720.00
Less previous payment	(-)			Rs	70,64,412.00
Net Payable Amount				Rs	15,62,308.00
				(Rupees Fifteen Lakh, sixty-two thousand, three hundred & eight) only,	
				1	
	M.M. 14/10/20			(J.E.)	
				Wishu	
				14/10/20	
				15/10	

Continuation