Bela 19.11.4.64 (S.C)

Schedule XLV—Form No. 204

No. [illegible]

BIHAR P.W.D.

E.E R.W.D. Work Ayrimgubal DIVISION

Assistant Engineer R.W.D. SUB-DIVISION

Work Sub-Division- Madhubani.

MEASUREMENT BOOK.

2513

Dilip Kr (Schwdt)

Certified that this M.B. contain two (one hundred) pages by Printers Machine and issued to Sri Balaq Ram A.E.R.W.D. Wuyq Sub-Division-Madambyr.

5.12.19

Executive Engineer
Rural Works Dipartt. at
Works Division. Aurangabad

5/12/19

Schedule XLV – Form No. 134.

E.E. Aurangabad DIVISION.

A.E. Madambyr. SUB-DIVISION.

MEASUREMENT BOOK. 2513

511165

Name of officer Sri Balaq Ram A.E. R.W.D

Wuyq Sub-Division- Madambyr.

Date of first entry

Date of last entry

बिहार सार्वजनिक क्षेत्र, पटना ।

Particulars	No.	L	B	D	

4th or R.I.C Bill

Name of work – Madan Pur Kesna Road & Be lo under MMGSY

Agency – Dilip Kr., Satwal
E/4 MR, Deo, Aurangabad.

Agreement – 33 SBD/ 2017-20
(10% below)

Date of Start – 20/10/2019

Date of Completion – 19/10/2020

Record entry

Item (1) Clear Jungle Road
Case –
$2 \times (2 \times 3000 + 10m) \times 3.80 = 490m^2$

Continuation = 0.049 hect

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	

Item (3) Bituminous :-

$2 \times (2 \times 30m + 5) \times 0.527 \times 0.10 = 6.825 m^3$

Item (8) Construction of embankment with approved material obtained for deposited at site roadway :-

$0.60 \times (3 \times 4.13 + 6.825)$

$= 24.57 m^3$

Item (9) GSB - Construction of granular sub-base by providing material, spreading etc. —

$2 \times (2 \times 30m + 5m) \times 0.525 \times 0.10 = 6.83 m^3$

$(2 \times 30m + 5m) \times 4.05 \times 0.10 = 26.33 m^3$

$33.16 m^3$

$\approx 33.34 m^3$

28/12/2020

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
Item (9) Supply, laying, spreading and compacting stone aggregate — do — as complete as per specn.					
30.00m x 3.75m x 0.075 =					8.44m³
45.0m x [(5.1+5.0)+0.10] / 2 x 0.075 =					5.625m³
15.0m x (8.41+0.9)/2 x 0.075 =					4.73m³
					18.79m³
—	—	—	—		—
[signature] 05/01/2020		[signature] 5/01/20			
Item (10) Prime coat — Pl and applying bitumen concrete Bitumen emulsion — do — as complete SOI as per specn.					
10m x (13.75+3.75)/2 =					87.50m² ~~131.25m²~~
(9 x 30m + 7.60m) x 3.75m =					1041.00m² ~~1132.5~~
(15 x 30m + 19m) x 3.75m =					1758.75m²
[illegible] x 3.75 + 12.15 =					79.50m²
					~~2966.75m²~~
					⇒ 2945.25m²

 Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
[illegible] (11) Tack coat – Pro and applying tack coat with bitumen emulsion [illegible] — do —					
[illegible] (42) [illegible] (10)					
					2945.280 m²
[illegible] (12) [illegible] – Pro laying and rolling of close graded premix surfacing — do — [illegible] complete [illegible] [illegible]					
[illegible] (12) [illegible] (10)					
					2945.280 m²

[signature] 10/01/2021 JE

[signature] 10/01/21

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
Item	(19) cement Concrete Pavement :- Construction of un-reinforced Plain cement Concrete Pavement, thickness as per design — do — all complete Job as per spec,				
	2 × 30m × 3.75m × 0.160 = 36.00 m³				
	1 × 29m × 3.75m × 0.160 = 17.40 m³				
	20m × (3.75m + 5.0 + 3.75)/3 × 0.160 = 13.33 m³				
	(2 × 30m + 12m) = 72m × 3.75m × 0.160 = 43.20 m³				
	(3 × 30m + 19m) × 3.75m × 0.160 = 65.40 m³				
	30m × (3.75 + 9.84 + 3.75)/3 × 0.160 = 27.68 m³				
	(5 × 30m + 25m) × 3.75m × 0.160 = 105 m³				
	22m × 2.70m × 0.160 = 9.50 m³				
	10m × (5.0 + 3.75)/2 × 0.160 = 7.00 m³				
	(3 × 30m + 4m) × 3.75m × 0.160 = 56.40 m³				
	(2 × 30m + 20m) × 3.75m × 0.160 = 48.00 m³				
					428.91 m³
				≅	428.40 m³
[signature] 23/01/2021			[signature] 25/01/2021		

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
Item 15/16	Kilometre stone —				
	(i) Ordinary km stone — 36				
	(ii) 200m stone — 618				
Item (17)	Pro & fixing logo				
	enforcing sign				
	board — 32				
Item (18)	Providing				
	road letter —				
	132				
Item (19)	Boundary Pillar — 24				
Item (20)	Retro reflectorised				
	traffic sign — Pro				
	& fixing do —				
	600mm △ — 14				
	800 x 600mm ▭ — 4				
	600 x 450mm ▭ — 4				

Continuation

10/02/2021
10/02/2021

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
700 mm octagonal = 2 Nos.					
Item (21) Road marking with Rot. Applied Thermoplastic Compound -do-					
2 x (6 x 300 + 21m) x 0.10 =					58.20 m²
2 x (15 x 300 + 29m) x 0.10 =					95.50 m²
					154.10 m²
Item (22) Road marking with hot applied thermoplastic Compound -do-					
2 x (14 x 300 + 75m) x 0.10 =					89.0 m²
2 x (2 x 300 + 120) x 0.10 =					14.40 m²
2 x (3 x 300 + 120) x 0.10 =					20.60 m²
2 x (2 x 300 + 200) x 0.10 =					16.0 m²
					140 m²

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
Item (23) Planting of trees by the road side. — do — 77 Nos.					
Item (28) Painting of brackets — do —					
		2 x 3.60m x (0.60 to 0.40 + 0.60)			= 11.52 m²
		2 x 2 x 0.40 x 0.60			= 0.96 m²
					12.48 m²
Item (33) Painting on brackets — do —					
		2 x 6.80m x (0.60 to 0.40 + 0.60)			= 19.68 m²
		2 x 2 x 0.40 x 0.60			= 0.96 m²
					20.64 m²

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
9(4)m (39)	Pre Place cement concrete (M7.5) substructure — do —				
	2x 8.00m x 0.40 x 0.60				= $3.84m^3$
9(6)m (42)	Preload filling joints sealing compound — do —				
	2x 6.00				= 12.00 metre
9(6) (45)	Painting on parapets wall — do —				
	2x 8.00 x (0.60+0.40+0.60)				= $25.60m^2$
	2x2x 0.40x0.60				= $0.96m^2$
					$26.56m^2$

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
Item (45)	P/o a Repair of 300mm dia pipe culvert etc —				
	8x 4x2.50 = 60 metre				
Item (46)	Dismantling of pipe structure —				
	cement concrete —				0.75m³
	Reinforced concrete —				1.68m³
Item (47)	Dismantling pipe structure. etc —				
	Cement mortar —				24.75m³
Item (3)	P/o subgrade & earthen shoulder 30 —				
	$2\times(291+479)\times 1.182\times 0.075$				$=136.52m^3$
	$2\times(291+479)\times 1.388\times 0.20$				$=427.50m^3$
	$2\times(444.17+104+80)\times 0.375\times(0.160+0.075+0.10)$				$=175.88m^3$
					739.90m³
[signature] 14/02/2021	[signature] 14/02/21				

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.				Contents of area
		B	C	D	

Executive Engineer
Rural Works Department
Works Division, Aurangabad

Embankment Excavation

Ch-m	Area m²	Mean Area m²	Distance m	Volume m³
0+0	6.776	—	—	—
50	8.559	7.668	50	383.375
100	5.991	7.275	50	363.750
150	7.456	6.725	50	336.250
200	6.621	7.065	50	353.250
250	8.209	7.440	50	372.000
300	7.383	7.833	50	388.550
350	6.710	7.022	50	351.075
400	3.250	5.380	50	249.000
450	3.510	3.380	50	169.000
500	3.300	3.405	50	170.250
550	3.602	3.454	50	172.500
600	3.650	3.626	50	181.300
650	4.050	3.850	50	192.500
700	3.530	3.790	50	189.500
729	3.265	3.398	29	98.542
729	4.389	—	—	—
750	2.966	3.785	21	78.950
800	2.950	2.955	50	147.750
840	3.696	3.320	40	132.800
840	4.510	—	—	—
850	2.845	3.678	10	36.775
900	2.960	2.903	50	145.125

Continuation

Sch. XLV-Form No. 134 51

Particulars	Details of actual measurement No.	L	B	D	Contents of area
910	3·830	3·395		10	33·950
910	8·880	—		—	—
950	7·250	8·065		40	322·600
1000	7·850	7·550		50	377·500
1050	8·300	8·075		50	403·750
1100	6·996	7·648		50	382·400
1150	7·007	7·002		50	350·075
1200	4·300	5·654		50	282·675
1250	3·900	4·100		50	205·000
1300	6·300	5·100		50	255·000
1350	3·810	5·055		50	252·750
1400	3·200	3·505		50	175·250
1450	3·200	3·250		50	162·500
1470	3·915	3·608		20	72·150
					7787·875m³

Deduction

subgrade –

(15 67·504 / 36·24) – 2303·764

GSB – 684·86 + 29·34 (66) = 714·20

WMM-III – 421·70m³

CEP – 428·40m³

3868·04m³

Net E(w) – 7787·875

(–) 3868·04

= 3919·84m³

10/02/2021

Sec ⑤ Earthy cl. of SA ... conc. rd – 1 lead 100m – 1656·64m³

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	

Item (6) Construction of embankment with – lead 1000m

vide F/W calculation

3919.84-1651.64=2268.20 m3

16/02/2024 JE 16/02/24

Material statement

Earth – 3596.24 m3

Sand – 207.74 m3

Stone Aggregate – 430.80 m3

Bitumen emulsion

(SS1) – 2.503 MT

(R51) – 0.810 MT

Bitumen – 5.596 MT

16/02/2024 JE 16/02/24

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Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
	4th & Final Bill				
	Abstract of Cost				
① Pegs fixing of working					
	Benchmarks - do —				
	working Benchmarks -				
	vide TMBP (32) 2 No				
	@ 4335.27 each Rs				8671=00
	Reference Pillars -				
	vide TMBP (33) 5 No				
	@ 1970.20 each Rs				9851=00
② clearing & grubbing					
	road level - do —				
	vide TMBP (39) 0.98 Hect				
	vide — (40) 0.05 Hect -				
			1.03 Hect		
	@ 49174.98 Rs				
			Hect Rs		50650=00
③ Box cutting for road clearing - Excavation - do —					
	vide MBP (32) 34.13 m³				
	vide — (41) 4.825 m³				
			40.955 m³		
			≈ 40.96 m³		
	@ 76.19/m³ Rs				3121=00

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
(4) Construction of embankment with material obtained from Road way & HP					
-do-					
	0.60 x 40.96 = 24.58 m³				
	Rs 26.77 /m³-Rs				658.00
(5) Construction of embankment with approved material -do- lead 100 m					
Wide Trench	(51)	165.64 m³			
	Rs 131.31/m³-Rs				21753.30
(6) Construction of embankment with approved material -do-					
Side Trench	(52)	22 63.20 m³			
	Rs 179.10 /m³-Rs				405339.20
(7) Construction of Syphonage & earthen shoulder - -do-					
Side Trench	(34)	1567.50 m³			
Side	(49)	739.90 m³			
		2307.40 m³			
		= 2303.74 m³			
	Rs	181.30 /m³-Rs			417668.20

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
(8)	25B - Construction of granular sub base by providing [illegible]				
	— do —				
	vide TMBP (34) 684.86 m^3				
	vide — (41) 29.34 m^3				
				714.20 m^3	
	@ Rs 2099.94 / m^3 Rs 1499777=00				
(9)	WBM-III - Pro, laying spreading & Compacting stone aggregate				
	— do —				
	vide TMBP (34) 405.00 m^3				
	vide — (42) 18.79 m^3				
			423.79 m^3		
			= 421.70 m^3		
	@ Rs 2949.69 / m^3 Rs 1243884=00				
(10)	Prime Coat - Pro & applying primer coat - do -				
	vide TMBP (42) 2945.25 m^2				
	@ Rs 48.32 / m^2 Rs 142314=00				
(11)	Tack Coat - Pro & applying tack coat with Bitumen [illegible] (SS1)				
	— do —				
	vide TMBP (43) 2945.25 m^2				
	@ Rs 16.16 / m^2 Rs 47595=00				

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
(12) Mix seal surfacing Type B – Plug, tacking and rolling of close graded premix bituminous mixture					
–do–					
vide TMBP (43)					2945.25 m²
Obs		136.54		28	549407=00
(13) Cap Construction of Plain cement concrete Pavement, thickness 5 cm as per design.					
–do–					
vide TMBP (42)					428.40 m²
Obs		63 85.9		2	2735720=00
14/15/16. Welcome stone					
(i) ordinary km stone					
vide TMBP (45)					2 Nos
Obs		2195.500			4391=00
(ii) 20 km stone –					
vide TMBP (45)					6 Nos
Obs		637.21			3823=00
15/17 – Plain drop type with foundation					
Sign board –do–					
vide TMBP (34)					2 Nos
vide – (45)					2 Nos
					4 Nos
Obs		9946.78			39787=00

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
19/18- Painting new letters & figures -do-					
vide TMBP (45) 132 nos					
@ 0.52 each					69=00
18/19- Boundary Pillar					
vide TMBP (45) 24 nos					
@ 522.42 each					12538=00
18/20- Retro-reflectorised Traffic signs -					
600 mm △ -					
vide TMBP (45) - 14 nos					
@ 4011.48 each					56160=00
800 x 600 mm ▭ -					
vide TMBP (45) - 4 nos					
@ 7677.98 each					30712=00
600 mm x 450 mm ▭					
vide TMBP (45) - 4 nos					
@ 5301.55 each					21206=00
900 mm octagonal					
vide TMBP (46) - 2 nos					
@ 9850.73 each					19701=00
19/21- Road marking with hot applied Thermo-plastic compound - -do-					
vide TMBP (46) 154.03 m²					
@ 850.91 / m²					131040=00

Continuation

Scanned with CamScanner

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
20/(22)	Road marking with				
	Hot-Applied				
	Thermoplastic				
	Compound ---				
	-do-				
	vide TMBP (46) 140 m²				
	@ 953.79/m² Rs				133531=00
21/(23)	Planting of tree				
	by the road side				
	--do--				1
	vide TMBP (47) 77 Nos				
	@ 743.55 each Rs				57253=00
22/(24)	E/W in excavation				
	in foundation				1
	--do--				
	vide TMBP (34) -15.60 m³				
	@ 282.43/m³ Rs				4423=00
23/(25)	PCC M15 as levelling				
	course in foundation				
	--do--				
	vide TMBP (35) 2.85 m³				
	@ 5252.89/m³ Rs				14971=00
24/(26)-	PCC Plain Cement				
	concrete in sub structure				
	--do--				
	vide TMBP (35) 15.17 m³				
	@ 6166.68/m³ Rs				93549=00

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
25/27 Providing RCC NP3 pedestal to culvert					
—do—					
vide MBP (35) 7 structure					
	Qty	11	48.46		8613 cu
26/28 Painting on parapets (all)					
—do—					
vide MBP (45) 12.46 m²					
	Qty	108.56	2 Sides		1354 sq
27/29 Providing earthwork in foundation					
—do—					
vide MBP (35) 29.80 m³					
	Qty	282.43	3 Sides		8416 cu
28/30 Providing PCC M15 grade in curve					
Curve —do—					
vide MBP (35) 4.60 m³					
	Qty	525.85	3 Sides		24163 cu
29/31 Providing Plain cement concrete in substructure					
—do—					
vide MBP (35) 33.74 m³					
	Qty	466.68	3 Sides		26064 cu

Continuation

Sch. XLV-Form No. 134

Particulars	No.	L	B	D	Contents of area
30/32-	Pl. and laying Recaps for culvert -do- vide TMBP (36) 7.500 tbc @ 4294.84 per 1000 tbc Rs				32211=00
31/33-	Painting on parapet wall -do- vide TMBP (47) 20.64 m² @ 108.50 /m² Rs				2239=00
32/34-	E/W in excavation -do- vide TMBP (36) 74.32 m³ @ 282.43/m³ Rs				20990=00
33/35-	sand filling in foundation -do- vide TMBP (36) 1.01 m³ @ 484.96 /m³ Rs				490=00
34/36-	Pl. M15 Plain cement concrete in open foundation -do- vide TMBP (36) 10.99 m³ @ 5252.89/m³ Rs				57729=00

Sch. XLV-Form No. 134 61

Particulars	Details of actual measurement No.	L	B	D	Contents of area
35/37- Plum Pcc [illegible]-Plain					
cement concrete in					
for foundation					
-do-					
[illegible] (37) 47.221 m³					
Rs 5252.89/m³ Rs					248041=50
36/38- Plain Plain cement					
concrete in					
sub structure - .					
-do- -[illegible]					
[illegible]					
[illegible]					
[illegible] (38)					
22.69 m³					
Rs 5681.38/m³ Rs					128911=50
37/39- Plain Plain cement					
concrete (1:2:4) in					
sub structure - .					
-do-					
[illegible] (37) 2.83 m³					
[illegible] - (43) 3.84 m³					
6.67 m³					
Rs 6166.68/m³ Rs					41132=00
38/40- Reinforced Deck					
[illegible] -do-					
[illegible] (37) 3.69 m³					
Rs 7394.47/m³ Rs					27286=00

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L	B	D	Contents of area
39/41 – S/F RCC bar reinforcement – do –					
	Wide Timber	(37)	0.49 MT		
	@ Rs 77313.18				
	per MT Rs				37883=00
40/42 – Plug and Filling Sealing Compound – do –					
	Wide Timber	(43)	12.0 Metre		
	@ Rs 38.87 per metre Rs				466=00
41/43 – Plug weep Holes in brick masonry – do –					
	Wide Timber	(38)			
	24 Nos @				
	Rs 131.91 each Rs				3166=00
42/45 – Painting on Parapets – do –					
	Wide Timber	(43)	26.56 m^2		
	@ Rs 108.50 per m^2 Rs				2881=00
43/46 (45) – Plug and Caping 300 mm wide & 50 mm deep – do –					
	Wide Timber	(42)	60 Metre		
	@ Rs 1001.21 per metre Rs				60073=00

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
44/46 - Dismantling of existing structure					
-do- [illegible]					
[illegible]					
(i) [illegible] 0.75 m^3					
@ 470.91/m^3					353=00
(ii) Reinforced cement concrete -do-					
[illegible] (49) 1.68 m^3					
@ 1056.05/m^3					1774=00
46 47 - Dismantling of existing structure					
-do-					
[illegible] (49) 24.75 m^3					
@ 227.35/m^3					5627=00
					Rs 8877206=00
Deduction as per Agreement 10% below				(-)	887721=00
					Rs 7989485=00
Deduction of previous Payment				Rs (-)	3463200=00
					Rs 4526285=00

[signature] 10/02/2021 JE

[signature] 10/02/21 A.E.

C&P [signature] 12/2/21

Continuation