NH 106 to NH 106

Schedule XLV-Form No. 134

DIVISION

Chhatarpur Pipra SUB-DIVISION

Lalan Kumar 1292

MEASUREMENT BOOK

I st on the Bill

1.

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 commencemer
of the measurements relating to each work).

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
N/W - NH 106 To NH 106 (Harijan Tola)					
Agency Name - Lalan Kumar					
Agreement No - 04/S.D.B/NMMSY (AWS HES4)/2425-26					
Date of Commencement - 24-06-2					
Date of Completion - 23-08-26					

① P/V & Fixing of working bench mark/Refrence pillars etc.

Benchmark pillars 1 No/km = 01 Nos.

Refrence pillars 04 Nos/km = ~~03 Nos.~~ 04 Nos.

② P/V & Fixing of typical MMGSY information/sign board with logo as per MORD etc. - 02 Nos.

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
(2) Bill for RCC slab culvert					
2 Nos X 2.0 Span X 1.50 m vent height.					
(3) P/N for excavation for					
structure as per drawing etc.					
Abutment	8 Nos	X2X	7.60	X2.133	X1.60 = 155.42
R/W. ~~3X4X0~~					
8X	4	X1.767	X1.93	X1.600	= 65.478
floor under deck slab.					
~~3X1X6.20X1.629X0.100~~ = ~~A~~					
8X	1	X6.20	X0.400	X0.250	= 1.86
				Total Qty =	222.963

Limit 222.96 m³

(4) Sand filling in found etc.
floor under deck slab

~~Abutment 3X2X7.60X2.133X t~~

3X1X6.20X1.629X0.100 = 3.03 m³

(5) P/N PCC M15 (1:2.5:5)
etc all Com
Qty below G.L.

Abutment	3X2X	7.60	X2.133	X0.200	=	19.452
R/Wall	3X4X	1.767	X1.930	X0.200	=	8.184
under D/s	3X1X	6.20	X1.736	X0.150	=	4.842
cut off wall	3X2X	0.400	X1.00	X0.200	=	0.480
						32.958 m³

Continuation

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
⑥ p/v pcc M15 (1:2.5:5) Concrete for plain Concrete in open found^n.					
Abutment	3	X2	X6.80	X1.633 X1.40	= 93.276
R/wall	3	X4	X1.767	X1.43 X1.40	= 42.450
cut off wall	3	X2	X1.200	X0.588 X1.40	= 5.922
					141.648 m³
⑦ plain/reinforced cement Concrete in S/S Complete as per drawing & spec (1:2:4) Qty above b.l.					
Abutment	3	X2	X6.00	X0.917 X1.300	= 42.891
I/wall	3	X4	X1.984	X0.665 X1.590	= 25.167
					68.058 m³.
⑧ plain/Reinforced cement Concrete (M20) in substructure.					
A/Cap	3	X2	X6.00	X0.700 X0.200	= 5.040
Dirt wall	3	X2	X6.00	X0.400 X0.240	= 3.456
P/wall	3	X2	X8.00	X0.400 X0.600	= 11.520
					20.016 m³.
⑨ RCC M25 in deck slabs.					
	3	X1	X6.00	X2.580 X1.240	= 11.058 m³.

Continuation

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
(10) Supplying fitting and placing 1475D bars reinforcement in Super structure etc.					
Abutment cap & Dirt wall @ 70 kg/m³.					
i.e 3X9.832X70=594.72 kg.					~~594.72 kg~~ K
Deck slab @80 kg/m².					
i.e 3X3.686X80 = 884.64 kg					
Total weight = 1479.36 kg.					
				or $\frac{1479.36}{1000}$ = 1.479 MT.	
(11) P/L & filling joints sealing Compound as per drawing etc.					
3X2X6.000 = 36.00 mt.					
(12) P/L weepholes in brick masonary, plain/Reinforced Concrete R/W, W/W, R/W with 100 mm dia PC pipe etc.					
3[(2X4)+(4X4)] = 72 Nos.					
~~3X1X2 = 6 Nos.~~ K					

Continuation

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
(13) Drainage sports Complex as per drawing etc.					
	3	X 1	X 2	=	6 Nos.
~~3 X 1 X 2 = 6 Nos.~~					
(14) painting on R/wall painting two coats including primer coat etc.					
Top	3	X 2 X	8.00	X 0.40 =	19.20
Side	3	X 4 X	8.00	X 0.60 =	57.60
(15)	3	X 4 X	0.40	X 0.10 =	2.88
					79.68 m²
(15) clearing & grubbing road land including uprooting wild vegetation, grass etc all kinds.					
	3	X 2 X	30.00	X 3.50 =	630.00
~~3 X 30.00 X 1.00 R~~					
	5	X 2 X	30.00	X 3.50 =	1050.00
	5	X 2 X	30.00	X 3.50 =	1050.00
	4	X 2 X	30.00	X 3.50 =	840.00
	4	X 2 X	30.00	X 3.50 =	840.00
	4	X 2 X	30.00	X 3.50 =	840.00
	4	X 2 X	30.00	X 3.50 =	840.00
	1	X 2 X	18.00	X 3.50 =	126.00
					6216.00 m²
				or 0.62 hac	

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
(16) Excavation for roadways on soil using manual means for carrying of earth to embankment etc. (BOX CUTTING)					
Beside of RCC for provision of Rigid Road.					
	2	X30.00	X0.375	X0.100 =	2.250
	2	X30.00	X0.375	X0.100 =	2.250
	2	X15.00	X0.375	X0.100 =	1.125
Beside of RCC for provision of Rigid Road.					
	2	X30.00	X0.375	X0.175 =	3.938
	2	X20.00	X0.375	X0.175 =	2.625
			Total Qty =		12.188 M³
(17) Construction of embankment with approved material deposited from roadways etc. 60% of the item no (16)					
					= 7.31
(18) Construction of embankment with material obtained from borrow pits etc all Lead.					
	Change (M)	Fill Area	Mean Area	Distance (M)	Fill volume (M³)
	0.000	0.758	—	—	—

Continuation

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
	chainage (m)	Full Area	Mean Area	Distance	Full volumn.
	(M)	M^2	M^2	M	m^3
	50	0.863	0.811	50	40.525
	100	1.042	0.953	50.00	47.625
	150	0.986	1.014	50.00	50.700
	200	0.856	0.921	50.00	46.050
	250	0.757	0.807	50.00	40.325
	300	0.781	0.769	50.00	38.450
	350	1.036	0.909	50.00	45.425
	400	0.996	0.981	50.00	49.050
	450	0.859	0.893	50.00	44.625
	500	1.183	1.021	50.00	51.050
	550	0.839	1.011	50.00	50.550
	600	0.872	0.856	50.00	42.825
	650	1.028	0.950	50.00	47.500
	700	0.763	0.896	50.00	44.775
	750	0.689	0.726	50.00	36.300
	800	0.752	0.721	50.00	36.025
850	~~888~~	0.736	0.744	50.00	37.200
	888	0.845	0.791	50.00	30.039
					778.989 m
for 1000	load 66% of total Bty.			ie	514.133 m
for 100 m	load 34% of total Bty			ie	264.856 m

Continuation

Sch.XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
(19) Construction of subgrade & earthen shoulders with approved materials obtained from borrow pits with all lifts & leads etc all com					
5X30.00X $\frac{8.30+7.10}{2}$ X0.30 =					346.50
5X30.00X $\frac{8.30+7.10}{2}$ X0.30 =					346.50
1X30.00X $\frac{8.28+7.05}{2}$ X0.30 =					68.985
2X30.00X $\frac{8.30+7.08}{2}$ X0.30 =					138.240
5X30.00X $\frac{8.30+7.10}{2}$ X0.300 =					346.50
3X30.00X $\frac{8.30+7.10}{2}$ X0.300 =					207.90
1X8X $\frac{8.30+7.10}{2}$ X0.30 =					18.48
					1473.105 m³
(20) Construction of granular subbase by p/r wellgraded material for grading I with e/sand screening etc. ~~of~~ profile correction.					
~~1X30.00X2.00X~~					
1X11.25X3.00X0.100 =					3.375 m³

Continuation

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
0.25 m Earthen portion					3.375
1	30.00	3.75	0.100	=	11.34
1	30.00	3.75	0.100	=	11.34
1	15.00	3.75	0.100	=	5.67
1	30.00	3.80	0.100	=	11.40
1	20.00	3.90	0.100	=	7.80
0.15 m widening portion					
2	30.00	0.382	0.100	=	2.292
2	30.00	0.382	0.100	=	2.292
2	15.00	0.382	0.100	=	1.146
0.15 m RCC widening portion					
2	30.00	0.382	0.175	=	4.011
2	30.00	0.382	0.125	=	2.674
					63.34 m² (A)
0.15 m earthen portion					
1	8.00	$\frac{5.10+4.50}{2}$	0.200	=	7.680
1	30.00	$\frac{4.50+4.05}{2}$	0.200	=	26.650
2	30.00	$\frac{4.05+4.05}{2}$	0.200	=	48.600
2	2.10	1.30	0.200	=	1.092
4	30.00	$\frac{4.10+4.10}{2}$	0.20	=	98.40
2	30.00	$\frac{4.06+4.08}{2}$	0.20	=	48.84
					231.262 *

Continuation

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
			BF		231.262
	5	30.00	$\frac{4.05+4.05}{2}$	0.20	= 121.500
	1	1.70	1.60	0.20	= 0.544
	1	2.90	2.50	0.20	= 1.450
	2	30.00	$\frac{4.05+4.05}{2}$	0.20	= 48.60
	1	3.85	2.90	0.20	= 2.233
	5	30.00	$\frac{4.05+4.05}{2}$	0.20	= 121.50
					527.09 m³
					(B)

Total cost Qty (A)+(B) = 590.429 m³

(21) WBM Grading 3

P/L, laying, spreading and Compacting stone aggregate of specific size to WBM Gr-III etc all complete WBM Gr-III in pcc length.

1	30.00	$\frac{4.20+3.75}{2}$	0.075	= 8.944	
1	30.00	$\frac{3.25+3.25}{2}$	0.075	= 8.438	
1	30.00	$\frac{3.75+3.25}{2}$	0.025	= 8.438	
3	30.00	$\frac{3.25+3.75}{2}$	0.025	= 25.314	
1	30.00	$\frac{3.75+4.05}{2}$	0.025	= 5.850	
				56.984 m³	

Continuation

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
				Bf	56.984 m³
WBM on pcc widening.					
2	30.00	2.25		0.075 × 1.02 =	17.213
2	20.40	3.25		0.075 × 1.02 =	11.475
					85.672
					(A)
WBM on BT length.					
1	30.00	(4.10+3.25)/2		× 0.075 =	8.831
2	8.40	2.30		× 0.075 =	0.828
2	30.00	(3.25+3.25)/2		× 0.075 =	16.875
2	30.00	(3.25+3.25)/2		× 0.075 =	16.875
3	30.00	(3.80+3.80)/2		× 0.075 =	25.65
5	30.00	(3.25+3.25)/2		× 0.075 =	42.188
3	2.60	2.900		× 0.075 =	1.728
4	30.00	(3.25+3.25)/2		× 0.075 =	33.750
1	30.00	(3.25+3.25)/2		× 0.075 =	8.438
1	30.00	(3.25+3.31)/2		× 0.075 =	8.494
1	30.00	(3.25+3.25)/2		× 0.075 =	8.438
1	30.00	(3.25+3.25)/2		× 0.075 =	8.438
1	8.40	(3.25+3.90)/2		× 0.075 =	2.295
					182.828 m³
					(B)

Continuation

Total B/f (A)+(B) = 268.50 m³

Sch.XLV-Form No. 134

Particulars	Details of actual measure				Contents of area
	No.	L.	B.	D.	
	Bf Qty = 218.50 m^3				

Abstract of Cost

1/51 P/V & fixing Benchmark pillars Qty vide TMB page-① ie 01 Nos @ Rs 5491=44/No Rs 5491=00

2/52 P/V & fixing Reference pillars Qty vide TMB page-① item No-① ie 03 Nos @ Rs 2553=28/each Rs 7660=00

3/68 P/V & fixing typical MMWY information signboard with logo. Qty vide TMB page-① item② ie 02 Nos @ Rs 12037=49/No Rs 24074=00

Continuation Rs 37225=00

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
4/53 clearing & grubbing road land etc all complete vide TMB ⑤ item (15)					
ie 0.62 hac @ Rs 76926=08/hac					Rs 47694=00
5/77 E/W in excavation in found. vide TMB page-② item ③					
ie 222.96 m^3 @ Rs 405=83/m^3					Rs 90484=00
6/78 Sand filling in found. etc. vide TMB page-③ item No-④					
ie 3.03 m^3 @ Rs 578=66/m^3					Rs 1753=00
7/79 P/V M_{15} (PCC 1:2.5:5) in open found. etc. vide TMB page-④ item No-⑤					
ie 32.958 m^3 @ Rs 8813=79/m^3					Rs 277506=00
8/80 P/V PCC M_{15} (1:2.5:5) in open found. etc. vide TMB page-③ item ⑥					
ie 141.648 m^3 @ Rs 8413=99/m^3					Rs 1192675=00
Continuation					Rs 1647337=00

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
(9/81) plain/reinforced cement concrete in substructure ade.					
Bfy vide TMB page (3) item No (7)					
ie 65.058 m^3 @Rs 9089=31/m^3					Rs 618600=00
(10/82) plain/reinforced cement concrete (M20) in substructure ade.					
Bfy vide TMB page (3) item No (8)					
ie 20.016 m^3 @Rs 9526=52/m^3					Rs 190683=00
(11/83) P/V Rcc M25 in deck slab.					
Bfy vide TMBP (3) item No (9)					
ie 11.058 m^3 @Rs 10702=32/m^3					Rs 118346=00
(12/84) Supplying fitting & placing HYSD bar.					
Bfy vide TMBP (4) item No (10)					
ie 1.479 MT @Rs 75044=89/MT					Rs 110991=00
(13/85) P/V & fitting, sealing ade					
Bfy vide TMBP (4) item No (11)					
ie, 36 m @Rs 55=9/mt					Rs 2013=00
(14/86) P/V weep hole in brickwork					
Bfy vide TMB page (4)					
72 Nos @Rs 197=00/No.					Rs 14184=00
Continuation					Rs 27,02,154=00

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
					Bf Rs 2702154=00
15/87 80 Drainage spout etc Bfy vide Item No-13 TMBpage-5					
Le 6 Nos @Rs 526=41/No Rs					3158=00
16/88 Painting on p/wall etc Bfy vide TMBp-5 Item. Nos-14					
Le 79.58 M² @Rs 137=57/M² Rs					10961=00
17/54 excavation of road ways in soil etc Bfy vide TMBp 6 Item No 16					
Le 12.188 M³ @Rs 104=01/M³ Rs					1268=00
18/55 Construction of embankment etc Bfy vide TMBp 6 Item No 17					
Le 7.31 M³ @Rs 81.30/M³ Rs					594=00
19/56 Construction of embankment Bfy vide TMBp 7 Item No 18					
Le 264.856 M³ @Rs 196=04/M³ Rs					51922=00
					Rs 2770856=00

Continuation

Sch.XLV-Form No. 134

Particulars	Details of actual measure No.	L.	B.	D.	Contents of area
(20/57) Construction of embankment Qty vide TMRP (7) item no (18)					
ie 574.133 M^3 @ Rs 260=98/M^3					Rs 134178=00
(21/58) Construction of Subgrade Qty vide TMRP (8) item no (19)					
ie 1473.05 M^2 @ Rs 264=5/M^2					Rs 389651=00
(22/59) Granular Subbase for Loading I Materials etc Qty vide TMRP (10) item no (20)					
ie 590.429 M^3 @ Rs 3640=28/M^3					Rs 2149327=00
(23/60) WBM loading 3 materials. Qty vide TMRP (11) item no (21)					
ie 268.59 M^2 @ Rs 6071=32/M^2					Rs 1630331=00
					Rs 7073543=00
Add VAT @ 18%.				(+)	Rs 1273238=00
Add Ld Cess @ 1%.				(+)	Rs 70735=00
Add SR Amount				(+)	Rs 124888=00
					Rs 8547604=00
Less 1.57% below				(-)	Rs 134103=00
					Rs 8407501=00

Continuation

04/10/95 20 Forest

03/10/95 AE