Name of Road :- Merarkuwan to Malbigha

Schedule XLV-Form No. 134

Executive Engineer, R.W.D, Works DIVISION

Daniyawan SUB-DIVISION

MB No - 7650

Measurement Book

Ramjeet/Cr.

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 measurement relating to each work)

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
	1st on A/c Bill				
Name of Work:- Repair & Five years Maintenance of Road from Mesarkuwan to Malbigha length 3054 MR					
Agency:- Ranjeet kumar s/o Rameshwar Prasad Singh Vill-Alampur, P.O-Kachi Dargah, Didarganj Patna-803201					
Agreement no - 31/MBD/23-24					
Rate Approved - 0.10 % Below.					
Date of commencement - 8/8/23					
Date of completion - 7/5/24					
Date of measurement - 14/03/24.					
	Work-done				
Item ①	clearing & grubbing Road land-do-ete				
	2 + 10	x 30.00	x 1.125	=	675.00 m^2
	2 x 10	x 30.00	x 1.125	=	675.00 "
	2 x 4	x 30.00	x 1.125	=	270.00 "
	2 x 1	x 20.00	x 1.125	=	45.00 "
					1665.00 m^2
∴ Hect = 1665.00 m^2 / 10000 = 0.1665 Hect.					

Continuation

PTO

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item ② Construction of sub-grade by cutting & filling in layers ... do ... do ... etc.					
BT -	2	10	30.00	1.125 × 0.30	= 202.50 m³
	2	10	30.00	1.125 × 0.30	= 202.50 "
	2	1	30.00	1.125 × 0.30	= 20.25 "
PC -	2	3	30.00	0.50 × 0.30	= 27.00 "
	2	1	20.00	0.50 × 0.30	= 6.00 "
					458.25 m³
Item ③ Construction of Gabion Grading-I by Providing well graded material ... do ... do ... do ... etc.					
	3	5.32	1.33	× 0.175	= 3.71 m³
	2	6.34	1.29	× 0.175	= 2.86 "
	4	5.85	1.34	× 0.175	= 5.49 "
	3	5.48	1.28	× 0.175	= 3.65 "
	6	5.29	1.42	× 0.175	= 7.89 "
	4	6.15	1.35	× 0.175	= 5.81 "
					29.41 m³
Item ④ Prov. Laying, spreading & compacting stone aggregates of specifications ... do ... etc.					
	3	7.70	1.90	× 0.075	= 3.29 m³

Continuation

OTO

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
				BF =	3.99 m³
Item (4) Contd (WBM Gr. II)					
	2 ×	9.20 ×	1.90 ×	0.075 =	2.622 "
	4 ×	8.50 ×	1.90 ×	0.075 =	4.845 "
	3 ×	7.90 ×	1.90 ×	0.075 =	3.377 "
	6 ×	7.70 ×	2.10 ×	0.075 =	7.276 "
	4 ×	8.90 ×	2.00 ×	0.075 =	5.34 "
					26.75 m³
Item (5)	Prov. laying, spreading & compacting stone aggregates of specific sizes to WBM Gr. III - do - etc				
	1 ×	30.00 ×	(4.50+3.75)/2 ×	0.075 =	9.281 m³
	10 ×	30.00 ×	3.75 ×	0.075 =	84.375 "
	1 ×	30.00 ×	(3.75+4.50)/2 ×	0.075 =	9.281 "
	1 ×	20.00 ×	(3.90+3.75)/2 ×	0.075 =	5.738 "
	8 ×	30.00 ×	3.75 ×	0.075 =	67.50 "
	1 ×	10.00 ×	3.75 ×	0.075 =	2.812 "
					178.987 m³
			Limit to		178.959 m³
Item (6)	Prov. & applying primer coat with bitumen emulsion (SS-1) - do - etc				
	1 ×	30.00 ×	(4.50+3.75)/2 =		123.75 m²
	10 ×	30.00 ×	3.75 =		1125.00 "
					401248.75 m²

Continuation

PTO

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item ⑥ Contd (Primes coat)				Bf=	1248.75 m²
	1	30.00	3.75+4.50/2	=	123.75 "
	1	20.00	3.90+3.75/2	=	76.50 "
	8	30.00	3.75	=	900.00 "
	1	10.00	3.75	=	37.50 "
					2386.50 m²
			Limit to		2386.125 m²
Item ⑦ Prov. & applying tack coat with bitumen emulsion ... do - do - etc @ Qty same as item ⑥ = 2386.125 m²					
Item ⑧ Prov. laying & rolling of close graded premix surfacing material of 20 mm thick ... do - etc @ Qty same as item ⑥ = 2386.125 m²					
Item ⑨ Prov. & applying tack coat with bitumen emulsion (RS-1) ... do - etc					
	1	30.00	4.50+3.75/2	=	123.75 m²
	10	30.00	3.75	=	1125.00 "
	1	30.00	3.75+4.50/2	=	123.75 "
	1	20.00	3.90+3.75/2	=	76.50 "
					40 = 1449.00 m²

Continuation

PTO

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
				Bf =	1449.00 m²
Item ⑨ Contd (Track Coat)					
	8	× 30.00	× 3.75	=	900.00 "
	1	× 10.00	× 3.75	=	37.50 "
					2386.50 m²
			Limit to		2386.125 m²
Item ⑩ Prov. & laying Sub Base with 100-150 TPH batch type HMP -do- cte					
Area vide item ⑨ = 2386.125 m²					
Qty = 2386.125 m² × 0.025 =					59.65 m³
Item ⑪ Construction of 7 cm lean Cement Concrete Sub-base -do- cte					
	1	× 11.00	× 3.75	× 0.100 =	4.125 m³
Item ⑫ Construction of Panel Concrete, P.C.C. pave-ment M-30 40.00 cte					
In all Madhya					
	1	× 30.00	× 4.15 + 3.75	× 0.10 =	11.85 m³
	2	× 30.00	× 3.75	× 0.100 =	22.50 "
	1	× 90.00	× 3.75	× 0.100 =	7.50 "
					41.85 m³
			Limit to		41.663 m³

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item (13) R.C.C. M. 15 grade					
km. stone - do - etc.					
(ii) km. stone — 2.00 nos.					
(iii) 200 M stone — 3.00 nos.					
Item (14) Prov. dissecting direction & place identification retro-ref. - Reflectorised sign - do - etc					
	2	1.20	0.80		1.92 m²
Item (15) Prov. & fixing of retro reflectorised cautionary, mandatory & informatory sign - do - do - etc					
(i) 600 mm eq. triangle — 30.00 Nos.					
(ii) 600 mm Circular — 8.00 Nos.					
(iii) 600 × 450 mm rectangular — 2.00 Nos.					
(iv) 900 mm side octagon — 2.00 Nos.					
Item (16) R.C.C. M. 15 grade boundary pillars - do - etc					
					Qty = 14.00 Nos.
Item (17) Painting new letters & figures - do - etc.					
					44 × 2.00 = 88.00 Per Pt.

Continuation

PTD

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item (18) Planting of trees by the road sides-do-etc					
				Qty =	62.00 Nos.
Item (19) Prov. & laying of hot applied thermoplastic compound-do-etc.					
BT-	2	x 10	x 30.00	x 0.100 =	60.00 m²
	2	x 10	x 30.00	x 0.100 =	60.00 "
	2	x 1	x 30.00	x 0.100 =	6.00 "
					126.00 m²
Pedestrian Crossing					
	4	x 6.00	x 0.500	x 2 =	24.00 m²
New Local Carpetting					
	2	x 3	x 30.00	x 0.100 =	18.00 m²
	2	x 1	x 20.00	x 0.100 =	4.00 "
					22.00 m²
Item (20) Prov. & fixing of typical mandatory informatory board with "Logo"-do-etc					
				Qty =	3.00 Nos.

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item (21)	Provi. & laying of RCC				
	Pipe duct 300mm dia.				
	across the road etc.				
	2 nos × 4 × 2.50 =				30.00 Rm.
Item (22)	Brick masonry work				
	in c.m. (1:3) in parapet				
	--- do --- do --- do --- etc.				
	2 × 4.80 × 0.40 × 0.60 =				2.30 m^3
Item (23)	Plastering with c.m.				
	(1:3) in Sub Structure				
	--- do --- do --- etc.				
Side face	4 × 4.80 × 0.60 =				11.52 m^2
Top	2 × 4.80 × 0.40 =				3.84 "
Bottom face	4 × 0.40 × 0.60 =				0.96 "
					16.32 m^2
Item (24)	Painting two coats in-				
	-cluding primer after				
	filling the surface with				
	Synthetic enamel paint				
	--- do --- do --- etc.				
	Qty. as item (23) =				16.32 m^2

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item (25) Dismantling & existing Cement Concrete					
---do---do---do---etc					
	1	3.50	3.38	0.150	1.77 m³
Item (26) Dismantling & existing cement mortar---do---etc					
	2	8.00	0.825	3.00	39.60 m³
Item (27) Removing all types of Hume pipes above 600 mm to 900 mm dia H/P					
---do---do---etc.					
	3			5.00	15.00 Rm.
Rcc Slab cover	1	2.0 m	Span	1.5 m	
Item (28) E/W in excavation for structure---do---etc.					
Apartment	2	9.30	2.233	1.800	74.761 m³
Kitchen hall	4	1.767	2.09	1.800	25.826 "
Floor under D-Slab	1	7.70	0.900	0.250	0.385 "
					100.972 m³
Item (29) Sand filling in foundation trenches					
---do---do---etc.					

Continuation

PTO

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Item (29) Coated (sand filling)					
	2	× 9.300	× 2.233	× 0.100 =	4.159 m³
	4	× 1.767	× 2.03	× 0.100 =	1.435 "
	1	× 7.700	× 1.625	× 0.100 =	1.251 "
					6.839 m³
Item (30) P.C.C. 1:5:10 (1:2:5:10) in open foundation &c etc					
Apartment	2	× 9.33	× 2.233	× 0.900 =	8.307 m³
Return wall	4	× 1.767	× 2.03	× 0.200 =	2.87 "
Floor under 0.5 slab	1	× 7.70	× 1.734	× 0.150 =	2.003 "
Cut off wall	2	× 0.40	× 1.00	× 0.900 =	0.16 "
					13.34 m³
Item (31) P/R.C.C. 1:2:4 in open foundation &c etc					
Apartment	2	× 8.40	× 1.683	× 1.60 =	45.239 m³
Return wall	4	× 1.767	× 1.480	× 1.600 =	16.737 "
Cut off wall	2	× 1.90	× 0.588	× 1.600 =	2.95 "
					64.926 m³
Item (32) P/R.C.C. 1:2:4 in Sub Structure &c etc					
Apartment	2	× 7.50	× 0.917	× 1.300 =	17.881 m³
Return wall	4	× 1.984	× 0.665	× 1.500 =	8.391 "
					26.272 m³
				Lowitto	26.261 m³

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Plan (33)	S/F & placing HYSD				
	bar reinforcement				
	do — do — do — do				
Abutment - 8mm					
Main bars -	2 × 2 × 4 × 7.50 =				120.00 Rm
Stirrups -	2 × 41 × 1.608 =				131.856 "
Diaphragm -					
Vertical -	2 × 2 × 41 × 0.568 =				89.872 "
Horizontal	2 × 2 × 2 + 7.50 =				60.80 "
Return wall casing					
long -	4 × 3 × 2.200 =				26.64 "
Cross -	4 × 16 × 0.300 =				20.48 "
					448.348 Rm
I	@ 0.400 kg/Rm = 179.5392 kg				
Deck slab - 12mm bars					
Main bar -	88 × 2.56 =				225.28 Rm
D- bar -	10 × 7.50 =				75.00 "
"	10 × 7.50 =				75.00 "
					375.28 Rm
II	@ 0.89 kg/m = 333.9992 kg				
Extra -	27 × 2.908 =				78.516 Rm
long -	10 × 7.50 =				75.00 "
					153.516 Rm
	@ 0.62 kg/Rm = 95.17992 kg				
Add 5% for laps & wastage =					4.758996 "
III					99.938916 kg
(I + II + III) →	Total = 612.92756 kg				
	or, 0.613 MT				

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
				B/fwd	Rs 4729072=00
Item (37) Cont'd (Re-Measurement)					
30.00 Rm. vide TM No. P. (24)					
@ Rs 966=87/Rm — Rs					29006=00
(38) Dismantling of existing cement concrete					
-do- -do- -do- -do- etc.					
1.77 m^3 vide TM No. Page (24)					
@ Rs 563=17/m^3 — Rs					997=00
(39) Dismantling of existing cement mortar					
-do- -do- -do- -do- etc.					
39.60 m^3 vide TM No. Page (24)					
@ Rs 248=71/m^3 — Rs					9849=00
(40) Removing of type of H/Pabode 600mm to 900mm dia -do- etc.					
15.00 Rm. vide TM No. P. (24)					
@ Rs 336=348/Rm — Rs					5045=00
				Rs	4764969=00
Add 18% GST (+)				Rs	857694=00
Add 1% L. cess (+)				Rs	47650=00
Add Sign Vintage as per agreement (+)				Rs	63949=00
				Rs	5733562=00
Less 0.10% Below as per agreement (-)				Rs	5734=00
				@ Rs	5,727828=00

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
				B/F Rs 57	27828=00
Deduct Previous payment					
vide TM B/Page (25)				Rs 57	27828=00
				Rs	00=00
					(NIL)

20/03/24 J.E

Himanshu 20.03.24 AE

CAP 20/3/24

Figure (D) in words- Rupees	Deduct value of work shown on p... bill .... vide TM B...
	Net value of work since previous ...
	Figure (F) in words - Rupees

II - Certificat...

1. The measurements on which are based the entries in colu... recorded at page ....26 to 35.... of M...
2. *Certified that in addition to and quite apart form the quan... some work has actually been done in connection with sev... advance payments as per column 3 of Account I, made ... anticipation of and subject to the results of detailed measur...