

$$\begin{array}{r} 14.13.10 \\ \times 3485 \\ \hline \end{array}$$

निर्देश

T019भारताना कुर से खातिन कुर तय
पत्रिका नं०-42SBD/2021-22
Shedule XLV Form No. 134.

सर्वदेक:- श्री विवेक कुमार
श्री अमित साह खेला अतिथि

DIVISION

७१२५१५२

SUB-DIVISION

Measurement Book

17-B-NO-3485

1st on A/c 12/11

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 commencement of the measurement relating to each work)

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Name of Road:-	Cont. of Road from Toi				
	Bazar Note Kuye Sahasipur Tah.				
Length:-	3.500 Km				
Agency:-	Vivek Kumar				
	Vill-Charihara, Mashrak, Saran				
Agreement No.	42/SAD/2021-22				
Date of Start:-	02/03/2022				
Date of Completion:-	01/03/2023				
Date of Entry:-	05/08/2022				

Work done

① Setting out of benchmark
pillar.

Say 3.500 Km

② clearing and grubbing Road

Land - - - - - E/1

$2 \times 35.00 \times 4 \times 25.00 \times 3.00 (av) = 21000.00 \text{ cu}$

Say 2100 Hec

③ Box-culting of existing
Road - - - - - E/1

$2 \times 3 \times 4 \times 25.00 \times 0.375 \times 0.100 = 22.50 \text{ cu}$

④ Const. of Embankment - - - - - E/1

$2 \times 2 \times 30.00 \times \frac{0.80+1.20}{2} \times 0.60 = 90.00 \text{ cu}$

$2 \times 2 \times 30.00 \times \frac{0.90+1.00}{2} \times 0.55 = 89.10 \text{ cu}$

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
$2 \times 2 \times 30.00 \times \frac{0.70 + 1.50}{2} \times 0.65$					85.80 cm
$2 \times 2 \times 30.00 \times \frac{0.65 + 1.70}{2} \times 0.60$					86.40 "
$2 \times 2 \times 30.00 \times \frac{0.85 + 1.60}{2} \times 0.60$					88.20 "
$2 \times 3 \times 30.00 \times \frac{0.90 + 1.75}{2} \times 0.55$					131.18 "
$2 \times 3 \times 30.00 \times \frac{0.80 + 1.70}{2} \times 0.70$					157.50 "
$2 \times 2 \times 30.00 \times \frac{0.70 + 1.60}{2} \times 0.80$					112.80 "
$2 \times 3 \times 30.00 \times \frac{0.80 + 1.60}{2} \times 0.75$					115.25 "
$2 \times 3 \times 30.00 \times \frac{0.70 + 1.60}{2} \times 0.65$					134.55 "
$2 \times 2 \times 30.00 \times \frac{0.65 + 1.50}{2} \times 0.80$					103.20
					1231.58 cm

5) Const of GSB by PIV coarse

graded Material — — — 8 ft

Profile Correction

$5 \times 1.50 \times 0.75 \times 0.100$	—	0.56 cm
$4 \times 1.20 \times 0.70 \times 0.100$	—	0.34 "
$5 \times 0.90 \times 0.60 \times 0.100$	—	0.27 "
$8 \times 1.10 \times 0.50 \times 0.150$	—	0.66 "
$1 \times 2.10 \times 1.10 \times 0.150$	—	0.35 "
$4 \times 1.60 \times 0.90 \times 0.170$	—	0.86 "
$6 \times 1.90 \times 1.00 \times 0.160$	—	1.82 "
$5 \times 2.00 \times 0.90 \times 0.150$	—	1.35 "
$4 \times 1.90 \times 1.10 \times 0.150$	—	0.84 "
$3 \times 1.50 \times 0.70 \times 0.100$	—	0.36 "
$6 \times 2.10 \times 1.50 \times 0.100$	—	1.84 "
		9.25 cm

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
GSD in widening -					
$2 \times 3 \times 4 \times 25.00 \times 0.375 \times 0.10$					22.50 c.m
Add for curve					
$1 \times 15.00 \times \left(\frac{4.20 + 3.75}{2} - 3.75 \right) \times 0.10$					0.34 "
$1 \times 10.00 \times \left(\frac{3.75 + 4.50}{2} - 3.75 \right) \times 0.10$					0.60 "
$1 \times 15.00 \times \left(\frac{4.50 + 3.75}{2} - 3.75 \right) \times 0.10$					0.56 "
$1 \times 20.00 \times \left(\frac{5.00 + 3.75}{2} - 3.75 \right) \times 0.10$					1.25 "
					34.49 c.m
⑥ p.v. laying, spreading and compacting stone aggregate - eff					
$3 \times 4 \times 25.00 \times 3.750 \times 0.075$					84.38 c.m
Add for curve					
$1 \times 15.00 \times \left(\frac{4.20 + 3.75}{2} - 3.75 \right) \times 0.075$					0.25 "
$1 \times 10.00 \times \left(\frac{3.75 + 4.50}{2} - 3.75 \right) \times 0.075$					0.28 "
$1 \times 15.00 \times \left(\frac{4.50 + 3.75}{2} - 3.75 \right) \times 0.075$					0.42 "
$1 \times 20.00 \times \left(\frac{5.00 + 3.75}{2} - 3.75 \right) \times 0.075$					0.94 "
					86.27 c.m
⑦ Const. of un-reinforced joint at expansion - - - eff					
$1 \times 15.00 \times \frac{4.20 + 3.75}{2} \times 0.160$					9.54 c.m
$3 \times 4 \times 25.00 \times 3.75 \times 0.160$					120.00 "
$1 \times 10.00 \times \frac{3.75 + 4.50}{2} \times 0.160$					6.60 "
$1 \times 15.00 \times \frac{4.50 + 3.75}{2} \times 0.160$					9.90 "
$1 \times 20.00 \times \frac{3.75 + 3.60}{2} \times 0.160$					11.76 "

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1 X 20.00 W X 5.00 + 3.75 X 0.160					14.00 cum
	2				12.00 "
1 X 20.00 X 3.75 X 0.160					183.80 cum
				Limit	183.60 cum
(8) Const. of subgrade - - - E/S					
Sides of BES - 2 X 3 X 4 X 25.00 X 1.00 X 0.10					60.00 cu
Sides of NBM - 2 X 3 X 4 X 25.00 X 0.625 X 0.10					28.13 "
Sides of PCC - 2 X 3 X 4 X 25.00 X 0.625 X 0.160					60.00 "
					148.13 cum
H.P. Culvert 600mm dia					
(9) Earthwork in excavation - - - E/S					
H.W - 2 X 2 X 3.700 X 1.15 X 1.50					26.91
					13.46 cu
Below pipe - 2 X 1 X 5.350 X 1.13 X 0.361					4.61
					2.21 "
					67.32 cu
(10) Plv M.S. (PCC 1:2:5) as per spec					
Coarse - - - E/S					
H.W - 2 X 2 X 3.700 X 1.15 X 0.150					2.69 cum
Below pipe - 2 X 1 X 5.311 X 1.13 X 0.250					3.00 "
Less for pipe - 0.250 X 0.7857 X (0.830 ² X 5.311)					1.58 "
					4.11 cu
(11) Plv concrete for plain/reinforced					
Concrete in open foundation					
H.W - 2 X 2 X 3.60 X 0.70 X 2.780					28.02 cum
Parapet - 2 X 2 X 3.60 X 0.40 X 0.60					3.46 "
Less for pipe - 2 X 2 X 0.7857 X 0.830 ² X 0.530					1.15 "
					30.33 cum
(12) Plv and laying reinforced					
Cement concrete pipe N/A 3 for					
Culvert					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
10.00 2x7.50					15.00 M
(13) painting 200 coats including primer coat - E/F					
Outer Sides - 2x2x3.60x3.380					48.67 sqm
Inner Sides - 2x2x3.60x0.60					8.64 "
Top - 2x2x3.60x0.40					5.76 "
Ends - 2x4x0.700x2.780					15.57 "
Ends (Arched) - 2x4x0.400x0.600					1.92 "
Lees - 2x2x0.7857x0.832					(-) 2.17 "
					78.39 sqm
(14) p/v 15mm Cement punning including Churny - E/F					
Top - 2x2x3.60x0.40					5.76 sqm
Ends parapet - 2x4x0.40x0.60					1.92 "
Inner Sides - 2x2x3.60x0.60					8.64 "
					16.32 sqm
H.P. Culvert 1000mm dia					
(15) Earthwork in excavation - E/F					
H.W - 4x2x6.450x1.400x1.50					108.36 cu
					10.83 "
Below pipe - 4x1x6.850x1.53x0.365					5.42 "
					113.78
					119.19 cu
(16) p/v M/s (pcc 1:2:5) as per drawing					
Coarse in foundation - E/F					
H.W - 4x2x6.450x1.40x0.150					10.84 cu
Below pipe - 4x1x4.931x1.53x0.250					7.59 "
Loss for pipe - 4x0.250x0.7857x1.36x5.40					(-) 6.53 "
					12.15 cu
					Limit 11.85 cu

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(17) p/v concrete to p/v reinforcement concrete in open foundation					
H.W. - $4 \times 2 \times 6.150 \times 0.825 \times 2.580$					104.72 cu
Pumps - $4 \times 2 \times 6.150 \times 0.400 \times 1.200$					23.62 "
Less for pipe - $4 \times 2 \times 0.7857 \times 1.230^2 \times 0.622$					(6) 5.91 "
					122.43 "
(18) p/v and lagging reinforcement					
Cement concrete pipe MP-3 for					
4×7.50					30.00 M
(19) painting two coats including primer coat - E1					
outer sides - $4 \times 2 \times 6.150 \times 3.780$					185.98 sqm
inner sides - $4 \times 2 \times 6.150 \times 0.600$					29.52 "
Top - $4 \times 2 \times 6.150 \times 0.400$					19.68 "
Ends - $4 \times 4 \times 0.825 \times 2.580$					34.06 "
Ends (pumps) - $4 \times 4 \times 0.400 \times 1.200$					7.68 "
Less - $4 \times 2 \times 0.7857 \times 1.230^2 \times 0.622$					(6) 9.51 "
					267.41 sqm
(20) p/v 1.5 mm cement painting including chimney - E1					
Top - $4 \times 2 \times 6.150 \times 0.400$					19.68 sqm
Ends (pumps) - $4 \times 4 \times 0.400 \times 1.200$					7.68 "
inner sides - $4 \times 2 \times 6.150 \times 0.600$					29.52 "
					56.88 sqm
Box-culvert - $1 \times 1.8m \times 1.5m$					
(21) Earthwork in excavation - E1					
Structure - $2 \times 6.00 \times 3.00 \times 2.45$					88.20 cu
Return wall - $2 \times 4 \times 0.75 \times 0.60 \times 2.45$					17.64 "
10% extra for slope					10.58 "
					116.42 "
					106.72 cu

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
22) Sand filling in foundation					
Structure - $2 \times 1 \times 6.00 \times 3.00 \times 0.20$					7.20 cu
Return wall - $2 \times 4 \times 0.75 \times 0.60 \times 0.20$					0.72 "
					7.92
23) Cont. of C/SB by p/w well joint					
- - - E.P.					
Structure - $2 \times 1 \times 6.00 \times 3.00 \times 0.30$					10.80 cu
Return wall - $2 \times 4 \times 0.75 \times 0.60 \times 0.30$					1.08 "
					11.88 cu
24) p/w p/c M ₁₀ (1:3:6) concrete for plain concrete					
Structure - $2 \times 1 \times 6.00 \times 3.00 \times 0.20$					7.20 cu
Return wall - $2 \times 4 \times 0.75 \times 0.60 \times 0.20$					0.72 "
					7.92 cu
25) p/w and Lays Reinforced Cement Concrete (M ₂₅) in structure					
Raft (Bottom slab) - $2 \times 1 \times 6.00 \times 3.00 \times 0.25$					9.00 cu
Return wall (Bottom slab) - $2 \times 4 \times 0.75 \times 0.60 \times 0.25$					0.90 "
					9.90 cu
26) Reinforced cement concrete (M ₂₅) in superstructure - L.					
Abutment - $2 \times 2 \times 5.40 \times 0.30 \times 1.50$					9.72 cu
Deck slab - $2 \times 1 \times 6.00 \times 3.00 \times 0.280$					10.08 "
Parapet - $2 \times 4 \times 5.40 \times 0.150 \times 0.075$					0.48 "
Crash barrier - $2 \times 2 \times 3.00 \times 0.30 \times 0.25$					0.90 "
Parapet - $2 \times 2 \times 3.00 \times 0.20 \times 1.10$					2.64 "
					23.82 cu

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(27) p/v and laying Bitumens concrete With 100-125 TPH					
Deck slab Wearing coat - 2X 5.40 X 3.0 X 0.075					2.44 Cum
(28) Supplying fixing and placing Hysp bar reinforcement					
Substructure @ 116 kg/Cum					
9.90 X 116.0 kg/cu					1148.40 kg
Superstructure @ 154 kg/cum					
23.82 Cu X 154.0 kg/cu					3668.28 kg
					4816.68 kg
				Say -	4.82 MT
(29) painting two coat on metal/iron					
Raft - 2X 1 X 6.0 X 3.0					36.0 sqm
Raft slab - 1X 18.0 X 0.250					9.00
Abutment - 2X 2 X 11.40 X 1.50					68.40
Deck slab - 2X 1 X 6.0 X 3.0					36.00
Deck slab side - 2X 1X 18.0 X 0.28					10.08
Crash barrier - 2X 2 X 3.0 X 0.80					9.60
Paperwork - 2X 2 X 3.0 X 2.40					28.80
					197.88 sqm
(30) p/v and fixing logo of Mmcsy Informatory Sign board					
Qty -					03 Nos

ABSTRACT OF COST

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Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
① setting out pillars benchmark					
3.50 km wide MD P-1					
@ Rs 12646 = 09/km					Rs 44261 = 00
② clearing and grubbing land					
Land - E/I					
2.10 Hec wide MD P-1					
@ Rs 52970 = 33/Hec					Rs 111238 = 00
③ Box-cutting of existing R/W					
22.50 cum wide MD P-1					
@ Rs 130 = 83/cum					Rs 2944 = 00
④ Const. of Embankment - E/I					
1231.58 cum wide MD P-2					
@ Rs 197 = 04/cum					Rs 242670 = 00
⑤ Const. of GSB with well					
graded material - E/I					
34.49 cum wide MD P-3					
@ Rs 3032 = 50/cum					Rs 104591 = 00
⑥/⑧/13 PM laying, spreading and					
compensy stone aggregates					
86.27 cum wide MD P-3					
@ Rs 416 = 76/cum					Rs 359035 = 00
⑦/14 Const of Un-reinforced					
joint at expansion - E/I					
183.60 cum wide MD P-4					
@ Rs 7913 = 70/cum					Rs 1452955 = 00
⑧/6 Const. of subgrade - E/I					
148.13 cum wide MD P-4					
@ Rs 183 = 34/cum					Rs 27158 = 00

Continuation

2344852 = 00

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(9/29) Earthwork in excavation - 2/1					
31.32 Cum wide MB P-4					
@ Rs 305 = 40/Cum					Rs 9565 = 40
(10/30) plv M15 (pcc 1:2.5:5) as					
leveling course					
4.11 Cum wide MB P-4					
@ Rs 5599 = 61/Cum					Rs 23019 = 40
(11/31) plv concrete for plain reinforcement					
30.33 Cum wide MB P-4					
@ Rs 6278 = 72/Cum					Rs 190439 = 20
(12/32) plv and laying reinforcement					
Cement Concrete pipe 2 - 8/1					
15.00 m wide MB P-5					
@ Rs 1276 = 52/M					Rs 19148 = 40
(13/33) painting two coats including					
78.39 sqm wide MB P-5					
@ Rs 100 = 80/sqm					Rs 7902 = 40
(14/34) plv 1.5mm cement putty					
16.32 sqm wide MB P-5					
@ Rs 52 = 70/sqm					Rs 860 = 40
(15/35) Earthwork in excavation - 2/1					
119.19 Cum wide MB P-5					
@ Rs 305 = 40/Cum					Rs 36401 = 40
(16/36) plv M15 (pcc 1:2.5:5) as					
leveling course					
11.85 Cum wide MB P-5					
@ Rs 5599 = 61/Cum					Rs 66355 = 40
					353679 = 40

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(17/37) p/v concrete for p/tn/ reinforced concrete - E/I					
122.43 cum wide MD P-6					
@ Rs 6278 = 72/cum					Rs 768704 = 0
(18/38) p/v and lagg reinforced Cement concrete NP-3 for ar					
30.60 M wide MD P-6					
@ Rs 3327 = 22/M					Rs 998172 = 0
(19/39) painting 100 sqm mchdy primer coat - E/I					
267.4157m wide MD P-6					
@ Rs 100 = 80/sqm					Rs 26955 = 0
(20/40) p/v 1.5mm cement pumy					
56.88 57m wide MD P-6					
@ Rs 52 = 70/sqm					Rs 2998 = 0
(21/41) Earthwork in excavation - E/I					
106.72 Cum wide MD P-6					
@ Rs 305 = 40/cum					Rs 32592 = 0
(22/42) Sand filling in foundation					
7.92 Cum wide MD P-7					
@ Rs 593 = 55/cum					Rs 4701 = 0
(23/43) Const. of LWB by p/v course graded material - E/I					
11.88 Cum wide MD P-7					
@ Rs 3032 = 30/cum					Rs 36026 = 0
(24/44) pec M10 (1:3:6) concrete for plain concrete in open foundation					
					Rs 971793 = 0

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
7.92 cum wide MD P-7					
@ Rs 6015 = 80/cum					Rs 47645 = 40
(25/45) p/w and laying reinforcement					
Cement concrete in substructure					
9.90 cum wide MD P-7					
@ Rs 7176 = 30/cum					Rs 71045 = 40
(26/46) Reinforcement Cement concrete					
(CM-25) in substructure					
27.84 cum wide MD P-7					
@ Rs 7784 = 70/cum					Rs 185587 = 20
(27/47) p/w and laying Bituminous					
Concrete					
2.44 cum wide MD P-8					
@ Rs 10822 = 40/cum					Rs 26406 = 40
(28/48) supplying fitting and fixing					
HYSD bar reinforcement					
4.82 MT wide MD P-8					
@ Rs 55352 = 20/MT					Rs 266798 = 00
(29/49) painting two coats on new/					
Concrete surface					
197.88					
206.88 sqm wide MD P-8					
@ Rs 100 = 80/sqm					Rs 19946 = 20
(30/28) p/w and laying Logo of project					
MMKV informatory sign board					
0.3 Nos wide MD P-8					
@ Rs 10227 = 42/each					Rs 30682 = 40
					Rs 648109 = 40
Total Rs 4318433 = 40					

Continuation

Material Statement

- | | | |
|---|-----------------|---------------|
| ① | Earthwork | — 1379.71 cum |
| ② | Stone Metel | — 146.12 cum |
| ③ | Stone chips | — 342.79 cum |
| ④ | Sand | — 191.08 m |
| ⑤ | Stone Screening | — 20.70 cum |
| ⑥ | Cement | — 130.56 MT |
| ⑦ | HYSD bar | — 4.82 MT |