

~~NABAR~~

॥ १ ॥ - गच्छाति मे। गच्छात्तु त्वत्पुत्रस्य पुत्र्ये च भर्तुम्
 पुत्र्याय चैव स्वरत्ना भर्तुयथा चैव पुत्रस्य चैव भर्तुम्
 पुत्र्ये चैव भर्तुम् चैव पुत्रस्य चैव भर्तुम्।

राष्ट्रिय कार्य विज्ञान कार्य प्रभाकर

सुनन्ति शास्त्रं

MEASUREMENT BOOK

3. ଆମର କାମ ନୀତି :- ସ୍ୱାଧୀନ ସଂସ୍କୃତି ସଂଗ୍ରହ ଆମେ

प्रमाणित किया जाता है, कि इस
मापी पुस्त में कुल 100(एक सौ) पन्ना है।
जो अंको में छापी गई है इस मापी पुस्त
को...
ग्रामीण कार्य विभाग कार्य अवर प्रमण्डल
...निर्मित किया जाता है।


कार्य विभाग अधिकारी
ग्रामीण कार्य विभाग कार्य अवर प्रमण्डल
...
19/12/23

Sch. XLV - Form No. 134

_____ DIVISION

_____ SUB-DIVISION

Measurement Book

No.

Name of Officer _____

Date of first entry _____

Date of last entry _____

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Name of work:- Const. of bridge from Mahai Pandayat ke sherna maridura to Shumali parsa kachhi path over Gaichacha nala.					
Scheme:- NABARD					
Agency:- Vijain Engicon India Private Limited, Kanurke Pajne.					
Dt. of start:- 10.11.2023					
Dt. of Completion:- 09.11.2024.					
Actual Dt. of Comp:- 26/11/2024					
Record entry:-					
(1/8) P/v and Constructing one span service road to each island as per E/P					
$8 \times 7.609 \text{ m} = 60.87 \text{ m}$					
(2/41) Const. of embankment with material obtained from borrow pit with lead up to 100m. as per spec.					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1					
5 x 30.0m x (7.02 + 5.18 + 4.30) x 2.0m				3	
					= 1650.00 m ³
1 x 2.27m x (7.02 + 5.18 + 4.30) x 2.0m				2	
					= 24.97 m ³
					Total = 1674.97 m ³

③ P/V. & laying RCC
pipe NP₄ 1000mm
dia as per Enc.

$$3 \times 8 \times 2.50 = 60.0 \text{ m}$$

④ Cont. of G.S.B
Grid as per
Enc.

$$5 \times 30.0 \text{ m} \times 4.05 \text{ m} \times 0.20 \text{ m} = 121.50 \text{ m}^3$$

$$1 \times 2.27 \text{ m} \times 4.05 \text{ m} \times 0.20 \text{ m} = 1.84 \text{ m}^3$$

$$\text{Total} = 123.34 \text{ m}^3$$

⑤ S/F/P HYSD bar
reinforcement
as per Enc.

$$\frac{25 \text{ mm}}{145} \times 0.856 \text{ m} \times 3.85 \text{ kg/m} = 477.98 \text{ kg}$$

$$30 \times 0.884 \text{ m} \times 2.85 \text{ kg/m} = 79.023 \text{ kg}$$

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>20 mm</u>					
156 x 0.785 m x 2.465 kg/m					301.864 kg
<u>16 mm</u>					
30 x 0.436 m x 1.578 kg/m					20.640 kg
					Total = 879.513 kg
					= 0.879 MT

⑥
25 Plv. & Fixing 20 mm
thk. C.F. board.
as per Enc.

$$4 \times 8.450 \text{ m} = 33.80 \text{ m}$$

⑦
26 Plv. & Fixing in

position, precast
joint filler as
per Enc.

$$4 \times 8.450 \text{ m} = 33.80 \text{ m}$$

⑧
31 Comp. of Subgrade
& e/shoulder as
per Enc.

0 Subgrade

$$2 \times 5 \times 30.0 \text{ m} \times \frac{(7.25 + 8.45)}{2} \times 0.30 \text{ m} = 706.50 \text{ m}^3$$

$$2 \times 1 \times 10.0 \text{ m} \times \frac{(7.25 + 8.45)}{2} \times 0.30 \text{ m} = 47.10 \text{ m}^3$$

$$\text{Total} = 753.60 \text{ m}^3$$

Rev.
18/10/24
J.E.

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>Record entry</u>					
<u>(1/32) Const. of G.S.B.</u>					
Gr. 1. — as per					
Enc.					
$2 \times 25.0m \times \frac{(7.95 + 4.05)}{2} \times 0.20m$					60.00 m ³
					194.40
$2 \times 4 \times 30.0m \times 4.05m \times 0.20m =$					194.40 m ³
$2 \times 1 \times 15.0m \times 4.05m \times 0.20m =$					24.30 m ³
Total =					278.70

<u>(2/33) Const. of WBM</u>					
Gr. 3 — as per					
Enc.					
$2 \times 25.0m \times \frac{(7.58 + 3.75)}{2} \times 0.075m$					
$= 21.40m^3$					
$2 \times 4 \times 30.0m \times 3.75m \times 0.075m$					
$= 67.50m^3$					
$2 \times 15.0m \times 3.75m \times 0.075m = 8.44m^3$					
Total = 97.18m ³					
97.88m³					

Rs. 05/11/2024

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>Record entry</u>					
(1/21) Work of Subgrade & E/shoulder as per E/c.					
Adjacent to road & G.S.					
$2 \times 2 \times 5 \times 30.0m \times 1.50m \times 0.20m$					$= 180.0m^3$
$2 \times 2 \times 10.0m \times 1.50m \times 0.20m$					$= 12.0m^3$
<u>Total =</u>					<u>192.00m³</u>
$2 \times 2 \times 5 \times 30.0m \times 1.275 \times 0.075$					$= 57.38m^3$
$2 \times 2 \times 10.0m \times 1.275 \times 0.075$					$= 3.83m^3$
<u>Total =</u>					<u>61.21m³</u>
Net total = $(192.0 + 61.21)m^3$					$= 253.21m^3$
(2/28) P/L Filter media underneath pitching as per E/c					
$2 \times 9.45 \times 9.62 \times 0.15$					$= 27.27m^3$
$2 \times 2 \times (3.14 \times 9.12 \times 9.12) \times 0.15$					$= 39.18m^3$
$2 \times 2 \times 15.0m \times 4.81m \times 0.15$					$= 43.29m^3$
<u>Total =</u>					<u>109.74m³</u>

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
$\frac{3}{27}$ P/L Boulder pitching on slope as per Ene.					
$2 \times 14.844 \times 0.90 \times 0.60 = 16.03 \text{ m}^3$					
$2 \times 2 \times 15.0 \times 0.90 \times 0.60 = 32.40 \text{ m}^3$					
$2 \times 9.45 \times 9.62 \times 0.30 = 54.55 \text{ m}^3$					
$2 \times 2 \times \left(\frac{3.14 \times 9.12 \times 9.12}{4} \right) \times 0.30 \text{ m}$ $= 78.35 \text{ m}^3$					
$2 \times 2 \times 15.0 \times 4.81 \times 0.30 = 86.58 \text{ m}^3$					
Total = 267.91 m ³					
$\frac{4}{34}$ P/A Prime coat with 8% emulsion (55-1) as per Ene.					
$2 \times 25.0 \times \frac{(7.58 + 3.75)}{2} = 283.25 \text{ m}^2$					
$2 \times 4 \times 30.0 \times 3.75 = 900.00 \text{ m}^2$					
$2 \times 15.0 \times 3.75 = 112.50 \text{ m}^2$					
Total = 1295.75 m ²					
R.B. No. 20/11/24 J.E.					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
					Record entry
(5/35) P/A Tack coat with Bit. emulsion (RS-1) — as per Eve measurement found					
(6/36) same as prime coat,					
Hence, Qty. = 1295.75 m ²					
(6/36) P/L/R of close-graded premix surface material — as per Eve measurement found					
same as prime coat and tack coat					
Hence, Qty. = 1295.75 m ²					
Rs. 22/11/24					
J.E.					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Record entry					
(1/35) P/A tack coat with Bit. Emulsion (P1-1) over MSS and below SDBL as per ene.					
$2 \times 25.0m \times \frac{(7.58 + 3.75)}{2}$					$285.25m^2$
$2 \times 4 \times 30.0m \times 3.75m$					$900.00m^2$
$2 \times 15.0m \times 3.75m$					$112.50m^2$
Total =					$1295.75m^2$

(2/37) P/L of semi dense Bituminous Course as per ene.

Area measurement same as tack coat as mentioned prev. item

~~1/35~~ and of tack coat thickness = 0.025m

Here,

$$Qty. = 1295.75m^2 \times 0.025m = 32.394m^3$$

(3/38) P/F of Logo of

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
project info. sign board — as per Enc.					
3 Nos.					3 Nos.
(4/40) P/E of Type-A'N' Metal beam Crash Barrier — as per Enc.					
4 x 30.0m = 120.0m					
(5/39) Road marking with HATC on BT surface — as per Enc.					

2 x 2 x 5 x 30.0m x 0.10m = 60.0m ²	
2 x 2 x 10.0m x 0.10m = 4.0m ²	
Total = 64.0m ²	

* * E/W including Const steel

Chairs (nos)	C.S.A. (m ²)	M.C.S.A (m ²)	Dist. (m)	Qty./vol. (m ³)
0.00	35.1m	—	—	—
25	27.480	31.290	25	782.250
50	15.283	21.382	25	534.538
75	11.240	13.262	25	331.538
100	10.234	10.737	25	268.425
125	8.213	9.224	25	230.588

Continuation

Continuation

5495 511141

Part II

Schedule XI-V-Form No. 134

NABARD

ଆଜିଆରୀ ନିମ୍ନ - ମାଗଣା ମାଗଣା-ମାଗଣା ଉପାଧାରୀଙ୍କ ଦ୍ୱାରା
ମାଗଣା ଉପାଧାରୀଙ୍କ ଦ୍ୱାରା ମାଗଣା ଦେଖିବା
ପ୍ରକାରୀ ମାଗଣା ଦେଖିବା ମାଗଣା ପ୍ରକାରୀ

ମାଗଣା ଦେଖିବା ମାଗଣା ଦେଖିବା

DIVISION

1729/23-24

II

SUB-DIVISION

MEASUREMENT BOOK

ମାଗଣା ଦେଖିବା ମାଗଣା ଦେଖିବା (50) ମାଗଣା ଦେଖିବା

प्रमाणित किया जाता है, कि इस
मापी पुस्त में कुल 100(एक सौ) पन्ना है।
जो अंको में छापी गई है इस मापी पुस्त
को...
ग्रामीण कार्य विभाग कार्य अवर प्रमण्डल
...निर्गत किया जाता है

कार्यपालक अधिकारी
ग्रामीण कार्य विभाग कार्य अवर प्रमण्डल

19.12.23

Sch. XLV - Form No. 134

DIVISION

SUB-DIVISION

Measurement Book

No. 1729(II)

Name of Officer

Date of first entry

Date of last entry

6th & Final Bill

33

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Name of work:— Construction of bridge from Mahia Panchayat ke Sherwa Masjid to Shunab Passa Kachhi path over Gaichacha Nala.					
Agency:— Ujjain Engicon India Private Limited, Rajua,					
Scheme:— "NABARD"					
App. No.:— 19/23-24					
Date of start:— 10-11-2023					
Date of Completion:— 09/11/2024					
Actual Cost of Completion:— 26/11/2024					

Abstract of Cost

1) Earthwork in excavation					
1) for str.					
(i) Up to 3m depth.					
Qty. vide TMB P-23					
= 710.04 m ³ @ Rs. 427.089/m ³					
					Rs. 3,03,250=
(ii) 3m to 6m depth.					
Qty. vide TMB P-23=					
76.44 m ³ @ Rs. 507.17/m ³					
					Rs. 38,768=00
2) Prov. & laying of PCC					
M-15 levelling course					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Qty. vide TMB P-24 =					
25.08 m ³ @ Rs. 9978.17/m ³					
					Rs. 2,50,253 =
3/3) P/v. & laying RCC M-30					
in pile cap. Qty. vide					
TMB P-24 = 319.46 m ³ @					
Rs. 10930.87/m ³					Rs. 34,91,976 =
4/4) Bored Cast-in-situ					
M-35 grade RCC pile					
(dia. 1200 mm) Qty. vide					
TMB P-24 = 516.0 m					
@ Rs. 32551.29/m					
					Rs. 1,67,95,466 =
5/5) S/R/P HYSD bar					
reinforcement in					
foundation Qty. vide					
TMB P-24 = 68.599 MT					
@ Rs. 80931.08/MT					Rs. 55,51,791 = 00
6/6) Providing steel lines					
10 mm thick. Qty. vide					
TMB P-25 = 8.489 MT					
@ Rs. 105931.33/MT					
					Rs. 8,99,251 = 00
7/7) Providing & Constructing					
Temporary Earth Island,					
Qty. vide TMB P-25 =					
2 Nos. @ Rs. 78583.82/No.					
					Rs. 1,57,168 = 00

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
8/8) Providing & laying new of an service road to reach island; qty. vide MD NC-1729-1, TMA P-48 = 60.87 m @ Rs. 4378.01/m — Rs. 266489 = 0					
9/9) Prov. & laying RCC M-30 Gr. Conl. in Sub. str. (i) up to 5m height; qty. vide TMA P-25 = 185.29 m ³ @ Rs. 11423.15/m ³ — Rs. 2,114,310 = 0					
(ii) from 5m up to 10m height; qty. vide TMA P-25 = 46.52 m ³ @ Rs. 11526.46/m ³ — Rs. 5,36,211 = 0					
10/10) Providing & laying RCC M-30 in Sub. str.; qty. vide TMA P-26 = 10.24 m ³ @ Rs. 11,605.49 /m ³ — Rs. 1,19,352 = 0					
11/11) S/A/P of MYSO bar reinforcement; qty. vide TMA P-26 = 30.208 MT MD 1729 P-50 = 0.879 MT Total = 31.087 MT @ Rs. 81,154.60/MT — Rs. 25,22,853 =					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
$\frac{12}{12}$ S/A/F in position true line and level POT - PTFE bearing; Qty. vide TMB P-26 = 18 Nos. @ Rs. 5114.04/ No. ————— Rs. 920,53 = 00					
$\frac{13}{13}$ supp S/A/F in position true to line and level elastomeric bearing ; Qty. vide TMB P-27 = 168750 cc @ Rs. 0.91 Rs. 0.91/cc ————— Rs. 1,53,871 = 00					
$\frac{14}{14}$ P/v. weep holes in RCC str.; Qty. vide TMB P-27 = 156 Nos. @ Rs. 160.73/No. ————— Rs. 25074 = 00					
$\frac{15}{15}$ Backfilling behind Abt. & R/wall; Qty. vide TMB P-27 = 186.06 m ³ @ Rs. 985.03/m ³ ————— Rs. 1,83,274 =					
$\frac{16}{16}$ P/v. and laying filter media; Qty. vide TMB P- 27 = 101.70 m ³ @ Rs. 5707.25/m ³ ————— Rs. 5,80,430 =					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
$\frac{17}{17}$ P/v. and laying RCC - M-30 Gr. in Super - str.; qty. vide TMB P-28 = 238.08 m ³ @ Rs. 12600.02/m ³ — Rs. 29,99,813 =					
$\frac{18}{18}$ S/F/P MYS D bar reinforcement in Super-structure; qty. vide TMB P-28 = 36.24 MT , 36.24 MT @ Rs. 82885.28 /MT — Rs. 3003763 = 00					
$\frac{19}{19}$ Providing & laying RCC M-30 Gr. Cont.; Qty vide TMB P-28 = 38.67 m ³ @ Rs. Rs. 20569.33/m ³ — Rs. 7,95,416 =					
$\frac{20}{20}$ Const. of RCC Railing (M25 Gr. Cont.); Qty. vide TMB P-28 = 137.500 m @ Rs. 4771.49 /m — Rs. 6,56,079 = 00					
$\frac{21}{21}$ Drainage spout in Deck slab. Qty.					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
vide TMS P-29 = 21 m ²					
@ Rs. 6302.45 / m ²					
					Rs. 132,259 =
(22) P.H. & Laying P.C.C					
(22) m-13 Laying Course					
1/4th wide + 7/12 P-29					
= 7.15 m ² @ Rs. 9601.32 / m ²					
					Rs. 68,649 =
(23) R.C.C. m-50 G. Conf.					
in Aff. slab; 1/4th wide					
TMS P-29 = 16.96 m ² @					
Rs. 16769.95 / m ²					
					Rs. 2,84,418 = 00
(24) P.H. Laying Strip					
(24) Seal Expansion					
Joint; 1/4th wide TMS					
P-29 = 33.80 m @ Rs.					
1412.48 / m					
Rs. 288.18 / m					Rs. 478969 = 00
(25) P.H. & fixing 20mm					
(25) thick 20mm thick					
Compressible fibre.					
1/4th wide TMS P-50					
1729 part-1 P-50					
= 33.80 m @ Rs. 288.18 / m					
					Rs. 9740 = 00

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
$\frac{26}{26}$ P/L & filling in position for mouth joint fitter filter; qty. vide M.B. No. 1729 part-2, A-50 = 33.80 m @ Rs. 405.05/m — B. 13,691 =					
$\frac{27}{27}$ P/L boulder pitching on slopes; qty. vide M.B. 1729 part-2 P-53 = 267.91 m ³ Qty. 267.91 m ³ @ Rs. 6003.29/m ³ — B. 16,08,341 = 00					
$\frac{28}{28}$ P/L filter material underneath pitching; qty. vide M.B. 1729 part-5 P-52 = 109.74 m ³ @ Rs. 5696.77/m ³ — Rs. 6,25,164 = 00					
$\frac{29}{29}$ clearing & grubbing Road land; qty. vide TMB P-30 = 0.258 Ha. @ Rs. 75573.34/Ha. — B. 19,347 = 00					
$\frac{30}{30}$ Const. of embankment with material obtained from borrow pit with					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Lead up to 1000m; Qty.					
vide MB No. 1729 part-I					
P-57 = 3674.96/m ³					
Limited Qty. = 3674.00 @ Rs. 261.09/m ³					
					Rs. 959261=00
<u>31</u> <u>31</u> Const. of Sub-grade & e/shoulder, Qty.					
vide part P-50 MB No.					
1729 part-I P-50,					
P-50 = 753.60 m ³					
P-52 = 253.21 m ³					
total = 1006.81 m ³					
Limited = 1006.80 m ³ @					
Rs. 263.63/m ³ — Rs. 2,66,429=					
<u>32</u> <u>32</u> Const. of G.S.B.					
Gr. 2; Qty. vide TMB					
No. 1729 part-I P-51					
= 278.70 m ³ @ Rs.					
Rs. 5253.03/m ³ — Rs. 14,64,019=					
<u>33</u> <u>33</u> Const. of WBM,					
Gr. 3; Qty. vide TMB					
No. 1729 part-I P-51					
= 97.18 m ³ @ Rs.					
Rs. 7046.80/m ³ — Rs. 6,84,808=00					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
$\frac{34}{34}$ P/A Prime coat with Bit. emulsion (RS-1) Qty. vide MB No. 1729 Part-5 P-53 = 1295.75 m ² @ Rs. Rs. 59.26/m ² Rs. 76786 = 00					
$\frac{35}{35}$ P/A Jack coat with emulsion (RS-1) Qty. vide MB No. 1729 Part -2, P-54 = 1295.75 m ² P-55 = 1295.75 m ² Total = 2591.50 m ² @ Rs. $\frac{20.28}{m^2}$ Rs. 52556 = 00					
$\frac{36}{36}$ P/L/R of Close graded premix material Qty. vide MB No. 1729 Part-5, P-54 = 1295.75 m ² @ Rs. 337.11/m ² Rs. 436810 =					
$\frac{37}{37}$ P/L Semi Dense Bitu. minores Course; Qty. vide MB No. 1729 Part-5, P-54 = 32.394 m ³ @ Rs. 17151.62/m ³ Rs. 555610 =					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
$\frac{38}{38}$ P/E logs of project info sign board; Qty. vide MB No. 1729 part - I, P-56 = 3 Nos. @ Rs. Rs. 10893.23/No. Rs. 32,680 =					
$\frac{39}{39}$ Road markings with HA TC on BT surface; Qty. vide MB No. 1729 part - I, P-56 = 64.00 m ² @ Rs. 886.00/m ² — Rs. 56,704 =					
$\frac{40}{40}$ P/E of type - new metal beam crash barrier; Qty. vide MB No. 1729 part - I P-56 = 120.00 m @ Rs. 3357.65/m — Rs. 402,918 =					
$\frac{41}{41}$ Const. of embankment with material obtained from borrow pit with lead up to 1000 m; Qty. vide MB No. 1729 part - I P-49 = 1674.97 m ³ @ Rs. 261.29/m ³ Rs. 4,37,318 =					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(42) Const. of C.S.B.					
(42) Gr. 2; Qty. vide MB					
No. 1729 part J P-49					
= 123.34 m ³ @ Rs.					
Rs. 5253.03 / m ³					
					Rs. 6,47,909 = 00
(43) P/L & laying RCC					
pipe NF, 1000 mm dia					
Qty. vide MB No. 1729					
part - I, P-49 = 60.0 m,					
Qty. 60.0 m @ Rs. 8034.67					
/m					Rs. 4,82,000 =
(44) Dismantling of					
existing structure;					
Qty. vide TMBP-30					
= 313.50 m ³ @ Rs.					
1713.06 / m ³					
					Rs. 5,37,044 =
Total Rs. 5,27,18,421 = 00					
Add GST @ 18% (+) Rs. 94,89,316 = 00					
Add L. cess @ 1% (+) Rs. 5,27,184 = 00					
Add S. fee @ (+) Rs. 2,65,080 = 00					
Total = Rs. 6,30,00,001 = 00					
Less below 0.05% (-) Rs. 31,500 = 00					
Total = Rs. 6,29,68,501 = 00					
Less prev. paid (-) Rs. 5,29,89,595 = 00					
Net total = Rs. 99,78,906 = 00					
Continuation					
Rs. 26/11/2024					
J.E.					