

Agency -

Nishant Raj
~~Chief Const.~~

Banar Mahipal Mr. to Bhimra to K

~~Chief Const. Mr. Raj~~

K. R. N. S.

He is the

Chief P. W. D.

E. E. R. D. Mr. J. P. Singh

Division

He

Banar

S. D. Division

Chief Const. Mr. D. K.

10-217991

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Pages By Printers Matchline And issued
To Sri...Yadvendra Yadav.....A.E- R.W.D
Work Sub-Div... BARUN.....

Yadvendra
10/7/20

Executive Engineer
Road Works Division
Works Division, Barangaba
10/7/20

Schedule XLV - Form No. 134.

E.E. A. Bad.

DIVISION.

A.E. Barun.

SUB-DIVISION.

MEASUREMENT BOOK.

211564

2799

Name of officer

Sri Yadvendra Yadav

A.E. Barun.

Date of first entry

Date of last entry

विद्यार्थी नाम, पता :

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 measurements relating to each work)

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

Test & A/C Bill

Name of work - Construction of.
 Road from Barun Nabinagar
 Road to Bhurya Tola.

Name of Agency - Alishant Ray's

Agreement No - 418 SBD/2020-21

Date of work start - 08.06.20

Date of completion - 07.03.21

Agreement value - 10%

Below of B.O.P. Rate.

Agreement Amt. Paid - A/c 3533257
 = 10

Date of measurement -

15.06.20

① Setting out pillar.

Providing & fixing & working
 bench mark pillar -

Qty = 1.0 nos.

② Reference pillar.

Qty = 2.0 nos.

③ Clearing & grubbing

Road length -

6th side

$2 \times 6 \text{ No} \times 30.0 \times 3.50 = 1260.0 \text{ m}^2$

$2 \times 1 \text{ No} \times 23.0 \times 3.50 = 161.0 \text{ m}^2$

$2 \times 8 \text{ No} \times 30.0 \times 3.30 = 1584.0 \text{ m}^2$

$2 \times 4 \text{ No} \times 30.0 \times 3.10 = 744.0 \text{ m}^2$

$2 \times 1 \text{ No} \times 10.0 \times 3.40 = 68.0 \text{ m}^2$

$\Rightarrow 0.3817 \text{ Hec}$

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
<u>Date of measurement</u>					
09-07-2020					
(3) P.C.C. Meo in Sub-					
- structure -					
$1.11 - 2 \times 3.70 \times (1.0 + 0.40) \times 2.140$					
$2 = 14.40 \text{ m}^3$					
upst-					
$2 \times 3.70 \times 0.40 \times 0.20 = 0.592 \text{ m}^3$					
less for pipe-					
$2 \times \frac{\pi}{4} \times (0.830)^2 \times 0.530 = 0.574 \text{ m}^3$					
$= 14.418 \text{ m}^3$					

(4) Providing & laying - R.C.C.
pipe N.P.-3, for culvert
 $3 \times 2.50 \text{ m} = 7.50 \text{ m}$

Remarks
09-07-2020
J.B.

Date of measurement
12-07-2020

(1) Providing & laying of
a R.C.C. 300mm ϕ utility
pipe duct -
 $2 \times 1.0 \times 2.50 = 20.0 \text{ m}$

(2) ~~Excavation~~ - excavation
for road way in soil
 $2 \times 15.00 \times 0.375 \times 0.100 = 33.75 \text{ m}^3$
Continuation
 $2 \times 1.0 \times 10.0 \times 0.375 \times 0.100 = 0.75 \text{ m}^3$
= 34.50 m³

Sch. XLV-Form No. 134

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

BF = 4.14 = 34.50 m³

Side of the pit

2 x 3.10 x 30.0 x 0.375 x 0.145 = 11.8 m³

Total = 46.31 m³

③ Construction of Embankment

With approved materials -

For 60% qty from Govt

= 46.31 x 60% = 27.79 m³

Ranvijay

2-07-20

5/16

Date of measurement

16-12-2020

1) L.S.B - Construction

of L.S.B with well graded

materials for grading -

L.S.B in widening -

2 x 15.10 x 30.0 x 0.375 x 0.100 = 33.75 m³

2 x 1.10 x 10.0 x 0.375 x 0.100 = 0.75 m³

L.S.B in place - widening

2 x 3.10 x 30.0 x 0.375 x 0.100 = 6.75 m³

Total = 41.25 m³

Add for extra profile/correction

4.10 x 2.10 x 1.75 x 0.100 = 1.47 m³

3.10 x 3.70 x 2.10 x 0.100 = 2.33 m³

3.10 x 2.80 x 1.15 x 0.100 = 1.83 m³

4.10 x 3.80 x 1.20 x 0.100 = 2.91 m³

Continuation

Total = 49.80 m³

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

					$Bf = 47.49.803 m^3$
3 No X	1.80	X 2.20	X 0.150		$= 1.782 m^3$
5 No X	3.70	X 1.15	X 0.100		$= 2.12 m^3$
6 No X	4.20	X 1.10	X 0.05		$= 2.079 m^3$
8 No X	7.10	X 1.40	X 0.075		$= 5.964 m^3$
2 No X	3.45	X 1.90	X 0.200		$= 2.622 m^3$
					$= 64.368 m^3$
					$\Rightarrow$ Sampled qty $= 62.78 m^3$

Ranjit

16-12-2020

J.E

16-12-20

A.D. Baidya

Date of measurement

06.01.2021

① INBm hr-3, Providing
laying, spreading &
completion of work

$$1 \text{ No X } 5.00 \frac{(6.50 + 3.75)}{2} \times 0.075 = 5.765 m^3$$

$$8:15 \text{ No X } 30.0 \times 3.75 \times 0.075 = 101.25 m^3$$

$$1 \text{ No X } 15.0 \times \frac{(3.75 + 6.40)}{2} \times 0.075 = 5.707$$

$$1 \text{ No X } 15.0 \times \frac{(6.40 + 6.65 + 3.90)}{3} \times 0.075 = 6.356 m^3$$

$$1 \text{ No X } 15.0 \times \frac{(3.90 + 3.75)}{2} \times 0.075 = 4.30 m^3$$

$$1 \text{ No X } 15.0 \times \frac{(3.75 + 5.40 + 3.75)}{3} \times 0.075 = 4.837$$

Continuation

3

$$\text{Copy} = \frac{128.208 m^3}{153.518 m^3}$$

$$Bf = qty = 128.208 m^3$$

$$153.518 m^3$$

Sch. XLV-Form No. 134

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

$$1 m \times 20.0 \times 3.75 \times 0.075 = 5.625 m^3$$

$$1 m \times 5.0 \times 3.75 \times 0.075 = 1.406 m^3$$

extra width in clear mm

manholes

$$1.30 \times \frac{(5.80 + 3.25)}{2} \times 0.075 = 0.741 m^3$$

In P.C. Portion: 1/3 m m m

$$2 \times 3 m \times 30.0 \times 0.375 \times 0.075 = 5.06 m^3$$

$$= 140.74 m^3$$

$$Sup. limit qty = 137.13 m^3$$

Revd
06.01.2021
JTB

06.01.21

Date of measurement

25.01.2021

① P.C. m m grade of

conc. - - - do - - - all

$$1 \times 15.0 \times \frac{(6.50 + 3.75)}{2} \times 0.160 = 12.30 m^3$$

$$15 m \times 30.0 \times 3.75 \times 0.160 = 270.0 m^3$$

$$1 m \times 15.0 \times \frac{(3.75 + 6.40)}{2} \times 0.160 = 12.18 m^3$$

$$1 m \times 15.0 \times \frac{(6.40 + 6.65 + 3.90)}{3} \times 0.160 = 13.56 m^3$$

$$1 m \times 15.0 \times \frac{(3.90 + 3.75)}{2} \times 0.160 = 9.18 m^3$$

$$1 m \times \frac{(2.75 + 5.40 + 3.75)}{3} \times 0.160 = 10.32 m^3$$

$$1 m \times 15.0 \times \frac{(3.75 + 3.75)}{2} \times 0.160 = 9.0 m^3$$

$$1 m \times 5.0 \times \frac{(3.75 + 3.25)}{2} \times 0.160 = 2.80 m^3$$

Continuation

Co. qty
2/10/21

$$= 339.34 m^3$$

$$Bf = \phi \cdot y = 128.208 \text{ m}^2$$

$$= 153.518 \text{ m}^2$$

Sch. XLV-Form No. 134

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

$$1 \text{ No} \times 20.0 \times 3.75 \times 0.075 = 5.625 \text{ m}^3$$

$$1 \text{ No} \times 5.0 \times 3.75 \times 0.075 = 1.406 \text{ m}^3$$

extra width in clear mm
moulds.

$$1.30 \times \frac{(5.80 + 3.25)}{2} \times 0.075 = 0.241 \text{ m}^3$$

In P.C.C Portion: 1/3 mms

$$2 \times 3 \text{ No} \times 30.0 \times 0.375 \times 0.075 = 5.06 \text{ m}^3$$

$$= 140.74 \text{ m}^3$$

$$\text{Sub limit PH} = 137.13 \text{ m}^3$$

Rev'd
06.01.2021
JTB

06.01.21

Date of measurement

25.01.2021

① P.C.C. m/s grade of

conc. - - - - - 2.00

$$1 \times 15.0 \times \frac{(6.50 + 3.75)}{2} \times 0.160 = 12.30 \text{ m}^3$$

$$15 \text{ No} \times 30.0 \times 3.75 \times 0.160 = 270.0 \text{ m}^3$$

$$1 \text{ No} \times 15.0 \times \frac{(3.75 + 6.40)}{2} \times 0.160 = 12.18 \text{ m}^3$$

$$1 \text{ No} \times 15.0 \times \frac{(6.40 + 6.65 + 3.90)}{3} \times 0.160 = 13.56 \text{ m}^3$$

$$1 \text{ No} \times 15.0 \times \frac{(3.90 + 3.75)}{2} \times 0.160 = 9.18 \text{ m}^3$$

$$1 \text{ No} \times \frac{15}{3} \times \frac{(2.75 + 5.40 + 3.75)}{3} \times 0.160 = 10.32 \text{ m}^3$$

$$1 \text{ No} \times 15.0 \times \frac{(3.75 + 3.75)}{2} \times 0.160 = 9.0 \text{ m}^3$$

$$1 \text{ No} \times 5.0 \times \frac{(3.75 + 3.25)}{2} \times 0.160 = 2.80 \text{ m}^3$$

Continuation

$$\text{Co. effy} = 339.34 \text{ m}^3$$

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
B.F. = $7.4 = 339.34 \text{ m}^3$					
Say limit $7.4 = 336.60 \text{ m}^3$					
<u>Range</u>					
25-01-2024					
J.E.					
					25-01-21
					AR

Date of measurement

07-02-2024

① Construction of subgrade and Earthen shoulder

Adjacent of h.s.n.

$$2 \times 18 \text{ No} \times 30.0 \times 0.375 \times 0.100240.50 \text{ m}^3$$

$$2 \times 1 \text{ No} \times 10.0 \times 0.375 \times 0.100 = 0.75 \text{ m}^3$$

Adjacent w.B.m = 3

$$2 \times 18 \text{ No} \times 30.0 \times 0.375 \times 0.075 = 30.375 \text{ m}^3$$

$$2 \times 1 \text{ No} \times 10.0 \times 0.375 \times 0.075 = 0.562 \text{ m}^3$$

Alignment of p.c.c.

$$\text{Tot} = 72.19 \text{ m}^3$$

Adjacent of p.c.c.

$$2 \times 10 \text{ No} \times 30.0 \times 0.375 \times 0.160 = 36.0 \text{ m}^3$$

$$= 108.19 \text{ m}^3$$

$$\text{For 100 m road} = 35.70 \text{ m}^3$$

$$\text{For 100 m deal} = 72.19 \text{ m}^3$$

② Hand Shouldering -

Laying Brick Soling Layer

$$2 \times 16 \text{ No} \times 30.0 \times 0.250 = 240.0 \text{ m}^2$$

$$2 \times 1 \text{ No} \times 26.0 \times 0.250 = 13.0 \text{ m}^2$$

$$= 253.0 \text{ m}^2$$

Range

07-02

Continuation

J.E.

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
<u>Date of measurement</u>					
15-02-2021					
① Construction of Embankment					
With approved materials as per graph					
CH-	C/S Area	Mean Area	L	Volume	
0+00	3.760	—	—	—	
50+0	4.100	3.930	50	196.50	
100+0	4.115	4.107	50	205.35	
150+0	3.865	3.99	50	199.50	
200+0	3.750	3.80	50	190.00	
250+0	4.105	3.927	50	196.35	
300+0	4.010	4.052	50	202.85	
350+0	3.650	3.830	50	191.50	
400+0	3.560	3.605	50	180.25	

450+0	3.732	3.646	50	182.30	
500+0	3.325	3.778	50	188.90	
550+0	3.155	3.49	50	174.50	
Total =				2108.0m ³	

Deduction qty.

- ① Hand shouldering = 23.51m³
- ② Subgrade = 108.19m³
- ③ A.C.C. = 336.60m³
- ④ WBM hr. 13 = 137.13m³
- ⑤ L.S.B gr. 5 = 62.78m³
- ⑥ Box cutting = 34.50m³

Net Qty = 1405.29m³
 for (room lead)

Ranjan
 15-02-2021
 J.T.

Particulars	Details of actual measurement				Contents of area
	No	L	B	D	
Date of measurement:					
2-03-2021					
① kilometre stone					
Qty = 2.0 Nos.					
② 200mm stone					
Qty = 2.0 Nos.					
Traffic sign.					
600mm equilateral triangle					
Qty = 4.0 Nos.					
600mm circular					
Qty = 3.0 Nos.					
800mm X 600mm Rectangle					
Qty = 2.0 Nos.					
600mm X 450mm Rectangle					
Qty = 2.0 Nos.					
900mm side Octagon					
Qty = 1.0 Nos.					
Guard Post					
Qty = 8.0 Nos.					
Painting on Parapet wall					
X 3.70 X 0.40 =					2.96m ²
X 3.70 X 0.50 =					7.40m ²
X 0.40 X 0.50 =					0.80m ²
Continuation					11.16m ²

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
⑧ Road marking with hot applied thermoplastic					
In C.C. portion -					
2 x 18 No x 30.0 x 0.100					= 108.0 m ²
2 x 1 No x 10.0 x 0.100					= 2.0 m ²
					= 110.0 m ²

Ramji
03-03-2021
J.E.

~~27.06.21~~

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

ABSTRACT of COST.

①	Providing & fixing of working benchmark /				
	Qty wide tms P-1 = 1.0				
	@ RS = 3798.26 / Each = RS				3798.26
②	Reference pillar -				
	Qty wide tms P-1 = 2.0				
	@ RS = 1719.29 / Each = RS				3439.58
③	Clearing and grubbing Road land -				
	Qty wide tms P-1 = 0.3817 Hec				
	@ RS = 51133.76 / Hec = RS				19518.20
④	Box cutting - Excavation				
	For Road ways - - -				
	Qty wide tms P-4 = 46.3 / m ³				
	@ RS = 74.16 / m ³ = RS				3434.20
⑤	Construction of Embankment for 50% of road -				
	Qty wide tms P-4 = 27.79 m ³				
	@ RS = 26.11 / m ³ = RS				726.50
⑥	Construction of Embankment for 100% of road -				
	Qty wide tms P-8 = 1405.29 m ³				
	@ RS = 174.94 / m ³ = RS				24584.10
⑦	Construction of Subgrade & Earthen Shoulder for 100% of road -				
	Qty wide tms P-7 = 35.70 m ³				
	@ RS = 176.58 / m ³ = RS				6301.10
Continuation					
	Co. RS				283,057.00

BS = PS = 2,83,057 = 00

Sch. XLV-Form No. 134

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Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
(8) Construction of Sub-grade for 100m deep					
Qty wide TMB P-2 = 72.49 m ³					
@ PS = 141.17 / m ³ = PS = 10,233.200					
(9) L.S.B. with well pre-dead materials					
Qty wide TMB P-5 = 62.78 m ³					
@ PS = 2427.53 / m ³ = PS = 1,52,410 = 00					
(10) 1st BM Mr-3, Providing laying, Breeding and Compacting Stone Aggr					
Qty wide TMB P-6 = 137.13 m ³					
@ PS = 3765.16 / m ³ = PS = 5,16,316.200					
(11) Cement concrete Pavement					
Const. of P.C.C M 30					
Grade					
Qty wide TMB P-7 = 336.60 m ³					
@ PS = 5967.32 / m ³ = PS = 2,00,86,000 = 00					
(12) Hand Shouldering					
Qty wide TMB P-7 = 253.00 m ³					
@ PS = 543.78 / m ³ = PS = 1,37,576 = 00					
(13) Kilometre Stone					
Qty wide TMB P-9 = 2.0					
@ PS = 1985.18 / each = PS = 3970 = 00					
(14) 200 mtr. Stone					
Qty wide TMB P-9 = 2.0					
@ PS = 551.59 / each = PS = 1103 = 00					
10 - PS = 31,13,255 = 00					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
$B.F = RS = 31.13, 255.00$					
5) Providing & fixing logs of Project -					
Qty wide Tmp P. 2 = 4.0					
@ RS = 9214.62 / each = RS = 36858 = 00					
6) retro Traffic sign Providing and fixing 600mm square -					
Qty wide Tmp P. 9 = 4.0					
@ RS = 3662.59 / each = RS = 14650.20					
7) 600mm circular Qty wide Tmp P. 9 = 3.0					
@ RS = 4989.91 / each = RS = 14804.20					
8) 800mm x 600mm Rectangular -					
Qty wide Tmp P. 9 = 2.0					
@ RS = 6907.48 / each = RS = 13815 = 00					
9) 600mm x 450mm Rectangle Qty wide Tmp P. 9 = 2.0					
@ RS = 4804.31 / each = RS = 9609 = 00					
10) 900mm octagone Qty wide Tmp P. 9 = 2.0					
@ RS = 8830.38 / each = RS = 17660.76					
11) Boundary Pili -					
Qty wide Tmp P. 9 = 8.0					
@ RS = 463.14 / each = RS = 3705 = 00					
Total RS = 32753.57					
Continuation = 32755.26					

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
					$B \times R = 3215.526 \text{ m}^2$
(22/23) Road marking with hot applied - - - - -					
					$\text{Qty wide TMB } P/0 = 110.0 \text{ m}^2$
					$@ RS = 821.29 / \text{m}^2 = RS = 90,342 \text{ m}^2$
(23/24) irrigation pipe conduit					
					$\text{Qty wide TMB } P/3 = 20.0 \text{ m}$
					$@ RS = 862.11 / \text{m} = RS = 17,242 \text{ m}^2$
(24/25) Earth work in excavation for foundation - - - - -					
					$\text{Qty wide TMB } P/2 = 15.66 \text{ m}^3$
					$@ RS = 263.32 / \text{m}^3 = RS = 4,218 \text{ m}^2$

(25/26) Providing m/s P.C.C. (1:2:5) in trench - - - - -					
					$\text{Qty wide TMB } P/2 = 2.24 \text{ m}^3$
					$@ RS = 4664.09 / \text{m}^3 = RS = 10,448 \text{ m}^2$
(26/27) P.C.C m/s in subsoil churn - - - - -					
					$\text{Qty wide TMB } P/3 = 14.418 \text{ m}^3$
					$@ RS = 5463.20 / \text{m}^3 = RS = 78,768 \text{ m}^2$
(27/28) Providing & laying R.C. N.P.3 Pipe - - - - -					
					$\text{Qty wide TMB } P/3 = 7.50 \text{ m}$
					$@ RS = 932.53 / \text{m} = RS = 6,994 \text{ m}^2$
(28/29) painting on parapet wall two coats - - - - -					
					$\text{Qty wide TMB } P/4 = 11.16 \text{ m}^2$
					$@ RS = 97.19 / \text{m}^2 = RS = 1,085 \text{ m}^2$
					$@ RS = 3424,623 \text{ m}^2$

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
BF = RS					34,24,623.20
Net RS					34,24,623.20
Add 12% GST					4,10,955.20
Add 1% LC					34,246.00
Total					38,69,824.20
Less 10% below					3,86,982.00
Net RS					34,82,842.20

Ranjan
24.08.2021
J.E.

27.06.21
Ranjan

CSP

10/7/21

Continuation