

Satchamda Const. Pvt. Ltd.

Ref No. to Mysore Pigeon (M.A. 5.4)

Schub XIV - Form 13A

Section

BIHAR P.W.D.

E.E. R.W.D. WORK A.B.A.D. **DIVISION**

Assistant Engineer **SUB-DIVISION**

WORK Sub Division - BARUN

WAZIRABAD 1000

2592

Certified that this M.B. Contain
100 (one hundred) Pages by Printed
Machine and Issued to Sri
Krishan KR. Yadavendra A.E.
R.W.D. WORK Sub Division Barrun

Ym
10/7/20
Executive Engineer
Road Works Depart. rd
Works Division, Aurangabad
10/7/20

Schedule XLV - Form No. 134.

E.E. R.W.D. A.BAD DIVISION.

Assistant Engineer *Sri. K. R. Yadavendra*

R.W.D. WORK Sub Div- Barrun

MEASUREMENT BOOK.

2592

512217

Sri Krishan KR. Yadavendra A.E.
DIVISION

Date of first entry _____

Date of last entry _____

विज्ञापन सं. १०८, पृष्ठ १

MMU-SY

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 of area
	No.	L	B	D	
Test & P.C. Bill.					
Name of work - Const. of Road from Bahua Road to Munshir - bigha.					
Name of Agency - Satchanoli Const. Pvt. Ltd. Aurangabad.					
Agreement No. - 132 SPD/20-21					
Head. munsy (SC)					
Agreement Rate - 101 below of B.O.G. Rate					
Agreement Amt. - Rs. 101					

Date of work start - 20-03-2021

Date of Completion - 19-08-2021

Date of measurement

20-11-2021

① Setting out Pillar.

Benchmark Pillar -

Qty = 2.0 Nos.

② Reference pillar -

Qty = 7.0 Nos.

③ Clearing & Limbing

Road Land - 100.00 m

CH - 0.00 to 65.00 m

$20.0 \times 30.0 \times 6.50 = 4140.00 \text{ m}^2$

11.00 x 30.00 x 5.60 = 188.00 m²

11.00 x 20.00 x 5.80 = 116.00 m²

Qty = 4424.00 m²

Sch. XLV-Form No. 134 2

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
Bf = Qty = 44/24.0m ²					
CH- 650 to 985 m.					
6 No x 30.0 x 7.0 =					1260.0m ²
5 No x 30.0 x 4.80 =					720.0m ²
1 No x 5.0 x 4.80 =					24.0m ²
CH- 985.0 m to 1850 m.					
8 No x 30.0 x 7.10 =					1704.0m ²
1 No x 25.0 x 7.10 =					177.50m ²
10 No x 30.0 x 7.0 =					2100.0m ²
10 No x 30.0 x 6.95 =					2085.0m ²
Total/Qty =					12494.50m ²
3 m/Qty =					1.2494m ²

④ Providing & Fixing
Rope to Project

Qty = 2.0 Nos.

Ramkrishna
20-11-2020

J.S

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
<u>Date of measurement</u>					
28-11-20					
① dismantling existing					
structure					
Single Row 600mm to 900mm					
Brick masonry - $3 \text{ Nos } 2 \times 4.10 \times (1.0 + 0.40) \times 210$					
$= 35.28 \text{ m}^3$					
R.C. - $3 \text{ Nos } 2 \times 4.10 \times 0.150 =$					
$= 8 \text{ Nos } 2 \times 4.10 \times 1.0 \times 0.150 = 3.69 \text{ m}^3$					
Hume pipe					
$3 \times 2 \text{ Nos } 2.50 = 5.0 \text{ m}$					
P.C. below H.P.					
$3 \text{ Nos } 3.20 \times 1.10 \times 0.150 = 1.81 \text{ m}^3$					
For double Row Room					
to 900mm					
Brick masonry					
$2 \text{ Nos } 3.30 \times (0.90 + 0.50) \times 1.90$					
$= 8.778 \text{ m}^3$					
R.C. - $1 \text{ Nos } 2 \text{ Nos } 3.30 \times 0.90 \times 0.150$					
$= 0.891 \text{ m}^3$					
Hume pipe					
$1 \text{ Nos } 3.0 \times 2.50 = 7.50 \text{ m}$					
P.C. below H.P.					
$1 \text{ Nos } 5.30 \times 1.0 \times 0.125 = 6.625 \text{ m}^3$					
For dismantling of slab column					
R.C. - $1 \text{ Nos } 5.0 \times 2.0 \times 0.300 = 3.0 \text{ m}^3$					
C.C. - $2 \text{ Nos } 5.0 \times 0.40 \times 0.300 = 1.20 \text{ m}^3$					
Brick masonry					
$2 \text{ Nos } 5.0 \times (1.30 + 0.40) \times 2.90 = 24.65 \text{ m}^3$					
P.C. in foundation slab					
$1 \text{ Nos } 5.0 \times 2.0 \times 0.150 = 1.50 \text{ m}^3$					

Continuation

Rev. 26-11-20
Jit

02.12.20

q + ch - 75m.	
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ISO 9001

for foundation. -

Below 1-1/2-

$$1 \text{ No} \times 5.350 \times 1.130 \times 1.0 = 6.045 \text{ m}^3$$

M15 R.C. (1.2.55) in

leveling work.

$$2 \times 3.0 \times 1.20 \times 0.150 = 1.40 \text{ m}^3$$
$$P_{120} \times 5.350 \times 1.130 \times 0.15 = 0.906 \text{ m}^3$$

Continuation

$$= 2.306 \text{ m}^3$$

Sch. XLV-Form No. 1345

Particulars	Details of actual measurement			Contents of area
	No.	L	B	
③ P.C.C. Mass in Sub-structure				
Structure up to formation level				
H/W		2 x 3.70	(1.0 + 0.55)	x 1.30
			2	= 7.45 m ³

Ramby

02.12.20

J.E.

Date of measurement
7-12-20

① P.C.C. Mass in Substructure				
Structure up to R.L.				
		2 No x 3.70	(0.55 + 0.50)	x 1.40
			2	= 5.42 m ³

Percept

		2 x 8.70	(0.50 + 0.40)	x 0.600
			2	= 1.998 m ³

less for pipe.

		$\frac{\pi}{4} \times (0.830)^2 \times 0.530$		= 0.574 m ³
				= 6.854 m ³

Ramby

06.12.20

J.E.

06.12.20

AM

② Bracing & lagging				
R.C. & P.B. H.P.C. - 60mm				
		3 x 2.50		= 7.50 m

Ramby

07.12.20

J.E.

Continuation

Sch. XLV-Form No. 134 6

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
Date of measurement					
18/12/20					
2nd H.P.C. - 60mm dia.					
at CH-210m					

① Earthwork in excavation

for foundation -

$$2 \times 3.90 \times 1.15 \times 1.50 = 13.455 \text{ m}^3$$

Below H.P.C.

$$1 \text{ No} \times 5.360 \times 1.130 \times 1.10 = 6.66 \text{ m}^3$$

$$= 20.11 \text{ m}^3$$

② Providing R.C. M10

in leveling course -

$$2 \times 3.90 \times 1.150 \times 0.150 = 1.345 \text{ m}^3$$

$$1 \text{ No} \times 5.360 \times 1.130 \times 0.250 = 1.497 \text{ m}^3$$

$$2.850 \text{ m}^3$$

③ Providing M20 R.C.

in sub structure

up to 600mm G.L.

$$\text{H.W.} - 2 \times 3.75 \times (1.0 + 0.60) \times 1.30 = 7.60 \text{ m}^3$$

Remarks

08/12/20

J.F.

Date of measurement

and H.P.C.

18/12/20

① Providing & laying R.C.

N.P.2 pipes - 60mm dia.

$$3 \times 2.50 = 7.50 \text{ m}$$

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
(2) P.C.C. Main Substructure up to B.L. to R.L.					
$2 \times 3.75 \times \frac{(0.60 + 0.90)}{2} \times 1.430$					$= 5.362 \text{ m}^3$
Ret. parapet					
$2 \times 3.75 \times 0.40 \times 0.60$					$= 1.80 \text{ m}^3$
Less for pipe					
$2 \times \frac{\pi}{4} \times (0.33)^2 \times 0.530$					$= 0.574 \text{ m}^3$
					$= 6.588 \text{ m}^3$

Rough

13.12.20
J.E.

Date of measurement

14.12.20

Sd/- H.P.C. Secy
at H-210

(1) Fourth work in execution for foundation

~~2 x 3.90 x 1.15 x 1.50~~

$$2 \times 3.90 \times 1.15 \times 1.50 = 13.455 \text{ m}^3$$

$$\text{Below Pipe} - 1 \times 5.39 \times 1.10 \times 0.90 =$$

$$= 6.39 \text{ m}^3$$

$$= 19.755 \text{ m}^3$$

(2) Providing P.C.C. (1:2:5)

on leveling course in foundation

- - - - -

$$2 \times 3.90 \times 1.15 \times 0.150 = 1.34 \text{ m}^3$$

$$1 \times 5.39 \times 0.250 = 1.50 \text{ m}^3$$

$$= 2.85 \text{ m}^3$$

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
② Providing Meas in					
Substructure. - - - -					
Up to G.L.					
Final. $2 \times 3.75 \times \frac{(1.0 + 0.40)}{2} \times 1.30$					
					$= 3.285 m^3$

B

Ranvi

14-12-20

J.E

State of Maharashtra
3rd Div. 18-12-20

① Providing and laying

R.C.C pipe. N.P. 3 for

H.P. -

 $3 \text{ Nos} \times 2.50 = 7.50 \text{ m}$

② Providing Meas in

Substructure. - - - -

Up to G.L.

 $2 \times 3.75 \times \frac{(0.70 + 0.40)}{2} \times 1.40 =$
 $= 5.775 m^3$

Provided.

 $2 \times 3.75 \times 0.40 \times 0.60 = 1.80 m^3$

less for pipe -

 $2 \times \frac{\pi}{4} \times (0.380)^2 \times 0.530 = 0.74 m^3$
 $= 7.00 m^3$

Ranvi

18-12-20

J.E

Continuation

Particulars	Details of actual measurement			Contents of area
	No.	L	B	
Date of measurement 19-12-20				
4 th H.P.C. box				
at ch-520m				
① Earth work in excavation for foundation of ..				
Shallow ..				
H.W. = $2 \times 3.90 \times 1.20 \times 1.50 = 19.01 \text{ m}^3$				
Return pipe = $1 \text{ m} \times 5.30 \times 1.20 \times 0.80 = 5.088 \text{ m}^3$				
				$= 19.128 \text{ m}^3$

② Providing M.S. P.C.C.				
(1:2.5:5) @ leveling. cur.				
$2 \times 3.90 \times 1.20 \times 0.150 = 1.404 \text{ m}^3$				
$1 \text{ m} \times 5.30 \times 1.20 \times 0.150 = 1.59 \text{ m}^3$				
				$= 2.994 \text{ m}^3$

③ Providing M.S. P.C.C.				
in substructure.				
up to U.L.				
$2 \times 3.70 \times \frac{(1.0 + 0.25)}{2} \times 1.30 = 8.417 \text{ m}^3$				

Rainy
13-12-20
JTE

17-12-20
AM

~~Date of measurement~~
22-12-20

④ Providing & fitting R.C. - N.P.3, pipe ..				
.. ..				
Qty = $3 \text{ Nos} \times 2.50 = 7.50 \text{ m}$				

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
② Providing P.C.C. Mass in substructure upto R.L.					
					$2 \times 3.70 \times \frac{(0.75 + 0.40)}{2} \times 1.430 = 6.08 \text{ m}^3$
Parapet					
					$2 \times 3.70 \times 0.40 \times 0.60 = 1.776 \text{ m}^3$
less for H.P.C.					
					$2 \times \frac{\pi}{4} \times (0.830)^2 \times 0.930 = 0.574 \text{ m}^3$
					$= 7.282 \text{ m}^3$
Remarks					
23.12.20					
J.R.					

5th H.P.C. date of measurement
const. of H.P.C. becoming

② Rect-Beam

① Earth work in excavation for foundation of structure

H.W. $2 \times 3.90 \times 1.150 \times 1.50 = 13.455 \text{ m}^3$

Below pipe-

$1 \times 5.30 \times 1.130 \times 0.650 = 3.89 \text{ m}^3$

$= 2.85 \text{ m}^3$
 $= 17.34 \text{ m}^3$
 $= 5.93 \text{ m}^3$
Rm

② Providing M.S. P.C.C. (2:15:12) in leveling course.

H.W. $2 \times 3.90 \times 1.150 \times 0.150 = 1.34 \text{ m}^3$

Below pipe-
 $1 \times 5.30 \times 1.130 \times 0.250 = 1.50 \text{ m}^3$
 $= 2.39 \text{ m}^3$

Remarks
23.12.20
J.R.

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
Reli. <u>Date of measurement</u> 26/12/20 (1) Provisioning margin Sub structure - 200 - 240 - up to WL H.W.L. 3.75x $2 \times 3.75 \times \frac{(1.0 + 0.70)}{2} \times 1.30 = 8.28 \text{ m}^3$ Ramp 26/12/20 D/E					
Reli. H.W.L. <u>Date of measurement</u> 30/12/20 (1) Provisioning margin Sub structure 250 to H.L. H.W.L. $2 \times 3.75 \times \frac{(0.70 + 0.40)}{2} \times 1.420 = 5.89 \text{ m}^3$ Parapet - $2 \times 3.75 \times 0.40 \times 0.60 = 1.80 \text{ m}^3$ less for pipe - $2 \times \frac{\pi}{4} \times (0.830)^2 \times 0.530 = 0.574 \text{ m}^3$ $= 7.124 \text{ m}^3$ Ramp 30/12/20 D/E					

Date of measurement
01-01-21

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
Const. of H.P.C. - 1000mm dia					
(H=12.50m) 6+1 NO H.P.C					
① Earth work in excavation for foundation in concrete					
H.H. 2x 6.50x1.40x1.50 = 27.30m ³					
Below pipe					
1 No x 4.850x1.530x1.10 = 8.16m ³					
Total = 35.46m ³					

② Providing M15 (1:2:5) for leveling course					
H.H. 2x 6.50x1.40x0.15 = 2.73m ³					
1 No x 4.85x1.530x0.20 = 1.484m ³					
4.214m ³					

③ Providing P.C.C M20 in sub structure up to 1st L					
1 No x 6.10x(1.0+0.75)x1.30 = 6.98m ³					
2					
1 No x 6.15x(1.0+0.85)x1.30 = 7.39m ³					
2					
14.38m ³					

Ranjan
02-01-2021
D.E

Date of measurement
05-01-21

① Providing P.C.C M20 in Sub structure 1st L to R-L					
1 No x 6.10x(0.75+0.40)x1.80					
Continuation 2					
6.315m ³					

Continuation

Date of measurement

07.01.21

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
Const. of R.C.C Box					
Cut-off = $2.0 \times 2.0 \text{ m}$					
① Earth work in excavation for foundation -					
Box.					
1 No $6.10 \times 3.70 \times 0.70 = 15.79 \text{ m}^3$					
Cut-off wall.					
2 No $3.50 \times 1.30 \times 1.80 = 16.38 \text{ m}^3$					
Return wall.					
4 No $3.50 \times 3.45 \times 1.80 = 86.94 \text{ m}^3$					
					$= 119.19 \text{ m}^3$
					Sup. Limit = 111.71 m^3

② Supplying, fitting and placing H.V.D bars in cut-off wall					
10mm ϕ					
$2 \times 8 \times 2.70 = 43.20 \text{ m}$					
@ $0.62 \text{ kg/m} = 26.784 \text{ kg}$					
1 No $13 \times 3.70 = 41.60 \text{ m}$					
@ $0.62 \text{ kg/m} = 25.792 \text{ kg}$					
					52.576 kg

Ramms
07.01.21
7.0

~~07.01.21~~
07.01.21

Date of measurement
03.1.21

① P.C.C M15 for levelling					
Course - 20 - 2					
Box Culvert - $1 \times 6.0 \times 2.50 \times 0.10 = 1.50 \text{ m}^3$					
Return wall - $4 \text{ No } 3.30 \times 2.40 \times 0.20$					
					$= 6.42 \text{ m}^3$
					$= 7.92 \text{ m}^3$

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No	L	B	D	
② P.C.C-Mortar in place for foundation - 1.2 - 1.2					
Cut-off wall -					
2 No x 2.50 x 0.30 x 1.50 = 2.25 m ³					

Ramji
09-12-21
D.I.

Date of measurement
12-02-21

① Supplying, fitting and placing HYSD bar in substructure.					
Bottom slab -					

10mm ϕ main bar - 120% -

$$2 \times 51 \times 2.72 \times 0.62 = 172.0 \text{ kg.}$$

10 ϕ dist bar 200mm/c

$$2 \times 13 \times 6.22 \times 0.62 = 100.0 \text{ kg}$$

Hunch - 150mm/c - 10mm ϕ

$$2 \times 41 \text{ No x } 1.15 \times 0.62 = 58.47 \text{ kg.}$$

Clip - 10mm ϕ 150% c

$$2 \times 41 \text{ No x } 1.42 \times 0.62 = 72.20 \text{ kg}$$

Wall - outer - 12mm ϕ 120% c

$$2 \times 51 \text{ No x } 3.83 \times 0.82 = 347.69 \text{ kg}$$

Inner wall - 10 ϕ - 150% c.

$$2 \times 41 \text{ No x } 2.72 \times 0.62 = 138.23 \text{ kg}$$

Dist bar 10mm ϕ

$$2 \times 2 \times 11 \times 6.07 \times 0.62 = 165.59 \text{ kg}$$

$$= 1054.51 \text{ kg}$$

Continuation

$$= 1.054 \text{ MT}$$

$$\text{Supply unit} = 1.01 \text{ MT}$$

Ramji
12-02-21

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No	L	B	D	
Date of measurement					
① P.C.C. M20 in foundation.					
- structure -					
Return wall.					
$4 \text{ Nos} \times (2.92 + 1.35) \times 1.80 =$					
$4 \text{ Nos} \times 2.92 \times \frac{(2.92 + 1.35)}{2} \times 1.80$					
$= 31.395 \text{ m}^3$					
Range					
16-01-21					
Jr. Jr.					
Date of measurement					
26-01-21					
① P.C.C. - M20 in Sub.					
- structure -					
Return wall.					
$4 \text{ Nos} \times (1.35 + 0.40) \times 2.92 \times 1.75 =$					
$= 17.88 \text{ m}^3$					
Side wall = 16.25 m ³					
② R.C.C in Sub Structure					
M20 M25					
Bottom slab					
$1 \text{ Nos} 6.0 \times 2.50 \times 0.250 = 3.75 \text{ m}^3$					
Side wall					
$2 \text{ Nos} 6.0 \times 2.0 \times 0.250 = 6.0 \text{ m}^3$					
Fench - $4 \text{ Nos} 6.0 \times 1.0 \times 0.20 =$					
$= 4.8 \text{ m}^3$					
Total = 10.020 m ³					

Continuation

Particulars	Details of actual measurement			Contents of area
	No.	L	B	
(3) Filter media - Packing				
6 laying filter media -				
- - - - -				
Behind box -				
$2 \times 4.60 \times 0.510 \times 1.70 = 7.976 \text{ m}^3$				
Behind Return tank				
$4 \times 2.30 \times 0.400 \times 1.80 = 6.624 \text{ m}^3$				
				$= 14.60 \text{ m}^3$
(4) Back filling				
$2 \times 2.22 \times 5.20 \times 0.200 = 6.072 \text{ m}^3$				
$2 \times 2.22 \times 4.50 \times 1.70 = 44.670 \text{ m}^3$				
Deduct filter media				50.746 m^3
				$= 14.60 \text{ m}^3$
				$= 36.146 \text{ m}^3$

Supply limit $94.39.25 \text{ m}^3$

Remains
26.01.21
JL

Date of work
30.01.21

(1) Supplying, fitting, & placing Hydr. bar in Super structure.	
Slab bottom bar - 12 mm of 100%	
$51 \text{ no} \times 2.72 \times 0.89 = 123.46 \text{ kg}$	
Top bar 10 mm of 140%	
$43 \text{ no} \times 2.72 \times 0.62 = 72.52 \text{ kg}$	
1st. bar 10 mm of 90%	
$2 \times 13 \text{ no} \times 6.22 \times 0.62 = 100.27 \text{ kg}$	
(Continuation) Total $= 296.25 \text{ kg}$	

Sch. XLV-Form No. 134 18

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
					$1\frac{1}{2} = 98 = 296.25 \text{ kg}$
Hammer - 10 of 15 = 11.52					
$2 \times 41 \text{ No} \times 1.15 \times 0.62 = 58.17 \text{ kg}$					
Clip Hammer - 10 of -					
$2 \times 41 \text{ No} \times 1.42 \times 0.62 = 70.20 \text{ kg}$					
					Total/line: 426.22 kg
					= 0.426 MT.
Qty Sydnhit = 0.390 MT.					

Ramji

30-01-21
J E

~~30-01-21~~

Date of measurement
20-02-2021

① Providing & laying -
R.C.C concrete in
Slip structure -
500 mm

Box Culvert -
Top slab -
 $1 \text{ No} \times 6.10 \times 2.50 \times 0.250 = 3.81 \text{ m}^3$
Kerb $1 \text{ No} \times 9.05 \times 0.40 \times 0.60$

② Parapet - consist of
parapet - 20 - mm

L/S $1 \text{ No} \times 9.05 \times 0.40 \times 0.60 = 2.16 \text{ m}^3$
R/S $1 \text{ No} \times 9.05 \times 6.40 \times 0.60 = 217.2 \text{ m}^3$
= 4.38 m³

Qty = 4.0 m³

Continuation

Sch. XLV-Form No. 134¹⁹

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
③ Providing weepholes. in drains - 10 - nos. Qty = 30.0 nos.					
④ Drainage Spout Complete as per spec. Qty = 4.0 nos.					
Summary 20.02.20 D.L. Total 22.02.20 Const. of H.P.C. - 600 m. at rate 1.60 km.					
① Earth work in excavation for foundation - 20 - m ³ H.P.C. 2.00 x 3.90 x 1.15 x 1.50 = 13.45 m ³ Below H.P.C. 1.00 x 5.35 x 1.13 x 1.0 = 6.04 m ³ Total = 19.49 m ³					
② Providing M.S.P.C.C. as leveling course - up to 100 mm 2 x 3.90 x (1.0 + 0.45) x 1.30 1.00 x 3.30 x 1.15 x 0.250 = 2 x 3.90 x 1.15 x 0.150 = 1.345 m ³ 1.00 x 5.35 x 1.13 x 0.250 = 1.50 m ³ Continuation 2.94 m					

Continuation

Sch. XLV-Form No. 154					Contents of area
Particulars	Details of actual measurement				
	No.	L	B	D	
Date of measurement					
28-02-21					
① Box cutting - Evaluation					
for Roadway - in.					
Soil: - Do - in.					
CH - 650m to 985m.					
$2 \times 11.10 \times 30.0 \times 0.375 \times 0.100 = 2495$					
$2 \times 11.10 \times 5.0 \times 0.375 \times 0.100 = 0.375$					
					$= 25.125 m^3$
② Construction of Embankment					
ment 60% of embankment					
Qty = $25.125 \times 60\% = 15.075 m^3$					
③ Const. of Subgrade					
8 Earthen shoulder					
CH - 0m to 650m.					
$20.10 \times 90.0 \times (7.50 + 7.0) \times 0.300$					
					$= 1305.0 m^3$
$1.10 \times 30.0 \times (7.10 + 6.80) \times 0.300$					
					$= 62.55 m^3$
$1.10 \times 20.0 \times (7.0 + 6.80) \times 0.300$					
					$= 41.40 m^3$
CH - 985m to 1850m					
$8.10 \times 30.0 \times (7.50 + 7.0) \times 0.300$					
					$= 522.0 m^3$
$1.10 \times 25.0 \times (7.40 + 7.10) \times 0.300$					
					$= 54.375 m^3$
$10.10 \times 30.0 \times (7.60 + 6.90) \times 0.300$					
					$= 652.50 m^3$
$10.10 \times 30.0 \times (7.50 + 7.0) \times 0.300$					
					$= 652.50 m^3$

Qty
28-02-21
J.R. Taha

Continuation

3290.325 m³

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
Date of measurement					
15-03-21					
(1) (9.5.20 - 10.5.20) of					
L.S.B with w.L					
grade of materials					
Ch - 6.50 m to 6.50 m					
$1 \text{ No} \times 30.0 \times \frac{(6.10 + 4.05) \times 0.20}{2} = 13.15 \text{ m}^3$					
$2 \text{ No} \times 30.0 \times 4.05 \times 0.20 = 4.86 \text{ m}^3$					
$1 \text{ No} \times 7.0 \times 4.05 \times 0.20 = 5.67 \text{ m}^3$					
$1 \text{ No} \times 30.0 \times 4.05 \times 0.20 = 24.30 \text{ m}^3$					
Ch - 9.85 m to 14.50 m					
$15 \text{ No} \times 30.0 \times 4.05 \times \frac{(0.20 + 0.20) \times 0.20}{2} = 36.45 \text{ m}^3$					
$1 \text{ No} \times 15.0 \times \frac{(4.05 + 6.10) \times 0.20}{2} = 15.075 \text{ m}^3$					
14.80 m to 18.50 m					
$1 \text{ No} \times 20.0 \times \frac{(6.0 + 6.20 + 4.05) \times 0.20}{2} = 21.55 \text{ m}^3$					
$2 \text{ No} \times 30.0 \times 4.05 \times 0.20 = 4.86 \text{ m}^3$					
$1 \text{ No} \times 4 \times 30.0 \times 4.05 \times 0.20 = 9.72 \text{ m}^3$					
$1 \text{ No} \times 14.0 \times \frac{(4.05 + 5.80 + 4.05) \times 0.20}{3} = 12.97 \text{ m}^3$					
$5 \text{ No} \times 30.0 \times 4.05 \times 0.20 = 12.15 \text{ m}^3$					
$1 \text{ No} \times 6.0 \times 4.05 \times 0.20 = 4.86 \text{ m}^3$					
Ch - 6.50 m to 9.85 m					
$2 \times 1 \text{ No} \times 30.0 \times 0.375 \times 0.10 = 12.375 \text{ m}^3$					
$2 \times 1 \text{ No} \times 50 \times 0.375 \times 0.10 = 0.375 \text{ m}^3$					
Extra for Profile corner					
$1 \text{ No} \times 4.10 \times 1.50 \times 0.150 = 0.9225 \text{ m}^3$					
Continuation					
Total = 124.47 m ³					

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
					$B.F = 1204.77 m^3$
3 No. X	2.10 X	1.20 X	0.075		$= 0.567 m^3$
4 No. X	1.15 X	0.90 X	0.150		$= 0.621 m^3$
5 No. X	4.10 X	2.10 X	0.250		$= 10.762 m^3$
3 No. X	5.15 X	2.15 X	0.200		$= 6.57 m^3$
4 No. X	7.10 X	1.20 X	0.200		$= 10.792 m^3$
3 No. X	4.80 X	2.10 X	0.100		$= 3.024 m^3$
6 No. X	6.25 X	1.85 X	0.125		$= 8.67 m^3$
3 No. X	2.10 X	1.20 X	0.150		$= 1.135 m^3$
7 No. X	3.80 X	1.90 X	0.150		$= 5.98 m^3$
4 No. X	5.10 X	2.15 X	0.150		$= 10.44 m^3$
2 No. X	5.70 X	1.95 X	0.200		$= 4.446 m^3$
Total					$= 1267.776 m^3$

Ravish

15.03.21

JF

15/3/21
ABD

State of measurement

① WBM br. 3. - Formulating
laying, spreading and comp.
- Chg. - 00.00 to 100 m.

CH - 0.00 to 650 m.

1 No. X 15.0 X (6.10 + 3.75) X 0.075 = 4.180 m³

20 No. X 30.0 X 3.75 X 0.075 = 168.75 m³

1 No. X 7.0 X 3.25 X 0.075 = 1.968 m³

1 No. X 30.0 X 3.75 X 0.075 = 8.437 m³

CH - 285 to 1450 m

15 No. X 30.0 X 3.75 X 0.075 = 126.56 m³

1 No. X 15.0 X (3.75 + 6.0) X 0.075

Continuation 2

= 5.48 m³

Co. (ft) = 315.925 m³

24

24

Continuation

Date of measurement

25-04-25

Sch. XLV-Form No. 134

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

① Construction of

Subgrade & Earthwork

Shoulder - - - - -

Adjacent to L.S.B in (B.P. section)

Chl - 0.00 to 650 m

Range

$$2 \times 20 \text{ No} \times 30.0 \times (1.5 + 1.2) \times 0.200$$

$$2 = 1.86 \text{ m}^3$$

$$2 \times 1 \text{ No} \times 30.0 \times (1.5 + 1.2) \times 0.200$$

$$2 = 1.56 \text{ m}^3$$

Range

$$2 \times 1 \text{ No} \times 20.0 \times (1.5 + 1.2) \times 0.200$$

$$2 = 1.04 \text{ m}^3$$

Chl - 985 m to 1850 m.

$$2 \times 3 \text{ No} \times 30.0 \times (1.5 + 1.2) \times 0.200$$

$$2 = 1.29 \text{ m}^3$$

$$2 \times 1 \text{ No} \times 25.0 \times (1.5 + 1.2) \times 0.200$$

$$2 = 1.35 \text{ m}^3$$

$$2 \times 10 \text{ No} \times 30.0 \times (1.5 + 1.2) \times 0.200$$

$$2 = 162.0 \text{ m}^3$$

$$2 \times 10 \text{ No} \times 20.0 \times (1.6 + 1.2) \times 0.200$$

$$2 = 168 \text{ m}^3$$

Range

Adjacent to W.B.M.B.

Chl - 0.00 to 650 m

$$2 \times 20 \text{ No} \times 30.0 \times (1.20 + 1.0) \times 0.075$$

$$2 = 99.0 \text{ m}^3$$

$$2 \times 1 \text{ No} \times 30.0 \times (1.10 + 1.0) \times 0.075$$

$$2 = 4.725 \text{ m}^3$$

$$2 \times 1 \text{ No} \times 20.0 \times (1.10 + 1.0) \times 0.075$$

$$2 = 3.15 \text{ m}^3$$

Chl - 985 m to 1850 m.

$$2 \times 8 \text{ No} \times 30.0 \times (1.2 + 1.0) \times 0.025$$

$$2 = 39.60 \text{ m}^3$$

$$2 \times 1 \text{ No} \times 25.0 \times (1.20 + 1.0) \times 0.075$$

$$2 = 4.125 \text{ m}^3$$

$$\text{Total} = 973.10 \text{ m}^3$$

$$BF = \frac{973.10}{1352.10 \text{ m}^3}$$

Sch. XLV-Form No. 134 ²⁶

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
$2 \times 10 \text{ m} \times 30.0 \times \frac{(1.20 + 1.10)}{2} \times 0.75$					$= 49.50 \text{ m}^3$
$2 \times 10 \text{ m} \times 30.0 \times \frac{(1.20 + 1.10)}{2} \times 0.75$					$= 49.50 \text{ m}^3$
Total =					145.10 m^3
Total Qty =					1072.10 m^3

Round
25.04.21
J.B.

Date of measurement
13.06.21

1st

Construction of Embankment

- made with materials

obtained from borrow

As a graph

Ch-	C/S Area	Avg Area	L	Volume
0+00	4.304	—	00	—
50+0	4.120	4.212	50	210.60 m ³
100+0	4.130	4.125	50	206.25 m ³
150+0	4.510	4.320	50	216.00 m ³
200+0	4.612	4.561	50	228.05 m ³
250+0	4.110	4.361	50	218.05 m ³
300+0	4.225	4.167	50	208.375 m ³
350+0	4.325	4.275	50	213.75 m ³
400+0	4.730	4.527	50	226.375 m ³
450+0	4.281	4.505	50	225.275 m ³
500+0	4.110	4.393	50	219.65 m ³
550+0	4.800	4.455	50	222.75 m ³

Continuation

2395.12 m³

$$BF = \phi 74 = 2395.1 \text{ m}^3$$

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Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
Ch/r	G/S	AVR	L		Volume
	Area	Area			
6m.0	4.120	4.46	50		223.0m ³
650.0	4.119	4.117	50		205.87m ³
7m.0	4.122	4.143	50		207.175m ³
750.0	2.152	3.162	50		158.10m ³
800.0	1.795	1.923	50		98.675m ³
850.0	1.890	1.842	50		92.125m ³
900.0	2.650	2.27	50		113.50m ³
950.0	2.980	2.815	50		140.75m ³
1000.0	4.895	3.937	50		196.875m ³
1050.0	4.312	4.60	50		230.175m ³
1100.0	5.110	4.711	50		235.55m ³
1150.0	5.625	5.367	50		268.32m ³
1200.0	4.310	4.967	50		248.375m ³
1250.0	4.215	4.262	50		213.125m ³

1300	4.198	4.206	50		210.325m ³
1350.0	4.625	4.411	50		220.575m ³
1400.0	4.785	4.68	50		234.0m ³
1450.0	4.308	4.591	50		226.075m ³
1500.0	4.925	4.616	50		230.82m ³
1550.0	4.315	4.62	50		232.0m ³
1600.0	4.100	4.20	50		210.575m ³
1650.0	3.925	4.01	50		200.62m ³
1700.0	3.675	3.80	50		190.0m ³
1750.0	3.415	3.545	50		177.25m ³
1800.0	4.185	3.80	50		190.0m ³
1850.00	3.885	4.035	50		201.75m ³

$$\text{Total } \phi 74 = 7963.378$$

up to 1850m³

Subtraction of

$$\text{① Subgrade} = 4362.425 \text{ m}^3$$

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
(2) $10.5 \times 8 =$					1267.776 m ³
(3) $4.8 \times 10 \times 3 =$					518.177 m ³
(4) $10 \times 10 \times 15 =$					15.075 m ³
Net Qty =					1799.925 m ³
(5) Embankment for (1000 m lead)					Qty = 933.10 m ³
(6) Embankment for (1000 m lead)					Qty = 366.825 m ³
Rammed					15/7/21
13.000					15/7/21
J.E.					AR

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
<u>ABSTRACT of cost.</u>					
(1) Setting out pillars.					
Benchmark pillar —					
Qty wide T.M.B.P. = 2.0					
@ Rs = 3831.25/Each = Rs.					7662.50
(2) Reference pillar.					
Qty wide T.M.B.P. = 2.0					
@ Rs = 1793.34/Each = Rs.					12133.20
(3) Box cutting - Excavation of Road way in Soil					
Qty wide T.M.B.P. = 2.0					
(4) Box cutting - Excavation of Road way in Soil					
Qty wide T.M.B.P. = 2.0					
(5) Cleaning & mulching Road land - 200 m					
Qty wide T.M.B.P. = 1.2415 Hec.					
@ Rs = 51133.76/Hec = Rs.					63866.50
(6) Box cutting - Excavation of Road way in Soil					
Qty wide T.M.B.P. = 2.0					
@ Rs = 74.16/m ³ = Rs.					1863.00
(7) Cost of Embankment 60% of Box cutting					
Qty wide T.M.B.P. = 2.0					
@ Rs = 26.11/m ³ = Rs.					394.00
Total					85915.50

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
					$0.6 = 28 = 85918 = 00$
(6) Construction of Embankment with materials for 1000m length					
Qty wide + msp-28 =					$282.10 m^3$
@ PS =					$124.24 / m^3 \text{ PS} = 163,236 = 00$
(7) Const. of Embankment with material obtained from borrow pit for 1000m length					
Qty wide + msp-28 =					$866.825 m^3$
@ PS =					$181.03 / m^3 \text{ PS} = 113,580 = 00$
(8) W.S. & G. with well graded materials					
Qty wide + msp-23 =					$1267.226 m^3$
@ PS =					$2226.93 / m^3 \text{ PS} = 2950.026 = 00$
(9) Const. of Subgrade and Earthen Shoulder					
Qty wide + msp-23 =					$3290.525 m^3$
Qty wide + msp-24 =					$1072.10 m^3$
					$= 4362.48 m^3$
@ PS =					$176.58 / m^3 \text{ PS} = 770,317 = 00$
(10) LBM for 3, providing laying & spreading					
Qty wide + msp-24 =					$518.17 m^3$
@ PS =					$3487.32 / m^3 \text{ PS} = 1807,049 = 00$
					$(\text{C.P.}) = 58,901.26 = 00$

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
					$8\text{ ft} \times 25 = 58,90,126 \text{ sq}$
(11) Provisioning & fixing Slope of Proxm. t.					
Qty wide Tms P-2 = 2.0					
@ RS = 9199.90 / Each = RS = 18,399.80					
(12) Dismantling of existing Structure like R.C.C.					
Qty wide Tms P-3 = 3.69 m ³					
Qty wide Tms P-3 = 1.184 m ³ R.C.C.					
Qty wide Tms P-3 =					
Qty wide Tms P-4 = 5.70 m ³					
@ RS = 484.74 / m ³ = RS = 2763.20					
(13) Dismantling of existing Structure Brickwork.					
Qty wide Tms P-4 = 68.78 m ³					
@ RS = 231.27 / m ³ = RS = 15924.00					
(14) Dismantling of existing Structure like R.C.C.					
Qty wide Tms P-4 = 3.36 m ³					
@ RS = 1098.44 / m ³ = RS = 3674.00					
(15) Dismantling of existing Structure like H.P.					
Qty wide Tms P-4 = 22.50 m					
@ RS = 236.34 / m = RS = 5318.00					
(16) Construction of Humble Earth work in excavation for foundation					

Continuation

↓
P.T.O. (0. RS) = 59,36,204.00

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
					Bf = 23 = 59,362.042 m
(16) Earth work in excavation for foundation					
Qty white tms P-4					20.04 m ³
Qty white tms P-6					20.11 m ³
Qty white tms P-7					19.795 m ³
Qty white tms P-8					19.128 m ³
Qty white tms P-10					17.34 m ³
Qty white tms P-12					35.462 m ³
Qty white tms P-19					19.495 m ³
					Total = 151.39 m ³
					So limit qty = 123.76 m ³

$$@ P8 = 269.32 / m^3 = P8 = 33,331 = m$$

(17) P.C.G.M. 15 in Road leveling course

Qty white tms P-4	2.306 m ³
Qty white tms P-6	2.850 m ³
Qty white tms P-7	2.850 m ³
Qty white tms P-9	2.994 m ³
Qty white tms P-10	2.395 m ³
Qty white tms P-12	4.214 m ³
Qty white tms P-19	2.945 m ³
	20.554 m ³

$$@ P8 = 4605.66 / m^3 = P8 = 94,665 = m$$

$$So P8 = 60,64,200 = m$$

Continuation

P.7.10

BF-PS-60,64,200200

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Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
(18) P.C.S. M20 in Sub.					
Structure -					
Qty wire mesh P-5 =					7.45 m ³
Qty wire mesh P-6 =					6.854 m ³
Qty wire mesh P-7 =					7.80 m ³
Qty wire mesh P-8 =					6.588 m ³
Qty wire mesh P-9 =					3.28 m ³
Qty wire mesh P-10 =					7.00 m ³
Qty wire mesh P-11 =					8.414 m ³
Qty wire mesh P-12 =					10.7.282 m ³
Qty wire mesh P-13 =					7.124 m ³
Qty wire mesh P-14 =					8.28 m ³
Qty wire mesh P-15 =					14.38 m ³
Qty wire mesh P-16 =					13.696 m ³
Qty wire mesh P-20 =					8.531 m ³
Qty wire mesh P-21 =					7.392 m ³
Total =					125.029 m ³
Qty wire mesh =					124.76 m ³
(2) PS = 5383.45 / m ³ PS =					6.71,639200
(19) Provisioning & Laying Area					
N.P.S. Pipe - 60 mm dia					
Qty wire mesh P-5 =					7.50 m
Qty wire mesh P-7 =					7.50 m
Qty wire mesh P-8 =					7.50 m
Qty wire mesh P-10 =					7.50 m
Qty wire mesh P-11 =					7.50 m
Qty wire mesh P-20 =					7.50 m
					= 45.0 m
PS 958.38 / m = PS =					43127200
(2) PS =					67,78,966200

Continuation

$$Bf = RS = 67,78,966 = 00$$

Sch. XLV-Form No. 134

34

Particulars	Details of actual measurement				Contents of area
	No.	L	B	D	
20) Providing & laying R.C.C. 1/1.3 pipe - 1000mm dia Qty with T.M.P. = 7.50m @ RS = 3603.52/m = RS = 27,064 = 00					
21) Earth work in excavation - 1m in foundation up to 3.0 depth Qty with T.M.P. = 141 = 111.71m ³ @ RS = 269.32/m ³ = RS = 30,086 = 00					
22) Providing P.C.C. M10 (1:2:5) for leveling course Qty with T.M.P. = 141 = 7.92m ³ @ RS = 4605.66/m ³ = RS = 36,477 = 00					
23) Providing P.C.C. M10 in open foundation Qty with T.M.P. = 15 = 2.25m ³ Qty with T.M.P. = 16 = 31.395m ³ = 33.645m ³ @ RS = 5193.36/m ³ = RS = 17,3458 = 00					
24) Supplying & fitting & placing H.P.S.D. bar Qty with T.M.P. = 14 = 0.6525MT @ RS = 99645.89 = RS = 2379 = 00					

Continuation

$$RS = 70,48,425 = 00$$

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

$$B \times H \times S = 7048.425 \text{ cum}$$

(25) R.C.C. Marginal
of concrete in Substructure

— — — — —

$$\text{Qty. wire. Tms } P-16 = 10.02 \text{ m}$$

$$@ RS = 5973.44/\text{m}^2 \text{ RS} = 598542 \text{ cum}$$

(26) R.C.C. Marginal
in substructure.

in Return wall.

$$\text{Qty. wire. Tms } P-16 = 16.25 \text{ m}$$

$$@ RS = 5973.45/\text{m}^2 \text{ RS} = 374812 \text{ cum}$$

(27) Providing weepholes
in structure.

$$\text{Qty. wire. Tms } P-16 = 30.0$$

$$@ RS = 108.85/\text{Each} \text{ RS} = 3265 \text{ cum}$$

(28) Supplying, fitting,
& placing Hys D bar

in substructure.

$$\text{Qty. wire. Tms } P-15 = 100 \text{ MT}$$

$$@ RS = 45786.89/\text{MT} \text{ RS} = 46245 \text{ cum}$$

(29) Backfilling behind

Abutment, wing. Wall

— — — — —

$$\text{Qty. wire. Tms } P-17$$

$$= 34.28 \text{ m}$$

$$@ RS = 702.46/\text{m}^2 \text{ RS} = 24087 \text{ cum}$$

Continuation

$$(S + RS) = 7269357 \text{ cum}$$

Rahmso

Q. 8. 7-21

$$J_k$$

288

~~2/2/78~~

~~2017/2~~

Continuation