

M/s Raja Const

MMUSY (Cen)

Schedule XLV Form No. 134

MMUSY (Cen) Alipur Road DIVISION

in Bakhatyarpur Block SUB-DIVISION

M.B. NO - 7/89

MEASUREMENT BOOK

श्री ३१ जून १९८९, ३१९८ १०० वरिष्ठ



1st on R/c bill.

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 measurements relating to each work.)

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Name of road :- Construction of road from P.C. road Bina to Rajpur road.					
Agency - M/S Rgs Construction.					
Agreement No - 13557/2015-16					
Date of measurement - 11-11-17.					
Setting out pillars					
6. w/m					
2. Clearing and grubbing road land					
$1152 \times 6.5 = 7488.00 \text{ m}^2$					
or 6.74 88 Hec for					
3. Removing all types of Hume pipe					
$37 \times 2.5 = 715 \text{ m}$					
4. Construction of subdrainage with approved material					
obtained from Jorner					
for bed level 100 cm section measurement					
$10 \times 30 \times 5.5 \times 0.75 = 1237.50 \text{ m}^3$					
$10 \times 30 \times 5.5 \times 0.70 = 1155.00 \text{ m}^3$					

Continuation 2392.50 m³

Sch XIV Form No. 134

Sch. XIV Form No. 134					Contents of area
Particulars	Details of actual measurement				
	No.	L.	B.	D.	
47.00 M & Road will					
Name of work	Construction & fire was maintenance of Road from R.C.C. Road Bridge to Abut Road in Bak. - Katiyopur Block under Patna district for the years 2014-15.				
Agency	M/s Raja Construction, Prop- Sri Chandrasekhar Ajit, Masurany, Patna City Post- Bagaimari, Dist- Patna.				

Agreement No- 13/SBD/2015-2016
 Accepted Rate - 4.21 % Below.
 Date of Commence - 11-4-2015
 Date of Completion - 28/0/2020.

Work done
 Item ① Construction of sub-
 - grade & parking
 Shoulder & do- etc

For the portion
 $4 \times 30.00 \times 4.75 \times 0.30 = 171.00 \text{ m}^3$
 $1 \times 15.00 \times 4.75 \times 0.30 = 21.38 \text{ m}^3$
 Adjacent 2 $4 \times 30.00 \times 0.75 \times 0.175 = 31.50 \text{ m}^3$
 Continuation 40223.88 m



Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
					BF = 220.88 m
Item (1) Cont of (subgrade)					
	2	15.00	0.75	0.175	3.94 "
Adjacent to road					
	2	10	30.00	0.75	0.15 = 67.50 "
	2	10	30.00	0.75	0.15 = 67.50 "
					362.82 m
Item (2) Construction of L.S.B.					
by Prov. Wall grade					
material 1/2 D. etc.					
	1	16.00	2.80	3.75 + 420	57.33 m
	1	14.00	2.55		35.70 "
	1	30.00	3.00		90.00 "
	1	30.00	3.40		102.00 "
	1	22.00	3.55		78.10 "
	1	28.00	3.70		103.60 "
	1	18.00	3.40		61.20 "
	1	30.00	4.10		123.00 "
	1	30.00	3.80		114.00 "
	1	10.00	4.80		48.00 "
	1	20.00	3.75		75.00 "
	1	32.00	3.75		120.00 "
	1	10.00	4.50		45.00 "
	1	24.00	3.75		90.00 "
Continuation					401142.93 m

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
					BF = 1142.93 m ²
Item (2) Contd (43.13)					
1 x 7.00 x 4.50 =					31.50 "
1 x 23.00 x 3.75 =					86.25 "
1 x 33.00 x 3.80 =					125.40 "
1 x 37.00 x 3.80 =					140.60 "
1 x 9.00 x 5.60 =					50.40 "
1 x 6.00 x 2.85 =					17.10 "
1 x 25.00 x 2.95 =					73.75 "
1 x 20.00 x 3.10 =					62.00 "
1 x 32.00 x 3.00 =					96.00 "
1 x 21.00 x 4.40 =					92.40 "
					1912.33 m ²
					(A)
Qty = 1912.33 m ² x 0.15 =					286.85 m ³
Item (3) Construction of non-reinforced Plain Cement concrete pan					
- cement thickness as per design etc					
As per item (2) 95 m ²					
Area (3) (A) = 1912.33 m ²					
Qty = 1912.33 m ² x 0.190 =					363.34 m ³

Continuation

Particulars	Details of actual measurement				Contents of area
	No	L.	B	D.	
Item (4) R.C.C.M-15 grade km. Stone - etc.					
(i) km Stone —	02				nos.
(ii) 200 M Stone —	04				nos.
Item (5) P/F of Semi reflective Can Honary mandatory & Informatory sign --- do --- etc.					
(ii) 600 mm eq. & triangle —	01				nos.
(iv) 800 x 600 mm rectangular —	01				nos.
(vii) 900 mm side octagon —	02				nos.
Item (6) Prop. & Erecting sign - Time Place Identifi- - catron Semi reflective sign --- do --- etc.					
					Qty = 1.00 m ²
Item (7) Prop. & Erecting & Typi- - cal mm by title in- - formation board with " Logo " --- do --- etc.					
					Qty = 01 nos.

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Item (12) Prov. Baffle masonry work with c.m (1:3) in sub structure etc.					
M.W. $1 \times 2 \times 4 \times 1.25 + 0.4 \times 2.78^2$					18.348 m ²
For sept. $1 \times 2 \times 4 \times 0.4 \times 0.60^2$					1.92 "
Loss for pipe					
$1 \times 2 \times 0.7857 + (0.83)^2 \times 0.570 = 6$					0.574 "
					19.694 m ²

Item (13) Prov. & Laying Rec Home pipe 150 mm dia - do - E.P.					
$1 \times 3 \times 2.50$					7.50 m

Item (14) Back filling in foundation etc.					
$1 \times 2 \times 4.00 \times 1.40 \times 1.50 = 16.80$					m ³
Loss for stone etc.					
$2.39 \text{ m}^3 + (1 \times 2 \times 4.00 \times 1.25 + 0.80^2 \times 1.43) = 6$					14.116 m ³
					2.684 m ³

Item (15) Plastering with c.m (1:4).					
$2 \times 4.0 \times 3.38 = 27.04$					m ²
$2 \times 4.0 \times 0.60 = 4.80$					"
$2 \times 4.0 \times 0.40 = 3.20$					"
$2 \times 0.7 \times 2.78 = 3.88$					"
$4 \times 0.4 \times 0.60 = 0.96$					"
Loss $2 \times 0.7857 + (0.83)^2 = 6$					1.08 "
					42.38 m ²

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Item (16)	Construction of embankment with approved material obtained from borrow pits - do - do - do - etc.				
	E/W Calculation as per chart is given below -				
Sl. No	CH	Area	Mean Area	Distance	Volume
	(M)	(M ²)	(M ²)	(M)	(M ³)
1	0	5.512	-	-	-
2	50	5.546	5.529	50	276.450 m ³
3	100	7.997	6.772	50	338.575 "
4	150	8.021	8.009	50	400.450 "
5	200	7.981	8.001	50	400.050 "
6	250	8.021	8.001	50	400.050 "
7	300	7.990	7.971	50	398.525 "
8	350	8.149	8.035	50	401.725 "
9	400	7.783	7.966	50	398.300 "
10	450	8.097	7.940	50	397.800 "
11	500	8.017	8.057	50	402.850 "
12	550	7.837	7.927	50	396.350 "
13	600	7.882	7.860	50	392.975 "
14	650	7.531	7.707	50	385.325 "
15	700	5.577	6.554	50	327.200 "
16	750	5.946	5.762	50	288.075 "

Continuation

Particulars	Details of actual measurement				Contents of area
	No	L	B	D	
Station 15 (16) (17) (18) (19) (20) (21) (22) (23) (24)	S/N	CH	Area	Area	Volume
	(m)	(m ²)	(m ²)	(m)	(m ³)
17	300	5.686	5.776	50	200.000
18	850	5.675	5.641	50	282.005
19	940	5.672	5.674	50	283.656
20	950	5.581	5.627	50	281.375
21	1000	5.909	5.745	50	287.250
22	1050	6.037	5.973	50	298.650
23	1100	6.532	5.786	50	289.250
24	1125	5.397	5.465	25	136.613
Total & Total = 7751.96 m ³					

E/W & L with Crust (3 ay) = 7751.96 m³

Less for Crust:

Subgrade (-) 2138.570

C/S B (-) 697.662

W/B m/s I (-) 164.587

W/B m/s II (-) 164.587

P.C.C. (-) 363.340

Net & W/B = 4221.22 m³

Lead up to 100 m 60% = 2538.73 m³

Lead up to 100 m 40% = 1692.487 m³

28/01/23

Continuation

J.E.

28/01/23
CE

PTV



Particulars	Unit	Rate	Amount
1. 1000000			
2. 1000000			
3. 1000000			
4. 1000000			
5. 1000000			
6. 1000000			
7. 1000000			
8. 1000000			
9. 1000000			
10. 1000000			

28/01/23
J.E.

28/01/23
A.E.

1. 1000000	10%
2. 1000000	10%
3. 1000000	10%
4. 1000000	10%
5. 1000000	10%
6. 1000000	10%
7. 1000000	10%
8. 1000000	10%
9. 1000000	10%
10. 1000000	10%

28/01/23
J.E.

28/01/23
A.E.

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
				BFL 7, 64, 883 = 00	
(6) Construction of sub-grade & written show - do - do - do etc					
1767.75 m ³ vide TMB P - (24)					
362.82 m ³ vide TMB P - (30)					
2130.57 m ³ @ 161 = 92 / m ³ - Rs 3,44,982 = 00					
(7) Construction of sub-grade by Popv. Will graded material - do - do etc					
410.812 m ³ vide TMB Page (3)					
286.85 m ³ vide TMB Page (31)					
697.662 m ³ @ 2217.83 / m ³ - Rs 1,54,729 = 00					
(8) Popv. laying, spreading & compacting stone aggregate & specific binder to WBM grade - do etc					
164.587 m ³ vide TMB P (24)					
@ 3848 = 77 / m ³ - Rs 6,33,457 = 00					
(9) Popv. laying, spreading & compacting stone aggregate & specific binder to WBM grade - do etc					
164.587 m ³ vide TMB Page (25)					
@ 3744 = 58 / m ³ - Rs 6,16,309 = 00					
				4 @ 39,060.47 = 00	

Continuation

Sl. No.	Topic	Answer
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Q.1. Define the term 'Ecosystem'.

A. An ecosystem is a community of living organisms (plants, animals, and microorganisms) interacting with their physical environment (air, water, and soil) as a functional unit.

Q.2. What is the difference between a community and an ecosystem?

A. A community consists of different populations of organisms living together in a particular area. An ecosystem, on the other hand, includes the community along with the physical environment and the interactions between them.

Q.3. Explain the flow of energy in an ecosystem.

A. Energy flows from the sun to producers (plants) through photosynthesis. It then moves to consumers (animals) through feeding. Energy is lost at each stage as heat and is not recycled.

Q.4. What is a food chain? Give an example.

A. A food chain is a linear sequence of organisms through which nutrients and energy pass. Example: Grass → Grasshopper → Frog → Snake.

Q.5. Define 'Biodiversity'.

A. Biodiversity refers to the variety of life forms, including different species, genetic variations within a species, and the variety of ecosystems.

Q.6. Why is biodiversity important?

A. Biodiversity is important for maintaining the stability and resilience of ecosystems, providing ecosystem services, and supporting human well-being.

[illegible]

Continuation

Continuation

Particulars	Details of area in measurement				Contents of area
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Continuation

etc



	15.00 M. wide TMBP - (27)	
	7.50 M. wide TMBP - (34)	
	22.50 M. ely 1389 = 12/m - Rs 3,195.00	
(27)	Plastering with 1.0 M	
	(1.17) - do - etc	
	48.94 m ² wide TMBP - (27)	
	42.38 m ² wide TMBP - (34)	
	90.62 m ² limit to 48.94 m ²	

	el 148 = 93/m ² - Rs 7186.00	
(28)	Back filling in foundation - do - etc	
	5.97 m ³ wide TMBP - (27)	
	2.684 m ³ wide TMBP - (34)	
	8.654 m ³ el 448 = 15/m ³ - Rs 3878.00	
		Rs 77,584.00

	Less 4.21% below	
	as per agreement (→) Rs 3,266.92.00	
		Rs 74,31,839.00

Deduct Previous payment
 vide TMB Page (23) (→) Rs 43,27,874.00
 work has been completed, 31,03,965.00
 as per spec & direc. of E/T

J.E.
 28/01/23

Continuation

Subhakar
 28/01/23
 Sd/-

