

Certified that this M.B Contains
100 (One hundred) Nos of Machine
Pages & Issued to Sri.. Shi.V. Shankar
Ram.....A.E, R.W.D, work
Sub Division... Naubatpur.....

27.4.20
Executive Engineer
Rural Works Department
Works Division, Paliganj
27/04/20

इस मापि पुरत को कमीन
अभिपता श्रीमति दीपा कुमारी
नाम से निर्गत किया जाता है।

S.S. Ram

सहायक विभागाध्यक्ष
ग्रामीण कार्य विभाग
कार्य अवर प्रमंडल, नौबतपुर

Sch, XLV-Form No. 134

Paliganj DIVISION

Naubatpur SUB-DIVISION

Measurement Book

No. 583

Name of Officer Sri Shiv Shankar Ram

Date of first entry _____

Date of last entry _____

IS+ on A/c Bill

Name of Work Constⁿ & five year maintenance
 of House of Sanjay Saw to NH 98.
 Situation of work -
 Agency by which work is executed - Global Solutions.
 Date of measurement -
 No. and date of agreement - 41/SBD/MMGSS/NDB/2018-19
 07/03/2019
 (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.	
① E/W in excavation of foundation trenches -					
H/W - $2 \times 4.15 \times 0.40 \times 1.47 =$					$17.08 m^3$
U/Pipe - $1 \times 5.78 \times 1.07 \times 0.25 =$					$1.55 m^3$
					$18.63 m^3$

②

Name of Work - Constⁿ & five year maintenance of Road from house of Sanjay Saw to NH 98
under necessity (NDB) B.R.C.S.

Agency - Global Solutions
At - New Bigrapur
In front of Bus stand, Patna.

Agreement No. - 41/SBD/MMGSS/NDB/
2018-19.

Date of Commencement - 07/03/2019.

Date of Completion - 06-03-2020

① E/W in excavation of foundation trenches -					
H/W - $2 \times 4.15 \times 0.40 \times 1.47 =$					$17.08 m^3$
U/Pipe - $1 \times 5.78 \times 1.07 \times 0.25 =$					$1.55 m^3$
					$18.63 m^3$

② Laying (First class) bedding in well compacted of Ac 115 below house pipe.

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1x5.78x1.07x0.55					3.40m ³
less for pipe - 1x5.78x0.22					(0.27m ³)
					2.13m ³

(3) Providing concrete in open foundation of PCC M15

2x3.85x1.40x0.15 — 1.62m³

(4) Head wall in Brick masonry (1:4)

Head wall - 2x3.85x0.825x2.00 = 12.74m³

Parapet - 2x3.85x0.30x0.40 = 0.924m³

less for pipe opening -

2x0.465x0.61 = 0.57

13.094m³

(5) Providing and laying pipe NP3 600 mm dia -

3x2.50 — 7.50m

(6) Clearing and grubbing of road land including uprooting wild vegetation -

2x15x3.5 — 105m²

3x15x3.5 — 157.5m²

2x15x3.5 — 105.00m²

4x15x3.5 — 210.00m²

1x15x3.5 — 52.50m²

700.00m²

0.070hect

(7) Const of embankment with material obtained

Continuation

Sch. XLV - Profile						
Particulars		Details of actual measurement				Contents of area
		No.	L.	B.	D.	
from borrow pits -						
S. No.	Ch. in m	Area m^2	Mean Area m^2	Distance	Volume in m^3	
01	0	2.50				
02	50	2.067	2.284	50	114.175	
03	100	2.390	2.229	50	111.425	
04	150	2.799	2.675	50	134.725	
05	200	0.001	1.520	50	75.00	
					435.325	

(i) Lead up to 1000 m — 130.578 m^3

(ii) Lead up to 100 m — 304.748 m^3

⑧ Constⁿ of granular Sub-

base by providing well

foundations of buildings

$11.70 \times \frac{6.60 + 6.70 + 7.70 + 7.10}{4} \times 0.10$	—	7.475 m^3
$1.5 \times \frac{3.10 + 3.3}{2} \times 0.10$	—	4.8 m^3
$1.5 \times 3.3 \times 0.10$	—	4.95 m^3
$1.5 \times \frac{3.3 + 3.8}{2} \times 0.10$	—	5.325 m^3
$1.5 \times \frac{2.8 + 4.5}{2} \times 0.10$	—	6.225 m^3
$1.5 \times \frac{4.5 + 2.8}{2} \times 0.10$	—	5.475 m^3
$1.5 \times \frac{2.8 + 2.95}{2} \times 0.10$	—	4.3125 m^3
$1.5 \times \frac{2.95 + 3.45}{2} \times 0.10$	—	4.80 m^3

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
15 x $\frac{3.45 + 3.75}{2} \times 0.10$					5.40 m ³
15 x 3.75 x 0.10					5.625 m ³
15 x 3.75 x 0.10					5.625 m ³
15 x 3.75 x 0.10					5.625 m ³
15 x 3.75 x 0.10					5.625 m ³
					71.263 m ³

Actual
27/10/2020
JE

⑨ Providing, laying, spreading
and compacting stone agg.

of WBM grading 3-

$$11.50 \times \frac{8.60 + 6.90 + 7.40 + 3.10}{4} \times 0.075 = 5.606 \text{ m}^3$$

$$1 \times 15 \times \frac{3.10 + 3.3}{2} \times 0.075 = 3.60 \text{ m}^3$$

$$1 \times 15 \times 3.3 \times 0.075 = 3.713 \text{ m}^3$$

$$1 \times 15 \times \frac{3.3 + 3.8}{2} \times 0.075 = 3.994 \text{ m}^3$$

$$1 \times 15 \times \frac{3.8 + 4.5}{2} \times 0.075 = 4.669 \text{ m}^3$$

$$1 \times 15 \times \frac{4.5 + 2.8}{2} \times 0.075 = 4.106 \text{ m}^3$$

$$1 \times 15 \times \frac{2.8 + 2.95}{2} \times 0.075 = 3.234 \text{ m}^3$$

$$1 \times 15 \times \frac{2.95 + 3.45}{2} \times 0.075 = 3.60 \text{ m}^3$$

$$1 \times 15 \times \frac{3.45 + 3.75}{2} \times 0.075 = 4.05 \text{ m}^3$$

$$4 \times 15 \times 3.75 \times 0.075 = 16.875 \text{ m}^3$$

$$\text{Actual 27/10/2020 JE} = 53.448 \text{ m}^3$$

⑩ Cement concrete pavement

Const 2 of cur-reinforced idowel

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
jointed at expansion & construction joint —					
$11.50 \times \frac{8.60 + 6.90 + 7.40 + 3.10}{4} \times 0.15$					$11.96 m^3$
$1 \times 15 \times \frac{3.10 + 3.3}{2} \times 0.16$					$7.68 m^3$
$1 \times 15 \times 3.3 \times 0.16$					$7.92 m^3$
$1 \times 15 \times \frac{3.3 + 3.8}{2} \times 0.16$					$8.52 m^3$
$1 \times 15 \times \frac{3.8 + 4.5}{2} \times 0.16$					$9.96 m^3$
$1 \times 15 \times \frac{4.5 + 2.8}{2} \times 0.16$					$5.76 m^3$
$1 \times 15 \times \frac{2.8 + 2.75}{2} \times 0.16$					$5.7 m^3$
$1 \times 15 \times \frac{2.95 + 3.45}{2} \times 0.16$					$7.68 m^3$
$1 \times 15 \times \frac{3.45 + 3.75}{2} \times 0.16$					$8.64 m^3$
$4 \times 15 \times 3.75 \times 0.16$					$36.00 m^3$
Subtotal $\frac{10111.20}{5}$					$114.02 m^3$
(ii) Const ⁿ of subgrade & earthen shoulders with approved material					
for subgrad —					
$191.50 \times 7.40 (av.) \times 0.30$					$425.13 m^3$
for earthen shoulder —					
$2 \times 191.50 \times 0.583 (av.) \times 0.18$					$37.73 m^3$
					$462.86 m^3$
(2) Reinforced cement concrete					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
M15 grade Kilometer local stone of standard size					
Km stone					1 No.
(13) Providing and fixing of typical messy informatory sign board with 1.6 mm thick					
Logo board					1 No
Citizen board					1 No
					2 Nos.

(14) Providing and fixing of retro-reflective cautionary mandatory informatory sign board -

- (i) 600 mm equilateral triangle - 1 No
 (ii) 600 mm circular - 1 No
 (iii) 600 mm x 450 mm □ - 1 No

~~25/11/2020~~
 25/11/2020
 J.E.

Abstract of Cost.

(1) E/W in excavation of foundation trenches -

18.63 m³ Qty vide TMBPD item ①

@ Rs. 280.02/m³ — Rs. 5217.00

(2) Laying (First class) bedding of PCCMS below drain pipe

2.13 m³ Qty vide TMBPD item ②

@ Rs. 490.28/m³ — Rs. 1044.20

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
③ P/c concreting in open foundation of RCC M15					
1.62 m ³ Qty vide TMBP (2) item ①					
@ Rs. 5565.90/m ³					Rs. 9017.20
④ Head wall in Brick masonry					
1.54					
13.094 m ³ Qty vide TMBP (2)					
item ④ @ Rs. 6360.05/m ³					Rs. 83278.20
⑤ Providing and Laying pipe					
NP 3 60 mm dia.					
7.50 m Qty vide TMBP (2) item					
⑤ @ Rs. 1177.79/m					Rs. 8839.20
⑥ clearing & grubbing work					
Land including uprooting of wild vegetation					
0.07 hect. Qty vide TMBP (2)					
item ⑥ @ Rs. 48772/hect.					Rs. 3415.20
⑦ Const ⁿ of embankment with material obtained from borrow pits.					
(i) Lead up to 1000 m					
130.598 m ³ Qty vide TMBP (2-3)					
item 7(i) @ Rs. 16210/m ³					Rs. 21170.20
(ii) Lead up to 100 m					
304.728 m ³ Qty vide TMBP (3)					
item 7(ii) @ Rs. 118.85/m ³					Rs. 36217.20
⑧ Const ⁿ of granular Sub-base					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
by providing well graded material, spreading in uniform layers of grading 5					
71.263 m ³ Qty vide TMBP (3-4)					
item (8) @ Rs. 2447.55/m ³ - Rs					174420.00
9) Providing, laying, spreading and compacting stone agg. of WBM grading 3.					
53.448 m ³ Qty vide TMBP (4)					
item (9) @ Rs. 3507.13/m ³ - Rs					187449.00
10) Const of unreinforced dressed joints at expansion & construction joint -					
114.02 m ³ Qty vide TMBP (4-5)					
item (10) @ Rs. 7345.79/m ³ - Rs					837567.00
11) Const of subgrade & earthen shoulder with approved material -					
462.865 m ³ Qty vide TMBP (5)					
item (11) @ Rs. 162.10/m ³ - Rs					75030.00
12) Reinforced cement concrete M15 grade kilometer stone.					
1 No Qty vide TMBP (5-6) item					
(12) @ Rs. 2368.96/No -					2369.00
13) Providing and fixing of typical M15 concrete sign board -					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
2 Nos. Qty vide TMBP (6)					
item (13) @ Rs. 9753.08/No -					19506.25
(14) Providing & fixing of retro-reflective cautionary mandatory & informatory sign board -					
(i) 600 mm equilateral Δ -					
1 No Qty vide TMBP (8) item 14(i)					
@ Rs. 1585.18/No -					Rs 1585.18
(ii) 600 mm Circular					
1 No. Qty vide TMBP (8) item 14(ii)					
@ Rs. 1629.23/No -					Rs 1629.23
(iii) 600 mm x 450 mm sq □					
1 No. Qty vide TMBP (8) item 14(iii)					
@ Rs. 1624.72/No -					Rs 1624.72
					Rs 14693.77
Less 10% below as per agg. (-)					Rs 14693.77
					Rs 13224.39
Done by 25/11/2020 J.E.					

Continuation