

Name of road - SPM Road to Ramnagar.
(Mansy, Aushah, NOB)

Schedule XLV Form No. 134.

10/3BD/23-24

M/s Ambay construction _____ DIVISION

राष्ट्रीय राजमार्ग २११९००१ _____ SUB-DIVISION

Measurement Book

1348

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Name of work:-	SPM road to Rangpur				under masonry (new shape, NDA)
Agg-No:-	10	SAD/23-24			
Package No:-	NAB-BARRA 2 Masaurhi				
Agency:-	M/S Ambay Contractors				
Date of start:-	15/11/23				
Stipulated date of completion:-	14/12/2024				
Agg-value- Contract:-	₹ 76,86,949.00				
	Material:- ₹ 6,95,060.00				
	₹ 83,82,009.00				
Rate of agreement:-	0.11/1.6-10.0				

Record Measurement					
① Contn of h-2 B area					
BT portion					
$1 \times 3.60 \times \left[\frac{16.80 + 8.50}{2} - 4.05 \right] \times 0.20 = 6.19 \text{ m}^3$					
$1 \times 23.40 \times \left[\frac{18.50 + 4.05}{2} - 4.05 \right] \times 0.20 = 10.41 \text{ m}^3$					
$3 \times 20.00 \times \left[\frac{4.05 + 4.35 + 4.05}{3} - 4.05 \right] \times 0.20 = 1.20 \text{ m}^3$					
Ch - 336.70 to 649.50 m					
$1 \times 11.20 \times \left[\frac{5.70 + 6.20}{2} - 4.05 \right] \times 0.20 = 4.26 \text{ m}^3$					
$1 \times 8.00 \times \left[\frac{11.50 + 4.05}{2} - 4.05 \right] \times 0.20 = 5.96 \text{ m}^3$					
Less for already measured					
$1 \times 9.20 \times 4.05 \times 0.20 = (-) 7.45 \text{ m}^3$					
					20.57 m ³
					(1)

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>P.L.C. Posing</u>					
Ch 278 to 330.70m					
✓ 1	30.00	3.75	0.100		11.25 m ³
✓ 1	28.70	3.75	0.100		10.76 "
Ch - 649.50m to 129.780m					4.82 "
1 x 10.00 x (5.90 + 3.75) x 0.100					3.42 "
1 x 18.50 x 3.75 x 0.100 =					6.94 "
② 8.50					3.19 "
1 x 19.50 x (3.40 + 3.55) x 0.100					6.78 "
1 x 21.50 x (4.00 + 4.60) x 0.100					4.95 "
					40.68 m ³
					41.75 (B)
					41.75
Total A+B = 20.57 + 40.68					
					61.25 m ³
					62.30 m ³
② Excavation for found ⁿ					
of structure.					
300 dia cable duct					
12 x 300 x					
✓ 3	6.00	0.60	1.00		10.80 m ³
					ie 10.80 m ³
③ Laying 1st class (Type B)					
bedding					
✓ 12	2.50	0.60	0.25		4.50 m ³
					ie 4.50 m ³
④ Construction of earth shoulder					
2 x 9 x 30.00 x 1.300 x 0.200 =					140.40 m ³
2 x 10 x 30.00 x 1.300 x 0.200 =					156.00 "
					296.40 m ³

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(4) 1/4" 1-laying R.C.C. NP ₃ H.P. 300 mm dia					
		12 x 2.50			
		= 30.00 m ²			
(5) H.P. laying & spreading & Compacting 150 mm G.V. - 3					
Ch-0 to 278 m (Below B.T.)					
1 x 3.60 x (16.50 + 8.20) / 2 x 0.075					3.33 m ³
1 x 23.40 x (8.20 + 3.75) / 2 x 0.075					10.49 m ³
1 x 11.40 x 3.75 x 0.075					3.21 m ³
3 x 20.00 x (3.75 + 4.10 + 3.75) / 2 x 0.075					50.63 m ³
Ch-278 to 336.70 m (Below P.W.)					
1 30.00 3.75 0.075					8.44 m ³
1 28.70 3.75 0.075					8.07 m ³
Ch-336.70 m to 649.50 m (Below P.W.)					
8 30.00 3.75 0.075					67.50 m ³
1 28.30 3.75 0.075					7.96 m ³
1 x 11.20 x (5.40 + 5.90) / 2 x 0.075					4.75 m ³
2 x 6.00 x 3.75 x 0.075					4.49 m ³
1 x 8.00 x (11.20 + 3.75) / 2 x 0.075					4.49 m ³
1 x 25.50 x 3.75 x 0.075					7.17 m ³
Ch-649.50 m to 789 m (Below P.W.)					
3 30.00 3.75 0.075					25.31 m ³

218.75 m³

Particulars	Details of actual measurement				Contents of area $\frac{F}{3}$
	No.	L.	B.	D.	
					218.75 m ³
	1	18.50	3.75	0.075	5.20
	1 x 19.50 x $\frac{(3.40 + 3.55)}{2}$ x 0.075				5.08
	1 x 11.50 x $\frac{(4.60 + 4.00)}{2}$ x 0.075				3.71
					232.74 m ³
					ie 232.74 m ³
⑥ Contd of unreinforced					
PCC pavement m-30					
Ch- 278 to 336.70 m					
	1	30.00	3.75	0.16	18.00 m ³
	1	28.70	3.75	0.16	17.22

Ch- 649.50 to 789 m					
	1 x 10.00 x $\frac{(5.90 + 3.75)}{2}$ x 0.16				7.72
	1 x 8.50 x 3.75 x 0.16				5.10
	3 x 30.00 x 3.75 x 0.16				54.00
	1 x 19.50 x $\frac{(3.40 + 3.55)}{2}$ x 0.16				10.84
	1 x 11.50 x $\frac{(4.60 + 4.00)}{2}$ x 0.16				7.91
					120.79 m ³
					ie 120.79 m ³

⑦ Contd of PCC drain m-15					
Ch section area $(0.30 + 0.60 + 0.30) \times 0.15$					
				15.00 m	2.70 m ³
Ch section area $(0.45 + 0.75 + 0.45) \times 0.15$					
				24.00 m	5.94
					8.64 m ³

28/02/2024
AE/SE

Continuation
28/2/24
AE

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
ABSTRACT OF COST					
① Setting out work complete with construction of bench mark.					
Qty vide TMS P/4 Item ①					
0.800 km	@	Rs 17685/m			1414800
② Clearing grass & removal of rubbish					
Qty vide TMS P/4 Item ②					
0.48 Hect.	@	Rs 19930.80/Ha			956720
③ Excavation in soil using hydraulic excavator					
Qty vide TMS P/4 Item ③					
27.18 m ³	@	Rs 103.96/m ³			282600
④ Removal of unsuitable soil					
Qty vide TMS P/5 Item ④					
5.44 m ³	@	Rs 103.96/m ³			56600
⑤ Constr of embankment with material obtained from roadway cutting.					
Qty vide TMS P/5 Item ⑤					
21.74 m ³	@	Rs 83.71/m ³			182000
⑥ Constr of embankment upto 100m lead					
Qty vide TMS P/5 Item ⑥					
1443.32 m ³	@	Rs 217.07/m ³			313300

P 3422280

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
					342228
					342228
(7) Constn of embankment					
do upto 1000m lead					
Qty vide TMB P/5 item (7)					
360.83 m ³	Q.H.	26.79/m			36627.2
(8) Constn of subgrade/shoulder					
Qty vide TMB P/5 item (8)					
1605.60 m ³	Q.H.				
+ 296.40 m ³	Qty vide TMB P/10 item (30)				
1902.00 m ³	Q.H.	438.03/m			833133
(9) Constn of kerb cur-I					
Qty vide TMB P/5 item (9) = 519.75 m ³					
" " " P/10 item (10) = 62.32 "					
Limited to 581.60 m ³					
Q.H.	2823.72/m ³				1642276
(10) Paving, spreading & compaction of curbm ker-3					
Qty vide TMB P/12 item (5)					
292.74 m ³	Q.H.	4098.04/m ³			953778
(11) Constn of un-reinforced P.C.C.					
14 Pavement m-30					
Qty vide TMB P/12 item (6)					
120.79 m ³	Q.H.	7427.03/m ³			897111
					4765153

Continuation