

M.R-N/19-20

Ham & Road - Repair & Five year maintenance
of Road from Peli masavathi to
Sajjavalu

Measurement Book

Schedule XLV-Form No. 134

Block - Doldin
Batra

D: Division - Paligam **DIVISION**

Contractor - M/S Subhash Kumar
W-1 - Ashwara. Bijkraim

Name of AE - Sri Koushlandra Kumar Pandey **SUB-DIVISION**
- Subdivision

No for - 580

19,26,814=00

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
MMSY sign board					
16/ Pro/fining of Typical					
MMSY infomatory					
Sign Board do do					
3 No side timber - 1 P-01					
@ 11809.51 each - A					35,429=00
					19,62,243=00
Loss 10% Below as					
Per agree					19,62,24=00
1x, labor etc					17,66,019=00
					17,660=00
12x, 68.7					2,11,922=00
12,06.2020					19,95,606=00
1 E					

Material statement					
Stone agg 26.5 mm to 9.5 mm - 29.5 m ³					
@ Rs 404.62/m ³					11,936=00
9.5 mm to 2.36 mm - 21.0 m ³					
@ Rs 614.17/m ³					12,898=00
Local sand - 33.60 m ³					
@ Rs 116.25/m ³					3,926=00
63 mm to 4.75 mm - 68.01 m ³					
@ Rs 427.60/m ³					29,087=00
screen material - 48.54 m ³					
@ Rs 345.52/m ³					16,778=00
53 mm to 2.36 mm stone - 161.65 m ³					
@ Rs 458.22/m ³					74,071=00
Stone 13.2 to 0.075 mm - 17.83 m ³					
@ Rs 642.67/m ³					11,497=00
Stone 9.5 to 4.75 mm - 71.0 m ³					
@ Rs 614.17/m ³					43,606=00
4.75 mm & below - 51.05 m ³					
@ Rs 411.33/m ³					20,998=00
Bitum & Vm SS1 - 1.513 m ³					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
9x	9x	2.28	2.95		$= 60.53 m^2$
	4x	2.91	1.7		$= 19.79 m^2$
	5x	3.17	3.15		$= 49.93 m^2$
	8x	0.76	3.26		$= 19.82 m^2$
	15x	2.85	2.43		$= 103.88 m^2$
	12x	0.69	2.06		$= 17.06 m^2$
	8x	2.02	3.35		$= 54.13 m^2$
					$656.03 m^2$
	3 No	30.0	3.75		$= 337.5 m^2$
	2 No	30.0	3.75		$= 225.00 m^2$
	2 No	30.0	3.75		$= 225.00 m^2$
	3 No	30.0	3.75		$= 337.50 m^2$

(B) $1125.00 m^2$

Total A + B

$$656.03 m^2 + 1125.00 m^2$$

$$= 1781.03 m^2$$

8/8 Tack coat

Providing & applying Tack

Coat with Bitumen emulsion

R&I do - do

Qty vide drawing - 7/7 P-06

$$1781.03 m^2$$

Tack coat

8/8 Re & apply Tack coat with

Bitu emulsion R&I do - do

Qty vide drawing - 7/7 P-06

$$1781.03 m^2$$

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
6/6 providing, laying, spreading					
& compacting stone aggregate					
to Water Bound macadam					
Grading - 3 do - do					
5 x 1.17 m x 1.83 m x 0.075 = 0.8 m ³					
8 x 0.95 m x 1.94 m x 0.075 = 1.15 m ³					
13 x 2.00 m x 2.07 m x 0.075 = 4.04 m ³					
9 x 2.35 m x 1.28 m x 0.075 = 2.03 m ³					
15 x 2.30 m x 2.99 m x 0.075 = 7.74 m ³					
2 x 1.5 m x 1.92 m x 0.075 = 0.43 m ³					
4 x 1.6 m x 0.69 m x 0.075 = 0.33 m ³					
4 x 3.24 m x 1.66 m x 0.075 = 1.61					
2 x 0.88 m x 1.5 m x 0.075 = 0.20 m ³					
5 x 1.64 m x 3.19 m x 0.075 = 1.96 m ³					
5 x 2.84 m x 1.11 m x 0.075 = 1.18 m ³					
8 x 2.67 m x 0.93 m x 0.075 = 1.49 m ³					
3 x 2.77 m x 2.37 m x 0.075 = 1.85 m ³					
9 x 2.28 m x 2.95 m x 0.075 = 4.54 m ³					
4 x 2.91 m x 1.70 m x 0.075 = 1.48 m ³					
5 x 3.17 m x 3.15 m x 0.075 = 3.74 m ³					
8 x 0.76 m x 3.26 m x 0.075 = 1.49 m ³					
15 x 2.85 m x 2.43 m x 0.075 = 7.79 m ³					
12 x 0.69 m x 2.06 m x 0.075 = 1.28 m ³					
8 x 2.02 m x 3.35 m x 0.075 = 4.06 m ³					
					40.29 m ³

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
3/2 Sealing existing Gutters					
Surface do - do					
	2	20.0m	3.75m		150.00m ²
	2	30.0m	3.75m		225.00m ²
					375.00m ²

4/4 Construction of Granular

Sub base by providing Well

graded Material, spreading

do - do

$$3\text{Nos } 1.18\text{m} \times 1.61\text{m} \times 0.175 = 1.0\text{m}^3$$

$$10\text{Nos } 3.50 \times 1.18 \times 0.175 = 7.23\text{m}^3$$

$$4\text{Nos } 3.07 \times 1.28 \times 0.175 = 2.75\text{m}^3$$

$$11\text{Nos } 2.23 \times 0.86 \times 0.175 = 3.63\text{m}^3$$

$$14\text{Nos } 4.00 \times 1.09 \times 0.175 = 10.68\text{m}^3$$

$$7\text{Nos } 2.58 \times 1.31 \times 0.175 = 4.14\text{m}^3$$

$$11\text{Nos } 2.36 \times 1.34 \times 0.175 = 6.09\text{m}^3$$

$$9\text{Nos } 2.42 \times 0.68 \times 0.175 = 2.59\text{m}^3$$

$$14\text{Nos } 1.34 \times 0.69 \times 0.175 = 2.27\text{m}^3$$

$$3\text{Nos } 4.66 \times 1.34 \times 0.175 = 4.75\text{m}^3$$

$$9\text{Nos } 5.12 \times 1.48 \times 0.175 = 11.93\text{m}^3$$

$$6\text{Nos } 1.66 \times 1.72 \times 0.175 = 3.00\text{m}^3$$

$$6\text{Nos } 0.84 \times 1.62 \times 0.175 = 1.43\text{m}^3$$

$$3\text{Nos } 4.66 \times 1.16 \times 0.175 = 2.84\text{m}^3$$

$$7\text{Nos } 3.65 \times 1.43 \times 0.175 = 6.39\text{m}^3$$

$$\text{Limit to } 65.62\text{m}^3$$

$$70.88\text{m}^3$$

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 work - Repair & Maintenance					
of Road from Pali Masurahi Path					
to Jayeedih under Dulhin Bazar					
Block - Dulhin Bazar					
Contractor - M/S Subodh Kumar					
At - Aspora, Birkram Dist. Patna					
Agreement No - 02/MAD/2019-20					
Date of commencement - 25.10.2019					
Date of completion - 24.07.2020					
1/ Providing & fixing 120					
mm GSY Informatory Sign					
Board do-do					
2 + 1 = 3m					
2/1 clearing & grubbing Road					
Land do-do					
2 x 10 x 30.0m x 1.0m					= 600.00m ²
2 x 10 x 30.0m x 1.00m					= 600.00m ²
2 x 6 x 30.0m x 0.80m					= 288.00m ²
2 x 2 x 30.0m x 0.800					= 96.00m ²
					1584.00m ²
1584.00					= 0.16 Hectare
10,000					

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
5/5 providing, laying, spreading & compacting stone aggregate to WBM Graveling - 0.2					
340x1.18m x 1.61m x 0.175 =					
740x5.04m x 2.09 x 0.075 = 5.53m ²					
140x0.84 x 1.55 x 0.075 = 0.10m ²					
440x3.97m x 1.59 x 0.075 = 1.89m ²					
340x3.78m x 1.48 x 0.075 = 1.26m ²					
540x3.12m x 1.35 x 0.075 = 2.28m ²					
740x4.28m x 2.54 x 0.075 = 5.71m ²					
540x5.77m x 1.45 x 0.075 = 3.14m ²					
1440x0.64m x 0.76 x 0.075 = 0.51m ²					
1440x2.17m x 1.00 x 0.075 = 2.28m ²					
240x5.04m x 1.29 x 0.075 = 0.98m ²					
340x1.58m x 1.12 x 0.075 = 0.40m ²					
1340x2.81m x 2.37 x 0.075 = 6.49m ²					
1540x4.67m x 2.53 x 0.075 = 13.29m ²					
640x4.80m x 1.95 x 0.075 = 4.21m ²					
940x4.54m x 1.50 x 0.075 = 4.60m ²					
740x4.39m x 1.18 x 0.075 = 2.72m ²					
640x3.80m x 0.77 x 0.075 = 1.32m ²					
1240x2.51m x 2.24 x 0.075 = 5.06m ²					
					61.77m ²
Limit to = 56.250m ²					
10/12/2025					
12/2					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Continue from No. 86					
3X 30.0m X 3.75 X 0.075					$= 25.31 \text{ m}^2$
2X 30.0m X 3.75 X 0.075					$= 16.88 \text{ m}^2$
2X 30.0m X 3.75 X 0.075					$= 16.88 \text{ m}^2$
3X 30.0m X 3.75 X 0.075					$= 25.31 \text{ m}^2$
					84.38 m^2
Total G-12 A+B					
					$= 49.219 \text{ m}^2 + 84.380 \text{ m}^2$
					$= 133.599 \text{ m}^2$

7/7 Prime coat

Providing & applying Prime
coat with bitumen

emulsion ss, do-do

5X 1.17m X 1.83m	$= 10.70 \text{ m}^2$
8X 0.99m X 1.94m	$= 15.36 \text{ m}^2$
13X 2.00m X 2.07m	$= 53.82 \text{ m}^2$
9X 2.35m X 1.28m	$= 27.07 \text{ m}^2$
15X 2.30m X 2.99m	$= 103.15 \text{ m}^2$
2X 1.5m X 1.92m	$= 5.76 \text{ m}^2$
4X 1.6m X 0.69m	$= 4.42 \text{ m}^2$
4X 3.24m X 1.66m	$= 21.51 \text{ m}^2$
2X 0.88m X 1.50m	$= 2.64 \text{ m}^2$
5X 1.64m X 3.19m	$= 26.16 \text{ m}^2$
5X 2.84m X 1.11m	$= 15.76 \text{ m}^2$
8X 2.67m X 0.93m	$= 19.86 \text{ m}^2$
3X 2.77m X 2.97m	$= 24.68 \text{ m}^2$
	330.89 m^2

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
9/8 Patch Repair using Mix Seal Surf Pro/Laying & rolling of close graded Mix Seal Surfacing of 20 mm thick					
	5 No	1.17 m	1.83 m		10.70 m ²
	8 No	0.99 m	1.94 m		15.36 m ²
	13 No	2.0 m	2.07 m		53.82 m ²
	9 No	2.35 m	1.28 m		27.07 m ²
	15 No	2.30 m	2.99 m		103.15 m ²
	2 No	1.50 m	1.92 m		5.76 m ²
	4 No	1.6 m	0.63 m		4.43 m ²
	4 No	3.24 m	1.66 m		21.51 m ²
	2 No	0.88 m	1.50 m		2.64 m ²
	5 No	1.64 m	3.10 m		26.16 m ²
	5 No	2.84 m	1.11 m		15.76 m ²
	8 No	2.67 m	0.93 m		19.86 m ²
	3 No	2.77 m	2.97 m		24.68 m ²
	9 No	2.28 m	2.95 m		60.53 m ²
	4 No	2.91 m	1.70 m		19.79 m ²
	5 No	3.17 m	3.15 m		49.93 m ²
	8 No	0.76 m	3.26 m		19.82 m ²
	15 No	2.85 m	2.43 m		103.88 m ²
	13 No	0.69 m	2.06 m		17.06 m ²
	8 No	2.02 m	3.35 m		54.13 m ²
	3 No	30.0 m	3.75 m		337.5 m ²
	2 No	30.0 m	3.75 m		225.00 m ²
	2 No	30.0 m	3.75 m		225.00 m ²
	3 No	30.0 m	3.75 m		337.50 m ²
					1781.03 m ²
Limit to 662.810 m ²					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
10/8 Tack Coat.					
Providing & applying Tack					
Coat with Bitumen emulsion					
As do do					
1X 11.0m X $\frac{8.70+3.75}{2}$					68.48m ²
10No X 30.0m X 3.75m					1125.00m ²
10No X 30.0m X 3.75m					1125.00m ²
1No X 30.0m X 3.75m					112.50m ²
1No X 25.0m X 3.75m					93.75m ²
1No X 20.0m X 3.75m					75.00m ²
1No X 30.0m X $\frac{2.90+3.30}{2}$					93.0m ²
1No X 14.0m X 3.70m					51.80m ²
1No X 24.0m X $\frac{3.40+2.90}{2}$					75.60m ²
5No X 30.0m X 3.75m					562.50m ²
1No X 20.0m X 3.70m					74.00m ²
1No X 8.0m X $\frac{3.70+3.10}{2}$					27.2m ²
					3408.83m ²
11/10 Semi Dense Bituminous					
Providing & laying Semi					
Dense bituminous concrete					
using crushed aggregate					
1X 11.0m X $\frac{8.70+3.75}{2}$					68.48m ²
10No X 30.0m X 3.75m					1125.00m ²
10No X 30.0m X 2.75m					1125.00m ²
1No X 30.0m X 3.75m					112.50m ²
1No X 25.0m X 3.75m					93.75m ²
1No X 14.0m X 3.70m					51.80m ²

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1 No x 30.0m x 2.30 + 3.30					33.00m ²
					$2 \times 0.025 = 2.33m$
1 No x 14.00m x 3.70					51.80m ²
					$0.025 = 1.30m$
1 No x 24.0m x 3.40 + 2.90					75.60m ²
					$0.025 = 1.89m$
5 No x 30.0m x 3.75					562.50m ²
					$0.025 = 14.06m$
1 No x 20.0m x 3.70					74.00m ²
					$0.025 = 1.85m$
1 No x 8.0m x 3.70 + 3.10					27.20m ²
					0.025
					3408.83m ²
					$= 0.68m$
12/11 Reinforced concrete cone					85.23m ²
M15 grade Kilometer stone					
2 No					
13/12 R.C.C 200mm Stone (Prest)					
4 No					
14/13 For setting of water					
water sized cautionary					
information sign					
600mm square and Triangle					
6 No					
15/ 600mm circular					
2 No					
16 600mm x 450mm rectangular					
2 No					
17/3 cost of subgrade do do					
2 x 21 No x 30.0m x 1.00m x 0.300					378.0m ³
2 x 6 No x 30.0m x 1.00m x 0.300					108.0m ³
					486.0m ³
12.06/2020					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1/2 clearing & grubbing road land do do					
0.16 Hectare vide item No - 2 P-01					
@ 49524.68/Hec — A					7,924=00
2/3 scarifying the existing bituminous road surface do do					
375.00 m ² vide item No - 3 P-02					
@ 15.32/m ² — — A					5745=00
3/3 construction of subgrade & earthen shoulder do do					
486.00 m ³ vide item No - 3 P-03					
@ 161.23/m ³ — — b					78,358=00
4/4 Const of Granular Sub base by Providing Well graded Material do do					
65.62 m ³ vide item No - 4 P-02					
70.88 m ³ vide item No - 4 P-02					
@ 1881.51/m ³ — —					123,465=00
5/5 W.B.M G.S.B					
Pro/lay/streeding & compacting stone aggregate do do					
56.25 m ³ vide item No - 5 P-03					
@ 3521.29/m ³ — — A					198,073=00
					413,565=00
12.96 m ³ 2020					

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
6/6 <u>W.B.M Gr-3</u>					
Providing, laying, spreading & compacting stone aggregate to W.B.M Gr-III do do					
133.599 m ³ vide item No. 6 P-5					
@ 3271.64/m ³ — A					4,37,088=00
7/7 <u>Prime coat</u>					
Providing & applying Primer Coat with bitumen emulsion SS, do do					
1781.03 m ² vide item No. 7 P-6					
@ 41.51/m ² — A					73,931=00
8/8 <u>Tack coat</u>					
Providing & applying Tack coat with Bitumen emulsion RS, do do					
1781.03 m ² vide item No. 8 P-6					
3408.83 m ² vide item No. 10 P-8					
5189.86 m ²					
@ 14.08/m ² — A					73,073=00
9/9 <u>m.s.s</u>					
Pro/laying & rolling of close graded mixed premix Surfacing material of 20mm					
1781.03 m ² vide item No. 9 P-7					
562.810					
@ 187.08/m ² — A					123,998=00
					11,21,655=00

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
10/ S.P.B.2 Paving Semi dense bituminous concrete do do 85.23 m ² vide item No - 11 P-09 @ 89 13.43/m ³ — B 7.60, 203=00 11/11 Reinforced cement conc M15 grade Kilometre stone 2 No vide item No - 12 P-09 @ 2093.27/each — B 4187=00 12/12 Rec 200mm stone (Precast) 4 No vide item No - 13 P-09					

@ 595.04 each — +	2396=00				
13/13 Retro-reflectORIZED Traffic Signs 600mm equilateral Triangle 6 No vide item No - 14 P-09 @ 338570 each — 20,314=00 14/14 600mm circular 2 No vide item No 15 P-09 @ 4575.66 each — B 9151=00 15/15 600mm x 450mm rectangular do do 2 No vide item No - 16 P-09 @ 4485 4453485 each B 8,908=00 19,26,814=00					