

MMGSYNEMSC

M.B.No-3169

Schedule XLV-Form No. 134

જાતિ/નામ કુમાર કમલ સસક (તરફ) નંક ૧૧૧
જાતિ/નામ કુમાર સસક (તરફ) નંક ૧૧૧
જાતિ/નામ કુમાર સસક (તરફ) નંક ૧૧૧

DIVISION

શ્રી કુમાર સુરેશ

શ્રી આશોક કુમાર સારો SUB-DIVISION

અમર જાતિ/નામ

MEASUREMENT BOOK

M.B.No-3169

1st & Final 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.	
N/W:- Construction of Road & old works from Basdila Kumbh Pakki Sadak, Shekhpura to Basdila Jalalpur Sadak (Mahar) tak under M.M.W.V (S) al-block Jalalpur.					
N/Agency - Sri Karmar Anubhan					
Ass. No - 20/SB/D/2019-20					
Date of start - 20.02.2019					
Date of Completion - 19.11.2019					
Date of measurement - 18.11.2019					

Items of work

(1) P.V. & Rizing of working

Benchmark pillars & reference

pillars - 02 Nos.

(2) clearing & grubbing of road land.

$$2 \times 15 \times 30.60 \text{ m} \times 3.50 \text{ m} = 91.50 \text{ m}^2$$

$$= 0.315 \text{ Hect.}$$

(3) Construction of embankment

- met with material

obtained from borrow pits

with a level up to 100 m &

1000 m.

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
<u>Earthwork Calculation.</u>					
S/NO	chainage	C/S Area	Mean C/S Area	Dist.	Volume
	m.	m ²	m ²	m	m ³
1	0	4.349	2.174	0	0
2	50	5.513	4.931	50	246.550
3	100	5.260	5.387	50	269.325
4	150	5.513	5.402	50	270.075
5	200	5.218	5.381	50	269.025
6	250	4.735	4.977	50	248.825
7	300	4.859	4.797	50	239.850
8	350	5.411	5.135	50	256.750
9	400	4.740	5.076	50	253.775
10	450	5.275	5.008	50	250.375

Total E/W Qty (including crust)	=	2304.527 m ³
Less for G.S.B-I	= (-)	1368.15 m ³
Less for W.B.M-3	= (-)	127.83 m ³
Less for F.M.C	= (-)	34.08 m ³
Net Qty of E/W	=	1774.467 m ³
Less Qty of Subgrade & earthen shoulder	= (-)	1130.10 m ³
Net Qty of E/W in embankment	=	669.467 m ³

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(4) Construction of granular sub-base by providing coarse graded materials.					
In earthen portion.					
1 x 15 x 30.10 m x 4.050 m x 0.200 m.					= 364.50 m ³
Extra widening at H-curve					
2 x 2.10 m x 1.80 m x 0.200 m = 1.51 m ³					
1 x 5.80 m x 0.50 m x 0.200 m = 0.58 m ³					
2 x 2.50 m x 1.70 m x 0.200 m = 1.70 m ³					
				Total =	368.29 m ³
				Qty limit =	368.15 m ³
(5) P.V., Laying, spreading & compacting of WBM-3					
1 x 15 x 30.10 m x 3.75 m x 0.075 m					= 126.56 m ³
Extra width at H-curve					
2 x 2.10 m x 1.70 m x 0.075 m = 0.53 m ³					
1 x 5.80 m x 0.450 m x 0.075 m = 0.20 m ³					
2 x 2.50 m x 1.50 m x 0.075 m = 0.56 m ³					
				Total =	127.85 m ³
				Qty limit =	127.83 m ³
(6) P.V. & applying primer coat with bitumen emulsion (SS-1)					

Continuation

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1 X 15 X 30.00 m X 3.75 m =					1687.50 m ²
Extra width at H-curve,					
2 X 2.10 m X 1.70 m =					7.14 m ²
1 X 5.80 m X 0.450 m =					2.61 m ²
2 X 2.50 m X 1.50 m =					7.50 m ²
				Total =	1704.75 m ²
				Qty Limit =	1704.38 m ²
(7) P.V. & applying tack coat with bitumen emulsion RS-1					
1 X 15 X 30.00 m X 3.75 m =					1687.50 m ²
Extra width at H-curve, 7.14 m²					
2 X 2.10 m X 1.70 m =					7.14 m ²
1 X 5.80 m X 0.450 m =					2.61 m ²
2 X 2.50 m X 1.50 m =					7.50 m ²
				Total =	1704.75 m ²
				Qty Limit =	1704.38 m ²
(8) P.V., Laying, and rolling of close-graded premix surfacing material of 20 mm thickness,					
1 X 15 X 30.00 m X 3.75 m =					1687.50 m ²
Extra width at H-curve,					
2 X 2.10 m X 1.70 m =					7.14 m ²
2 X 2.10 m X 1.70 m =					
1 X 5.80 m X 0.450 m =					2.61 m ²
2 X 2.50 m X 1.50 m =					7.50 m ²
				Total =	1704.75 m ²
				Qty Limit =	1704.38 m ²

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(9) Construction of Subgrade & Earthen Shoulder.					
Subgrade—					
	1	15	30.04	7.20	0.30042 972.04
Earthen Shoulder—					
Sides of G.S.B.					
	2	15	30.04	1.40	0.20042 252.04
Sides of W.B.M.					
	2	15	30.04	1.20	0.07542 81.04
Total—					1305.04
(10) P.V & Fixing of R.C.C. Misgrade kilometre					
Local stone =					01 No
(11) P.V & Fixing of 200m					
stones =					02 Nos
(12) P.V & Fixing of boundary pillars (R.C.C misgrade) =					
					40 Nos
(13) P.V & Fixing of Retro-reflective traffic					
Sign (600 mm circular)					
speed limit =					04 Nos
(14) 900 mm equilateral & triangle (Left/Right)					
Curves =					02 Nos
(15) 600 mm x 450 mm rectangular					
(school & place) =					02 Nos

Continuation

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(16) P/V & laying of hot-applied thermoplastic compound 2.5mm thick					
					$2 \times 15 \times 30.10 \text{ m} \times 0.10 \text{ m} = 90.10 \text{ m}^2$
(17) P/V & laying of a R.C.C. pipe duct 300mm dia across the road.					
					$2 \times 3 \times 2.50 \text{ m} = 15.00 \text{ Rm.}$
(18) P/V & erecting direction & place identification retro-reflectors					
					Sign board = 01 NO.
(19) P/V & fixing of typical messy information sign board with logo.					
					Logo identification board = 02 NOS
					Citizen information board = 02 NOS
					Maintenance board = 02 NOS
					Total = 06 NOS
(20) Earth work in excavation for foundation of structure.					
(H.P. Culvert - 1x6000mm - 01 NO)					
H. Wall,					
					$2 \times 6.450 \text{ m} \times 1.40 \text{ m} \times 0.50 \text{ m} = 22.09 \text{ m}^3$
Below pipe,					
					$1 \times 4.850 \text{ m} \times 1.530 \text{ m} \times 0.36 \text{ m} = 2.70 \text{ m}^3$

Continuation

Total = 29.79 m³

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
(21) P.V. p.c.c. m/s (1:2.5:5) as levelling course.					
H. wall,					
	2x	6.450 m	1.40 m	0.15 m	2.709 m^2
Below pipe,					
	1x	4.931 m	1.530 m	0.250 m	1.886 m^2
Less for pipe—					
					$0.250 \times 0.7857 \times (1.230)^2 \times 5496 = 1.637 \text{ m}^2$
					Total = 2.962 m^2 Qty. limb = 2.96 m^2
(22) Brick masonry work in C.M. 1:4.					
H. wall,					
	2x	6.150 m	$\frac{1.250 \text{ m} + 0.40 \text{ m}}{2}$	2.580 m	26.180 m^2
Parapet,					
	2x	6.150 m	0.40 m	1.20 m	5.904 m^2
Less for pipe,					
	2x	0.7857	$(1.230)^2$	0.622	(-1.478 m^2)
					Total = 30.606 m^2
(23) P.V. & laying R.C.C. pipe HPB of dia 1000 mm.					
	3x	2.50 m			7.50 m
(24) plastering with cement mortar (1:4) on brick work.					
outer side—	2x	6.150 m	3.780 m		46.49 m^2
inner side—	2x	6.150 m	0.60 m		7.38 m^2

Continuation

Qty C/O, = 53.87 m^2

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
Abstract of Cost.					
1. P.V. & fixing of Working Benchmark pillar & reference pillar,					
02 Nos, vide TMBP-1					
(a) Rs 1787 = 34/No - Rs					3575 = 00
2. Clearing & grubbing of road level.					
0.315 hect, vide TMBP-1					
(a) Rs 50148 = 62/hect Rs					15,797 = 00
3. Construction of embankment with material obtained from borrow pits with a haul up to 100 m.					
469.467 m ³ , vide TMBP-2					
(a) Rs 130 = 88/m ³ - Rs					61,444 = 00
4. Construction of granular sub-base by spreading coarse graded material.					
368.15 m ³ , vide TMBP-3					
(a) Rs 2646 = 59/m ³ - Rs					9,74,342 = 00
5. P.V. Laying, spreading & compacting of WBM.					
127.82 m ³ , vide TMBP-3					
(a) Rs 4000 = 93/m ³ - Rs					5,11,439 = 00
				c/o, Rs	15,66,597 = 00

Continuation

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
			B/F,	Rs 15,66,597=	60
<u>6</u> <u>7</u> P/V & applying of Primer coat with bitumen emulsion SS-1 1704.38 m ² , vide TMAP-4 (a) Rs 49=49/m ² —Rs 84,350=					60
<u>7</u> <u>8</u> P/V & applying tack Coat with bitumen emulsion RS-1 1704.38 m ² , vide TMAP-4 (a) Rs 16=07/m ² —Rs 27,389=					60
<u>8</u> <u>9</u> P/V, laying, rolling of close-graded premix surfacing material. 1704.38 m ² , vide TMAP-4 (a) Rs 238=75/m ² —Rs 4,07,262=					60
<u>9</u> <u>4</u> Construction of Subgrade & earthen shoulder 1305.60 m ³ , vide TMAP-5 (a) Rs 195=74/m ³ —Rs 2,55,702=					60
<u>10</u> <u>10</u> P/V & fixing of R.C. 1:5 grade kilometre Local stone 01 NO, vide TMAP-5 (a) Rs 2302=02/No—Rs 23,02=60 C/O, Rs 23,43,602=					60

Continuation

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
			B/F, Rs 23,43,602=		
<u>11</u> 11. P/V & fixing of 200m stones.					
02 Nos, vide TMBP-5					
① Rs 655=81/No - B					1312=00
<u>12</u> 12. P/V & fixing of boundary pillar (R.C.C. MIS grade)					
40 Nos, vide TMBP-5					
② Rs 500=02/No - B					20,001=00
<u>13</u> 13. P/V & fixing of Retro-reflective traffic sign (600mm circular speed limit					
04 Nos, vide TMBP-5					
③ Rs 5560=88/No - B					22,244=00
<u>14</u> 14. 900m equilateral triangle (Left/Right curve)					
02 Nos, vide TMBP-5					
④ Rs 6182=18/No - B					12,364=00
<u>15</u> 15. 600m x 450m rectangle (school & place)					
02 Nos, vide TMBP-5					
⑤ Rs 5410=85/No - B					10,822=00
			C/O, B 24,10,345=		

Continuation

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
			BIF	PS	24,10,345 = ∞
<u>16</u> 16. P.V. & Laying of hot applied thermoplastic compomat 2.5mm thick. 90.6 m ² , vide TMBP-6 (1) PS 942 = 89/m ² = PS 84,860 = ∞					
<u>17</u> 17. P.V. & Laying R.C.C. pipe duct 300 mm dia across the road 15.00 km, vide TMBP-6 (1) PS 880 = 24/km = PS 13,211 = ∞					
<u>18</u> 18. P.V. & erecting of direction & place identification retro- reflection to affix sign board 01 NO, vide TMBP-6 (1) PS 3445 = 02/NO = PS 3445 = ∞					
<u>19</u> 19. P.V. & fixing of typical message in format sign board with logo. 06 NOS, vide TMBP-6 (1) PS 9390 = 61/NO = PS 56,344 = ∞ C/O, PS 25,68,205 = ∞					

Continuation

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Particulars	Details of actual measurements			Quantity of area
	No.	L	B	
			B/F, Rs	25,68,205
20. Earthwork in excavation for foundation of structure of (H.P. culvert)				
29.79 m ³ , vide Tmap-6				
(U) Rs 264=02/m ³ -Rs				7865.00
21. P.V. P.C.C. M15 (1:2.5:5) as leveling course				
2.96 m ³ , vide Tmap-7				
(U) Rs 53.59=58/m ³ -Rs				15,864.00
22. Brick masonry work in c.m (1:4)				
30.606 m ³ , vide Tmap-7				
(U) Rs 5920=98/m ³ -Rs				1,81,524.00
23. P.V. & Laying R.C.C. pipe NP3 of dia 1000 mm				
7.50 M, vide Tmap-7				
(U) Rs 4194=44/M-Rs				31,458.00
24. Plastering with cement mortar (1:4) on brick work				
66.843 m ² , vide Tmap-8				
(U) Rs 160=50/m ² -Rs				10,728.00
			C/D, Rs	28,15,044.00
Continuation				

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Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
			B/F	Rs	28,15,644=00
$\frac{25}{25}$ P/V 1.5 mm cement painting.					
14.22 m ² , hole TMBP-8					
① Rs 49=48/m ² —Rs					704=00
$\frac{26}{26}$ Painting two coats on					
new surfaces.					
146.235 m ² , hole TMBP-8					
① Rs 110.65/m ² —Rs					12,861=00
			Total, Rs		28,29,209=00
Less 10% (below) (-) Rs					2,82,921=00
				Rs	25,46,288=00
Less previous amt (-) Rs					00=00
Net payable Amount, Rs					25,46,288=00

(Rupees) Twenty five Lakh,
Forty six thousand, two hundred
& eighty eight only.

Mmm
18/11/19
(J.E)

Atm
18/11/19

Col P
18/11/19

Work has been completed
as per agreement & technical
specification.

Mmm
18/11/19
(J.E)

Continuation