M.M.G.S.S
S.C

NH-98 To Rampur

Schedule XLV-Form No.-134

कार्यपालक अभियन्ता, सागरिय कार्य वि० कार्य मं० दाउदनगर **DIVISION**

सहायक अभियन्ता, कार्य अवर मं० -औरंगा **SUB-DIVISION**

MEASUREMENT BOOK

631

संवेदक → धनीश कुमार सिंह

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 No.	L.	B.	D.	Contents of area
Name of work :- Construction and five Year maintenance of Road from NH-98 To Rampur (2.270km)					
Agency :- Satish Kumar Singh					
Agreement no :-					
Date of Commencement :-					
Date of Completion :-					
Details of measurement					
1/ providing and fixing setting out pillars					
(a) Bench mark pillar				=	3 Nos
(b) Reference pillar				=	9 Nos
2/ Clearing and grubbing road land					
	2	x 10	x 30.00	x 3.50 =	2100.00 m²
	2	x 10	x 30.00	x 3.50 =	2100.00 m²
	2	x 10	x 30.00	x 3.50 =	2100.00 m²
	2	x 10	x 30.00	x 3.50 =	2100.00 m²
	2	x 10	x 30.00	x 3.50 =	2100.00 m²
	2	x 10	x 30.00	x 3.50 =	2100.00 m²
	2	x 10	x 30.00	x 3.50 =	2100.00 m²
	2	x 4	x 30.00	x 5.00 =	1200.00 m²
					15900.00 m²
				Unit 15,900.00 m²	= 1.59 Ha

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
3/ Dismantling of existing Structure					
(a) Plain Cement Concrete					
	4	3.50	1.14	0.15	= 2.40 m³
	1	3.50	1.54	0.15	= 0.81 m³
	2	3.50	3.38	0.15	= 3.54 m³
					6.75 m³
(b) Stone/Brick masonary					
	4	2	4.20	0.825	2.50 = 69.32 m³
	1	2	6.20	0.825	3.00 = 30.69 m³
	2	2	8.00	0.825	3.00 = 79.20 m³
					179.21 m³
(c) Hume pipe 600mm dia					
	4	7.50			= 30.00 m
(d) Hume pipe 600 to 900mm dia					
	1	5.00			= 5.00 m
	2	2	5.00		= 20.00 m
					25.00 m
4/ Providing and fixing MMGSY Logo Citizen information board CD work 600mm dia					= 2 Nos
5/ Earthwork in excavation for foundation					
Head wall	7	2	3.90	1.15	1.50 = 94.185 m³
Below pipe	7	1	5.35	1.13	0.365 = 15.446 m³
					109.631 m³
6/ Providing M15 grade PCC as levelling course					
Head wall	7	2	3.90	1.15	0.15 = 9.418 m³
Below pipe	7	1	5.311	1.130	0.25 = 10.502 m³
					19.92 m³

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
7/ Plain/reinforced Cement Concrete in Sub Structure					
Head wall	7	2	3.60	$\left(\frac{1.00+0.90}{2}\right)$ × 2.78	= 98.077 m³
Parapet	7	2	3.60	0.40 × 0.60	= 12.096 m³
Less for pile	7	2	0.7857	0.83² × 0.53	= 14.018 m³
					106.155 m³
8/ Providing and laying RCC NP3 600mm dia Hume pipe					
	7	3	2.50		= 52.50 m
HP- 1000mm dia					
9/ EW for excavation for foundation					
Head wall	2	2	6.45	1.40 × 1.50	= 54.18 m³
Below pile	2	1	4.85	1.53 × 0.365	= 5.416 m³
					59.596 m³
10/ providing M/s grade levelling Course in foundation					
Head wall	2	2	6.45	1.40 × 0.15	= 5.418 m²
Below pile	2	1	4.93	1.53 × 0.25	= 3.772 m³
					9.19 m³
11/ Plain Cement Concrete in Substructure					
Head wall	2	2	6.15	$\left(\frac{1.25+0.90}{2}\right)$ × 3.18	= 64.538 m³
Parapet	2	2	6.15	0.40 × 0.60	= 5.904 m³
Less for pile	2	2	0.7857	1.23² × 0.622	= 2.956 m³
					67.486 m³
12/ Providing and laying RCC NP3 1000mm dia Hume pipe					
	2	3	2.50		= 15.00 m

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Box Culvert 2m×2m					
13/ E/W in excavation for foundation					
	2	× 6.00	× 3.50	× 0.65 =	27.30 m³
	2×2	× 3.50	× 1.30	× 1.80 =	32.76 m³
	2×4	× 3.32	× 3.42	× 1.80 =	163.50 m³
					223.56 m³
14/ Supplying and fitting and placing HYSD Bar reinforcement in foundation					
	2×2×4	× 2.76	× 0.89	=	39.30 kg
	2×2×2×6	× 2.76	× 0.62	=	82.137 kg
	2×2×16	× 3.70	× 0.62	=	146.816 kg
	2×20	× 2.00	× 0.62	=	49.60 kg
					317.853 kg
					= 0.317 MT
15/ providing plain/reinforced Cement Concrete M/20 grade in foundation Cutoff wall					
	2×2×2	× 2.50	× 0.30	× 1.50 =	4.50 m³
15/ providing plain Cement Concrete M15 grade in foundation					
	2×1	× 6.00	× 2.50	× 0.10 =	3.00 m³
	2×4	× 3.32	× 2.42	× 0.20 =	12.85 m³
					15.83 m³
16/ providing plain/reinforced concrete M15 grade in foundation					
Cutoff wall	2×2	× 2.50	× 0.30	× 1.50 =	4.50 m³
Return wall	2×4	× 2.92	× 2.017	× 0.20 =	9.423 m³
	2×4	× 2.92	× 1.917	× 0.20 =	8.956 m³
	2×4	× 2.92	× 1.817	× 0.20 =	8.489 m³

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Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
	2x4x	2.92x	1.717x	0.20 =	8.021 m³
	2x4x	2.92x	1.617x	0.20 =	7.554 m³
	2x4x	2.92x	1.517x	0.20 =	7.087 m³
	2x4x	2.92x	1.417x	0.20 =	6.620 m³
	2x4x	2.92x	1.317x	0.20 =	6.153 m³
					66.803 m³
17/ Supplying and filling HYSD bar reinforcement in substructure					
	2x43x	2.74x	0.62	=	146.09 kg
	2x43x	2.74x	0.62	=	146.09 kg
	2x2x	43x1.42x	0.89	=	217.37 kg
	2x2x	41x1.15x	0.39	=	73.55 kg
	2x2x	11x6.24x	0.62	=	170.22 kg
	2x2x	42x3.84x	0.89	=	574.15 kg
	2x2x	30x2.74x	0.62	=	203.85 kg
	2x2x	43x1.42x	0.39	=	95.25 kg
	2x2x	41x1.15x	0.39	=	73.55 kg
	2x4x	11x5.92x	0.62	=	322.99 kg
					2023.11 kg
		=2.02 MT			
18/ plain reinforced Cement Concrete M25 grade in Substructure in box Culvert					
Bottom Slab	2x	6.00x	2.50x	0.25 =	7.50 m³
Side wall	2x2x	6.00x	2.00x	0.25 =	12.00 m³
Haunch	2x4x	6.00x	0.01	=	0.48 m³
					19.98 m³
19/ Supplying and filling HYSD bar reinforcement in Superstructure					

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
	2×47	×2.804	×0.89	=	234.58 kg
	2×43	×2.74	×0.62	=	146.09 kg
	2×2×13	×6.24	×0.62	=	201.17 kg
	2×2×2×13	×1.70	×0.62	=	109.61 kg
	2×2×8	×2.44	×0.89	=	69.49 kg
					760.94 kg
					= 0.76 MT
20/ Providing and laying RCC M30 grade in Superstructure.					
Top Slab	2	×2.50	×6.00	×0.25 =	7.50 m³
Kerb	2×2	×2.50	×0.25	×0.50 =	1.25 m³
					8.75 m³
21/ PCC M20 grade in Substructure in Retaining wall					
	2×4	×2.92	×(2.40+1.17a)/2	×1.78 =	32.43 m³
22/ providing and laying filter Media with granular (crushed Aggregate					
Behind Box Culvert	2×2	×4.61	×0.60	×1.70 =	18.80 m³
Behind retaining wall	2×4	×2.32	×0.60	×1.87 =	20.82 m³
					39.62 m³
23/ Back filling behind abutment and retaining wall					
Behind abutment					
	2×2	×2.92	×5.20	×0.20 =	12.147 m³
Retaining wall	2×2	×2.92	×4.61	×1.78 =	95.843 m³
Less for Filter Media		~~2×~~		= (-)	39.62 m³
					68.37 m³
24/ Plain reinforced Cement Concrete in Substructure for parapet Cont.					

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
	2	8.00	0.40	0.60 =	3.84 m³
	2	8.00	0.40	0.70 =	4.48 m³
Less for Cab	2	2	2.50	0.25 x 0.50 =	1.25 m³
					7.07 m³
25/ Providing curtailed	2	36		=	72.08
26/ Construction of Soakage with approved material					
	10	30.00	7.276	0.30 =	654.84 m³
	10	30.00	7.276	0.30 =	654.84 m³
	10	30.00	7.276	0.30 =	654.84 m³
	10	30.00	7.276	0.30 =	654.84 m³
					2619.36 m³
a) For Lead up to 1000m					
30% of 2619.36 m³				=	785.808 m³
b) For Lead up to 100m					
70% of 2619.36 m³				=	1833.552 m³
27/ Const. of Soak with well graded material Grading I					
For 3T Surface	10	30.00	4.05	0.20 =	243.00 m³
	10	30.00	4.05	0.20 =	243.00 m³
	10	30.00	4.05	0.20 =	243.00 m³
	10	30.00	4.05	0.20 =	243.00 m³
For CC Road	5	30.00	3.75	0.10 =	56.25 m³
	5	30.00	3.75	0.10 =	56.25 m³
					1084.50 m³

Checked
03-01-21
J.E.

31/1/2021
AE

Continuation

Abstract of Cost

8

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
1/ Setting out work					
(a) Providing and fixing Bench Mark pillar					
qty vide item no (1)(a) P(1)					
				=3 Nos	
@ Rs 3855.04					= Rs 11565.00
(b) Providing and fixing Reference pillar					
qty vide item no (1)(b) P(1)					
				=9 Nos	
@ Rs 1745.08					= Rs 15705.00
2/ Clearing and grubbing Road land					
qty vide item no (2) P(1)					
				=1.59 Ha	
@ Rs 51133.76					= Rs 81303.00
3/ Dismantalling of existing Structure					
(a) Plain Cement Concrete					
qty vide item no. 3(a) P(2)					
				=6.75 m³	
@ Rs 484.74					= Rs 3272.00
(b) Stone/Brick Masonary					
qty vide item no. 3(b) P(2)					
				=179.21 m³	
@ Rs 231.77					= Rs 41535.00
(c) Hume pipe 600mm dia					
qty vide item no 3(c) P(2)					
				=30.00m	
@ Rs 174.78					= Rs 5243.00
(d) Hume pipe 600-900mm dia					

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
Qty vide item no 3(a) P(2)			=25.00m		
@Rs 236.34				=Rs	5908.00
4/ Providing and fixing MMG[sy Logo bol					
Qty. vide item no(4) P(2)			= 2 Nos		
@Rs 9211.31				=Rs	18422.00
5/ ~~(2) Work Payment~~ Earthwork in excavation for foundation					
Qty vide item no (5) P(2)			=109.631m³		
Qty vide item no (5) P(3)			=59.596m³		
			169.227m³		
@Rs 269.32				=Rs	45576.00
6/ Providing RCC Mix grade in Levelling Course					
Qty vide item no(6) P(2) = 9.19m³					
Qty vide item no (6) P(3)			=19.92 m³		
			29.11m³		
@Rs 4650.96				=Rs	135389.00
7/ Plain Cement Concrete in Substructure					
Qty. vide item no(7) P(3) = 106.155m³					
Qty vide item no. (1) P(3) = 67.486m³					
			173.641m³		
@Rs 5425.02				=Rs	942006.00
8/ Providing and laying RCC NP3 600mm dia Hume pipe					
Qty vide item no (8) P(3) = 52.50m					
@Rs 1000.44				=Rs	52523.00

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
9/ providing and laying RCC NP3 1000mm dia Hume pipe					
Qty vide Item no (12/P3)					
			= 15.00m		
@ Rs 3713.47				= Rs	55702.00
~~Qty covered 2m²~~					
10/ E/W in excavation for foundation					
qty vide item no. (13/P4) = 223.56m³					
@ Rs 269.32				= Rs	60209.00
11/ Supplying and fitting HYSD bar					
reinforcement in foundation					
qty vide item no. (14/P-(4)					
			= 0.3178MT		
@ Rs 45606.68				= Rs	14494.00
12/ providing plain cement					
Concrete M15 grade in foundation					
qty vide item no. 15 P-4					
			= 15.83m³		
@ Rs 4650.96				= Rs	73624.00
13/ providing ~~RCC~~ 1:2:4 plain/					
Reinforced Cement Concrete M20					
grade in foundation					
Qty. vide item no (16) P-(5)					
			= 66.803m³		
@ Rs 5234.93				= Rs	349709.00
14/ Supplying and fitting HYSD bar					
in Substructure					
Qty. vide item no. (17/P(5)					
			= 2.02MT		
@ Rs 45747.67				= Rs	92410.00

Continuation

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
15/ Reinforced cement Concrete M25 grade in Substructure					
qty vide Item no. (18) P-(5)					
			= 19.98 M³		
@ Rs 6012.25				= Rs	120124.00
16/ providing weepholes					
qty. vide Item no 25 P(7)					
			= 72 Nos		
@ Rs 109.01				= Rs	7848.00
7/ Supplying and fitting HYSD bar reinforcement in Superstructure					
qty: Vide item no. (19/ P (6)					
			= 0.76 MT		
@ Rs 46797.47				= Rs	35566.00
18/ providing RCC M30 grade in Superstructure					
qty. vide item no. (20) P(6)					
			= 8.75 m³		
@ Rs 6554.16				= Rs	57349.00
19/ PCC M20 grade in Substructure Return wall					
qty. vide Item no. (21) P(6)					
			= 32.43 m³		
@ Rs 5425.02				= Rs	175933.00
20/ providing and laying filter Media					
qty. vide item no (22) P (6)					
			= 39.62 m³		
@ Rs 3062.92				= Rs	121353.00

Sch. XLV-Form No. 134

Particulars	Details of actual measurement No.	L.	B.	D.	Contents of area
21/ Back filling behind abutment and Return wall					
Qty. vide item no 23/ P(6)					
			= 68.37 m³		
@ Rs 702.46				= Rs 48027.00	
22/ PCC in Superstructure in parapet					
Qty. vide item no 24/ P(6)					
			= 7.07 m³		
@ Rs 5425.02				= Rs 38355.00	
23/ Construction of Subgrade with approved material					
a/ For Lead upto 1000m					
Qty. vide item no 26(a) P(7)					
			= 785.808 m³		
@ Rs 176.58				= Rs 138758.00	
(b) For Lead upto 100m					
Qty. vide item no 26(b) P(7)					
			= 1833.552 m³		
@ Rs 141.17				= Rs 258842.00	
24/ Const. of Gsb GSI					
Qty. vide item no. (27) P(7)					
			= 1084.50 m³		
@ Rs 2371.49				= Rs 2571881.00	
				Rs 5578631.00	
Less 10% as per Agreement				(-) Rs 557863.00	
				Rs 5020768.00	

Shukla 23-01-21
J.E

31/1/2021

Continuation

Sch. XLV-Form No. 134

Particulars	Details of actual measurement				Contents of area
	No.	L.	B.	D.	
		Blc	Rs 50	20768/-	
Add	12%	G.S.T	Rs	602492/-	
Add	1%		Rs	50208/-	
Total		Rs	5673468/-		
			3/01/2021		
MRD Gvs/m				AE	

Continuation