Directorate, CPWD
DG/DAR/07
NIRMAN BHAWAN, NEW DELHI – 110011.

This issue with the approval of DG, CPWD.

NIRMAN BHAWAN NEW DELHI DATED: 20/07/2017

OFFICE MEMORANDUM

Sub:- Correction slip no.5 Delhi Analysis of Rates 2016.

The following new item of prefab technology to be included in DAR-2016 after item No 5.49 of SH:5 (Reinforced Cement Concrete).

5.50	Fabrication & Manufacturing of Prestressed Hollow Core slab (Hollow area 25 to 30%) of different thickness & modular width 1200 mm in Controlled Factory Environment with approved methodology, conforming to IS:10297-1982 by using long line casting method having arrangement of proper steel bed. Concreting should be done by batch mixing plant capable of producing zero slump concrete, transported through automatic shuttels of standard make & layed on bed with the help of extruder/Slipformer, finishing, curing and also provision of steam curing. Cutting, making necessary cutout/holes of required sizes for services in slab element after achieving required strength, yard handling & stacking all complete as per approved shop drawings & design mix as per the direction of the Engineer-in-charge. (Cost of strands should be paid separately). **Note:** Excess/less cement over the specified cement content used as per design mix is payable/recoverable separately)				
5.50.1	Concrete Grade-M-40 (cement content 400 kg)				
5.50.1.1	100 mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of **10.80 cum (120 Rmt)** 120 Rmt X 1.20 m X .10 (25 % hollow)				
5.33.2	Rate as per item no 5.33.2 of SH RCC (M-25)	cum	10.80	7250.05	78300.54(A)
5.34.2	Rate as per item no 5.34.2 of SH RCC (M-35 instead of M-25) (Note : Cement content considered in M-35 is @ 350 kg/ cum)	cum	10.80	138.95	1500.66(A)
5.35	Rate as per item no 5.35 of SH RCC	quintal	5.40	672.75	3632.85(A)
NA	Hollow core bed cost taking 500 repetition 1500000/500=3000.00. Salvage value 25% of 3000.00= 750.00. Hence net value = 2250.00	L.S.	1.00	2250.00	2250.00
NA	Steam curing by using boiler /Heater	cum	10.80	500.00	5400.00
NA	Extra cost for preparing zero slump concrete	cum	10.80	150.00	1620.00
NA	Cutting, marking, lifting & transportation	L.S.	1.00	1000.00	1000.00
9999	Sundries	L.S.	13.00	1.73	22.49
5.41.1	Rate as per item no 5.41.1 of SH RCC (120x2x(1.20+0.10)=312)	sqm	312.00	32.20	10046.40(A)
	TOTAL				103772.94
	Add Water Charges @ 1% except on A				102.92
	TOTAL				103875.86
	Add CPOH @ 15% except on A				1559.31
	Cost for 120 metre				105435.18
	Cost of 1 metre				878.63
	Say				**878.65**

EE(GAS-II)

5.50.1.2	120 mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of **12.96 cum (120 Rmt)** 120 Rmt X 1.20 m X .12 (25 % hollow)				
5.33.2	Rate as per item no 5.33.2 of SH RCC (M-25)	cum	12.96	7250.05	93960.65(A)
5.34.2	Rate as per item no 5.34.2 of SH RCC (M-35 instead of M-25) (Note : Cement content considered in M-35 is @ 350 kg/ cum)	cum	12.96	138.95	1800.79(A)
5.35	Rate as per item no 5.35 of SH RCC	quintal	6.48	672.75	4359.42(A)
NA	Hollow core bed cost taking 500 repetition 1500000/500=3000.00. Salvage value 25% of 3000.00= 750.00. Hence net value = 2250.00	L.S.	1.00	2250.00	2250.00
NA	Steam curing by using boiler /Heater	cum	12.96	500.00	6480.00
NA	Extra cost for preparing zero slump concrete	cum	12.96	150.00	1944.00
NA	Cutting, marking, lifting & transportation	L.S.	1.00	1000.00	1000.00
9999	Sundries	L.S.	13.00	1.73	22.49
5.41.1	Rate as per item no 5.41.1 of SH RCC (120x2x(1.20+0.12)=316.80)	sqm	316.80	32.20	10200.96(A)
	TOTAL				122018.31
	Add Water Charges @ 1% except on A				116.96
	TOTAL				122135.27
	Add CPOH @ 15% except on A				1772.02
	Cost for 120 metre				123907.29
	Cost of 1 metre				1032.56
	Say				**1032.55**

5.50.1.3	150 mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 16.20 cum (120 Rmt) 120 Rmt X 1.20 m X 0.15 (25 % hollow)				
5.33.2	Rate as per item no 5.33.2 of SH RCC (M-25)	cum	16.20	7250.05	117450.81(A)
5.34.2	Rate as per item no 5.34.2 of SH RCC (M-35 instead of M-25) (Note : Cement content considered in M-35 is @ 350 kg/ cum)	cum	16.20	138.95	2250.99(A)
5.35	Rate as per item no 5.35 of SH RCC	quintal	8.10	672.75	5449.28(A)
NA	Hollow core bed cost taking 500 repetition 1500000/500=3000.00. Salvage value 25% of 3000.00= 750.00. Hence net value = 2250.00	L.S.	1.00	2250.00	2250.00
NA	Steam curing by using boiler /Heater	cum	16.20	500.00	8100.00
NA	Extra cost for preparing zero slump concrete	cum	16.20	150.00	2430.00
NA	Cutting, marking, lifting & transportation	L.S.	1.00	1000.00	1000.00
9999	Sundries	L.S.	13.00	1.73	22.49
5.41.1	Rate as per item no 5.41.1 of SH RCC (120x2x(1.20+0.15)=324.00)	sqm	324.00	32.20	10432.80(A)
	TOTAL				149386.37
	Add Water Charges @ 1% except on A				138.02
	TOTAL				149524.39
	Add CPOH @ 15% except on A				2091.08

EE(THS)

Code no	Description	Unit	Quantity	Rate	Amount
	Cost for 120 metre				151615.47
	Cost of 1 metre				1263.46
	Say				**1263.45**

5.50.1.4	200 mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 20.160 cum (120 Rmt) 120 Rmt X 1.20 m X0.20 (30 % hollow)				
5.33.2	Rate as per item no 5.33.2 of SH RCC (M-25)	cum	20.16	7250.05	146161.01(A)
5.34.2	Rate as per item no 5.34.2 of SH RCC (M-35 instead of M-25) (Note : Cement content considered in M-35 is @ 350 kg/ cum)	cum	20.16	138.95	2801.23(A)
5.35	Rate as per item no 5.35 of SH RCC	quintal	10.08	672.75	6781.32(A)
NA	Hollow core bed cost taking 500 repetition 1500000/500=3000.00. Salvage value 25% of 3000.00= 750.00. Hence net value = 2250.00	L.S.	1.00	2250.00	2250.00
NA	Steam curing by using boiler /Heater	cum	20.16	500.00	10080.00
NA	Extra cost for preparing zero slump concrete	cum	20.16	150.00	3024.00
NA	Cutting, marking, lifting & transportation	L.S.	1.00	1000.00	1000.00
9999	Sundries	L.S.	13.00	1.73	22.49
5.41.1	Rate as per item no 5.41.1 of SH RCC (120x2x(1.20+0.20)=336.00)	sqm	336.00	32.20	10819.20(A)
	TOTAL				182939.25
	Add Water Charges @ 1% except on A				163.76
	TOTAL				183103.01
	Add CPOH @ 15% except on A				2481.04
	Cost for 120 metre				185584.05
	Cost of 1 metre				1546.53
	Say				**1546.55**

5.50.1.5	250 mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 25.20 cum (120 Rmt) 120 Rmt X 1.20 m X 0.25 (30 % hollow)				
5.33.2	Rate as per item no 5.33.2 of SH RCC (M-25)	cum	25.20	7250.05	182701.26(A)
5.34.2	Rate as per item no 5.34.2 of SH RCC (M-35 instead of M-25) (Note : Cement content considered in M-35 is @ 350 kg/ cum)	cum	25.20	138.95	3501.54(A)
5.35	Rate as per item no 5.35 of SH RCC	quintal	12.60	672.75	8476.65(A)
NA	Hollow core bed cost taking 500 repetition 1500000/500=3000.00. Salvage value 25% of 3000.00= 750.00. Hence net value = 2250.00	L.S.	1.00	2250.00	2250.00
NA	Steam curing by using boiler /Heater	cum	25.20	500.00	12600.00
NA	Extra cost for preparing zero slump concrete	cum	25.20	150.00	3780.00
NA	Cutting, marking, lifting & transportation	L.S.	1.00	1000.00	1000.00
9999	Sundries	L.S.	13.00	1.73	22.49

EE(TAS)

Code no	Description	Unit	Quantity	Rate	Amount
5.41.1	Rate as per item no 5.41.1 of SH RCC (120x2x(1.20+0.25)=348.00)	sqm	348.00	32.20	11205.60(A)
	TOTAL				225537.54
	Add Water Charges @ 1% except on A				196.52
	TOTAL				225734.06
	Add CPOH @ 15% except on A				2977.35
	Cost for 120 metre				228711.42
	Cost of 1 metre				1905.93
	Say				**1905.95**

5.50.1.6	300 mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 30.24 cum (120 Rmt) 120 Rmt X 1.20 m X 0.30 (30 % hollow)				
5.33.2	Rate as per item no 5.33.2 of SH RCC (M-25)	cum	30.24	7250.05	219241.51(A)
5.34.2	Rate as per item no 5.34.2 of SH RCC (M-35 instead of M-25) (Note : Cement content considered in M-35 is @ 350 kg/ cum)	cum	30.24	138.95	4201.85(A)
5.35	Rate as per item no 5.35 of SH RCC	quintal	15.12	672.75	10171.98(A)
NA	Hollow core bed cost taking 500 repetition 1500000/500=3000.00. Salvage value 25% of 3000.00= 750.00. Hence net value = 2250.00	L.S.	1.00	2250.00	2250.00
NA	Steam curing by using boiler /Heater	cum	30.24	500.00	15120.00
NA	Extra cost for preparing zero slump concrete	cum	30.24	150.00	4536.00
NA	Cutting, marking, lifting & transportation	L.S.	1.00	1000.00	1000.00
9999	Sundries	L.S.	13.00	1.73	22.49
5.41.1	Rate as per item no 5.41.1 of SH RCC (120x2x(1.20+0.30)=360.00)	sqm	360.00	32.20	11592.00(A)
	TOTAL				268135.83
	Add Water Charges @ 1% except on A				229.28
	TOTAL				268365.11
	Add CPOH @ 15% except on A				3473.67
	Cost for 120 metre				271838.78
	Cost of 1 metre				2265.32
	Say				**2265.30**

5.50.1.7	350 mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 35.28 cum (120 Rmt) 120 Rmt X 1.20 m X 0.35 (30 % hollow)				
5.33.2	Rate as per item no 5.33.2 of SH RCC (M-25)	cum	35.28	7250.05	255781.76(A)
5.34.2	Rate as per item no 5.34.2 of SH RCC (M-35 instead of M-25) (Note : Cement content considered in M-35 is @ 350 kg/ cum)	cum	35.28	138.95	4902.16(A)
5.35	Rate as per item no 5.35 of SH RCC	quintal	17.64	672.75	11867.31(A)

EE(THS)

Code no	Description	Unit	Quantity	Rate	Amount
NA	Hollow core bed cost taking 500 repetition 1500000/500=3000.00. Salvage value 25% of 3000.00= 750.00. Hence net value = 2250.00	L.S.	1.00	2250.00	2250.00
NA	Steam curing by using boiler /Heater	cum	35.28	500.00	17640.00
NA	Extra cost for preparing zero slump concrete	cum	35.28	150.00	5292.00
NA	Cutting, marking, lifting & transportation	L.S.	1.00	1000.00	1000.00
9999	Sundries	L.S.	13.00	1.73	22.49
5.41.1	Rate as per item no 5.41.1 of SH RCC (120x2x(1.20+0.35)=372.00)	sqm	372.00	32.20	11978.40(A)
	TOTAL				310734.12
	Add Water Charges @ 1% except on A				262.04
	TOTAL				310996.16
	Add CPOH @ 15% except on A				3969.98
	Cost for 120 metre				314966.15
	Cost of 1 metre				2624.72
	Say				**2624.70**

5.50.1.8	400 mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 40.32 cum (120 Rmt) 120 Rmt X 1.20 m X 0.40 (30 % hollow)				
5.33.2	Rate as per item no 5.33.2 of SH RCC (M-25)	cum	40.32	7250.05	292322.02(A)
5.34.2	Rate as per item no 5.34.2 of SH RCC (M-35 instead of M-25) (Note : Cement content considered in M-35 is @ 350 kg/ cum)	cum	40.32	138.95	5602.46(A)
5.35	Rate as per item no 5.35 of SH RCC	quintal	20.16	672.75	13562.64(A)
NA	Hollow core bed cost taking 500 repetition 1500000/500=3000.00. Salvage value 25% of 3000.00= 750.00. Hence net value = 2250.00	L.S.	1.00	2250.00	2250.00
NA	Steam curing by using boiler /Heater	cum	40.32	500.00	20160.00
NA	Extra cost for preparing zero slump concrete	cum	40.32	150.00	6048.00
NA	Cutting, marking, lifting & transportation	L.S.	1.00	1000.00	1000.00
9999	Sundries	L.S.	13.00	1.73	22.49
5.41.1	Rate as per item no 5.41.1 of SH RCC (120x2x(1.20+0.40)=384.00)	sqm	384.00	32.20	12364.80(A)
	TOTAL				353332.41
	Add Water Charges @ 1% except on A				294.80
	TOTAL				353627.21
	Add CPOH @ 15% except on A				4466.29
	Cost for 120 metre				358093.51
	Cost of 1 metre				2984.11
	Say				**2984.10**

EE (TAS-II)

5.50.2	Extra for using M-50 (Cement content 425 kg) instead of M-40				
5.50.2.1	100mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of **10.80 cum (120 Rmt)** 120 Rmt X 1.20 m X .10 (25 % hollow)				
	Cement for M-50 Mix = 4.590 T Cement for M-40 Mix = 4.320 T Difference 0.270 T				
0367	Portland Cement	tonne	0.270	5,700.00	1539.00
2209	Carriage of cement	tonne	0.270	92.24	24.90
	Plasticizer for M-50 Mix = 91.800 Kgs Plasticizer for M-40 Mix = 86.400 Kgs Difference 5.400 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	5.400	38.00	205.20
	TOTAL				1769.10
	Add Water Charges @ 1%				17.69
	TOTAL				1786.80
	Add CPOH @ 15%				268.02
	Cost for 120 metre				2054.82
	Cost of 1 metre				17.12
	Say				**17.10**

5.50.2.2	120mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 12.96 cum (120 Rmt) 120 Rmt X 1.20 m X .12 (25 % hollow)				
	Cement for M-50 Mix = 5.508 T Cement for M-40 Mix = 5.184 T Difference 0.324 T				
0367	Portland Cement	tonne	0.324	5700.00	1846.80
2209	Carriage of cement	tonne	0.324	92.24	29.89
	Plasticizer for M-50 Mix = 110.160 Kgs Plasticizer for M-40 Mix = 103.680 Kgs Difference 6.480 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	6.48	38.00	246.24
	TOTAL				2122.93
	Add Water Charges @ 1%				21.23
	TOTAL				2144.16
	Add CPOH @ 15%				321.62
	Cost for 120 metre				2465.78
	Cost of 1 metre				20.55
	Say				**20.55**

5.50.2.3	150mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 16.20 cum (120 Rmt) 120 Rmt X 1.20 m X 0.15 (25 % hollow)				
	Cement for M-50 Mix = 6.885 T Cement for M-40 Mix = 6.480 T Difference 0.405 T				

EE (TA)

Code no	Description	Unit	Quantity	Rate	Amount
0367	Portland Cement	tonne	0.405	5700.00	2308.50
2209	Carriage of cement	tonne	0.405	92.24	37.36
	Plasticizer for M-50 Mix = 137.700 Kgs				
	Plasticizer for M-40 Mix = 129.600 Kgs				
	Difference 8.100 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	8.10	38.00	307.80
	TOTAL				2653.66
	Add Water Charges @ 1%				26.54
	TOTAL				2680.19
	Add CPOH @ 15%				402.03
	Cost for 120 metre				3082.22
	Cost of 1 metre				25.69
	Say				**25.70**

5.50.2.4	200mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 20.160 cum (120 Rmt)				
	120 Rmt X 1.20 m X0.20 (30 % hollow)				
	Cement for M-50 Mix = 8.568 T				
	Cement for M-40 Mix = 8.064 T				
	Difference 0.504 T				
0367	Portland Cement	tonne	0.504	5700.00	2872.80
2209	Carriage of cement	tonne	0.504	92.24	46.49
	Plasticizer for M-50 Mix = 171.360 Kgs				
	Plasticizer for M-40 Mix = 161.280 Kgs				
	Difference 10.080 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	10.08	38.00	383.04
	TOTAL				3302.33
	Add Water Charges @ 1%				33.02
	TOTAL				3335.35
	Add CPOH @ 15%				500.30
	Cost for 120 metre				3835.66
	Cost of 1 metre				31.96
	Say				**31.95**

5.50.2.5	250mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 25.20 cum (120 Rmt)				
	120 Rmt X 1.20 m X 0.25 (30 % hollow)				
	Cement for M-50 Mix = 10.710 T				
	Cement for M-40 Mix = 10.080 T				
	Difference 0.630 T				
0367	Portland Cement	tonne	0.63	5700.00	3591.00
2209	Carriage of cement	tonne	0.63	92.24	58.11
	Plasticizer for M-50 Mix = 214.200 Kgs				
	Plasticizer for M-40 Mix = 201.600 Kgs				
	Difference 12.600 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	12.60	38.00	478.80
	TOTAL				4127.91
	Add Water Charges @ 1%				41.28

EE(THS-II)

Code no	Description	Unit	Quantity	Rate	Amount
	TOTAL				4169.19
	Add CPOH @ 15%				625.38
	Cost for 120 metre				4794.57
	Cost of 1 metre				39.95
	Say				**39.95**

5.50.2.6	300mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 30.24 cum (120 Rmt) 120 Rmt X 1.20 m X 0.30 (30 % hollow) Cement for M-50 Mix = 12.852 T Cement for M-40 Mix = 12.096 T Difference 0.756 T				
0367	Portland Cement	tonne	0.756	5700.00	4309.20
2209	Carriage of cement	tonne	0.756	92.24	69.73
	Plasticizer for M-50 Mix = 257.040 Kgs Plasticizer for M-40 Mix = 241.920 Kgs Difference 15.1200 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	15.12	38.00	574.56
	TOTAL				4953.49
	Add Water Charges @ 1%				49.53
	TOTAL				5003.03
	Add CPOH @ 15%				750.45
	Cost for 120 metre				5753.48
	Cost of 1 metre				47.95
	Say				**47.95**

5.50.2.7	350mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 35.28 cum (120 Rmt) 120 Rmt X 1.20 m X 0.35 (30 % hollow) Cement for M-50 Mix = 14.994 T Cement for M-40 Mix = 14.112 T Difference 0.882 T				
0367	Portland Cement	tonne	0.882	5700.00	5027.40
2209	Carriage of cement	tonne	0.882	92.24	81.36
	Plasticizer for M-50 Mix = 299.880 Kgs Plasticizer for M-40 Mix = 282.240 Kgs Difference 17.640 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	17.64	38.00	670.32
	TOTAL				5779.08
	Add Water Charges @ 1%				57.79
	TOTAL				5836.87
	Add CPOH @ 15%				875.53
	Cost for 120 metre				6712.40
	Cost of 1 metre				55.94
	Say				**55.95**

EE (THS-II)

5.50.2.8	400mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 40.32 cum (120 Rmt) 120 Rmt X 1.20 m X 0.40 (30 % hollow) Cement for M-50 Mix = 17.136 T Cement for M-40 Mix = 16.128 T Difference 1.008 T				
0367	Portland Cement	tonne	1.008	5700.00	5745.60
2209	Carriage of cement	tonne	1.008	92.24	92.98
	Plasticizer for M-50 Mix = 342.720 Kgs Plasticizer for M-40 Mix = 322.560 Kgs Difference 20.160 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	20.16	38.00	766.08
	TOTAL				6604.66
	Add Water Charges @ 1%				66.05
	TOTAL				6670.70
	Add CPOH @ 15%				1000.61
	Cost for 120 metre				7671.31
	Cost of 1 metre				63.93
	Say				**63.95**

5.50.3	Extra for using M-60 (Cement content 440 kg) instead of M-40				
5.50.3.1	100mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Cement for M-40 Mix = 4.320 T Cement for M-60 Mix = 4.752 T Cement for M-40 Mix = 4.320 T Difference 0.432 T				
0367	Portland Cement	tonne	0.432	5700.00	2462.40
2209	Carriage of cement	tonne	0.432	92.24	39.85
	Plasticizer for M-60 Mix = 95.040 Kgs Plasticizer for M-40 Mix = 86.400 Kgs Difference 8.640 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	8.640	38.00	328.32
	TOTAL				2830.57
	Add Water Charges @ 1%				28.31
	TOTAL				2858.87
	Add CPOH @ 15%				428.83
	Cost for 120 metre				3287.70
	Cost of 1 metre				27.40
	Say				**27.40**

5.50.3.2 120mm thick hollow core slab

Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 12.96 cum (120 Rmt) 120 Rmt X 1.20 m X .12 (25 % hollow) Cement for M-60 Mix = 5.702 T Cement for M-40 Mix = 5.184 T Difference 0.518 T				
0367	Portland Cement	tonne	0.5184	5700.00	2954.88

EE(TAS-II)

Code no	Description	Unit	Quantity	Rate	Amount
2209	Carriage of cement Plasticizer for M-60 Mix = 114.048 Kgs Plasticizer for M-40 Mix = 103.680 Kgs Difference 10.368 Kgs	tonne	0.5184	92.24	47.82
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	10.368	38.00	393.98
	TOTAL				3396.68
	Add Water Charges @ 1%				33.97
	TOTAL				3430.65
	Add CPOH @ 15%				514.60
	Cost for 120 metre				3945.25
	Cost of 1 metre				32.88
	Say				**32.90**

5.50.3.3	150mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 16.20 cum (120 Rmt) 120 Rmt X 1.20 m X 0.15 (25 % hollow) Cement for M-60 Mix = 7.128 T Cement for M-40 Mix = 6.480 T Difference 0.648 T				
0367	Portland Cement	tonne	0.648	5700.00	3693.60
2209	Carriage of cement Plasticizer for M-60 Mix = 114.048 Kgs Plasticizer for M-40 Mix = 129.600 Kgs Difference 12.960 Kgs	tonne	0.648	92.24	59.77
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	12.96	38.00	492.48
	TOTAL				4245.85
	Add Water Charges @ 1%				42.46
	TOTAL				4288.31
	Add CPOH @ 15%				643.25
	Cost for 120 metre				4931.56
	Cost of 1 metre				41.10
	Say				**41.10**

5.50.3.4	200mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 20.160 cum (120 Rmt) 120 Rmt X 1.20 m X0.20 (30 % hollow) Cement for M-60 Mix = 8.870 T Cement for M-40 Mix = 8.064 T Difference 0.806 T				
0367	Portland Cement	tonne	0.8064	5700.00	4596.48
2209	Carriage of cement Plasticizer for M-60 Mix = 177.408 Kgs Plasticizer for M-40 Mix = 161.280 Kgs Difference 16.128 Kgs	tonne	0.8064	92.24	74.38
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	16.128	38.00	612.86
	TOTAL				5283.73
	Add Water Charges @ 1%				52.84

EE (TAS-II)

Code no	Description	Unit	Quantity	Rate	Amount
	TOTAL				5336.56
	Add CPOH @ 15%				800.48
	Cost for 120 metre				6137.05
	Cost of 1 metre				51.14
	Say				**51.15**

5.50.3.5	250mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 25.20 cum (120 Rmt) 120 Rmt X 1.20 m X 0.25 (30 % hollow) Cement for M-60 Mix = 11.088 T Cement for M-40 Mix = 10.080 T Difference 0.806 T				
0367	Portland Cement	tonne	1.008	5700.00	5745.60
2209	Carriage of cement	tonne	1.008	92.24	92.98
	Plasticizer for M-60 Mix = 221.760 Kgs Plasticizer for M-40 Mix = 201.600 Kgs Difference 20.160 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	20.16	38.00	766.08
	TOTAL				6604.66
	Add Water Charges @ 1%				66.05
	TOTAL				6670.70
	Add CPOH @ 15%				1000.61
	Cost for 120 metre				7671.31
	Cost of 1 metre				63.93
	Say				**63.95**

5.50.3.6	300mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 30.24 cum (120 Rmt) 120 Rmt X 1.20 m X 0.30 (30 % hollow) Cement for M-60 Mix = 13.306 T Cement for M-40 Mix = 12.096 T Difference 1.210 T				
0367	Portland Cement	tonne	1.2096	5700.00	6894.72
2209	Carriage of cement	tonne	1.2096	92.24	111.57
	Plasticizer for M-60 Mix = 266.112 Kgs Plasticizer for M-40 Mix = 241.920 Kgs Difference 24.192 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	24.192	38.00	919.30
	TOTAL				7925.59
	Add Water Charges @ 1%				79.26
	TOTAL				8004.85
	Add CPOH @ 15%				1200.73
	Cost for 120 metre				9205.57
	Cost of 1 metre				76.71
	Say				**76.70**

EE(TAS-II)

5.50.3.7	350mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 35.28 cum (120 Rmt) 120 Rmt X 1.20 m X 0.35 (30 % hollow) Cement for M-60 Mix = 15.523 T Cement for M-40 Mix = 14.112 T Difference 1.411 T				
0367	Portland Cement	tonne	1.4112	5700.00	8043.84
2209	Carriage of cement	tonne	1.4112	92.24	130.17
	Plasticizer for M-60 Mix = 310.464 Kgs Plasticizer for M-40 Mix = 282.240 Kgs Difference 28.224 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	28.224	38.00	1072.51
	TOTAL				9246.52
	Add Water Charges @ 1%				92.47
	TOTAL				9338.99
	Add CPOH @ 15%				1400.85
	Cost for 120 metre				10739.83
	Cost of 1 metre				89.50
	Say				**89.50**

5.50.3.8	400mm thick hollow core slab				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail cost of 40.32 cum (120 Rmt) 120 Rmt X 1.20 m X 0.40 (30 % hollow) Cement for M-60 Mix = 17.741 T Cement for M-40 Mix = 16.128 T Difference 1.613 T				
0367	Portland Cement	tonne	1.6128	5700.00	9192.96
2209	Carriage of cement	tonne	1.6128	92.24	148.76
	Plasticizer for M-60 Mix = 354.816 Kgs Plasticizer for M-40 Mix = 322.560 Kgs Difference 32.256 Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	32.256	38.00	1225.73
	TOTAL				10567.45
	Add Water Charges @ 1%				105.67
	TOTAL				10673.13
	Add CPOH @ 15%				1600.97
	Cost for 120 metre				12274.10
	Cost of 1 metre				102.28
	Say				**102.30**

EE (TAS-II)

5.51	Fabrication and manufacturing of solid precast concrete element with provisions of shear keys, connecting loops, dowel tubes and proper lifting accessories for walls, beams, slabs, stairs, column etc, of various thickness, shape and size of different concrete grades manufactured in controlled factory environment with approved methodology including moulds (Pallet system, Tilts form, table moulds, battery moulds, vertical moulds, beam moulds, column moulds, staircase moulds, Facade mould, etc.), mixing, transporting and placing of concrete, vibrating, curing, finishing, making necessary cutout/holes of required sizes for services, yard handling & stacking all complete as per IS 11447:1985 and as per approved shop drawings and design mix as per the direction of Engineer-in-Charge (Cost of reinforcement, Mechanical, Electrical and Plumbing inserts will be paid separately). **Note:** Excess/less cement over the specified cement content used as per design mix is payable/recoverable separately)
5.51.1	Concrete grade M-35 (Cement content 370 kgs)

Code no	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 1.26 Cum Considers a wall 2.80 X 3.00 X 0.15 = 1.260 Cum				
5.33.2	Rate as per item no 5.33.2 of SH RCC (M-25)	cum	1.26	7,250.05	9135.06(A)
5.34.2	Rate as per item no 5.34.2 of SH RCC (M-35 instead of M-25) (Note : Cement content considered in M-35 is @ 350 kg/ cum)	cum	1.26	138.95	175.08(A)
5.35	Rate as per item no 5.35 of SH RCC (M-35 (370 kgs))	quintal	0.252	672.75	169.53(A)
NA	Cost of hosting and fixing moulds (Cost of material). Assuming costing table bed unserviceable after use of 800 repetition. Effective table size 85% of 48sqm (12mx4m). Total cost of vibration casting table =2500000. Cost per sqm = 2500000/(0.85x48x800)= 76.59.	sqm	8.40	76.59	643.36
5.9.1	Rate as per item 5.9.1 of SH RCC, Side Shuttering of walls ((2.8+3)x2x0.15=1.74)	sqm	1.74	193.95	337.47(A)
9999	Table buffing & oiling	L.S	174.00	1.73	301.02
9999	Sundries (Extra labour for Lifting, transportation, stacking of finished precast elements)	L.S	230.00	1.73	397.90
5.41.1	Rate as per item no 5.41.1 of SH RCC (Curing using curing compound)	sqm	18.54	32.20	596.99(A)
NA	Shear loops (6mm dia GI wire rope) (For vertical joints) 6 nos on each side	each	12.00	192.00	2304.00
NA	dowel tubes (Corrugated GI pipes 50 to 80mm dia) (For horizontal joints)	metre	3.00	120.00	360.00
NA	Shear key (6mm thick mechanically folded MS plate)	L.S	115.00	1.73	198.95
NA	Hooks for lifting (Alloy steel) having 2.5 tonne capacity	each	2.00	250.00	500.00
	Labour for fixing accessories & inserts such as shear loops, shear keys, dowel tubes, lifting hooks				
0155	Mason (Average)	day	0.50	467.00	233.50
0115	Coolie	day	0.50	368.00	184.00

EE (TAS-II)

Code no	Description	Unit	Quantity	Rate	Amount
	Labour for operating of hoisting & fixing moulds				
0157	Operator	day	0.50	487.00	243.50
0116	Fitter (Grade 1)	day	0.30	487.00	146.10
0115	Coolie	day	0.30	368.00	110.40
9999	Sundries (Labour cost such as crane, trailer(flat bed & a frames) & panel racks for stacking of precost concrete panel wall)	L.S	173.41	1.73	300.00
	TOTAL				16336.86
	Add Water Charges @ 1% except on A				59.23
	TOTAL				16396.09
	Add CPOH @ 15% except on A				947.91
	Cost for 1.26 Cum				17344.00
	Cost of 1 Cum				13765.08
	Say				**13765.10**

5.51.2	Extra for using M-40 (Cement content 400 kg) instead of M-35				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Cement for M-35 Mix = 0.370 T Cement for M-40 Mix = 0.400 T Difference 0.030 T				
0367	Portland Cement	tonne	0.03	5700	171.00
2209	Carriage of cement	tonne	0.03	92.24	2.77
	Plasticizer for M-35 Mix =7.400 Kgs Plasticizer for M-40 Mix = 8.000 Kgs Difference 0.600Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	0.60	38	22.80
	TOTAL				196.57
	Add Water Charges @ 1%				1.97
	TOTAL				198.53
	Add CPOH @ 15%				29.78
	Cost of 1.00 Cum				228.31
	Say				**228.30**

5.51.3	Extra for using M-50 (Cement content 425 kg) instead of M-35				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Cement for M-35 Mix = 0.370 T Cement for M-50 Mix = 0.425 T Difference 0.055 T				
0367	Portland Cement	tonne	0.055	5700	313.50
2209	Carriage of cement	tonne	0.055	92.24	5.07
	Plasticizer for M-35 Mix =7.400 Kgs Plasticizer for M-50 Mix = 8.500 Kgs Difference 1.100Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	1.10	38	41.80
	TOTAL				360.37
	Add Water Charges @ 1%				3.60
	TOTAL				363.98
	Add CPOH @ 15%				54.60

Duo EE (M&S-II)

Code no	Description	Unit	Quantity	Rate	Amount
	Cost of 1.00 Cum				418.57
	Say				**418.55**

5.51.4	Extra for using M-60 (Cement content 440 kg) instead of M-35				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Cement for M-35 Mix = 0.370 T Cement for M-60 Mix = 0.440 T Difference 0.070 T				
0367	Portland Cement	tonne	0.07	5700	399.00
2209	Carriage of cement	tonne	0.07	92.24	6.46
	Plasticizer for M-35 Mix =7.400 Kgs Plasticizer for M-60 Mix = 8.800 Kgs Difference 1.400Kgs				
7318	Plasticizer or Super Plasticizer 2% of cement content	kg	1.40	38	53.20
	TOTAL				458.66
	Add Water Charges @ 1%				4.59
	TOTAL				463.24
	Add CPOH @ 15%				69.49
	Cost of 1.00 Cum				532.73
	Say				**532.75**

5.52	Providing & laying in position Prestressing steel strands (low relaxation) on hollow core bed by using mechanical pulling arrangement like Rabbit/ Bed master including all accessories for Stressing & destressing operations as per approved make conforming to IS1343 & grade FY-1860 etc, complete as per drawings and direction of Engineer -in-charge.				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Considering Four beds 8 strands (each strand is of 9.53mm dia consisting of 7 wires) X 4 beds X 120 Rmt X 0.453 Unit wt = 1739.52 kgs. Say 1740kgs. Details of Cost for 1740 Kg **MATERIALS** FY-1860 grade wire strands = 17.40 quintal Add wastage 10 % = 1.74 q				
	Total = 19.14 q	quintal	19.14	6200.00	118668.00
	Carriage of material	Kgs	1.914	92.24	176.55
NA	Cutting baldes required for strand cutting Strand cutting by cutting saw machine, 5000 cuts by diamond cutter costing Rs. 75000. Hence single cut cost =75000/5000=15.00	each	64.00	15.00	960.00
N/A	Wedges Cost of each wedge = 10000, and wedge used 600 times. Hence cost single use = 10000/600 = 16.67	each	64.00	16.67	1066.88
	Resources - For laying and fixing cables, anchorages				
0128	Mate	day	1.00	407.00	407.00
0102	Blacksmith 1st class	day	4.00	487.00	1948.00
0114	Coolie	day	3.00	368.00	1104.00
	Labour- For prestressting				
0128	Mate	day	2.00	407.00	814.00

EE(TAS-II)

Code no	Description	Unit	Quantity	Rate	Amount
0116	Fitter (Grade-1)	day	3.00	487.00	1461.00
0157	Operators	day	2.00	487.00	974.00
0114	Coolie	day	2.00	368.00	736.00
	MACHINERY (12 HRS Required to Lay 1.914 Ton strands on 4 beds)				
9999	Stressing Machine (jack with pump)	day	1.50	11500.00	17250.00
0028	Hire & Running Charges of Crane 20 Ton Capacity to handle strands (8 Nos. strand coils (average weight 3Ton each) required to lay one bed of 8 strands as one coil can lay only one strand at a time. Therefore to operate one complete bed total 8 Nos strand coils required, hence total 3X8= 24 Ton weight will be handled for one bed)	day	1.50	9300.00	13950.00
9999	Cutting Saw Machine	day	1.50	1350.00	2025.00
0030	Hire charges of Generator 250 KVA	day	1.50	2300.00	3450.00
9999	Strands Roller machinery for laying strands	day	1.50	3500.00	5250.00
9999	Bed master (Pulling strands)	day	1.50	3000.00	4500.00
0028	Crane handling charges for bed master & stressing machine. One bed master approx wt = 03 Ton (to be placed on each bed with the help of crane for laying of strands) One stressing Machine approx wt = 2.5 Ton (to be placed on each active ends of bed with the help of crane for initial pulling & stressing of strands) Handling & Shifting of bed master & stressing machine has to be done for each bed separately.	day	1.50	9300.00	13950.00
1235	Diesel for generator set (14 litres per hour for 11 hours)	Litre	154.00	46.65	7184.10
	TOTAL				195874.53
	Add Water Charges @ 1%				1958.75
	TOTAL				197833.27
	Add CPOH @ 15%				29674.99
	Cost for 1740 kgs				227508.26
	Cost of 1 Kg				130.75
	Say				**130.75**

5.53	Transportation of Precast Elements by flat bed Trailor (Double / Triple axle 40ft Length with proper accessories like A frame etc) from factory, including the cost of loading , unloading & stacking at site with the help of required capacity cranes.
5.53.1	Lead within 15km

Code no	Description	Unit	Quantity	Rate	Amount
	Trailors having capcity 22MT				

EE (TAS-II)

Code no	Description	Unit	Quantity	Rate	Amount
	Hire charges of truck trailors Number of trips in working day of 8 hours N=8/{(2L/S)+2)}. Where L=Lead in Km., S=Speed in Km.per hour, 1 hour is allowed for loading & 1 hour for unloading. L= 15 km . S= 15 km / hr N=8/{(30/15)+2)}=02 Trips / day				
	Hire charges Trailors having capacity 22MT including cost of fuel & driver cost / trip				
N/A	120000 rent for 30 days (26 working days) i/c driver and maintenance = 120000/26 = 4615.38, 2 trips per day at 30 litres diesel @46.55 = 1396.50. Total cost = 4615.38+1396.50 = 6011.88. Hence cost per trip = 6011.88/2 = 3005.94	trip	1.00	3005.94	3005.94
0028	Crane capacity of 30MT for loading from stock yard and unloading at site for 120 MT. Crane rent per day=9300. Hence Loading and unloading per MT = (9300/120)x2=155	MT	22.00	155.00	3410.00
0128	Mate	day	0.50	407.00	203.50
0114	Beldar	day	0.50	368.00	184.00
N/A	wooden battens for transportation	L.S.	57.80	1.73	99.99
N/A	Chain for packing & binding precast elements	L.S.	57.80	1.73	99.99
9999	sundries	L.S.	220.00	1.73	380.60
	TOTAL				7384.03
	Add Water Charges @ 1%				73.84
	TOTAL				7457.87
	Add CPOH @ 15%				1118.68
	Cost for 22 MT				8576.55
	Cost of 1 MT				389.84
	Say				**389.85**

5.53.2	Add/Deduct over item 5.1 for every additional lead of 5 km				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Extra for lead 5 km				
N/A	Hire charges Trailors having capcity 22MT in cluding cost of fuel & driver e trips (2 X15 X2)= 60km cost / Km = 6011.88/60 = 100.20 / km. Extra lead (5 X 2)= 10 Km	Km	10.00	100.20	1002.00
9999	sundries	L.S.	220.00	1.73	380.60
	TOTAL				1382.60
	Add Water Charges @ 1%				13.83
	TOTAL				1396.43
	Add CPOH @ 15%				209.46
	Cost for 22 MT				1605.89
	Cost of 1 MT				72.99
	Say				**73.00**

EE (TAS-II)

5.54	Erection & Installation of Precast/Prestressed Concrete elements in correct & final position with proper line level and plumb at site making all arrangements (i.e cranes, push-pull jacks & all another T & P for lifting Placing & Alignment of elements, within erection tolerance as per IS 15916 as per approved shop drawings and all complete as per the direction of Engineer-in-Charge but excluding the cost of sim pads, non shrink grout and steel works i.e hangers. All work up to fifth floor.

5.54.1	Prestressed hollow core Slab up to 200 mm thickness				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail of cost for 150 Sqm. Length of element can be upto 8.00 metres.				
	Mobile crane (Tyre mounted) upto 25m height 100 feet boom				
9999	Cost for crane upto 40 tonne capacity	day	1.00	20000.00	20000.00
NA	Hire charges of props & Misc	L.S.	150.00	5.00	750.00
0070	Genrator hiring 100kva	hour	8.00	300.00	2400.00
	Labour cost for erection				
0111	Forman	day	1.00	487.00	487.00
0112	Erectors	day	2.00	448.00	896.00
0116	Fitter (grade 1)	day	2.00	487.00	974.00
0130	Rigger	day	2.00	487.00	974.00
0114	Helper	day	2.00	368.00	736.00
9999	Sundries (Miscellaneous tools and lifting slings)	L.S.	500.00	1.73	865.00
	TOTAL				28082.00
	Add Water Charges @ 1%				280.82
	TOTAL				28362.82
	Add CPOH @ 15%				4254.42
	Cost for 150 Sqm				32617.24
	Cost of 1 Sqm				217.45
	Say				**217.45**

5.54.2	Prestressed hollow core slab above 200 mm up to 400 mm thickness				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail of cost for 120 Sqm. Length of element can be more than 8.00 metre and upto 14.00 metres.				
NA	Cost for crane upto 80 tonne capacity	day	1.00	30000.00	30000.00
NA	Hire charges of props & Misc	L.S.	120.00	5.00	600.00
0070	Genrator hiring 100kva	hour	8.00	300.00	2400.00
	Labour cost for erection				
0111	Forman	day	1.00	487.00	487.00
0112	Erectors	day	2.00	448.00	896.00
0116	Fitter (grade 1)	day	2.00	487.00	974.00
0130	Rigger	day	2.00	487.00	974.00
0114	Helper	day	2.00	368.00	736.00
9999	Sundries (Miscellaneous tools and lifting slings)	L.S.	500.00	1.73	865.00
	TOTAL				37932.00
	Add Water Charges @ 1%				379.32
	TOTAL				38311.32
	Add CPOH @ 15%				5746.70
	Cost for 120 Sqm				44058.02

EE(T)ASD

Code no	Description	Unit	Quantity	Rate	Amount
	Cost of 1 Sqm				367.15
	Say				**367.15**

5.54.3	Solid concrete wall elements				
Code no	**Description**	**Unit**	**Quantity**	**Rate**	**Amount**
	Detail of cost for 18 Cum. / Day Considering volume of different type of elements wall elements = 15 cum (13 nos) Beams / portal = 3 cum (02 nos) Total no of elements = 15 nos				
N/A	Cost for crane (50 MT) duration 01 day	day	1.00	25000.00	25000
N/A	Shifting of elements	L.S.	15.00	50.00	750
N/A	Hire charges of props & Misc for 3 days (3x3 = 9 / pc)	L.S.	150.00	9.00	1350
N/A	Erection Bolts (Minimum 04 nos for each element)	each	60.00	25.00	1500
0070	Genrator hiring 100kva	hour	8.00	300.00	2400
	Labour cost				
0111	Forman	day	2.00	487.00	974
0112	Carpenter 2nd class	day	2.00	448.00	896
0116	Fitter (grade 1)	day	2.00	487.00	974
0130	Mistry	day	3.00	487.00	1461
0116	rigger	day	2.00	487.00	974
0114	Beldar	day	8.00	368.00	2944
9999	Scaffolding, hire charge of drill machine etc.	L.S.	500.00	1.73	865
9999	Sundries (Miscellaneous tools and lifting slings)	L.S.	500.00	1.73	865
	TOTAL				40953.00
	Add Water Charges @ 1%				409.53
	TOTAL				41362.53
	Add CPOH @ 15%				6204.38
	Cost for 18 cum				47566.91
	Cost of 1 cum				2642.61
	Say				**2642.60**

5.55	Providing & Applying weather proof sealant on outer joints of approved make confirming to IS & directed by Engineer-in-charge.
5.55.1	Sealant 25mmx10mm at joints

Code no	Description	Unit	Quantity	Rate	Amount
	Detail of material required for = 1.00 metre including 5 % wastage				
8646	Silicon sealant (including 5% wastage)	cartridge	0.870	340.00	295.80
8654	Masking tape	metre	2.00	2.30	4.60
9999	Scaffolding, hire charge etc.	L.S.	2.87	1.73	4.97
9999	Sundries	L.S.	2.87	1.73	4.97
	TOTAL				310.33
	Add Water Charges @ 1%				3.10

EE (TAS-II)

Code no	Description	Unit	Quantity	Rate	Amount
	TOTAL				313.43
	Add CPOH @ 15%				47.02
	Cost of 1 metre				360.45
	Say				**460.45**

5.56	Providing & Laying of levelling sim pads required sizes (5x5cm to 10x10cm) of PVC / Rubber to adjust level of bearing surface of supporting members as per the direction of Engineer in charge.
5.56.1	2mm thick

Code no	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 100 nos				
	MATERIAL				
N/A	2 mm thick sim pad	each	100.00	10.00	1000.00
9977	Carriage of material	L.S.	5.00	1.73	8.65
	LABOUR				
0116	Fitter (Grade-1)	day	1.00	487.00	487.00
9999	Sundries	L.S.	10.00	1.73	17.30
	TOTAL				1512.95
	Add Water Charges @ 1%				15.13
	TOTAL				1528.08
	Add CPOH @ 15%				229.21
	Total				1757.29
	Cost for100 Nos				1757.29
	Cost of each				17.57
	Say				**17.55**

5.56.2	5 mm thick

Code no	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 100 nos				
	MATERIAL				
N/A	5 mm thick sim pad	each	100.00	15.00	1500.00
9977	Carriage of material	L.S.	5.00	1.73	8.65
	LABOUR				
0116	Fitter (Grade-1)	day	1.00	487.00	487.00
9999	Sundries	L.S.	10.00	1.73	17.30
	TOTAL				2012.95
	Add Water Charges @ 1%				20.13
	TOTAL				2033.08
	Add CPOH @ 15%				304.96
	Total				2338.04
	Cost for100 Nos				2338.04
	Cost of each				23.38
	Say				**23.40**

5.56.3	10 mm thick

Code no	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 100 nos				
	MATERIAL				
N/A	10 mm thick sim pad	each	100.00	25.00	2500.00
9977	Carriage of material	L.S	5.00	1.73	8.65
	LABOUR				

EE(TMAS-II)

Code no	Description	Unit	Quantity	Rate	Amount
0116	Fitter (Grade-1)	day	1.00	487.00	487.00
9999	Sundries	LS	10.00	1.73	17.30
	TOTAL				3012.95
	Add Water Charges @ 1%				30.13
	TOTAL				3043.08
	Add CPOH @ 15%				456.46
	Total				3499.54
	Cost for100 Nos				3499.54
	Cost of each				35.00
	Say				**35.00**

5.57	Providing & Grouting of dowel tubes / Shear keys / Joints of precast members with M-60 grade cementitious grout (Non Shrink) of approved make by suitable means (Free flowing /pump),curing etc. Complete as per directions of Engineer-in-charge. (The payment shall be made on the basis of actual weight of approved grout injected.)
5.57.1	Stirrer mixed cementitious grout (non shrink) of approved make in dowel tubes / Shear keys / Joints of precast members.

Code no	Description	Unit	Quantity	Rate	Amount
	Detail of cost for 250 kgs non shrink cementitious grout including 5 % wastage				
N/A	M-60 grade cemetitious grout (Non Shrink)	kg	262.50	28.00	7350.00
9977	Carriage of material	tonne	0.25	5700.00	1425.00
9999	Grouting charges of Stirrer mixed cementitious grout, rubber, pipe and other accessories hire charges of plant, machinery including necessary fuel and transportation of site	L.S.	2250.00	1.73	3892.50
	LABOUR				
0122	Foreman	day	1.00	487.00	487.00
0155	Masson	day	1.00	467.00	467.00
0161	Helper	day	1.00	368.00	368.00
	TOTAL				13989.50
	Add Water Charges @ 1%				139.90
	TOTAL				14129.40
	Add CPOH @ 15%				2119.41
	Cost for 200 Kgs				16248.80
	Cost of 1 Kg				65.00
	Say				**65.00**

20/7/17

Executive Engineer (TAS-II)
CSQ, CPWD, Nirman Bhawan,
New Delhi.

No. 133/SE (TAS)/CS-DAR-2016/ 142-E Dated: 20/07/2017

Copy to All the SDG/ADG/CEs/CPMs through CPWD website http://cpwd.gov.in

20/7/17

Executive Engineer (TAS-II)