

Item No.

D06.03

ditto, for Type P4 Pedestrian Parapet

Total Cost

Rs-1,070per m

Local Component

33 %

Foreign Component

67 %

Taxes Component

18 %

Particular

Description

Unit Q'ty

Unit cost (Rs)

Total cost (Rs)

Local Comp. Unit cost (Rs)

(Rs)

Foreign Comp. Unit cost (Rs)

(Rs)

Unit cost (Rs)

Taxes Comp.

Unit cost (Rs)

Cor. (Rs)

Inc. (Rs)

The cost of this item is deemed to be 80% of that of D06.01.

Remarks:

Item No.	Expansion Joint for Bridge and Water-tight Joint for Box Culvert, Type A										Total Cost			
											Local Component	Foreign Component	Taxes	
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Unit cost (Rs)	Taxes Comp. (Rs)	Imp. (Rs)	Cor. (Rs)	Inc. (Rs)
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)					
1	Equipment Cost	(23%)												
	Miscellaneous				20	25%	5	75%	15	15%	3	82%	16%	2%
2	Labour Cost	(1%)												
	Class 3 Carpenter	h	0.2	5.5	1	5.5	1							
	" 7 Skilled labourer	"	0.5	3.0	1.5	3.0	1.5							
	s-total				2.5		2.5							
3	Material Cost	(56%)												
	Joint Material	m	1	50	50	35%	18	65%	32	28%	14	92%	8%	1%
4	Overhead	(16%)			14.5	60%	9	40%	5.5	20%	3	70%		30%
5	Profit	(4%)			4	100%	4			50%	2		100%	2%
	total				91	(43%)	39	(57%)	52	(24%)	22	(77%)	(18%)	(5%)
Remarks:														

Item No.	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Total Cost		
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Local Component	Foreign Component	
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Imp. (Rs)	Cor. (Rs)	inc. (Rs)
D08.01	Transport to the site, lifting and fixing of prestressed Post Tensioned Beam on the top of bearing, Beams with length not exceeding 25 meters													Rs 14,300 per Beam
														53 %
														47 %
														20 %
	It is regarded the cost is approximately 80% of that for D08.02.													
	per 1.0 nr of beam			(100%)	14,300	(53%)	7,580	(47%)	6,720	(20%)	2,860	(65%)	(16%)	(19%)
												1,860	460	540
	The cost element is shown as below:													
1	Equipment Cost			(9%)	1,287									
2	Labour Cost			(26%)	3,718									
3	Material Cost			(45%)	6,435									
4	Overhead			(16%)	2,288									
5	Profit			(4%)	572									
	total				14,300									
	F.O.L Consumption				(Rs)									
	per 1.0 nr of beam				1,630	(11% of total cost)								
Remarks:														

Item No.	Temporary railway line facilities 30 kg/m (gauge 1067 mm)										Rs.130 per m			
	Local Component					Foreign Component					Taxes			
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Unit cost (Rs)	Taxes Comp. (Rs)	Imp. (Rs)	Cor. (Rs)	Inc. (Rs)
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)					
1	Equipment Cost													
	Truck	lt	1	145	145	60	60	85	85	44	44	40.5	2.6	0.9
	W.crane	16t	1	175	175	45	45	130	130	26	26	40.5	2.6	0.9
	B.dozer	24t	5	235	1,175	60	300	175	875	35	175	21.3	4.2	0.5
	Miscellaneous	sum	5%	75	75	25%	19	56	56	15%	11	82%	16%	2%
	s-total			1,570	1,570	424	424	1,146	1,146	256	256	9	1.8	0.2
2	Labour Cost													
	Class 2 Foreman	h	60	7.0	420	7.0	420			0.3	18			0.3
	" 7 Unskilled labourer	"	120	3.0	360	3.0	360							18
	" 3 Driver truck	"	1	5.5	5.5	5.5	5.5			0.1	0.1			0.1
	" 3 Operator W.crane	"	1	5.5	5.5	5.5	5.5			0.1	0.1			0.1
	" 3 Operator B.dozer	"	5	5.5	27.5	5.5	27.5			0.1	0.5			0.1
	s-total			819	819	819	819			19	19			0.5
3	Material Cost													
	Rail, 30 kg/m	m	100	54	5,400	37%	2,000	63%	3,400	27%	1,460	92%	8%	
	Sleeper	"	100	12	1,200	35%	420	65%	780	22%	260	79%	19%	2%
	Accessories	sum	5%	330	330	35%	115	65%	215	28%	90	86%	13%	1%
	Crusher run	m ³	20	54	1,080	19%	380	35%	700	12	240	9.5	2.3	0.2

Remarks: In material cost, assumed as:
 Rail: 0.03 t/m x 9000 Rs/t x 2m ÷ 5 times/depreciation = 54 Rs/m in railway length
 Sleeper: 0.04 m³/nr x 3000 Rs/m³ x 1 nr/m ÷ 5 times/depreciation = 12 Rs/m in railway length

Item No.	Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.				Foreign Comp.		Taxes			Per %		
							Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Imp. (Rs)		Cor. (Rs)	Inc. (Rs)
							(Rs)	(Rs)	(Rs)	(Rs)	(Rs)	(Rs)	(Rs)	(Rs)	(Rs)		(Rs)	(Rs)
		s-total			8,010		2,915		5,095		2,050		1,815		226	9		
		total			10,399		4,158		6,241		2,325		2,029		263	33		
4	Overhead		sum	20%	2,080		1,248	60%	832	40%	416	20%	70%		30%	125		
5	Profit		"	5%	521		521				260				260			
		g-total			13,000		5,927		7,073		3,001		2,320		523	158		
		per 1.0 m			130		60	(45%)	70	(55%)	30	(23%)	(77%)	(17%)	(6%)			
		per 1.0 nr of PC beam	m	8	1,040		470	(45%)	570	(55%)	240	(23%)	(77%)	(17%)	(6%)			
	F.O.I Consumption																	
	Truck,	11t	h	1	73		73											
	W.crane	16t		1	49		49											
	B.dozer	24t		5	60		300											
		total			422													
		per 1.0 m			4													
		per 1.0 nr of PC beam			32													

Remarks: Total nr of PC beam erected by girder method = 132.
 Required railway length = approx. 1000 m, so, 8 m length of railway line will be necessary for 1 nr of PC beam.

Item No.	Installation and removal of erection girder with appurtenant machineries for PC beam, $\ell > 25$ m										Total Cost			
											Rs. 2,360 per PC beam	Local Component	Foreign Component	Taxes Component
Particular	Description	Unit Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Imp. (Rs)	Cor. (Rs)	Inc. (Rs)	
					Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost	(Rs)				
1	Equipment Cost													
	W-crane	25t	h	30	250	60	1,800	190	5,700	38	1,140	31.2	6.1	0.7
	Miscellaneous		sum	10%	750	25%	190	75%	560	15%	113	936	183	21
	s-total				8,250		1,990		6,260		1,253	93	18	2
2	Labour Cost			(15 days)										
	Expatriate		h	60	45	47%	1,270	53%	1,430	33%	890			890
	Class 2 Foreman		"	60	7	7	420			0.3	18			18
	" 2 Artisan		"	600	7	7	4,200			0.3	180			180
	" 7 Unskilled labourer		"	600	3	3	1,800							
	s-total				9,120		7,690		1,430		1,088			1088
3	Material Cost													
	Miscellaneous		sum		1,500	35%	525	65%	975	28%	420	86%	13%	1%
	total				18,870		10,205		8,665		2,761	360	55	5
4	Overhead		sum	20%	3,770	60%	2,270	40%	1,500	20%	755	70%	256	1116
5	Profit		"	5%	945		945				473	530	473	225
	g-total				23,585		13,420		10,165		3,989	1,919	729	1341
	Here assumed that the cost covers 10 times of erection work, so,													
	1.0 nr of PC beam $\ell > 25$ m													
					2,360	(57%)	1,340	(43%)	1,020	(17%)	400	(48%)	(18%)	(34%)
Remarks:													73	134

Item No.	Erection work of PC beam										Total Cost		Rs.3910 per PC beam	
											Local Component	Foreign Component	71 %	29 %
Particular	Description	Unit	Qty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Taxes		
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Imp (Rs)	Cor. (Rs)	Inc. (Rs)
1	Equipment Cost													
	Miscellaneous	sum			250	25%	63	75%	187	15%	38	82%	16%	2%
2	Labour Cost													
	Expatriate	h	15	45	675	21	31.5	24	360	14.9	224			224
	Class 2 Foreman	"	15	7	105	7	105			0.2	3			
	" 2 Artisan	"	160	7	1,120	7	1,120			0.2	32			32
	" 7 Unskilled labourer	"	160	3	480		480							
	s-total				2,380		2,020		360		259			259
3	Material Cost													
	Miscellaneous	sum			500	35%	175	65%	325	28%	140	86%	13%	1%
	total				3,130		2,258		872		437	129	18	2
4	Overhead	sum	20%		625	60%	375	40%	250	20%	125	70%		30%
5	Profit	"	5%		155		155				78	88		37
	g-total				3,910	(71%)	2,790	(29%)	1,120	(16%)	640	(37%)	(16%)	(47%)
												239	102	299
Remarks:														

Item No.	Anchoring for erection girder										Rs. 1390 per 1.0 nr of PC beam						
	Sub.D08.02-5					Local Component					Foreign Component					Taxes	
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Imp. (Rs)	Cor. (Rs)	Inc. (Rs)			
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)						
1	Equipment Cost																
	Miscellaneous	sum			200	25%	50	75%	150	15%	30	82%	16%	2%			
2	Labour Cost																
	Class 2 Foreman	h	2	7	14	7	14			0.3	0.6				0.6		
	" 2 Artisan	"	20	7	140	7	140			0.3	6				6		
	" 7 Unskilled labourer	"	20	3	60		60										
	s-total				214		214				6.6				6.6		
3	Material Cost																
	Timber, local	m3	0.06	2,650	159	928	56	1,722	103	583	35	461	111		11		
	Steel wire ø16	t	0.02	13,000	260	1200	24	11,800	236	520	10.4	21	489		10		
	Miscellaneous	sum			21	25%	5	75%	16	15%	3	82%	9.9	2%			
	s-total				440		85		355		48.4	30.9	17.4		0.1		
	total				854		349		505		85	55.9	22.4		6.7		
4	Overhead				170	60%	102	40%	68	20%	34	70%			30%		
5	Profit				43		43				22				10%		
	g-total				1,067	(46%)	494	(54%)	573	(13%)	141	(57%)	(31%)	(12%)			
	Here assumed that 8 nr of anchorage is required for 1 span (5 PC beam), so:																
	per 1.0 nr of PC beam				1,390	46%	640	54%	750	13%	180	57%	31%	12%			
	Remarks:														56	21	

Item No.	Depreciation cost of erection girders and appurtenant machineries										Rs. 8,100 per nr. of 20 beam				
											Local Component	Foreign Component	Taxes Component	43 %	57 %
Particular	Description	Unit	Qty	Unit cost (Rs)	Total cost (Rs)	Local Comp. Unit cost (Rs)	Local Comp. (Rs)	Foreign Comp. Unit cost (Rs)	Foreign Comp. (Rs)	Unit cost (Rs)	Taxes Comp. (Rs)	Imp. (Rs)	Cor. (Rs)	Inc. (Rs)	
	Assumed that the girder be manufactured at Site;														
	(for manufacturing and final dismantling)														
1	Equipment Cost														
	Truck	8t	h	50	100	40	2,000	60	3,000	30	1,500	27,61,380	1.8	0.6	
	W. crane	5t	"	50	75	20	1,000	55	2,750	11	550	9,04,450	1.8	0.2	
	Miscellaneous		sum	10%	450	25%	112	75%	338	15%	68	82,56	16%	2%	
	s-total				9,200		3,112		6,088		2,118	1,886	191	41	
2	Labour Cost (total duration: 25 days)														
	Expatriate		h	50	45	21	1,050	24	1,200	14.9	745			14.9	
	Class 1 Chief foreman		"	25	10.5	10.5	263			0.7	18			0.7	
	" 2 Foreman		"	100	7	7	700			0.2	20			0.2	
	" 2 Artisan		"	1000	7	7	7,000			0.2	200			0.2	
	" 7 Unskilled labourer		"	1000	3	3	3,000							200	
	" 5 Driver truck 8t		"	50	5.5	5.5	275			0.1	5			0.1	
	" 5 Operator W. crane		"	50	5.5	5.5	275			0.1	5			0.1	
	s-total				13,763		12,563		1,200		993			993	
Remarks:	Weight of girder; 22 t														

Item No.	Total Cost										Rs.	per %		
	Local Component					Foreign Component								
	Taxes Component					Taxes								
	Unit cost (Rs)	Q'ty	Unit cost (Rs)	Total cost (Rs)	Unit cost (Rs)	Unit cost (Rs)	Unit cost (Rs)	Unit cost (Rs)	Unit cost (Rs)	Unit cost (Rs)			Unit cost (Rs)	Imp. (Rs)
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp. Unit cost (Rs)	Local Comp. (Rs)	Foreign Comp. Unit cost (Rs)	Foreign Comp. (Rs)	Taxes Comp. Unit cost	Taxes Comp. (Rs)			
		w. crane 5t	h	50	35	1,750								
		total				4,450								
		per 1.0 nr of PC beam, l > 25 m				110								
Remarks:														

Item No.	Supply and Complete in Place of Precast Concrete Block Footway for Bridge										Total Cost		Rs. 92 per 1.0m ²	
											Local Component	48	%	%
D09.											Foreign Component	52	%	%
											Taxes Component	17	%	%
Particular	Description	Unit	Qty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Taxes		
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Imp. (Rs)	Cor. (Rs)	Inc. (Rs)
1	Equipment Cost	(11%)												
	Miscellaneous sum				10	25%	2.5	75%	7.5	15%	1.5	82%	16%	2%
												1.2	0.3	
2	Labour Cost	(4%)												
	Class 3 Mason	h	0.3	5.5										
	5-Skilled labourer	"	0.6	3										
	S-total				3.5		3.5							
3	Material Cost	(65%)												
	Concrete Block, etc.	m	1.0		60	41%	25	59%	35	15%	9	63%	33%	4%
												6	3	
4	Overhead	(16%)												
					14.5	60%	9	40%	5.5	20%	3	70%		50%
												2		1
5	Profit	(4%)												
					4	100%	4			50%	2	100%		
	G-total				92	(48%)	44	(52%)	48	(17%)	16	(56%)	(38%)	(6%)
												9	6	1
Remarks:														

Item No.	Supply and fixing of Bridge Drain, Catch Basin, Type A										Total Cost		Rs.1,180 per 10mtr	
	Local Comp.					Foreign Comp.					Local Component	Foreign Component	41 %	59 %
Particular	Description	Unit Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Imp. (Rs)	Cor. (Rs)	Inc. (Rs)	
					Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)				
1	Equipment Cost													
	Miscellaneous	sum		100	25%	25	75%	75	15%	15	82%	16%	2%	
2	Labour Cost													
	Class 2 Foreman	h	7	21										
	" 5 Skilled labourer	h	4	40										
	S-total			61		61								
3	Material Cost													
	Drain	nr	600	600	29%	174	71%	426	12%	72	80%	19%	1%	
	Miscellaneous	sum	30%	180	35%	63	65%	117	28%	50	92%	8%		
	S-total			780		237		543		122	104	18		
4	Overhead			188	60%	113	40%	75	20%	38	70%		30%	
5	Profit			47	100%	47			50%			100%	11%	
	G-total			1,176	(41%)	483	(59%)	693	(15%)	175	(82%)	(12%)	(6%)	
	per 1.0 nr (rounded)			1,180	(41%)	483	(59%)	697	(15%)	177	(82%)	(12%)	(6%)	
Remarks:														

Item No.	Supply and fixing of Bridge Drain, ditto Type B										Total Cost		Rs. 1,500 per 1.0 nr		
	Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Imp. (Rs)	Cor. (Rs)	Inc. (Rs)
Unit cost (Rs)							(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)				
D10.02															
1	Equipment Cost														
	Miscellaneous		sum		100										
2	Labour Cost														
	Class 2 Foreman		h	3	7	21									
	" 5 Skilled labourer		h	10	4	40									
	S-total					61									
3	Material Cost														
	Drain		nr	1	800	800									
	Miscellaneous		sum	30%		240									
	S-total					1,040									
4	Overhead					240									
5	Profit					60									
	G-total					1,501									
	per 1.0 nr (rounded)					1,500									

Remarks: The ratio of cost element and component is deemed same with that of D10.01.

Item No.	Supply and fixing of Bridge Drain, ditto, Type C and Type C'										Rs. 850 per lOnr	
											Local Component	41 %
										Foreign Component	59 %	
										Taxes Component	15 %	
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Inc. (Rs)
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	
1	Equipment Cost											
	Miscellaneous	sum			100							
2	Labour Cost											
	Class 2 Foreman	h	3	7	21							
	" 5 Skilled labourer	h	10	4	40							
	S-total				61							
3	Material Cost											
	Drain	nr	1	400	400							
	Mascellaneous	sum	30%		120							
	S-total				520							
4	Overhead				136							
5	Profit				34							
	G-total				851							
	per 1.0 nr				850							
Remarks:	Ratio of cost component and component is deemed same with that of D10.01.											

Item No.	ditto, but for Lead Pipe, PVC φ125										Rs. 90 per lOnr			
											Total Cost	Local Component	%	
D10.05											Foreign Component	58	%	
											Taxes Component	25	%	
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Imp. (Rs)	Cor. (Rs)	Inc. (Rs)
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost	(Rs)			
	(per 10 m)													
1	Equipment Cost													
	Miscellaneous	sum			100	25%	25	75%	75	15%	15	82%	16%	2%
												12	3	
2	Labour Cost													
	Class 2 Foreman	h	1	7	7					0.2	0.2			0.2
	" 5 Skilled labourer	h	7	4	28									
	S-total				35		35							
3	Material Cost													
	PVC pipe φ	m	10	50	500	35%	175	65%	325	28%	140	92%	8%	
	Miscellaneous				100	35%	35	65%	65	28%	28	92%	8%	
	S-total				600		210		390		168	155	13	
4	Overhead				120	60%	72	40%	48	20%	24	70%		30%
	Profit				30	100%	30			50%	15	17	100%	7
	G-total				885	(42%)	372	(58%)	513	(25%)	222.2	(83%)	(14%)	(3%)
	per 1.0 m				90	(42%)	38	(58%)	52	(25%)	23	(83%)	(14%)	(3%)
	Remarks:											19	3	1

Item No.	ditto, but for Lead Pipe, PVC φ200										Total Cost			Rs. 135 per 1.0 m		
	Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Imp. Cor. (Rs)	Inc. (Rs)	%	
Unit cost (Rs)							(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)					
	(per 10 m)															
1	Equipment Cost															
	Miscellaneous		sum		100											
2	Labour Cost															
	Class 2 Foreman		h	7	7											
	" 5 Skilled labourer		h	4	28											
	S-total				35											
3	Material Cost															
	PVC pipe φ		m	10	800											
	Miscellaneous				160											
	S-total				960											
4	Overhead															
					219											
5	Profit															
					55											
	G-total				1,369											
	per 1.0 m				135											
Remarks:		The ratio of cost element and component is deemed same with that of D10.05.														

Item No.	PVC pipe for telephone cable φ150										Total Cost		Rs. 98 per m		
	Particular.	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Imp. (Rs)	Cor. (Rs)	Inc. (Rs)
Unit cost (Rs)							(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)				
	(per 10 m)														
1	Equipment Cost	(10%)													
	Miscellaneous		sum		100	25%	25	75%	75	15%	15	82%	16%	2%	
2	Labour Cost	(4%)													
	Class 2 Foreman		h	7	7	7.0	7			0.2	0.2			0.2	
	" 5 Skilled labour		h	4	28	4.0	28							0.2	
	S-total				35		35								
3	Material Cost	(66%)													
	P.V.C pipe		m	10	540	35%	189	65%	351	28%	151	92%	8%		
	Miscellaneous		sum	1	110	35%	39	65%	71	28%	31	92%	8%		
	S-total				650		228		422		182	167	15		
	total				785		288		497		197.2	179	18	0.2	
4	Overhead	(16%)	sum	20%	157	60%	94	40%	63	20%	30.8	70%		30%	
5	Profit	(4%)	sum	5%	38	100%	38			50%	19			100%	
	G-total				980	(43%)	420	(57%)	560	(25%)	247	(81%)	(15%)	(4%)	
	per 1.0 m				98							201	37	9	
Remarks:															

Item No.	PVC pipe for telephone cable φ80										Rs. 39 per m	
											Local Component	43 %
										Foreign Component	57 %	
										Taxes Component	25 %	
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes		
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	Cor. (Rs)	Inc. (Rs)
1	Equipment Cost											
	Miscellaneous	sum			50							
2	Labour Cost											
	Class 2 Foreman	h	1	7.0	7							
	" 5 Skilled labour	h	4	4.0	16							
	S-total				23							
3	Material Cost											
	P.V.C pipe	m	10	20	200							
	Miscellaneous	sum	1		40							
	S-total				240							
	total				313							
4	Overhead (16%)		20%		63							
5	Profit (4%)		5%		14							
	G-total				390							
	per 1.0 m				39							
Remarks:												

Ratio of both Cost element and component are deemed same with those of Pay Item D11.01.

Item No.	Steel water pipe φ90										Rs. 78 per m		
	Total Cost		Local Component		Foreign Component		Taxes Comp.		Taxes				
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Unit cost (Rs)	Imp. (Rs)	Cor. (Rs)	Inc. (Rs)
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)				
1	Equipment Cost	(10%)											
	Miscellaneous		sum		50								
2	Labour Cost	(4%)											
	Class 2 Foreman		h	7.0	7.0								
	" 3 Plumber		h	5.5	5.5								
	" 7 Unskilled labour		h	3.0	18.0								
	S-total				30.5								
3	Matreial Cost	(66%)											
	Steel water pipe φ90		m	45	450								
	Miscellaneous		sum		89.5								
	S-total				539.5								
	total				620								
4	Overhead	(16%)	sum	20%	124								
5	Profit	(4%)	sum	5%	31								
	G-total				775	(43%)		(57%)		(25%)	(81%)	(15%)	(4%)
	per 1.0 m				78								
Remarks:													

Ratio of both cost element and component are deemed same with those of Pay Item D11.01.

Item No.	Steel Sewage pipe φ380										Rs. 574 per m					
											Total Cost	Local Component	Foreign Component	Taxes Component	Local Component	Foreign Component
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Unit cost (Rs)	Taxes Comp. (Rs)	Imp. (Rs)	Cor. (Rs)	Inc. (Rs)		
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)							
1	Equipment Cost	(2%)														
	Miscellaneous		sum		100											
2	Labour Cost	(1%)														
	Class 2 Foreman		h	7.0	7.0											
	" 3 Plumber		h	5.5	22.0											
	" 7 Unskilled labour		h	3.0	24.0											
	S-total				53.0											
3	Material Cost	(77%)														
	Steel sewage pipe		m	370	3,700											
	Miscellaneous		sum		740											
	S-total				4,440											
	total				4,593											
4	Overhead	(16%)	sum	20%	920											
5	Profit	(4%)	sum	5%	227											
	G-total				5,740											
	per 1.0 m				574											
Remarks:																

Ratio of Cost component is deemed same with Pay Item D11.01.

Item No.	Supply and complete in place of Nameplate											Total Cost			
												Local Component	Foreign Component	Taxes Component	Rs. 4,225 per 1.0 nr
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Imp. (Rs)	Cor. (Rs)	Inc. (Rs)	
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)				
	(per 1.0 nr)														
1	Equipment Cost	(7%)													
	Miscellaneous		sum		300	25%	75	75%	225	15%	45	82%	16%	2%	
												37	7	1	
2	Labour Cost	(2%)													
	Skilled labourer		h	20	80	100%	80								
3	Material Cost	(71%)													
	Cast bronze		nr	1	2,500	20%	500	80%	2,000	13%	325	81%	19%		
	Miscellaneous			20%	500	35%	175	65%	325	28%	140	92%	8%	10	
	S-total				3,000		675		2,325		465		390	75	
4	Overhead	(16%)													
					675	60%	405	40%	270	20%	135	70%		30%	
5	Profit	(4%)													
					170	100%	170			50%	85		100%	85	
	G-total				4,225	(33%)	1,405	(67%)	2,820	(17%)	730	(72%)	(23%)	(5%)	
												522	167	41	
Remarks:															

Item No.	Supply and complete in place of Score Protection Riprap covered by Concrete										Total Cost			Rs. 60 per 1.0 m ²		
	Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Imp. (Rs)	Cor. (Rs)	Inc. (Rs)	
Unit cost (Rs)							(Rs)	Unit cost (Rs)	(Rs)	Unit cost	(Rs)					
D-13																
	(per 10 m ²)															
1	Equipment Cost	(25%)														
	Miscellaneous		sum		150	25%	40	75%	110	15%	25	82%	16%	2%		
2	Labour Cost	(19%)														
	Mason		h	8	40		40									
	Unskilled labourer		h	24	72		72									
	S-total				112		112									
3	Material Cost	(36%)														
	Riprap stone		t	3.3	180	35%	65	65%	115	22%	40	79%	19%	2%		
	Miscellaneous		sum	20%	35	35%	13	65%	22	28%	10	92%	8%			
	S-total				215		78		137		50	41	9			
4	Overhead	(16%)			95	60%	57	40%	38	20%	19	70%		30%		
5	Profit	(4%)			25		25				13		13			
	G-total				597	(52%)	312	(48%)	285	(18%)	107	(69%)	(25%)	(6%)		
	per 1.0 m ²				60	(52%)	31	(48%)	29	(18%)	11	7	3	1		
Remarks:	F.O.L consumption is assumed 7% of total cost with G01.01.															

Item No:	Supply and Complete in Place of Water Proof Mortar for Aguaduct, t = 2 cm										Total Cost		Rs.20 per m ²	
											Local Component	Foreign Component	50 %	50 %
Particular	Description	Unit	Qty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Taxes		
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Imp. (Rs)	Cor. (Rs)	Inc. (Rs)
1	Equipment Cost	(5%)												
	Concrete mixer, 30KW	h	1	45	45	15	15	30	30	6	6	4.9	1.0	0.1
	Miscellaneous	sum	10%		5	25%	1.3	3.7	75%	15%	0.8	4.9	1.0	0.1
	S-total				50		16	34			7	0.7	0.1	2%
2	Labour Cost	(10%)												
	Class 2 Foreman	h	5	10.5	52.5	10.5	52.5			0.7	3.5			0.7
	7 Unskilled labourer	"	15	3	45	3	45							3.5
	S-total				98		98				4			4
3	Material Cost	(65%)												
	Cement	t	0.72	670	482	43%	207	275	57%	6%	29	60%	36%	4%
	Sand, Line	"	1	78	78	27	27	51	51	17	17	17	10	2
	Miscellaneous	sum	10%		60	35%	21	39	65%	28%	17	92%	8%	0.4
	S-total				620		255	365			63	46	14	3
	Total				768		369	399			74	52	15	7
	Overhead				154	60%	92	62	40%	20%	31	70%		30%
		"	5%		38		38				19		19	9
	G-total				960	(52%)	499	461	(48%)	(13%)	124	(60%)	(27%)	(13%)
	per 1 m ³				960		499	461			124	74	34	16
Remarks:	per 1 m ²				20	(50%)	10	10	(50%)	(15%)	3	(60%)	(30%)	(10%)
												1.8	0.9	0.3

Item No.	Graded Stone Subbase Course, 30 cm Thick for Main Road Carriageway										Total Cost		Rs. 42 per m ²	
											Local Component		43	
Particular	Description	Unit Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Imp. (Rs)	Cor. (Rs)	Inc. (Rs)	
					Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)				
					It is rearded the cost will be 1.5 times of that in case of E01.02.									
					(Component)									
	per 1.0 m			42	(43%)	18	(57%)	24	(23%)	9.6	(72%)	(23%)	(5%)	
	(Element)											2.2	0.5	
	1. Equipment				(Ratio)									
	2. Labour				2%									
	3. Material				77%									
	4. Overhead				16%									
	5. Profit				4%									
	F.O.L. Consumption				Rs									
				0.3	(0.2% of total cost)									
Remarks:														

Item No.	Graded Stone Subbase Course, 20 cm Thick for Access Road Carriageway										Total Cost			Rs. 28 per m ²		
	Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Imp. (Rs)	Cor. (Rs)	Inc. (Rs)	
Unit cost (Rs)							(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)					
E01.02	Hourly working rate															
	(1) Spreading and leveling by Motor Grader, W = 3.7 m															
	$Q = \frac{1000 \times b \times V \times H \times f \times E}{N}$															
	here, Q = Hourly production rate (m ³ /h)															
	b = Effective blade width = 2.9 (m)															
	V = Working speed = 3.0 (km/h)															
	H = Leveling thickness = 0.2 (m)															
	f = Earth volume conversion factor = 1.0															
	E = Job efficiency = 0.5															
(2) Compaction by Tire roller, 20 ton																
	$Q = \frac{1000 \times W \times V \times E \times f \times E}{N}$															
	here, W = Effective compaction width = 2.0 (m)															
Remarks:																

$$= 124 \text{ (m}^3\text{/h)}$$

$$= 125 \text{ (m}^3\text{/h)}$$

Item No.	Graded Stone Base Course, 15 cm thick for shoulder of main road, carriageway of approach road and frontage road										Total Cost		Rs. 21 per m ²	
											Local Component	Foreign Component	43	%
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Imp. (Rs)	Cor. (Rs)	Inc. (Rs)
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost	(Rs)			
	It is regarded the cost will be 75% of that for Graded stone subbase course 20 cm thick.													
		per 1.0 m ²			21	(43%)	9	(57%)	12	(23%)	4.8	(72%)	(23%)	(5%)
		per 1.0 m ³			140		59		81		32	3.5	1.1	0.2
	(Element)				(Ratio)									
	1. Equipment				2%									
	2. Labour				1%									
	3. Material				77%									
	4. Overhead				16%									
	5. Profit				4%									
	F.O.L. Consumption				Rs									
	per 1.0 m ²				0.15									
	per 1.0 m ³				1.0									
Remarks:														

Item No.	Graded Stone Base course, 10 cm thick for foot way of access road										Total Cost				
	Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.	Unit cost (Rs)	Imp. (Rs)	Cor. (Rs)	Inc. (Rs)
Unit cost (Rs)							(Rs)	Unit cost (Rs)	(Rs)						
E01.04														43 %	
														57 %	
														23 %	
		It is regarded the cost will be 75% of that for Graded stone subbase course 20 cm thick.													
		per 1.0 m ²			14	(43%)	6	(57%)	8	(23%)	3.2	(72%)	2.3	(23%)	0.7
		(Element)													
		1. Equipment			2%										
		2. Labour			1%										
		3. Material			77%										
		4. Overhead			16%										
		5. Profit			4%										
		F.O.L consumption			RS										
		per 1.0 m ²			0.1	(0.7% of total cost)									
Remarks:															

Item No.	Bituminous Prime Cost at the rate of 1.0 kg to the square meter of prepared subbase course of roads										Total Cost		
											Local Component	Foreign Component	Rs. 2,550 per ton
Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes		Cor. (Rs)	Inc. (Rs)
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost	(Rs)		
	Hourly working rate of Asphalt Sprayer (30ℓ/mir)												
	$Q = 60 \times K$												
	$T + T_1$ here, $T =$ Spraying time for one full kettle = $\frac{K}{q \times E} = \frac{200}{30 \times 0.7} = 9.5$ (m)												
	$T_1 =$ Other time following $T = 40$ (min)												
	$K =$ Kettle capacity = 200 ℓ												
	$q =$ Spraying quantity per one minute = 30 (ℓ/min)												
	$E =$ Job efficiency = 0.7												
	So, $Q = \frac{60 \times 200}{9.5 + 40} = 242$ (ℓ/h) = 0.3 (ton/h)												
1	Equipment Cost	(%)											
	Asphalt sprayer, 30 ℓ/min	h	3.5	2	6	25%	2	75%	4	15%	1	82%	16%
	Lorry, 3 ton	"	1.0	35	35	40%	14	60%	21	30%	11	92%	6%
	Miscellaneous	sum	50%		19	25%	5	75%	14	15%	3	82%	11%
	S-total				60		21		39		15	2.5	0.5
2	Labour Cost	(1%)											
	Class 3 Operator finisher	h	3.5	5.5	19		19			2%	0.4		0.4
	2 Foreman	"	3.5	7	25		25			3%	0.8		0.8
Remarks:													

Item No.	Particular	Description	Unit	Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes Comp.		Taxes	Rs.	Per %
							Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)			
	F.O.L Consumption														
	Asp. sprayer, 30 l/min		h	3.5	1	3.5									
	Lorry, 3t		"	1.0	20	20									
	Total					23.5	(1% of total cost)								
Remarks:															

Item No.	Particular	Description	Unit Q'ty	Unit cost (Rs)	Total cost (Rs)	Local Comp.		Foreign Comp.		Taxes				
						Unit cost (Rs)	(Rs)	Unit cost (Rs)	(Rs)	Unit cost (Rs)	Imp. (Rs)	Cor. (Rs)	Inc. (Rs)	
Bituminous Tack Coat at the rate of 0.6 kg to the square meter of prepared base course of roads						Total Cost		Rs. 2,550 per ton						
E02:02						Local Component		Foreign Component						
						44 %		56 %						
						22 %								
		It is regarded the cost is same as that for E03.												
		per 1.0 ton		(100%)	2,550	(44%)	1,130	(56%)	1,420	(22%)	563	(71%) 397	(23%) 132	(6%) 34
Remarks:														