Appendix-1
Cost Estimation for Routine Maintenance Work of Bridge

Unit Price List of Cost Estimation : Routine Maintenance

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
Routine Maintenance					
CostR-1	Routine Maintenance		day	10,971	CostR-1

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UPR-1	Routine Maintanance Works		day	1.00	6,762	6,762	DUPAR-01
Sub Total (A)			day	1.00		6,762	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		1,739	
Sub Total (C) = (A) + (B)						8,501	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		850	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		468	
Sub Total (F) = (C) + (D) + (E)						9,819	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		1,152	
Unit Price (H) = (F) + (G)					10,971	10,971	

Item	:	Routine Maintanance Works	
Description	:		
Quantity, Unit	:	1	day

Unit Cost
BDT
6,762

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.00	person	800	800	SoR, 2015
Un-skilled		2.00	person	400	800	SoR, 2015
Car Operation	Saloon Car 1200cc Capacity	1.00	day	5,162	5,162	SDUPAR-01
Amount		1.00	day		6,762	
Unit Cost		1.00	day		6,762	

Item	:	Car Operation
Description	:	Saloon Car 1200cc Capacity
Quantity, Unit	:	1 day

Unit Cost
BDT
5,162

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Driver	Truck	1.00	person	600	600	Quotation
Car	Saloon Car 1200cc Capacity	0.05	month	40,682	2,034	SoR, 2015 (01/04/01)
Petrol		32.00	L	79	2,528	SoR, 2015
Amount		1.00	day		5,162	
Unit Cost		1.00	day		5,162	

Unit Price of Machinery

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
MC-R101	Car	Saloon Car 1200cc Capacity	month	40,682	SoR, 2015 (01/04/01)

Unit Price of Materials

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
MT-R101	Petrol		L	79	SoR, 2015

Unit Price of Labor

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
LB-R101	Foreman		person	800	SoR, 2015
LB-R102	Un-skilled		person	400	SoR, 2015
LB-R201	Driver	Truck	person	600	Quotation

Appendix-2
Cost Estimation for Minor Repair Work of Bridge

Unit Price List of Cost Estimation : Minor Repair

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
Minor Repair					
CostN-1	Minor Repair		day	10,971	CostN-1

Minor Repair

CostN-1

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UPN-1	Minor Repair Works		day	1.00	6,762	6,762	DUPAN-01
Sub Total (A)			day	1.00		6,762	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		1,739	
Sub Total (C) = (A) + (B)						8,501	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		850	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		468	
Sub Total (F) = (C) + (D) + (E)						9,819	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		1,152	
Unit Price (H) = (F) + (G)					10,971	10,971	

Minor Repair

DUPAN-01

Item	:	Minor Repair Works	
Description	:		
Quantity, Unit	:	1	day

Unit Cost
BDT
6,762

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.00	person	800	800	SoR, 2015
Un-skilled		2.00	person	400	800	SoR, 2015
Car Operation	Saloon Car 1200cc Capacity	1.00	day	5,162	5,162	SDUPAN-01
Amount		1.00	day		6,762	
Unit Cost		1.00	day		6,762	

Item	:	Car Operation
Description	:	Saloon Car 1200cc Capacity
Quantity, Unit	:	1 day

Unit Cost
BDT
5,162

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Driver	Truck	1.00	person	600	600	Quotation
Car	Saloon Car 1200cc Capacity	0.05	month	40,682	2,034	SoR, 2015 (01/04/01)
Petrol		32.00	L	79	2,528	SoR, 2015
Amount		1.00	day		5,162	
Unit Cost		1.00	day		5,162	

Unit Price of Machinery

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
MC-N101	Car	Saloon Car 1200cc Capacity	month	40,682	SoR, 2015 (01/04/01)

Unit Price of Materials

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
MT-N101	Petrol		L	79	SoR, 2015

Unit Price of Labor

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
LB-N101	Foreman		person	800	SoR, 2015
LB-N102	Un-skilled		person	400	SoR, 2015
LB-N201	Driver	Truck	person	600	Quotation

Appendix-3
Cost Estimation for Bridge Rehabilitation/ Strengthening Work

Unit Price List of Cost Estimation

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
1.Common					
1.1	Scaffoldings for Bridge Rehabilitation/Strengthening				
Cost-1	Suspended Scaffolding Work	Type A	m2	20,278	Cost-1
Cost-2	Suspended Scaffolding Work	Type B	m2	20,278	Cost-2
Cost-3	Suspended Scaffolding Work	Type C	m2	20,278	Cost-3
Cost-4	Prefabricated Scaffolding Work		m3	812	Cost-4
1.2	Excavation and Backfill for Structures				
Cost-11	Excavation and Backfill Work on Land		m3	473	Cost-11
Cost-12	Excavation and Backfill Work in River	Water Depth of 1 m or Less: Sandy Soil	m3	585	Cost-12
Cost-13	Excavation and Backfill Work in River	Water Depth of Over 1 m: Sandy Soil	m3	601	Cost-13
Cost-14	Excavation and Backfill Work in River	Water Depth of 1 m or Less: Soft Rock	m3	648	Cost-14
Cost-15	Excavation and Backfill Work in River	Water Depth of Over 1 m: Soft Rock	m3	661	Cost-15
2. Concrete Element					
2.1	Surface Protection Coating				
Cost-21	Surface Protection Coating		m2	2,962	Cost-21
2.2	Repairing of Crack				
Cost-22	Repairing of Crack	Crack Filling	m	89	Cost-22
Cost-23	Repairing of Crack	Crack Injection	m	5,419	Cost-23
2.3	Concrete Restruction				
Cost-24	Concrete Restruction	Hand Applied Mortar	m3	197,579	Cost-24
Cost-25	Concrete Restruction	Fluid Recasting Mortar	m3	95,793	Cost-25
Cost-26	Concrete Restruction	Fluid Recasting Concrete	m3	100,036	Cost-26
Cost-27	Concrete Restruction	Spray Applied Mortar	m3	1,938,644	Cost-27
2.4	Replacement of Curb				
Cost-28	Replacement of Curb		m3	43,930	Cost-28
2.5	CFRP Bonding on Concrete Member				
Cost-29	CFRP Bonding on Concrete Member		m2	55,422	Cost-29

Unit Price List of Cost Estimation

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
3. Steel Element					
3.1	Re-painting of Steel Member				
Cost-31	Re-painting of Steel Member		m2	2,323	Cost-31
3.2	Supplementing Steel Plate				
Cost-32	Supplementing Steel Plate		m2	75,045	Cost-32
3.3	CFRP Bonding on Steel Member				
Cost-33	CFRP Bonding on Steel Member		m2	58,768	Cost-33
4. Concrete Deck					
Cost-41	Replacement of Concrete Deck	30m length, 10.2m width and deck slab of 250mm thickness	span	24,958,168	Cost-41
5. Concrete Pier					
Cost-51	Strengthening of Concrete Pier with Spray Applied Mortar	10m height, 1.8m dia meter and lining mortar of 70mm thickness	pier	4,026,677	Cost-51
6. Bearing					
Cost-61	Repairing of Bearing	0.8m x 0.8m	number	1,578	Cost-61
Cost-62	Replacement of Bearing	Rubber Bearing, 200t Type	number	96,979	Cost-62
7. Expansion Joint					
Cost-71	Repairing of Expansion Joint		m	12,612	Cost-71
Cost-72	Replacement of Expansion Joint		m	34,229	Cost-72
8. Road Surface					
Cost-81	Replacement of Asphalt Pavement without Waterproofing	30m length and 7.3m width	span	431,045	Cost-81
Cost-82	Replacement of Asphalt Pavement with Waterproofing of Liquid-Type	30m length and 7.3m width	span	1,287,629	Cost-82
Cost-83	Replacement of Asphalt Pavement with Waterproofing of Sheet-Type	30m length and 7.3m width	span	1,708,637	Cost-83

Unit Price List of Cost Estimation

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
9. Other					
9.1	Replacement of Catch Basin and Drainage				
Cost-91	Replacement of Catch Basin and Drainage		number	5,565	Cost-91
9.2	Replacement of Railing				
Cost-92	Replacement of Railing		m	26,007	Cost-92
9.3	Additional Support for Superstructure				
Cost-93	Additional Support for Superstructure	Cast-in-place Pile	pier	9,814,855	Cost-93
Cost-94	Additional Support for Superstructure	Concrete Pier	pier	7,891,729	Cost-94
Cost-95	Additional Support for Superstructure	Bearing Installation	pier	152,909	Cost-95
9.4	Repairing of Scouring				
Cost-96	Repairing of Scouring		m3	7,009	Cost-96
9.5	Repairing of Slope Protection				
Cost-97	Repairing of Slope Protection	with Grass Sodding	m2	49	Cost-97
Cost-98	Repairing of Slope Protection	with Concrete	m2	1,979	Cost-98
9.6	Repairing of Foundation Consolidation				
Cost-99	Repairing of Foundation Consolidation		m3	13,465	Cost-99
9.7	Repairing of Block Stacking Structure				
Cost-100	Repairing of Block Stacking Structure		m3	20,312	Cost-100

Scaffoldings for Bridge Rehabilitation/Strengthening

Suspended Scaffolding Work Type A

Cost-1

Unit price of area i.e. 1m length and 1m width

Unit Price: 1.00 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-1	Suspended Scaffolding Work	Type A	m2	1.00	12,500	12,500	
Sub Total (A)			m2	1.00		12,500	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		3,214	
Sub Total (C) = (A) + (B)						15,714	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		1,571	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		864	
Sub Total (F) = (C) + (D) + (E)						18,149	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		2,129	
Unit Price (H) = (F) + (G)						20,278	

Item	:	Suspended Scaffolding Work
Description	:	Type A
Quantity, Unit	:	1 m2

Unit Price
BDT
12,500

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Suspended Scaffolding	Type A	1.00	m2	12,500	12,500	Quotation, 05/04/2016
Amount		1.00	m2		12,500	
Unit Price		1.00	m2		12,500	

Scaffoldings for Bridge Rehabilitation/Strengthening

Suspended Scaffolding Work Type B

Cost-2

Unit price of area i.e. 1m length and 1m width

Unit Price: 1.00 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-2	Suspended Scaffolding Work	Type B	m2	1.00	12,500	12,500	
Sub Total (A)			m2	1.00		12,500	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		3,214	
Sub Total (C) = (A) + (B)						15,714	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		1,571	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		864	
Sub Total (F) = (C) + (D) + (E)						18,149	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		2,129	
Unit Price (H) = (F) + (G)						20,278	

Item	:	Suspended Scaffolding Work
Description	:	Type B
Quantity, Unit	:	1 m2

Unit Price
BDT
12,500

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Suspended Scaffolding	Type B	1.00	m2	12,500	12,500	Quotation, 05/04/2016
Amount		1.00	m2		12,500	
Unit Price		1.00	m2		12,500	

Scaffoldings for Bridge Rehabilitation/Strengthening

Suspended Scaffolding Work Type C

Cost-3

Unit price of area i.e. 1m length and 1m width

Unit Price: 1.00 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-3	Suspended Scaffolding Work	Type C	m2	1.00	12,500	12,500	
Sub Total (A)			m2	1.00		12,500	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		3,214	
Sub Total (C) = (A) + (B)						15,714	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		1,571	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		864	
Sub Total (F) = (C) + (D) + (E)						18,149	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		2,129	
Unit Price (H) = (F) + (G)						20,278	

Item	: Suspended Scaffolding Work	
Description	: Type C	
Quantity, Unit	: 1 m2	

Unit Price
BDT
12,500

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Suspended Scaffolding	Type C	1.00	m2	12,500	12,500	Quotation, 05/04/2016
Amount		1.00	m2		12,500	
Unit Price		1.00	m2		12,500	

Scaffoldings for Bridge Rehabilitation/Strengthening

Prefabricated Scaffolding Work

Cost-4

Unit price of volume i.e. 1m length, 1m width and 1m height

Unit Price: 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-4	Prefabricated Scaffolding Work		m3	1.00	500	500	
Sub Total (A)			m3	1.00		500	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		129	
Sub Total (C) = (A) + (B)						629	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		63	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		35	
Sub Total (F) = (C) + (D) + (E)						727	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		85	
Unit Price (H) = (F) + (G)						812	

Item	:	Prefabricated Scaffolding Work
Description	:	
Quantity, Unit	:	1 m3

Unit Price
BDT
500

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Prefabricated Scaffolding		1.00	m3	500	500	Quotation, 05/04/2016
Amount		1.00	m3		500	
Unit Price		1.00	m3		500	

Excavation and Backfill for Structures

Excavation and Backfill Work on Land

Cost-11

Unit price of volume i.e. 1m length, 1m width and 1m depth

Unit Price: 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-11	Excavation and Backfill Work on Land		m3	1.00	291	291	
Sub Total (A)			m3	1.00		291	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		75	
Sub Total (C) = (A) + (B)						366	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		37	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		20	
Sub Total (F) = (C) + (D) + (E)						423	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		50	
Unit Price (H) = (F) + (G)						473	

Item	:	Excavation and Backfill Work on Land
Description	:	
Quantity, Unit	:	100 m3

Unit Price
BDT
291

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Semi-skilled		5.00	person	450	2,250	SoR, 2015
Un-skilled		55.00	person	400	22,000	SoR, 2015
Plate Compactor		3.00	day	850	2,550	SoR, 2015
Small Hand Tools		60.00	day	20	1,200	SoR, 2015
Water Tanker		0.25	day	4,300	1,075	SoR, 2015
Amount		100.00	m3		29,075	
Unit Price		1.00	m3		291	

Excavation and Backfill for Structures

Excavation and Backfill Work in River

Water Depth of 1 m or Less: Sandy Soil

Cost-12

Unit price of volume i.e. 1m length, 1m width and 1m depth

Unit Price: 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-12	Excavation and Backfill Work in River	Water Depth of 1 m or Less: Sandy Soil	m3	1.00	361	361	
Sub Total (A)			m3	1.00		361	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		93	
Sub Total (C) = (A) + (B)						454	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		45	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		25	
Sub Total (F) = (C) + (D) + (E)						524	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		61	
Unit Price (H) = (F) + (G)						585	

Item	: Excavation and Backfill Work in River	
Description	: Water Depth of 1 m or Less: Sandy Soil	
Quantity, Unit	: 100 m3	

Unit Price
BDT
361

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Semi-skilled		11.00	person	450	4,950	SoR, 2015
Un-skilled		65.00	person	400	26,000	SoR, 2015
Plate Compactor		3.00	day	850	2,550	SoR, 2015
Small Hand Tools		76.00	day	20	1,520	SoR, 2015
Water Tanker		0.25	day	4,300	1,075	SoR, 2015
Amount		100.00	m3		36,095	
Unit Price		1.00	m3		361	

Excavation and Backfill Work in River

Water Depth of Over 1 m: Sandy Soil

Cost-13

Unit price of volume i.e. 1m length, 1m width and 1m depth

Unit Price: 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-13	Excavation and Backfill Work in River	Water Depth of Over 1 m: Sandy Soil	m3	1.00	370	370	
Sub Total (A)			m3	1.00		370	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		95	
Sub Total (C) = (A) + (B)						465	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		47	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		26	
Sub Total (F) = (C) + (D) + (E)						538	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		63	
Unit Price (H) = (F) + (G)						601	

Item	: Excavation and Backfill Work in River	
Description	: Water Depth of Over 1 m: Sandy Soil	
Quantity, Unit	: 100 m3	

Unit Price
BDT
370

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Semi-skilled		11.00	person	450	4,950	SoR, 2015
Un-skilled		65.00	person	400	26,000	SoR, 2015
Plate Compactor		3.00	day	850	2,550	SoR, 2015
Small Hand Tools		76.00	day	20	1,520	SoR, 2015
Water Tanker		0.25	day	4,300	1,075	SoR, 2015
Water Pump		1.00	day	900	900	SoR, 2015
Amount		100.00	m3		36,995	
Unit Price		1.00	m3		370	

Excavation and Backfill Work in River

Water Depth of 1 m or Less: Soft Rock

Cost-14

Unit price of volume i.e. 1m length, 1m width and 1m depth

Unit Price: 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-14	Excavation and Backfill Work in River	Water Depth of 1 m or Less: Soft Rock	m3	1.00	399	399	
Sub Total (A)			m3	1.00		399	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		103	
Sub Total (C) = (A) + (B)						502	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		50	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		28	
Sub Total (F) = (C) + (D) + (E)						580	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		68	
Unit Price (H) = (F) + (G)						648	

Item	: Excavation and Backfill Work in River	
Description	: Water Depth of 1 m or Less: Soft Rock	
Quantity, Unit	: 100 m3	

Unit Price
BDT
399

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Semi-skilled		15.00	person	450	6,750	SoR, 2015
Un-skilled		70.00	person	400	28,000	SoR, 2015
Plate Compactor		3.00	day	850	2,550	SoR, 2015
Small Hand Tools		76.00	day	20	1,520	SoR, 2015
Water Tanker		0.25	day	4,300	1,075	SoR, 2015
Amount		100.00	m3		39,895	
Unit Price		1.00	m3		399	

Excavation and Backfill Work in River

Water Depth of Over 1 m: Soft Rock

Cost-15

Unit price of volume i.e. 1m length, 1m width and 1m depth

Unit Price: 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-15	Excavation and Backfill Work in River	Water Depth of Over 1 m: Soft Rock	m3	1.00	408	408	
Sub Total (A)			m3	1.00		408	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		105	
Sub Total (C) = (A) + (B)						513	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		51	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		28	
Sub Total (F) = (C) + (D) + (E)						592	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		69	
Unit Price (H) = (F) + (G)						661	

Item	: Excavation and Backfill Work in River	
Description	: Water Depth of Over 1 m: Soft Rock	
Quantity, Unit	: 100 m3	

Unit Price
BDT
408

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Semi-skilled		15.00	person	450	6,750	SoR, 2015
Un-skilled		70.00	person	400	28,000	SoR, 2015
Plate Compactor		3.00	day	850	2,550	SoR, 2015
Small Hand Tools		76.00	day	20	1,520	SoR, 2015
Water Tanker		0.25	day	4,300	1,075	SoR, 2015
Water Pump		1.00	day	900	900	SoR, 2015
Amount		100.00	m3		40,795	
Unit Price		1.00	m3		408	

Unit price of area i.e. 1m length and 1m height

Unit Price: 1.00 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-101	Surface Preparation Work		m2	1.00	59	59	
UP-102	Priming Work		m2	1.00	566	566	
UP-103	Base Coating Work (Putty Application)		m2	1.00	601	601	
UP-104	Intermediate Coating Work		m2	1.00	300	300	
UP-105	Top Coating Work		m2	1.00	300	300	
Sub Total (A)			m2	1.00		1,826	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		469	
Sub Total (C) = (A) + (B)						2,295	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		230	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		126	
Sub Total (F) = (C) + (D) + (E)						2,651	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		311	
Unit Price (H) = (F) + (G)						2,962	

Surface Protection Coating

DUPA-101

Item	:	Surface Preparation Work
Description	:	
Quantity, Unit	:	50 m2

Unit Price
BDT
59

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.91	person	800	728	SoR, 2015
Skilled		1.82	person	550	1,001	SoR, 2015
Un-skilled		0.91	person	400	364	SoR, 2015
Petty Charge	22 %	1.00	L.S		460	
Temporary Facility Cost	15.66 %	1.00	L.S		400	
Amount		50.00	m2		2,953	
Unit Price		1.00	m2		59	

Surface Protection Coating

DUPA-102

Item	:	Priming Work
Description	:	
Quantity, Unit	:	50 m2

Unit Price
BDT
566

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.56	person	800	448	SoR, 2015
Skilled		1.11	person	550	611	SoR, 2015
Un-skilled		0.56	person	400	224	SoR, 2015
Primer		16.50	kg	1,400	23,100	Quotation, 13/06/2016
* Primer: 0.30kg/m2, loss 10%						
Petty Charge	6 %	1.00	L.S		77	
Temporary Facility Cost	15.66 %	1.00	L.S		3,830	
Amount		50.00	m2		28,290	
Unit Price		1.00	m2		566	

Surface Protection Coating

DUPA-103

Item	:	Base Coating Work (Putty Application)
Description	:	
Quantity, Unit	:	50 m2

Unit Price
BDT
601

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.19	person	800	952	SoR, 2015
Skilled		2.37	person	550	1,304	SoR, 2015
Un-skilled		1.19	person	400	476	SoR, 2015
Putty		16.50	kg	1,400	23,100	Quotation, 13/06/2016
* Putty: 0.30kg/m2, loss 10%						
Petty Charge	6 %	1.00	L.S		164	
Temporary Facility Cost	15.66 %	1.00	L.S		4,071	
Amount		50.00	m2		30,067	
Unit Price		1.00	m2		601	

Surface Protection Coating

DUPA-104

Item	:	Intermediate Coating Work
Description	:	
Quantity, Unit	:	50 m2

Unit Price
BDT
300

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.50	person	800	1,200	SoR, 2015
Skilled		3.00	person	550	1,650	SoR, 2015
Un-skilled		1.50	person	400	600	SoR, 2015
Intermediate Coating Material		14.30	kg	650	9,295	Quotation, 13/06/2016
* Intermediate Coating Material: 0.26kg/m2, loss 10%						
Petty Charge	6 %	1.00	L.S		207	
Temporary Facility Cost	15.66 %	1.00	L.S		2,028	
Amount		50.00	m2		14,980	
Unit Price		1.00	m2		300	

Item	:	Top Coating Work
Description	:	
Quantity, Unit	:	50 m2

Unit Price
BDT
300

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.50	person	800	1,200	SoR, 2015
Skilled		3.00	person	550	1,650	SoR, 2015
Un-skilled		1.50	person	400	600	SoR, 2015
Top Coating Material		14.30	kg	650	9,295	Quotation, 13/06/2016
* Top Coating Material: 0.26kg/m2, loss 10%						
Petty Charge	6 %	1.00	L.S		207	
Temporary Facility Cost	15.66 %	1.00	L.S		2,028	
Amount		50.00	m2		14,980	
Unit Price		1.00	m2		300	

Unit price of length i.e. 1m length

Unit Price: 1.00 m

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-201	Repairing of Crack (Filling) Work		m	1.00	55	55	
Sub Total (A)			m	1.00		55	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		14	
Sub Total (C) = (A) + (B)						69	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		7	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		4	
Sub Total (F) = (C) + (D) + (E)						80	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		9	
Unit Price (H) = (F) + (G)						89	

Repairing of Crack (Filling)

DUPA-201

Item	:	Repairing of Crack (Filling) Work
Description	:	
Quantity, Unit	:	24 m

Unit Price
BDT
55

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.00	person	800	800	SoR, 2015
Semi-skilled		1.00	person	450	450	SoR, 2015
Ordinary Portland Cement (OPC)	Grade 60	0.0025	t	10,760	27	SoR, 2015
Sand	FM=1.0	0.0073	m3	600	4	SoR, 2015
Small Hand Tools		2.00	day	20	40	SoR, 2015
Amount		24.00	m		1,321	
Unit Price		1.00	m		55	

Unit price of length i.e. 1m length

Unit Price: 1.00 m

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-301	Repairing of Crack (Injection) Work	Crack Width: 0.2mm and Crack Depth: 50mm	m	1.00	3,340	3,340	
Sub Total (A)			m	1.00		3,340	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		859	
Sub Total (C) = (A) + (B)						4,199	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		420	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		231	
Sub Total (F) = (C) + (D) + (E)						4,850	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		569	
Unit Price (H) = (F) + (G)						5,419	

Repairing of Crack (Injection)

DUPA-301

Item	:	Repairing of Crack (Injection) Work
Description	:	Crack Width: 0.2mm and Crack Depth: 50mm
Quantity, Unit	:	100 m

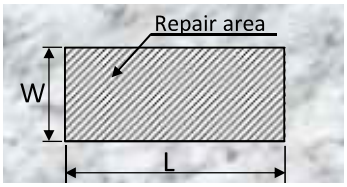
Unit Price
BDT
3,340

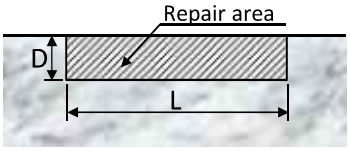
Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		10.07	person	800	8,056	SoR, 2015
Skilled		20.13	person	550	11,072	SoR, 2015
Un-skilled		10.07	person	400	4,028	SoR, 2015
Grout Material		1.21	kg	2,000	2,420	Quotation, 13/06/2016
Sealant Material		31.91	kg	1,400	44,674	Quotation, 13/06/2016
Low-pressure Injection Pipes		400.00	number	540	216,000	Quotation
* Grout: w=0.0002m*0.050m*100m*1,050(kg/m3), loss 15%						
* Sealant: w=0.050m*0.003m*100m*1,850(kg/m3), loss 15%						
* Low-pressure Injection Pipes: N=100m/0.25m						
Petty Charge	11 %	1.00	L.S		2,547	
Temporary Facility Cost	15.66 %	1.00	L.S		45,226	
Amount		100.00	m		334,023	
Unit Price		1.00	m		3,340	

Unit price of volume i.e. 1m length, 1m width and 1m depth

Unit Price: 1.00 m3

Length: L= 1.00 m
Width: W= 1.00 m
Depth: D= 1.00 m





Concrete Chipping Work

1.00 * 1.00 * 1.00 * 0.7 / 70% = 0.70 m3

Priming Work

1.00 *(1.00 + 1.00)* 2 + 1.00 * 1.00 = 5.00 m2

Mortar Filling Work (Polymer Cement Mortar)

1.00 * 1.00 * 1.00 = 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-401	Concrete Chipping Work		m3	0.70	1,036	725	
UP-402	Priming Work		m2	5.00	206	1,030	
UP-403	Mortar Filling Work	Polymer Cement Mortar	m3	1.00	120,035	120,035	
Sub Total (A)			m3	1.00		121,790	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		31,312	
Sub Total (C) = (A) + (B)						153,102	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		15,310	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		8,421	
Sub Total (F) = (C) + (D) + (E)						176,833	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		20,746	
Unit Price (H) = (F) + (G)						197,579	

Concrete Restruction (Hand Applied Mortar)

DUPA-401

Item	:	Concrete Chipping Work
Description	:	
Quantity, Unit	:	10 m3

Unit Price
BDT
1,036

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		3.00	person	800	2,400	SoR, 2015
Skilled		6.00	person	550	3,300	SoR, 2015
Un-skilled		7.50	person	400	3,000	SoR, 2015
Petty Charge	3 %	1.00	L.S		261	
Temporary Facility Cost	15.66 %	1.00	L.S		1,403	
Amount		10.00	m3		10,364	
Unit Price		1.00	m3		1,036	

Concrete Restruction (Hand Applied Mortar)

DUPA-402

Item	:	Priming Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
206

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.15	person	800	120	SoR, 2015
Skilled		0.60	person	550	330	SoR, 2015
Un-skilled		0.30	person	400	120	SoR, 2015
Primer		2.00	kg	600	1,200	Quotation, 13/06/2016
* Primer: 0.20kg/m2						
Petty Charge	2 %	1.00	L.S		11	
Temporary Facility Cost	15.66 %	1.00	L.S		279	
Amount		10.00	m2		2,060	
Unit Price		1.00	m2		206	

Item	:	Mortar Filling Work
Description	:	Polymer Cement Mortar
Quantity, Unit	:	1 m3

Unit Price
BDT
120,035

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		7.95	person	800	6,360	SoR, 2015
Skilled		22.50	person	550	12,375	SoR, 2015
Un-skilled		17.40	person	400	6,960	SoR, 2015
Polymer Cement Mortar		1.06	m3	72,941	77,317	SDUPA-401
* Polymer Cement Mortar: loss 6%						
Petty Charge	3 %	1.00	L.S		771	
Temporary Facility Cost	15.66 %	1.00	L.S		16,252	
Amount		1.00	m3		120,035	
Unit Price		1.00	m3		120,035	

Item	:	Polymer Cement Mortar	
Description	:		
Quantity, Unit	:	1	m3

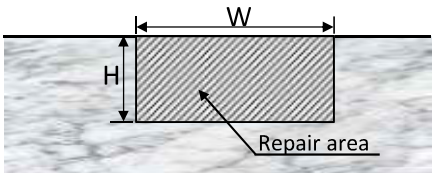
Unit Price
BDT
72,941

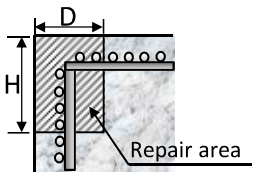
Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Un-skilled		2.25	person	400	900	SoR, 2015
Ordinary Portland Cement (OPC)	Grade 60	0.50	t	10,760	5,380	SoR, 2015
Sand	FM=1.0	0.60	m3	600	360	SoR, 2015
Admixture for Polymer Cement		102.00	kg	650	66,300	Quotation, 13/06/2016
Water		0.10	m3	10	1	SoR, 2015
Amount		1.00	m3		72,941	
Unit Price		1.00	m3		72,941	

Unit price of volume i.e. 1m width, 1m height and 1m depth

Unit Price: 1.00 m3

Width: W= 1.00 m
Height: H= 1.00 m
Depth: D= 1.00 m





Concrete Chipping Work

1.00 * 1.00 * 1.00 * 0.1 / 10% = 0.10 m3

Priming Work

1.00 * 1.00 + 1.00 * 1.00 * 2 + 1.00 * 1.00 = 4.00 m2

Fabrication, Installation and Removal Work of Form

1.00 * 1.00 = 1.00 m2

Mortar Filling Work (Fluid Mortar)

1.00 * 1.00 * 1.00 = 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-501	Concrete Chipping Work		m3	0.10	1,036	104	
UP-502	Priming Work		m2	4.00	206	824	
UP-503	Fabrication, Installation and Removal Work of Form		m2	1.00	306	306	
UP-504	Mortar Filling Work	Fluid Mortar	m3	1.00	57,814	57,814	
Sub Total (A)			m3	1.00		59,048	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		15,181	
Sub Total (C) = (A) + (B)						74,229	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		7,423	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		4,083	
Sub Total (F) = (C) + (D) + (E)						85,735	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		10,058	
Unit Price (H) = (F) + (G)						95,793	

Concrete Restruction (Fluid Recasting Mortar)

DUPA-501

Item	:	Concrete Chipping Work
Description	:	
Quantity, Unit	:	10 m3

Unit Price
BDT
1,036

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		3.00	person	800	2,400	SoR, 2015
Skilled		6.00	person	550	3,300	SoR, 2015
Un-skilled		7.50	person	400	3,000	SoR, 2015
Petty Charge	3 %	1.00	L.S		261	
Temporary Facility Cost	15.66 %	1.00	L.S		1,403	
Amount		10.00	m3		10,364	
Unit Price		1.00	m3		1,036	

Concrete Restruction (Fluid Recasting Mortar)

DUPA-502

Item	:	Priming Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
206

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.15	person	800	120	SoR, 2015
Skilled		0.60	person	550	330	SoR, 2015
Un-skilled		0.30	person	400	120	SoR, 2015
Primer		2.00	kg	600	1,200	Quotation, 13/06/2016
* Primer: 0.20kg/m2						
Petty Charge	2 %	1.00	L.S		11	
Temporary Facility Cost	15.66 %	1.00	L.S		279	
Amount		10.00	m2		2,060	
Unit Price		1.00	m2		206	

Concrete Restruction (Fluid Recasting Mortar)

DUPA-503

Item	:	Fabrication, Installation and Removal Work of Form
Description	:	
Quantity, Unit	:	100 m2

Unit Price
BDT
306

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		4.65	person	800	3,720	SoR, 2015
Form Worker		23.55	person	500	11,775	Quotation, 30/01/2015
Un-skilled		15.00	person	400	6,000	SoR, 2015
Petty Charge	23 %	1.00	L.S		4,944	
Temporary Facility Cost	15.66 %	1.00	L.S		4,140	
Amount		100.00	m2		30,579	
Unit Price		1.00	m2		306	

Concrete Restruction (Fluid Recasting Mortar)

DUPA-504

Item	:	Mortar Filling Work
Description	:	Fluid Mortar
Quantity, Unit	:	1 m3

Unit Price
BDT
57,814

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		3.75	person	800	3,000	SoR, 2015
Skilled		18.00	person	550	9,900	SoR, 2015
Un-skilled		11.25	person	400	4,500	SoR, 2015
Fluid Mortar		1.06	m3	29,921	31,716	SDUPA-501
* Fluid Mortar: loss 6%						
* Zinc Rich Primer for reinforcement bars is including in the Petty Charge						
Petty Charge	5 %	1.00	L.S		870	
Temporary Facility Cost	15.66 %	1.00	L.S		7,828	
Amount		1.00	m3		57,814	
Unit Price		1.00	m3		57,814	

Concrete Restruction (Fluid Recasting Mortar)

SDUPA-501

Item	:	Fluid Mortar
Description	:	
Quantity, Unit	:	1 m3

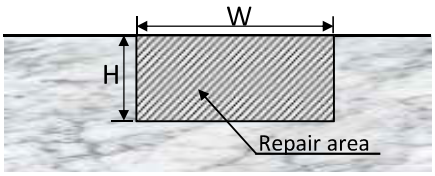
Unit Price
BDT
29,921

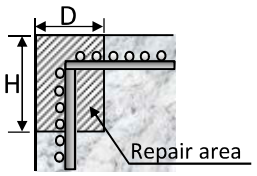
Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Un-skilled		2.25	person	400	900	SoR, 2015
Ordinary Portland Cement (OPC)	Grade 60	0.23	t	10,760	2,475	SoR, 2015
Sand	FM=1.0	0.74	m3	600	444	SoR, 2015
Silica Fume		58.00	kg	450	26,100	Quotation, 13/06/2016
Water		0.15	m3	10	2	SoR, 2015
Amount		1.00	m3		29,921	
Unit Price		1.00	m3		29,921	

Unit price of volume i.e. 1m width, 1m height and 1m depth

Unit Price: 1.00 m3

Width: W= 1.00 m
Height: H= 1.00 m
Depth: D= 1.00 m





Concrete Chipping Work

1.00 * 1.00 * 1.00 * 0.1 / 10% = 0.10 m3

Priming Work

1.00 * 1.00 + 1.00 * 1.00 * 2 + 1.00 * 1.00 = 4.00 m2

Fabrication, Installation and Removal Work of Form

1.00 * 1.00 = 1.00 m2

Concrete Filling Work (Fluid Concrete)

1.00 * 1.00 * 1.00 = 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-511	Concrete Chipping Work		m3	0.10	1,036	104	
UP-512	Priming Work		m2	4.00	206	824	
UP-513	Fabrication, Installation and Removal Work of Form		m2	1.00	306	306	
UP-514	Concrete Filling Work	Fluid Concrete	m3	1.00	60,429	60,429	
Sub Total (A)			m3	1.00		61,663	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		15,854	
Sub Total (C) = (A) + (B)						77,517	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		7,752	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		4,263	
Sub Total (F) = (C) + (D) + (E)						89,532	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		10,504	
Unit Price (H) = (F) + (G)						100,036	

Concrete Restruction (Fluid Recasting Concrete)

DUPA-511

Item	:	Concrete Chipping Work
Description	:	
Quantity, Unit	:	10 m3

Unit Price
BDT
1,036

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		3.00	person	800	2,400	SoR, 2015
Skilled		6.00	person	550	3,300	SoR, 2015
Un-skilled		7.50	person	400	3,000	SoR, 2015
Petty Charge	3 %	1.00	L.S		261	
Temporary Facility Cost	15.66 %	1.00	L.S		1,403	
Amount		10.00	m3		10,364	
Unit Price		1.00	m3		1,036	

Concrete Restruction (Fluid Recasting Concrete)

DUPA-512

Item	:	Priming Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
206

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.15	person	800	120	SoR, 2015
Skilled		0.60	person	550	330	SoR, 2015
Un-skilled		0.30	person	400	120	SoR, 2015
Primer		2.00	kg	600	1,200	Quotation, 13/06/2016
* Primer: 0.20kg/m2						
Petty Charge	2 %	1.00	L.S		11	
Temporary Facility Cost	15.66 %	1.00	L.S		279	
Amount		10.00	m2		2,060	
Unit Price		1.00	m2		206	

Concrete Restruction (Fluid Recasting Concrete)

DUPA-513

Item	:	Fabrication, Installation and Removal Work of Form
Description	:	
Quantity, Unit	:	100 m2

Unit Price
BDT
306

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		4.65	person	800	3,720	SoR, 2015
Form Worker		23.55	person	500	11,775	Quotation, 30/01/2015
Un-skilled		15.00	person	400	6,000	SoR, 2015
Petty Charge	23 %	1.00	L.S		4,944	
Temporary Facility Cost	15.66 %	1.00	L.S		4,140	
Amount		100.00	m2		30,579	
Unit Price		1.00	m2		306	

Concrete Restruction (Fluid Recasting Concrete)

DUPA-514

Item	:	Concrete Filling Work
Description	:	Fluid Concrete
Quantity, Unit	:	1 m3

Unit Price
BDT
60,429

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		3.75	person	800	3,000	SoR, 2015
Skilled		18.00	person	550	9,900	SoR, 2015
Un-skilled		11.25	person	400	4,500	SoR, 2015
Fluid Concrete		1.06	m3	32,054	33,977	SDUPA-511
* Fluid Concrete: loss 6%						
* Zinc Rich Primer for reinforcement bars is including in the Petty Charge						
Petty Charge	5 %	1.00	L.S		870	
Temporary Facility Cost	15.66 %	1.00	L.S		8,182	
Amount		1.00	m3		60,429	
Unit Price		1.00	m3		60,429	

Item	:	Fluid Concrete	
Description	:		
Quantity, Unit	:	1	m3

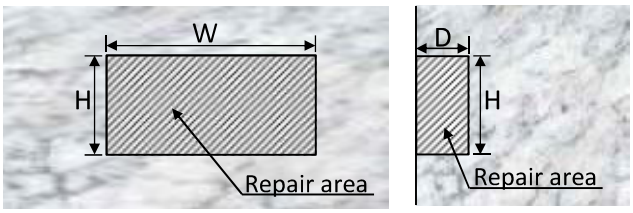
Unit Price
BDT
32,054

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Skilled		1.43	person	550	787	SoR, 2015
Un-skilled		0.38	person	400	152	SoR, 2015
Ordinary Portland Cement (OPC)	Grade 60	0.23	t	10,760	2,475	SoR, 2015
Sand	FM=1.0	0.35	m3	600	210	SoR, 2015
Aggregate	20mm	0.39	m3	5,970	2,328	SoR, 2015
Silica Fume		58.00	kg	450	26,100	Quotation, 13/06/2016
Water		0.15	m3	10	2	SoR, 2015
Amount		1.00	m3		32,054	
Unit Price		1.00	m3		32,054	

Unit price of volume i.e. 1m width, 1m height and 1m depth

Unit Price: 1.00 m3

Width: W= 1.00 m
Height: H= 1.00 m
Depth: D= 1.00 m



Concrete Chipping Work

1.00 * 1.00 * 1.00 * 0.7 / 70% = 0.70 m3

Priming Work

1.00 * 1.00 + 1.00 *(1.00 + 1.00)* 2 = 5.00 m2

Mortar Spraying Work

1.00 * 1.00 * 1.00 = 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-601	Concrete Chipping Work		m3	0.70	1,036	725	
UP-602	Priming Work		m2	5.00	206	1,030	
UP-603	Mortar Spraying Work		m3	1.00	1,193,249	1,193,249	
Sub Total (A)			m3	1.00		1,195,004	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		307,236	
Sub Total (C) = (A) + (B)						1,502,240	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		150,224	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		82,623	
Sub Total (F) = (C) + (D) + (E)						1,735,087	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		203,557	
Unit Price (H) = (F) + (G)						1,938,644	

Concrete Restruction (Spray Applied Mortar)

DUPA-601

Item	:	Concrete Chipping Work
Description	:	
Quantity, Unit	:	10 m3

Unit Price
BDT
1,036

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		3.00	person	800	2,400	SoR, 2015
Skilled		6.00	person	550	3,300	SoR, 2015
Un-skilled		7.50	person	400	3,000	SoR, 2015
Petty Charge	3 %	1.00	L.S		261	
Temporary Facility Cost	15.66 %	1.00	L.S		1,403	
Amount		10.00	m3		10,364	
Unit Price		1.00	m3		1,036	

Concrete Restruction (Spray Applied Mortar)

DUPA-602

Item	:	Priming Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
206

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.15	person	800	120	SoR, 2015
Skilled		0.60	person	550	330	SoR, 2015
Un-skilled		0.30	person	400	120	SoR, 2015
Primer		2.00	kg	600	1,200	Quotation, 13/06/2016
* Primer: 0.20kg/m2						
Petty Charge	2 %	1.00	L.S		11	
Temporary Facility Cost	15.66 %	1.00	L.S		279	
Amount		10.00	m2		2,060	
Unit Price		1.00	m2		206	

Item	: Mortar Spraying Work	
Description	:	
Quantity, Unit	: 11.75 m3	

Unit Price
BDT
1,193,249

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		22.04	person	800	17,632	SoR, 2015
Carpenter		66.09	person	600	39,654	SoR, 2015
Skilled		44.07	person	550	24,239	SoR, 2015
Un-skilled		44.07	person	400	17,628	SoR, 2015
Spray Applied Mortar		12.46	m3	904,180	11,266,083	Quotation
Generator Operation	15kVA	14.69	day	4,371	64,210	SDUPA-601
Air Compressor Operation	1.4m3/min	14.69	day	12,881	189,222	SDUPA-602
Mortar Mixer	100L	14.69	day	28,378	416,873	SDUPA-603
Concrete Pump	3.0 to 4.0 kw	14.69	day	5,705	83,806	SDUPA-604
* Spray Applied Mortar: loss 6%						
Petty Charge	3 %	1.00	L.S		2,975	
Temporary Facility Cost	15.66 %	1.00	L.S		1,898,356	
Amount		11.75	m3		14,020,678	
Unit Price		1.00	m3		1,193,249	

Concrete Restruction (Spray Applied Mortar)

SDUPA-601

Item	: Generator Operation	
Description	: 15kVA	
Quantity, Unit	: 1 day	

Unit Price
BDT
4,371

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Generator	15kVA	1.20	day	2,780	3,336	Quotation
Diesel		14.79	L	70	1,035	SoR, 2015
Amount		1.00	day		4,371	
Unit Price		1.00	day		4,371	

Concrete Restruction (Spray Applied Mortar)

SDUPA-602

Item	: Air Compressor Operation	
Description	: 1.4m3/min	
Quantity, Unit	: 1 day	

Unit Price
BDT
12,881

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Air Compressor	1.4m3/min	1.75	day	6,850	11,988	Quotation
Diesel		12.75	L	70	893	SoR, 2015
Amount		1.00	day		12,881	
Unit Price		1.00	day		12,881	

Concrete Restruction (Spray Applied Mortar)

SDUPA-603

Item	: Mortar Mixer	
Description	: 100L	
Quantity, Unit	: 1 day	

Unit Price
BDT
28,378

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Mortar Mixer	100L	1.63	day	17,410	28,378	Quotation
Amount		1.00	day		28,378	
Unit Price		1.00	day		28,378	

Concrete Restruction (Spray Applied Mortar)

SDUPA-604

Item	: Concrete Pump	
Description	: 3.0 to 4.0 kw	
Quantity, Unit	: 1 day	

Unit Price
BDT
5,705

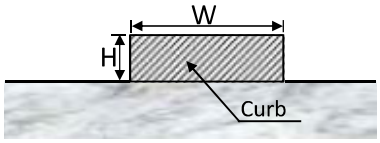
Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Concrete Pump	3.0 to 4.0kw	1.63	day	3,500	5,705	Quotation
Amount		1.00	day		5,705	
Unit Price		1.00	day		5,705	

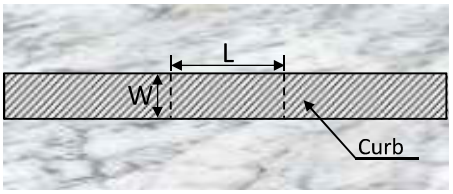
Replacement of Curb

Unit price of volume i.e. 1m length, 1m width and 1m height

Unit Price: 1.00 m3

Length: L= 1.00 m
Width: W= 1.00 m
Height: H= 1.00 m





Demolition and Loading Work of Concrete

1.00 * 1.00 * 1.00 * 0.2 (20%) = 0.20 m3

Priming Work

1.00 * 1.00 * 2 + 1.00 * 1.00 = 3.00 m2

Bending and Assembling Work of Reinforcement Bars

1.00 * 1.00 * 1.00 * 0.10 (0.10t/m3) = 0.10 t

Curb Construction Work

1.00 * 1.00 * 1.00 = 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-701	Demolition and Loading Work of Concrete		m3	0.20	25,320	5,064	
UP-702	Priming Work		m2	3.00	206	618	
UP-703	Bending and Assembling Work of Reinforcement Bars		t	0.10	79,040	7,904	
UP-704	Curb Construction Work		m3	1.00	13,493	13,493	
Sub Total (A)			m3	1.00		27,079	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		6,962	
Sub Total (C) = (A) + (B)						34,041	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		3,404	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		1,872	
Sub Total (F) = (C) + (D) + (E)						39,317	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		4,613	
Unit Price (H) = (F) + (G)						43,930	

Replacement of Curb

DUPA-701

Item	:	Demolition and Loading Work of Concrete	Unit Price
Description	:		BDT
Quantity, Unit	:	10 m3	25,320

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		6.60	person	800	5,280	SoR, 2015
Skilled		21.75	person	550	11,963	SoR, 2015
Un-skilled		20.40	person	400	8,160	SoR, 2015
Concrete Breaker	20kg class	13.20	day	7,695	101,574	SDUPA-701
Air Compressor Operation	3.5 to 3.7m3/min	6.60	day	13,815	91,179	SDUPA-702
Petty Charge	3 %	1.00	L.S		762	
Temporary Facility Cost	15.66 %	1.00	L.S		34,283	
Amount		10.00	m3		253,201	
Unit Price		1.00	m3		25,320	

Replacement of Curb

DUPA-702

Item	:	Priming Work	Unit Price
Description	:		BDT
Quantity, Unit	:	10 m2	206

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.15	person	800	120	SoR, 2015
Skilled		0.60	person	550	330	SoR, 2015
Un-skilled		0.30	person	400	120	SoR, 2015
Primer		2.00	kg	600	1,200	Quotation, 13/06/2016
* Primer: 0.20kg/m2						
Petty Charge	2 %	1.00	L.S		11	
Temporary Facility Cost	15.66 %	1.00	L.S		279	
Amount		10.00	m2		2,060	
Unit Price		1.00	m2		206	

Replacement of Curb

DUPA-703

Item	:	Bending and Assembling Work of Reinforcement Bars	
Description	:		
Quantity, Unit	:	1	t

Unit Price
BDT
79,040

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Reinforcement Bar Work	Grade 60	1.02	t	77,490	79,040	SoR, 2015 [05/02/02]
* Reinforcement Bar: loss 2%						
Amount		1.00	t		79,040	
Unit Price		1.00	t		79,040	

Replacement of Curb

DUPA-704

Item	:	Curb Construction Work	
Description	:		
Quantity, Unit	:	1	m3

Unit Price
BDT
13,493

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Concrete Construction Work	Class-20 (Batching Plant)	1.05	m3	12,850	13,493	SoR, 2015 [05/01/03 (e)]
* Concrete: loss 5%						
Amount		1.00	m3		13,493	
Unit Price		1.00	m3		13,493	

Replacement of Curb

SDUPA-701

Item	: Concrete Breaker	
Description	: 20kg class	
Quantity, Unit	: 1 day	

Unit Price
BDT
7,695

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Concrete Breaker	20kg class	1.71	day	4,500	7,695	Quotation
Amount		1.00	day		7,695	
Unit Price		1.00	day		7,695	

Replacement of Curb

SDUPA-702

Item	: Air Compressor Operation	
Description	: 3.5 to 3.7m3/min	
Quantity, Unit	: 1 day	

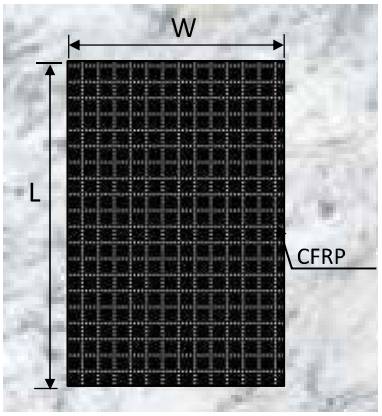
Unit Price
BDT
13,815

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Air Compressor	3.5 to 3.7 m3/min	1.70	day	6,850	11,645	Quotation
Diesel		31.00	L	70	2,170	SoR, 2015
Amount		1.00	day		13,815	
Unit Price		1.00	day		13,815	

Unit price of area i.e. 1m length and 1m width, and 2 layers

Unit Price: 1.00 m2

Length: L= 1.00 m
Width: W= 1.00 m
Layer of CFRP: N= 2 layer(s)



Surface Preparation Work
1.00 * 1.00 = 1.00 m2
Marking Work
1.00 * 1.00 = 1.00 m2
Priming Work
1.00 * 1.00 = 1.00 m2
Irregularity Correction Work
1.00 * 1.00 = 1.00 m2
CFRP Application Work (per Layer)
1.00 * 1.00 * 2 Layers = 2.00 m2
Finishing Work
1.00 * 1.00 = 1.00 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-801	Surface Preparation Work		m2	1.00	145	145	
UP-802	Marking Work		m2	1.00	34	34	
UP-803	Priming Work		m2	1.00	414	414	
UP-804	Irregularity Correction Work		m2	1.00	2,570	2,570	
UP-805	CFRP Application Work (per Layer)		m2	2.00	12,752	25,504	
UP-806	Finishing Work		m2	1.00	5,496	5,496	
Sub Total (A)			m2	1.00		34,163	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		8,783	
Sub Total (C) = (A) + (B)						42,946	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		4,295	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		2,362	
Sub Total (F) = (C) + (D) + (E)						49,603	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		5,819	
Unit Price (H) = (F) + (G)						55,422	

CFRP Bonding on Concrete Member

DUPA-801

Item	:	Surface Preparation Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
145

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.32	person	800	256	SoR, 2015
Skilled		1.25	person	550	688	SoR, 2015
Un-skilled		0.63	person	400	252	SoR, 2015
Petty Charge	5 %	1.00	L.S		60	
Temporary Facility Cost	15.66 %	1.00	L.S		197	
Amount		10.00	m2		1,453	
Unit Price		1.00	m2		145	

CFRP Bonding on Concrete Member

DUPA-802

Item	:	Marking Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
34

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.08	person	800	64	SoR, 2015
Skilled		0.30	person	550	165	SoR, 2015
Un-skilled		0.15	person	400	60	SoR, 2015
Petty Charge	1 %	1.00	L.S		3	
Temporary Facility Cost	15.66 %	1.00	L.S		46	
Amount		10.00	m2		338	
Unit Price		1.00	m2		34	

CFRP Bonding on Concrete Member

DUPA-803

Item	:	Priming Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
414

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.15	person	800	120	SoR, 2015
Skilled		0.60	person	550	330	SoR, 2015
Un-skilled		0.30	person	400	120	SoR, 2015
Primer (CFRP for Concrete)		2.00	kg	1,500	3,000	Quotation, 13/06/2016
* Primer: 0.20kg/m2						
Petty Charge	2 %	1.00	L.S		11	
Temporary Facility Cost	15.66 %	1.00	L.S		561	
Amount		10.00	m2		4,142	
Unit Price		1.00	m2		414	

CFRP Bonding on Concrete Member

DUPA-804

Item	:	Irregularity Correction Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
2,570

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.32	person	800	256	SoR, 2015
Skilled		1.25	person	550	688	SoR, 2015
Un-skilled		0.63	person	400	252	SoR, 2015
Putty (CFRP for Concrete)		15.00	kg	1,400	21,000	Quotation, 13/06/2016
* Putty: 1.50kg/m2						
Petty Charge	2 %	1.00	L.S		24	
Temporary Facility Cost	15.66 %	1.00	L.S		3,480	
Amount		10.00	m2		25,700	
Unit Price		1.00	m2		2,570	

CFRP Bonding on Concrete Member

DUPA-805

Item	:	CFRP Application Work (per Layer)	Unit Price
Description	:		BDT
Quantity, Unit	:	10 m2	12,752

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.38	person	800	304	SoR, 2015
Skilled		1.50	person	550	825	SoR, 2015
Un-skilled		0.75	person	400	300	SoR, 2015
CFRP		11.50	m2	8,000	92,000	Quotation, 13/06/2016
Impregnation Material (CFRP for Concrete)		8.00	kg	2,100	16,800	Quotation, 13/06/2016
* CFRP: loss 15%						
* Impregnation Material: 0.80kg/m2						
Petty Charge	2 %	1.00	L.S		29	
Temporary Facility Cost	15.66 %	1.00	L.S		17,266	
Amount		10.00	m2		127,524	
Unit Price		1.00	m2		12,752	

CFRP Bonding on Concrete Member

DUPA-806

Item	:	Finishing Work	Unit Price
Description	:		BDT
Quantity, Unit	:	10 m2	5,496

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.15	person	800	120	SoR, 2015
Skilled		0.63	person	550	347	SoR, 2015
Un-skilled		0.32	person	400	128	SoR, 2015
Surface Treatment Material (CFRP for Concrete)		3.00	kg	15,620	46,860	Quotation
* Surface Treatment Material: 0.30kg/m2						
Petty Charge	10 %	1.00	L.S		60	
Temporary Facility Cost	15.66 %	1.00	L.S		7,441	
Amount		10.00	m2		54,956	
Unit Price		1.00	m2		5,496	

Re-painting of Steel Member

Unit price of area i.e. 1m length and 1m width

Unit Price: 1.00 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-901	Pretreatment Work of Existing Painting		m2	1.00	1,002	1,002	
UP-902	Re-painting Work		m2	1.00	430	430	
Sub Total (A)			m2	1.00		1,432	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		368	
Sub Total (C) = (A) + (B)						1,800	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		180	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		99	
Sub Total (F) = (C) + (D) + (E)						2,079	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		244	
Unit Price (H) = (F) + (G)						2,323	

Re-painting of Steel Member

DUPA-901

Item	:	Pretreatment Work of Existing Painting
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
1,002

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.50	person	800	1,200	SoR, 2015
Skilled		6.00	person	550	3,300	SoR, 2015
Un-skilled		9.00	person	400	3,600	SoR, 2015
Petty Charge	7 %	1.00	L.S		567	
Temporary Facility Cost	15.66 %	1.00	L.S		1,357	
Amount		10.00	m2		10,024	
Unit Price		1.00	m2		1,002	

Re-painting of Steel Member

DUPA-902

Item	:	Re-painting Work
Description	:	
Quantity, Unit	:	1 m2

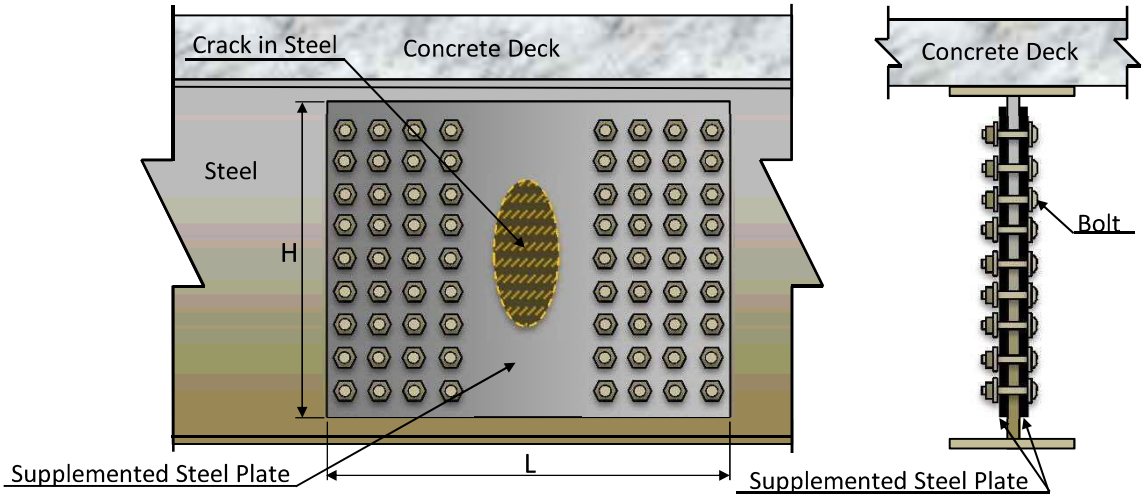
Unit Price
BDT
430

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Painting Works	Existing Structures	1.00	m2	430	430	SoR, 2015 [05/06/01]
Amount		1.00	m2		430	
Unit Price		1.00	m2		430	

Unit price of area i.e. 1m length and 1m height, and steel plate of 25mm tickness and bolt of 15 numbers

Unit Price: 1.00 m2

Length: L= 1.00 m
Height: H= 1.00 m
Thickness of Steel Plate: T= 0.025 m
Number of Bolt: N= 15 number(s)



Pretreatment Work for Existing Painting
(1.00 + 0.20)*(1.00 + 0.20)* 2 = 2.88 m2

Steel Plate
1.00 * 1.00 * 0.025 * 7.85 * 2 = 0.39 t
Weight of Steel

Driiling Work on Steel Plate
15 number(s)

High-strength Bolt fully Tightening Work
15 number(s)

Re-painting Work
(1.00 + 0.20)*(1.00 + 0.20)* 2 = 2.88 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-1001	Pretreatment Work for Existing Painting		m2	2.88	1,002	2,886	
UP-1002	Steel Plate		t	0.39	75,000	29,250	
UP-1003	Driiling Work on Steel Plate		number	15.00	451	6,765	
UP-1004	High-strength Bolt fully Tightening Work		number	15.00	408	6,120	
UP-1005	Re-painting Work		m2	2.88	430	1,238	
Sub Total (A)			m2	1.00		46,259	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		11,893	
Sub Total (C) = (A) + (B)						58,152	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		5,815	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		3,198	
Sub Total (F) = (C) + (D) + (E)						67,165	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		7,880	
Unit Price (H) = (F) + (G)						75,045	

Supplementing Steel Plate

DUPA-1001

Item	:	Pretreatment Work for Existing Painting
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
1,002

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.50	person	800	1,200	SoR, 2015
Skilled		6.00	person	550	3,300	SoR, 2015
Un-skilled		9.00	person	400	3,600	SoR, 2015
Petty Charge	7 %	1.00	L.S		567	
Temporary Facility Cost	15.66 %	1.00	L.S		1,357	
Amount		10.00	m2		10,024	
Unit Price		1.00	m2		1,002	

Supplementing Steel Plate

DUPA-1002

Item	:	Steel Plate
Description	:	
Quantity, Unit	:	1 t

Unit Price
BDT
75,000

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Steel Plate		1.00	t	75,000	75,000	SoR, 2015
Amount		1.00	t		75,000	
Unit Price		1.00	t		75,000	

Supplementing Steel Plate

DUPA-1003

Item	:	Driiling Work on Steel Plate
Description	:	
Quantity, Unit	:	225 number

Unit Price
BDT
451

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.50	person	800	1,200	SoR, 2015
Skilled		4.50	person	550	2,475	SoR, 2015
Un-skilled		1.50	person	400	600	SoR, 2015
Drill Blade	13mm	9.60	number	8,600	82,560	Quotation
Petty Charge	23 %	1.00	L.S		983	
Temporary Facility Cost	15.66 %	1.00	L.S		13,752	
Amount		225.00	number		101,570	
Unit Price		1.00	number		451	

Supplementing Steel Plate

DUPA-1004

Item	:	High-strength Bolt fully Tightening Work
Description	:	
Quantity, Unit	:	225 number

Unit Price
BDT
408

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.50	person	800	1,200	SoR, 2015
Skilled		4.50	person	550	2,475	SoR, 2015
Un-skilled		1.50	person	400	600	SoR, 2015
High-strength Bolts		225.00	number	330	74,250	Quotation
Petty Charge	20 %	1.00	L.S		855	
Temporary Facility Cost	15.66 %	1.00	L.S		12,431	
Amount		225.00	number		91,811	
Unit Price		1.00	number		408	

Item	:	Re-painting Work
Description	:	
Quantity, Unit	:	1 m2

Unit Price
BDT
430

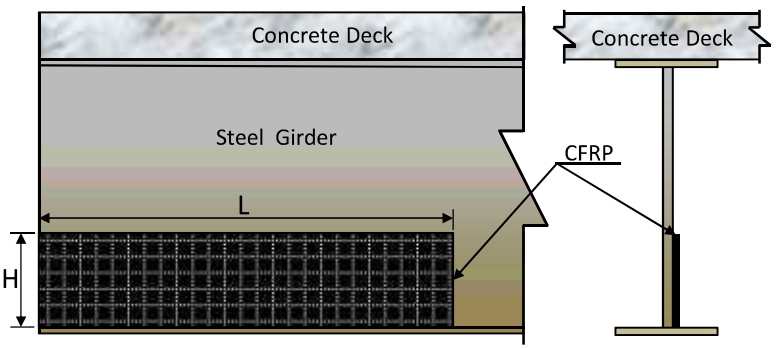
Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Painting Works	Existing Structures	1.00	m2	430	430	SoR, 2015 [05/06/01]
Amount		1.00	m2		430	
Unit Price		1.00	m2		430	

CFRP Bonding on Steel Member

Unit price of area i.e. 1m length and 1m height, and 2 layers

Unit Price: 1.00 m2

Length: L= 1.00 m
Height: H= 1.00 m
Layer of CFRP: N= 2 layer(s)



Pretreatment Work for Existing Painting
(1.00 + 0.20)*(1.00 + 0.20)= 1.44 m2

Surface Preparation Work
1.00 * 1.00 = 1.00 m2

Marking Work
1.00 * 1.00 = 1.00 m2

Priming Work
1.00 * 1.00 = 1.00 m2

Irregularity Correction Work
1.00 * 1.00 = 1.00 m2

CFRP Application Work (per Layer)
1.00 * 1.00 * 2 / 2 Layers = 2.00 m2

Finishing Work
1.00 * 1.00 = 1.00 m2

Re-painting Work
(1.00 + 0.20)*(1.00 + 0.20)= 1.44 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-1101	Pretreatment Work for Existing Painting		m2	1.44	1,002	1,443	
UP-1102	Surface Preparation Work		m2	1.00	145	145	
UP-1103	Marking Work		m2	1.00	34	34	
UP-1104	Priming Work		m2	1.00	414	414	
UP-1105	Irregularity Correction Work		m2	1.00	2,570	2,570	
UP-1106	CFRP Application Work (per Layer)		m2	2.00	12,752	25,504	
UP-1107	Finishing Work		m2	1.00	5,496	5,496	
UP-1108	Re-painting Work		m2	1.44	430	619	
Sub Total (A)			m2	1.00		36,225	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		9,313	
Sub Total (C) = (A) + (B)						45,538	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		4,554	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		2,505	
Sub Total (F) = (C) + (D) + (E)						52,597	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		6,171	
Unit Price (H) = (F) + (G)						58,768	

CFRP Bonding on Steel Member

DUPA-1101

Item	:	Pretreatment Work for Existing Painting
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
1,002

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.50	person	800	1,200	SoR, 2015
Skilled		6.00	person	550	3,300	SoR, 2015
Un-skilled		9.00	person	400	3,600	SoR, 2015
Petty Charge	7 %	1.00	L.S		567	
Temporary Facility Cost	15.66 %	1.00	L.S		1,357	
Amount		10.00	m2		10,024	
Unit Price		1.00	m2		1,002	

CFRP Bonding on Steel Member

DUPA-1102

Item	:	Surface Preparation Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
145

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.32	person	800	256	SoR, 2015
Skilled		1.25	person	550	688	SoR, 2015
Un-skilled		0.63	person	400	252	SoR, 2015
Petty Charge	5 %	1.00	L.S		60	
Temporary Facility Cost	15.66 %	1.00	L.S		197	
Amount		10.00	m2		1,453	
Unit Price		1.00	m2		145	

CFRP Bonding on Steel Member

DUPA-1103

Item	:	Marking Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
34

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.08	person	800	64	SoR, 2015
Skilled		0.30	person	550	165	SoR, 2015
Un-skilled		0.15	person	400	60	SoR, 2015
Petty Charge	1 %	1.00	L.S		3	
Temporary Facility Cost	15.66 %	1.00	L.S		46	
Amount		10.00	m2		338	
Unit Price		1.00	m2		34	

CFRP Bonding on Steel Member

DUPA-1104

Item	:	Priming Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
414

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.15	person	800	120	SoR, 2015
Skilled		0.60	person	550	330	SoR, 2015
Un-skilled		0.30	person	400	120	SoR, 2015
Primer (CFRP for Steel)		2.00	kg	1,500	3,000	Quotation, 13/06/2016
* Primer: 0.20kg/m2						
Petty Charge	2 %	1.00	L.S		11	
Temporary Facility Cost	15.66 %	1.00	L.S		561	
Amount		10.00	m2		4,142	
Unit Price		1.00	m2		414	

CFRP Bonding on Steel Member

DUPA-1105

Item	:	Irregularity Correction Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
2,570

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.32	person	800	256	SoR, 2015
Skilled		1.25	person	550	688	SoR, 2015
Un-skilled		0.63	person	400	252	SoR, 2015
Putty (CFRP for Steel)		15.00	kg	1,400	21,000	Quotation, 13/06/2016
* Putty: 1.50kg/m2						
Petty Charge	2 %	1.00	L.S		24	
Temporary Facility Cost	15.66 %	1.00	L.S		3,480	
Amount		10.00	m2		25,700	
Unit Price		1.00	m2		2,570	

CFRP Bonding on Steel Member

DUPA-1106

Item	:	CFRP Application Work (per Layer)
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
12,752

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.38	person	800	304	SoR, 2015
Skilled		1.50	person	550	825	SoR, 2015
Un-skilled		0.75	person	400	300	SoR, 2015
CFRP		11.50	m2	8,000	92,000	Quotation, 13/06/2016
Impregnation Material (CFRP for Steel)		8.00	kg	2,100	16,800	Quotation, 13/06/2016
* CFRP: loss 15%						
* Impregnation Material: 0.80kg/m2						
Petty Charge	2 %	1.00	L.S		29	
Temporary Facility Cost	15.66 %	1.00	L.S		17,266	
Amount		10.00	m2		127,524	
Unit Price		1.00	m2		12,752	

CFRP Bonding on Steel Member

DUPA-1107

Item	:	Finishing Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
5,496

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.15	person	800	120	SoR, 2015
Skilled		0.63	person	550	347	SoR, 2015
Un-skilled		0.32	person	400	128	SoR, 2015
Surface Treatment Material (CFRP for Steel)		3.00	kg	15,620	46,860	Quotation
* Surface Treatment Material: 0.30kg/m2						
Petty Charge	10 %	1.00	L.S		60	
Temporary Facility Cost	15.66 %	1.00	L.S		7,441	
Amount		10.00	m2		54,956	
Unit Price		1.00	m2		5,496	

CFRP Bonding on Steel Member

DUPA-1108

Item	:	Re-painting Work
Description	:	
Quantity, Unit	:	1 m2

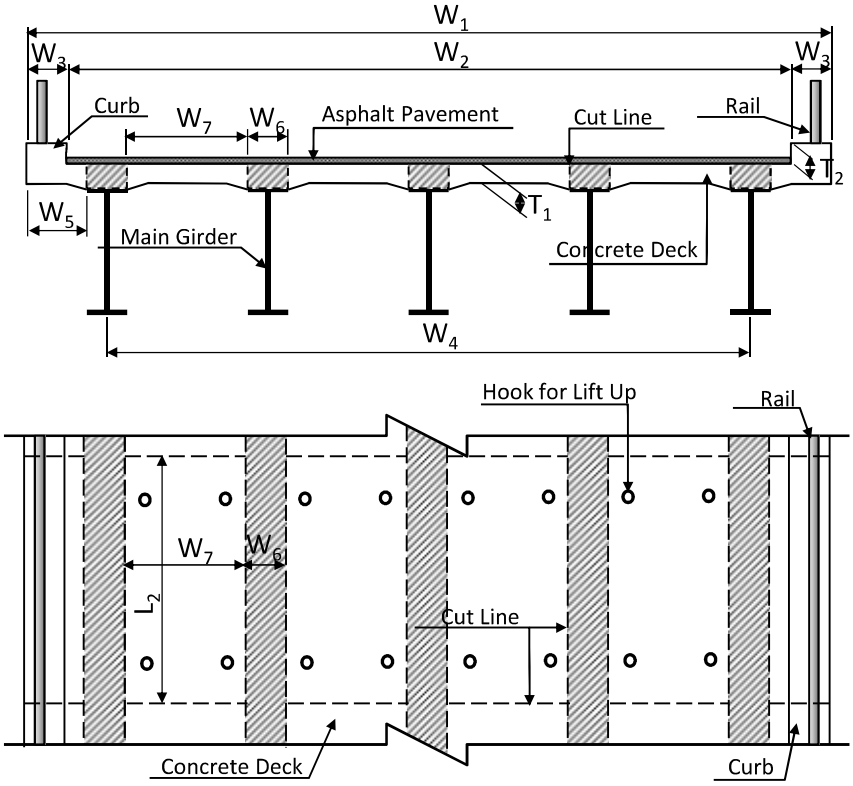
Unit Price
BDT
430

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Painting Works	Existing Structures	1.00	m2	430	430	SoR, 2015 [05/06/01]
Amount		1.00	m2		430	
Unit Price		1.00	m2		430	

Unit price of span i.e. 30m length, 10.2m width and deck slab of 250mm thickness

Unit Price: 1 span

Span Length: L_1=	30.00 m	Thickness of Deck Slab: T_1=	0.25 m
Total Width: W_1=	10.20 m	Thickness of Curb: T_2=	0.35 m
Effective Width: W_2=	9.00 m	Number of Girder: N_G=	5 number(s)
Curb Width: W_3=	0.60 m	Number of Lane: N_L=	2 lane(s)
W_4=	8.00 m	Number of Expansion Joint: N_E=	2 number(s)
Length to Cut: L_2=	3.00 m	Leveling Concrete Volume: V_L=	8.40 m3
W_5=	0.85 m	Thickness of Base Coat of Pavement: T_B=	0.050 m
W_6=	0.50 m	Thickness of Surface Coat of Pavement: T_S=	0.012 m
W_7=	1.50 m	Line Width of Road Marking: W_{RM}=	0.15 m



Area of Concrete Deck

30.00 * 10.20 = 306.00 m2

Railing Removal Work

30.00 * 2 = 60.00 m

Asphalt Pavement Removal Work

30.00 * 9.00 *(0.050 + 0.012)= 16.74 m3

Curb and Deck Removal Work (Partially Broken) (Lift Hole Drilling Work)

(30.00 / 3.00)*(5 - 1)* 4 = 160 number

Number of Hole

Curb and Deck Removal Work (Partially Broken) (Vertical Deck Cutting Work with Cutter (Cutting depth 250mm))

(30.00 * 5.00 * 2)+ 1.50 *(5 - 1)

*(30.00 / 3.00 - 1)= 354.00 m

Curb and Deck Removal Work (Partially Broken) (Curb Vertical Cutting Work with Cutter)

(30.00 / 3.00 - 1)* 2 = 18 time

Block Removal Work

(3.00 * 1.50)*(5 - 1)*(30.00 / 3.00)= 180.00 m2

Deck Breaking Work (above Girder)

30.00 * 0.50 * 0.25 * 5 = 18.75 m3

Secondary Breaking Work

(30.00 * 10.20 * 0.25)-(30.00 * 0.50 * 0.25 * 5)= 57.75 m3

Main Girder Flange Handling Work

30.00 * 5 = 150.00 m

Expansion Joint (Steel Type) Removal Work

9.00 * 2 = 18.00 m

Deck Construction Work (Bending and Assembling Work of Reinforcement Bars)

$$30.00 * 10.20 * 0.25 * \frac{0.15}{0.15t/m3} = 11.48\ t$$

Deck Construction Work (Deck Concrete)

30.00 * 10.20 * 0.25 = 76.50 m3

Levelling Concrete Construction Work (Levelling Concrete)

8.40 m3

Prime Coat Installation Work

30.00 * 9.00 = 270.00 m2

Waterproofing Installation Work (Liquid-type)

30.00 * 9.00 = 270.00 m2

Expansion Joint Installation Work

9.00 * 2 = 18.00 m

Curb Construction Work (Bending and Assembling Work of Reinforcement Bars)

$$30.00 * 0.60 * 0.35 * 2 * \frac{0.10}{0.10t/m3} = 1.26\ t$$

Curb Construction Work (Curb Concrete Construction Work)

30.00 * 0.60 * 0.35 * 2 = 12.60 m3

Railing Installation Work

30.00 * 2 = 60.00 m

Asphalt Pavement Placement Work (Bituminous Base Course)

30.00 * 9.00 0.050 = 13.50 m3

Asphalt Pavement Placement Work (Tack Coat)

30.00 * 9.00 = 270.00 m2

Asphalt Pavement Placement Work (Bituminous Wearing Course)

30.00 * 9.00 * 0.012 = 3.24 m3

Road Surface Marking Work

30.00 *(2 + 1)* 0.15 = 13.50 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-1201	Railing Removal Work		m	60.00	161	9,660	
UP-1202	Asphalt Pavement Removal Work		m3	16.74	220	3,683	
UP-1203	Curb and Deck Removal Work (Partially Broken)	Lift Hole Drilling Work	number	160.00	2,938	470,080	
UP-1204	Curb and Deck Removal Work (Partially Broken)	Vertical Deck Cutting Work with Cutter (Cutting depth 250mm)	m	354.00	24,233	8,578,482	
UP-1205	Curb and Deck Removal Work (Partially Broken)	Curb Vertical Cutting Work with Cutter	time	18.00	50,425	907,650	
UP-1206	Block Removal Work		m2	180.00	1,466	263,880	
UP-1207	Deck Breaking Work (above Girder)		m3	18.75	16,433	308,119	
UP-1208	Secondary Breaking Work		m3	57.75	3,172	183,183	
UP-1209	Main Girder Flange Handling Work		m	150.00	173	25,950	
UP-1210	Expansion Joint (Steel Type) Removal Work		m	18.00	5,606	100,908	
UP-1211	Deck Construction Work	Bending and Assembling Work of Reinforcement Bars	t	11.48	77,490	889,585	
UP-1212	Deck Construction Work	Deck Concrete	m3	76.50	13,950	1,067,175	
UP-1213	Levelling Concrete Construction Work	Levelling Concrete	m3	8.40	12,850	107,940	
UP-1214	Prime Coat Installation Work		m2	270.00	100	27,000	
UP-1215	Waterproofing Installation Work	Liquid-type	m2	270.00	2,411	650,970	
UP-1216	Expansion Joint Installation Work		m	18.00	15,798	284,364	
UP-1217	Curb Construction Work	Bending and Assembling Work of Reinforcement Bars	t	1.26	77,490	97,637	
UP-1218	Curb Construction Work	Curb Concrete Construction Work	m3	12.60	12,850	161,910	
UP-1219	Railing Installation Work		m	60.00	15,870	952,200	
UP-1220	Asphalt Pavement Placement Work	Bituminous Base Course	m3	13.50	16,200	218,700	
UP-1221	Asphalt Pavement Placement Work	Tack Coat	m2	270.00	40	10,800	
UP-1222	Asphalt Pavement Placement Work	Bituminous Wearing Course	m3	3.24	16,370	53,039	
UP-1223	Road Surface Marking Work		m2	13.50	860	11,610	
Sub Total (A)			span	1		15,384,525	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		3,955,361	
Sub Total (C) = (A) + (B)						19,339,886	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		1,933,989	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		1,063,694	
Sub Total (F) = (C) + (D) + (E)						22,337,569	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		2,620,599	
Unit Price (H) = (F) + (G)						24,958,168	

Replacement of Concrete Deck

DUPA-1201

Item	:	Railing Removal Work
Description	:	
Quantity, Unit	:	30 m

Unit Price
BDT
161

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.50	person	800	1,200	SoR, 2015
Skilled		3.00	person	550	1,650	SoR, 2015
Un-skilled		3.00	person	400	1,200	SoR, 2015
Petty Charge	3 %	1.00	L.S		122	
Temporary Facility Cost	15.66 %	1.00	L.S		653	
Amount		30.00	m		4,825	
Unit Price		1.00	m		161	

Replacement of Concrete Deck

DUPA-1202

Item	:	Asphalt Pavement Removal Work
Description	:	
Quantity, Unit	:	1 m3

Unit Price
BDT
220

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Asphalt Pavement Removal Work		1.00	m3	220	220	SoR, 2015 [02/02/03]
Amount		1.00	m3		220	
Unit Price		1.00	m3		220	

Replacement of Concrete Deck

DUPA-1203

Item	:	Curb and Deck Removal Work (Partially Broken)
Description	:	Lift Hole Drilling Work
Quantity, Unit	:	10 number

Unit Price
BDT
2,938

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.45	person	800	360	SoR, 2015
Skilled		1.80	person	550	990	SoR, 2015
Un-skilled		0.90	person	400	360	SoR, 2015
Truck Crane Operation	truck crane 4.9t	0.80	day	15,730	12,584	SDUPA-1201
Diamond Bit	50φ	0.60	number	17,920	10,752	Quotation
Petty Charge	21 %	1.00	L.S		359	
Temporary Facility Cost	15.66 %	1.00	L.S		3,978	
Amount		10.00	number		29,383	
Unit Price		1.00	number		2,938	

Replacement of Concrete Deck

DUPA-1204

Item	:	Curb and Deck Removal Work (Partially Broken)
Description	:	Vertical Deck Cutting Work with Cutter (Cutting depth 250mm)
Quantity, Unit	:	10 m

Unit Price
BDT
24,233

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.74	person	800	592	SoR, 2015
Skilled		1.47	person	550	809	SoR, 2015
Un-skilled		1.47	person	400	588	SoR, 2015
Truck Crane Operation	truck crane 4.9t	1.36	day	15,730	21,393	SDUPA-1201
Cutter Blade	26 inch	0.59	number	314,880	185,779	Quotation
Petty Charge	18 %	1.00	L.S		358	
Temporary Facility Cost	15.66 %	1.00	L.S		32,811	
Amount		10.00	m		242,330	
Unit Price		1.00	m		24,233	

Replacement of Concrete Deck

DUPA-1205

Item	:	Curb and Deck Removal Work (Partially Broken)
Description	:	Curb Vertical Cutting Work with Cutter
Quantity, Unit	:	10 time

Unit Price
BDT
50,425

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.88	person	800	1,504	SoR, 2015
Skilled		3.75	person	550	2,063	SoR, 2015
Un-skilled		3.75	person	400	1,500	SoR, 2015
Truck Crane Operation	truck crane 4.9t	3.50	day	15,730	55,055	SDUPA-1201
Cutter Blade	30 inch	1.00	number	375,040	375,040	Quotation
Petty Charge	16 %	1.00	L.S		811	
Temporary Facility Cost	15.66 %	1.00	L.S		68,273	
Amount		10.00	time		504,246	
Unit Price		1.00	time		50,425	

Replacement of Concrete Deck

DUPA-1206

Item	:	Block Removal Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
1,466

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.45	person	800	360	SoR, 2015
Skilled		1.50	person	550	825	SoR, 2015
Un-skilled		0.75	person	400	300	SoR, 2015
Truck Crane Operation	truck crane 4.9t	0.30	day	15,730	4,719	SDUPA-1201
Dump Truck Operation	10t vehicle	0.30	day	21,060	6,318	SDUPA-1202
Petty Charge	10 %	1.00	L.S		149	
Temporary Facility Cost	15.66 %	1.00	L.S		1,984	
Amount		10.00	m2		14,655	
Unit Price		1.00	m2		1,466	

Replacement of Concrete Deck

DUPA-1207

Item	:	Deck Breaking Work (above Girder)
Description	:	
Quantity, Unit	:	1 m3

Unit Price
BDT
16,433

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.20	person	800	960	SoR, 2015
Welder		0.30	person	600	180	SoR, 2015
Skilled		4.35	person	550	2,393	SoR, 2015
Un-skilled		3.15	person	400	1,260	SoR, 2015
Truck Operation	4.5t vehicle	0.70	day	12,491	8,744	SDUPA-1203
Petty Charge	14 %	1.00	L.S		671	
Temporary Facility Cost	15.66 %	1.00	L.S		2,225	
Amount		1.00	m3		16,433	
Unit Price		1.00	m3		16,433	

Replacement of Concrete Deck

DUPA-1208

Item	:	Secondary Breaking Work
Description	:	
Quantity, Unit	:	10 m3

Unit Price
BDT
3,172

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.45	person	800	360	SoR, 2015
Welder		0.45	person	600	270	SoR, 2015
Un-skilled		1.65	person	400	660	SoR, 2015
Large Breaker	600 to 800kg	0.70	day	14,720	10,304	Quotation
Backhoe Operation	0.6m3	0.10	day	29,991	2,999	SDUPA-1204
Dump Truck Operation	10t vehicle	0.60	day	21,060	12,636	SDUPA-1202
Petty Charge	15 %	1.00	L.S		194	
Temporary Facility Cost	15.66 %	1.00	L.S		4,294	
Amount		10.00	m3		31,717	
Unit Price		1.00	m3		3,172	

Replacement of Concrete Deck

DUPA-1209

Item	:	Main Girder Flange Handling Work
Description	:	
Quantity, Unit	:	100 m

Unit Price
BDT
173

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		3.90	person	800	3,120	SoR, 2015
Skilled		7.95	person	550	4,373	SoR, 2015
Un-skilled		11.85	person	400	4,740	SoR, 2015
Petty Charge	22 %	1.00	L.S		2,691	
Temporary Facility Cost	15.66 %	1.00	L.S		2,337	
Amount		100.00	m		17,261	
Unit Price		1.00	m		173	

Replacement of Concrete Deck

DUPA-1210

Item	:	Expansion Joint (Steel Type) Removal Work
Description	:	
Quantity, Unit	:	10 m

Unit Price
BDT
5,606

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.50	person	800	1,200	SoR, 2015
Skilled		6.00	person	550	3,300	SoR, 2015
Un-skilled		1.50	person	400	600	SoR, 2015
Rough Terrain Crane	capable of lifting 20t	1.70	day	25,000	42,500	Quotation
Petty Charge	17 %	1.00	L.S		867	
Temporary Facility Cost	15.66 %	1.00	L.S		7,590	
Amount		10.00	m		56,057	
Unit Price		1.00	m		5,606	

Replacement of Concrete Deck

DUPA-1211

Item	: Deck Construction Work	
Description	: Bending and Assembling Work of Reinforcement Bars	
Quantity, Unit	: 1 t	

Unit Price
BDT
77,490

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Reinforcement Bar Work	Grade 60	1.00	t	77,490	77,490	SoR, 2015 [05/02/02]
Amount		1.00	t		77,490	
Unit Price		1.00	t		77,490	

Replacement of Concrete Deck

DUPA-1212

Item	: Deck Construction Work	
Description	: Deck Concrete	
Quantity, Unit	: 1 m3	

Unit Price
BDT
13,950

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Concrete Construction Work	Class-30 (Batching Plant)	1.00	m3	13,950	13,950	SoR, 2015 [05/01/03 (k)]
Amount		1.00	m3		13,950	
Unit Price		1.00	m3		13,950	

Replacement of Concrete Deck

DUPA-1213

Item	:	Levelling Concrete Construction Work
Description	:	Levelling Concrete
Quantity, Unit	:	1 m3

Unit Price
BDT
12,850

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Concrete Construction Work	Class-20 (Batching Plant)	1.00	m3	12,850	12,850	SoR, 2015 [05/01/03 (e)]
Amount		1.00	m3		12,850	
Unit Price		1.00	m3		12,850	

Replacement of Concrete Deck

DUPA-1214

Item	:	Prime Coat Installation Work
Description	:	
Quantity, Unit	:	1 m2

Unit Price
BDT
100

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Prime Coat	Plant placed	1.00	m2	100	100	SoR, 2015 [03/06/01 (a)]
Amount		1.00	m2		100	
Unit Price		1.00	m2		100	

Replacement of Concrete Deck

DUPA-1215

Item	:	Waterproofing Installation Work
Description	:	Liquid-type
Quantity, Unit	:	100 m2

Unit Price
BDT
2,411

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.88	person	800	704	SoR, 2015
Skilled		2.65	person	550	1,458	SoR, 2015
Un-skilled		2.65	person	400	1,060	SoR, 2015
Waterproofing (Liquid-type)		180.00	kg	1,140	205,200	Quotation
* Waterproofing (Liquid-type): 1.5kg/m2, loss 20%						
Petty Charge	2 %	1.00	L.S		64	
Temporary Facility Cost	15.66 %	1.00	L.S		32,649	
Amount		100.00	m2		241,135	
Unit Price		1.00	m2		2,411	

Replacement of Concrete Deck

DUPA-1216

Item	:	Expansion Joint Installation Work
Description	:	
Quantity, Unit	:	12 m

Unit Price
BDT
15,798

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.05	person	800	40	SoR, 2015
Skilled		0.25	person	550	138	SoR, 2015
Un-skilled		1.00	person	400	400	SoR, 2015
Expansion Joint		12.00	m	15,000	180,000	Quotation
Anchorage	5% of Cost of Expansion Joint				9,000	
Basic Unit Price		12.00	m		189,578	
Unit Price		1.00	m		15,798	

Replacement of Concrete Deck

DUPA-1217

Item	:	Curb Construction Work
Description	:	Bending and Assembling Work of Reinforcement Bars
Quantity, Unit	:	1 t

Unit Price
BDT
77,490

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Reinforcement Bar Work	Grade 60	1.00	t	77,490	77,490	SoR, 2015 [05/02/02]
Amount		1.00	t		77,490	
Unit Price		1.00	t		77,490	

Replacement of Concrete Deck

DUPA-1218

Item	:	Curb Construction Work
Description	:	Curb Concrete Construction Work
Quantity, Unit	:	1 m3

Unit Price
BDT
12,850

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Concrete Construction Work	Class-20 (Batching Plant)	1.00	m3	12,850	12,850	SoR, 2015 [05/01/03 (e)]
Amount		1.00	m3		12,850	
Unit Price		1.00	m3		12,850	

Replacement of Concrete Deck

DUPA-1219

Item	:	Railing Installation Work
Description	:	
Quantity, Unit	:	1 m

Unit Price
BDT
15,870

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Mobilization for Railing Work		1.00	m	1,520	1,520	SoR, 2015 [05/15/01]
Steel Beam Installation Work	Steel Beam (W530×167)	1.00	m	8,980	8,980	SoR, 2015 [05/16/02]
RCC Railing Post	3m Post, 150mm x 150mm	1.00	m	5,370	5,370	SoR, 2015 [06/17/01 (b)]
Amount		1.00	m		15,870	
Unit Price		1.00	m		15,870	

Replacement of Concrete Deck

DUPA-1220

Item	:	Asphalt Pavement Placement Work
Description	:	Bituminous Base Course
Quantity, Unit	:	1 m3

Unit Price
BDT
16,200

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Base Course	Grade 60/70	1.00	m3	16,200	16,200	SoR, 2015 [03/10/01 (b)]
Amount		1.00	m3		16,200	
Unit Price		1.00	m3		16,200	

Replacement of Concrete Deck

DUPA-1221

Item	:	Asphalt Pavement Placement Work
Description	:	Tack Coat
Quantity, Unit	:	1 m2

Unit Price
BDT
40

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Tack Coat	Plant Work	1.00	m2	40	40	SoR, 2015 [03/07/01 (a)]
Amount		1.00	m2		40	
Unit Price		1.00	m2		40	

Replacement of Concrete Deck

DUPA-1222

Item	:	Asphalt Pavement Placement Work
Description	:	Bituminous Wearing Course
Quantity, Unit	:	1 m3

Unit Price
BDT
16,370

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Wearing Course	Grade 60/70	1.00	m3	16,370	16,370	SoR, 2015 [03/10/02 (b)]
Amount		1.00	m3		16,370	
Unit Price		1.00	m3		16,370	

Item	:	Road Surface Marking Work
Description	:	
Quantity, Unit	:	1 m2

Unit Price
BDT
860

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Road Surface Marking Work	Thermoplastic Materials	1.00	m2	860	860	SoR, 2015 [06/11/02]
Amount		1.00	m2		860	
Unit Price		1.00	m2		860	

Replacement of Concrete Deck

SDUPA-1201

Item	:	Truck Crane Operation
Description	:	truck crane 4.9t
Quantity, Unit	:	1 day

Unit Price
BDT
15,730

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Driver	Machinery	1.00	person	600	600	Quotation, 30/01/2015
Truck Crane	4.9t	1.40	day	9,350	13,090	Quotation
Diesel		29.14	L	70	2,040	SoR, 2015
Amount		1.00	day		15,730	
Unit Price		1.00	day		15,730	

Replacement of Concrete Deck

SDUPA-1202

Item	:	Dump Truck Operation
Description	:	10t vehicle
Quantity, Unit	:	1 day

Unit Price
BDT
21,060

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Driver	Truck	1.00	person	600	600	Quotation, 30/01/2015
Dump Truck	10t vehicle	1.29	day	12,000	15,480	Quotation
Diesel		71.14	L	70	4,980	SoR, 2015
Amount		1.00	day		21,060	
Unit Price		1.00	day		21,060	

Replacement of Concrete Deck

SDUPA-1203

Item	:	Truck Operation
Description	:	4.5t vehicle
Quantity, Unit	:	1 day

Unit Price
BDT
12,491

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Driver	Truck	1.00	person	600	600	Quotation, 30/01/2015
Truck	4.5t vehicle	1.13	day	8,500	9,605	Quotation
Diesel		32.66	L	70	2,286	SoR, 2015
Amount		1.00	day		12,491	
Unit Price		1.00	day		12,491	

Replacement of Concrete Deck

SDUPA-1204

Item	:	Backhoe Operation
Description	:	0.6m3
Quantity, Unit	:	1 day

Unit Price
BDT
29,991

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Driver	Machinery	1.00	person	600	600	Quotation, 30/01/2015
Backhoe	0.8m3	1.64	day	14,440	23,682	Quotation
Diesel		81.55	L	70	5,709	SoR, 2015
Amount		1.00	day		29,991	
Unit Price		1.00	day		29,991	

10m height, 1.8m dia meter and lining mortar of 70mm thickness

Unit price of pier i.e. 10m height, 1.8m dia meter and lining mortar of 70mm thickness

Unit Price: 1 pier

Concrete Pier Dia Meter: D= 1.80 m
Concrete Pier Height: H= 10.00 m
Lining Mortar Thickness: t= 0.07 m
Concrete Drilling Number: N= 56 number(s)

Surface Preparation Work

1.80 * π * 10.00 = 56.55 m2

Concrete Drilling Work (Hole Diameter 42mm, Drilling Depth 65cm)

56 number

Bending and Assembling Work of Reinforcement Bars

(1.87 * 1.87 - 1.80 * 1.80)* 0.25 * π * 10.00 * 0.15 = 0.30 t

0.15t/m3

Mortar Spraying Work

(1.87 * 1.87 - 1.80 * 1.80)* 0.25 * π * 10.00 = 2.02 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-1301	Surface Preparation Work		m2	56.55	80	4,524	
UP-1302	Concrete Drilling Work	Hole Diameter 42mm, Drilling Depth 65cm	number	56.00	785	43,960	
UP-1303	Bending and Assembling Work of Reinforcement Bars		t	0.30	77,490	23,247	
UP-1304	Mortar Spraying Work		m3	2.02	1,193,249	2,410,363	
Sub Total (A)			pier	1		2,482,094	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		638,146	
Sub Total (C) = (A) + (B)						3,120,240	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		312,024	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		171,613	
Sub Total (F) = (C) + (D) + (E)						3,603,877	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		422,800	
Unit Price (H) = (F) + (G)						4,026,677	

Strengthening of Concrete Pier with Spray Applied Mortar

DUPA-1301

Item	: Surface Preparation Work	
Description	:	
Quantity, Unit	: 100 m2	

Unit Price
BDT
80

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.91	person	800	1,528	SoR, 2015
Skilled		6.15	person	550	3,383	SoR, 2015
Un-skilled		3.17	person	400	1,268	SoR, 2015
Petty Charge	12 %	1.00	L.S		741	
Temporary Facility Cost	15.66 %	1.00	L.S		1,084	
Amount		100.00	m2		8,004	
Unit Price		1.00	m2		80	

Strengthening of Concrete Pier with Spray Applied Mortar

DUPA-1302

Item	: Concrete Drilling Work	
Description	: Hole Diameter 42mm, Drilling Depth 65cm	
Quantity, Unit	: 100 number	

Unit Price
BDT
785

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		2.67	person	800	2,136	SoR, 2015
Skilled		8.04	person	550	4,422	SoR, 2015
Un-skilled		2.67	person	400	1,068	SoR, 2015
Grout Material (Strengthening of Pier)		49.39	kg	350	17,287	Quotation
Reinforcement Bar Work	Grade 60	0.53	t	77,490	41,070	SoR, 2015 [05/02/02]
*Grout: Diameter of Re-bar 32mm						
$(0.042^2-0.032^2)*3.14*(1/4)*0.65*100*1200$kg/m3, loss 9%						
*Reinforcement Bar: D32mm=6.23kg/m						
0.85m*100*6.23kg/m						
Petty Charge	25 %	1.00	L.S		1,907	
Temporary Facility Cost	15.66 %	1.00	L.S		10,632	
Amount		100.00	number		78,522	
Unit Price		1.00	number		785	

Strengthening of Concrete Pier with Spray Applied Mortar

DUPA-1303

Item	:	Bending and Assembling Work of Reinforcement Bars	
Description	:		
Quantity, Unit	:	1 t	

Unit Price
BDT
77,490

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Reinforcement Bar Work	Grade 60	1.00	t	77,490	77,490	SoR, 2015 [05/02/02]
Amount		1.00	t		77,490	
Unit Price		1.00	t		77,490	

Strengthening of Concrete Pier with Spray Applied Mortar

DUPA-1304

Item	:	Mortar Spraying Work	
Description	:		
Quantity, Unit	:	11.75 m3	

Unit Price
BDT
1,193,249

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		22.04	person	800	17,632	SoR, 2015
Carpenter		66.09	person	600	39,654	SoR, 2015
Skilled		44.07	person	550	24,239	SoR, 2015
Un-skilled		44.07	person	400	17,628	SoR, 2015
Spray Applied Mortar		12.46	m3	904,180	11,266,083	Quotation
Generator Operation	15kVA	14.69	day	4,371	64,210	SDUPA-1301
Air Compressor Operation	1.4m3/min	14.69	day	12,881	189,222	SDUPA-1302
Mortar Mixer	100L	14.69	day	28,378	416,873	SDUPA-1303
Concrete Pump	3.0 to 4.0 kw	14.69	day	5,705	83,806	SDUPA-1304
* Spray Applied Mortar: loss 6%						
Petty Charge	3 %	1.00	L.S		2,975	
Temporary Facility Cost	15.66 %	1.00	L.S		1,898,356	
Amount		11.75	m3		14,020,678	
Unit Price		1.00	m3		1,193,249	

Strengthening of Concrete Pier with Spray Applied Mortar

SDUPA-1301

Item	: Generator Operation	
Description	: 15kVA	
Quantity, Unit	: 1 day	

Unit Price
BDT
4,371

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Generator	15kVA	1.20	day	2,780	3,336	Quotation
Diesel		14.79	L	70	1,035	SoR, 2015
Amount		1.00	day		4,371	
Unit Price		1.00	day		4,371	

Strengthening of Concrete Pier with Spray Applied Mortar

SDUPA-1302

Item	: Air Compressor Operation	
Description	: 1.4m3/min	
Quantity, Unit	: 1 day	

Unit Price
BDT
12,881

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Air Compressor	1.4m3/min	1.75	day	6,850	11,988	Quotation
Diesel		12.75	L	70	893	SoR, 2015
Amount		1.00	day		12,881	
Unit Price		1.00	day		12,881	

Strengthening of Concrete Pier with Spray Applied Mortar

SDUPA-1303

Item	: Mortar Mixer	
Description	: 100L	
Quantity, Unit	: 1 day	

Unit Price
BDT
28,378

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Mortar Mixer	100L	1.63	day	17,410	28,378	Quotation
Amount		1.00	day		28,378	
Unit Price		1.00	day		28,378	

Strengthening of Concrete Pier with Spray Applied Mortar

SDUPA-1304

Item	: Concrete Pump	
Description	: 3.0 to 4.0 kw	
Quantity, Unit	: 1 day	

Unit Price
BDT
5,705

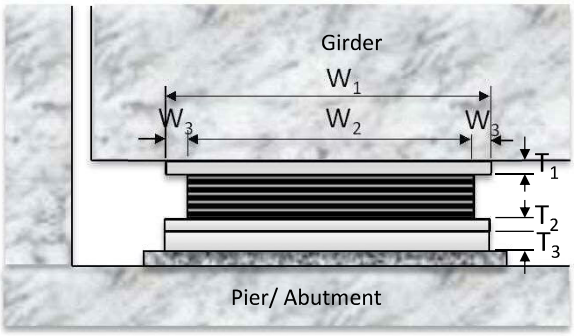
Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Concrete Pump	3.0 to 4.0kw	1.63	day	3,500	5,705	Quotation
Amount		1.00	day		5,705	
Unit Price		1.00	day		5,705	

Repairing of Bearing 0.8m x 0.8m

Unit price of number i.e. 0.8m size

Unit Price: 1 number

Width of Bearing: W_1= 0.80 m
W_2= 0.70 m
W_3= 0.05 m
Thickness of Top of Bearing: T_1= 0.035 m
Thickness of Bottom of Bearing: T_2= 0.035 m
Thickness of Base Plate: T_3= 0.050 m



Pretreatment Work of Existing Painting

0.80 * 0.035 * 4 + 0.80 *(0.035 + 0.050)* 4
+(0.80 * 0.80 - 0.70 * 0.70)* 2 = 0.68 m2

Re-painting Work

0.80 * 0.035 * 4 + 0.80 *(0.035 + 0.050)* 4
+(0.80 * 0.80 - 0.70 * 0.70)* 2 = 0.68 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-1401	Pretreatment Work of Existing Painting		m2	0.68	1,002	681	
UP-1402	Re-painting Work		m2	0.68	430	292	
Sub Total (A)			number	1		973	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		250	
Sub Total (C) = (A) + (B)						1,223	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		122	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		67	
Sub Total (F) = (C) + (D) + (E)						1,412	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		166	
Unit Price (H) = (F) + (G)						1,578	

Repairing of Bearing

DUPA-1401

Item	:	Pretreatment Work of Existing Painting
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
1,002

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.50	person	800	1,200	SoR, 2015
Skilled		6.00	person	550	3,300	SoR, 2015
Un-skilled		9.00	person	400	3,600	SoR, 2015
Petty Charge	7 %	1.00	L.S		567	
Temporary Facility Cost	15.66 %	1.00	L.S		1,357	
Amount		10.00	m2		10,024	
Unit Price		1.00	m2		1,002	

Repairing of Bearing

DUPA-1402

Item	:	Re-painting Work
Description	:	
Quantity, Unit	:	1 m2

Unit Price
BDT
430

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Painting Works	Existing Structures	1.00	m2	430	430	SoR, 2015 [05/06/01]
Amount		1.00	m2		430	
Unit Price		1.00	m2		430	

Unit price of number

Unit Price:	1	number

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-1501	Bearing Replacement Work	Steel Bridge [Rubber Bearing] 200t, Within the general land, 3 to 5units	number	1.00	59,779	59,779	
Sub Total (A)			number	1		59,779	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		15,369	
Sub Total (C) = (A) + (B)						75,148	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		7,515	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		4,133	
Sub Total (F) = (C) + (D) + (E)						86,796	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		10,183	
Unit Price (H) = (F) + (G)						96,979	

Item	:	Bearing Replacement Work
Description	:	Steel Bridge [Rubber Bearing] 200t, Within the general land, 3 to 5units
Quantity, Unit	:	1 number

Unit Price
BDT
59,779

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		4.35	person	800	3,480	SoR, 2015
Skilled		12.60	person	550	6,930	SoR, 2015
Skilled		5.85	person	550	3,218	SoR, 2015
Un-skilled		4.05	person	400	1,620	SoR, 2015
Elastic Bearing		1.00	number	32,000	32,000	Quotation
Bearing Assembly	1% of Cost of Elastic Bearing				320	
Petty Charge	27 %	1.00	L.S		4,117	
Temporary Facility Cost	15.66 %	1.00	L.S		8,094	
Amount		1.00	number		59,779	
Unit Price		1.00	number		59,779	

Repairing of Expansion Joint

Unit price of length i.e. 1m length

Unit Price: 1.00 m

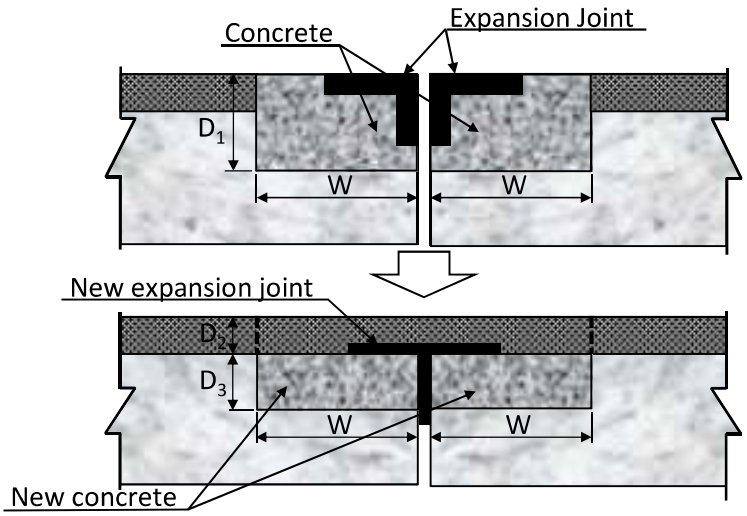
Length of Expansion Joint: L= 1.00 m

D_1= 0.15 m

D_2= 0.062 m

D_3= 0.088 m

W= 0.35 m



Expansion Joint Repairing Work

1.00 m

Bending and Assembling Work of Reinforcement Bars

1.00 * 0.088 * 0.35 * 2 * 0.10 / 0.10t/m3 = 0.006 t

Concrete Construction Work

1.00 * 0.088 * 0.35 * 2 = 0.06 m3

Asphalt Pavement Placement Work (Bituminous Wearing Course)

1.00 * 0.062 * 0.35 * 2 = 0.04 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-1601	Expansion Joint Repairing Work		m	1.00	5,817	5,817	
UP-1602	Bending and Assembling Work of Reinforcement Bars		t	0.006	77,490	465	
UP-1603	Concrete Construction Work		m3	0.06	13,950	837	
UP-1604	Asphalt Pavement Placement Work	Bituminous Wearing Course	m3	0.04	16,370	655	
Sub Total (A)			m	1.00		7,774	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		1,999	
Sub Total (C) = (A) + (B)						9,773	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		977	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		538	
Sub Total (F) = (C) + (D) + (E)						11,288	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		1,324	
Unit Price (H) = (F) + (G)						12,612	

Repairing of Expansion Joint

DUPA-1601

Item	:	Expansion Joint Repairing Work
Description	:	
Quantity, Unit	:	7.5 m

Unit Price
BDT
5,817

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.80	person	800	1,440	SoR, 2015
Skilled		0.90	person	550	495	SoR, 2015
Skilled		4.05	person	550	2,228	SoR, 2015
Un-skilled		6.30	person	400	2,520	SoR, 2015
Backup Material	thickness of 20mm	2.25	m2	3,000	6,750	Quotation
Steel Material	H-300, section steel	0.19	t	112,000	21,280	Quotation
Anchorage	5% of Cost of Backup Material and Steel Material				1,402	
* Backup Material: 0.3m*7.5m						
* Steel Material: H200*200*8*12, 7.5m*49.9(kg/m)/2						
Petty Charge	24 %	1.00	L.S		1,604	
Temporary Facility Cost	15.66 %	1.00	L.S		5,907	
Amount		7.50	m		43,626	
Unit Price		1.00	m		5,817	

Repairing of Expansion Joint

DUPA-1602

Item	:	Bending and Assembling Work of Reinforcement Bars
Description	:	
Quantity, Unit	:	1 t

Unit Price
BDT
77,490

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Reinforcement Bar Work	Grade 60	1.00	t	77,490	77,490	SoR, 2015 [05/02/02]
Amount		1.00	t		77,490	
Unit Price		1.00	t		77,490	

Repairing of Expansion Joint

DUPA-1603

Item	:	Concrete Construction Work	
Description	:		
Quantity, Unit	:	1	m3

Unit Price
BDT
13,950

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Concrete Construction Work	Class-30 (Batching Plant)	1.00	m3	13,950	13,950	SoR, 2015 [05/01/03 (k)]
Amount		1.00	m3		13,950	
Unit Price		1.00	m3		13,950	

Repairing of Expansion Joint

DUPA-1604

Item	:	Asphalt Pavement Placement Work	
Description	:	Bituminous Wearing Course	
Quantity, Unit	:	1	m3

Unit Price
BDT
16,370

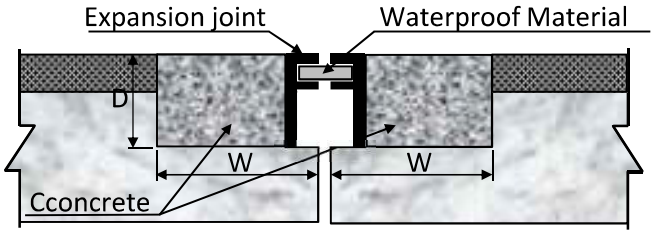
Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Wearing Course	Grade 60/70	1.00	m3	16,370	16,370	SoR, 2015 [03/10/02 (b)]
Amount		1.00	m3		16,370	
Unit Price		1.00	m3		16,370	

Replacement of Expansion Joint

Unit price of length i.e. 1m length

Unit Price: 1.00 m

Length of Expansion Joint: L= 1.00 m
D= 0.15 m
W= 0.35 m



Expansion Joint Removal Work

1.00 * 0.15 * 0.35 * 2 = 0.11 m3

Priming Work

1.00 *(0.15 + 0.35)* 2 = 1.00 m2

Expansion Joint Installation Work

1.00 m

Bending and Assembling Work of Reinforcement Bars

1.00 * 0.15 * 0.35 * 2 * 0.10 / 0.10t/m3 = 0.01 t

Concrete Construction Work

1.00 * 0.15 * 0.35 * 2 = 0.11 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-1701	Expansion Joint Removal Work		m3	0.11	25,320	2,785	
UP-1702	Priming Work		m2	1.00	206	206	
UP-1703	Expansion Joint Installation Work		m	1.00	15,798	15,798	
UP-1704	Bending and Assembling Work of Reinforcement Bars		t	0.01	77,490	775	
UP-1705	Concrete Construction Work		m3	0.11	13,950	1,535	
Sub Total (A)			m	1.00		21,099	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		5,425	
Sub Total (C) = (A) + (B)						26,524	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		2,652	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		1,459	
Sub Total (F) = (C) + (D) + (E)						30,635	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		3,594	
Unit Price (H) = (F) + (G)						34,229	

Replacement of Expansion Joint

DUPA-1701

Item	:	Expansion Joint Removal Work
Description	:	
Quantity, Unit	:	10 m3

Unit Price
BDT
25,320

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		6.60	person	800	5,280	SoR, 2015
Skilled		21.75	person	550	11,963	SoR, 2015
Un-skilled		20.40	person	400	8,160	SoR, 2015
Concrete Breaker	20kg class	13.20	day	7,695	101,574	SDUPA-1701
Air Compressor Operation	3.5 to 3.7m3/min	6.60	day	13,815	91,179	SDUPA-1702
Petty Charge	3 %	1.00	L.S		762	
Temporary Facility Cost	15.66 %	1.00	L.S		34,283	
Amount		10.00	m3		253,201	
Unit Price		1.00	m3		25,320	

Replacement of Expansion Joint

DUPA-1702

Item	:	Priming Work
Description	:	
Quantity, Unit	:	10 m2

Unit Price
BDT
206

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.15	person	800	120	SoR, 2015
Skilled		0.60	person	550	330	SoR, 2015
Un-skilled		0.30	person	400	120	SoR, 2015
Primer		2.00	kg	600	1,200	Quotation, 13/06/2016
* Primer: 0.20kg/m2						
Petty Charge	2 %	1.00	L.S		11	
Temporary Facility Cost	15.66 %	1.00	L.S		279	
Amount		10.00	m2		2,060	
Unit Price		1.00	m2		206	

Replacement of Expansion Joint

DUPA-1703

Item	: Expansion Joint Installation Work	
Description	:	
Quantity, Unit	: 12 m	

Unit Price
BDT
15,798

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.05	person	800	40	SoR, 2015
Skilled		0.25	person	550	138	SoR, 2015
Un-skilled		1.00	person	400	400	SoR, 2015
Expansion Joint		12.00	m	15,000	180,000	Quotation
Anchorage	5% of Cost of Expansion Joint				9,000	
Basic Unit Price		12.00	m		189,578	
Unit Price		1.00	m		15,798	

Replacement of Expansion Joint

DUPA-1704

Item	: Bending and Assembling Work of Reinforcement Bars	
Description	:	
Quantity, Unit	: 1 t	

Unit Price
BDT
77,490

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Reinforcement Bar Work	Grade 60	1.00	t	77,490	77,490	SoR, 2015 [05/02/02]
Amount		1.00	t		77,490	
Unit Price		1.00	t		77,490	

Item	:	Concrete Construction Work	
Description	:		
Quantity, Unit	:	1	m3

Unit Price
BDT
13,950

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Concrete Construction Work	Class-30 (Batching Plant)	1.00	m3	13,950	13,950	SoR, 2015 [05/01/03 (k)]
Amount		1.00	m3		13,950	
Unit Price		1.00	m3		13,950	

Replacement of Expansion Joint

SDUPA-1701

Item	: Concrete Breaker	
Description	: 20kg class	
Quantity, Unit	: 1 day	

Unit Price
BDT
7,695

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Concrete Breaker	20kg class	1.71	day	4,500	7,695	Quotation
Amount		1.00	day		7,695	
Unit Price		1.00	day		7,695	

Replacement of Expansion Joint

SDUPA-1702

Item	: Air Compressor Operation	
Description	: 3.5 to 3.7m3/min	
Quantity, Unit	: 1 day	

Unit Price
BDT
13,815

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Air Compressor	3.5 to 3.7 m3/min	1.70	day	6,850	11,645	Quotation
Diesel		31.00	L	70	2,170	SoR, 2015
Amount		1.00	day		13,815	
Unit Price		1.00	day		13,815	

Unit price of span i.e. 30m length and 7.3m width

Unit Price:	1	span

Span Length: L=	30.00	m	Thickness of Base Course Asphalt Pavement: T_B=	0.050	m
Road Width: W_R=	7.30	m	Thickness of Surface Course Asphalt Pavement: T_S=	0.012	m
Line Width of Road Marking: W_{RM}=	0.15	m	Number of Lane: N_L=	2	lane(s)

Asphalt Pavement Removal Work

30.00 * 7.30 *(0.050 + 0.012)= 13.58 m3

Prime Coating Work

30.00 * 7.30 = 219.00 m2

Base Course Asphalt Pavement Placement Work

30.00 * 7.30 * 0.050 = 10.95 m3

Tack Coat Placement Work

30.00 * 7.30 = 219.00 m2

Surface Course Asphalt Pavement Placement Work

30.00 * 7.30 * 0.012 = 2.63 m3

Road Surface Marking Work

30.00 *(2 + 1)* 0.15 = 13.50 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-1801	Asphalt Pavement Removal Work		m3	13.58	220	2,988	
UP-1802	Prime Coating Work		m2	219.00	100	21,900	
UP-1803	Base Course Asphalt Pavement Placement Work		m3	10.95	16,200	177,390	
UP-1804	Tack Coat Placement Work		m2	219.00	40	8,760	
UP-1805	Surface Course Asphalt Pavement Placement Work		m3	2.63	16,370	43,053	
UP-1806	Road Surface Marking Work		m2	13.50	860	11,610	
Sub Total (A)			span	1		265,701	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		68,312	
Sub Total (C) = (A) + (B)						334,013	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		33,401	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		18,371	
Sub Total (F) = (C) + (D) + (E)						385,785	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		45,260	
Unit Price (H) = (F) + (G)						431,045	

Replacement of Asphalt Pavement (without Waterproofing)

DUPA-1801

Item	:	Asphalt Pavement Removal Work	
Description	:		
Quantity, Unit	:	1	m3

Unit Price
BDT
220

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Asphalt Pavement Removal Work		1.00	m3	220	220	SoR, 2015 [02/02/03]
Amount		1.00	m3		220	
Unit Price		1.00	m3		220	

Replacement of Asphalt Pavement (without Waterproofing)

DUPA-1802

Item	:	Prime Coating Work	
Description	:		
Quantity, Unit	:	1	m2

Unit Price
BDT
100

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Prime Coat	Plant placed	1.00	m2	100	100	SoR, 2015 [03/06/01 (a)]
Amount		1.00	m2		100	
Unit Price		1.00	m2		100	

Replacement of Asphalt Pavement (without Waterproofing)

DUPA-1803

Item	:	Base Course Asphalt Pavement Placement Work	
Description	:		
Quantity, Unit	:	1	m3

Unit Price
BDT
16,200

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Base Course	Grade 60/70	1.00	m3	16,200	16,200	SoR, 2015 [03/10/01 (b)]
Amount		1.00	m3		16,200	
Unit Price		1.00	m3		16,200	

Replacement of Asphalt Pavement (without Waterproofing)

DUPA-1804

Item	:	Tack Coat Placement Work	
Description	:		
Quantity, Unit	:	1	m2

Unit Price
BDT
40

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Tack Coat	Plant Work	1.00	m2	40	40	SoR, 2015 [03/07/01 (a)]
Amount		1.00	m2		40	
Unit Price		1.00	m2		40	

Replacement of Asphalt Pavement (without Waterproofing)

DUPA-1805

Item	:	Surface Course Asphalt Pavement Placement Work
Description	:	
Quantity, Unit	:	1 m3

Unit Price
BDT
16,370

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Wearing Course	Grade 60/70	1.00	m3	16,370	16,370	SoR, 2015 [03/10/02 (b)]
Amount		1.00	m3		16,370	
Unit Price		1.00	m3		16,370	

Replacement of Asphalt Pavement (without Waterproofing)

DUPA-1806

Item	:	Road Surface Marking Work
Description	:	
Quantity, Unit	:	1 m2

Unit Price
BDT
860

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Road Surface Marking Work	Thermoplastic Materials	1.00	m2	860	860	SoR, 2015 [06/11/02]
Amount		1.00	m2		860	
Unit Price		1.00	m2		860	

30m length and 7.3m width

Unit price of span i.e. 30m length and 7.3m width

Unit Price: 1 span

Span Length: L= 30.00 m
Road Width: W_R= 7.30 m
Line Width of Road Marking: W_{RM}= 0.15 m
Thickness of Base Course Asphalt Pavement: T_B= 0.050 m
Thickness of Surface Course Asphalt Pavement: T_S= 0.012 m
Number of Lane: N_L= 2 lane(s)

Asphalt Pavement Removal Work
30.00 * 7.30 *(0.050 + 0.012)= 13.58 m3
Prime Coating Work
30.00 * 7.30 = 219.00 m2
Waterproofing Layer Placement Work (Liquid-type)
30.00 * 7.30 = 219.00 m2
Base Course Asphalt Pavement Placement Work
30.00 * 7.30 * 0.050 = 10.95 m3
Tack Coat Placement Work
30.00 * 7.30 = 219.00 m2
Surface Course Asphalt Pavement Placement Work
30.00 * 7.30 * 0.012 = 2.63 m3
Road Surface Marking Work
30.00 *(2 + 1)* 0.15 = 13.50 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-1901	Asphalt Pavement Removal Work		m3	13.58	220	2,988	
UP-1902	Prime Coating Work		m2	219.00	100	21,900	
UP-1903	Waterproofing Layer Placement Work (Liquid-type)		m2	219.00	2,411	528,009	
UP-1904	Base Course Asphalt Pavement Placement Work		m3	10.95	16,200	177,390	
UP-1905	Tack Coat Placement Work		m2	219.00	40	8,760	
UP-1906	Surface Course Asphalt Pavement Placement Work		m3	2.63	16,370	43,053	
UP-1907	Road Surface Marking Work		m2	13.50	860	11,610	
Sub Total (A)			span	1		793,710	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		204,063	
Sub Total (C) = (A) + (B)						997,773	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		99,777	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		54,878	
Sub Total (F) = (C) + (D) + (E)						1,152,428	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		135,201	
Unit Price (H) = (F) + (G)						1,287,629	

Replacement of Asphalt Pavement (with Waterproofing of Liquid-type)

DUPA-1901

Item	:	Asphalt Pavement Removal Work
Description	:	
Quantity, Unit	:	1 m3

Unit Price
BDT
220

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Asphalt Pavement Removal Work		1.00	m3	220	220	SoR, 2015 [02/02/03]
Amount		1.00	m3		220	
Unit Price		1.00	m3		220	

Replacement of Asphalt Pavement (with Waterproofing of Liquid-type)

DUPA-1902

Item	:	Prime Coating Work
Description	:	
Quantity, Unit	:	1 m2

Unit Price
BDT
100

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Prime Coat	Plant placed	1.00	m2	100	100	SoR, 2015 [03/06/01 (a)]
Amount		1.00	m2		100	
Unit Price		1.00	m2		100	

Replacement of Asphalt Pavement (with Waterproofing of Liquid-type)

DUPA-1903

Item	:	Waterproofing Layer Placement Work (Liquid-type)
Description	:	
Quantity, Unit	:	100 m2

Unit Price
BDT
2,411

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.88	person	800	704	SoR, 2015
Skilled		2.65	person	550	1,458	SoR, 2015
Un-skilled		2.65	person	400	1,060	SoR, 2015
Waterproofing (Liquid-type)		180.00	kg	1,140	205,200	Quotation
* Waterproofing (Liquid-type): 1.5kg/m2, loss 20%						
Petty Charge	2 %	1.00	L.S		64	
Temporary Facility Cost	15.66 %	1.00	L.S		32,649	
Amount		100.00	m2		241,135	
Unit Price		1.00	m2		2,411	

Replacement of Asphalt Pavement (with Waterproofing of Liquid-type)

DUPA-1904

Item	:	Base Course Asphalt Pavement Placement Work
Description	:	
Quantity, Unit	:	1 m3

Unit Price
BDT
16,200

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Base Course	Grade 60/70	1.00	m3	16,200	16,200	SoR, 2015 [03/10/01 (b)]
Amount		1.00	m3		16,200	
Unit Price		1.00	m3		16,200	

Replacement of Asphalt Pavement (with Waterproofing of Liquid-type)

DUPA-1905

Item	:	Tack Coat Placement Work
Description	:	
Quantity, Unit	:	1 m2

Unit Price
BDT
40

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Tack Coat	Plant Work	1.00	m2	40	40	SoR, 2015 [03/07/01 (a)]
Amount		1.00	m2		40	
Unit Price		1.00	m2		40	

Replacement of Asphalt Pavement (with Waterproofing of Liquid-type)

DUPA-1906

Item	:	Surface Course Asphalt Pavement Placement Work
Description	:	
Quantity, Unit	:	1 m3

Unit Price
BDT
16,370

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Wearing Course	Grade 60/70	1.00	m3	16,370	16,370	SoR, 2015 [03/10/02 (b)]
Amount		1.00	m3		16,370	
Unit Price		1.00	m3		16,370	

Item	:	Road Surface Marking Work	
Description	:		
Quantity, Unit	:	1	m2

Unit Price
BDT
860

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Road Surface Marking Work	Thermoplastic Materials	1.00	m2	860	860	SoR, 2015 [06/11/02]
Amount		1.00	m2		860	
Unit Price		1.00	m2		860	

Replacement of Asphalt Pavement with Waterproofing of Sheet-Type

30m length and 7.3m width

Unit price of span i.e. 30m length and 7.3m width

Unit Price: 1 span

Span Length: L= 30.00 m
Road Width: W_R= 7.30 m
Line Width of Road Marking: W_{RM}= 0.15 m
Thickness of Base Course Asphalt Pavement: T_B= 0.050 m
Thickness of Surface Course Asphalt Pavement: T_S= 0.012 m
Number of Lane: N_L= 2 lane(s)

Asphalt Pavement Removal Work
30.00 * 7.30 *(0.050 + 0.012)= 13.58 m3

Prime Coating Work
30.00 * 7.30 = 219.00 m2

Waterproofing Layer Placement Work (Sheet-type)
30.00 * 7.30 = 219.00 m2

Base Course Asphalt Pavement Placement Work
30.00 * 7.30 * 0.050 = 10.95 m3

Tack Coat Placement Work
30.00 * 7.30 = 219.00 m2

Surface Course Asphalt Pavement Placement Work
30.00 * 7.30 * 0.012 = 2.63 m3

Road Surface Marking Work
30.00 *(2 + 1)* 0.15 = 13.50 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-1911	Asphalt Pavement Removal Work		m3	13.58	220	2,988	
UP-1912	Prime Coating Work		m2	219.00	100	21,900	
UP-1913	Waterproofing Layer Placement Work (Sheet-type)		m2	219.00	3,596	787,524	
UP-1914	Base Course Asphalt Pavement Placement Work		m3	10.95	16,200	177,390	
UP-1915	Tack Coat Placement Work		m2	219.00	40	8,760	
UP-1916	Surface Course Asphalt Pavement Placement Work		m3	2.63	16,370	43,053	
UP-1917	Road Surface Marking Work		m2	13.50	860	11,610	
Sub Total (A)			span	1		1,053,225	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		270,784	
Sub Total (C) = (A) + (B)						1,324,009	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		132,401	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		72,821	
Sub Total (F) = (C) + (D) + (E)						1,529,231	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		179,406	
Unit Price (H) = (F) + (G)						1,708,637	

Replacement of Asphalt Pavement (with Waterproofing of Sheet-type)

DUPA-1911

Item	:	Asphalt Pavement Removal Work	
Description	:		
Quantity, Unit	:	1	m3

Unit Price
BDT
220

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Asphalt Pavement Removal Work		1.00	m3	220	220	SoR, 2015 [02/02/03]
Amount		1.00	m3		220	
Unit Price		1.00	m3		220	

Replacement of Asphalt Pavement (with Waterproofing of Sheet-type)

DUPA-1912

Item	:	Prime Coating Work	
Description	:		
Quantity, Unit	:	1	m2

Unit Price
BDT
100

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Prime Coat	Plant placed	1.00	m2	100	100	SoR, 2015 [03/06/01 (a)]
Amount		1.00	m2		100	
Unit Price		1.00	m2		100	

Replacement of Asphalt Pavement (with Waterproofing of Sheet-type)

DUPA-1913

			Unit Price
Item	:	Waterproofing Layer Placement Work (Sheet-type)	
Description	:		BDT
Quantity, Unit	:	100 m2	3,596

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.00	person	800	800	SoR, 2015
Skilled		3.00	person	550	1,650	SoR, 2015
Un-skilled		3.00	person	400	1,200	SoR, 2015
Waterproofing (Sheet-type)		120.00	m2	2,560	307,200	Quotation
* Waterproofing (Sheet-type): loss 20%						
Petty Charge	2 %	1.00	L.S		73	
Temporary Facility Cost	15.66 %	1.00	L.S		48,691	
Amount		100.00	m2		359,614	
Unit Price		1.00	m2		3,596	

Replacement of Asphalt Pavement (with Waterproofing of Sheet-type)

DUPA-1914

			Unit Price
Item	:	Base Course Asphalt Pavement Placement Work	
Description	:		BDT
Quantity, Unit	:	1 m3	16,200

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Base Course	Grade 60/70	1.00	m3	16,200	16,200	SoR, 2015 [03/10/01 (b)]
Amount		1.00	m3		16,200	
Unit Price		1.00	m3		16,200	

Replacement of Asphalt Pavement (with Waterproofing of Sheet-type)

DUPA-1915

Item	:	Tack Coat Placement Work
Description	:	
Quantity, Unit	:	1 m2

Unit Price
BDT
40

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Tack Coat	Plant Work	1.00	m2	40	40	SoR, 2015 [03/07/01 (a)]
Amount		1.00	m2		40	
Unit Price		1.00	m2		40	

Replacement of Asphalt Pavement (with Waterproofing of Sheet-type)

DUPA-1916

Item	:	Surface Course Asphalt Pavement Placement Work
Description	:	
Quantity, Unit	:	1 m3

Unit Price
BDT
16,370

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bituminous Wearing Course	Grade 60/70	1.00	m3	16,370	16,370	SoR, 2015 [03/10/02 (b)]
Amount		1.00	m3		16,370	
Unit Price		1.00	m3		16,370	

Item	:	Road Surface Marking Work	
Description	:		
Quantity, Unit	:	1	m2

Unit Price
BDT
860

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Road Surface Marking Work	Thermoplastic Materials	1.00	m2	860	860	SoR, 2015 [06/11/02]
Amount		1.00	m2		860	
Unit Price		1.00	m2		860	

Unit price of number

Unit Price: 1 number

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-2001	Catch Basin and Drainage Removal Work		number	1.00	425	425	
UP-2002	Catch Basin and Drainage Installation Work		number	1.00	3,006	3,006	
Sub Total (A)			number	1		3,431	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		882	
Sub Total (C) = (A) + (B)						4,313	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		431	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		237	
Sub Total (F) = (C) + (D) + (E)						4,981	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		584	
Unit Price (H) = (F) + (G)						5,565	

Replacement of Catch Basin and Drainage

DUPA-2001

Item	:	Catch Basin and Drainage Removal Work
Description	:	
Quantity, Unit	:	1 number

Unit Price
BDT
425

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.15	person	800	120	SoR, 2015
Skilled		0.30	person	550	165	SoR, 2015
Un-skilled		0.35	person	400	140	SoR, 2015
Amount		1.00	number		425	
Unit Price		1.00	number		425	

Replacement of Catch Basin and Drainage

DUPA-2002

Item	:	Catch Basin and Drainage Installation Work
Description	:	
Quantity, Unit	:	1 number

Unit Price
BDT
3,006

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		0.02	person	800	16	SoR, 2015
Welder		0.02	person	600	12	SoR, 2015
Skilled		0.02	person	550	11	SoR, 2015
Foreman		0.01	person	800	8	SoR, 2015
Mason		0.01	person	600	6	SoR, 2015
Un-skilled		0.20	person	400	80	SoR, 2015
Structural Steel		4.00	kg	80	320	Quotation
GI Pipe	100mm dia.	1.60	m	1,310	2,096	Quotation
GI Bolt	10mm dia.	6.00	number	40	240	Quotation
MS Flat Clamp		2.00	number	40	80	Quotation
Anchorage	5% of Cost of Drainage Materials				137	
Amount		1.00	number		3,006	
Unit Price		1.00	number		3,006	

Replacement of Railing

Unit price of length i.e. 1m length

Unit Price: 1.00 m

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-2101	Railing Removal Work		m	1.00	161	161	
UP-2102	Railing Installation Work		m	1.00	15,870	15,870	
Sub Total (A)			m	1.00		16,031	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		4,122	
Sub Total (C) = (A) + (B)						20,153	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		2,015	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		1,108	
Sub Total (F) = (C) + (D) + (E)						23,276	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		2,731	
Unit Price (H) = (F) + (G)						26,007	

Replacement of Railing

DUPA-2101

Item	: Railing Removal Work	Unit Price
Description	:	BDT
Quantity, Unit	: 30 m	161

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		1.50	person	800	1,200	SoR, 2015
Skilled		3.00	person	550	1,650	SoR, 2015
Un-skilled		3.00	person	400	1,200	SoR, 2015
Petty Charge	3 %	1.00	L.S		122	
Temporary Facility Cost	15.66 %	1.00	L.S		653	
Amount		30.00	m		4,825	
Unit Price		1.00	m		161	

Replacing of Railing

DUPA-2102

Item	: Railing Installation Work	Unit Price
Description	:	BDT
Quantity, Unit	: 1 m	15,870

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Mobilization for Railing Work		1.00	m	1,520	1,520	SoR, 2015 [05/15/01]
Steel Beam Installation Work	Steel Beam (W530×167)	1.00	m	8,980	8,980	SoR, 2015 [05/16/02]
RCC Railing Post	3m Post, 150mm x 150mm	1.00	m	5,370	5,370	SoR, 2015 [06/17/01 (b)]
Amount		1.00	m		15,870	
Unit Price		1.00	m		15,870	

Unit price of pier i.e. 4 piles (Diameter: 1.2m, Length: 60m)

Unit Price: 1 pier

Diameter of Pile: D_P= 1.20 m Diameter of Casing: D_C= 1.20 m

Length of Pile: L_P= 60.00 m Length of Casing: L_C= 3.00 m

Number of Pile: N_P= 4 number(s)

Cast-in-place Pile Driving Work (Steel Casing Work)

4 * 3.00 = 12.00 m

Cast-in-place Pile Driving Work (Bending and Assembling Work of Reinforcement Bars)

$$1.20 * 1.20 / 4 * \pi * 60.00 * 4 * \frac{0.10}{0.10t/m3} = 27.14 \text{ t}$$

Cast-in-place Pile Driving Work (Concrete Work)

60.00 * 4 = 240.00 m

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-2201	Cast-in-place Pile Driving Work	Steel Casing Work	m	12.00	26,510	318,120	
UP-2202	Cast-in-place Pile Driving Work	Bending and Assembling Work of Reinforcement Bars	t	27.14	77,490	2,103,079	
UP-2203	Cast-in-place Pile Driving Work	Concrete Work	m	240.00	15,120	3,628,800	
Sub Total (A)			pier	1		6,049,999	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		1,555,455	
Sub Total (C) = (A) + (B)						7,605,454	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		760,545	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		418,300	
Sub Total (F) = (C) + (D) + (E)						8,784,299	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		1,030,556	
Unit Price (H) = (F) + (G)						9,814,855	

Additional Support for Superstructure — Concrete Pier — Cost-94

Unit price of pier i.e. 240m3 concrete volume

Unit Price: 1 pier

Concrete Volume of Pier: V= 240.00 m3

Pier Construction Work (Bending and Assembling Work of Reinforcement Bars)

240.00 * 0.10 / 0.10t/m3 = 24.00 t

Pier Construction Work (Concrete Work)

240.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-2211	Pier Construction Work	Bending and Assembling Work of Reinforcement Bars	t	24.00	77,490	1,859,760	
UP-2212	Pier Construction Work	Concrete Work	m3	240.00	12,520	3,004,800	
Sub Total (A)			pier	1		4,864,560	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		1,250,678	
Sub Total (C) = (A) + (B)						6,115,238	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		611,524	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		336,338	
Sub Total (F) = (C) + (D) + (E)						7,063,100	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		828,629	
Unit Price (H) = (F) + (G)						7,891,729	

Additional Support for Superstructure — Bearing Installation — Cost-95

Unit price of pier i.e. 5 bearings

Unit Price: 1 pier

Base Mortar Volume: V= 0.025 m3

Number of Bearing: N= 5 number(s)

Bearing Shoe-seat Construction Work (Mortar Work of Bearing Shoe-seat)

0.025 * 5.00 = 0.13 m3

Bearing Installation Work

5 number

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-2221	Bearing Shoe-seat Construction Work	Mortar Work of Bearing Shoe-seat	m3	0.13	120,035	15,605	
UP-2222	Bearing Installation Work		number	5.00	15,730	78,650	
Sub Total (A)			pier	1		94,255	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		24,233	
Sub Total (C) = (A) + (B)						118,488	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		11,849	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		6,517	
Sub Total (F) = (C) + (D) + (E)						136,854	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		16,055	
Unit Price (H) = (F) + (G)						152,909	

Additional Support for Superstructure

DUPA-2201

Item	: Cast-in-place Pile Driving Work	Unit Price
Description	: Steel Casing Work	BDT
Quantity, Unit	: 1 m	26,510

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Permanent Steel Casing	10mm thick, dia 1200mm	1.00	m	26,510	26,510	SoR, 2015 [04/01/05 (h)]
Amount		1.00	m		26,510	
Unit Price		1.00	m		26,510	

Additional Support for Superstructure

DUPA-2202

Item	: Cast-in-place Pile Driving Work	Unit Price
Description	: Bending and Assembling Work of Reinforcement Bars	BDT
Quantity, Unit	: 1 t	77,490

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Reinforcement Bar Work	Grade 60	1.00	t	77,490	77,490	SoR, 2015 [04/07/06]
Amount		1.00	t		77,490	
Unit Price		1.00	t		77,490	

Additional Support for Superstructure

DUPA-2203

Item	: Cast-in-place Pile Driving Work	Unit Price
Description	: Concrete Work	BDT
Quantity, Unit	: 1 m	15,120

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Bored Cast in Place Piles	dia 1200mm	1.00	m	15,120	15,120	SoR, 2015 [04/01/01 (f)]
Amount		1.00	m		15,120	
Unit Price		1.00	m		15,120	

Additional Support for Superstructure

DUPA-2211

Item	: Pier Construction Work	Unit Price
Description	: Bending and Assembling Work of Reinforcement Bars	BDT
Quantity, Unit	: 1 t	77,490

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Reinforcement Bar Work	Grade 60	1.00	t	77,490	77,490	SoR, 2015 [05/02/02]
Amount		1.00	t		77,490	
Unit Price		1.00	t		77,490	

Additional Support for Superstructure

DUPA-2212

Item	: Pier Construction Work	Unit Price
Description	: Concrete Work	BDT
Quantity, Unit	: 1 m3	12,520

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Concrete Construction Work	Class-20 (Batching Plant)	1.00	m3	12,520	12,520	SoR, 2015 [05/01/03 (c)]
Amount		1.00	m3		12,520	
Unit Price		1.00	m3		12,520	

Additional Support for Superstructure

DUPA-2221

Item	: Bearing Shoe-seat Construction Work	Unit Price
Description	: Mortar Work of Bearing Shoe-seat	BDT
Quantity, Unit	: 1 m3	120,035

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foreman		7.95	person	800	6,360	SoR, 2015
Skilled		22.50	person	550	12,375	SoR, 2015
Un-skilled		17.40	person	400	6,960	SoR, 2015
Polymer Cement Mortar		1.06	m3	72,941	77,317	SDUPA-2221
* Polymer Cement Mortar: loss 6%						
Petty Charge	3 %	1.00	L.S		771	
Temporary Facility Cost	15.66 %	1.00	L.S		16,252	
Amount		1.00	m3		120,035	
Unit Price		1.00	m3		120,035	

Item	:	Bearing Installation Work	
Description	:		
Quantity, Unit	:	1 number	

Unit Price
BDT
15,730

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Neoprene Rubber Bearing		1.00	number	15,730	15,730	SoR, 2015 [05/13/01 (b)]
Amount		1.00	number		15,730	
Unit Price		1.00	number		15,730	

Item	:	Polymer Cement Mortar
Description	:	
Quantity, Unit	:	1 m3

Unit Price
BDT
72,941

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Un-skilled		2.25	person	400	900	SoR, 2015
Ordinary Portland Cement (OPC)	Grade 60	0.50	t	10,760	5,380	SoR, 2015
Sand	FM=1.0	0.60	m3	600	360	SoR, 2015
Admixture for Polymer Cement		102.00	kg	650	66,300	Quotation, 13/06/2016
Water		0.10	m3	10	1	SoR, 2015
Amount		1.00	m3		72,941	
Unit Price		1.00	m3		72,941	

Unit price of volume i.e. 1m length, 1m width and 1m depth

Unit Price: 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-2301	Repairing Work of Scouring	Stone Riprap Protection	m3	1.00	4,320	4,320	
Sub Total (A)			m3	1.00		4,320	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		1,111	
Sub Total (C) = (A) + (B)						5,431	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		543	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		299	
Sub Total (F) = (C) + (D) + (E)						6,273	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		736	
Unit Price (H) = (F) + (G)						7,009	

Item	:	Repairing Work of Scouring
Description	:	Stone Riprap Protection
Quantity, Unit	:	1 m3

Unit Price
BDT
4,320

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Repairing Work of Scouring	Stone Riprap Protection	1.00	m3	4,320	4,320	SoR, 2015 [06/01/03]
Amount		1.00	m3		4,320	
Unit Price		1.00	m3		4,320	

Unit price of area i.e. 1m length and 1m width

Unit Price: 1.00 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-2401	Repairing Work of Slope Protection	Grass Sodding	m2	1.00	30	30	
Sub Total (A)			m2	1.00		30	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		8	
Sub Total (C) = (A) + (B)						38	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		4	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		2	
Sub Total (F) = (C) + (D) + (E)						44	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		5	
Unit Price (H) = (F) + (G)						49	

Repairing of Slope Protection (with Grass Sodding)

DUPA-2401

Item	:	Repairing Work of Slope Protection
Description	:	Grass Sodding
Quantity, Unit	:	1 m2

Unit Price
BDT
30

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Repairing Work of Slope Protection	Grass Sodding	1.00	m2	30	30	SoR, 2015 [06/07/01]
Amount		1.00	m2		30	
Unit Price		1.00	m2		30	

Unit price of area i.e. 1m length and 1m width

Unit Price: 1.00 m2

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-2501	Repairing Work of Slope Protection	Concrete	m2	1.00	1,220	1,220	
Sub Total (A)			m2	1.00		1,220	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		314	
Sub Total (C) = (A) + (B)						1,534	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		153	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		84	
Sub Total (F) = (C) + (D) + (E)						1,771	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		208	
Unit Price (H) = (F) + (G)						1,979	

Repairing of Slope Protection (with Concrete)

DUPA-2501

Item	:	Repairing Work of Slope Protection
Description	:	Concrete
Quantity, Unit	:	1 m2

Unit Price
BDT
1,220

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Repairing Work of Slope Protection	Concrete Slope Protection	1.00	m2	1,220	1,220	SoR, 2015 [06/01/02]
Amount		1.00	m2		1,220	
Unit Price		1.00	m2		1,220	

Unit price of volume i.e. 1m length, 1m width and 1m depth

Unit Price: 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-2601	Foundation Consolidation Work		m3	1.00	8,300	8,300	
Sub Total (A)			m3	1.00		8,300	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		2,134	
Sub Total (C) = (A) + (B)						10,434	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		1,043	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		574	
Sub Total (F) = (C) + (D) + (E)						12,051	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		1,414	
Unit Price (H) = (F) + (G)						13,465	

Repairing of Foundation Consolidation

DUPA-2601

Item	:	Foundation Consolidation Work	
Description	:		
Quantity, Unit	:	1	m3

Unit Price
BDT
8,300

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Foundation Consolidation Work	Concrete Backfill for Structures	1.00	m3	8,300	8,300	SoR, 2015 [02/05/02]
Amount		1.00	m3		8,300	
Unit Price		1.00	m3		8,300	

Unit price of volume i.e. 1m length, 1m width and 1m depth

Unit Price: 1.00 m3

No.	Item	Description	Unit	Quantity	Unit Price	Amount	Remarks
UP-2701	Block Stacking Work		m3	1.00	12,520	12,520	
Sub Total (A)			m3	1.00		12,520	
Site Expense (B) = Quantity (Rate) x (A)			%	25.71		3,219	
Sub Total (C) = (A) + (B)						15,739	
Company Profit (D) = Quantity (Rate) x (C)			%	10.00		1,574	
Company Overhead (E) = Quantity (Rate) x [(C) + (D)]			%	5.00		866	
Sub Total (F) = (C) + (D) + (E)						18,179	
TAX and VAT (G) = Quantity (Rate) x (F)			%	11.7318		2,133	
Unit Price (H) = (F) + (G)						20,312	

Item	:	Block Stacking Work	
Description	:		
Quantity, Unit	:	1	m3

Unit Price
BDT
12,520

Item	Description	Quantity	Unit	Unit Price (BDT)	Amount (BDT)	Remarks
Block Stacking Work	Class-20 (Batching Plant)	1.00	m3	12,520	12,520	SoR, 2015 [05/01/03 (c)]
Amount		1.00	m3		12,520	
Unit Price		1.00	m3		12,520	

Work Item (SoR, Quotation)

No.	Item	Description	Unit	Adopted Unit Price (BDT)	Remarks
WI-1	Suspended Scaffolding	Type A	m2	12,500	Quotation, 05/04/2016
WI-2	Suspended Scaffolding	Type B	m2	12,500	Quotation, 05/04/2016
WI-3	Suspended Scaffolding	Type C	m2	12,500	Quotation, 05/04/2016
WI-4	Prefabricated Scaffolding		m3	500	Quotation, 05/04/2016
WI-5	Spray Applied Mortar		m3	904,180	Quotation
WI-6	Reinforcement Bar Work	Grade 60	t	77,490	SoR, 2015 [05/02/02]
WI-7	Reinforcement Bar Work	Grade 60	t	77,490	SoR, 2015 [04/07/06]
WI-8	Concrete Construction Work	Class-20 (Batching Plant)	m3	12,850	SoR, 2015 [05/01/03 (e)]
WI-9	Concrete Construction Work	Class-30 (Batching Plant)	m3	13,950	SoR, 2015 [05/01/03 (k)]
WI-10	Concrete Construction Work	Class-20 (Batching Plant)	m3	12,520	SoR, 2015 [05/01/03 (c)]
WI-11	Bearing-shoe Concrete Construction Work	Class-20 (Batching Plant)	m3	12,850	SoR, 2015 [05/01/03 (e)]
WI-12	Painting Works	Existing Structures	m2	430	SoR, 2015 [05/06/01]
WI-13	Mobilization for Railing Work		m	1,520	SoR, 2015 [05/15/01]
WI-14	Steel Beam Installation Work	Steel Beam (W530×167)	m	8,980	SoR, 2015 [05/16/02]
WI-15	RCC Railing Post	3m Post, 150mm x 150mm	m	5,370	SoR, 2015 [06/17/01 (b)]
WI-16	Asphalt Pavement Removal Work		m3	220	SoR, 2015 [02/02/03]
WI-17	Bituminous Prime Coat	Plant placed	m2	100	SoR, 2015 [03/06/01 (a)]
WI-18	Bituminous Base Course	Grade 60/70	m3	16,200	SoR, 2015 [03/10/01 (b)]
WI-19	Bituminous Tack Coat	Plant Work	m2	40	SoR, 2015 [03/07/01 (a)]
WI-20	Bituminous Wearing Course	Grade 60/70	m3	16,370	SoR, 2015 [03/10/02 (b)]
WI-21	Road Surface Marking Work	Thermoplastic Materials	m2	860	SoR, 2015 [06/11/02]
WI-22	Permanent Steel Casing	10mm thick, dia 1200mm	m	26,510	SoR, 2015 [04/01/05 (h)]
WI-23	Bored Cast in Place Piles	dia 1200mm	m	15,120	SoR, 2015 [04/01/01 (f)]
WI-24	Neoprene Rubber Bearing		number	15,730	SoR, 2015 [05/13/01 (b)]
WI-25	Repairing Work of Scouring	Stone Riprap Protection	m3	4,320	SoR, 2015 [06/01/03]
WI-26	Repairing Work of Slope Protection	Grass Sodding	m2	30	SoR, 2015 [06/07/01]
WI-27	Repairing Work of Slope Protection	Concrete Slope Protection	m2	1,220	SoR, 2015 [06/01/02]
WI-28	Foundation Consolidation Work	Concrete Backfill for Structures	m3	8,300	SoR, 2015 [02/05/02]
WI-29	Block Stacking Work	Class-20 (Batching Plant)	m3	12,520	SoR, 2015 [05/01/03 (c)]

Unit Price of Machinery

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
MC-101	Plate Compactor		day	850	SoR, 2015
MC-102	Small Hand Tools		day	20	SoR, 2015
MC-103	Water Tanker		day	4,300	SoR, 2015
MC-104	Water Pump		day	900	SoR, 2015
MC-201	Low-pressure Injection Pipes		number	540	Quotation
MC-202	Generator	15kVA	day	2,780	Quotation
MC-203	Air Compressor	1.4m3/min	day	6,850	Quotation
MC-204	Mortar Mixer	100L	day	17,410	Quotation
MC-205	Concrete Pump	3.0 to 4.0kw	day	3,500	Quotation
MC-206	Concrete Breaker	20kg class	day	4,500	Quotation
MC-207	Air Compressor	3.5 to 3.7 m3/min	day	6,850	Quotation
MC-208	Drill Blade	13mm	number	8,600	Quotation
MC-209	Truck Crane	4.9t	day	9,350	Quotation
MC-210	Diamond Bit	50φ	number	17,920	Quotation
MC-211	Cutter Blade	26 inch	number	314,880	Quotation
MC-212	Cutter Blade	30 inch	number	375,040	Quotation
MC-213	Dump Truck	10t vehicle	day	12,000	Quotation
MC-214	Truck	4.5t vehicle	day	8,500	Quotation
MC-215	Large Breaker	600 to 800kg	day	14,720	Quotation
MC-216	Backhoe	0.8m3	day	14,440	Quotation
MC-217	Rough Terrain Crane	capable of lifting 20t	day	25,000	Quotation

Unit Price of Materials

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
MT-101	Sand	FM=1.0	m3	600	SoR, 2015
MT-102	Ordinary Portland Cement (OPC)	Grade 60	t	10,760	SoR, 2015
MT-103	Water		m3	10	SoR, 2015
MT-104	Aggregate	20mm	m3	5,970	SoR, 2015
MT-105	Diesel		L	70	SoR, 2015
MT-106	Steel Plate		t	75,000	SoR, 2015
MT-201	Primer		kg	1,400	Quotation, 13/06/2016
MT-202	Putty		kg	1,400	Quotation, 13/06/2016
MT-203	Intermediate Coating Material		kg	650	Quotation, 13/06/2016
MT-204	Top Coating Material		kg	650	Quotation, 13/06/2016
MT-205	Grout Material		kg	2,000	Quotation, 13/06/2016
MT-206	Sealant Material		kg	1,400	Quotation, 13/06/2016
MT-207	Primer		kg	600	Quotation, 13/06/2016
MT-208	Admixture for Polymer Cement		kg	650	Quotation, 13/06/2016
MT-209	Silica Fume		kg	450	Quotation, 13/06/2016
MT-210	Primer (CFRP for Concrete)		kg	1,500	Quotation, 13/06/2016
MT-211	Putty (CFRP for Concrete)		kg	1,400	Quotation, 13/06/2016
MT-212	CFRP		m2	8,000	Quotation, 13/06/2016
MT-213	Impregnation Material (CFRP for Concrete)		kg	2,100	Quotation, 13/06/2016
MT-214	Surface Treatment Material (CFRP for Concrete)		kg	15,620	Quotation
MT-215	High-strength Bolts		number	330	Quotation
MT-216	Primer (CFRP for Steel)		kg	1,500	Quotation, 13/06/2016
MT-217	Putty (CFRP for Steel)		kg	1,400	Quotation, 13/06/2016
MT-218	CFRP		m2	8,000	Quotation, 13/06/2016
MT-219	Impregnation Material (CFRP for Steel)		kg	2,100	Quotation, 13/06/2016
MT-220	Surface Treatment Material (CFRP for Steel)		kg	15,620	Quotation
MT-221	Grout Material (Strengthening of Pier)		kg	350	Quotation
MT-222	Elastic Bearing		number	32,000	Quotation
MT-223	Backup Material	thickness of 20mm	m2	3,000	Quotation
MT-224	Steel Material	H-300, section steel	t	112,000	Quotation
MT-225	Expansion Joint		m	15,000	Quotation
MT-226	Waterproofing (Liquid-type)		kg	1,140	Quotation
MT-227	Waterproofing (Sheet-type)		m2	2,560	Quotation
MT-228	Structural Steel		kg	80	Quotation
MT-229	GI Pipe	100mm dia.	m	1,310	Quotation
MT-230	GI Bolt	10mm dia.	number	40	Quotation
MT-231	MS Flat Clamp		number	40	Quotation

Unit Price of Labor

No.	Item	Description	Unit	Unit Price (BDT)	Remarks
LB-101	Foreman		person	800	SoR, 2015
LB-102	Carpenter		person	600	SoR, 2015
LB-103	Mason		person	600	SoR, 2015
LB-104	Welder		person	600	SoR, 2015
LB-105	Skilled		person	550	SoR, 2015
LB-106	Semi-skilled		person	450	SoR, 2015
LB-107	Un-skilled		person	400	SoR, 2015
LB-201	Form Worker		person	500	Quotation, 30/01/2015
LB-202	Driver	Machinery	person	600	Quotation, 30/01/2015
LB-203	Driver	Truck	person	600	Quotation, 30/01/2015

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