PROJECT : ESTABLISHMENT OF TWO (2) STOREY RADIATION PROTECTION SERVICES FACILITY (2018) SUBJECT : DETAILED COST ESTIMATE

				MATERIA	AL COST	LABOR	R COST	ESTIMATED	MARK-	-UPS IN PE	RCENT	TOTAL	MARK-UP	VAT	TOTAL	
Item No.	ITEM/DESCRIPTION	QTY	UNIT	UNIT	TOTAL	UNIT	TOTAL	DIRECT	CONT.	ОСМ	PROFIT	%	VALUE	VAI	INDI.	TOTAL COST
NO.				COST	COST	COST	COST	COST							COST	0031
Α	GENERAL REQUIREMENTS															
1	Mobilization / Demobilization	1	lot													
2	Bonds/Insurance	1	lot													
3	Temporary Facilities	1	lot													
4	As-Built Plans	1	lot													
5	Project Billboard	1	lot													
	Sub-total															
В	CIVIL WORKS															
B.1	SITE WORKS															
1	Excavation of Foundation (Soil w/ Adobe Rock)	250	cu m													
2	Gravel Bedding	20	cu m													
3	Filling Materials and Compaction	306	cu m													
4	Back filling and Compaction	72	cu m													
5	Soil Poisoning	450	sq m													
6	Cleaning and Disposal of Waste Materials	1	lot													
7	Concrete Road Restoration	1	lot													
8	Demolition of Exisiting One Storey Storage Bldg. (Kubo)	1	lot													
	including Foundation															
	Sub-total															
B.2	REINFORCED CONCRETE WORKS															
1	Pumpcrete Pipes and Motors (Rental) 3 Times	1	lot													
2	3000 Psi Ready Mixed Concrete	325	cu m													
3	3000 Psi Job Mixed Concrete	76	cu m													
4	25mmØ x 7.50m Def. Bar	195	рс													
5	25mmØ x 6.00m Def. Bar	95	рс													
6	20mmØ x 6.00m Def. Bar	161	рс													
7	16mmØ x 6.00m Def. Bar	1324	рс													
8	16mmØ x 7.50m Def. Bar	982	рс													
9	12mmØ x 6.00m Def. Bar	40	рс													
10	10mmØ x 6.00m Def. Bar	3208	рс													
11	G.A 16 G.I Wire	250	kg													
	Sub-total															
B.3	SCAFFOLDINGS AND FORMWORKS															
1	2" x 4" x 12' Coco Lumber	405	рс													
2	2" x 3" x 12' Coco Lumber	378	рс													
3	2" x 6" x 12' Coco Lumber	450	рс													

4	3/4" x 4' x 8' Marine Plywood	150	no								
	· · · · · · · · · · · · · · · · · · ·	l -	pc								
5	Steel Shoring w/ Jack (Rental)	1	lot								
6	Assorted CW Nail	100	kg								
	G.A 16 G.I Wire	20	kg								
8	Metal Deck Ceiling G.A #12	175	sq m								
	Sub-total										
	MASONRY WORKS (Walls and Stairs)										
	CHB Walls (Mortar)										
1	6" thk Ord. CHB	4142	рс								
2	Portland Cement	228	bag								
3	Sand	30	cu m								
4	G.A 16 G.I Wire	20	kg								
5	10mmØ x 6.00m Def. Bar	228	рс								
B.4.2	Plastering Works (Interior and Exterior)										
	CHB Walls, Beams & Columns										
1	Portland Cement	224	bag								
2	Sand	32	cu m								
	Sub-total										
B.5	STRUCTURAL WORKS										
1	3" x 3" x 1/4" x 20' Angular Bar	54	рс								
2	2" x 2" x 1/4" x 20' Angular Bar	63	рс								
	1 1/2" x 1 1/2" x 3/16" x 20' Angualar Bar ,	110	рс								
	(Truss and Fascia Frame)										
4	2" x 4" x 1.5mm thk x 20' Metal C-Purlins	160	рс								
5	2" x 2" x 3/16" x 20' Angular Bar	48	рс								
6	16mmØ x 6.00m Cross Bracing	12	pc								
7	16mmØ Turn Buckle	12	рс								
8	12mmØ x 6.00m Sagrod	24	pc .								
9	Dyna Bolt 1/2"Ø x 2 1/2"	20	рс						1		
10	Welding Rod 1/8"Ø Fuji	7	box						1		
	Cutting Disc 14"Ø Tyrolit	4	рс								
	Grinding Disc 4Ø Tyrolit	12	рс								
	Hacksaw Blade	6	рс								
	Red Led Primer	2	tin								
	Turco Rust Converter	2	gal								
13	Turbo Must Conventer		yaı	I .						J	<u> </u>

16	Steel Brush	4	рс							
	Paint Brush	4	рс							
	Cutting Disc 4"Ø	12	рс							
	Sub-total	. —	F							
B.6	ROOFING WORKS									
1	0.40mm thk Pre-Painted Long Span G.I Sheet Rib-Type	540	lm							
	0.40mm thk x 0.60m x 2.4m Pre-Painted Side Flashing	8	рс							
3	0.40mm thk x 0.60m x 2.44m Pre-Painted Ridge Roll	14	рс							
4	0.40mm thk x 0.60m x 2.44m Pre-Painted Wall Flashing	8	рс							
5	Roof Insulation (10mm thk x 1.00m x 50m),	12	roll							
	Polythelene Foam w/ One Side Aluminum									
6	Ficem Board (12mm x 14" x 8')	42	рс							
7	3 1/2" Texscrew	4800	рс							
8	Blind Rivets	2	box							
9	Rubber Sealant	2	li							
10	Silicone Sealant	10	tube							
11	1" x 1" G.I Screen (Support for Insulation)	600	sq m							
12	Miscellaneous	1	lot							
	Sub-total									
B.7	FABRICATION AND INSTALLATION OF THE									
	FOLLOWING SHELVES, TABLES AND CABINETS									
	(DUCO PAINT FINISH OUTSIDE AND SEMI-DUCO									
	FINISH INSIDE) w/ 1/2" THK K.D S4S WOOD EDGING									
1	Storage Shelf (Calibration) in Instrument Area	2	set							
	(0.45m x 2.00m x 1.60m) Pre-Painted Slotted Angular									
	Frame 5 Layers of 3/4" thk Plywood Top Finish, Painted									
2	Storage Shelf w/ Wooden Drawers (TDL/OSL)	2	set							
	in Instrument Area									
	(0.45m x 2.00m x 1.30m) Pre-Painted Slotted Angular									
	Frame w/1/2" thk Plywood Platform w/ Wooden									
	Box Drawers									
3	Bookshelf in Conference Room	3	set							
	(0.319m x 1.00m x 2.00m) 3/4" thk Plywood w/5 Layers									
	Shelf w/ Doors at Bottom)									
4	Form Table and Side Cabinet in Receiving Area	1	set							
	(0.35m x 1.10m x 2.00m) 3/4" & 1/2" Plywood Frame									
	w/ 3/8" Glass Top Finish	1	set							
	(0.45m x 0.70m x 1.56m) 3/4" & 1/2" Plywood Frame									
	w/4 Layers Open Shelves w/2-Drawer Box									
6	Wooden Hanging Shelf	8	set							
	(0.31m x 0.50m x 1.90m) 3/4" thk Plywood with									
	2 Layers Open Shelves									

7	Evaluation Table	1	set							
	(0.80m x 1.10m x 4.03m) 3/4" thk Plywood Table	<u> </u>								
	w/ Drawers and Open Shelves on Top									
	(0.40m x 0.60m x 0.80m) w/ 2" x 3" S4S K.D Support									
8	Wooden Table for PC Tracker in OSL	2	set							
H	Loading/Unloading Room	+ -								
	(0.75m x 1.132m x 2.44m) 3/4" thk Plywood Table w/ High									
	Pressure White Formica Top Finish w/ C.O & LAN									
	w/ 2" x 2" K.D Support									
9	Stainless Steel Box in Loading/Unloading Room	6	set							
Ť	(0.34m x 0.52m x 0.30m) G.A 24 Stainless Steel 304	+ -								
	w/ 1" x 1" x 3/16" S.Steel Top Sidings									
10	Loading/Issuance and Unloading/Processing Shelf	4	set							
Ť	(0.335m x 1.126m x 0.35m) 3/4" Plywood Shelf	1	301							
11	Shelf @ Instrument Area	1	set							
Ħ	(0.40m x 2.50m x 0.90m) 3/4" Plywood with High Pressure	+ -	301							
	Laminated Top Finish w/ 2" x 2" K.D Support									
12	Staff Table	16	set							
	(0.50m x 1.35m + 0.35m x 0.50m) (1.05)	1								
	3/4" thk Plywood w/High Pressure Laminated Top Finish									
	w/ 3 Drawers, C.O and LAN w/ 2"x2" K.D Suppport									
13	Table for Manual Reader in OSL Processing Room	1	set							
	(0.90m x 3.50m x 0.75m) 3/4" thk Plywood									
	w/ High Pressure White Laminated Top Finish									
	w/ C.O & LAN w/ 2" x 2" K.D Support									
14	Table For Automatic Reader in OSL Processing Room	1	set							
	(0.80m x 3.92m x 0.75m) 3/4" thk Plywood w/ High									
	Pressure Laminated Top Finish w/ C.O & LAN w/									
	2" x 3" K.D Support									
15	Conference Table	1	set							
	(1.42m x 4.26m x 0.82m) 1 1/2" thk Plywood Top with High	1								
	Pressure Laminated Sht. Top Finish w/ Plastic Edging									
	(1 1/2" wide) (Oval Shape)									
16	TLD Main Table	1	set							
	(0.70m x 3.88m x 1.27m) & (0.74m x 3.50m x 0.80m) 3/4"	1								
	thk Plywood w/ High Pressure White Laminated Top Finish	1								
	w/ Shelves and Sliding Keyboard	1								
17	Table in Head Office	1	set							
	(1.68m x 0.80m x 0.77m) + (0.50m x 0.70m x 0.77m) +	1								
	(0.50m x 1.35m x 0.77m) 3/4" thk Plywood w/ High Pressure	1								
	Laminated Top Finish w/ 1 1/2" White Plastic Edging w 4	1								
	Drawers & Shelves (Provide 2" x 2" K.D Support)						İ			

40	Matter Table to Landing Dans					1		1							1	1
18	Mailing Table in Loading Room	2	set													
	(0.66m x 1.93m x 0.89m) 3/4" thk Plywood w/ High															
	Pressure White Laminated Sht. Top Finish															
	w/ Shelves and Drawers	.														
19	Table for OSL Loading Room	1	set													
	(0.70m x 3.80m x 1.58m) + (0.60m x 1.30m x 0.81m) 3/4" thk															
	Plywood w/ High Pressure White Lamnated Sht. Finish, w/															
	2" x 3" S4S K.D Support & 2" x 2" x 1.5mm Tubular															
	Stainless Steel Support Bracket															
20	Table For OSL Unloading Room	1	set													
	(0.70m x 3.00m x 0.81m) 3/4" thk Plywood w/ High															
	Pressure Laminated SHt. Top Finish															
	w/ 2" x 2" K.D Support															
21	Work Table in SSDL Control Room		set													
	(0.57m x 2.30m x 0.78m) 3/4" thk Plywood w/ High															
	Pressure Laminated Sht. Top Finish w/ 2" x 2" K.D Support															
22	Rolling Shelf in OSL Laboratory	5	set													
	(0.375m x 0.35m x 0.78m) 3/4" thk Plywood w/7															
	Layer Shelf w. Roller Caster, Stainless Steel, Round															
	Bar Handle															
23	TLD Rack in TLD Room	3	set													
	(0.27m x 0.31m x 0.50m) 1/2" thk Plywood,															
	7-Layer Shelf															
24	Filing Shelf in Instrument Preparation Room	1	set													
	(0.50m x 1.695m x 1.15m) 3/4" thk Plywood w/ 16 Drawers															
	w/ Drawer Guides & S.Steel Handles															
25	Shelf for Samples in Counting Room		set													
	(0.31m x 0.57m x 1.50m) 1/2" thk Plywood															
	w/ Shelves & 2 Doors Below															
26	Big Shelf for Instruments		set													
	(0.40m x 1.80m x 1.90m) 3/4" thk Plywood															
	w/ 6-Layers Open Shelves															
27	Issuance Table	1	set													
	(0.75m x 6.73m x 1.00m) + (0.65m x 1.79mm x 1.00m) (3)															
	3/4" thk Plywood with High Pressure Laminated Sht.															
	Top Finish w/ 2" x 2" x 1.5mm thk S.Steel Tubular											1				
	Support, Keyboard Drawers, 6-Concenienve Outlet w/											1				
	Shelves Below															
			<u> </u>	L	_1		_i	1	1	I	I	I	i	L	I	<u> </u>

		1					1	l	1	T	1
28	TLD Assembly Area in TLD Lab	1	set								
	(0.48m x 1.20m x 0.80m) + (078m x 2.78m x 1.05m)										
	3/4" thk Plywood w/ 2" x 2" S4S K.D Support w/ Shelves										
	Below, w/ 5-convinience Outlet, High Pressure Laminated										
	Top Finish										
29	Receiving Area Table	1	set								
	(0.60 m x 2.60 m x 0.75 m)										
	Sub-total										
B.8	NEW RPSS BUILDING										
B.8.1	Stair Tread										
1	Solid Brass Nosing (2" x 8')	20	рс								
2	Epoxy A and B	3	li								
3	Stainless Screw	150	рс								
B.8.2	Doors, Windows and Walls				 						
1	Aluminum casement door, analok finish, 6 mm thick, swing	2	set								
	(1.00 m x 2.10 m)										
2	Aluminum double panel casement door with transom, analok	1	set								
	finish, 6 mm thick, swing (1.93 m x 2.80 m)										
3	Aluminum casement window, analok finish, 6 mm thick	1	set								
	clear glass, swing (1.30 m x 2.40 m)										
4	Aluminum glass wall, analok finish, 6 mm thick clear glass,	2	set								
	(1.70 m x 2.55 m)										
5	Aluminum glass wall with double panel door, analok finish,	1	set								
	6 mm thick clear glass (5.65 m x 2.55 m)										
6	Dry-wall partition, 1/4" ficem board with aluminum frame,	1	set								
	painted finish on both sides (2.00 m x 1.23 m)										
7	Dry-wall partition, 1/4" ficem board with aluminum frame,	1	set								
	painted finish on both sides (1.20 m x 2.80 m)										
8	Dry-wall partition, 1/4" ficem board with aluminum frame,	1	set								
	painted finish on both sides (4.70 m x 1.23 m)										
9	Fire exit ladder, epoxy-painted yellow,	1	lot								
	Relocation of existing fire exit steel door from GF to 2F	1	lot								
B.8.3	Concreting of Front										
1	6 in thick concrete with 10 mm dia. Rebar @ 0.40 O.C.B.W.	60	sq m								
B.8.4	Gutter and Downspout at Front Canopy										
1	Pre-painted gutter (0.5 mm thick x 8 ft)	5	рс								
2	PVC pipe, 4 in dia	4	рс								
-	PVC elbow, 4 in dia and PVC cement	1	lot								
-	Other Works								İ		
1	Blockout for window-type air-conditioning units including	5	set								
<u> </u>	7. 0							l		1	1

	restoration and painting									
2	Stee support/bracket for window-type air conditioning unit,	5	set							
	epoxy gray painted finish									
	Sub-total									
B.9	DOOR HARDWARES									
1	"YALE" Door Lockset Stainless Steel	10	set							
2	"STANLEY" Door Closer (Heavy Duty)	12	рс							
	"STANLEY" 4"x4" Stainless Steel Hinges	46	рс							
4	Door Stopper Stainless w/ Rubber	7	set							
5	"STANLEY" Foot Bolt Stainless	2	set							
6	"STANLEY" Head Bolt	2	set							
	Sub-total									
С	SANITARY AND PLUMBING WORKS									
C.1	ROUGHING-INS									
C.1.1	PLUMBING ROUGHING - INS									
1	1/2"Ø x 10' PPR Pipe	20	рс		 	 				
	1/2"Ø PPR Elbow	24	рс		 	 				
3	1/2"Ø PPR Coupling	10	рс							
4	1/2"Ø PPR Threaded Coupling	4	рс							
5	1/2"Ø Threaded Elbow	4	рс							
6	1/2"Ø Tee	6	рс							
7	Teflon Tape	6	рс							
8	PVC Cement	1	li							
	Clamps	40	рс							
	Tapping of 1"Ø PPR Pipe to Existing 1 1/2"ØG.I Pipe	1	lot							
C.1.2	SANITARY ROUGHING - INS									
1	6"x6" S.S Floor Drain	2	рс							
	4"Ø x 10' Series 1000 Neltex PVC Pipe	40	рс							
	4"Ø PVC Elbow Neltex (1/4 Bend)	6	рс							
	4"Ø PVC Coupling Neltex	8	рс							
	4"Ø PVC Elbow Neltex (1/8 Bend)	6	рс							
	4"Ø x 4"Ø PVC Wye	4	рс							
	4"Ø x 3"Ø PVC Wye	4	рс							
	4"Ø x 2"Ø PVC Wye	2	рс							
	4"Ø PVC Clear Out	6	рс							
	3"Ø x 10' Series 1000 PVC Pipe	2	рс							
	3"Ø PVC Elbow (1/4 Bend)	2	рс							
	3"Ø PVC Elbow (1/8 Bend)	4	рс							
	3"Ø PVC Coupling	2	рс							
	3"Ø PVC P-Trap	2	рс							
	2"Ø x 10' S-1000 PVC Pipe	6	рс							
16	2"Ø PVC Elbow (1/4 Bend)	6	рс							

17	2"Ø PVC Elbow (1/8 Bend)	4	рс							
	2"Ø PVC Coupling	4	рс							
	2"Ø PVC Tee	2	рс							
	PVC Cement	3	li .							
	Clamps	1	lot							
22	Miscellaneous	1	lot							
	Sub-total Sub-total									
C.2	SEPTIC TANK									
1	Excavation	7	cu m							
2	Portland Cement	33	bag							
3	Sand	5	cu m							
4	3/4" Crashed Gravel	2	cu m							
5	12mmØ x 6.00m Def. Bar	14	рс							
6	10mmØ x 6.00m Def. Bar	16	рс							
7	6" thk CHB	283	рс							
8	G.A 16 G.I Wire	3	kg							
9	Coco Lumber Asstd.	60	Bd. Ft.							
10	1/2" x 4' x 8' Ord. Plywood	2	рс							
11	Assorted CW Nail	2	kg							
12	4"Ø PVC Clean Out	2	рс							
13	4"Ø PVC Tee	2	рс							
	Sub-total									
C.3	SANITARY FIXTURES AND ACCESSORIES									
1	Water Closet Complete Set	2	set							
	(Pozzi) Medium Size, Elongated Shape									
	Lavatory w/ Stand w/ P-Trap	2	set							
	Urinal Complete Set (Medium Size)	1	set							
	Chrome Bidet Spray Set (Pozzi)	2	set							
	Tissue Holder Stainless Steel (Pozzi)	2	рс							
	Soap Holder Stainless Steel (Pozzi)	2	рс							
	Cup Holder Stainless Steel (Pozzi)	2	рс							
	Glass Mirror (18"x24")	2	рс							
	Stainless Steel Faucet w/ Telephone Shower (Pozzi)	2	set							
	Towel Bar (Pozzi)	2	рс							
	Lavatory Faucet Stainless Steel (Pozzi)	2	set							
	Angle Valve Stainless Steel	4	set							
	Flexible Hose Stainless Steel	4	set							
14	Gate Valve 1/2"Ø PPR Brass	3	рс							
	Sub-total									

C.4	SITE WORKS									
	EXCAVATION FOR THE INSTALLATION OF 4"Ø									
	PVC SEWERLINE									
1	Excavation of Soil w/ Adobe	20	cu m							
2	Backfilling and Compaction	16	cu m							
	Hauling and Disposal of Debris and Waste Materials	1	lot							
	Sub-total									
D	ELECTRICAL WORKS									
D.1	LIGHTING FIXTURES									
1	LED tube, mirrorized reflector, 2 x 18 watts, 120 cm x 60 cm,	16	set							
	surface, mounted									
2	LED tube, weatherproof, 2 x 18 watts, 120 cm x 20 cm, IP65	16	set							
3	LED tube, weatherproof enclosure, 1 x 18 watts, 120 cm x 10 cm,	17	set	 						
	IP65			 						
4	LED bulb, pinlight enclosure, 9 watts, surface-mounted	4	set	 						
5	LED bulb, pinlight enclosure, 9 watts, recessed-mounted	16	set			 				
6	LED bulb, wall-mounted fixture, 9 watts, outdoor-type	2	set							
7	Exit light, LED lamp-type	3	set							
8	Emergency exit light, LED lamp-type	1	set							
9	Emergency light, LED lamp-type	10	set							
	LED bulb, for existing perimeter lamp posts, 100 watts	6	set							
	Warning light, rotational, 230 volts	1	set							
D.2	WIRING DEVICES									
1	Switch-single	6	set							
	Switch-2-gang	8	set							
3	Switch-3-gang	2	set							
4	Switch-3-way	2	set							
5	Switch-2-gang, weatherproof	1	set							
6	Switch-3-gang, weatherproof	1	set							
7	Convenience outlet, 3-prong, tandem type, 250 V, 10 A	25	set							
8	Emer. light outlet, 3-prong, 250 V, 10 A	10	set							
9	Special purpose outlet, twist lock, 3-prong, 250 V, 10 A	4	set							
	Airconditioning unit outlet, 3-prong, 250 V, 15 A	3	set							
	Conv. outlet, floor-mounted, 3-prong, tandem type, 250 V, 10 A	2	set							
	Exhaust fan outlet, 3-prong, 250 V, 10 A	2	set							
	Exhaust fan, 12 in, 230 V, with shutter, ceiling mounted	2	set							
D.3	WIRES AND CABLES									
1	3.5 mm² THHN/THWN Wire	16	box							
2	5.5 mm² THHN/THWN Wire	4	box							
3	8.0 mm² THHN/THWN Wire	10	m							
4	60 mm² THHN/THWN Wire	112	m							

6 3 7 2 8 8	25 mm² THHN/THWN Wire 3.5 mm² THW Wire	840	m							
7 2: 8 8		4 1								
8 8	00 0 TUNA () A ()		box							
	22 mm² THW Wire	38	box							
D 4 IC	0 mm² THW Wire	280	m							
	CONDUITS AND FITTINGS									
	IPVC Conduits									
	5 mm dia. (1/2")	72	length							
	² 0 mm dia. (3/4")	110	length							
	0 mm dia. (2")	12	length							
	30 mm dia. (3")	54	length							
	IPVC Adafter with Locknut and Bushing									
1 1:	5 mm dia.	86	pair							
	20 mm dia.	16	pair							
3 5	60 mm dia.	4	pair							
	80 mm dia.	20	pair							
D.4.3 R	RSC									
1 1	5 mm dia.	112	length							
2 2	25 mm dia	1	length							
3 8	30 mm dia	20	length							
D.4.4 R	RSC Locknut and Bushing									
1 1	5 mm dia.	312	pair							
2 2	5 mm dia	2	pair							
3 8	30 mm dia	14	pair							
D.5 B	BOXES AND PULLBOXES									
1 U	Jtility box, ga 16	85	рс							
2 Jı	unction box and cover, ga 16	90	рс							
3 S	Square box and cover, ga 16	10	рс							
4 P	Pullbox with concrete base (PB1E to PB4E),	4	assy							
	(50 cm x 40 cm x 60 cm)									
D.6 P	PANELBOARDS, ECBS AND MTS									
1 N	MDP	1	assy							
	M: 400 AT, 3P, 240 V, BO									
	B: 2-70 AT, 3P									
	2-125 AT, 3P									
	1-150 AT, 3P									
	1-225 AT, 3P									
	NEMA 3R, industrial-type, bolt-on, with ground busbar,									
	with provision for lock, surface-mounted									

2	PP1	1	assy							
	M: 150 AT, 3P, 240 V, BO		,							
	B. 2-40 AT, 2P									
	7-30 AT, 2P									
	9-20 AT, 2P									
	NEMA 1, industrial-type main, bolt-on, with ground busbar,									
	with provision for lock, surface-mounted									
3	PP2	1	assy							
	M: 50 AT, 3P, 240 V, BO									
	B: 6-15 AT, 2P									
	6-20 AT, 2P									
	NEMA 1, industrial-type main, bolt-on, with ground busbar,									
	with provision for lock, surface-mounted									
4	MCB: 400 AT, 3P, 240 V, NEMA 3R	1	assy							
5	ECB: 40 AT, 3P, 240 V, NEMA 3R	3	assy							
6	ECB: 30 AT, 3P, 240 V, NEMA 3R	2	assy							
7	MTS, 60 A, non-fusible, 240 V, 3 P	1	assy							
D.7	TELEPHONE SYSTEM									
1	Telephone outlet, modern plate	5	set							
2	Utility box, ga 16	5	рс							
3	Telephone jac. Wire, 4C	2	roll							
4	15 mm Ø uPVC	10	length							
5	15 mm Ø uPVC adafter and locknut	4	pair							
6	25 mm Ø uPVC	4	length							
7	25 mm Ø uPVC adafter and locknut	2	pair							
8	25 mm Ø RSC	19	length							
9	25 mm Ø RSC locknuts and bushing	4	pair							
10	Telephone terminal cabinet, (45 cm x 50 cm x 15 cm)	2	assy							
D.8	LAN SYSTEM									
1	Data outlet, modern plate	37	set							
2	Utility box, ga 16	27	рс							
3	CAT 5 UTP Wire	6	roll							
4	20 mm dia. uPVC	59	length							
5	20 mm dia. uPVC adafter and locknut	62	pair					ļ		
6	25 mm dia. uPVC	4	length					ļ		
7	25 mm dia. uPVC adafter and locknut	2	pair					ļ		
8	25 mm dia. RSC	15	length							

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9	25 mm dia. RSC locknuts and bushing	2	pair									
10	LAN cabinet with glass door, (40 cm x 30 cm x 30 cm)	1	set									
11	Router with 24 ports	1	set									
D.9	FIRE ALARM SYSTEM											
1	Fire Alarm Control Panel, 6 Zones	1	unit									
2	Fire Alarm Bell, 230 V	3	unit									
3	Fire Alarm Manual Station	3	unit									
4	Smoke Detector	28	unit									
5	Blinker/Alarm, 230 V	1	set									
6	Junction box, ga 19	7	рс									
7	Square box, ga 16	2	рс									
8	1.25 mm ² TF wire	2	box									
9	20 mm dia. RSC	31	length									
10	20 mm dia. RSC locknuts and bushing	20	pair									
11	Fire extinguisher, ABC	4	unit									
12	Fire alarm cabinet, 30 cm x 30 cm x 15 cm	1	assy									
D.10	DOOR ACCESS CONTROL SYSTEM											
1	Door access panel, biometric, 12 VDC	3	assy									
2	Push-button switch, bypass / door release	3	set									
3	Latch solenoid / Magnetic Bolt, 12 VDC	3	set									
4	Power supply, 230 VAC input, 12 VDC output, 3 A, 60 Hz	3	set									
5	Emergency break glass switch	3	set									
6	Chipping and restoration works	1	lot									
7	Wires, conduits, accessories, clamps and brackets and testing	1	lot									
D.11	WARNING LIGHT SYSTEM											
1	Relocation of existing warning light at existing SSDL	1	lot									
	including switch, wires and conduits											
D.12	MISCELLANEOUS											
1	Electrical tape	20	roll									
2	GI pull wire	5	kg									
3	Rubber tape	1	roll									
4	Epoxy enamel paint	1	gal.									
5	Epoxy primer paint	1	gal.									
6	Lacquer thinner	1	gal.									
7	Paint brush	1	lot									
8	Hacksaw blade	15	piece									
9	Flexible uPVC conduit	10	lm									
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10	Drill bits	1	lot									
11	Bolts and nuts for new installations	1	lot									
12	Expansion shields	1	lot									
13	Tox and screw	1	lot									
14	PVC solvent	5	can									
15	U-bolts	1	lot									
16	Newspaper	3	kg									
17	Chisel	1	lot									
D.13	SITE WORKS											
1	Excavation for main feederline and auxiliary pipes	13	cu m									
2	Marker tape	80	m									
3	Backfill and compaction	4.50	cu m									
4	Concrete	2.60	cu m									
5	Asphalt	1.50	cu m									
	Sub-total											
E	MECHANIICAL WORKS											
2	Window-type air-conditioning unit, 2 HP, 230 volts	3	set									
3	Relocation and repiping of split-type airconditioning units	3	set	-	-	-			-	-		
	including brackets and supports, 3TR											
	Sub-total											
	TOTAL											

UNIT COST







