

AVIATION COMPLEX AT BLUE AREA, ISLAMABAD

BNILL NO. 3.D: EXTERNAL ELECTRICAL WORKS

BILL OF QUANTITIES

Item No.	Item Description	Unit	Qty	Unit Rate (Rs.)	Total Amount (Rs.)
(i)	(ii)	(iii)	(iv)	(v)	(vi)

PARKING GUIDENCE AND PARKING MANAGEMENT SYSTEM**ENTRY / EXIT EQUIPMENT**

Supply, installation and commissioning of entry/exit equipment with high speed automatic barrier, including RFID tickets, by any European manufacturing compay including all accessories as per requirements or as per drawings complete in all respect.

Entrance Terminal with 7' Display

- EX-E-01
- TCP / IP interface for communication. –
 - Embedded card reader RFID 125 Khz EM or (Mifare optional).
 - Printer to issue a bar code ticket 1D/2D.
 - Sending a signal to the barrier after issuing a ticket.
 - Cassette capacity about up to 8000pcs. of tickets.
 - Preview in the monitoring software module for the exact amount of remaining tickets.
 - Emergency opening of the barriers.
 - 7" TFT LCD color display 800x480.
 - 1CH inductive detector.
 - Power consumptions: maximum 80 W
 - heating with fan and thermostat (optional) - 200 W.
 - Voltage/ Frequency: 230VAC/50HZ
 - Operating temperature: -10°C to +50°C
 - Operating temperature: with additional heater -25°C
 - Body: Stainless steel painted - Color of the base: RAL 7016
 - Color of the front panel: RAL 2000
 - Dimensions: 350/350/1250
 - Weight: 50 kg.
 - Complies with European standards. EC

No. 2

BILL OF QUANTITIES

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(i)	(ii)	(iii)	(iv)	(v)	(vi)
	Electromechanical Barrier Qntra Parking PRO Lane width max. 3.5 m.				
EX-E-02	• Opening / Closing, 1.3 S • Power consumption max. 95 W • Duty cycle 100% • Wide supply voltage range voltage 85-264 V AC (also available as 24V DC version) • Frequency 50-60 Hz • Drive system MHTM TM MicroDrive - Housing dimensions (WxDxH) 315 x 360 x 915 mm • Weight (without boom) 40 kg • The design of the housing powder-coated aluminum • Base frame powder-coated stainless steel • Class of protection IP 54 • Compatible with 2004/108 / EC, 2006/42 / EC, 305/2011, CE, UL 325 • Temperature range -30 to +55 ° C. – • Colour on the body: RAL 7016 Dark Grey • Colour on the front and back dors: RAL 2000 orange.	No.	4		
	Parking Guidance system				
EX-E-03	Ticket dispenser machine for printing tickets	No.	2		
EX-E-04	Bar code scanner machine for scanning of the individual tickets	No.	2		
EX-E-05	Operator payment station +Monitor 23"+ WIN10Pro	No.	2		
EX-E-06	Supply of ultrasonic (sensor+ indicator) in same unit with base by Parksol Lithuania, detecting distance 0.7-4.0m, each detector for each parking space	No.	884		
EX-E-07	Supply of indoor parking data display showing the number of empty parking spaces at each side	No.	46		
EX-E-08	Supply of zone control unit with IP 54 enclosure supporting 128 devices and RS485 communication port, which sends collector's data to parking displayer.	No.	12		
EX-E-09	Supply of Central Control unit 24-Port Gigabit Ethernet Switch with IP 54 enclosure, complete with all accessories.	No.	1		
EX-E-10	Outdoor Parking Display Unit (1200x600) mm showing number of available parking spaces at main entrance. 1 Each 1,450,000 1,450,000.00 *Designs can be customized as per requirement	No.	1		
EX-E-11	Supply & Installation of Ticket kiosk with RFID card scanner complete in all respects as per drawings and specifications.	No.	2		
EX-E-12	Supply & Installation of Car barrier integration with Parking management system including all accessories necessary for the complete installation in all respect.	No.	2		

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EX-E-13	Supply of ANPR cameras installed at the entrance and exit of a car park detect and read the license plate passing in front of them. It generates a transit containing all the metadata related to the vehicle, including plate, date, time etc	No.	1		
EX-E-14	ParkSol Monitoring software (maps, monitoring and 1 control)				
EX-E-15	Dell PC for software monitoring of system with licensed windows	No.	1		
EX-E-16	Supply of telemetry cable 2x1.5+2x1, blue, for communication of sensors in already laid 25mm dia PVC conduit and cable tray complete with all respect.	Mtr	6,000		
EX-E-17	Supply of CAT 6 cable for communication of directional signs with zone controleers and ccommunication of zone controllers with main controllers.	Mtr	1,000		
EX-E-18	Installation and connection of ultrasonic sensors, zone controllers and CCU.	job	1		

Security Items

EX-E-19	Supply, Installation, Testing and Commissioning of X-ray Baggage and Parcel Scanning Machine with - Tunnel Opening 65.0 cm x 45.1 cm (W x H) minimum - Multiple Color Imaging - 160kV X-ray Generator - Computer with Core i5 Processor, 4Gb RAM, 1TB HDD and 240GB SSD, 1GB Dual Digital Display Video Card, Registered Windows OS - UPS Backup (for Computer - 20 minutes) - 19" LCD Display, 1280 x 1024; 24 Bit/Pixel Color - Compliant with USFDA, Center for Devices and Radiation Health Standards for Cabinet X-Ray Systems (21-CFR 1020.40) - Typical radiation leakage less than 0.1 mR/hr (Leakage less than 0.5 mR/hr permitted by the Federal Standards. - 2 x Entry Roller Extensions 0.5 meter - Operator Training including installation accessories complete in all respects.	Job.	2		
EX-E-20	Supply, Installation, Testing and Commissioning of Multi Zone Walk Through Gate with - High Performance Pin Point WTG Metal Detection - Up to 200 distinct sensitivity levels - Passageway Interior Size: Width 30", Height 80" and Depth 23" - Operating: -4° F (-20° C) to +122° F (50° C) including all accessories complete in all respects.	Job.	10		

LIGHT POLES

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(Ref. Specification Section-8001, 8260)

EX-E-21	Supply & Erection of Double arm GI round conical pole, hot dipped galvanized (80 microns) 10 meters long overall thickness 4 mm, base dia 180mm and top dia 62 with plate arrangement 450mmx 450mm x 25mm, complete in all respects.	No	20		
EX-E-22	Supply, installation, testing & commissioning of Lightning Protection System (for poles)	No	20		

LT CABLES

EX-E-23	Supply at site, installation, testing and commissioning of PVC insulated un-armoured copper conductor cable 600 / 1000 Volt grade (or otherwise mentioned in cable description) in pre-laid conduits / trenches to be installed as per routes shown on drawings including cost of all necessary materials, connections, identification tags, cables lugs properly crimped at both ends for the following sizes complete in all respects. (16 sqmm, 4 core)	Rft.	1,000		
EX-E-24	Providing, laying, cutting, jointing, testing and disinfecting UPVC pressure pipeline in trenches (conforming to BS 3505 manufactured) jointed with socket, elbow, tee, bend and plug bend etc.manufactured by the respective manufacturer complete as per specifications. uPVC Pressure Pipes Class D (12 Bar) 3" Nominal Pipe Size (NPS)	Rft.	1,000		

WIRING IN CONCEALED CONDUITS

EX-E-25	Supply and Erection 3 core PVC insulated+sheathed copper conductor 250/440 V grade cable : $3/0.029''(1.5mm^2)$.	Rft	3,000		
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LIGHT FIXTURES**(Ref. Specification Section-8001, 8150)**

Following light fixtures installed on surface or wall or floor or false ceiling or columns or masts complete with all accessories such as lamps, lamp holders, ballasts, starters, ignitors, capacitors, LED drivers as applicable, etc. including all relevant installation material as required and approved by the Engineer. (Note: The contractor shall be responsible for compatibility of recessed mounted light fixtures with gypsum / aluminium / damp etc., false ceiling types in coordination with architectural design.)

EX-E-26	Supply and Fixing SMD Type LED Road light Fixture (120-130 watts) 130 lumens per watt IP 66 rated	No.	40		
EX-E-27	Supply and Installation of 5 Meter Decorative Pole along with 60 watt LED Light IP65, Die-Cast Aluminum	No.	20		
EX-E-28	Outdoor type Die-Cast Aluminum LED bulkhead wall light of minimum 2000 lumens light output, IP-55 or better rated	No.	40		
EX-E-29	200 watt led flood lights along with their fixing arrangements for the outdoor entrance Area.	No.	20		
EX-E-30	Planter light Outdoor type Die-Cast Aluminum LED light of minimum 200 lumens light output, IP-55 or better rated	No.	40		

Total Amount (Rs.) = _____