



**ELECTRONICS CORPORATION OF INDIA LIMITED,
HYDERABAD SECURITY SYSTEMS AND PROJECTS DIVISION,
INSTRUMENTS AND SYSTEMS GROUP – PURCHASE**

Notice Inviting Expression of Interest (EOI)

ECIL:ISG:PUR:EOI:15-16/04:

Dated: 03rd December, 2015

INVITATION FOR EXPRESSION OF INTEREST (EOI) FOR selection of technically and financially competent firms for partnering ECIL for "Implementation of Access Control and Surveillance System at multiple sites spread across India".

Electronics Corporation of India Limited (ECIL) invites Expression of Interest from reputed technically and financially competent companies/firms, meeting eligibility criteria as detailed in the EOI document for partnering ECIL in **"Implementation of Access Control and Surveillance System, including Civil and Electrical jobs"** at more than 300 sites spread across the length and breadth of India.

It is reiterated that only such companies which are strictly meeting the qualification criteria, provided at subsequent pages in the EOI, will be considered for issue of RFP for selecting the partner as envisaged above.

Interested Firms who meet the qualification criteria may furnish their Expression of Interest PROPOSAL with all the necessary documents as envisaged in this EOI document in a sealed cover along with the covering letter duly signed by an authorized signatory on or before 09-12-2015 by 15:00 hours at the following address:

**TECHNICAL MANAGER (PURCHASE),
INSTRUMENT & SECURITY SYSTEMS GROUP
ECIL, Hyderabad - 500062**

Telephone: 040-27182655

Fax: 040-27122540

Email: igmmgt@ecil.co.in

The envelope containing EOI proposal shall be super scribed "Expression of Interest" and must mention the REF NO. ECIL:ISG:PUR:EOI:15-16/04.

LAST DATE FOR SUBMISSION OF PROPOSAL IS 10-12-2015 BY 15:00 hours

NOTE : Please note that the due date of submission will not be extended in any circumstances.

EXPRESSION OF INTEREST (EOI)

FOR

**Selection of FIRM for partnering ECIL in Implementation
of Enterprise Access Control & Surveillance System.**

**INSTRUMENTS AND SYSTEMS GROUP – PURCHASE
ELECTRONICS CORPORATION OF INDIA LIMITED
HYDERABAD**

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1. Introduction:

Electronics Corporation of India Ltd, a leading Public Sector Company with Head Office at Hyderabad and Branch Offices at Metropolitan cities, is engaged in design, development, manufacture, supply and installation of state-of-the-art technology based solutions to core industrial, government and strategic sectors.

Security Systems and Projects Division of Electronics Corporation of India Limited (ECIL) invites expression of Interest from reputed companies, having relevant technical experience for partnering ECIL for implementation of **Access Control and Surveillance System, including Civil and Electrical jobs”** at more than 300 sites spread across the length and breadth of India for one of ECIL’s customer.

Interested Parties may go through the Pre-qualification criteria and proposed scope of work as detailed in this document and submit their response by the due date for submission, complete in all respect and accompanied with all relevant documents as detailed in this invitation for EOI.

2. Eligibility/Pre-Qualification Criteria and documents required in support of eligibility/qualification:

Qualification criteria

Sr No.	Criteria Requirement	Documents Submission Requirements
01	The bidder should be a Company registered under Companies Act, 1956 in India / firm registered in India and should be in operational existence for the last 5 years.	Copy of Certificate of Incorporation / certificate of firm registration.
02	The bidder should have valid service tax and VAT registration in India.	A Copy of Central Sales Tax certificate, VAT, PAN & Service Tax Registration Certificates
03	The bidder should not have been blacklisted by any Govt. department or PSU as on the date of proposal submission.	Bidder should furnish notarized affidavit on non-judicial stamp paper of Rs.100 stating that: 'We, _____ (Name of the Bidder's firm) are not debarred nor blacklisted nor prosecuted for any breach of contract by the Central Government, State Governments or PSUs. We are not convicted or fined for any breach of contract by any court of law or tribunal or arbitration panel. The information and documents furnished as part of this EOI proposal are true and if at any stage, it is found otherwise, we agree that our proposal may be rejected.
04	The bidder should have average annual turnover of Rs.100 Cr. for the last three financial years (2012-13, 2013-14 & 2014-15)	Duly certified P&L statement from appointed statutory auditor for the last three financial years indicating the amount of turnover during these years.
05	The bidder should have positive net worth of Rs. 50 Cr in the last financial year 2014-15.	Duly certified statement from appointed statutory auditor for the last financial year indicating the net worth of the company/firm.
06	The bidder should be a profit making company for the last three FYs ending March 2015.	Duly certified P&L statement from appointed statutory auditor for the last three financial years.
07	The bidder should be financially sound and capable of executing this work on back to back payment terms linked with revenue realization from ECIL's customer.	An undertaking from bidder agreeing to this term.
08	The bidder must also agree for back to back terms for other commercial terms and conditions laid down by ECIL's customer for this work.	An undertaking from bidder agreeing to this term.
09	The bidder should have experience in System Integration for at least 3 Govt. projects in multiple sites (min. of 25 different locations in each project) in consortium.	(1) Copy of Purchase Order/Work order along with completion certificates in support of requirement. (2) Copy of consortium agreement, if applicable.
10	The bidder should have experience in Site Preparation Works (Civil, Electrical, Furniture works) and networking (LAN) in at least 3 Govt. projects and the value of each project should be minimum Rs.25 Cr.	Copy of Purchase Order/Work order along with completion certificates in support of requirement.

Sr No.	Criteria Requirement	Documents Submission Requirements
11	The bidder should have experience of minimum 2 Data Center / NOC projects with a value of Rs.15 Cr. each.	Copy of Purchase Order/Work order along with completion certificates in support of requirement and details of Data Centers/NOC's set up by the bidder.
12	The bidder should have experience in setting up and maintenance of Wide Area Network in 75 different locations in India.	Copy of Purchase Order/Work order along with completion certificates in support of requirement and details of locations where such network has been set up.
13	The bidder should have experience in installing IT hardware/Access Control/ Surveillance System and providing Facility Management Services.	Copy of Purchase Order/Work order along with completion certificates in support of requirement.
14	The bidder should have experience in providing warranty/AMC services for system involving IT hardware/Access Control/Surveillance Systems.	Copy of Purchase Order/Work order along with completion certificates in support of requirement.
15	The bidder should be ISO 9001 and ISO 20000 certified.	Copy of ISO 9001 and ISO 20000 certificates in support of requirement

3. The brief scope of work is detailed below:

Partner Firm's Responsibility:

- (1) Carrying out Civil Works on turnkey basis at different sites across India.
- (2) Supply of conduits, cables, Network Components (Passive), installation accessories, Air Conditioners, Electrical equipment and accessories and arranging for dispatch and delivery of these items to sites as per site details provided by ECIL
- (3) Excavation works, Trenching, Cable Laying, Termination and labeling at different sites across India.
- (4) Site wise installation of all items, including those supplied by ECIL (but excluding Access Barriers) at respective sites. However, wiring/cabling for these access barriers will also be in partner firm's scope.
- (5) Support services for realization of payments.
- (6) Deployment of technically competent manpower for Warranty and Facility Management Services (FMS) for a period of three years.
- (7) Post Warranty AMC for 5 years for entire system (at around 300 sites including Civil and Electrical Works).

An indicative list of items to be delivered and the services to be provided is detailed at Annexure- A, B, C and D enclosed with this document.

ANNEXURE-A

(A) INDICTAIVE LIST OF ITEMS TO BE <u>SUPPLIED AND INSTALLED</u> BY THE PARTNER FIRM			
Sl. No.	Item	UOM	TOTAL
i	Access Control		
a	Cable, Conduits, Poles & Accessories for Access Control System		0
1	Cat-6e UTP Cable	Mtrs.	40385
2	8 Core Multistrand Signal Cable	Mtrs	148378
3	Power Cable 3 x 1.0 sqmm-multistrand copper wire (for Turnstile, etc.)	Mtrs.	13735
4	Power Cable 4 x 2.5 sqmm- Armoured (Crash rated Boom Barrier)	Mtrs.	2456
5	Pole for installation of smart card readers -1 meter	No.	63
6	Pole for installation of RFID readers- 3 meter	No.	79
7	Emergency glass break unit	No.	1423
8	Manual Switch for operating Blockers/ Boom Barriers	No.	532
9	Push Bar/Panic Bar - single leaf door	No.	417
10	Push Bar/Panic Bar - double leaf door	No.	71
11	Panic Push Button	No.	209
12	Hooter / Buzzer for Fire Exit Door	No.	479
13	Magnetic Contact Sensor (MCS)	No.	1669
ii	Surveillance System		0
14	Cable, Conduits, Poles & other Accessories for Surveillance System		0
15	Cat-6e UTP Cable	Mtrs.	85635
16	Power Cable 3 x 2.5 sqmm-Armoured (for PTZ camera)	Mtrs.	191850
17	Multimode fiber optic cable 12 core- Armored (for Camera connectivity)	Mtrs	173290
18	Poles: 3 Mtr (for Fixed Camera)	No.	672
19	Poles: 8 Mtr (for PTZ Cameras)	No.	68
20	Poles: 10 Mtr (for PTZ Camera)	No.	771
21	Junction Box 400 x 600 mm for PTZ Cameras	No.	824
22	12 Port FO patch panel rack mounted fully loaded	No.	262
23	6 Port FO patch panel wall mounted fully loaded	No.	806
24	FO Patch Cord Multimode - 1 meter - ST/ST	No.	1700
25	FO pigtails Multimode - 1 meter-ST	No.	4884
26	25 mm GI conduit	Mtrs	101860
iii	Networking and Communication Devices		0
27	Single mode fiber optic cable 6 core - Armored (Switch to Switch connectivity)	Mtrs	59965
28	Single mode Fiber optic cable 6 core - Unarmored (Switch to Switch connectivity)	Mtrs	105
29	12 Port FO patch panel rack mounted fully loaded	No.	447
30	FO Patch Cord single mode	No.	898

31	FO pigtails single mode	No.	3210
iv	Control Room Devices. (Softwares+Hardwares)		0
32	9 U, 19" Rack with complete accessories.(Wall Mounted)	No.	321
33	15 U, 19" Rack with complete accessories.(Wall Mounted)	No.	25
34	27 U, 19", Server rack with complete accessories.	No.	246
35	42 U,19" ,Server rack with complete accessories.	No.	5
36	Workstation Furniture for Tier-1 Control Room & Security Cabin- For 2 desktop PC with 1 chair.	No.	427
37	Workstation Furniture for Cluster level (Tier-2) Control Room- For 4 Desk top PC with 2 chairs.	No.	18
38	Workstation Furniture for Central Control Room (Tier-3) with 4 chairs	No.	2
v	Other Associated Electrical Items		0
39	Supplying & Fixing of 1.5 ton split air conditioner for security room with plug , stablizer, socket as per detailed technical specifications provided in the RFP.	No.	530
40	Supplying & Fixing of Industrial Corrosive proof (IP 65) luminaire . 2X 28 Watt FTL T-5	No.	274
41	Supplying & Fixing of Ceiling fan for security room as per detailed technical specifications provided in the RFP.	No.	273
42	Supplying & Fixing of CFL light 24 watt as per detailed technical specifications provided in the RFP.	No.	543
43	Supplying & Fixing of UPS-2 KVA -Online as per detailed technical specifications provided in the RFP.	No.	48
44	Supplying & Fixing of UPS-3 KVA -Online as per detailed technical specifications provided in the RFP.	No.	284
45	Supplying & Fixing of UPS-5 KVA -Online as per detailed technical specifications provided in the RFP. (1 set includes 1+1 UPS with separate battery banks)	Set	216
46	Supplying & Fixing of UPS-8 KVA -Online as per detailed technical specifications provided in the RFP. (1 set includes 1+1 UPS with separate battery banks)	Set	25
47	Supplying & Fixing of UPS-10 KVA -Online as per detailed technical specifications provided in the RFP.(1 set includes 1+1 UPS with separate battery banks)	Set	34
48	Supplying & Fixing of UPS-30 KVA 3 Phase input & 3 Phase output-Online (1 set includes 1+1 UPS with separate battery banks)	Set	1
49	Supplying & Fixing of Cable Tray (ACS/CCTV/Electrical) as per detailed technical specifications provided in the RFP.	No.	300
vi	Other Items		0
50	Supplying & Fixing of PVC portable road divider	No.	2088

ANNEXURE-B

(B) ECIL SUPPLY ITEMS FOR WHICH I&C NEEDS TO BE DONE BY THE PARTNER FIRM

Sl. No.	Item	UOM	TOTAL
A	Access Control, Surveillance Systems & Associated Electrical Items		
i	Access Control System		
a	Readers & Cards		
1	Contactless Smart Card Reader	No.	1574
2	Palm Vein Reader cum controller	No.	311
3	Contactless Smart Card cum Pin-Pad Reader	No.	1264
4	Smart Card Swallower (Card Retrieval Box)	No.	391
5	Long Range RFID Reader	No.	83
6	Contactless Smart Card	No.	99319
7	RFID Tags for vehicle	No.	27690
8	Access Door Controller - 4 Reader	No.	1214
b	Electro Mechanical Devices		0
9	Solenoid Lock	No.	1672
10	Crash rated boom barrier-1 (5 meter)	No.	20
11	Crash rated boom barrier-2 (5 meter)	No.	6
12	Boom Barrier light duty- 4 meter	No.	61
13	Boom Barrier light duty- 5 meter	No.	207
14	Flap Barrier: Normal	No.	42
15	Flap Barrier: Wide	No.	90
16	Half Height Turnstile with canopy - Bidirectional	No.	225
17	Full Height Turnstile with canopy - Bidirectional	No.	95
c	Cable, Conduits, Poles & Accessories for Access Control System		0
ii	Surveillance System		0
a	Cameras		0
18	1/3" Fixed Dome IP Camera	No.	1434
19	1/3" Outdoor IP Box Camera	No.	709
20	Outdoor Speed Dome IP Camera (PTZ)	No.	852
b	Cable, Conduits, Poles & other Accessories for Surveillance System		0
21	Fiber Optic Transceiver for PTZ cameras	No.	821
iii	Networking and Communication Devices		0
22	Layer-2 Network Switch (12-Port)	No.	374
23	Layer-2 Network Switch (24-Port)	No.	274
24	Layer-3 Network Switch	No.	189
25	SFP Module	No.	577
iv	Control Room Devices. (Softwares+Hardware)		0

26	CCTV Database Server for Tier-1 and Tier-2 with OS.	No.	259
27	CCTV Recording Server at Site for 40 cameras max support with min 5TB	No.	250
28	CCTV Storage box (DAS) with RAID-5 configuration min 5 TB (expandable HDD)	No.	21
29	CCTV Storage box (DAS) with RAID-5 configuration min 12 TB (expandable HDD)	No.	3
30	Enterprise CCTV Software (Video Management software)	No.	1
31	Desk Top PC for Visitor Management System (VMS)	No.	261
32	Webcam with tripod for VMS	No.	261
33	Laser Printer for VMS	No.	261
34	Desktop PC with keyboard & mouse for CCTV & Access local Monitoring (without Monitor)	No.	625
35	Desk Top PC for CIC with 19" LCD	No.	28
36	12 megapixel Digital Web Camera with tripod for CIC	No.	27
37	Signature Pad for CIC	No.	27
38	Document Scanner for CIC	No.	27
39	Biometric (Palm vein) Enrolment Unit for CIC	No.	27
40	19" LCD Monitor for ACS & CCTV	No.	586
41	32" LED- Full HD Monitor for T-2 Control Room (for CCTV)	No.	51
42	Video Wall for T-3	No.	1
43	Projector with Screen for DR	No.	1
44	Access Control Server (Rack Mounted) for Tier-2 with OS and Raid-5 min 4 TB.	No.	41
45	Access Control Server for Tier-3 & Disaster Recovery site with OS and External box DAS with Raid-5 min 12 TB.	No.	4
46	Enterprise Access Control Application Software	No.	1
47	Palm Vein Software	No.	1
48	Rack mount Monitor with KVM Switch	No.	191
49	Smart card printer with cartridge	No.	27
50	LASER Printer for Control Room	No.	345
51	Four Channel Encoder for Existing Analog Cameras	No.	5
52	DESfire EV-1 contactless Card Encoder unit with Required Software	No.	286
53	32" LED Display Panel with CPU (Back side) for 24*7 Operation	No.	86

ANNEXURE-C

(C) INDICATIVE SCOPE CIVIL WORKS TO BE CARRIED OUT BY THE PARTNER FIRM ON TURNKEY BASIS:			
S. No.	Item	UOM	Total
A.	CIVIL WORKS		
1	EARTH WORK		
1.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	cum	173009.42
	a). All kinds of soil.		
1.2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating Each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	cum	97290.67
1.3	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.	sqm	9662.97
	All kinds of soil		
1.4	Supplying and filling in plinth with Locally available sand under floors including, watering, ramming consolidating and dressing complete.	cum	111930.22
2	CEMENT CONCRETES		
2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :		
	a)1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size).	cum	15390.90
	b)1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size).	cum	18499.83
2.2	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement :3 coarse sand : 6graded stone aggregate 20mm nominal size) over 75mm bed by dry brick ballast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth.	sqm	8441.63
2.3	Grading roof for water proofing treatment with Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	1857.75

3	BRICK WORK		
3.1	Brick work with F.P.S. bricks of class designation 75 / best Locally available bricks as aproved by engineer of local EACS team in foundation and plinth.		
	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	1892.89
3.2	Brick work with F.P.S bricks of class designation 75 /best Locally available bricks as aproved by engineer of local EACS team in superstructure above plinth level up to floor V level in all shapes and sizes in :		
	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	1552.93
3.3	Half brick masonry with F.P.S bricks of class designation 75 /best Locally available bricks as aproved by engineer of local EACS team superstructure above plinth level up to floor V level and providing & placing in position 2 nos. 6mm dia.M.S.bars at every 3rd course of half brick masonary.		
	Cement mortar 1:4 (1 cement :4 coarse sand)	sqm	2575.50
4	STONE WORK		
4.1	Coursed rubble masonry (first sort) with hard stone in foundation and plinth with :		
	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	19.48
4.2	Extra for coursed rubble masonry with hard stone (first or second sort) in superstructure above plinth level and upto floor five level.	cum	33.38
5	REINFORCE CEMENT CONCRETE		
5.1	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, slabs, footings, beams etc. excluding cost of centering, shuttering, finishing and reinforcement :		
	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	cum	8512.28
5.2	Centering and shuttering including strutting, propping etc. and removal of form for:		
	a)Foundations, footings, bases of columns, etc. for mass concrete.	sqm	28938.91
	b) Lintels, beams, plinth beams, girders, bressumers and cantilevers	sqm	8519.83
	c)Suspended floors, roofs, landings, balconies and access platform.	sqm	7004.49
	d) Columns, Pillars, Piers, Abutments, Posts and Struts.	sqm	5800.36
5.3	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete		
	Thermo-Mechanically Treated bars	kilogram	553860.80

6	CEMENT PLASTER		
	CEMENT PLASTER IN COARSE SAND		
6.1	12 mm cement plaster of mix :		
	1:4 (1 cement: 4 coarse sand)	sqm	11258.53
6.2	15 mm cement plaster on rough side of single or half brick wall of mix :		
	1:4 (1 cement: 4 coarse sand)	sqm	27084.28
7	VITRIFIED FLOOR TILES		
7.1	Providing and laying vitrified tiles for floor/dado in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS : 15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc.,Complete.		
	Size of Tile 60x60 cm	sqm	5192.43
8	PEBBLE DASH PLASTER		
8.1	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete	sqm	11210.90
9	FINISHING		
9.1	Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two or more coat applied @ 1.67 ltr/10 sqm overand including base coat of water proofing cement paint applied @ 2.20 kg/ 10 sqm).	sqm	26185.35
9.2	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade: Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	sqm	1136.52
9.3	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade : Old work (one or more coats)	sqm	701.93
9.4	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade :		
	New work (two or more coats) over and including priming coat with cement primer.	sqm	9943.03
9.5	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade: One or more coats on old work.	sqm	244.95
9.6	Applying one coat of cement primer of approved brand and manufacture on wall surface : Cement primer.	sqm	1284.24

9.7	Melamine polishing on wood work (one or more coat).	sqm	2776.20
9.8	French spirit polishing:		
	Two or more coats on new works including a coat of wood filler.	sqm	
9.9	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade : Two or more coats on New work.	sqm	
10	ALUMINIUM AND WOOD WORK		
10.1	Providing and fixing aluminium work (Jindal/Hindalco/indal or equivalent) for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS : 1285, fixed with rawl plugs and screws or with fixing clips, or with expansion hold fasteners including necessary filling up of gaps at junctions, at top, bottom and sides with equired EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of engineer of local EACS team. (Glazing and paneling to be paid for separately) :		
10.1.1	1) For fixed portion		
	a.) Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	Kilogram	6663.10
	b) Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	Kilogram	8214.00
10.1.2	2) For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately).		
	a.) Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	Kilogram	7455.43
	b) Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	Kilogram	15958.42
10.2	Providing and fixing 12mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer of local EACS team.		
	Pre-laminated particle board with decorative lamination on both sides.	sqm	303.37

10.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer of local EACS team. (Cost of aluminium snap leading shall be paid in basic item):		
	With float glass panes of 5.50 mm thickness	sqm	2707.59
10.4	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked, for doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of engineer of local EACS team. With stainless steel cover plate	Each	935.00
10.5	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	Each	620.00
10.6	Providing and fixing aluminium casement windows fastener of required length for aluminium windows with necessary screws etc. complete.		
	Anodized (AC 15) aluminium	Each	246.00
10.7	Providing and fixing aluminium round shape handle of outer dia 100mm with SS screws etc. complete as per direction of engineer of local EACS team. a) Anodized (AC 15) aluminium	Each	492.00
10.8	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of engineer of local EACS team complete.		
	205 X 19 mm	Each	984.00
10.9	Providing and fixing aluminium tubular handle bar 32 mm outer dia, 3.0 mm thick & 2100 mm long with SS screws etc .complete as per direction of engineer of local EACS team.		
	b) Polyester powder coated minimum thickness 50 micron aluminium tubular handle bar.	Each	1870.00
10.10	Providing and fixing IS : 12817 marked stainless steel butt hinges with stainless steel screws etc. complete :		
	a) 125x64x1.90 mm	Each	1008.00
	b) 100X58X1.90 mm	Each	3724.00
10.11	Providing and fixing bright finished brass tower bolts (barrel type) with necessary screws etc. complete :		
	a) 250x10 mm	Each	542.00
	b) 150x10 mm	Each	494.00

10.12	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	Each	503.00
10.13	Providing and fixing IS : 3564 marked aluminium extruded section body tubular type universal hydraulic door closer with double speed adjustment with necessary accessories and screws etc. complete.	Each	502.00
10.14	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :		
	a) 250x10 mm	Each	1964.00
	b) 150x10 mm	Each	2470.00
10.15	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position :		
	Second class teak wood	cum	31.48
10.16	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.		
	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	sqm	1112.54
10.17	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of shutters (Over all area of door shutter to be measured).	Sqm	1112.54
10.18	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete :		
	2nd class teak wood		0.00
	a). 50x12 mm	Meter	3822.30
	b). 50 x 20 mm	Meter	1568.00
10.19	Providing 40X5 mm flat iron hold fast 40 cm long including fixing to frame with 10mm diameter bolts, nuts and wooden plugs and embeddings in cement concrete block 30X10X15cm 1:3:6 mix (1:cement : 3Coarse sand:6graded stone aggregate 20mm nominal size)	Each	3534.00
10.20	Renewing glass panes, with wooden fillets wherever necessary:		
	Float glass panes of thickness 5.5 mm	sqm	154.98
10.21	Providing and fixing M.S.grills of required pattern in frames of windows tec. With M.S.flats,square or round bars etc.all complete.		0.00

	Fixed to openings/frames with rawl plugs screws.	Kg	18974.72
11	ROAD WORK/PARKING		0.00
11.1	Supplying and stacking at site.		0.00
	a) 90 mm to 45 mm size stone aggregate.	cum	976.38
	b) 63 mm to 45 mm size stone aggregate.	cum	634.74
	c)Moorum	cum	818.93
11.2	Laying spreading and compacting stone aggregate of specified sizes to WBM specifications including spreading in uniform thickness, handpicking , rolling with 3 wheeled road / vibratory roller 8-10 tonne in stage to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate watering and compacting to the required density .	cum	2016.98
11.3	Surface dressing on old surface with hot bitumen of grade A-90/ S-90 of approved quality using 1.95 Kilogram of bitumen per sqm. with 1.50 cum of stone chippings 11.2 mm nominal size per 100 sqm of road surface including consolidation with road roller of 6 to 8 tonne capacity, etc. complete.	sqm	5461.21
11.4	Providing and applying tack coat using hot straight run bitumen of grade 80/ 100 including heating the bitumen, spraying the bitumen with mechanically operated spray unit fitted on bitumen boiler, cleaning and preparing the existing road surface as per specifications : On W.B.M. @ 0.75 Kg / sqm.	sqm	5477.23
11.5	2.5 cm premix carpet surfacing with 3 cum of stone chippings 10 mm nominal size per 100 sqm and bitumen emulsion (medium setting min. 65% bitumen contents) complying with IS : 8887-1995 using 96 kg per cum of chippings of road surface including consolidation with road roller etc complete .	sqm	5477.23
11.6	Providing and laying seal coat of premixed fine aggregate (passing 2.36mm and retained on 180 micron sieve) with bitumen using 128 kg of bitumen of grade 80 / 100 bitumen per cum of fine aggregate and 0.60 cum of fine aggregate per 100 sqm of road surface including rolling and finishing with road roller all complete.	sqm	5477.23
11.7	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :		0.00
	100 mm dia. R.C.C. pipe	Meter	379387.20

11.8	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction and of approved size and design/ shape laid in required colour and pattern over and including 50mm thick compacted bed of fine sand, filling the joints with fine sand etc. all complete as per the direction of engineer of local EACS team.	sqm	4917.24
11.9	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement in position to the required line, level and curvature jointed with cement mortar 1:3 (1 cement: 3 coarse sand) including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm) including making drainage opening wherever required complete etc. as per direction of local EACS team (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by engineer of local EACS team).	cum	29.06
12	SANITARY INSTALLATIONS		0.00
12.1	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required : W.C. pan with ISI marked white solid plastic seat and lid.	Each	247.00
12.2	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, bottle trap including painting of fittings and brackets, cutting and making good the walls wherever required : White Vitreous China Wash basin size 550x400 mm with a pair of 15 mm C.P. brass pillar taps.	Each	248.00
12.3	Providing and fixing 40mm P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.		0.00
	Flexible pipe	Each	247.00
12.4	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore	Each	248.00
12.5	Providing and fixing soil, waste and vent pipes:		0.00
	a). 75 mm dia Sand cast iron S&S pipe as per IS: 1729	Meter	538.00
	b). 100mm dia Sand cast iron S&S pipe as per IS: 1729.	Meter	1698.00
12.6	Providing and fixing plain bend of required degree.		0.00
	a). 100 mm Sand cast iron S&S pipe as per IS: 1729.	Each	248.00

	b). 75 mm Sand cast iron S&S pipe as per IS: 1729.	Each	248.00
12.7	Providing and filling the joints with spun yarn cement slurry and cement mortar 1:2 (1 cement : 2 fine sand) in S.C.I./ C.I. Pipes :		0.00
	a). 75 mm dia pipe	Each	269.00
	b). 100 mm dia pipe	Each	416.00
12.8	Providing and fixing collar:		0.00
	a). 100 mm Sand cast iron S&S as per IS - 1729	Each	248.00
	b). 75 mm Sand cast iron S&S as per IS - 3989	Each	248.00
12.9	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.(i) Single socketed pipes.		0.00
	110 mm diaMeter	Meter	744.00
12.10	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.		0.00
	a). Coupler 110 mm	Each	248.00
	b). Single tee without door 110x110x110 mm	Each	248.00
	c). Bend 87.5° 110 mm bend	Each	248.00
12.11	Cutting holes up to 15x15cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof.	Each	248.00
12.12	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.		0.00
	110 mm diaMeter	Each	992.00
12.13	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps i/c making good the walls etc. concealed pipe including painting with anti corrosive bitumastic paint, cutting chases and making good the wall: (Medium B Class)		0.00
	a). 15 mm dia nominal bore	Meter	496.00
	b). 20 mm dia nominal bore	Meter	992.00
12.14	Providing and fixing G.I. Pipes complete with G.I. fittings i/c trenches & refilling. (Heavy C class)		0.00

	25 mm dia nominal bore	Meter	1240.00
12.15	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI:12701 marked with cover and suitable locking arrangement and making necessary holes for inlet,outlet and overflow pipes but without fittings and the base support for tank.	Litre	124000.00
12.16	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades except burgundy, bottle green, black of any size as approved by engineer of local EACS team in skirting, risers of steps and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per Sqm including pointing in white cement mixed with pigment of matching shade complete.	Sqm	2511.01
12.17	Providing and laying Ceramic glazed tiles for floor/dado 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in all colours, shades, except White, Ivory, Grey, Fume Red Brown laid on 20mm thick bed of Cement Mortar 1:4 (1 Cement : 4 Coarse sand) including pointing the joints with white cement and matching pigments etc., complete.	Sqm	558.00
12.18	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :		0.00
	25 to 40 mm nominal bore	Each	248.00
12.19	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :		0.00
	a) 25 mm nominal bore	Each	249.00
12.20	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :		0.00
	b). 20 mm nominal bore	Each	248.00
12.21	Providing and fixing C.P brass bib cock of approved quality conforming to IS:8931		0.00
	15 mm nominal bore	Each	495.00
12.22	Providing and fixing toilet paper holder :		0.00
	C.P. brass	Each	248.00
12.23	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	Each	247.00

12.24	Providing and fixing PTMT towel ring trapezoidal shape 215mm long, 200mm wide with a minimum distances of 37mm from wall face with concealed fittings arrangement of approved quality and colour.Weighing not less than 88 gms	Each	248.00
12.25	Providing and fixing PTMT soap Dish holder having length of 138 mm,breadth 102 mm, height of 75 mm with concealed fitting arrangements. Weighing not less than 106 gms.	Each	248.00
12.26	Providing and fixing square-mouth S.W.gully trap class SP-1 complete with C.I grating brick masonry chamber with water tight C.I.cover with frame of 300X300 mm size (inside) the weight of cover to be not less than 4.50 Kg and frame to be not less than 2.70 Kg as per standard design:		0.00
	100X100 mm size P typewith F.P.S Bricks class designation 75	Each	248.00
12.27	Making soak pit 2.5 m diameter 3.0 Meter deep with 45 x 45 cm dry brick honey comb shaft with bricks of class designation 75 and S.W.drain pipe 100 mm diameter, 1.8 m long complete as per standard design.		0.00
	With F.P.S. bricks /First class bricks of approved quality.	Each	242.00
12.28	Constructing brick masonry manhole in cement mortar 1:4 (1 cement: 4 coarse sand) R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :	Each	248.00
	With F.P.S. bricks with class designation 75		0.00
12.29	Constructing masonry Chamber 30x30x50 cm, inside with 75 class designation brick work in cement mortar 1:4 (1 cement :4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement:2 coarse sand : 4 graded stone aggregate 20 mm nominal size)necessary excavation foundation concrete 1:5:10 (1 cement :5 fine sand:10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement :3 coarse sand) 12mm thick finished with a floating coat of neat cement complete as per standard design :18.32.1 With F.P.S. bricks	Each	248.00

12.30	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete :	Each	248.00
	For pipes 100 to 230 mm diameter		0.00
12.31	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors :		0.00
	100 mm inlet and 100 mm outlet		0.00
	a)Sand cast iron S&S as per IS - 1729	Each	248.00
	100 mm inlet and 75 mm outlet		0.00
	a)Sand cast iron S&S as per IS - 1729	Each	248.00
13	DISMANTLING AND DEMOLISHING		0.00
13.1	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 Meters lead as per direction of engineer of local EACS team.	cum	3367.59
13.2	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 Meters lead.	sqm	2975.87
13.3	Dismantling manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50Meters lead as per direction of engineer of local EACS team :		0.00
	a). Water bound macadam road	sqm	5462.55
	b). bituminous road	sqm	5468.42
13.4	Dismantling precast concrete or stone slabs in walls, partition walls etc. including stacking within 50 Meters lead:	sqm	9.66
13.5	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 Meters lead :	Each	685.00
13.6	Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	meter	16504.00
13.7	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of engineer of Local EACS Team.	cum	87.24
13.8	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of engineer of Local EACS Team.	cum	522.01

14	MISC.		0.00
14.1	Providing 10 mm thick plaster of Paris (gypsum anhydrous) ceiling up to a height of 5 m above floor level over first class kail wood strips 25x6 mm with 10 mm gap in between and reinforced with rabbit wire mesh fixed to wooden frame (frame work to be paid separately) :	sqm	1276.20
10.22	Providing and fixing 12mm thick toughened glass including edge polishing and placing in position for frameless door (door fittings to be paid separately) as directed by engineer of local EACS team.	sqm	40.32
10.23	Providing and fixing in position clear float glass horizontally or vertically in partition or elsewhere of following thickness. All exposed edges to be machine polished and glass joints sealed with transparent silicon sealant using polyethylene lackup rod . All as per approval and instruction of the engineer of local EACS team.	sqm	9.78
	12mm thick toughened glass fixed with white ash wood moulding of finished size 37mm x 25mm.		-
10.24	Providing and fixing in stainless steel fittings for Double leaf frameless door namely SM1001 Teq pivot, SM1010 bottom patch, SM1020 upper patch, SM1049 E floor lock, SM1052 E strike plate, floor spring BTS 84 no. , handle of DORMA make TG9157 EQ-S complete including erection of double leaf glazed door with glass in position complete as directed by engineer of local EACS team. (Cost of glass to be paid separately)	job	6.00
10.25	Providing and fixing in stainless steel fittings for Single leaf frameless door namely SM1001 Teq pivot, SM1010 bottom patch, SM1020 upper patch, SM1049 E floor lock, SM1052 E strike plate, floor spring BTS 84 no. , handle of DORMA make TG9157 EQ-S complete including erection of double leaf glazed door with glass in position complete as directed by engineer of local EACS team. (Cost of glass to be paid separately)	job	2.00
13.9	Demolishing stone rubble masonry work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 Meters lead as per direction of engineer of local EACS team.	cum	0.00

ANNEXURE-D

(D)INDICATIVE SCOPE OF ELECTRICAL WORKS TO BE CARRIER OUT BY PARTNER FIRM			
Sr. No.	Item Description	UOM	Total
A	Electrical Works		
1	Supplying & Fixing of following way , single pole & netural ,sheet steel, MCB distribution board, 240 volts,on surface /recess, complete with tinnned copper busbar, neutral busbar, earth bar,din bar,detachable gland plate, interconnection, phosphatized & powder painted including earthing(without MCB) 2+12 double door .	Nos.	560
2	Supplying & Fixing of following way , single pole & netural ,sheet steel, MCB distribution board, 240 volts,on surface /recess, complete with tinnned copper busbar, neutral busbar, earth bar,din bar,detachable gland plate, interconnection, phosphatized & powder painted including earthing(without MCB) 2+ 4 way .	Nos.	237
3	Supplying & Fixing of following way , single pole & netural ,sheet steel, MCB distribution board, 240 volts,on surface /recess, complete with tinnned copper busbar, neutral busbar, earth bar,din bar,detachable gland plate, interconnection, phosphatized & powder painted including earthing(without MCB) 2+ 8 way .	Nos.	92
4	Supplying & Fixing of 32 Amp MCB -Double pole C series 10 KA breaking capacity . * 63 amp MCB for control room.	Nos.	1186
5	Supply & fixing 6 Amp- 32 Amp ,240 volts MCB - Single Pole" C Series 10KA,Breaking Capacity .	Nos.	8389
6	Supply & fixing of GI box with modular base & cover Plate in front on surface or in recess ,including providing and fixing 6 pin 15/16 & 5/6 amps modular socket outlet & 15/16 amps modular switch , connection, painting etc.	Nos.	8537
7	Supply & fixing of following size/modules,GI box along with modular base & cover Platefor modular switch in recess etc.		0
i.	2 Module(75mm X 75 mm)	Nos.	259
ii.	4 Module((125mm X 75 mm)	Nos.	261
8	Supply & fixing of following of modular switch / socket on the existing modular plate & switch box including connection but excluding modular plate etc.		0
	5/6 Amp Switch	Nos.	1562

9	Supplying & Fixing of Wiring for circuit/submain wiring along with earth wire with the following sizes of PVC insulated copper conductor ,single core cable in surface /recessed PVC conduit as required.		0
i	4 X 25 sq.mm+ 2 X 25 sq.mm earth wire	Mtrs.	650
ii	2 X25 sq.mm+ 1X 16 sq.mm earth wire	Mtrs.	3025
iii	2 X16 sq.mm+ 1X 16 sq.mm earth wire	Mtrs.	20680
iv	2 X 6 sq.mm+ 1 X 6 sq.mm earth wire	Mtrs.	52680
v	2 X 4 sq.mm+ 1X 4 sq.mm earth wire	Mtrs.	13650
vi	2 X 2.5 sq.mm+ 1X 2.5 sq.mm earth wire	Mtrs.	140535
vii	2 X 1.5 sq.mm+ 1X 1.5 sq.mm earth wire	Mtrs.	13050
10	Supplying & Fixing of Double pole (Single phase & Neutral) ,240 volts, residual current circuit breaker having current sensivity upto 300milliamperes in the existing MCB DB complete with connection ,testing & commissioning etc as required 63A	Nos.	586
11	4 Pole MCCB,100A,30KA	Nos.	282
12	32 Amp.TPN, Switch disconnecter fuse unit (Panel mount type)with ISI mark HRC fuse	Nos	136
13	Supplying & Fixing of Double pole (Single phase & Neutral) ,240 volts,residual current circuit breaker having current sensivity upto 300milliamperes in the existing MCB DB complete with connection ,testing & commissioning etc as required 40A	Nos	5
14	Supplying & Fixing of Wiring for circuit/submain wiring alongwith earth wire with the following sizes of PVC insulated copper conductor ,single core cable in surface /recessed PVC conduit as required.		0
	4 X 16 sq.mm+ 2 X 16 sq.mm earth wire	Mtrs.	600
15	Earthing with copper wire plate 600mm *600mm *3mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	2
16	6 SWG G.I wire (4.0 mm Dia)	Kg	2