

ELECTRIFICATION





LIGHT FIXTURES

S.NO	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT		
1	Н	PICTURE/MIROR LIGHT WALL MOUNTED FIXTURE WITH 8 WATT LED ROD AND DRIVER	12"ABOVE MIRROR		
2	(+)	DOWN LIGHT FIXTURE WITH 3W/4W WATT SMD			
3	Θ	DOWN LIGHT FIXTURE WITH 7W/9W WATT SMD			
4	0	DOWN LIGHT FIXTURE WITH 9 WATT COB	RECESSED TYPE		
5	0	CEILING DOWN LIGHT WITH 7W/9W COB	ON SLAB		
6	•	CEILING DOWN LIGHTER WITH 3W COB			
7	(h)	CEILING SUSPENDED HANGING LIGHT WITH LED 12W/15W			
8	•	CEILING SUSPENDED HANGING LIGHT WITH LED 12W/15W			
9		4 FEET LONG 1x30 WATT LED LINEAR LIGHT			
10		LED DAMP PROOF 1x18 W ROD TYPE LIGHT			
11		ROPE LIGHT	RECESSED IN FALSE CEILING		
12	PD	PRESENCE DETECTOR	RECESSED IN FALSE CEILING		
13	EXIT BATTERY OPERATED EXIT LIGHT		12" ABOVE ON DOOR		
14	EXIT >	BATTERY OPERATED DIRECTIONAL EXIT LIGHT	HANGING ON SLAB		
15	PP	BATTERY OPERATED EMERGENCY LIGHT FIXTURE WITH 2X7 WATT LED	8'-0" F.F.L OR AS REQ.		

TV SYSTEM

S.NO	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT
1	\vdash	TV OUTLET POINT	IN FOB OR ON WALL AT O'-9" F.F.L
2	TVJB	TV JUNCTION BOARD	0'-9" F.F.L
3	TVS	TV SPLITTER	RACK MOUNTED
4		WIRING IN 1"Ø PVCC FOR TV SYSTEM	IN WALL BUF/BUG/BIS

Q-MATIC SYSTEM

S.NO	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT
1	Q-P	Q-MATIC PANEL	AS PER SITE
2	QP	Q-MATIC KEYPAD	AS PER SITE
3		Q-MATIC DISPLAY	AS PER SITE
4	Q-MATIC COUNTER DISPLAY		AS PER SITE

WIRING ACCESSORIES

S.NO	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT	
1	12	10 AMPS, ONE WAY AND TWO WAYS GANG TYPE SWITCH NUMBER OF SWITCHES ON SWITCH PLATE	3'-6" F.F.L	
2	\triangle	5 AMPS 3-PIN COMBINED SWITCH SOCKET	0'-9" F.F.L	
3	Ф	5 AMPS 3-PIN COMBINED SWITCH SOCKET	3'-6" F.F.L	
4		3 PIN FLAT SWITCH SOCKET 13 AMPS,	0'-9" F.F.L	
5	$\stackrel{\leftarrow}{\triangle}$	15 AMPS 3-ROUND PIN SWITCH SOCKET	0'-9" F.F.L	
6	\triangle	15 AMPS 3-ROUND PIN SWITCH SOCKET	3'-6" F.F.L	
7		CEILING CASSETTE TYPE AC	RECESSED TYPE	
8		Technology Box made of M.S Sheet of 16 SWG of Size 14"X4", Consisting of 1—5 AMPS SMICH SOCKET ON NORMAL SUPPLY 2—13 AMPS UNKIFERA SOCKET ON UPS SUPPLY 3—8 RJ-45 DUPLEX, I NO. FOR DATA AND 1 NO. FOR TELEPHONE	2'-6" F.F.L	
9		Technology Box made of M.S Sheet of 16 SWG of Size 14"X4", Consisting of 1-5 AMPS SMITCH SOCKET ON NORMAL SUPPLY 2-13 AMPS UNIVERSAL SOCKET ON UPS SUPPLY 3-RJ-45 DUPLEX, I NO. FOR DATA AND 1 NO. FOR TELEPHONE	ON FLOOR	
10		WIRING IN 3/4" OR 1"DIA PVC CONDUIT		
11		DISTRIBUTION BOARD FOR LIGHTING CIRCUIT & SMALL POWER	4'-0" F.F.L OR AS REQ.	

FIRE ALARM SYSTEM

S.NO	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT
1	H	HEAT DETECTOR RATE OF TEMPERATURE TYPE	ON FALSE CEILING/SLAB
2	(\$)	SMOKE DETECTOR NON IONIZATION TYPE.	ON FALSE CEILING/SLAB
3	GD	GAS DETECTOR	ON FALSE CEILING/SLAB
4	£	ALARM SOUNDER	7'-0"F.F.L
5	М	MANUAL BREAK GLASS CALL STATION	4'-0"F.F.L
6	FACP	FIRE ALARM CONTROL PANEL	4'-0"F.F.L
7	FAJB	FIRE ALARM JUNCTION BOARD	1'-6" F.F.L
8	/	INDICATES WIRING IN 1"Ø PVCC FOR FIRE ALARM SYSTEM	ON SLAB AFC

CLOSE CIRCUIT T.V SYSTEM

S.NO	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT			
1	MON	MONITOR	AS PER SITE			
2	CCTVI	CLOSE CIRCUIT TV CAMERA	-ON WALL 7'-O" -ON SLAB			
3	CCJB	CCTV JUNCTION BOX	6" TO 9" BELOW SLAB BUT ABOVE FALSE CEILING			
4		WIRING IN 1"Ø PVCC FOR CCTV SYSTEM	ON SLAB/ BUG/BUF/BIS			
5	DVR	DIGITAL VIDEO RECORDER	AS PER SITE			

TELEPHONE SYSTEM

S.NO	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT
1		TELEPHONE OUTLET WITH RJ-11 ON M.S	IN FOB OR ON WALL AT O'-9" F.F.L
2	TJB	TELEPHONE JUNCTION BOARD	0'-9" F.F.L
3		WIRING IN 1"0 PVCC FOR TELEPHONE SYSTEM	IN WALL BUF/BUG/BIS
4	MDF MAIN DISTRIBUTION FRAME		AS PER SITE

DATA SYSTEM

S.NO	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT
1		DATA OUTLET WITH RJ-45 SOCKET	0'-9" F.F.L
2	D	DATA POINT	0'-9" F.F.L
3	DNS	DATA NETWORKING SWITCH	4'-0" F.F.L
4	DJB	DATA JUNCTION BOARD	0'-9" F.F.L
5		WIRING IN 1"Ø PVCC FOR TELEPHONE SYSTEM	IN WALL BUF/BUG/BIS
6	<u></u>	WIFI ROUTER	

ACCESS CONTROL PANEL

	S.NO	SYMBOLS	DESCRIPTION	MOUNTING HEIGHT		
	1	CR	CARD READER			
	2	•	UNLOCK PUSH POINT	AS PER SITE		
	3	ACP	ACCESS CONTROL PANEL	AS PER SITE		
	4	ACJB	ACCESS CONTROL JUNCTION BOX	AS PER SITE		

PROJECT:

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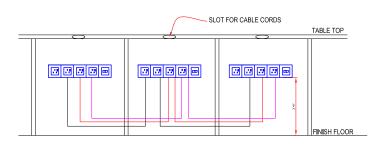
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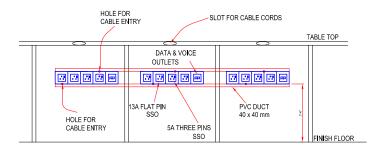
DRAWING TITLE:

MAIN LEGEND

DESIGN :	BY:	DRAW	N BY:	CHECK B	Y:
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SCALE:		DATE:		DWG.NO:	
	N.T.S		30 May,2020		E-01



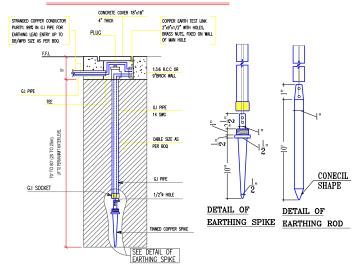
TYPICAL ARRENGMENTS OF TECHNOLOGY BORAD & CONDUITS FIXED ON WORK STATION



TYPICAL ARRENGMENTS OF TECHNOLOGY BORAD &PVC DUCTS FIXED ON WORK STATION



EARTHING DETAIL BORE TYPE





SEE DETAIL-C

GENERAL & WIRING NOTES:-

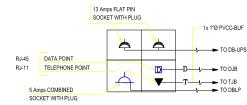
- 1. ALL ELECTRICAL WORKS PERTAINING TO WIRING OF ELECTRICAL SYSTEMS SHALL STRICTLY CONFORM TO I.E.E LATEST EDITION OF RULES & REGULATIONS.
- 2. ALL WIRING SHALL BE DONE IN PVC CONDUIT TO BE CONCEALED IN WALLS, SLABS, COLUMNS AND FLOOR OR AS SHOWN ON DRAWINGS.
- 3. THE WIRING SHOULD BE STARTED ONLY AFTER THE CONDUIT SYSTEM HAS BEEN COMPLETED AND ALL OUTLET BOXES ARE FIXED AT THEIR RESPECTIVE POSITIONS.
- 4. ALL PVC CONDUITS SHALL BE OF 3/4" OR 1"0 (DEPENDING UPON NUMBER OF WIRES) FROM SWITCH BOARD TO LIGHT POINTS & 1" D1A FROM DBs TO SWITCH BOARDS AND POWER SOCKETS OR AS SHOWN ON DRAWINGS.
- 5. LIGHT / FAN POINT CONTROLLED BY ONE WAY SWITCH. WIRED WITH 2x1.5mm sq (3/0.029") FOR(P+N) 1x2.5mmsq (7/0.029") AS EARTH(E) WIRE.
- 6. LIGHTING CIRCUITS FROM RESPECTIVE DB TO SWITCH SOCKET WIRED WITH 3×2.5 mm sq (7/0.029") AS P+N+E
- 7. SOCKETS WIRED IN PARALLEL WITH 3x2.5mm sq AS P+N+E
- 8. POWER SOCKETS WIRED WITH 3x4mmSq AS P+N+E
- 9. SA/C 1-1.5 TON WIRED WITH 3x6mmSq AS P+N+E
- 10. SA/C 2- 2.5 TON WIRED WITH 3x6mmSq AS P+N+E
- 11. NO LUBRICATION EXCEPT AS RECOMMENDED BY MANUFACTURER SHALL BE USED FOR PULLING OF WIRES IN PVC CONDUITS. NO OIL OF ANY KIND SHALL BE USED.
- 12. COLOUR CODING FOR WIRING SHALL BE AS FOLLOWS: RED, YELLOW AND BLUE FOR PHASES, BLACK FOR NEUTRAL AND GREEN / YELLOW FOR CPC (EARTH).
- 13. ALL LIGHT POINTS AND POWER SOCKETS SHALL BE PROPERLY EARTHED WITH 2.5mm sq PVC INSULATED WIRES OF COLOUR GREEN-YELLOW.
- 14. THE NUMBER OF WIRES TO BE PULLED IN ANY CONDUIT FOR WIRING PURPOSES SHALL CONFORM TO IEE. TABLE
- 1" DIA PVC CONDUIT SHALL BE USED FOR WIRING OF ALL OTHER SYSTEMS UNLESS OTHERWISE MENTIONED ON PLANS OR AS SPECIFIED IN BOQ.
- ELECTRICAL CONTRACTOR TO CONSULT ELECTRICAL CONSULTANT/ENGINEER FOR ANY FURTHER CLARIFICATIONS. NO ASSUMPTIONS SHOULD BE MADE.

NOTES FOR EARTHING SYSTEM

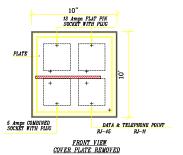
- . EARTH BORE SHALL BE MADE AT 6'-0" AWAY FROM FOUNDATION.
- 2. DISTANCE BETWEEN 2 EARTH BORES SHALL NOT BE GREATER THEN 10ft (3m)
- 3. COPPER CONDUCTOR AT TOP OF G.I. PIPE SHALL BE BOLTED WITH THIMBLES, BRASS NUTS, BOLTS ETC.
- 4. JOINTS SHALL BE COVERED WITH BITUMEN

MEP CONSULTANT:

CONTRACTOR TO MEASURE EARTHING RESISTANCE IN THE PRESENCE OF SITE ENGINEER. BOTH THE SITE ENGINEER AND CONTRACTOR SHALL SIGN THE EARTH TESTING RESULT AND SUBMIT IT TO THE CONSULTANT.

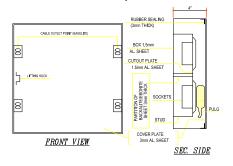


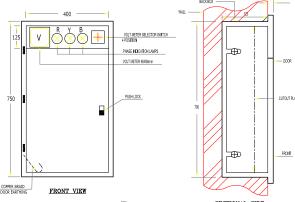
TENTATIVE DETAIL OF FLOOR OUTLET PLATE.

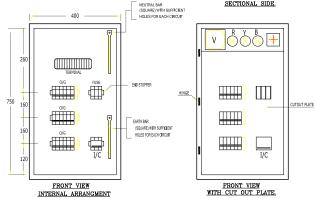


TENTATIVE DETAIL OF M.S FLOOR OUTLET BOX- (FOB)

 BURIED FLUSH WITH FINISHED FLOOR LEVEL
 SAMPLE TO BE SUBMITTED TO CONSULTANT FOR APPROVAL SEE BOQ.







TENTATIVE CONSTRUCTIONAL DETAIL OF:-DISTRIBUTION BOARD (DB) RECESSED TYPE.

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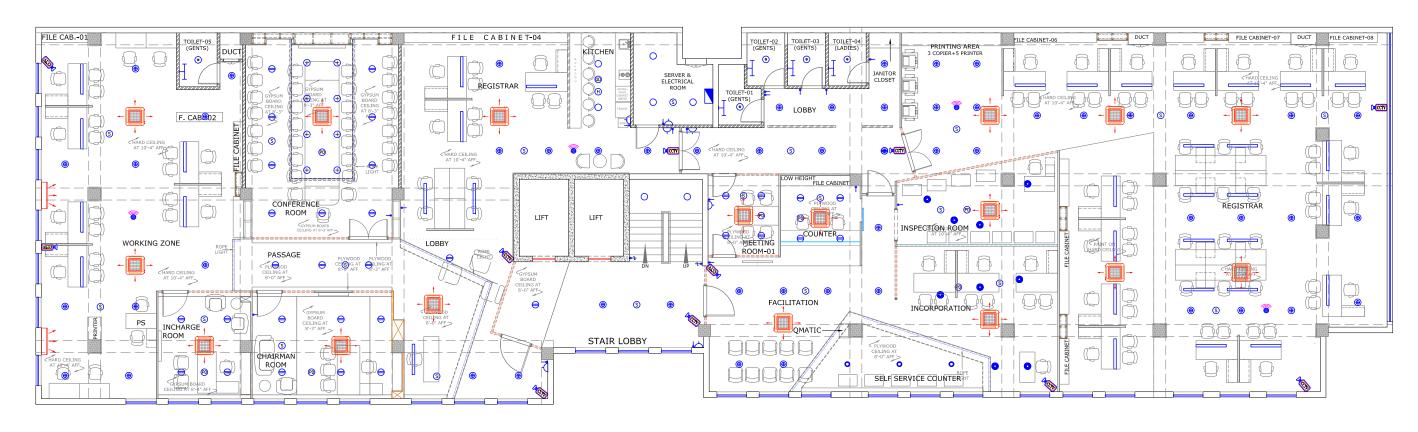
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DRAWING TITLE:

GENERAL WIRING NOTES, TENTATIVE CONSTRUCTIONAL DETAIL OF DISTRIBUTION BOARD, TECHNOLOGY, FLOOR BOX AND EARTHING DETAIL

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SCALE:		DATE:		DWG.NO:	
	N.T.S		30 May,2020		E-02



PROJECT:

CRO INTERIOR RENOVATION 3RD & 4TH FLOOR LAHORE

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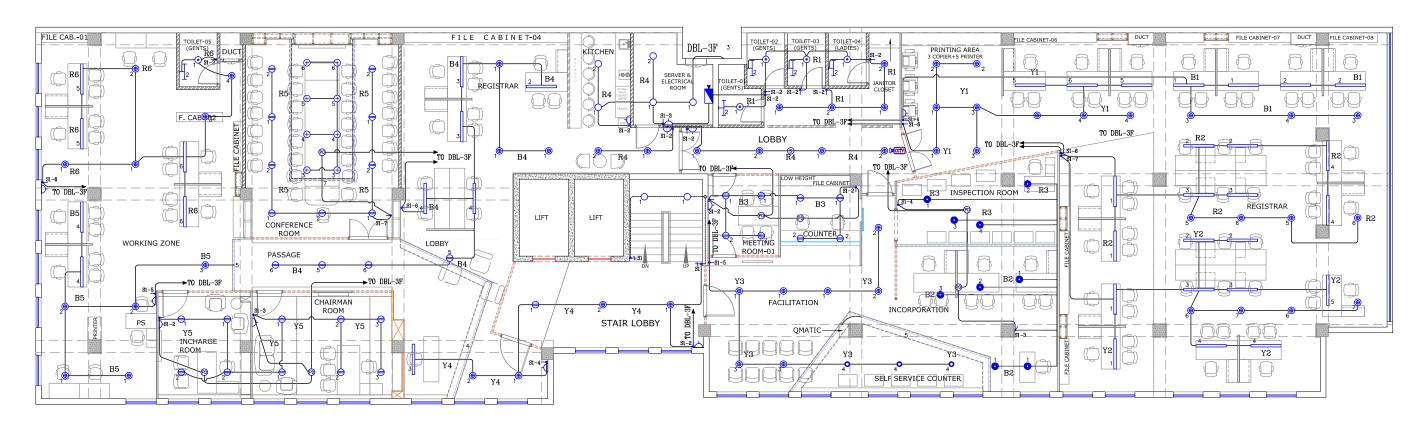


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DRAWING TITLE:

CEILING CO-ORDINATION LAYOUT

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PROJECT:

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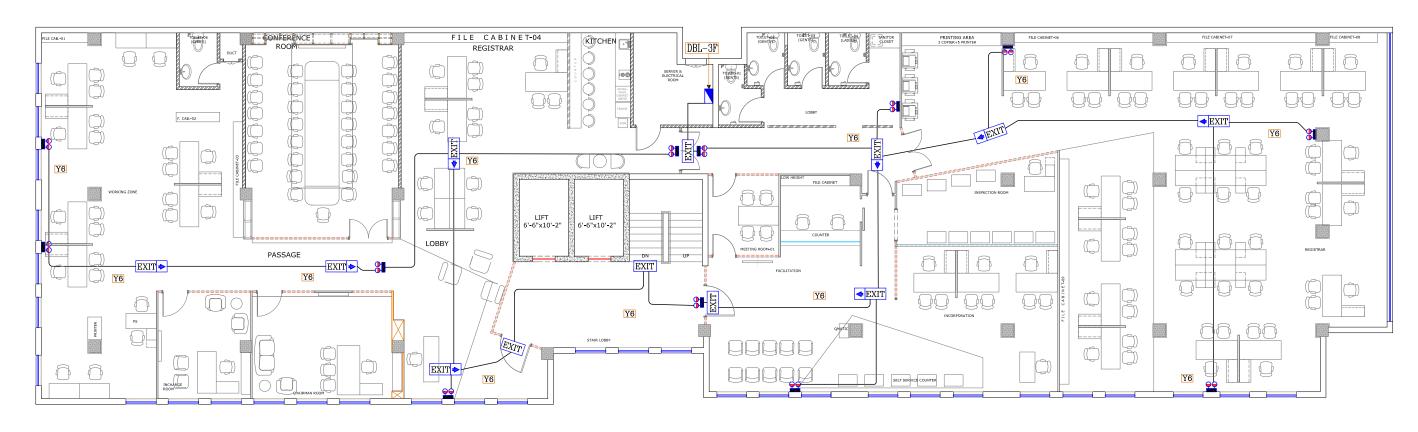




DRAWING TITLE:

ILLUMINATION LAYOUT PLAN

DESIGN	BY:	DRAWI	N BY:	CHECK B	Y:
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	N.T.S		30 May,2020		E-04



PROJECT:

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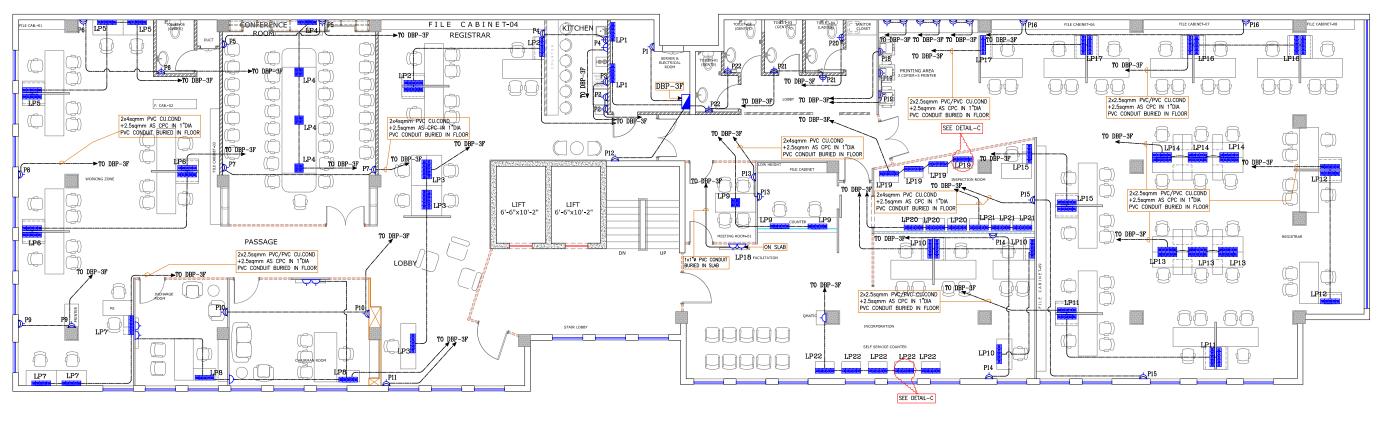
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EMERGENCY & EXIT LIGHT LAYOUT PLAN

DRAWING TITLE:

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SCALE:		DATE:		DWG.NO:	
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PROJECT:

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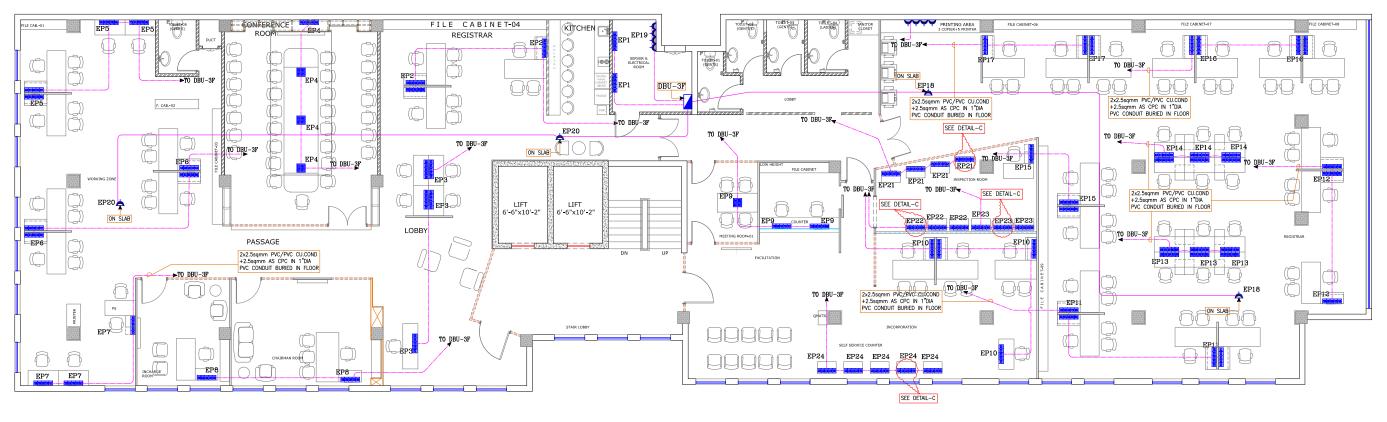




POWER SOCKETS LAYOUT PLAN ON NORMAL SUPPLY

DRAWING TITLE:

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PROJECT:

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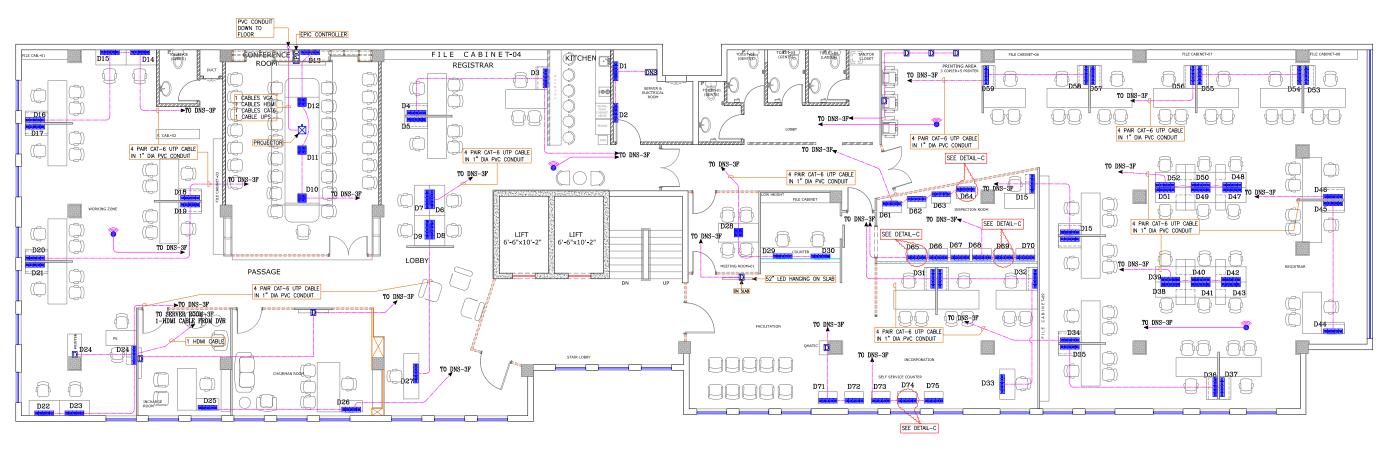
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POWER SOCKETS LAYOUT PLAN ON UPS SUPPLY

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	N.T.S		30 May,2020		E-07



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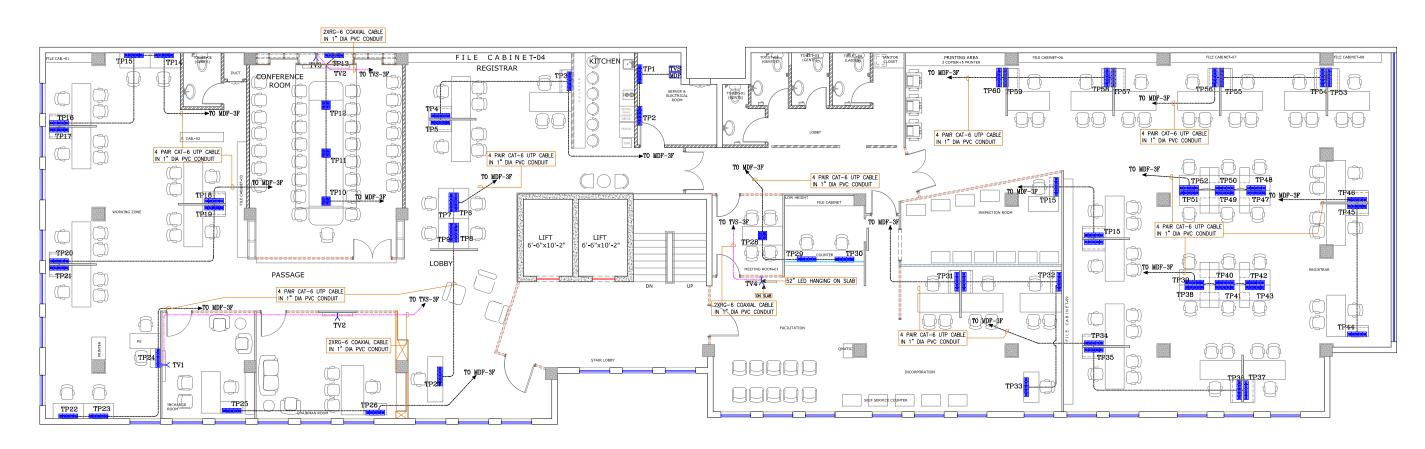
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DRAWING TITLE:

DATA & WIFI SYSTEM LAYOUT



PROJECT:

CRO INTERIOR RENOVATION 3RD & 4TH FLOOR LAHORE

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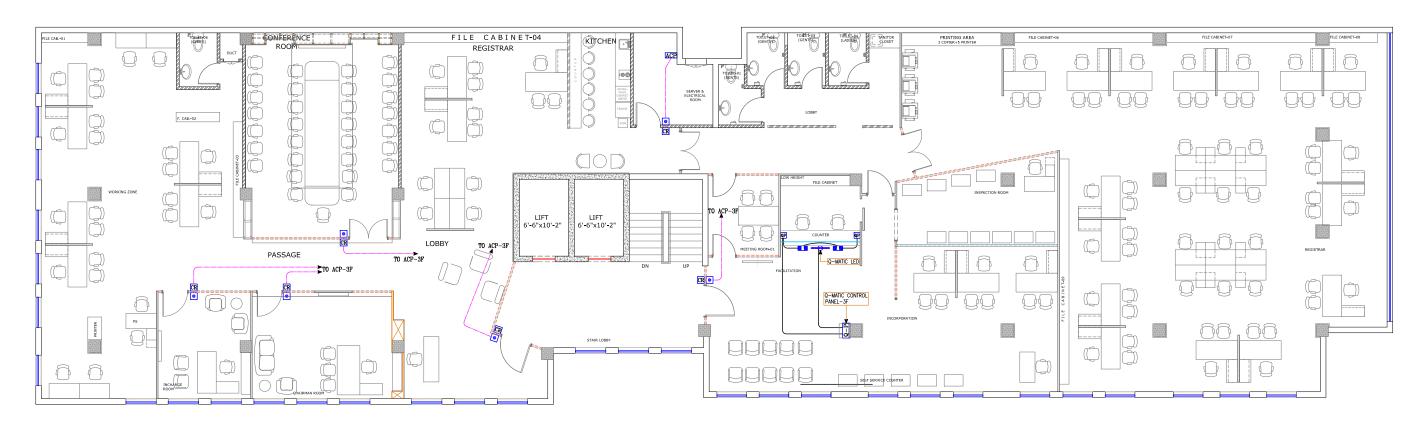


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DRAWING TITLE:

TELEPHON & TV CABLE SYSTEM LAYOUT

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N.T.S		30 May,2020		E-09



PROJECT:

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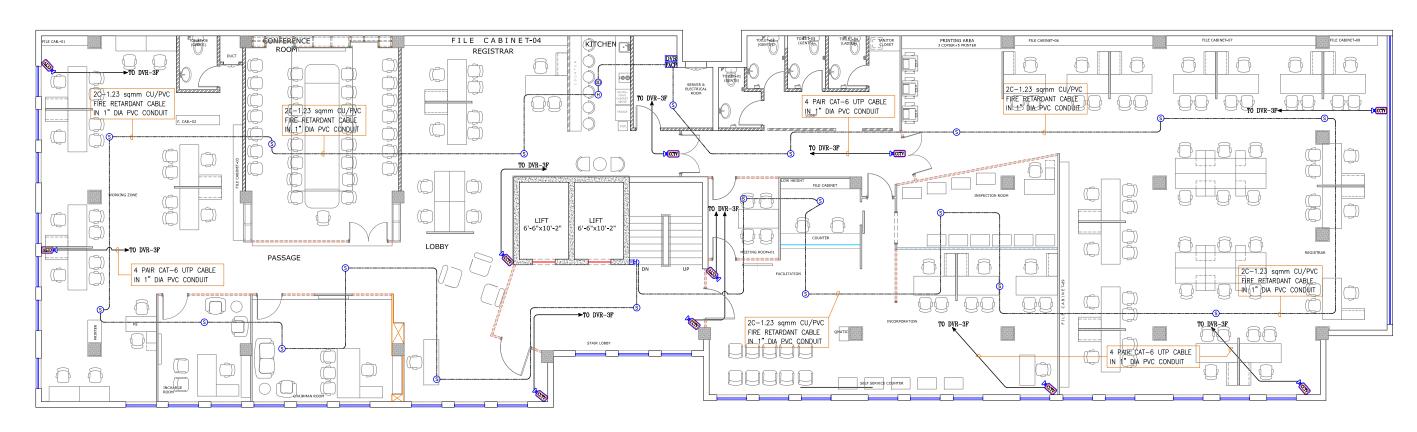
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DRAWING TITLE:

ACCESS CONTROL & Q-MATIC SYSTEM LAYOUT

DESIGN	BY:	DRAW	N BY:	СНЕСК В	Y:
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	N.T.S		30 May,2020		E-10



PROJECT:

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DRAWING TITLE:

FIRE ALARM & CCTV

SYSTEMS LAYOUT



PROJECT:

CRO INTERIOR RENOVATION 3RD & 4TH FLOOR LAHORE

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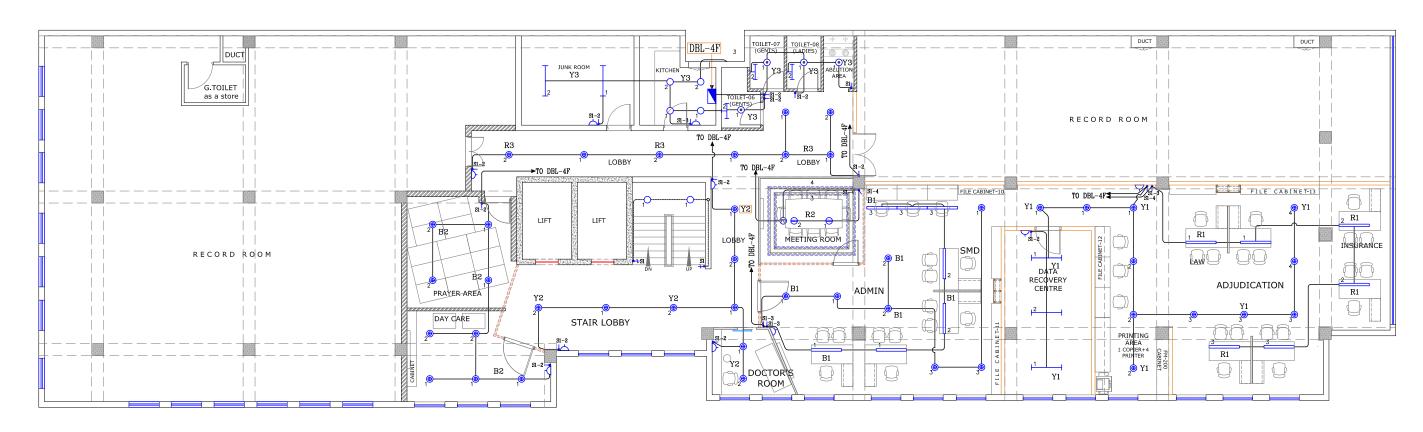


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DRAWING TITLE:

CEILING CO-ORDINATION LAYOUT

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	N.T.S		30 May,2020		E-12



PROJECT:

CRO INTERIOR RENOVATION 3RD & 4TH FLOOR LAHORE

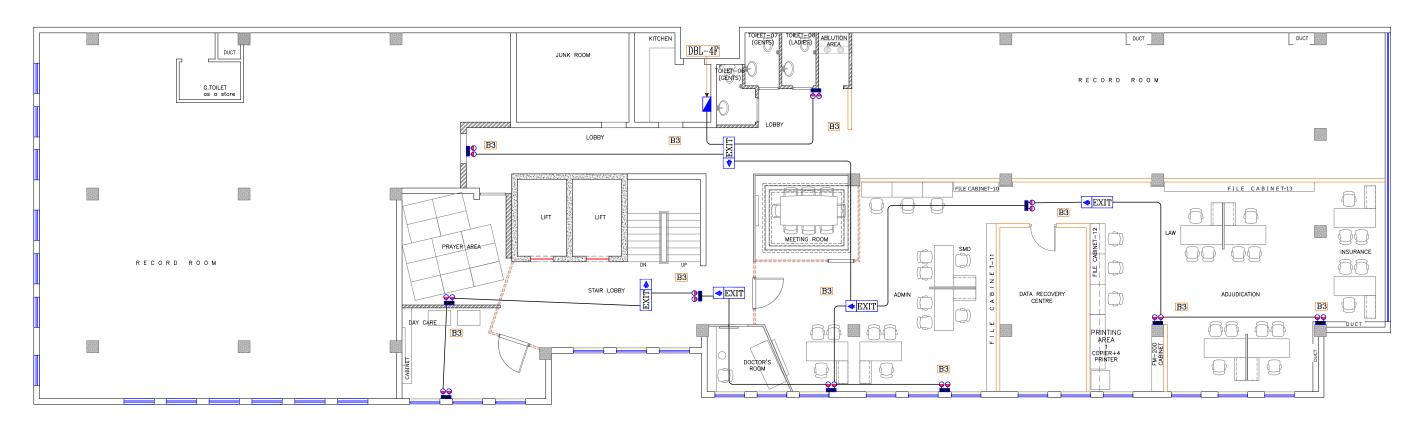
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44thFLOORPLAN

PROJECT:

CRO INTERIOR RENOVATION 3RD & 4TH FLOOR LAHORE

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MEP CONSULTANT:

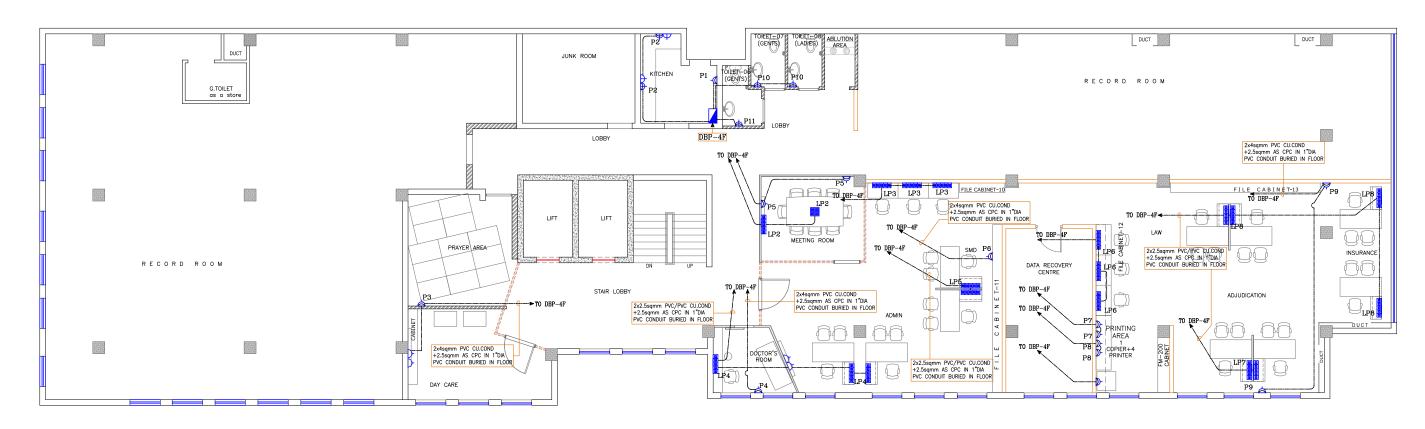
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DRAWING TITLE:

EMERGENCY & EXIT LIGHT LAYOUT PLAN

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N.T.S	30 May,2020	E-14



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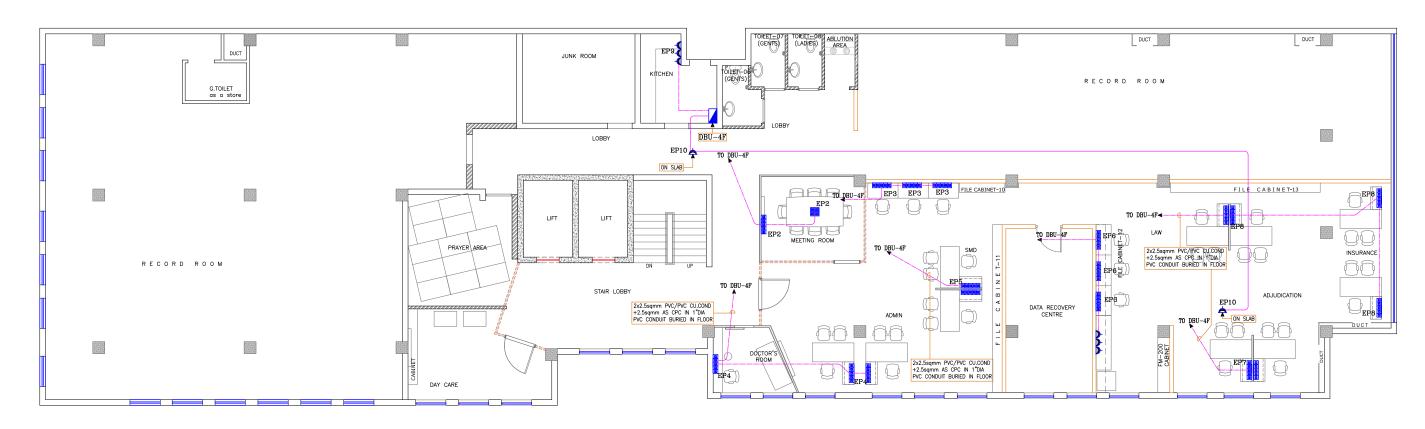
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DRAWING TITLE:

POWER SOCKETS LAYOUT PLAN ON NORMAL SUPPLY

DESIGN BY:	DRAW	N BY:	CHECK BY:	
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SCALE:	DATE:		DWG.NO:	
N.T.S		30 May,2020	E-15	



PROJECT:

CRO INTERIOR RENOVATION 3RD & 4TH FLOOR LAHORE

CONSULTANT:

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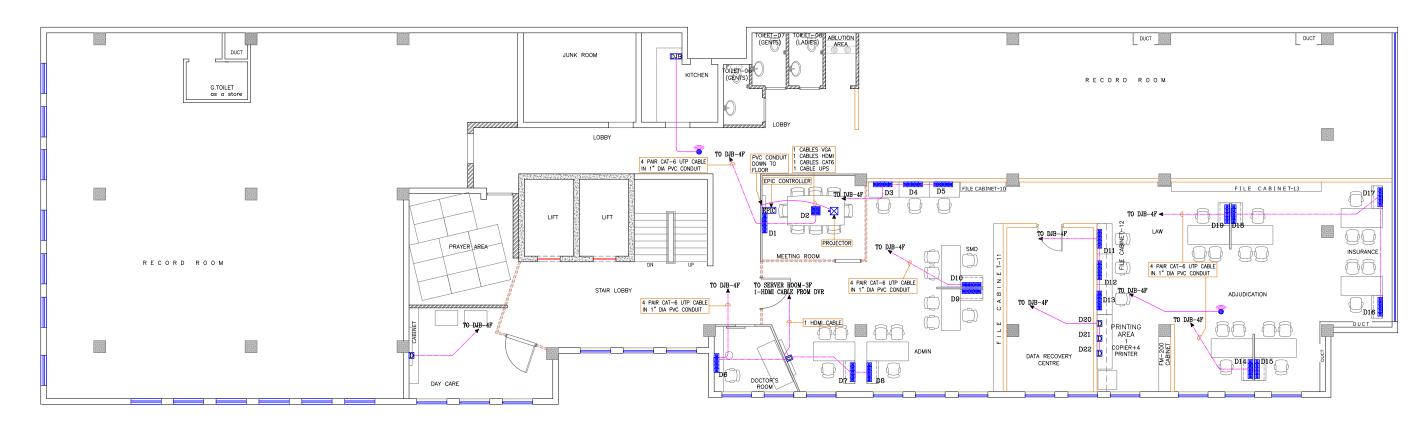
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DRAWING TITLE:

POWER SOCKETS LAYOUT PLAN ON UPS SUPPLY

DESIGN BY:	DRAWN BY:	CHECK BY:
USAMA	M.AKRAM	S.Y.B
SCALE:	DATE:	DWG.NO:
N.T.S	30 May,2020	E-16



PROJECT:

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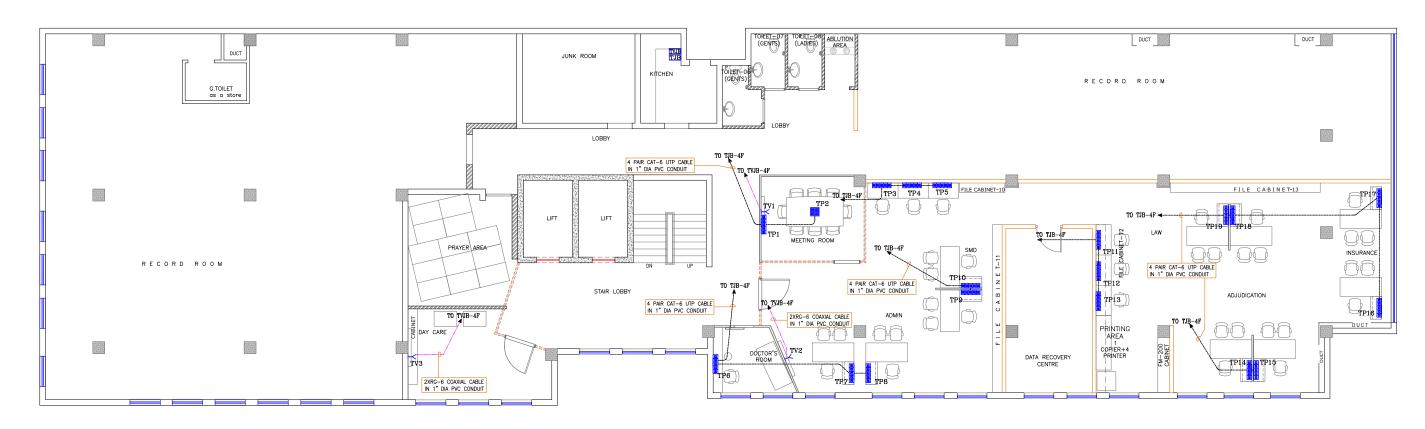


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DRAWING TITLE:

DATA & WIFI SYSTEM LAYOUT



PROJECT:

CRO INTERIOR RENOVATION 3RD & 4TH FLOOR LAHORE

CONSULTANT:

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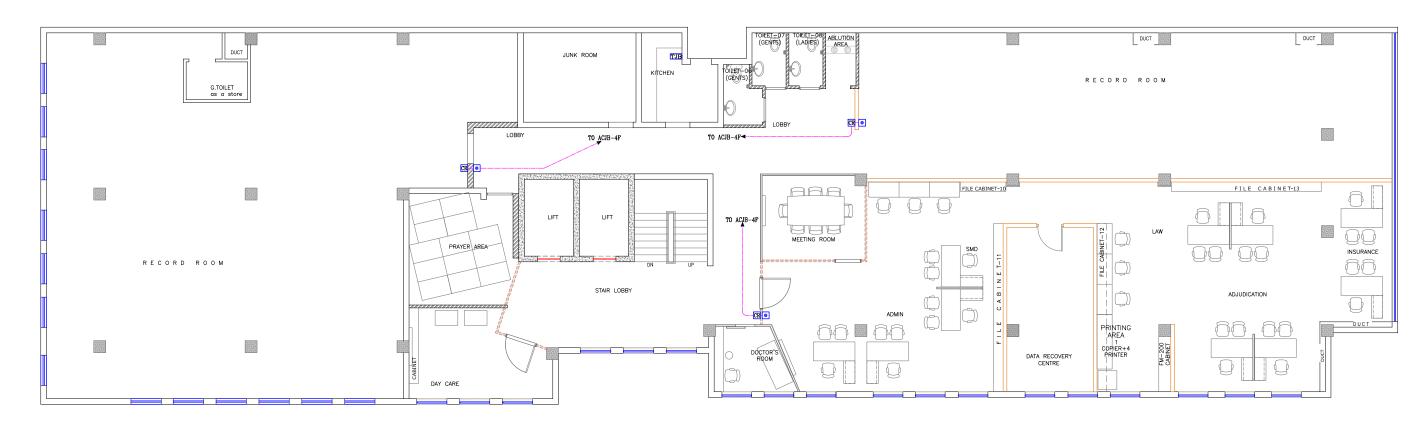


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DRAWING TITLE:

TELEPHON & TV CABLE SYSTEM LAYOUT



PROJECT:

CRO INTERIOR RENOVATION 3RD & 4TH FLOOR LAHORE

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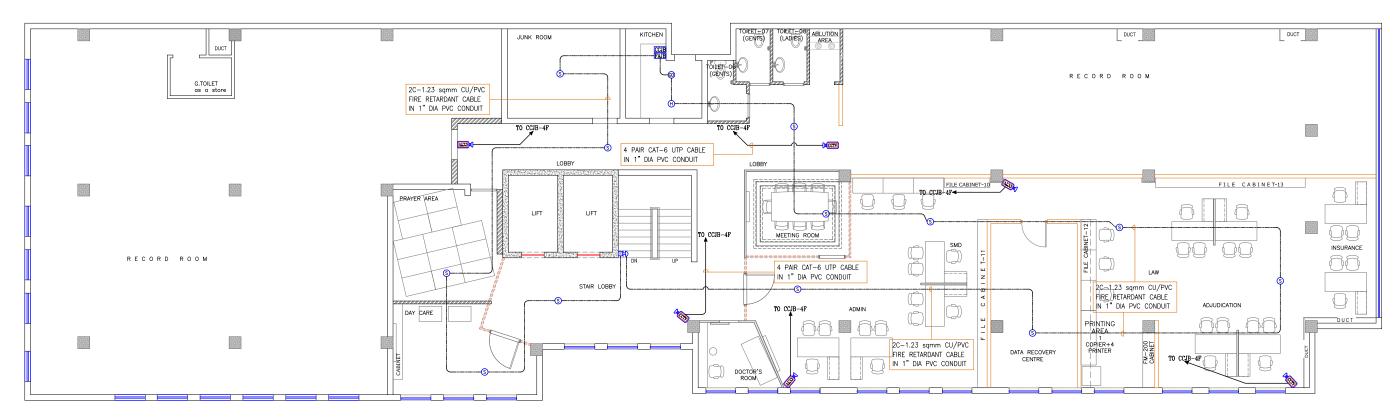
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DRAWING TITLE:

ACCESS CONTROL

SYSTEM LAYOUT



PROJECT:

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DRAWING TITLE:

FIRE ALARM & CCTV SYSTEMS LAYOUT

DESIGN BY:	DRAWN BY:	СНЕСК ВҮ:
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PLUMBING





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PLUMBING SYSTEM GENERAL NOTES

GENERAL NOTES :-

- 1- ALL DIMENSIONS ARE IN INCHES OTHERWISE SPECIFIED.
- 2- IT IS THE CONTRACTOR RESPONSIBILITY AND LIABILITY TO SYSTEMATICALLY, ACCURATELY, AND DILIGENTLY COORDINATE ALL WORKS OF ALL TRADES, AS DEPICTED ON EACH TRADE DRAWING, WITH EACH OTHERS AND WITH ALL PRODUCTS DATA SHEETS BEFORE GENERATING SHOP DRAWINGS FOR FABRICATION, INSTALLATION, PROCUREMENT OF PRODUCTS. AND/OR CONSTRUCTION.
- 3- CONTRACTOR IS RESPONSIBLE FOR CONNECTION OF NEW NETWORK WITH EXISTING LINES IN CO-ORDINATION WITH CLIENT
- 4- ANY NECESSARY ARRANGEMENTS REQUIRED FOR ABOVE MENTIONED WORKS WILL COME UNDER JURISDICTIONS OF MAIN CONTRACTOR.

WATER SUPPLY SYSTEM:

- 1- PROVIDE ISOLATING VALVE OR ANGLE VALVE AT ALL BRANCH PIPES CONNECTION /RISER.
- 2- ALL JOINTS IN PIPE WORK AND JOINTS OF PIPE WORK TO APPLIANCES SHALL BE AIRTIGHT AND WATERTIGHT AND SHALL REMAIN SO DURING USE, CARE SHALL BE TAKEN TO ENSURE THAT NO JOINING MATERIAL PROJECTS INSIDE THE CORE OF THE PIPE. SOME FLEXIBILITY IS DESIRABLE WHERE THERE IS A POSSIBILITY OF MOVEMENT IN A PIPELINE OR BETWEEN THE PIPE AND THE APPLIANCE AND PROVISION SHALL BE MADE IN ASSEMBLY OF SANITARY PIPE WORK TO ACCOMMODATE AND CONTROL THERMAL MOVEMENT.
- 3- ALL PIPE SIZE SHOWN ARE NOMINAL PIPE DIAMETER IN INCHES.
- 4- REFER TO AREA PLANS FOR DETAILED PIPING LAYOUT OF WATER SUPPLY PIPING NETWORK.
- 5 ALL PIPE PENETRATION THROUGH ROOF AND EXTERIOR WALLS SHALL BE FULLY WATERPROOFED.
- 6- EXACT ROUTE AND LOCATION OF EACH PIPELINE SHALL BE DETERMINED IN COORDINATION WITH OTHER TRADES PRIOR TO INSTALLATION.
- 7- PROVIDE UNIONS AT THE FINAL CONNECTION TO EACH PIECE OF EQUIPMENT OR PLUMBING FIXTURE HAVING 2 INCHES AND SMALLER CONNECTIONS.
- 8- PROVIDE FLANGES ON ALL VALVES, APPARATUS AND EQUIPMENT HAVING 2-1/2 INCHES AND LARGER CONNECTIONS.
- 9- PROVIDE PIPE SLEEVE WITH CAULKING FOR ALL PIPES PENETRATING THROUGH CONCRETE STRUCTURES.
- 10- THE CONTRACTOR MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR FIXTURES PRE-INSTALLATION
- 11- ALL MATERIALS TO BE USED SHALL GENERALLY CONFORM TO SASO, AMERICAN OR BRITISH STANDARDS.
- 12- COMPLETED PLUMBING SYSTEM INSTALLATIONS SHALL BE TESTED IN ACCORDANCE WITH ACCEPTED CODES AND STANDARD TESTING PROCEDURE.
- 13- ALL IMPORTANT ITEMS LIKE VALVES, ETC. SHALL HAVE A REPRESENTATIVE SAMPLE & CATALOG TO BE SUBMITTED TO THE CONSULTANT FOR APPROVAL.
- 14- ALL ITEMS TO BE INSTALLED SHALL IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS.
- 15- ALL PLUMBING FIXTURES WILL BE INSTITUTIONAL GRADE, VITREOUS CLAY OR STAINLESS STEEL AS REQUIRED.
- 16- WATER CLOSETS WILL BE FLOOR MOUNTED TYPE WITH A FLUSH RATE OF 1.6 GPF.
- 17- LAVATORIES WILL BE WALL HUNG OR COUNTER TOP TYPE, 1.9 LITERS PER MINUTE MAXIMUM FLOW RATE WITH MANUAL FAUCETS.
- 18- FLOOR DRAINS AND / OR FLOOR SINKS WILL BE FLUSH WITH FINISHED FLOOR, MINIMUM 2 INCHES OUTLET.
- 19- SEISMIC RESTRAINTS WILL BE PER THE REFERENCED BUILDING CODE
- 20- SBC, UPC AND IPC IS TO BE FOLLOWED DURING WORK IN PROGRESS.
- 21- POLYPROPYLYNE PIPES ARE TO BE PROVIDED FOR WATER SUPPLY PIPING

IMPORTANT NOTES :-

- 1- ALL DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INTENDED TO DEMONSTRATE THE INTENT OF THE DESIGN AND SHALL NOT BE USED DIRECTLY FOR FABRICATION AND/OR INSTALLATION. THE CONTRACTOR SHALL USE THE INFORMATION SHOWN AS START POINT TO DEVELOP DETAILED SHOP DRAWINGS NECESSARY FOR FABRICATION & INSTALLATION, THE CONTRACTOR SHALL SUBMIT THESE SHOP DRAWINGS, & CATALOG CUTS FOR CLIENT APPROVAL PRIOR TO PROCUREMENT, FABRICATION AND INSTALLATION.
- 2- THE CONTRACTOR PERFORMING THE PROCESS WILL CONSIDER & CHECK THE LATEST UPDATE OF ARCHITECTURAL, INTERIOR DESIGN, REQUIREMENTS OF MEDICAL GASES INSIDE THE ROOMS & LABS, THE SELECTION OF APPROPRIATE SYSTEMS TO FIGHT THE FIRE INSIDE THE SPECIAL ROOMS IN ACCORDANCE WITH NEPA
- 3- THE COORDINATION BETWEEN ALL TRADES IS THE CONTRACTOR RESPONSIBILITY
- 4- SHOP DRAWING REQUIRED FROM THE CONTRACTOR TO CONSULTANT APROVAL
- 5- WHERE THERE IS CONFLICT BETWEEN ANY LOCAL AUTHORITY REQUIREMENTS AND THE DRAWINGS OR SPECIFICATIONS, REQUIREMENTS OF LOCAL AUTHORITIES SHALL GOVERN.
- 6- IT IS THE CONTRACTOR RESPONSIBILITY AND LIABILITY TO SYSTEMATICALLY, ACCURATELY, AND DILIGENTLY COORDINATE ALL WORKS OF ALL TRADES, AS DEPICTED ON EACH TRADE DRAWING, WITH EACH OTHERS AND WITH ALL PRODUCTS DATA SHEETS BEFORE GENERATING SHOP DRAWINGS FOR FABRICATION, INSTALLATION, PROCUREMENT OF PRODUCTS, AND/OR CONSTRUCTION.
- 7- REFER TO DRAWINGS FOR EQUIPMENTS CAPACITIES & POWER REQUIRED ACCORDING TO DESIGN STAGE ONLY
- 8- CONTRACTOR IS RESPONSIBLE FOR CONNECTION OF MAIN NETWORK WITH EXISTING LINES IN CO-ORDINATION WITH CLIENT
- 9- ANY NECESSARY ARRANGEMENTS REQUIRED FOR ABOVE MENTIONED WORKS WILL COME UNDER JURISDICTIONS OF MAIN CONTRACTOR.

DRAINAGE SYSTEM:

- 1- SANITARY DRAINAGE SYSTEM INSIDE THE BUILDING SHALL BE ONE PIPE SYSTEM FOR BOTH SOIL AND WASTE APPLIANCES.
- 2- SANITARY DRAINAGE PIPING BELOW GRADE WILL BE UPVC CLASS 5 & CLASS 4 FOR ABOVE GRADE WITH RUBBER GASKET.
- 3- ALL WET AREAS SUCH AS TOILETS, JANITORS, KITCHENS, MECHANICAL ROOMS, ...ETC SHALL BE PROVIDED WITH FLOOR DRAINS.
- 4- DRAINAGE AND STORM SYSTEMS WITHIN THE INTERIOR OF THE BUILDING SHALL BE TESTED AND APPROVED BY OWNER IN ACCORDANCE WITH THE PROVISIONS OF THE PLUMBING CODE.
- 5- ALL DRAINS AND SEWER LINES INSIDE BUILDING SHALL BE SLOPED AT MAXIMUM OF 2.0% AND MINIMUM OF 1.0% SLOPE UNLESS OTHERWISE MENTIONED.
- 6- ALL PIPES RUN SHOWN ARE ABOVE FALSE CEILING LEVEL UNLESS OTHERWISE MENTIONED.
- 7- CONNECTION OF HORIZONTAL DRAINAGE LINES WITH OTHER HORIZONTAL DRAINAGE LINES SHALL BE MADE USING 45 DEGREE "Y" BRANCHES, COMBINATION "Y" AND 1/8 BEND BRANCHES OR OTHER APPROVED FITTINGS OF EQUIVALENT SWEEP, UNLESS SPECIFIED OTHERWISE.
- 8- INSTALL PIPING PARALLEL TO BUILDING WALLS AT SUCH HIGHS AS NOT TO OBSTRUCT ANY PORTION OF WINDOWS, DOOR WAYS, STAIR WAYS OR PASSAGE WAYS.
- 9- CONNECTION OF VERTICAL DRAINAGE LINES WITH HORIZONTAL DRAINAGE LINES SHALL BE MADE USING 45 DEGREE BRANCHES OR OTHER APPROVED FITTINGS OF EQUIVALENT SWEEP.60 DEGREE BRANCHES OR OFFSETS MAY BE USED ONLY WHEN INSTALLED IN A TRUE VERTICAL POSITION.
- 10- CHANGES IN DIRECTION OF DRAINAGE PIPING SHALL BE MADE BY THE APPROPRIATE USE OF APPROVED HITTINGS AND SHALL BE OF THE ANGLES PRESENTED BY 1/16 BEND, 1/8 BEND OR 1/6 BEND OR OTHER APPROVED FITTINGS OF FOLINAL FINT SWEEP.
- 11- HORIZONTAL PIPING SHALL BE SUPPORTED AT SUFFICIENTLY CLOSE INTERVALS TO MAINTAIN PIPE ALIGNMENT AND PREVENT SAGGING
- 12- PROVIDE ESCUTCHEONS ON ALL EXPOSED PIPING PASSING THROUGH WALLS, FLOORS, PARTITIONS AND CEILINGS HELD IN PLACE BY INTERNAL SPRING TENSION OR SET SLEEVES.
- 13- RODDING ACCESS TO BE LOCATED ON WALL OF DUCT SHAFDS AND COORDINATED WITH ARCHITECT (TYPICAL TO ALL DIDET SHAFDS)
- 14- TRAP ALL FIXTURES AS REQUIRED BY CODES & STANDARDS
- 15- EXACT ROUTE AND LOCATION OF EACH PIPELINE SHALL BE DETERMINED IN COORDINATION WITH OTHER TRADES PRIOR TO INSTALLATION.
- 16- PROVIDE PIPE SLEEVE WITH CAULKING FOR ALL PIPES PENETRATING THROUGH CONCRETE STRUCTURES.
- 17- THE CONTRACTOR MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR FIXTURES PRE-INSTALLATION.
- 18- UNLESS OTHERWISE SHOWN, ALL PLUMBING MATERIALS SHALL BE AS SPECIFIED.
- 19- DIELECTRIC UNION MUST BE USED WHEN TWO PIPES OF DIFFERENT MATERIAL ARE CONNECTED TOGETHER.
- $\hbox{ 20- ALL MATERIALS TO BE USED SHALL GENERALLY CONFORM TO SASO, AMERICAN OR BRITISH STANDARDS. } \\$
- 21- ALL FIXTURES SHALL BE PROVIDED WITH P OR S TRAP.
- 22- LONG RADIUS BEND SHALL BE USED AT THE FOOT OF VERTICAL SOIL / WASTE STACKS.
- 23- COMPLETED PLUMBING SYSTEM INSTALLATIONS SHALL BE TESTED IN ACCORDANCE WITH ACCEPTED CODES AND STANDARD TESTING PROCEDURE.
- 24- ALL ITEMS TO BE INSTALLED SHALL IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS.

LEGEND:

COLD WATER PIPE (C.W) HOT WATER PIPE (H.W) GATE VALVE CHACK VALVE WASTE WATER PIPE SOIL PIPE VENT PIPE 4"Ø FLOOR DAIN WITH P- TRAP GULLY TRAP MANHOLE GAS GEYSER GAS PIPE BOOSTER PUMP

GREASE TRAP FOR KITCHEN SINK

INDEX

DRG NO	DESCRIPTION	QTY
P-00	PLUMBING INDEX-LEGEND AND GENERAL NOTES	1NO.
P-01	WATER SUPPLY SYSTEM FOR 3RD FLOOR PLAN	1NO.
P-02	DRAINAGE SYSTEM FOR 3RD FLOOR PLAN	1NO.
P-03	WATER SUPPLY SYSTEM FOR 4TH FLOOR PLAN	1NO.
P-02	DRAINAGE SYSTEM FOR 4TH FLOOR PLAN	1NO.
P-03	PLUMBING STANDARD DETAILS	1NO.

PROJECT:

CRO INTERIOR RENOVATION 3RD & 4TH

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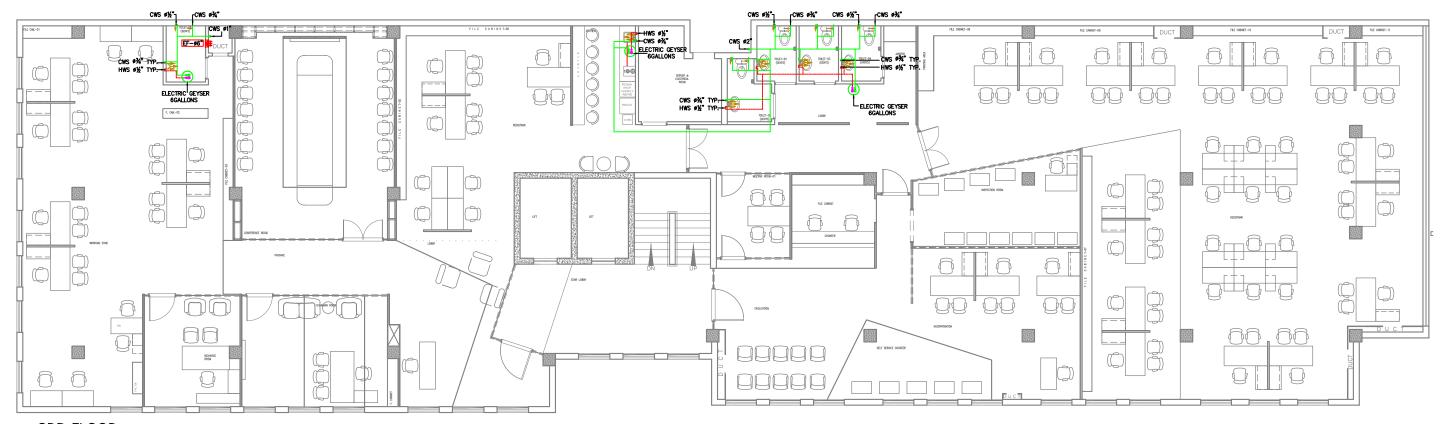




DRAWING TITLE:

PLUMBING INDEX-LEGEND AND GENERAL NOTES

DESIGN BY:	DRAWN BY:	CHECK BY:		
M.B	M. REHMAN	S.Y.B		
SCALE:	DATE:	DWG.NO:		
N.T.S	30 May,2020	P-00		



3RD FLOOR
WATER SUPPLY LAYOUT

PROJECT:

CRO INTERIOR RENOVATION 3RD & 4TH FLOOR LAHORE

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DRAWING TITLE:

WATER SUPPLY SYSTEM LAYOUT 3rd FLOOR PLAN

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	SCALE:	DATE:	DWG.NO:
	N.T.S	30 May,2020	P-01