

KARBALA 600 BED TEACHING UNIVERSITY HOSPITAL IRAQ

ELECTCAL DRAWINGS

PRELIMINARY DESIGN STAGE

FOR BINDING

OWNER :



وزارة التعليم العالي
والبحوث العلمي
جامعة كربلاء

and Scientific Research
Ministry of Higher Education
University of Karbala

PROJECT MANAGEMENT CONSULTANT :



MAIN Contractor :



PRINCIPAL ENGINEERING CONSULTANT :

ARABTECH JARDANEH
engineers & architects
TEL. 00962-6-5857167 FAX 00962-6-5824532

CONSULTING HEALTH PLANNERS :



HDP | healthcare designers
and project managers

CONSULTING INTERNATIONAL ARCHITECTS :



LEO A DALY | PLANNING ARCHITECTURE ENGINEERING INTERIORS

DWG ISSUE DATE:
OCTOBER - 2014

CLOSED-CIRCUIT TELEVISION (CCTV) SYSTEM	
SYMBOL	DESCRIPTION
	CCTV FIXED INDOOR HIGH RESOLUTION DIGITAL COLOR DOME CAMERA (CCD)
	CCTV FIXED INDOOR HIGH RESOLUTION DIGITAL COLOR DOME CAMERA (CCD) IN WEATHER PROOF ENCLOSURE (MIN IP65).
	MAIN CCTV RACK

QUEUE SYSTEM	
SYMBOL	DESCRIPTION
	QMS COUNTER DISPLAY UNIT
	QMS AREA DISPLAY UNIT
	QMS COUNTER STAFF CALLING UNIT
	QMS TICKET DISPENSER
	QUEUE MANAGEMENT SYSTEM CONTROLLER
	QMS RECESSED CEILING SPEAKER (6W)

TEL. & DATA SYSTEM	
SYMBOL	DESCRIPTION
	(RJ - 45) DATA OUTLET INCLUDING CAT6, 4P, 5FT CABLE, WALL/COUNTER MOUNTED
	(RJ - 45) VOICE OUTLET INCLUDING CAT6, 4P, UTP CABLE, WALL/COUNTER MOUNTED
	(RJ - 45) DATA OUTLET INCLUDING CAT6, 4P, UTP CABLE FOR CAMERA
	x NOS OF (RJ - 45) DATA OUTLET INCLUDING CAT6, 4P, 5FT CABLE, INCORPORATED IN BED HEAD UNIT
	WIRELESS ACCESS POINT RECESSED IN FALSE CEILING COMPLETE WITH (RJ - 45) DATA POINT INCLUDING CAT6, 4P, UTP CABLE
	MAIN DISTRIBUTION FRAME-TELEPHONE SYSTEM
	PRIVATE AUTOMATIC BRANCH EXCHANGE
	TELEDOM MANHOLE (80x80x100)cm
	IT CABINET
	3 NO. COMPARTMENT GALVANIZED IRON TRUNKING INSTALLED ABOVE FALSE CEILING (CABLE BASKET TO BE USED FOR SHAPTS), FOR LOW CURRENT SYSTEMS, WITH SUN SHADE COVER FOR ROOF INSTALLATIONS
	PERFORATED GALVANIZED LOW CURRENT CABLE TRAY INSTALLED ABOVE FALSE CEILING
	EMPTY BOX (7X14)CM WITH 38" EMPTY PVC CONDUIT (THE CONDUIT IS BETWEEN INTRA ORAL DEVICE AND PC WORK STATION IN DENTAL CLINICS) FOR VGA CONNECTION

SECURITY SYSTEM	
SYMBOL	DESCRIPTION
	ACS ELECTROMAGNETIC LOCK
	ACS REQUEST TO EXIT
	ACS BREAK GLASS (TO BE ACTIVATED IN CASE OF EMERGENCIES)
	ACS PROXIMITY CARD READER
	ACS INTELLIGENT NET WORK CONTROLLER
	ACS DOOR MAGNETIC CONTACT
	ACS DOOR JUNCTION BOX
	MAIN ACCESS CONTROL SYSTEM RACK

CLOCK SYSTEM	
SYMBOL	DESCRIPTION
	MASTER CLOCK PANEL
	SLAVE CLOCK WALL MOUNTED CONNECTED TO MASTER CLOCK SYSTEM

INFANT PROTECTION SYSTEM	
SYMBOL	DESCRIPTION
	EXCITER
	LOCAL AREA RECEIVER (RADIO FREQUENCY RECEPTION DEVICE), INSTALLED IN CEILING
	PC CONTROLLER WITH INFANT PROTECTION SYSTEM
	INFANT AND MOTHER TAGS (RADIO TRANSMITTER)

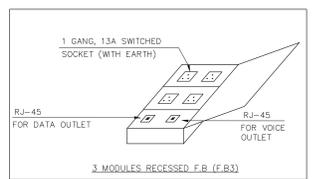
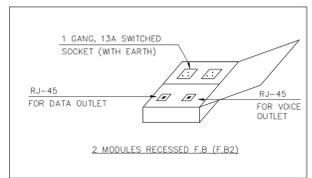
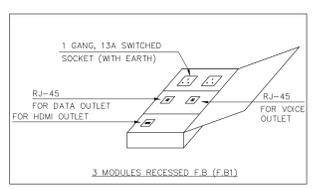
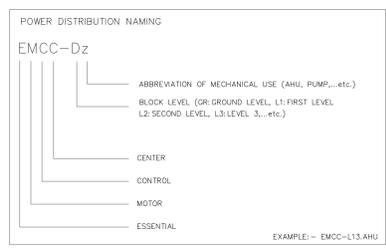
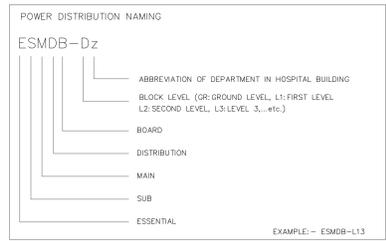
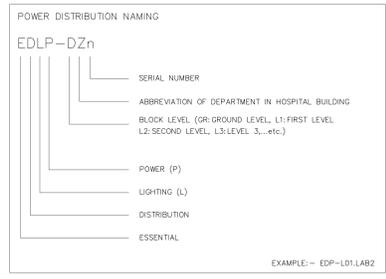
AIR LOCK ACCESS SYSTEM	
SYMBOL	DESCRIPTION
	ALS ELECTROMAGNETIC LOCK
	ALS LED INDICATOR
	ALS BREAK GLASS (TO BE ACTIVATED IN CASE OF EMERGENCIES)
	ALS PUSH BUTTON SET
	ALS CONTROLLER

EMERGENCY ALARM SYSTEM-PANIC ALARM	
SYMBOL	DESCRIPTION
	EMERGENCY ALARM CONTROL PANEL-PANIC ALARM
	PANIC ALARM HOLD-UP ALARM SWITCH
	BURGALAR ALARM SOUNDER WITH BLUE STROBE
	BURGALAR ALARM MOTION DETECTOR

MULTIMEDIA SYSTEM	
SYMBOL	DESCRIPTION
	MOTORIZED SCREEN
	SCREEN SWITCH
	GI BOX (7X7)cm FOR HDMI OUTLET COMPLETE WITH ALL NECESSARY ACCESSORIES & CONNECTIONS
	VIDEO PROJECTOR WITH ELECTRIC CEILING LIFT
	MULTIMEDIA RACK
	HAND HELD WIRELESS RADIO MICROPHONE
	RECESSED CEILING LOUD SPEAKER (10W)
	RECESSED CEILING LOUD SPEAKER (60W)

NURSE CALL & CODE BLUE SYSTEM	
SYMBOL	DESCRIPTION
	NURSE CALL CONTROL PANEL
	NURSE CALL INDICATOR LIGHT, CEILING/WALL MOUNTED
	STAFF/STAFF EMERGENCY CALL WITH RESET AND REASSURANCE LIGHT, WALL OR BED HEAD UNIT MOUNTED
	NURSE CALL WITHIN BED HEAD UNIT (BHU) COMPRISING OF PATIENT HANDSET FOR PATIENT/NURSE CALL, WITH RESET PUSH BUTTON, TWO WAY COMMUNICATION, REASSURANCE LIGHT, TV VOLUME & CHANNELS CONTROL AND BHU LIGHTS CONTROL
	PATIENT PULL CORD UNIT WITH WALL MOUNTED RESET UNIT AND REASSURANCE LIGHT
	INTERFACE UNIT CONTROLLER FOR NURSE CALL SYSTEM, FIXED ABOVE FALSE CEILING
	NURSE CALL REPEATER PANEL
	CODE BLUE PUSH BUTTON
	CODE BLUE DOUBLE FACE DIGITAL INDICATOR (MIN 15 x 20 CM) WITH ELECTRONIC ALARM SOUND
	NURSE CALL INTELLIGENT MANAGEMENT SYSTEM RACK

SMATV SYSTEM	
SYMBOL	DESCRIPTION
	SMATV SOCKET OUTLET (75 OHM)
	SMATV HEAD END EQUIPMENT
	SMATV SYSTEM TAP-OFF BOX (TWO TO EIGHT WAY AS PER DRAWING) ABOVE FALSE CEILING
	SMATV SYSTEM SIGNAL SPLITTER 1:2
	SMATV SYSTEM SIGNAL SPLITTER 1:3
	SMATV SYSTEM SIGNAL SPLITTER 1:4
	SMATV SYSTEM SIGNAL SPLITTER 1:6
	SMATV SYSTEM SIGNAL SPLITTER 1:8
	SMATV DISTRIBUTION AMPLIFIER
	SATELLITE



ABBREVIATION	DESCRIPTION
A.F.C	ABOVE FALSE CEILING
LL	LOW LEVEL
HL	HIGH LEVEL
REFR	REFRIGERATOR
P.F/PFC	POWER FACTOR CORRECTION
PVC	POLY VINYL CHLORIDE
GI	GALVANIZED IRON
NO	NORMALLY OPEN
NC	NORMALLY CLOSE
LV	LOW VOLTAGE PANEL
E	ESSENTIAL
BC	BUS COUPLER
FO	FIBER OPTIC CABLE
PP	PATCH PANEL
SP	SINGLE POLE
TP	THREE POLE
WC	WALL CONSOLE
SC	SERVICE COLUMN
BBT	BUS BAR TRUNKING
DJB/DI	DOOR JUNCTION BOX/DOOR INTERFACE
ACS	ACCESS CONTROL SYSTEM
CCTV	CLOSED CIRCUIT TV
GS	GRID SWITCH
DVR	DIGITAL VIDEO RECORDER
AMP	AMPLIFIER
TEAB	TELEPHONE TECHNOLOGY CABINET
TEL	TELEPHONE
L	LENGTH
DISP	DISPENSER
TV	TELEVISION
WP	WEATHERPROOF
IP	INGRESS PROTECTION

ABBREVIATION	DESCRIPTION
SEC	CAESARIAN SECTION THEATERS
REC	RESEARCH CENTER
RCU	RESPIRATORY CORE CENTER
ICU	INTENSIVE CARE UNIT
CCU	CORONARY CARE UNIT
CAL	CATHETERIZATION LABORATORY
E.S.	ELECTIVE SURGERY
OR	OPERATION ROOM
ORS	OPERATION ROOM SEPTIC
TW	TYPICAL WARD
SIR	SERVICE
GW	GNECOLOGY WARD
IVF	FERTILIZATION IN VITRO
IND	INFECTIOUS DISEASES
TEM	TEACHING MODULE
PEW	PEDIATRIC WARD
PICU	PEDIATRICS INTENSIVE CARE UNIT
OBW	OBSTETRICS WARD
NDU	NEONATAL INTENSIVE CARE UNIT
DEL	DELIVERY
EMG	ELECTROMYOGRAM
DEN	DENTAL
DIA	DIALYSIS
BUR	BURNS
HOK	HOUSE KEEPING
CON	CONFERENCE
OPH	OUT PATIENT PHARMACY
BLD	BLOOD DONATION
MST	MAIN STORE
MLJ	MEDICAL LIBRARY
AUD	AUDITORIUM
DCU	DAY CARE UNIT
SRV	SERVER
ADM	ADMIN
OPHT	OPHTHALMOLOGY
GIN	GNECOLOGY
PHYS	PHYSIOTHERAPY
IPP	IN PATIENT PHARMACY
KIT	KITCHEN
LAU	LAUNDRY
ME	MEDICAL IMAGING
OPH	OUT PATIENT PHARMACY
BLD	BLOOD DONATION
MER	MEDICAL RECORD
OPD	OUT PATIENT DEPARTMENT
MOR	MORTUARY
OBM	OBSERVATION HALL
OSF	OBSERVATION FEASLE
TRE	TREATMENT
REC	RECOVERY

- GENERAL NOTES
- 1.1 THE FOLLOWING NOTES SHALL APPLY TO ALL THE ELECTRICAL DRAWINGS UNLESS OTHERWISE INDICATED OR NOTED.
 - 1.2 DO NOT SCALE FROM THE LAYOUT DWGS. WORK ACCORDING TO ARCHITECTURAL AND ELECTRICAL DETAILS, UNLESS OTHERWISE INDICATED.
 - 1.3 THE ELECTRICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE REST OF THE DRAWINGS PERTAINING TO ARCHITECTURE, STRUCTURE, AIRCONDITIONING, PLUMBING, ID, MEDICAL DRAWINGS AND THE SPECIFICATIONS AS APPLICABLE.
 - 1.4 ALL UTILITY CONNECTIONS SHALL BE COORDINATED WITH THE LOCAL AUTHORITY , CLIENT AND ENGINEER

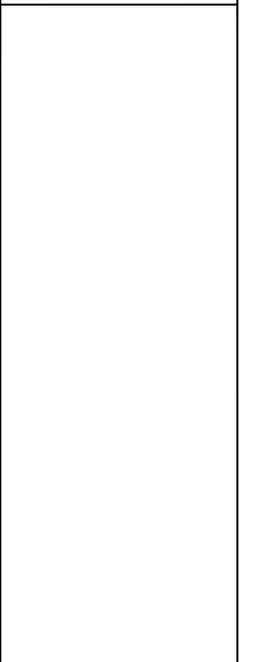
- 2.1 UNLESS OTHERWISE INDICATED ALL CONDUITS SHOWN ON DRAWINGS SHALL BE RIGID NON-METALIC PVC. CONDUITS.
- 2.2 ALL CONDUITS SHOWN ABOVE FALSE CEILING SHALL BE CONCEALED WHEN RUN IN WALLS BELOW FALSE CEILING.
- 2.3 ALL EXPOSED CONDUITS SHALL BE RIGID GALVANIZED STEEL.
- 2.4 LIGHTING OUTLETS SHALL BE EXPOSED ON CONCEALED IN ACCORDANCE TO ASSOCIATED CONDUITS, UNLESS OTHERWISE DIRECTED.
- 2.5 INCANDESCENT LAMP HOLDERS SHALL BE OF THE SREW TYPE UNLESS OTHERWISE INDICATED.
- 2.6 PENDANT LIGHTING OUTLETS SHALL CONSIST OF A PLUG IN TYPE CEILING ROSE, HEAT RESISTANT FLEXIBLE CORD, A SCREW TYPE LAMP HOLDER AND A 100W INCANDESCENT FROSTED LAMP MOUNTED AT H=230cm FROM F.F.L. UNLESS OTHERWISE INDICATED.
- 2.7 SHAPE AND DIMENSION OF SYMPOULSED FLUORESCENT OR INCANDESCENT LIGHTING FIXTURES DO NOT NECESSARILY REPRESENT SHAPE AND DIMENSION OF ACTUAL FIXTURES INTENDED FOR THIS PURPOSE, FOR EXACT DIMENSIONS REFER TO RELEVANT FIXTURE CATALOGUES CUT SHEETS
- 2.8 OUTLET BOX FOR FALSE CEILING MOUNTED LIGHTING FIXTURE SHALL BE POSITIONED SUCH THAT IT SHALL NOT BE OBSTRUCTED BY A/C DUCTS, PIPES, ETC. FOR THIS PURPOSE CONTRACTOR SHALL CO-ORDINATE WITH THE A/C AND PLUMBING CONTRACTOR PRIOR TO INSTALLATION.
- 2.9 LIGHTING FIXTURE MOUNTED IN FALSE CEILING SHALL BE FED THROUGH HEAT RESISTANT WIRES IN FLEXIBLE PVC CONDUITS CONNECTED TO THE LIGHTING OUTLET BOX WITH PROPER ADAPTORS.
- 2.10 LIGHTING FIXTURES IN THE SAME AREA ARE OF THE SAME TYPE UNLESS OTHERWISE INDICATED.
- 2.11 WALL LIGHTING OUTLETS IN GENERAL SERVICE AREAS SHALL BE INSTALLED AT H=220cm OR AS DIRECTED BY ENGINEER ON SITE.

- 3.1 ALL SWITCHES SHALL BE MOUNTED AT 1250mm ABOVE FINISHED FLOOR LEVEL UNLESS OTHERWISE STATED.
- 3.2 LIGHTING SWITCHES NEAR DOORS SHALL BE INSTALLED AT 15cm FROM ARCHITRAVE (MEASURED FROM THE EDGE OF THE SWITCH).
- 3.3 SOCKET OUTLETS SHALL BE LOCATED AT H=30cm ABOVE FINISHED FLOOR LEVEL UNLESS OTHERWISE INDICATED OR DIRECTED BY ENGINEER ON SITE.
- 3.4 FLEX OUTLETS SHALL BE LOCATED NEAR TO THE EQUIPMENT THEY SERVE BUT SUCH THAT THEIR DEVICE BOXES REMAIN ACCESSIBLE AND NOT OBSTRUCTED BY THE EQUIPMENT THEY SERVE.
- 3.5 TELEPHONE OUTLETS SHALL BE LOCATED AT H=30cm ABOVE FINISHED FLOOR LEVEL UNLESS OTHERWISE INDICATED OR DIRECTED BY ENGINEER ON SITE.

- 4.1 THE MINIMUM CONDUIT SIZE USED SHALL BE 20mm EXCEPT FOR COMMUNICATION AND SECURITY SYSTEM WHERE IT SHOULD BE 25mm MINIMUM.
- 4.2 CONTRACTOR SHALL PROVIDE THE REQUIRED CONDUIT SIZE WHEREVER NOT INDICATED FOR THE EASE OF PULLING OF CABLES.
- 4.3 ALL CIRCUIT BREAKERS SHOWN ON DRAWINGS OF RATING LESS THAN OR EQUAL TO 100AMPS SHALL HAVE FRAME SIZE EQUAL TO 100AMPS.
- 4.4 ALL CIRCUIT PROTECTIVE DEVICES SHALL BE COMPENSATED FOR 40%.
- 4.5 FOR GROUP SWITCHING AND WHERE SWITCH BOXES CONTAIN MORE THAN ONE PHASE, APPROVED PHASE BARRIER SWITCH BOXES WITH A LABEL SHOWING THAT (400V) EXISTING IN THAT BOX SHALL BE USED.
- 4.6 ALL DISTRIBUTION BOARDS FEEDING MECHANICAL EQUIPMENT SHALL BE CO-ORDINATED AT SITE WITH THE RATINGS OF APPROVED MECHANICAL EQUIPMENT, REVISIONS (IF NEEDED) SHALL BE DONE WITH NO EXTRA COST.
- 4.7 ALL OPENINGS, SLEEVES AND SHAPTS IN FLOORS USED FOR POWER & LOW CURRENT CABLES SHALL BE SEALED WITH FIRE RESISTANT MATERIAL OR CHECKERED PLATE TO THE APPROVAL OF AUTHORITIES / ENGINEER.
- 4.8 ALL BREAKERS PROTECTING MOTORS SHALL BE MOTOR PROTECTION TYPE.
- 4.9 CONTRACTOR SHALL PROVIDE EMPTY CONDUITS OF PROPER SIZE FOR CONTROL WIRES SERVING ALL MECHANICAL EQUIPMENT, A/C UNITS, A/H UNITS, ETC. FULLY CO-ORDINATED WITH MECHANICAL SERVICES REQUIREMENTS.
- 4.10 FACADE LIGHTING IS (WHERE APPLICABLE) SUBJECT TO ARCHITECTS APPROVAL.
- 4.11 ALL OUTLETS, SWITCHES, BOXES, ISOLATORS, FITTINGS, IN WET AREA SHALL BE WEATHER PROOF
- 4.12 ALL EQUIPMENT/PANELS AND THEIR RESPECTIVE ISOLATORS SHALL BE COORDINATED WITH ALL OTHER TRADES, VENDORS AND ENGINEER APPROVAL
- 4.13 PROVIDE 400X400MM FALSE CEILING ACCESS PANEL FOR EACH DOOR JUNCTION BOX AND CAMERA FOR FUTURE MAINTENANCE SHOP DRAWINGS FOR APPROVAL.
- 4.14 LOCATION OF ELECTRICAL AND LOW CURRENT OUTLETS AS SHOWN ARE DIAGRAMMATIC, EXACT LOCATION OF OUTLETS SHOULD BE FULLY COORDINATED WITH FURNITURE EQUIPMENT AND ALL OTHER SERVICES CONTRACTOR TO SUBMIT COMPLETE COORDINATED SHOP DRAWINGS FOR APPROVAL.
- 4.15 THE SIZE OF ALL CABLE TRAY TO BE CALCULATED AND COORDINATION WITH ALL OTHER TRADE AND SUBMITTED TO THE ENGINEER FOR APPROVAL, THE RESERVE SPARE CAPACITY SHALL NOT LESS THAN 25%
- 4.16 THE CONTRACTOR SHALL PROVIDE FINAL CAPACITY OF IT RACK INCLUDING NUMBERS OF PATCH PANELS AND EQUIPMENTS TO ENGINEER'S FOR APPROVAL.

- 5.1 FOR CIRCUITS CROSSING STRUCTURAL EXPANSION JOINTS, THE ELECTRICAL CONTRACTOR SHALL PROVIDE ADEQUATE ALLOWANCE FOR BUILDING DISPLACEMENTS.
- 5.2 LOCATIONS FOR ELECTRICAL DISTRIBUTION BOARDS AND BUSBAR RISERS SHOWN IN ELECTRICAL RISERS AND PLANS ARE INDICATIVE ONLY ELECTRICAL CONTRACTOR TO VERIFY ON SITE AND PROPOSE THEIR ACTUAL LOCATION ON THE SHOP DRAWINGS FOR APPROVAL.
- 5.3 THE ELECTRICAL CONTRACTOR SHALL NOTE THAT POSITIONS OF ELECTRICAL POINTS ARE INDICATIVE AND APPROXIMATE AS SHOWN ON DRAWINGS, THE ACTUAL POSITIONS SHALL BE BASED ON THE ARCHITECT'S PLANS, MEDICAL PLANS, 1:20 LOADED DRAWINGS, KITCHEN AND LAUNDRY DRAWINGS, THE CONTRACTOR IS DEEMED TO HAVE ALLOWED IN HIS TENDER PRICE FOR ALL NECESSARY SITE ADJUSTMENT TO SUITE THE FINAL POSITIONS.
- 5.4 THE ELECTRICAL CONTRACTOR SHALL SUBMIT ALL DETAILED COORDINATED CABLE/CONDUIT/TRAY/TRUNKING ROUTE PLANS AND SECTIONS DRAWINGS, ...ETC WITH ALL OTHER SERVICES TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING WORK ON SITE. CABLE TRAYS WHERE SHOWN ON THE DRAWINGS ARE INDICATIVE ONLY TO SHOW PROPOSED MAIN CABLE ROUTING.
- 5.5 LIGHTNING PROTECTION SYSTEM SHALL BE EARLY STREAMER EMISSION LIGHTNING ARRESTOR (ESE) COMPLY WITH LATEST CODE.
- 5.6 THE POSITION OF THE EARTH ELECTRODES FOR LIGHTNING PROTECTION SYSTEM WHERE SHOWN ARE APPROXIMATELY ONLY, THE EXACT LOCATION ON SITE SHALL BE DETERMINED SUCH THAT THE SPECIFIED REQUIREMENTS FOR EARTHING SYSTEM ARE MET.
- 5.7 THE SCHEMATIC DIAGRAM SHOWN FOR LOW CURRENT SYSTEM ARE INDICATIVE, CONTRACTOR TO PROPOSE COMPLETE SCHEMATIC DIAGRAM FOR ALL LOW CURRENT SYSTEMS IN LINE WITH SYSTEM MANUFACTURERS REQUIREMENT AND ENGINEER APPROVAL
- 5.8 THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL JUNCTION BOX, PULL BOX AS REQUIRED
- 5.9 THE CONTRACTOR SHALL SUBMIT COMPLETE COORDINATED SHOP DRAWINGS(LOCATION , SIZE , ROUTE OF CONDUITS, CABLES, CABLE TRAY PENETRATIONS, CONNECTION) FOR APPROVAL PRIOR TO COMMENCEMENT OF THE INSTALLATION
- 5.10 THE CONTRACTOR SHALL MAKE THE SELECTION OF MCCB'S BASED ON THE APPROVED VENDORS DATA, SHORT CIRCUIT. IF THE EQUIPMENT FEEDING CABLES LENGTH IS CHANGED THE CONTRACTOR SHOULD PREPARE THE FINAL CABLE SIZING BASED ON THE ACTUAL LENGTH, VOLTAGE DROP REQUIREMENTS, AND ACCORDING TO ENGINEER'S APPROVAL
- 5.11 THE CONTRACTOR SHALL PROVIDE LOAD SHEDDING PRIORITY AND ACCORDING TO ENGINEER'S APPROVAL
- 5.12 FOR SPECIFIC LOCATION OF MEP FIXTURES, REFER TO ARCHITECTURAL COORDINATED CEILING PLANS
- 5.13 ALL SOCKET OUTLET CONNECTED TO UPS ESSENTIAL POWER SUPPLY WILL BE ENGRAVED WITH "UPS"
- 5.14 THE RESISTANCE TO EARTH OF ELECTRICAL AND TELECOM PITS SHOULD NOT EXCEED CODE OF PRACTICE LEVEL IN THE REGION/COUNTRY (2 OHM IN THIS CASE FOR IRAQ).
- 5.15 THE PERIODIC INSPECTIONS AND TESTS HAVE TO BE REPEATED AT FIXED INTERVALS, AS MENTIONED IN THE BS EN 62305-PART III
- 5.16 ALL INSTALLATION DETAILS SHALL BE AGREED WITH THE ENGINEER PRIOR TO COMMENCEMENT OF WORK

General Notes :



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FISCAL ENGINEERING CONSULTANT:

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CONSULTING HEALTH PLANNERS:

HDP healthcare designers and project managers

CONSULTING INTERNATIONAL ARCHITECTS:

LEO A DALY PLANNING ARCHITECTURE ENGINEERING INTERIORS

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REV.	DESCRIPTION	APPRO. BY	DATE

DRAWN BY: E.D DESIGNED BY: A.D
 CHECKED BY: M.MH APPROVED BY: F.J
 QC REVIEW BY: B.M (DWG ISSUE DATE: 26.10.2014)

PROJECT:

KARBALA 600 BED TEACHING UNIVERSITY HOSPITAL, IRAQ

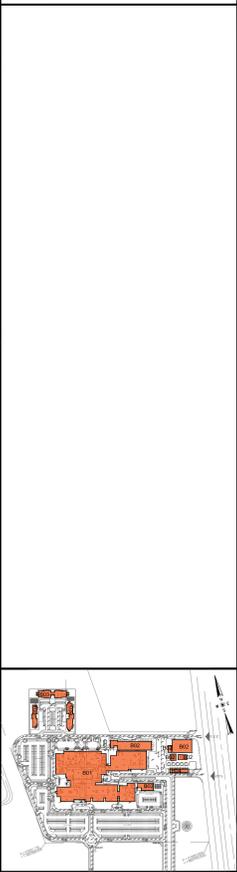
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 DESIGN DEVELOPMENT STAGE CONSTRUCTION DRAWINGS STAGE

DRAWING TITLE:

ELECTRICAL LEGEND PART 2

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Consulting Engineering & Construction
C.B.C

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DRAWN BY: E.D. DESIGNED BY: A.D.
CHECKED BY: M.M.H. APPROVED BY: F.J.
QC REVIEW BY: DWG ISSUE DATE: 26.10.2014

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UNIVERSITY HOSPITAL, IRAQ**

CONCEPT DESIGN STAGE PRELIMINARY DESIGN STAGE
DESIGN DEVELOPMENT STAGE CONSTRUCTION DRAWINGS STAGE

DRAWING TITLE:
**SITE PLAN COORDINATES
LIGHTING LAYOUT
OVERALL**

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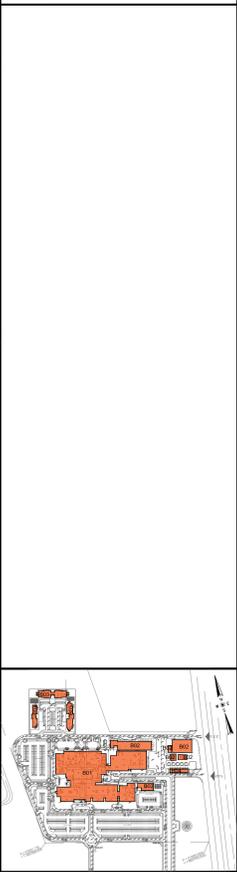
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Ambulance
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DRAWING TITLE:
**SITE PLAN COORDINATES
POWER CABLE ROUTE LAYOUT
OVERALL**

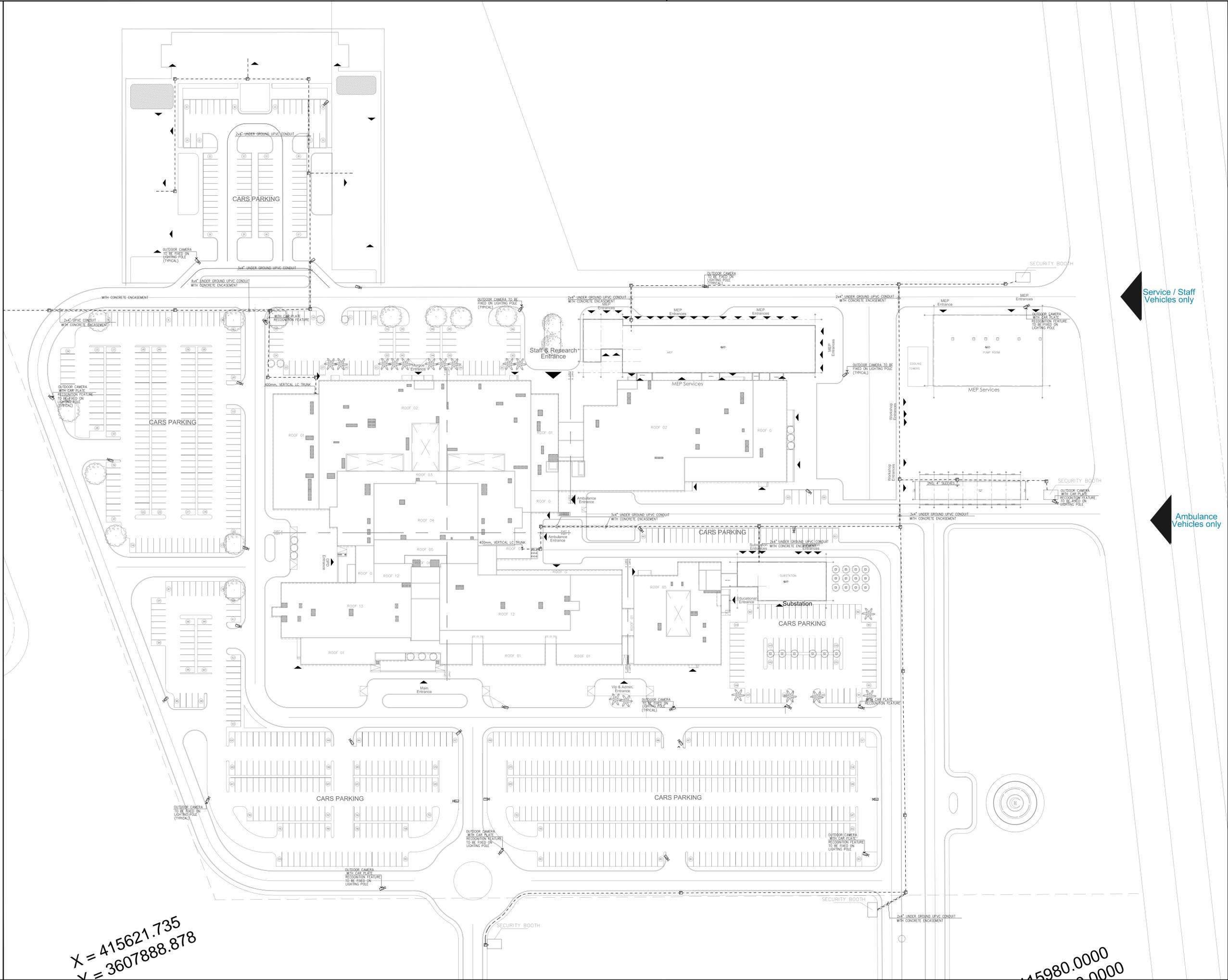
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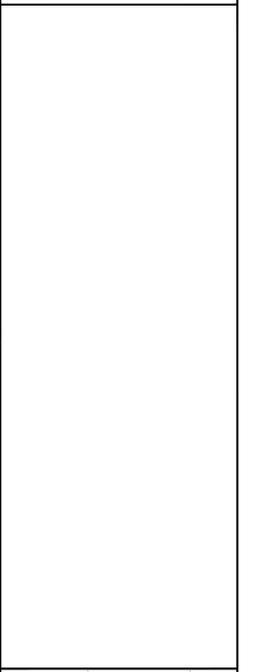
Ambulance Vehicles only

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CONCEPT DESIGN STAGE PRELIMINARY DESIGN STAGE
DESIGN DEVELOPMENT STAGE CONSTRUCTION DRAWINGS STAGE

DRAWING TITLE:
**SITE PLAN COORDINATES
LOW CURRENT CABLE ROUTE
OVERALL**

JOB # 01586 DWG: KUH-ES-103 BLOCK # B00
1:500 @ (A0) SHE. 01 OF 01 REV. # RO

X = 415621.735
Y = 3607888.878

45980.0000
0.0000

Service / Staff Vehicles only

Ambulance Vehicles only