Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-AC-01
Fed From : SMDB-BF01
Incoming Cable Size / Type : 1 x 4C16+1C16-E XLPE/PVC
Main Breaker Type & Rating : 50A 4P

Main Isolator	Busbar (section)(CU)	CCT Ref No.	MCB Rating (kA)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (W)	Circuit Load in W R	Y	B	Circuit Load in W R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in W R	Y	B	Remarks
RCB 32mA		1	20	4	4		AIR HANDLING UNIT (BF-AHU-01)	1	DS			1C	AC	1800	1800.00						AC	1.0	1800.00			
		3	20	4	4		AIR HANDLING UNIT (BF-AHU-02)	1	DS			1C	AC	2000		2000.00					AC	1.0		2000.00		
		5	20	4	4		AIR HANDLING UNIT (BF-AHU-03)	1	DS			1C	AC	500			500.00				AC	1.0			500.00	
		2	20	4	4		AIR HANDLING UNIT (BF-AHU-04)	1	DS			1C	AC	500				500.00			AC	1.0	500.00			
		4	20	4	4		AIR HANDLING UNIT (BF-AHU-06)	1	DS			1C	AC	400					400.00		AC	1.0		400.00		
		6	20	4	4		AIR HANDLING UNIT (BF-AHU-05)	1	DS			1C	AC	1500						1500.00	AC	1.0			1500.00	
		7	20	4	4		AIR HANDLING UNIT (BF-AHU-07)	1	DS			1C	AC	600	600.00						AC	1.0	600.00			
		9	16	4	4		AIR HANDLING UNIT (BF-AHU-08)	1	DS			1C	AC	600		600.00					AC	1.0		600.00		
		11	20	4	4		AIR HANDLING UNIT (BF-AHU-09)	1	DS			1C	AC	900			900.00				AC	1.0			900.00	
		8	20	4	4		AIR HANDLING UNIT (BF-AHU-10)	1	DS			1C	AC	1000				1000.00			AC	1.0	1000.00			
		10	20	4	4		AIR HANDLING UNIT (BF-AHU-11)	1	DS			1C	AC	1300					1300.00		AC	1.0		1300.00		
		12	16	2.5	2.5		EXHAUST FAN (BF-EAF-01-02)	1	DS			1C	AC	400						400.00	AC	1.0			400.00	
		13	20	4	4		AIR HANDLING UNIT (BF-AHU-12)	1	DS			1C	AC	300	300.00						AC	1.0	300.00			
		15	20	4	4		AIR HANDLING UNIT (BF-AHU-13)	1	DS			1C	AC	300		300.00					AC	1.0		300.00		
		17	16	2.5	2.5		FAN COIL UNIT (BF-FCU-01-02)	2	DS			1C	AC	400			800.00				AC	1.0			800.00	
		14	20				SPARE								0.00								0.00			
		16														0.00								0.00		
		18															0.00								0.00	

Total Connected Load (W)	1700.00	2900.00	2200.00	1600.00	1700.00	1900.00	4200	4600	4100	12900.00
Load After Demand Factor (W)										12900.00
Total Demand Load (KW)										13.40
Load After Demand Factor and 20% spare (W)										16460.00
Demand Load With 20% Future Load (KW)							1040.00	5520.00	4620.00	15.46
Demand Current (A)							28.44	31.94	8	27.64

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-AC-02
Fed From : SMDB-GF01
Incoming Cable Size / Type : 1 x 4C16+1C16-E XLPE/PVC
Main Breaker Type & Rating : 50A 4P

Main Isolator	Busbar (section)(CU)	CCT Ref No.	MCB Rating (kA)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (W)	Circuit Load in W R	Y	B	Circuit Load in W R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in W R	Y	B	Remarks
RCB 32mA		1	20	4	4		AIR HANDLING UNIT (GF-AHU-01)	1	DS			1C	AC	1100	1100.00						AC	1.0	1100.00			
		3	20	4	4		AIR HANDLING UNIT (GF-AHU-02)	1	DS			1C	AC	1000		1000.00					AC	1.0		1000.00		
		5	20	4	4		AIR HANDLING UNIT (GF-AHU-03)	1	DS			1C	AC	1000			1000.00				AC	1.0			1000.00	
		2	20	4	4		AIR HANDLING UNIT (GF-AHU-04)	1	DS			1C	AC	1100				1100.00			AC	1.0	1100.00			
		4	20	4	4		AIR HANDLING UNIT (GF-AHU-05)	1	DS			1C	AC	600					600.00		AC	1.0		600.00		
		6	20	4	4		AIR HANDLING UNIT (GF-AHU-06)	1	DS			1C	AC	800						800.00	AC	1.0			800.00	
		7	20	4	4		AIR HANDLING UNIT (GF-AHU-07)	1	DS			1C	AC	1100	1100.00						AC	1.0	1100.00			
		9	20	4	4		AIR HANDLING UNIT (GF-AHU-08)	1	DS			1C	AC	1100		1100.00					AC	1.0		1100.00		
		11	20	4	4		AIR HANDLING UNIT (GF-AHU-09)	1	DS			1C	AC	700			700.00				AC	1.0			700.00	
		8	20	4	4		AIR HANDLING UNIT (GF-AHU-10)	1	DS			1C	AC	800				800.00			AC	1.0	800.00			
		10	20	4	4		AIR HANDLING UNIT (GF-AHU-11)	1	DS			1C	AC	1600					1600.00		AC	1.0		1600.00		
		12	20	4	4		AIR HANDLING UNIT (GF-AHU-12)	1	DS			1C	AC	1300						1300.00	AC	1.0			1300.00	
		13	20	4	4		AIR HANDLING UNIT (GF-AHU-13)	1	DS			1C	AC	900	900.00						AC	1.0	900.00			
		15	16	2.5	2.5		FAN COIL UNIT (GF-FCU-01)	1	DS			1C	AC	300		300.00					AC	1.0		300.00		
		17	20				SPARE										0.00									
		14													0.00								0.00			
		16														0.00								0.00		
		18															0.00								0.00	
		19													0.00								0.00			
		21														0.00								0.00		
		23																								

Total Connected Load (W)	3100.00	2400.00	1700.00	1800.00	2200.00	2100.00	5000	4600	3900	13400.00
Load After Demand Factor (W)										13400.00
Total Demand Load (KW)										13.40
Load After Demand Factor and 20% spare (W)							4000.00	4416.00	3646.00	16062.00
Demand Load With 20% Future Load (KW)										16.06
Demand Current (A)							21.21	23.09	20.73	

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-AC-03
Fed From : SMDB-FF01
Incoming Cable Size / Type : 1 x 4C16+1C16-E XLPE/PVC
Main Breaker Type & Rating : 50A 4P

Main Isolator	Busbar (section)(CU)	CCT Ref No.	MCB Rating (kA)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (W)	Circuit Load in W R	Y	B	Circuit Load in W R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in W R	Y	B	Remarks
RCB 30mA		1	20	4	4		AIR HANDLING UNIT (FF-AHU-01)	1	DS			1C	AC	1100	1100.00						AC	1.0	1100.00			
		3	20	4	4		AIR HANDLING UNIT (FF-AHU-02)	1	DS			1C	AC	1100		1100.00					AC	1.0		1100.00		
		5	20	4	4		AIR HANDLING UNIT (FF-AHU-03)	1	DS			1C	AC	600			600.00				AC	1.0			600.00	
		2	20	4	4		AIR HANDLING UNIT (FF-AHU-04)	1	DS			1C	AC	1100				1100.00			AC	1.0	1100.00			
		4	20	4	4		AIR HANDLING UNIT (FF-AHU-05)	1	DS			1C	AC	800					800.00		AC	1.0		800.00		
		6	20	4	4		AIR HANDLING UNIT (FF-AHU-06)	1	DS			1C	AC	1000						1000.00	AC	1.0			1000.00	
		7	20	4	4		AIR HANDLING UNIT (FF-AHU-07)	1	DS			1C	AC	1100	1100.00						AC	1.0	1100.00			
		9	20	4	4		AIR HANDLING UNIT (FF-AHU-08)	1	DS			1C	AC	500		500.00					AC	1.0		500.00		
		11	20	4	4		AIR HANDLING UNIT (FF-AHU-09)	1	DS			1C	AC	1100			1100.00				AC	1.0			1100.00	
		8	20	4	4		AIR HANDLING UNIT (FF-AHU-10)	1	DS			1C	AC	1600				1600.00			AC	1.0	1600.00			
		10	20	4	4		AIR HANDLING UNIT (FF-AHU-11)	1	DS			1C	AC	500					500.00		AC	1.0		500.00		
		12	16	2.5	2.5		FAN COIL UNIT (FF-FCU-01...04)	1	DS			1C	AC	800						800.00	AC	1.5			800.00	
		13	16	2.5	2.5		FAN COIL UNIT (FF-FCU-05...07)	1	DS			1C	AC	600	600.00						AC	1.0	600.00			
		15	20				SPARE																			
		17	20				SPARE																			
		14	20				SPARE																			
		16																								
		18																								
		19																								
		21																								
		23																								

Total Connected Load (W)	2800.00	1600.00	1700.00	2700.00	1300.00	1600.00	5500	2900	3500	11900.00
Load After Demand Factor (W)										11900.00
Total Demand Load (KW)										11.90
Load After Demand Factor and 20% spare (W)							5280.00	2784.00	3360.00	14424.00
Demand Load With 20% Future Load (KW)										14.28
Demand Current (A)							30.80	13.92	19.09	

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-AC-04
Fed From : SMDB-FF01
Incoming Cable Size / Type : 1 x 4C50-1C25-E XLPE/PVC
Main Breaker Type & Rating : 100A 4P

Main Isolator	Busbar (section)(CU)	CCT Ref No.	MCB Rating (kA)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (W)	Circuit Load in W R	Y	B	Circuit Load in W R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in W R	Y	B	Remarks
RCB 30mA		1	16	2.5	2.5		EXHAUST FAN (EAF-01)	1	DS			1C	AC	918		918.00					AC	1.0	918.00			
		3	16	2.5	2.5		EXHAUST FAN (EAF-02)	1	DS			1C	AC	918		918.00					AC	1.0		918.00		
		5	16	2.5	2.5		EXHAUST FAN (EAF-04)	1	DS			1C	AC	956			956.00				AC	1.0			956.00	
		2	16	2.5	2.5		EXHAUST FAN (EAF-05)	1	DS			1C	AC	316				316.00			AC	1.0	316.00			
		4	16				SPARE	1	DS			1C	AC					0.00			AC	1.0	0.00			
		6	16	2.5	2.5		EXHAUST FAN (EAF-07)	1	DS			1C	AC	495					495.00		AC	1.0			495.00	
		7	16	2.5	2.5		EXHAUST FAN (EAF-08)	1	DS			1C	AC	1402	1402.00						AC	1.0	1402.00			
		9	16	2.5	2.5		EXHAUST FAN (EAF-09)	1	DS			1C	AC	495		495.00					AC	1.0		495.00		
		11	16	2.5	2.5		F1-AHU-OR01	1	DS			1C	AC	1224			1224.00				AC	1.0			1224.00	
		8	16	2.5	2.5		F1-AHU-OR02	1	DS			1C	AC	1224				1224.00			AC	1.0	1224.00			
		10	16	2.5	2.5		EXHAUST FAN (EAF-10)	1	DS			1C	AC	200				200.00			AC	1.0		200.00		
		12	16	2.5	2.5		EXHAUST FAN (EAF-11)	1	DS			1C	AC	100					100.00		AC	1.0			100.00	
		13	16	2.5	2.5		EXHAUST FAN (EAF-12)	1	DS			1C	AC	400	400.00						AC	1.0	400.00			
		15	16	2.5	2.5		EXHAUST FAN (EAF-13)	1	DS			1C	AC	1700		1700.00					AC	1.0		1700.00		
		17	16	2.5	2.5		FRESH AIR FAN (FAF-01)	1	DS			1C	AC	300			300.00				AC	1.0			300.00	
		14	16				SPARE								0.00								0.00			
		16	16				SPARE									0.00								0.00		
		18	16				SPARE										0.00								0.00	
		19																			AC	1.0	0.00			
		21	16				SPARE																	0.00		
		23																							0.00	
		20												14100				4700.00			AC	1.0	4700.00			
		22	63	4x10+16			HRU-01												4700.00					4700.00		
		24																		4700.00					4700.00	
		25												11300			3766.67				AC	1.0	3766.67			
		27	40	4x10+10			HRU-02										3766.67							3766.67		
		29																		3766.67					3766.67	
		26	20				SPARE																			
		28	20				SPARE																			
		30	20				SPARE																			
		31					SPACE																			
		33					SPACE																			
		35					SPACE																			
		32					SPACE																			
		34					SPACE																			
		36					SPACE																			

Total Connected Load (W)	6486.67	6878.67	6246.67	6240.00	4900.00	5295.00	12727	11780	11542	36048.00
Load After Demand Factor (W)										36048.00
Total Demand Load (KW)										36.05
Load After Demand Factor and 20% spare (W)										43257.60
Demand Load With 20% Future Load (KW)							12217.60	11308.48	11080.00	43.26
Demand Current (A)							49.43	44.24	43.65	

SHALL BE SUPPLIED WITH ISOLATION TRANSFORMER

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-MEC-01
Fed From : SMDB-GF01
Incoming Cable Size / Type : 1 x 4C70-1C35-E XLPE/PVC
Main Breaker Type & Rating : 125A 4P

Main Isolator	Busbar (section)(CU)	CCT Ref No.	MCB Rating (kA)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (W)	Circuit Load in W R	Y	B	Circuit Load in W R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in W R	Y	B	Remarks
RCB 30mA		1	16	2.5	2.5		HOT WATER CIRCULATION PUMPS SET	1	DS			1C	DS	500	500.00						DS	0.8	400.00			
		3	16	2.5	2.5		AUTOMATIC DUPLEX WATER SOFTENER	1	DS			1C	DS	200		200.00					DS	0.8		160.00		
		5	16	2.5	2.5		FUEL PUMPS	1	DS			1C	DS	1000			1000.00				DS	0.8			800.00	
		2						1	DS			3C	DS	2300				767.00			DS	0.8	613.60			
		4	16	4			DOMESTIC WATER												767.00					613.60		
		6																		767.00					613.60	
		7						1	DS			3C	DS	1500	500.00						DS	0.8	400.00			
		9	16	4			RAW WATER TRANSFER/FILTRATION									500.00								400.00		
		11															500.00							400.00		
		8						1	DS			3C	DS	2400				800.00			DS	0.8	640.00			
		10	16	4			DRAINAGE PUMPS												800.00					640.00		
		12																		800.00					640.00	
		13						1	DS			3C	DS	15000	5000.00						DS	0.8	4000.00			
		15	32	6			DOMESTIC HOT WATER 01									5000.00								4000.00		
		17															5000.00							4000.00		
		14						1	DS			3C	DS	15000				5000.00			DS	0.8	4000.00			
		16	32	6			DOMESTIC HOT WATER 02												5000.00					4000.00		
		18																		5000.00					4000.00	
		19						1	DS			3C	DS	5000	1997.00						DS	0.8	1333.60			
		21	20	4			REVERSE OSMOSIS									1997.00								1333.60		
		23															1997.00							1333.60		
		20	16	4	4		P01a	1	DS			1C	DS	1400				1400.00			DS	0.8	1120.00			
		22	16	4	4		P01b	1	DS			1C	DS	1400				1400.00			DS	0.8	1120.00			
		24	16	4	4		P02b	1	DS			1C	DS	400					400.00		DS	0.8		320.00		
		25						1	DS			3C	DS	5300	1767.00						DS	0.8	1413.60			
		27	20	4			P02a									1767.00								1413.60		
		29															1767.00							1413.60		

Total Connected Load (W)	8434.00	8134.00	9934.00	7967.00	7967.00	6967.00	13921	13681	13521	51403.00
Load After Demand Factor (W)										41122.40
Total Demand Load (KW)										41.12
Load After Demand Factor and 20% spare (W)							16704.96	16416.96	16224.96	49346.88
Demand Load With 20% Future Load (KW)										49.35
Demand Current (A)							75.93	74.62	73.76	

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-EXT
Fed From : SMDB-GF01
Incoming Cable Size / Type : 1 x 4C16+1C16-E XLPE/PVC
Main Breaker Type & Rating : 40A 4P

Main Isolator	Busbar (section)(CU)	CCT Ref No.	MCB Rating (kA)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (W)	Circuit Load in W R	Y	B	Circuit Load in W R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in W R	Y	B	Remarks
RCB 100mA with sensitivity connected to ground wire		R1	20	10	10		LIGHTING	6	FL2					300	1800.00						LTG	1	1800.00			
		Y1	20	10	10		LIGHTING	9	FL1					150		1350.00					LTG	1		1350.00		
		B1	20	6	6		LIGHTING	6	FL3					70			420.00				LTG	1			420.00	
		R2	20	6	6		LIGHTING	10	FL3					70				700.00			LTG	1	700.00			
		Y2	32				SPARE												0.00		LTG	1				
		B2	32				SPARE																			
		R3	20	6	6		LIGHTING	3	P2					300	900.00						LTG	1	900.00			
		Y3	20	6	6		LIGHTING	3	P2					300		900.00					LTG	1		900.00		
		B3	20	6	6		LIGHTING	2	P2					300			600.00				LTG	1			600.00	
		R4	20				SPARE																			
		Y4	20				SPARE																			
		B4	20				SPARE																			
RCB 30mA		R5	20	6	6		RECEPTACLES	5	ISO			1C	ISO	200	1000.00						ISO	0.6	600.00			
		Y5	20				SPARE																			
		B5	20				SPARE																			
		R6																								
		Y6																								
		B6																								

Total Connected Load (W)	3700.00	2250.00	1020.00	700.00	0.00	0.00	4600	2250	1020	7870.00
Load After Demand Factor (W)										7270.00
Total Demand Load (KW)										7.27
Load After Demand Factor and 20% spare (W)							4800.00	2700.00	1224.00	8724.00
Demand Load With 20% Future Load (KW)										8.72
Demand Current (A)							22.39	12.52	5.68	

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : SDB-OR 1
Fed From : UMDB-BF01
Incoming Cable Size / Type : 1 x 4C16+1C16-E XLPE/PVC
Main Breaker Type & Rating : 50A 4P

Main Isolator	Busbar (section)(CU)	CCT Ref No.	MCB Rating (kA)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (W)	Circuit Load in W R	Y	B	Circuit Load in W R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in W R	Y	B	Remarks
RCB 30mA		1	16	2.5	2.5		LIGHTING (OPERATING ROOM 1)					1C	LG	1000	1000.00						LG	1.0	1000.00			
		3	16	2.5	2.5		LIGHTING (IMMEDIATE STERILIZATION)					1C	LG	600		600.00					LG	1.0		600.00		
		5	16	2.5	2.5		FOR CABINET WARMING					1C	SO	1600			1600.00				SO	1.0			1600.00	
		2	20	4	4		SOCKETS CIRCUIT (OPERATING ROOM 1)					1C	SO	1600				1600.00			SO	1.0	1600.00			
		4	20	4	4		FOR ANASTHESIA UNIT					1C	SO	1200					1200.00		SO	1.0		1200.00		
		6	20	4	4		FOR ELECTRO SURGICAL UNIT					1C	SO	1000						1000.00	SO	1.0			1000.00	
		7	20	4	4		FOR SURGICAL TABLE					1C	SO	1000	1000.00						SO	1.0	1000.00			
		9	20	4	4		FOR CEILING PENDANT SOCKETS					1C	SO	1600		1600.00					SO	1.0		1600.00		
		11	20	4	4		FOR SURGICAL LIGHT					1C	DS	2000			2000.00				DS	1.0			2000.00	
		8	20	4	4		FOR CEILING PENDANT SOCKETS					1C	SO	1600				1600.00			SO	1.0	1600.00			
		10	20	4	4		POWER SOCKET					1C	SO	2000					2000.00		SO	1.0		2000.00		
		12	20	4	4		SOCKETS CIRCUIT (OPERATING ROOM 1)					1C	SO	1400					1400.00		SO	1.0		1400.00		
		13	20	4	4		FOR DIGITAL CONTROL UNIT					1C	SO	500	500.00						SO	1.0	500.00			
		15	20	4	4		DC	1	SSO			1C	SO	200		200.00					SO	1.0		200.00		
		17	20				SPARE										0.00									
		14	20				SPARE								0.00								0.00			
		16					SPACE									0.00								0.00		
		18					SPACE										0.00								0.00	

Total Connected Load (W)	2500.00	2400.00	3600.00	3200.00	3200.00	2400.00	5700	5600	6000	17300.00
Load After Demand Factor (W)										17300.00
Total Demand Load (KW)										17.30
Load After Demand Factor and 20% spare (W)							6840.00	6720.00	7200.00	20760.00
Demand Load With 20% Future Load (KW)										20.76
Demand Current (A)							31.09	30.55	32.73	

SHALL BE SUPPLIED WITH ISOLATION TRANSFORMER

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Dist

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : UDB-BF01 — Incoming Cable Size / Type : 2C(4C240)+1C240-E XLPE/PVC

Fed From : UMDB-BF01 — Main Breaker Type & Rating : 500A 4P

Main Isolator	Busbar Section(mm2)	CCT Ref No.	MCB Rating (Amp)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Singles): Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 30mA		1	20	4	4		RECEPTACLES	2	DSO					1C	SO	400	800.00						SO	0.6	480.00			
		3	20	4	4		RECEPTACLES	2	DSO					1C	SO	400		800.00					SO	0.6		480.00		
		5	20	4	4		RECEPTACLES	2	DSO					1C	SO	400			800.00				SO	0.6			480.00	
		2	20	4	4		RECEPTACLES	2	DSO					1C	SO	400				800.00			SO	0.6	480.00			
		4	20	4	4		RECEPTACLES	2	DSO					1C	SO	400					800.00		SO	0.6		480.00		
		6	20	4	4		RECEPTACLES	1	SSO					1C	SO	900						900.00	SO	1.0			900.00	
		7	20	4	4		RECEPTACLES	1	SSO					1C	SO	2000	2000.00						SO	1.0	2000.00			
		9	20				SPARE											0.00							0.00		
		11	20				SPARE												0.00							0.00	
		8																		16000.00			DS	0.8	12800.00			
		10	100	4x50+25			FOR SCANNER														16000.00					12800.00	
		12																				16000.00					12800.00	
		13															27000.00						DS	0.8	21600.00			
		15	160	4x70+35			FOR FLUOROSCOPY MACHINE											27000.00									21600.00	
		17																27000.00									21600.00	
		14																		20000.00			DS	0.8	16000.00			
		16	125	4x50+25			FOR X-RAY MACHINE														20000.00					16000.00	
		18																				20000.00					16000.00	
		19															2400.00						DS	0.8	1920.00			
		21	25	4x6+6			FOR MAMOGRAPHY MACHINE											2400.00									1920.00	
		23																2400.00									1920.00	
		20	20				SPARE												0.00							0.00		
		22	20				SPARE													0.00							0.00	
		24	20				SPARE														0.00							0.00

																Total Connected Load (VA)	28800.00	27600.00	27600.00	36800.00	36800.00	36960.00							195560.00
																Load After Demand Factor (VA)									55280	53280	53700		162260.00
																Total Demand Load (KVA)													162.26
																Load After Demand Factor and 20% spare (VA)									66336.00	63936.00	64440.00		194712.00
																Demand Load With 20% Future Load (KVA)													194.71
																Demand Current (A)									301.53	290.42	292.91		

DISTRIBUTION BOARD: UDB-BF04 \SERVICE 220V-1PHASE-4W-60Hz CONTROLLED BY :32A MCB FED FROM: UMDB-BF-01					
CIRCUIT NO.	WIRE SIZE (mm²)	MCB (AMPS)	DESCRIPTION	TYPE OF FIT.	NO. OF FIT.	VA. PER CIRCUIT
1	2x4 + 1x4 E	20	RECEPTACLES	DSO	2	800
2		20	SPARE			
3		20	SPARE			
TOTAL						800
INCOMER	3 C 6 mm2 XLPE / PVC				Load After Demand Factor (VA)		640
					Total Demand Load (KVA)		0.64
					Load After Demand Factor and 20% spare (KVA)		0.768
					Demand Current (A)		3.49

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : UDB-GF02 — Incoming Cable Size / Type : 1 x 4C6-1C6-E XLPE/PVC

Fed From : UMDB-BF01 — Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section(mm2)	CCT Ref No.	MCB Rating (Amp)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Singles): Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 30mA		1	20	4	4		RECEPTACLES	2	DSO					1C	SO	400	800.00						SO	0.6	480.00			
		3	20	4	4		FAXP	1	SSO					1C	SO	500		500.00					SO	0.6		300.00		
		5	20	4	4		DAU	1	SSO					1C	SO	500			500.00				SO	0.6			300.00	
		2	20	4	4		ACU	1	SSO					1C	SO	500				500.00			SO	0.6	300.00			
		4	20				SPARE											0.00							0.00		
		6	20				SPARE												0.00							0.00	
		7	20				SPARE										0.00											
		9					SPACE											0.00							0.00		
		11					SPACE												0.00							0.00	

																Total Connected Load (VA)	800.00	500.00	1000.00	500.00	500.00	0.00							3300.00
																Load After Demand Factor (VA)									760	600	600		1960.00
																Total Demand Load (KVA)													1.96
																Load After Demand Factor and 20% spare (VA)									936.00	720.00	720.00		2376.00
																Demand Load With 20% Future Load (KVA)													2.38
																Demand Current (A)									4.25	3.27	3.27		

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : UDB-BF03 — Incoming Cable Size / Type : 1 x 4C6-1C6-E XLPE/PVC

Fed From : UMDB-BF01 — Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section(mm2)	CCT Ref No.	MCB Rating (Amp)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Singles): Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 30mA		1	20	4	4		RECEPTACLES	1	SSO	1	DSO			1C	SO	200 400	600.00						SO	0.6	360.00			
		3	20	4	4		RECEPTACLES	2	SSO					1C	SO	400		800.00					SO	0.6		480.00		
		5	20	4	4		RECEPTACLES	1	SSO	1	DSO			1C	SO	200 400			600.00				SO	0.6			360.00	
		2	20	4	4		RECEPTACLES	3	DSO					1C	SO	400				1200.00			SO	0.6	720.00			
		4	20	4	4		RECEPTACLES	3	DSO					1C	SO	400					1200.00		SO	0.6		720.00		
		6	20	4	4		RECEPTACLES	4	DSO					1C	SO	400						1600.00	SO	0.6			960.00	
		7	20	4	4		RECEPTACLES	3	DSO					1C	SO	400	1200.00						SO	0.6	720.00			
		9	20	4	4		RECEPTACLES	1	SSO	1	DSO			1C	SO	200 400		200.00					SO	0.6		120.00		
		11	20		4	4	RECEPTACLES	4	DSO					1C	SO	400		1600.00					SO	0.6		960.00		
		8	20	4	4		RECEPTACLES	3	DSO					1C	SO	400				800.00			SO	0.6	480.00			
		10	20				SPARE														0.00		SO	0.6		0.00		
		12	20				SPARE																				0.00	
		13					SPACE										0.00									0.00		
		15					SPACE											0.00							0.00		
		17					SPACE												0.00							0.00	
		14					SPACE														0.00					0.00		
		16					SPACE														0.00					0.00		
		18					SPACE																				0.00	

																Total Connected Load (VA)	1800.00	1000.00	2200.00	2000.00	1000.00	1600.00							9600.00
																Load After Demand Factor (VA)									2280	1335	2280		5895.00
																Total Demand Load (KVA)													5.895
																Load After Demand Factor and 20% spare (VA)									2736.00	1564.00	2736.00		7036.00
																Demand Load With 20% Future Load (KVA)													7.06
																Demand Current (A)									12.44	7.20	12.44		

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : UDB-BF05 — Incoming Cable Size / Type : 1 x 4C6-1C6-E XLPE/PVC

Fed From : UMDB-BF01 — Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section(mm2)	CCT Ref No.	MCB Rating (Amp)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Singles): Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 30mA		1	20	4	4		RECEPTACLES	1	DSO					1C	SO	400	400.00						SO	0.6	240.00			
		3	20	4	4		FACP	1	SSO					1C	SO	500		500.00					SO	1.0		500.00		
		5	20	4	4		DAU	1	SSO					1C	SO	500			500.00				SO	1.0			500.00	
		2	20	4	4		NVR	1	SSO					1C	SO	1000				1000.00			SO	1.0	1000.00			
		4	20	4	4		BMS	1	SSO					1C	SO	1000					1000.00		SO	1.0		1000.00		
		6	20				SPARE															0.00						
		7	20				SPARE										0.00											
		9	20				SPARE											0.00							0.00		
		11	20				SPARE												0.00							0.00	
		8	20				SPARE														0.00					0.00		
		10	20				SPARE														0.00					0.00		
		12	20				SPARE																				0.00	
		13					SPACE										0.00									0.00		
		15					SPACE											0.00							0.00		
		17					SPACE												0.00							0.00	
		14					SPACE														0.00					0.00		
		16					SPACE														0.00					0.00		
		18					SPACE																				0.00	

																Total Connected Load (VA)	400.00	500.00	500.00	1000.00	0.00	0.00							3400.00
																Load After Demand Factor (VA)									1240	1500	500		3240.00
																Total Demand Load (KVA)													3.24
																Load After Demand Factor and 20% spare (VA)									1488.00	1800.00	600.00		3888.00
																Demand Load With 20% Future Load (KVA)													3.89
																Demand Current (A)									6.76	8.18	2.73		

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : UDB-BF07 — Incoming Cable Size / Type : 1 x 4C6-1C6-E XLPE/PVC

Fed From : UMDB-BF01 — Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section(mm2)	CCT Ref No.	MCB Rating (Amp)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Singles): Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 30mA		1	20	4	4		RECEPTACLES	3	DSO					1C	SO	400	1200.00						SO	0.6	720.00			
		3	20	4	4		RECEPTACLES	2	DSO					1C	SO	400		800.00					SO	0.6		480.00		
		5	20	4	4		RECEPTACLES	3	DSO					1C	SO	400			1200.00				SO	0.6			720.00	
		2	20	4	4		RECEPTACLES	2	DSO					1C	SO	400				800.00			SO	0.6	480.00			
		4	20	4	4		RECEPTACLES	3	DSO					1C	SO	400					1200.00		SO	0.6		720.00		
		6	20	4	4		DTC	1	SSO					1C	SO	500						500.00	SO	0.6			300.00	
		7	20	4	4		STC	1	SSO					1C	SO	500	500.00						SO	0.6	300.00			
		9	20	4	4		CSP	1	SSO					1C	SO	500		500.00					SO	0.6		300.00		
		11	20				SPARE												0.00									

																Total Connected Load (VA)	1700.00	1300.00	1200.00	800.00	1200.00	500.00							6700.00
																Load After Demand Factor (VA)									1500	1500	1020		4020.00
																Total Demand Load (KVA)													4.02
																Load After Demand Factor and 20% spare (VA)									1800.00	1800.00	1224.00		4824.00
																Demand Load With 20% Future Load (KVA)													4.82
																Demand Current (A)									8.18	8.18	5.74		

DISTRIBUTION BOARD: UDB-GF-04 SERVICE 220V-1PHASE-4W-60Hz CONTROLLED BY :32A MCB FED FROM: UMDB-BF01					
CIRCUIT NO.	WIRE SIZE (mm²)	MCB (AMPS)	DESCRIPTION	TYPE OF FIT.	NO. OF FIT.	VA. PER CIRCUIT
1	2x4 + 1x4 E	20	RECEPTACLES	DSO	2	800
2	2x4 + 1x4 E	20	RECEPTACLES	DSO	3	1200
3	2x4 + 1x4 E	20	BHU	BHU	1	1000
4	2x4 + 1x4 E	20	BHU	BHU	1	1000
5		20	SPARE			
		20	SPARE			
TOTAL						4000
INCOMER	3 C 6 mm2 XLPE / PVC				Load After Demand Factor (VA)		3200
					Total Demand Load (KVA)		3.2
					Load After Demand Factor and 20% spare (KVA)		3.84
					Demand Current (A)		17.45

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : UDB-GF02 — Incoming Cable Size / Type : 1 x 4C6-1C6-E XLPE/PVC

Fed From : UMDB-BF01 — Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section(mm2)	CCT Ref No.	MCB Rating (Amp)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Singles): Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 30mA		1	20	4	4		RECEPTACLES	2	DSO					1C	SO	400	800.00						SO	0.6	480.00			
		3	20	4	4		FAXP	1	SSO					1C	SO	500		500.00					SO	0.6		300.00		
		5	20	4	4		DAU	1	SSO					1C	SO	500			500.00				SO	0.6			300.00	
		2	20	4	4		ACU	1	SSO					1C	SO	500				500.00			SO	0.6	300.00			
		4	20				SPARE											0.00							0.00		
		6	20				SPARE												0.00							0.00	
		7	20				SPARE										0.00											
		9					SPACE											0.00							0.00		
		11					SPACE												0.00							0.00	

																Total Connected Load (VA)	800.00	500.00	500.00	500.00	0.00	0.00							2300.00
																Load After Demand Factor (VA)									760	300	300		1360.00
																Total Demand Load (KVA)													1.36
																Load After Demand Factor and 20% spare (VA)									936.00	360.00	360.00		1656.00
																Demand Load With 20% Future Load (KVA)													1.66
																Demand Current (A)									4.25	1.64	1.64		

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL — **Final Distribution Board**

Distribution Board No/Ref : UDB-GF01 — Incoming Cable Size / Type : 1 x 4C6-1C6-E XLPE/PVC

Fed From : UMDB-BF01 — Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section(mm2)	CCT Ref No.	MCB Rating (Amp)	Cable Size: CCT Wire (mm²)	Cable Size: ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Singles): Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA: R	Y	B	Circuit Load in VA: R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA: R	Y	B	Remarks
RCB 30mA		1	20	4	4		RECEPTACLES	2	DSO					1C	SO	400	800.00						SO	0.6	480.00			
		3	20	4	4		RECEPTACLES	3	DSO					1C	SO	400		1200.00					SO	0.6		720.00		
		5	20	4	4		RECEPTACLES	3	DSO					1C	SO	400			1200.00				SO	0.6			720.00	
		2	20	4	4		RECEPTACLES	2	DSO					1C	SO	400	800.00						SO	0.6	480.00			
		4	20				SPARE											0.00							0.00		
		6	20				SPARE												0.00							0.00	
		7	20				SPACE										0.00									0.00		
		9					SPACE											0.00							0.00		
		11					SPACE												0.00							0.00	

																Total Connected Load (VA)	800.00	1200.00	1200.00	800.00	0.00	0.00							4000.00
																Load After Demand Factor (VA)									960	720	720		2400.00
																Total Demand Load (KVA)													2.40
																Load After Demand Factor and 20% spare (VA)									1152.00	864.00	864.00		2880.00
																Demand Load With 20% Future Load (KVA)													2.88
																Demand Current (A)									5.24	3.93	3.93		

GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
Established in 1965 - C.R. 16013
P.O.BOX 11-6078 BEIRUT-LEBANON
Tel: 961/1/364304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

PANELBOARDS SCHEDULES 4/5

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E11
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	NTS
DRAWING NO.:	E11			REVISION	00

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL

Final Distribution Board

Distribution Board No/Ref : UDB-GF05

Fed From : UMDB-BF01

Incoming Cable Size / Type : 1 x 4C6-/1C6-E XLPE/PVC

Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section/RCD	CCT Ref No.	MCB Rating (Amp)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA R	Y	B	Circuit Load in VA R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA R	Y	B	Remarks
	RCB 30mA	1	20	4	4		RECEPTACLES	3	DSO					1C	SO	400	1200.00						SO	0.6	720.00			
		3	20	4	4		RECEPTACLES	4	DSO					1C	SO	400		1600.00					SO	0.6		960.00		
		5	20	4	4		RECEPTACLES	3	DSO					1C	SO	400			1200.00				SO	0.6			720.00	
		2	20	4	4		RECEPTACLES	3	DSO					1C	SO	400				1200.00			SO	0.6	720.00			
		4	20	4	4		OUTLET FOR PLASTER ROOM EQUIPMENT	1	DS					1C	DS	2000					2000.00		DS	0.6		1200.00		
		6	20	4	4		4U	1	4U					1C	SO	1600						1600.00	SO	0.6			960.00	
		7	20	4	4		4U	1	4U					1C	SO	1600	1600.00						SO	0.6	960.00			
		9	20				SPARE											0.00								0.00		
		11	20				SPARE												0.00									
							Total Connected Load (VA)										2800.00	1600.00	1200.00	1200.00	2000.00	1600.00						10400.00
							Load After Demand Factor (VA)										2400	2160	1680									6240.00
							Total Demand Load (KVA)																					6.24
							Load After Demand Factor and 20% spare (VA)										2880.00	2592.00	2016.00									7488.00
							Demand Load With 20% Future Load (KVA)																					7.49
							Demand Current (A)										13.09	11.78	9.16									

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL

Final Distribution Board

Distribution Board No/Ref : UDB-FF01

Fed From : UMDB-BF01

Incoming Cable Size / Type : 1 x 4C6-/1C6-E XLPE/PVC

Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section/RCD	CCT Ref No.	MCB Rating (Amp)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA R	Y	B	Circuit Load in VA R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA R	Y	B	Remarks
	RCB 30mA	1	20	4	4		RECEPTACLES	1	DSO					1C	SO	400	400.00						SO	0.6	240.00			
		3	20	4	4		RECEPTACLES	1	DSO					1C	SO	400		400.00					SO	0.6		240.00		
		5	20	4	4		BHU	1	BHU					1C	BHU	1000			1000.00				BHU	0.6			600.00	
		2	20	4	4		DTC	1	SSO					1C	SO	500				500.00			SO	0.6	300.00			
		4	20	4	4		DTC	1	SSO					1C	SO	500					500.00		SO	0.6		300.00		
		6	20	4	4		CSP	1	SSO					1C	SO	500						500.00	SO	0.6			300.00	
		7					SPACE										0.00								0.00			
		9					SPACE											0.00								0.00		
		11					SPACE												0.00									
							Total Connected Load (VA)										400.00	400.00	1000.00	500.00	500.00	500.00						3300.00
							Load After Demand Factor (VA)																		540	540	900		1980.00
							Total Demand Load (KVA)																					1.98
							Load After Demand Factor and 20% spare (VA)																		648.00	648.00	1080.00		2376.00
							Demand Load With 20% Future Load (KVA)																					2.38
							Demand Current (A)																		2.95	2.95	4.91		

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL

Final Distribution Board

Distribution Board No/Ref : UDB-FF02

Fed From : UMDB-BF01

Incoming Cable Size / Type : 1 x 4C6-/1C6-E XLPE/PVC

Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section/RCD	CCT Ref No.	MCB Rating (Amp)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA R	Y	B	Circuit Load in VA R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA R	Y	B	Remarks
	RCB 30mA	1	20	4	4		RECEPTACLES	2	DSO					1C	SO	400	800.00						SO	0.6	480.00			
		3	20	4	4		RECEPTACLES	2	DSO					1C	SO	400		800.00					SO	0.6		480.00		
		5	20	4	4		RECEPTACLES	3	DSO					1C	SO	400			1200.00				SO	0.6			720.00	
		2	20				SPARE													0.00								
		4	20				SPARE														0.00							
		6					SPACE															0.00							
		7					SPACE										0.00								0.00			
		9					SPACE											0.00								0.00		
		11					SPACE												0.00									
							Total Connected Load (VA)										800.00	800.00	1200.00	0.00	0.00	0.00						2800.00
							Load After Demand Factor (VA)																		480	480	720		1680.00
							Total Demand Load (KVA)																					1.68
							Load After Demand Factor and 20% spare (VA)																		576.00	576.00	864.00		2016.00
							Demand Load With 20% Future Load (KVA)																					2.02
							Demand Current (A)																		2.62	2.62	3.93		

Project/Building : AKKAR SAHLEH GOVERNMENTAL HOSPITAL

Final Distribution Board

Distribution Board No/Ref : UDB-FF03

Fed From : UMDB-BF01

Incoming Cable Size / Type : 1 x 4C6-/1C6-E XLPE/PVC

Main Breaker Type & Rating : 32A 4P

Main Isolator	Busbar Section/RCD	CCT Ref No.	MCB Rating (Amp)	Cable Size CCT Wire (mm²)	Cable Size ECC Wire (mm²)	Cable Rating A (kW)	Circuit Name / Point Reference	No. of Points (Double Single) Number	Type	Number	Type	Number	Type	Cable Type	Circuit Type	Connected Load per Point (VA)	Circuit Load in VA R	Y	B	Circuit Load in VA R	Y	B	Diversity Type	Diversity Factor	Total Demand Load in VA R	Y	B	Remarks
	RCB 30mA	1	20	4	4		RECEPTACLES	3	DSO					1C	SO	400	1200.00						SO	0.6	720.00			
		3	20	4	4		RECEPTACLES	4	DSO					1C	SO	400		1600.00					SO	0.6		960.00		
		5	20	4	4		RECEPTACLES	3	DSO					1C	SO	400			1200.00				SO	0.6			720.00	
		2	20				SPARE													0.00								
		4	20				SPARE														0.00							
		6					SPACE															0.00							
		7					SPACE										0.00								0.00			
		9					SPACE											0.00								0.00		
		11					SPACE												0.00									
							Total Connected Load (VA)										1200.00	1600.00	1200.00	0.00	0.00	0.00						4000.00
							Load After Demand Factor (VA)																		720	960	720		2400.00
							Total Demand Load (KVA)																					2.40
							Load After Demand Factor and 20% spare (VA)																		864.00	1152.00	864.00		2880.00
							Demand Load With 20% Future Load (KVA)																					2.88
							Demand Current (A)																		3.93	5.24	3.93		

DISTRIBUTION BOARD: UDB-FF04
0SERVICE 220V-1PHASE-4W -60Hz
CONTROLLED BY :32A MCB
FED FROM: UMDB-BF-01

CIRCUIT NO.	WIRE SIZE (mm²)	MCB (AMPS)	DESCRIPTION	TYPE OF FIT.	NO. OF FIT.	VA. PER CIRCUIT
1	2x4 + 1x4 E	20	RECEPTACLES	DSO	1	400
2		20	SPARE			
3		20	SPARE			
TOTAL						400

INCOMER| 3 C 6 mm2 XLPE / PVC

Load After Demand Factor (VA)	320
Total Demand Load (KVA)	0.32
Load After Demand Factor and 20% spare (KVA)	0.384
Demand Current (A)	1.75

DISTRIBUTION BOARD: UDB-FF05
0SERVICE 220V-1PHASE-4W -60Hz
CONTROLLED BY :32A MCB
FED FROM: UMDB-BF-01

CIRCUIT NO.	WIRE SIZE (mm²)	MCB (AMPS)	DESCRIPTION	TYPE OF FIT.	NO. OF FIT.	VA. PER CIRCUIT
1	2x4 + 1x4 E	20	RECEPTACLES	DSO	1	400
2		20	SPARE			
3		20	SPARE			
TOTAL						400

INCOMER| 3 C 6 mm2 XLPE / PVC

Load After Demand Factor (VA)	320
Total Demand Load (KVA)	0.32
Load After Demand Factor and 20% spare (KVA)	0.384
Demand Current (A)	1.75

GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
Established in 1965 - C.R. 16013
P.O.BOX 11-5078 BEIRUT-LEBANON
Tel: 961/1/364304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

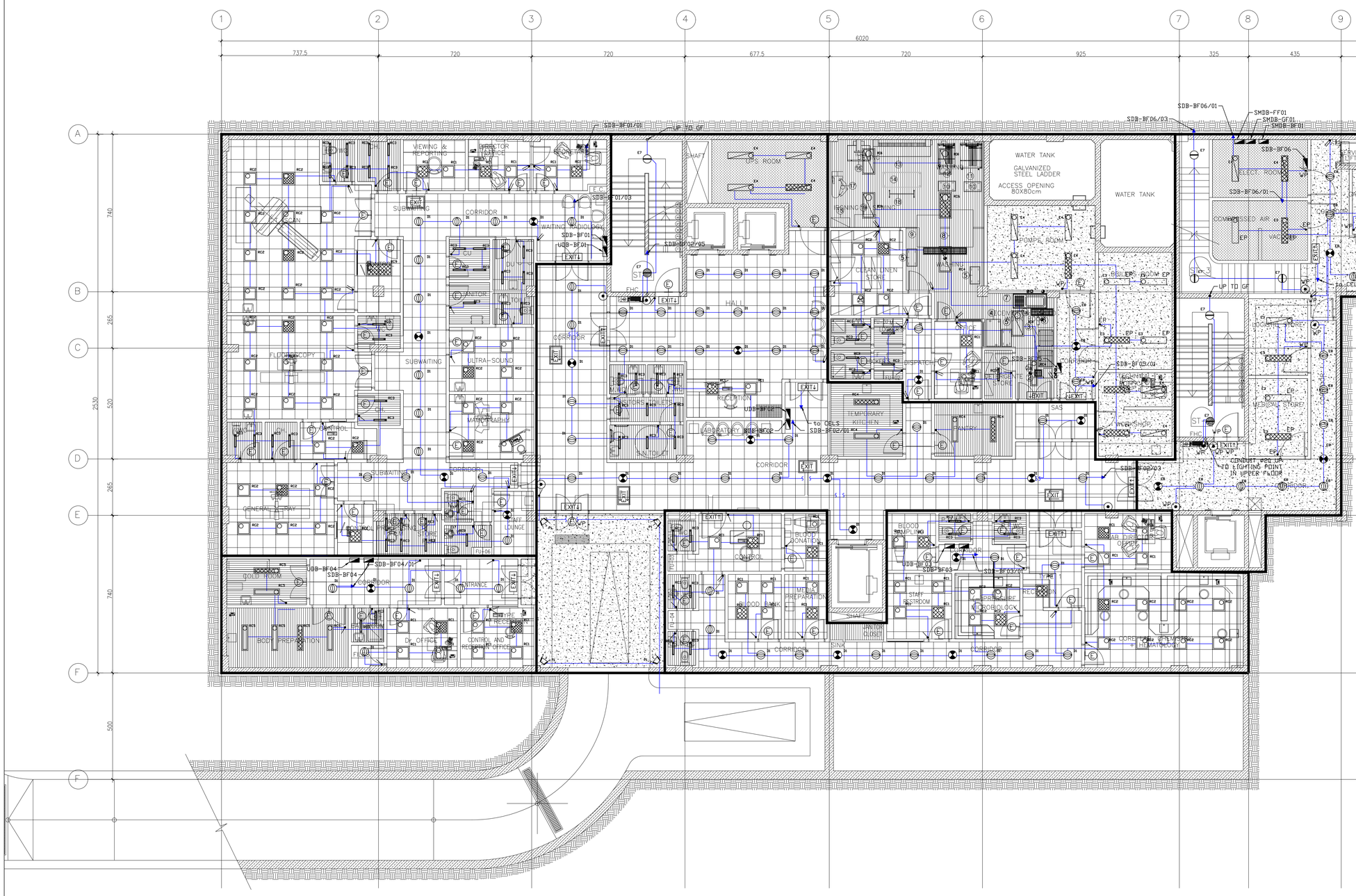
PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

PANELBOARDS SCHEDULES 5/5

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E12
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	NTS
DRAWING NO.:	E12			REVISION	00



GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
Established in 1965 - C.R. 16013
P.O.BOX 11-6078 BEIRUT-LEBANON
Tel: 961/1/364304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

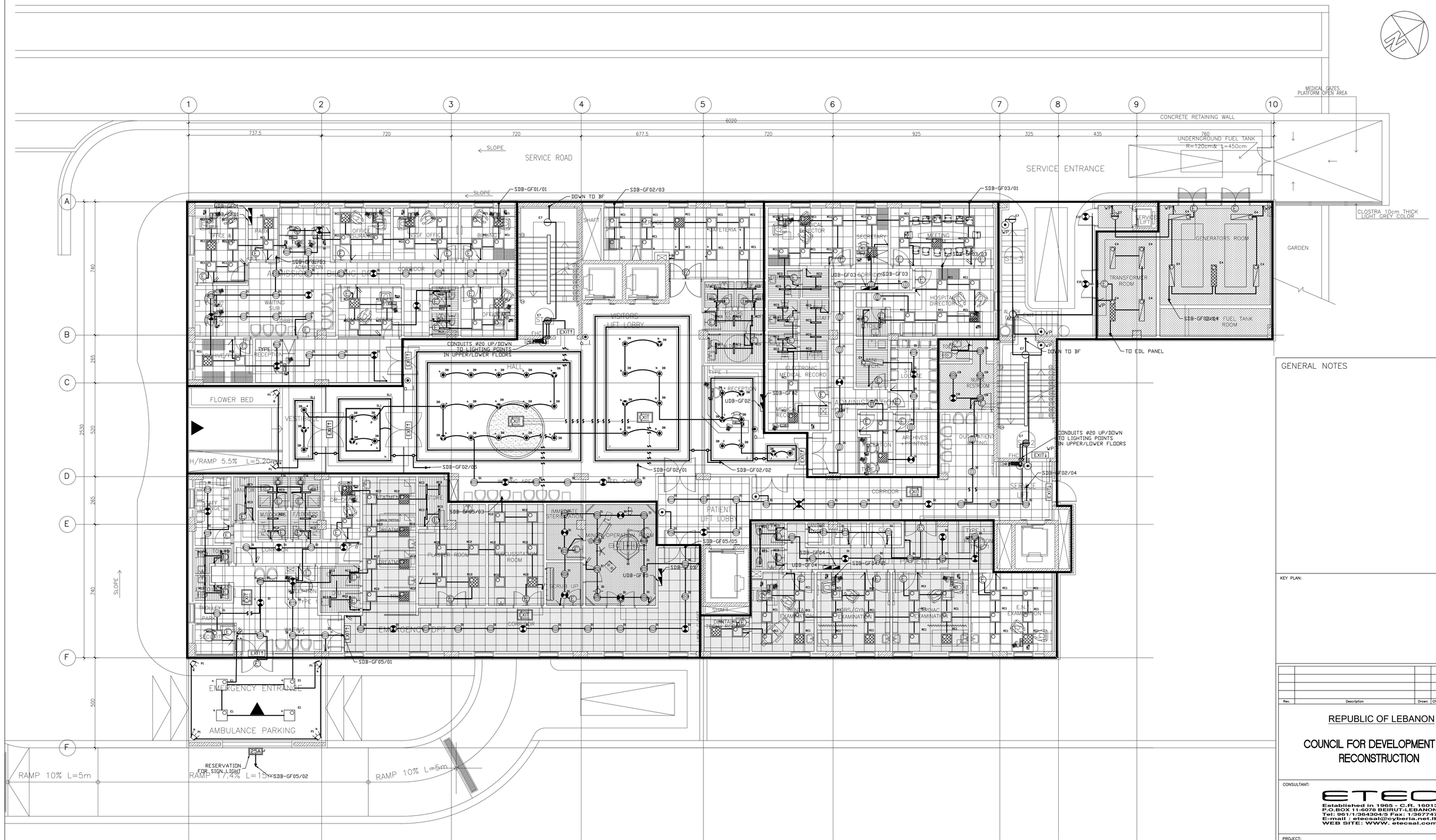
PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

BASEMENT FLOOR PLAN - LIGHTING LAYOUT

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E13
CHECKED BY:	J.J.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	1/100
DRAWING NO.:	E13			REVISION	00



GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
Established in 1965 - C.R. 16013
P.O.BOX 11-5078 BEIRUT-LEBANON
Tel: 961/1/364304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

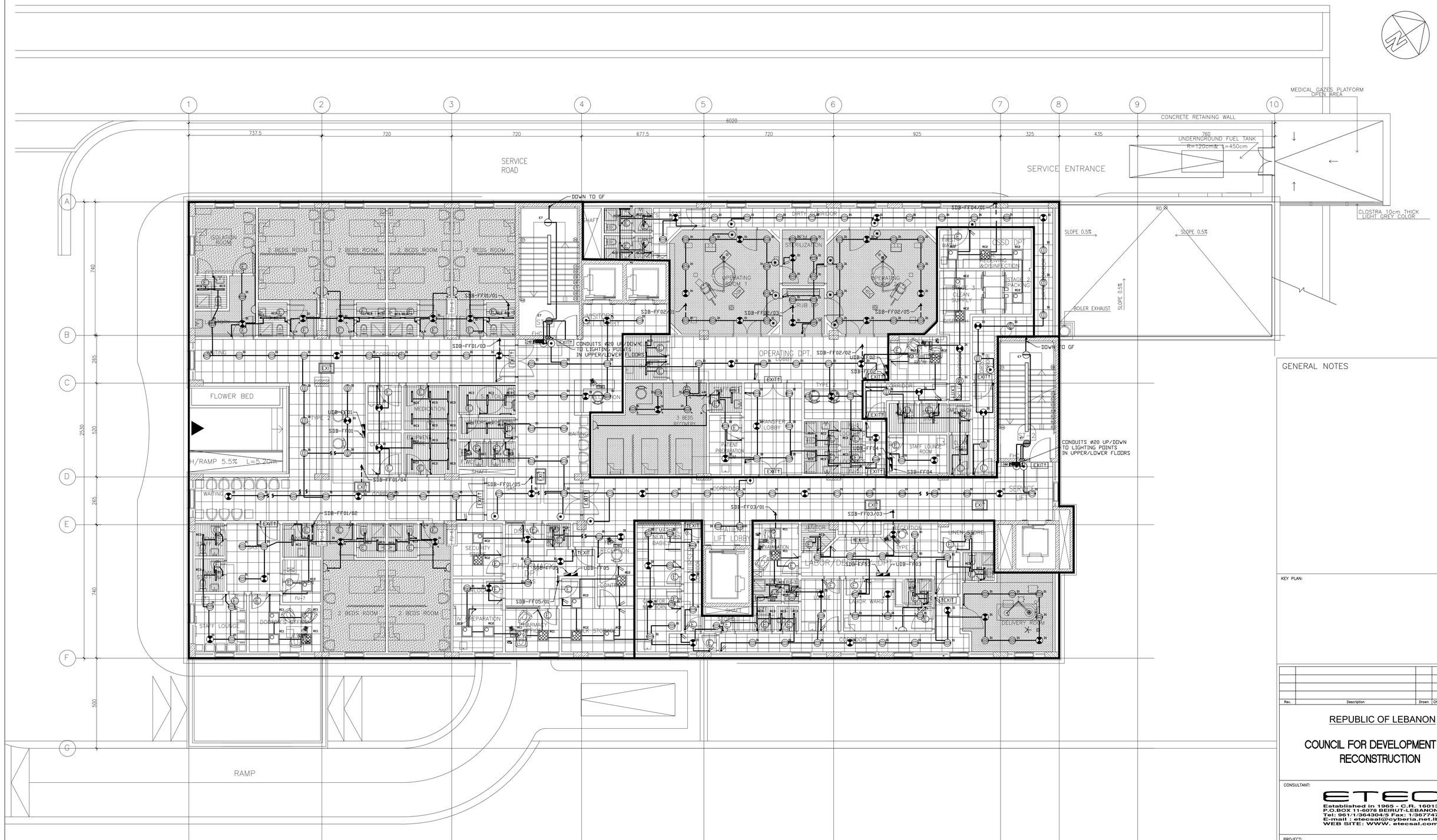
PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

GROUND FLOOR PLAN - LIGHTING LAYOUT

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E14
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	1/100
DRAWING NO.:	E14			REVISION	00



GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
Established in 1965 - C.R. 16013
P.O.BOX 11-5078 BEIRUT-LEBANON
Tel: 961/1/364304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

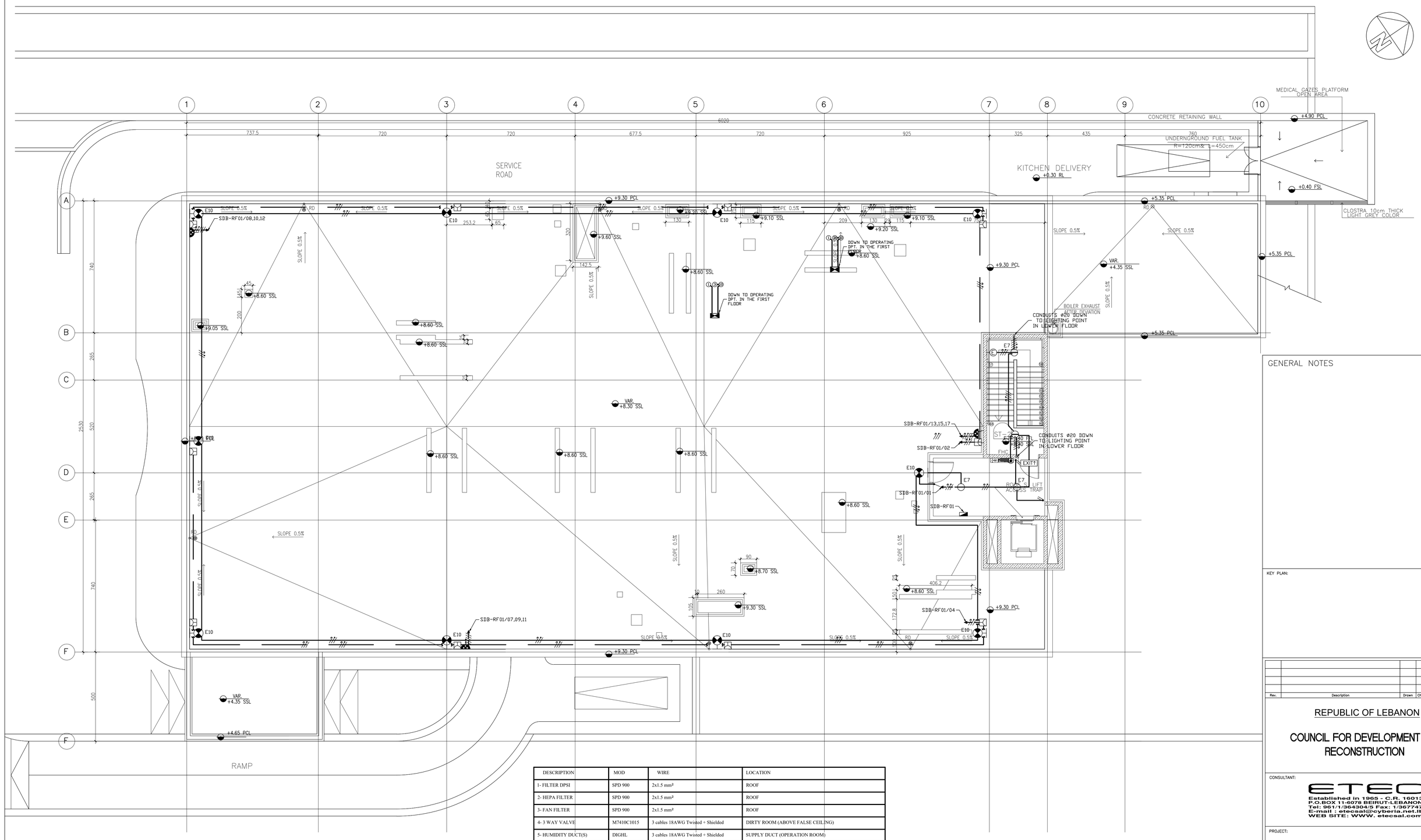
PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

FIRST FLOOR PLAN - LIGHTING LAYOUT

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E15
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	1/100
DRAWING NO.:	E15			REVISION	00



DESCRIPTION	MOD	WIRE	LOCATION
1- FILTER DPSI	SPD 900	2x1.5 mm²	ROOF
2- HEPA FILTER	SPD 900	2x1.5 mm²	ROOF
3- FAN FILTER	SPD 900	2x1.5 mm²	ROOF
4- 3 WAY VALVE	M7410C1015	3 cables 18AWG Twisted + Shielded	DIRTY ROOM (ABOVE FALSE CEILING)
5- HUMIDITY DUCT(S)	DIGHL	3 cables 18AWG Twisted + Shielded	SUPPLY DUCT (OPERATION ROOM)
6- TEMPERATURE DUCTS	TE-205	3 cables 18AWG Twisted + Shielded	SUPPLY DUCT (OPERATION ROOM)
7- TEMPERATURE DUCT(E)	TE-205	3 cables 18AWG Twisted + Shielded	EXHAUST DUCT (OPERATION ROOM)
8- DPT (PRESSURE SENSOR)	694	3 cables 18AWG Twisted + Shielded	ABOVE DOOR BETWEEN OPERATION ROOM AND CORIDOR
9- SURGEON PANEL		2 cables 2x1.5 mm²	OPERATION ROOM
10- MCC		6 cables 2x1.5 mm²	OPERATION ROOM
11- TEMPERATURE ROOM	I-STAT	TWISTED + SHIELDED	TEMPERATURE ROOM
12- HUMIDITY ROOM	E+E	TWISTED + SHIELDED	HUMIDITY ROOM
13- DUCT SMOKE DETECTOR		2 cables 2x1.5 mm²	DUCT SMOKE DETECTOR

GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
Established in 1965 - C.R. 16013
P.O.BOX 11-6078 BEIRUT-LEBANON
Tel: 961/1/364304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

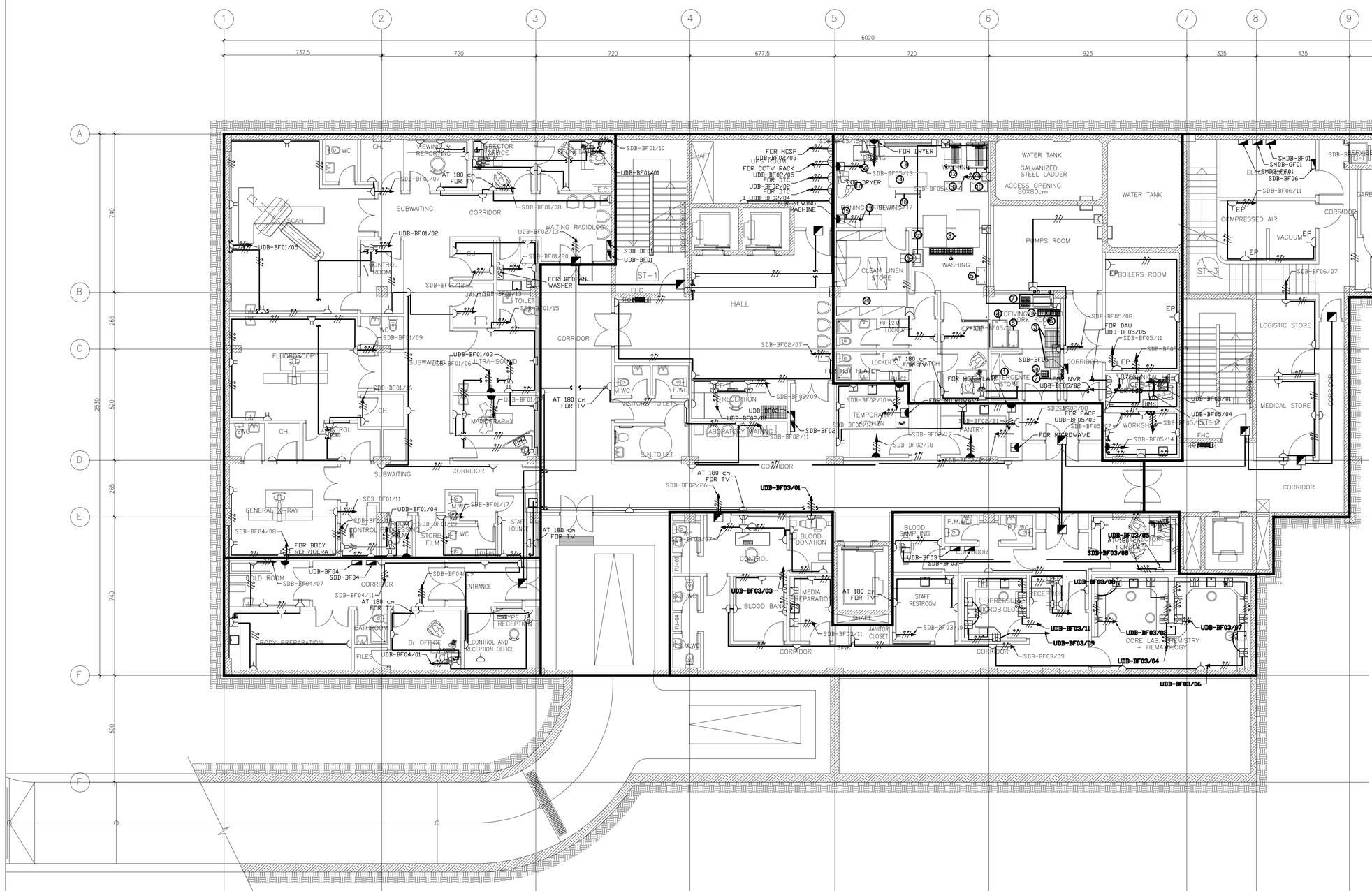
PROJECT:

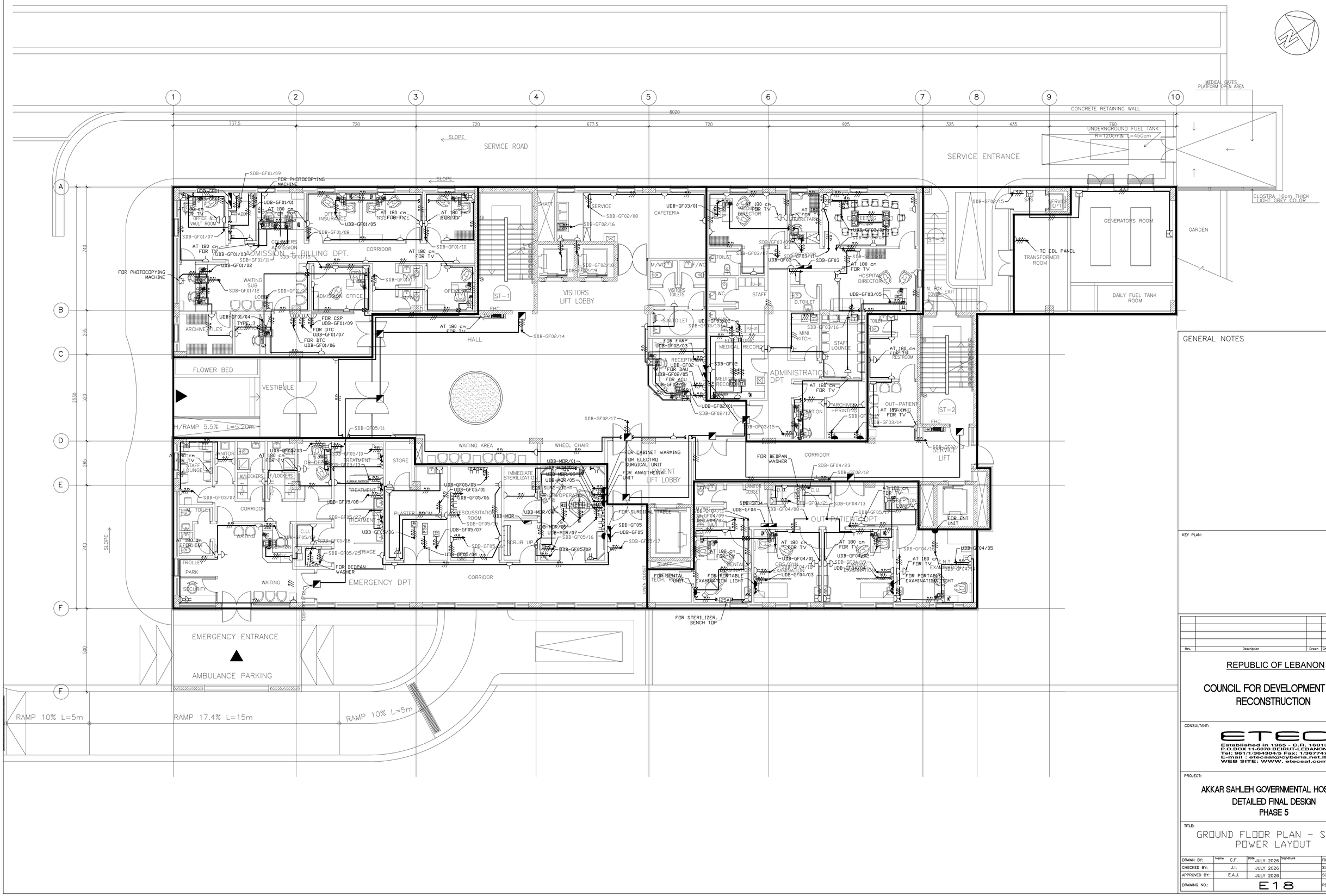
AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

ROOF FLOOR PLAN - LIGHTING & SMALL POWER LAYOUT

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E16
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	1/100
DRAWING NO.:	E16			REVISION	00


1
2
3
4
5
6
7
8
9
10
A
B
C
D
E
F
6020
737.5
720
720
677.5
720
925
325
435
760
740
265
520
265
740
500
SUBWAITING
CORRIDOR
CONTROL ROOM
FLUOROSCOPY
MAMMOGRAPHY
ULTRA-SOUND
RECEPTION
WAITING
LABORATORY
HALL
ST-1
ST-2
ST-3
SHAFT
LIFT
FOR MCSP
UPS ROOM
FOR CCTV RACK
FOR DTC
FOR DTC
FOR SEWING MACHINE
FOR DRYER
FOR DRYER
WATER TANK
GALVANIZED STEEL LADDER
ACCESS OPENING 80X80cm
WATER TANK
PUMPS ROOM
WASHING
CLEAN LINEN STORE
BOILERS ROOM
COMPRESSED AIR
VACUUM
GARBAGE COLD ROOM
MEDICAL WASTE
LOGISTIC STORE
MEDICAL STORE
FOR DAU
FOR HOT PLATE
FOR MICROWAVE
FOR MICROWAVE
FOR NVR
FOR FACP
FOR BMS
FOR BMS
TEMPORARY KITCHEN
PANTRY
WORKSHOP
RMS
FOR BODY REFRIGERATOR
BODY PREPARATION
COLD ROOM
BATHROOM
Dr OFFICE
FILES
ENTRANCE
TYPE RECEPTION
CONTROL AND RECEPTION OFFICE
STORES FILM
STAFF LOUNGE
BLOOD DONATION
BLOOD SAMPLING
CONTROL
BLOOD BANK
MEDIA PREPARATION
STAFF RESTROOM
(-) PRESSURE MICROBIOLOGY
RECEPTION
CORE LAB. + HEMATOLOGY
CHEMISTRY
FOR BMS
FOR CCTV
FOR ACCESS CONTROL
FOR ACCESS CONTROL
FOR ACCESS CONTROL



GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC

Established in 1965 - C.R. 16013
P.O.BOX 11-6078 BEIRUT-LEBANON
Tel: 961/1/364304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

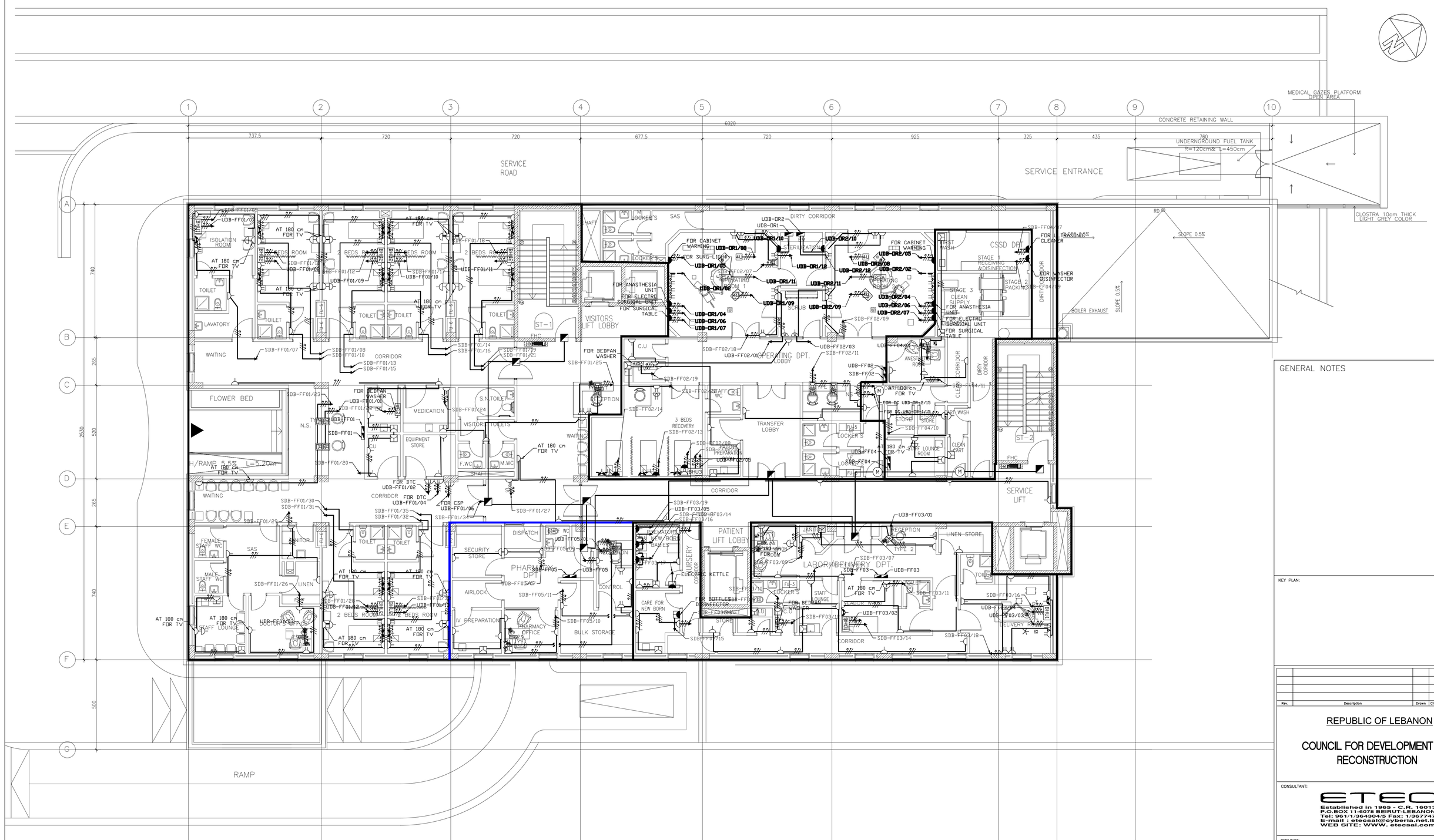
PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

GROUND FLOOR PLAN - SMALL POWER LAYOUT

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E18
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	1/100
DRAWING NO.:	E18			REVISION	00



GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
Established in 1965 - C.R. 16013
P.O.BOX 11-5078 BEIRUT-LEBANON
Tel: 961/1/364304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

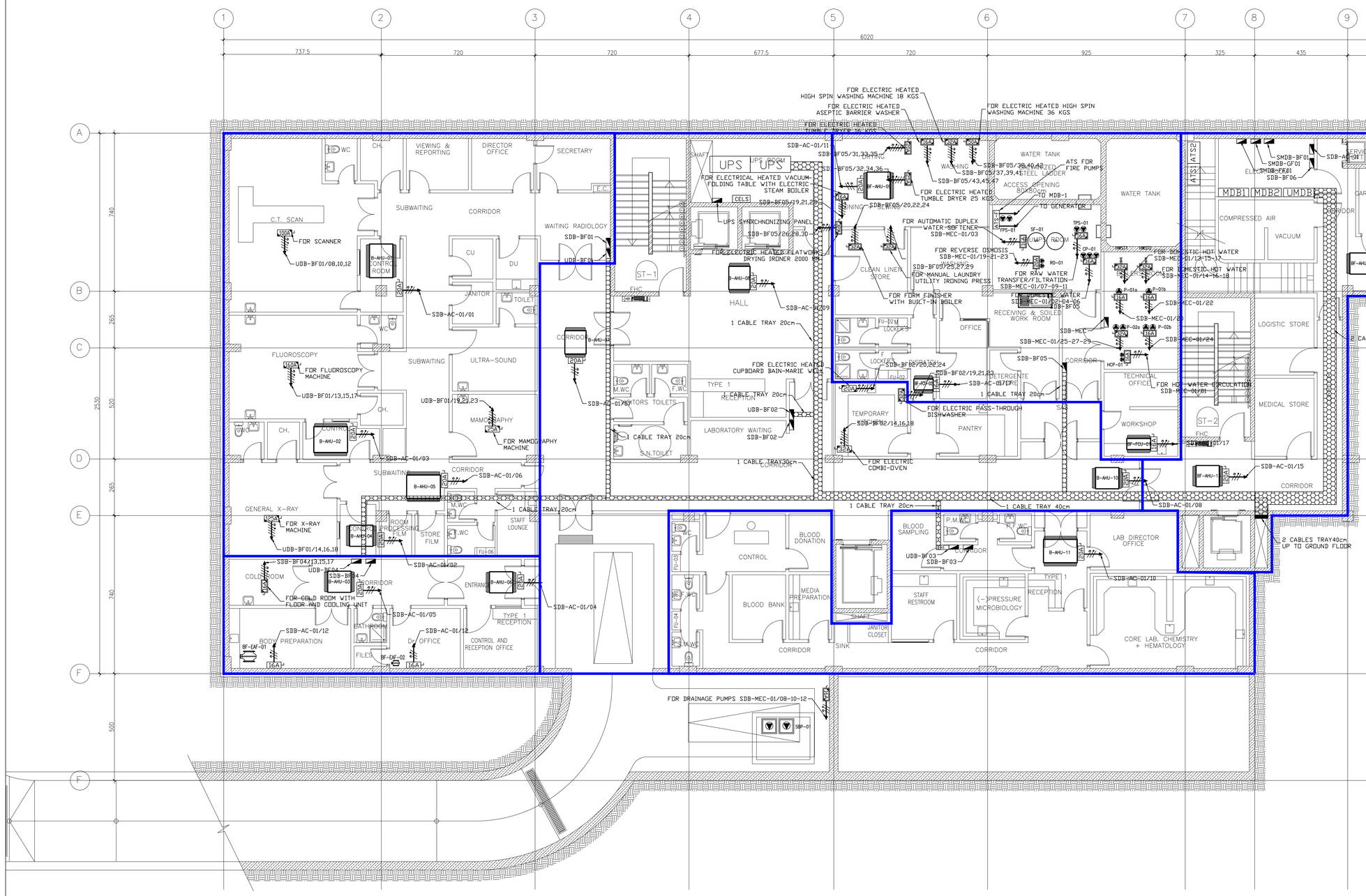
PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

FIRST FLOOR PLAN - SMALL POWER LAYOUT

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E19
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	1/100
DRAWING NO.:	E19			REVISION	00



GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
Established in 1965 - C.R. 16013
P.O.BOX 11-6078 BEIRUT-LEBANON
Tel: 961/1/364304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

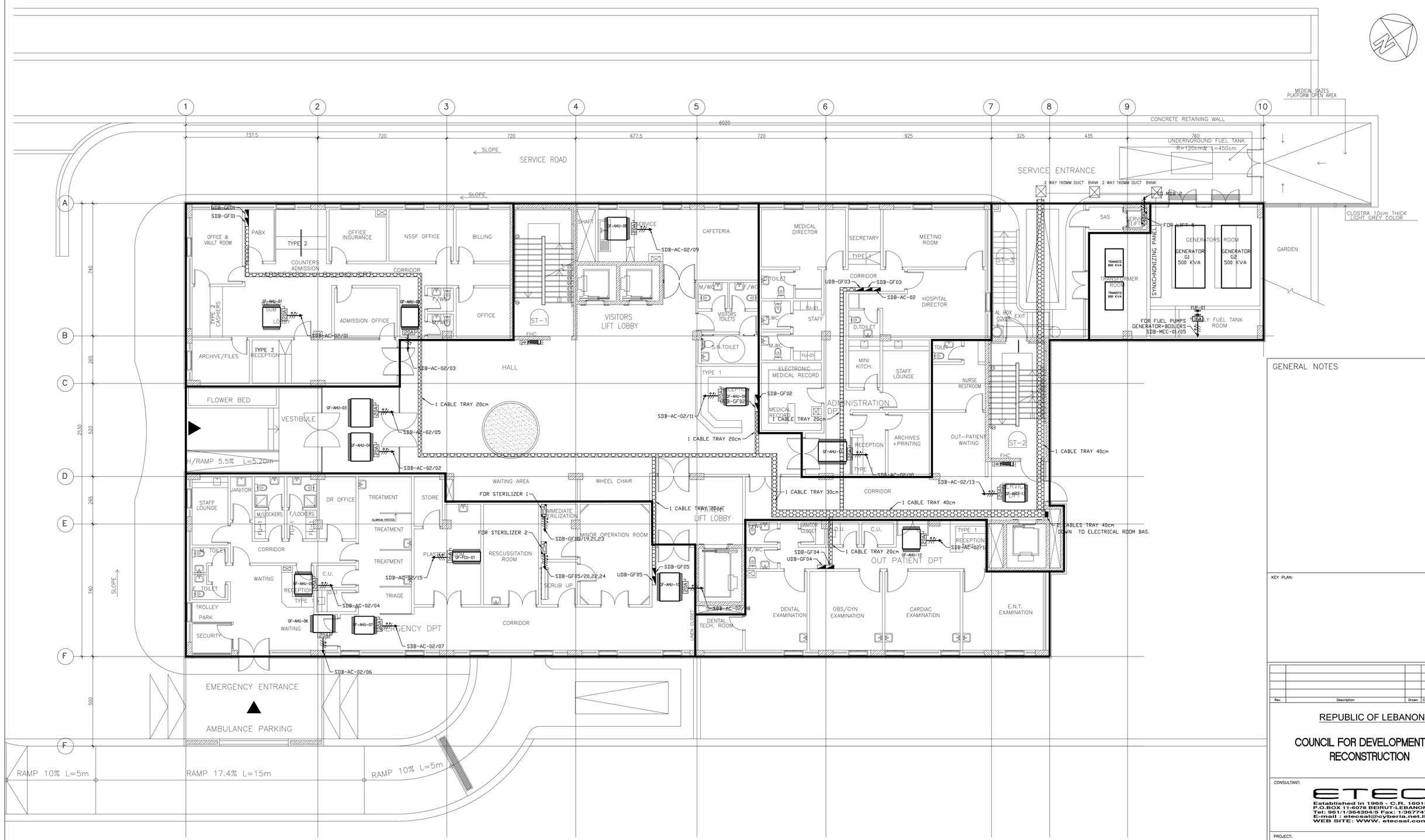
PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

BASEMENT FLOOR PLAN - POWER LAYOUT

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E20
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	1/100
DRAWING NO.:	E20			REVISION	00



GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
Established in 1965 - C.R. 16013
P.O.BOX 11-6078 BEIRUT-LEBANON
Tel: 961/1/364304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

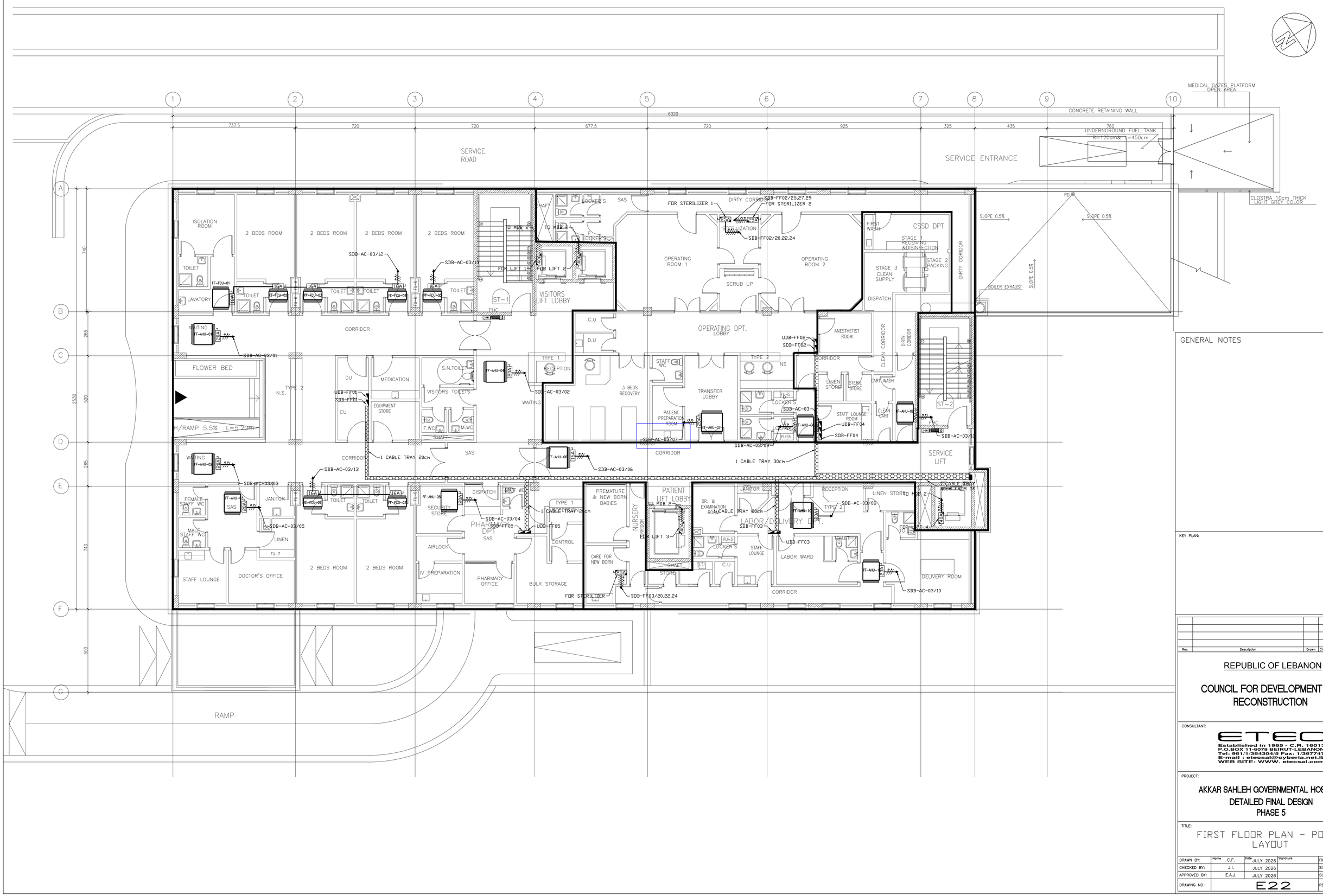
PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

GROUND FLOOR PLAN - POWER LAYOUT

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E21
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	1/100
DRAWING NO.:	E21			REVISION	00



GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
Established in 1965 - C.R. 16013
P.O.BOX 11-5078 BEIRUT-LEBANON
Tel: 961/1/364304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

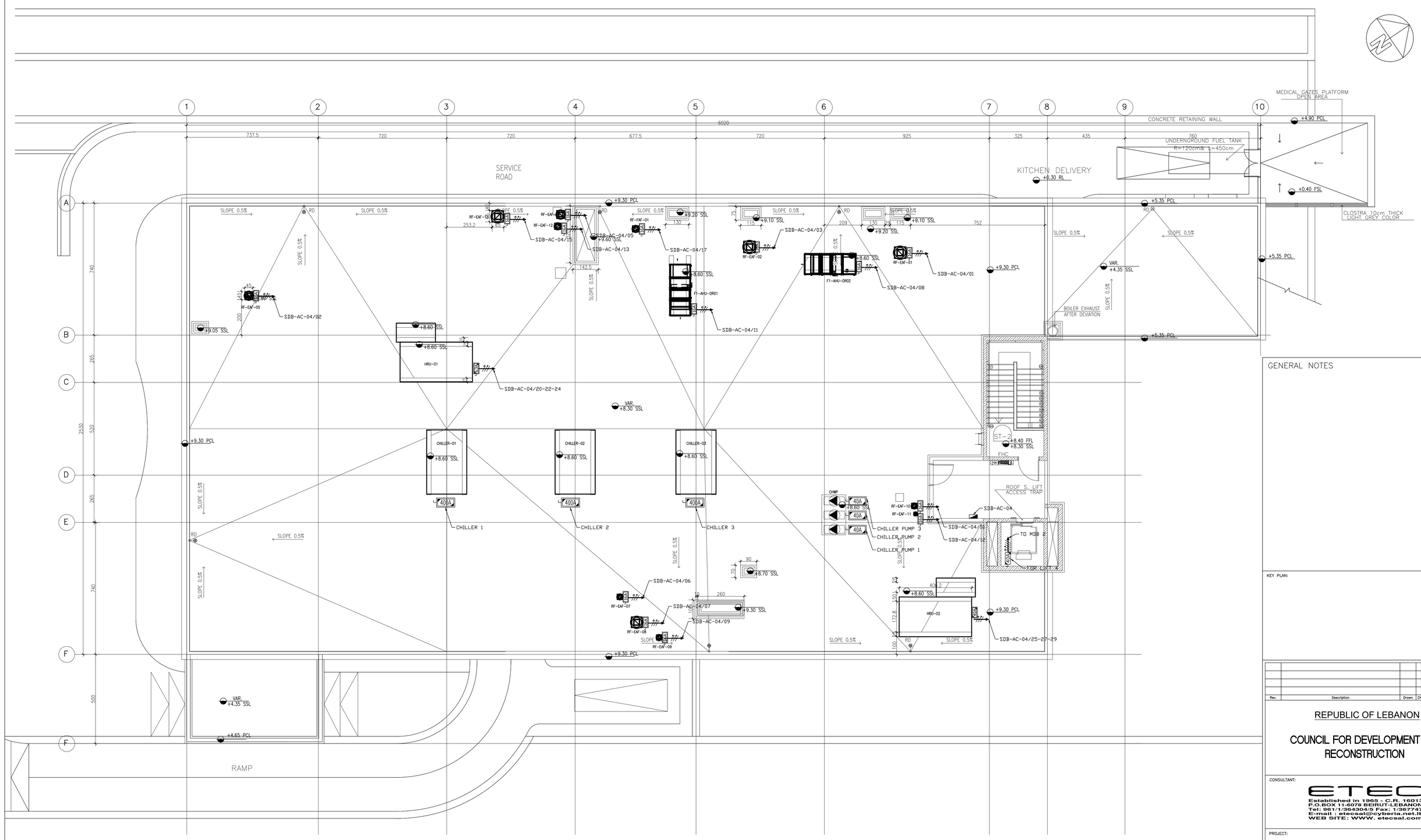
PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

FIRST FLOOR PLAN - POWER LAYOUT

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E22
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	1/100
DRAWING NO.:	E22			REVISION	00



GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
Established in 1965 - C.R. 16013
P.O.BOX 11-6078 BEIRUT-LEBANON
Tel: 961/1/364304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

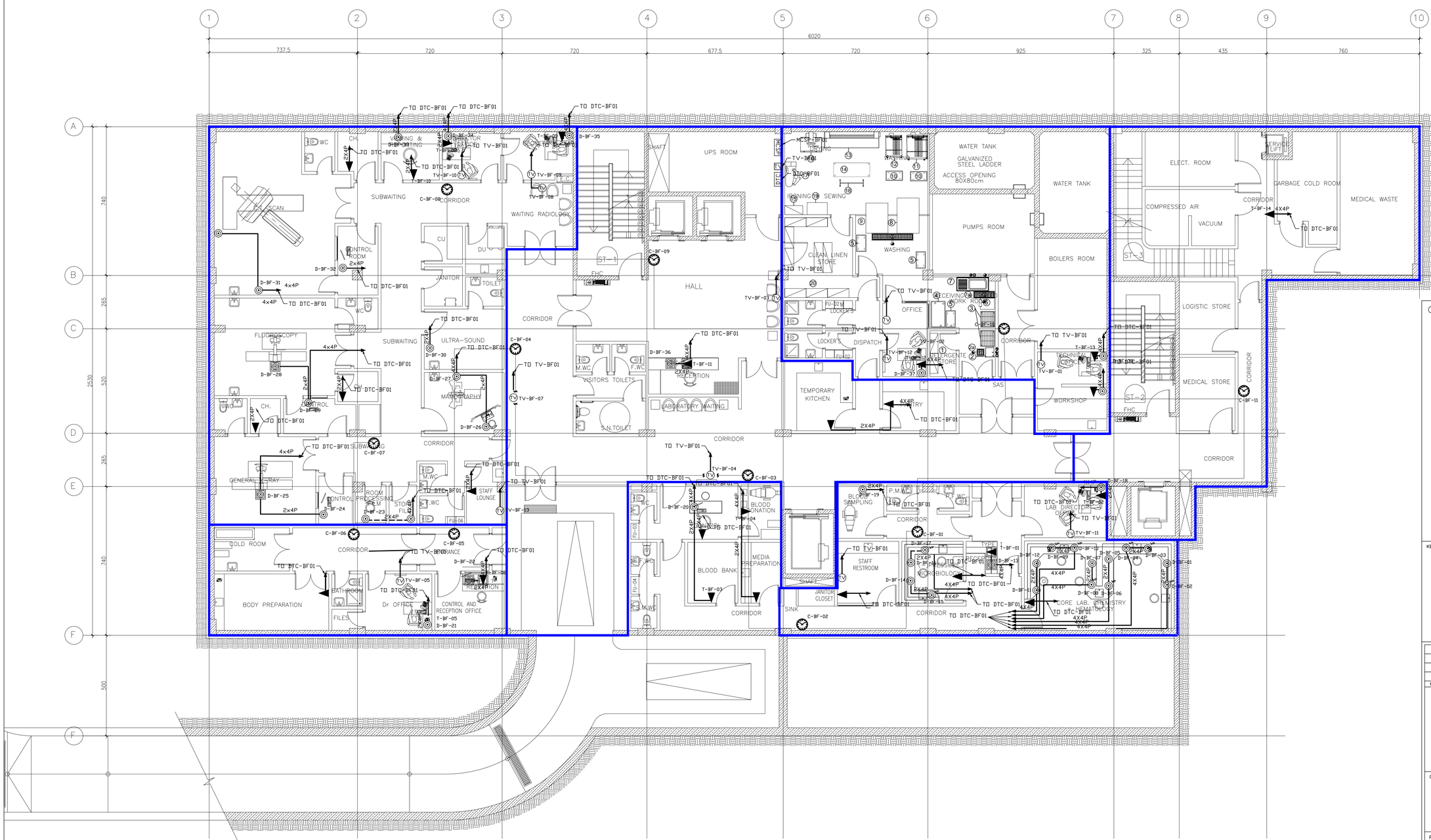
PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

ROOF PLAN - POWER LAYOUT

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E23
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	1/100
DRAWING NO.:	E23			REVISION	00



GENERAL NOTES

KEY PLAN:

Rev.	Description	Drawn	Checked	Approved	Date

REPUBLIC OF LEBANON

COUNCIL FOR DEVELOPMENT AND RECONSTRUCTION

CONSULTANT:

ETEC
Established in 1965 - C.R. 16013
P.O.BOX 11-6078 BEIRUT-LEBANON
Tel: 961/1/354304/5 Fax: 1/367747
E-mail : etecsal@cyberia.net.lb
WEB SITE: WWW. etecsal.com

PROJECT:

AKKAR SAHLEH GOVERNMENTAL HOSPITAL
DETAILED FINAL DESIGN
PHASE 5

TITLE:

BASEMENT FLOOR PLAN - DATA, TELEPHONE, TV & CLOCK SYSTEM LAYOUT

DRAWN BY:	Name C.F.	Date JULY 2026	Signature	FILE:	ASGH-E24
CHECKED BY:	J.I.	JULY 2026		SIZE:	A1
APPROVED BY:	E.A.J.	JULY 2026		SCALE	1/100
DRAWING NO.:	E24			REVISION	00