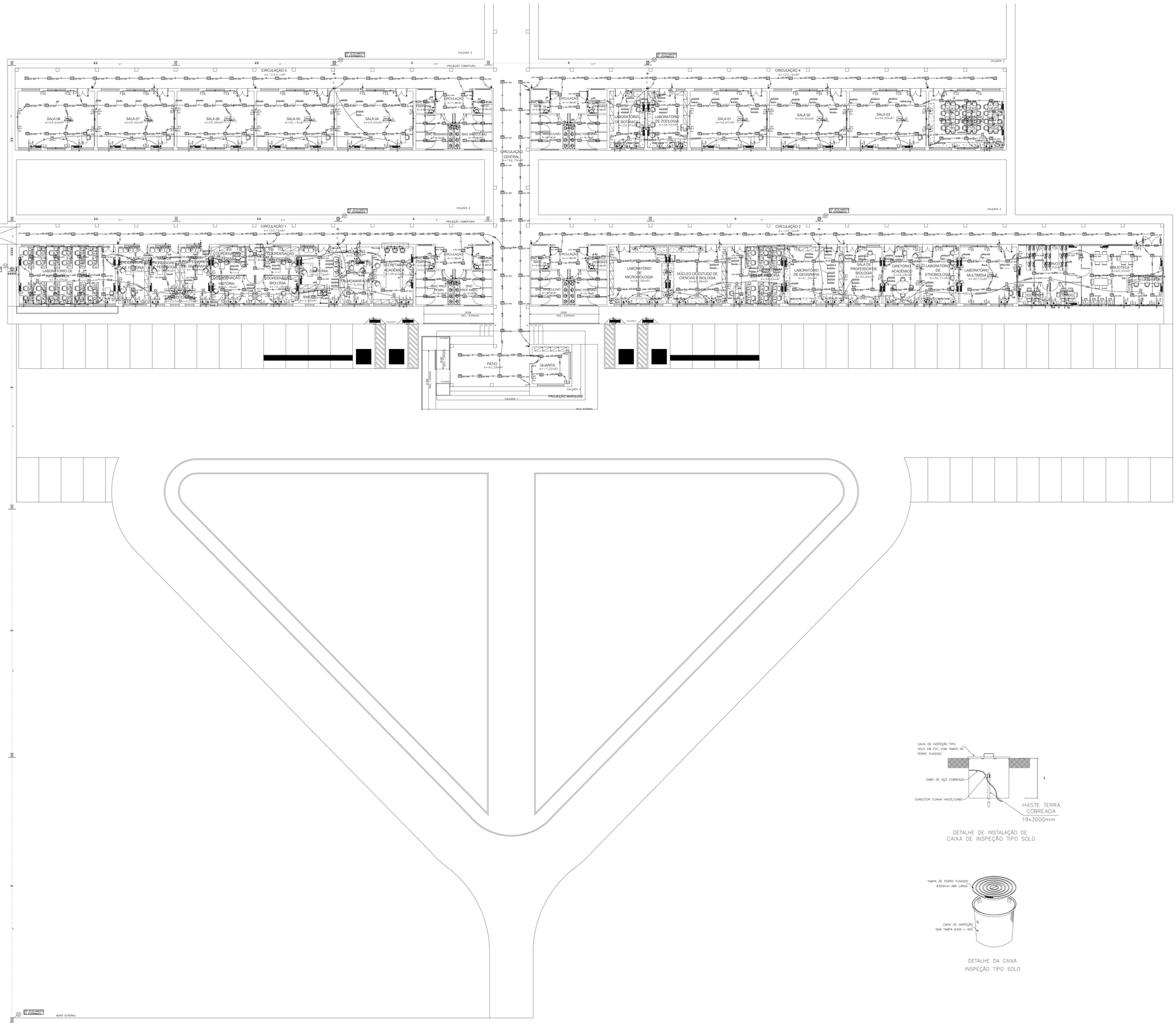
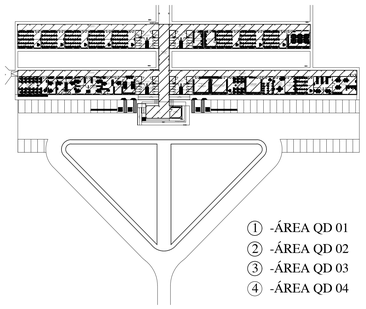




① -ÁREA QD 01
② -ÁREA QD 02
③ -ÁREA QD 03
④ -ÁREA QD 04

Legenda

14 9 CATRACA	CATRACA
530x530x152	Caixa de passagem de embutir na parede
530x530x152	Caixa de passagem de embutir no piso
120x120x75	Caixa de passagem de sobrepor no teto
	Entrada de serviço aérea - Saída aérea
p	Interruptor intermediário 1 tecla - 1,10m do piso
p	Interruptor paralelo 1 tecla - 1,10m do piso
k	Interruptor simples 1 tecla - 1,10m do piso
a a	Interruptor simples 2 teclas - 1,10m do piso
LED 18W	LED 18W
LED 24W	LED 24W
LED 30W	LED 30W
215 PROJ	Projetor de teto
	Quadro de distribuição - embutir a 1,50m do piso
	Quadro de distribuição - sobrepor a 1,50m do piso
Split 12000BTU 34 1260	Split 12000BTU
Split 18000BTU 18 2180	Split 18000BTU
Split 22000BTU 29 2430	Split 22000BTU
Split 30000BTU 16 3380	Split 30000BTU
Split 9000BTU 21 990	Split 9000BTU
GLC 10 250	Tomada hexagonal (NBR 14136) - 2P+T 10 A a 0,30m do piso
5	Tomada hexagonal (NBR 14136) - 2P+T 10 A a 1,10m do piso
2PT 5 (2x)	Tomada universal (2)2P+T a 1,10m do piso
2PT 5 (2x)	Tomada universal (2)2P+T a 0,30m do piso

OBSERVAÇÃO: Para os eletrodutos não cotados no desenho considerar bitola 3/4".

DETALHE DE INSTALAÇÃO DE CAIXA DE INSPEÇÃO TIPO SOLO

DETALHE DA CAIXA INSPEÇÃO TIPO SOLO

Projeto de Instalações Elétricas - Iluminação e Tomadas
Esc 1/150

Documento assinado digitalmente
DAVID HENRY SOARES BRANDÃO
Data: 03/07/2024 13:20:19-0300
Verifique em https://validar.iti.gov.br

David Henry Soares Brandão
Eng. Eletricista | CREA-PI, Reg.Nac.: 191.074.791-2

FUESPI
CNPJ: 07.471.758/0001-57

Revisão	Data	Modificações
R00	11/06/24	Emissão Inicial

Obra
REFORMA E AMPLIAÇÃO CAMPUS
UESPI - CAMPO MAIOR

Endereço
AVENIDA SANTO ANTÔNIO S/N SÃO LUÍS, CAMPO MAIOR - PI, 64280-000
Campo Maior - PI

Disciplina
INSTALAÇÕES ELÉTRICAS

Conteúdo
ILUMINAÇÃO E TOMADAS

Desenho
David Henry

Nome do arquivo digital:

1/150
ESCALA

Prancha
ELE 01/02

Quadro de Cargas (QGBT)

Circuito	Descrição	Esquema	Método de inst.	V (V)	Pot. total. (VA)	Pot. total. (W)	Fases	Pot. - R (W)	Pot. - S (W)	Pot. - T (W)	FCT	FCA	In' (A)	Seção (mm2)	Ic (A)	Disj (A)	dV parc (%)	dV total (%)	Status
QD1		3F+N	B1	380 / 220 V	78226	68885	R+S+T	23140	23176	22569	0.91	0.65	202.6	70	222.0	125.0	2.70	2.70	Ok
QD2		3F+N	B1	380 / 220 V	61654	53915	R+S+T	18145	17840	17930	0.91	0.65	163.3	50	175.0	100.0	1.43	1.43	Ok
QD3		3F+N	B1	380 / 220 V	57429	51035	R+S+T	17520	17070	16445	0.91	0.65	150.1	50	175.0	90.0	2.75	2.75	Ok
QD4		3F+N	B1	380 / 220 V	52962	47465	R+S+T	15810	15240	16415	0.91	0.65	139.6	50	175.0	90.0	1.66	1.66	Ok
TOTAL					250271	221300	R+S+T	74615	73326	73359									

Quadro de Cargas (QD1)

Circuito	Descrição	Esquema	Método de inst.	V (V)	Iluminação (W) 18	24	30	Tomadas (W) 9	100	215	250	600	1260	2180	2430	Pot. total. (VA)	Pot. total. (W)	Fases	Pot. - R (W)	Pot. - S (W)	Pot. - T (W)	FCT	FCA	In' (A)	Seção (mm2)	Ic (A)	Disj (A)	dV parc (%)	dV total (%)	Status
1	ILUMINAÇÃO - Circulação/Banheiros/Acervo/Biblio.	F+N	B1	220 V	32	10	16									1409	1296	S		1296		0.87	0.41	10.0	4	32.0	10.0	1.29	3.99	Ok
	bc					1										26	24	S		24			0.41	3.3	4	32.0				Ok
	bd					4										104	96	S		96			0.41	1.3	4	32.0				Ok
	be					4										104	96	S		96			0.41	2.7	4	32.0				Ok
	bf					1										26	24	S		24			0.41	3.0	4	32.0				Ok
	bg				4											78	72	S		72			1.00	3.3	4	32.0				Ok
	bu						4									130	120	S		120			0.41	10.0	4	32.0				Ok
	bv						12									391	360	S		360			0.41	8.3	4	32.0				Ok
	bw				28											548	504	S		504			1.00	2.9	4	32.0				Ok
2	ILUMINAÇÃO - Laboratórios/Salas/Diretoria	F+N	B1	220 V			44									1435	1320	T			1320	0.87	0.41	18.3	4	32.0	10.0	0.37	3.07	Ok
	bh						6									196	180	T			180		0.41	2.5	4	32.0				Ok
	bi						6									196	180	T			180		0.41	5.0	4	32.0				Ok
	bj						3									98	90	T			90		0.41	6.2	4	32.0				Ok
	bk						3									98	90	T			90		0.41	7.5	4	32.0				Ok
	bl						6									196	180	T			180		0.41	10.0	4	32.0				Ok
	bm						2									65	60	T			60		0.41	11.6	4	32.0				Ok
	bn						2									65	60	T			60		0.41	10.8	4	32.0				Ok
	bo						4									130	120	T			120		0.41	13.3	4	32.0				Ok
	bp						4									130	120	T			120		0.41	15.0	4	32.0				Ok
	bq						2									65	60	T			60		0.41	17.5	4	32.0				Ok
	br						4									130	120	T			120		0.41	16.6	4	32.0				Ok
	bs						1									33	30	T			30		0.41	18.3	4	32.0				Ok
	bt						1									33	30	T			30		0.41	17.9	4	32.0				Ok
3	TUG - Sala de Prof. de Biologia	F+N+T	B1	220 V					14							1750	1400	S		1400		0.87	0.41	22.3	4	32.0	10.0	0.38	3.08	Ok
4	TUG - Biblioteca (1/2)	F+N+T	B1	220 V					14							1750	1400	T			1400	0.87	0.41	22.3	4	32.0	10.0	1.83	4.53	Ok
5	TUG - Salas de Reunião	F+N+T	B1	220 V					12							1500	1200	S		1200		0.87	0.41	19.1	4	32.0	10.0	1.02	3.72	Ok
6	TUG - Banheiros (1/2)	F+N+T	B1	220 V								2				1333	1200	T			1200	0.87	0.41	17.0	4	32.0	10.0	1.12	3.82	Ok
7	TUG - Lab. História (1/2)	F+N+T	B1	220 V					20							2500	2000	S		2000		0.87	0.41	31.9	4	32.0	16.0	0.60	3.30	Ok
8	TUG - Lab. História (2/2)	F+N+T	B1	220 V					20							2500	2000	T			2000	0.87	0.41	31.9	4	32.0	16.0	0.78	3.48	Ok
9	TUG - (BANCADAS) Lab. Microbiologia	F+N+T	B1	220 V					14							1750	1400	S		1400		0.87	0.41	22.3	4	32.0	10.0	1.00	3.70	Ok
10	TUG - (BANCADAS) Lab. Biologia	F+N+T	B1	220 V					14							1750	1400	T			1400	0.87	0.41	22.3	4	32.0	10.0	0.88	3.58	Ok
11	TUG - (BANCADAS) Lab. Geografia	F+N+T	B1	220 V					12							1500	1200	S		1200		0.87	0.41	19.1	4	32.0	10.0	0.20	2.89	Ok
12	TUG - (BANCADAS) Lab. Etnobiologia	F+N+T	B1	220 V					10							1250	1000	T			1000	0.87	0.41	15.9	4	32.0	10.0	0.53	3.23	Ok
13	TUG - Lab.Microbio./Bio./ Geo./Etnobio.	F+N+T	B1	220 V					14							1750	1400	T			1400	0.87	0.41	22.3	4	32.0	10.0	0.41	3.11	Ok
14	TUE - Projetores/Geladeira/Catraca	F+N+T	B1	220 V				1		2	1					839	689	T			689	0.87	0.41	10.7	4	32.0	10.0	0.27	2.96	Ok
15	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	S		2180		0.87	0.50	24.8	4	32.0	16.0	1.47	4.17	Ok
16	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	T			2180	0.87	0.50	24.8	4	32.0	16.0	1.49	4.18	Ok
17	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	S		2180		0.87	0.50	24.8	4	32.0	16.0	1.17	3.86	Ok
18	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	T			2180	0.87	0.50	24.8	4	32.0	16.0	1.16	3.86	Ok
19	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	S		2180		0.87	0.50	24.8	4	32.0	16.0	0.94	3.64	Ok
20	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	T			2180	0.87	0.50	24.8	4	32.0	16.0	0.97	3.67	Ok
21	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	S		2180		0.87	0.50	24.8	4	32.0	16.0	0.44	3.14	Ok
22	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	T			2180	0.87	0.50	24.8	4	32.0	16.0	0.48	3.17	Ok
23	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	S		2180		0.87	0.45	27.5	4	32.0	16.0	0.69	3.38	Ok
24	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	T			2180	0.87	0.45	27.5	4	32.0	16.0	0.69	3.39	Ok
25	TUE - Split 12K	F+N+T	B1	220 V									1			1370	1260	S		1260		0.87	0.45	15.9	4	32.0	10.0	0.52	3.21	Ok
26	TUE - Split 12K	F+N+T	B1	220 V									1			1370	1260	S		1260		0.87	0.45	15.9	4	32.0	10.0	0.52	3.22	Ok
27	TUE - Split 12K	F+N+T	B1	220 V									1			1370	1260	T			1260	0.87	0.45	15.9	4	32.0	10.0	0.59	3.29	Ok
28	TUE - Split 12K	F+N+T	B1	220 V									1			1370	1260	S		1260		0.87	0.45	15.9	4	32.0	10.0	0.61	3.31	Ok
29	TUE - Split 22K	F+N+T	B1	220 V											1	2641	2430	R	2430			0.87	0.45	30.7	4	32.0	16.0	1.71	4.40	Ok
30	TUE - Split 22K	F+N+T	B1	220 V											1	2641	2430	R	2430			0.87	0.45	30.7	4	32.0	16.0	1.67	4.37	Ok
31	TUE - Split 12K	F+N+T	B1	220 V									1			1370	1260	R	1260			0.87	0.45	15.9	4	32.0	10.0	1.07	3.77	Ok
32	TUE - Split 12K	F+N+T	B1	220 V									1			1370	1260	R	1260			0.87	0.45	15.9	4	32.0	10.0	1.02	3.72	Ok
33	TUE - Split 12K	F+N+T	B1	220 V									1			1370	1260	R	1260			0.87	0.45	15.9	4	32.0	10.0	1.04	3.74	Ok
34	TUE - Split 12K	F+N+T	B1	220 V									1			1370	1260	R	1260			0.87	0.45	15.9	4	32.0	10.0	1.08	3.78	Ok
35	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	R	2180			0.87	0.45	27.5	6	41.0	16.0	1.52	4.22	Ok
36	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	R	2180			0.87	0.45	27.5	6	41.0	16.0	1.47	4.16	Ok
37	TUE - Split 18K	F+N+T	B1	220 V										1		2370	2180	R	2180			0.87	0.45	27.5	6	41.0	16.0	1.53	4.23	Ok
38	TUG - Diretório Acadêmico	F+N+T	B1	220 V					16							2000	1600	R	1600			0.87	0.41	25.5	4	32.0	10.0	0.64	3.34	Ok
39	TUG - Banheiros (2/2)	F+N+T	B1	220 V								2				1333	1200	R	1200			0.87	0.41	17.0	4	32.0	10.0	0.96	3.66	Ok
40	TUG - Biblioteca (2/2)	F+N+T	B1	220 V					12							1500	1200	R	1200			0.87	0.41	19.1	4	32.0	10.0	1.35	4.05	Ok
41	TUG - Circulação/Acervo	F+N+T	B1	220 V					11							1333	1100	R	1100			0.87	0.41	17.0	4	32.0	10.0	0.66	3.35	Ok
42	TUG - Lab. Multimídia	F+N+T	B1	220 V					16							2000	1600	R	1600			0.87	0.41	25.5	4	32.0	10.0	1.00	3.69	Ok
TOTAL					32	10	60	1	199	2	1	4	8	13	2	78226	68885	R+S+T	23140	23176	22569									

Quadro de Cargas (QD2)

Circuito	Descrição	Esquema	Método de inst.	V (V)	Iluminação (W) 18	24	30	Tomadas (W) 100	215	600	990	1260	2180	Pot. total. (VA)	Pot. total. (W)	Fases	Pot. - R (W)	Pot. - S (W)	Pot. - T (W)	FCT	FCA	In' (A)	Seção (mm2)	Ic (A)	Disj (A)	dV parc (%)	dV total (%)	Status
1	ILUMINAÇÃO - Circulação/Banheiros	F+N	B1	220 V	56	13								1435	1320	S		1320		0.87	0.41	7.7	4	32.0	10.0	0.84	2.27	Ok
	af				21									411	378	S		378			0.70	6.0	4	32.0				Ok
	ag					1								26	24	S		24			0.41	0.3	4	32.0				Ok
	ah					4								104	96	S		96			0.41	2.0	4	32.0				Ok
	ai					4								104	96	S		96			0.41	3.3	4	32.0				Ok
	aj					1								26	24	S		24			0.41	0.7	4	32.0				Ok
	ak				4									78	72	S		72			0.70	6.6	4	32.0				Ok
	am				1									20	18	S		18			0.41	3.6	4	32.0				Ok
	ap					1								26	24	S		24			0.41	3.9	4	32.0				Ok
	aq				2									39	36	S		36			0.41	4.4	4	32.0				Ok
	aw					1								26	24	S		24			0.41	5.1	4	32.0				Ok
	ax					1								26	24	S		24			0.41	4.7	4	32.0				Ok
	by				8									157	144	S		144			0.70	7.7	4	32.0				Ok
	bz				20									391	360	S		360			0.70	2.9	4	32.0				Ok
2	ILUMINAÇÃO- Lab./Dir./Sal./Alm./Gua./Coor./Sec.	F+N	B1	220 V			40							1304	1200	T			1200	0.87	0.41	15.0	4	32.0	10.0	0.50	1.93	Ok
	al						4							130	120	T			120		0.41	1.7	4	32.0				Ok
	an						4							130	120	T			120		0.41	3.3	4	32.0				Ok
	ao						2							65	60	T			60		0.41	4.2	4	32.0				Ok
	ar						2							65	60	T			60		0.41	5.0	4	32.0				Ok
	as						2							65	60	T			60		0.41	5.8	4	32.0				Ok
	at						2							65	60	T			60		0.41	6.6	4	32.0				Ok
	au						2							65	60	T			60		0.41	7.5	4	32.0				Ok
	av						2							65	60	T			60		0.41	8.3	4	32.0				Ok
	ay						2							65	60	T			60		0.41	9.1	4	32.0				Ok
	az						2							65	60	T			60		0.41	10.0	4	32.0				Ok
	ba						3							98	90	T			90		0.41	15.0	4	32.0				Ok
	bb						9							293	270	T			270		0.41	13.7	4	32.0				Ok
	bx						4							130	120	T			120		0.70	1.0	4	32.0				Ok
3	TUG - Sala de Prof. Geografia	F+N+T	B1	220 V				10						1250	1000	T			1000	0.87	0.41	15.9	4	32.0	10.0	0.47	1.90	Ok
4	TUG - Coordenações Pedag./Bio.	F+N+T	B1	220 V				16						2000	1600	S		1600		0.87	0.41	25.5	4	32.0	10.0	0.53	1.96	Ok
5	TUG - Secretaria Acadêmica	F+N+T	B1	220 V				14						1750	1400	S		1400		0.87	0.41	22.3	4	32.0	10.0	0.46	1.89	Ok
6	TUG - Circulação/Guarita	F+N+T	B1	220 V				12						1417	1200	T			1200	0.87	0.41	7.3	4	32.0	10.0	0.71	2.14	Ok
7	TUG - Banheiros (1/3)	F+N+T	B1	220 V						2				1333	1200	T			1200	0.87	0.41	17.0	4	32.0	10.0	0.69	2.12	Ok
8	TUG - Lab. de Informática (1/4)	F+N+T	B1	220 V				16						2000	1600	S		1600		0.87	0.41	25.5	4	32.0	10.0	1.54	2.97	Ok
9	TUG - Lab. de Informática (2/4)	F+N+T	B1	220 V				16						2000	1600	T			1600	0.87	0.41	25.5	4	32.0	10.0	1.69	3.12	Ok
10	TUG - Banheiros (2/3)	F+N+T	B1	220 V						3				2000	1800	S		1800		0.87	0.41	25.5	4	32.0	10.0	0.69	2.12	Ok
11	TUE - Split 12K	F+N+T	B1	220 V								1		1370	1260	T			1260	0.87	0.41	17.5	4	32.0	10.0	0.38	1.81	Ok
12	TUE - Split 12K	F+N+T	B1	220 V								1		1370	1260	T			1260	0.87	0.41	17.5	4	32.0	10.0	0.40	1.83	Ok
13	TUE - Split 12K	F+N+T	B1	220 V								1		1370	1260	T			1260	0.87	0.41	17.5	4	32.0	10.0	0.26	1.69	Ok
14	TUE - Split 12K	F+N+T	B1	220 V								1		1370	1260	T			1260	0.87	0.41	17.5	4	32.0	10.0	0.28	1.71	Ok
15	TUE - Split 12K	F+N+T	B1	220 V								1		1370	1260	T			1260	0.87	0.41	17.5	4	32.0	10.0	0.26	1.69	Ok
16	TUE - Split 12K	F+N+T	B1	220 V								1		1370	1260	S		1260		0.87	0.41	17.5	4	32.0	10.0	0.49	1.92	Ok
17	TUE - Split 18K	F+N+T	B1	220 V									1	2370	2180	T			2180	0.87	0.41	30.2	4	32.0	16.0	0.88	2.31	Ok
18	TUE - Split 18K	F+N+T	B1	220 V									1	2370	2180	S		2180		0.87	0.41	30.2	4	32.0	16.0	1.02	2.45	Ok
19	TUE - Split 12K	F+N+T	B1	220 V								1		1370	1260	S		1260		0.87	0.41	17.5	4	32.0	10.0	0.57	2.00	Ok
20	TUE - Split 9K	F+N+T	B1	220 V							1			1076	990	R	990			0.87	0.41	13.7	4	32.0	10.0	0.55	1.98	Ok
21	TUE - Split 9K	F+N+T	B1	220 V							1			1076	990	S		990		0.87	0.41	13.7	4	32.0	10.0	0.56	1.99	Ok
22	TUE - Split 9K	F+N+T	B1	220 V							1			1076	990	T			990	0.87	0.41	13.7	4	32.0	10.0	0.68	2.11	Ok
23	TUE - Split 9K	F+N+T	B1	220 V							1			1076	990	S		990		0.87	0.41	13.7	4	32.0	10.0	0.66	2.09	Ok
24	TUE - Split 12K	F+N+T	B1	220 V								1		1370	1260	T			1260	0.87	0.41	17.5	4	32.0	10.0	0.96	2.39	Ok
25	TUE - Split 12K	F+N+T	B1	220 V								1		1370	1260	S		1260		0.87	0.41	17.5	4	32.0	10.0	0.96	2.39	Ok
26	TUE - Split 18K	F+N+T	B1	220 V									1	2370	2180	S		2180		0.87	0.41	30.2	4	32.0	16.0	1.92	3.35	Ok
27	TUE - Split 18K	F+N+T	B1	220 V									1	2370	2180	R	2180			0.87	0.41	30.2	4	32.0	16.0	1.90	3.33	Ok
28	TUE - Split 18K	F+N+T	B1	220 V									1	2370	2180	R	2180			0.87	0.41	30.2	4	32.0	16.0	2.18	3.61	Ok
29	TUE - Split 18K	F+N+T	B1	220 V									1	2370	2180	R	2180			0.87	0.41	30.2	4	32.0	16.0	2.18	3.61	Ok
30	TUG - Sala de Prof. História	F+N+T	B1	220 V				14						1750	1400	R	1400			0.87	0.41	22.3	4	32.0	10.0	1.04	2.47	Ok
31	TUG - Coordenações de Geo./Hist.	F+N+T	B1	220 V				16						2000	1600	R	1600			0.87	0.41	25.5	4	32.0	10.0	0.70	2.13	Ok
32	TUG - Sala de Prof. Pedagogia	F+N+T	B1	220 V				10						1250	1000	T			1000	0.87	0.41	15.9	4	32.0	10.0	0.62	2.05	Ok
33	TUG - Diretoria	F+N+T	B1	220 V				14						1750	1400	R	1400			0.87	0.41	22.3	4	32.0	10.0	0.28	1.71	Ok
34	TUG - Almoxarifado	F+N+T	B1	220 V				12						1500	1200	R	1200			0.87	0.41	19.1	4	32.0	10.0	0.39	1.82	Ok
35	TUG - Banheiros (3/3)	F+N+T	B1	220 V						2				1333	1200	R	1200			0.87	0.41	17.0	4	32.0	10.0	0.53	1.96	Ok
36	TUG - Lab. de Informática (3/4)	F+N+T	B1	220 V				20						2500	2000	R	2000			0.87	0.41	31.9	4	32.0	16.0	1.66	3.09	Ok
37	TUG - Lab. de Informática (4/4)/Projetor	F+N+T	B1	220 V				16	1					2234	1815	R	1815			0.87	0.41	28.5	4	32.0	16.0	1.49	2.92	Ok
TOTAL					56	13	40	186	1	7	4	9	6	61654	53915	R+S+T	18145	17840	17930									

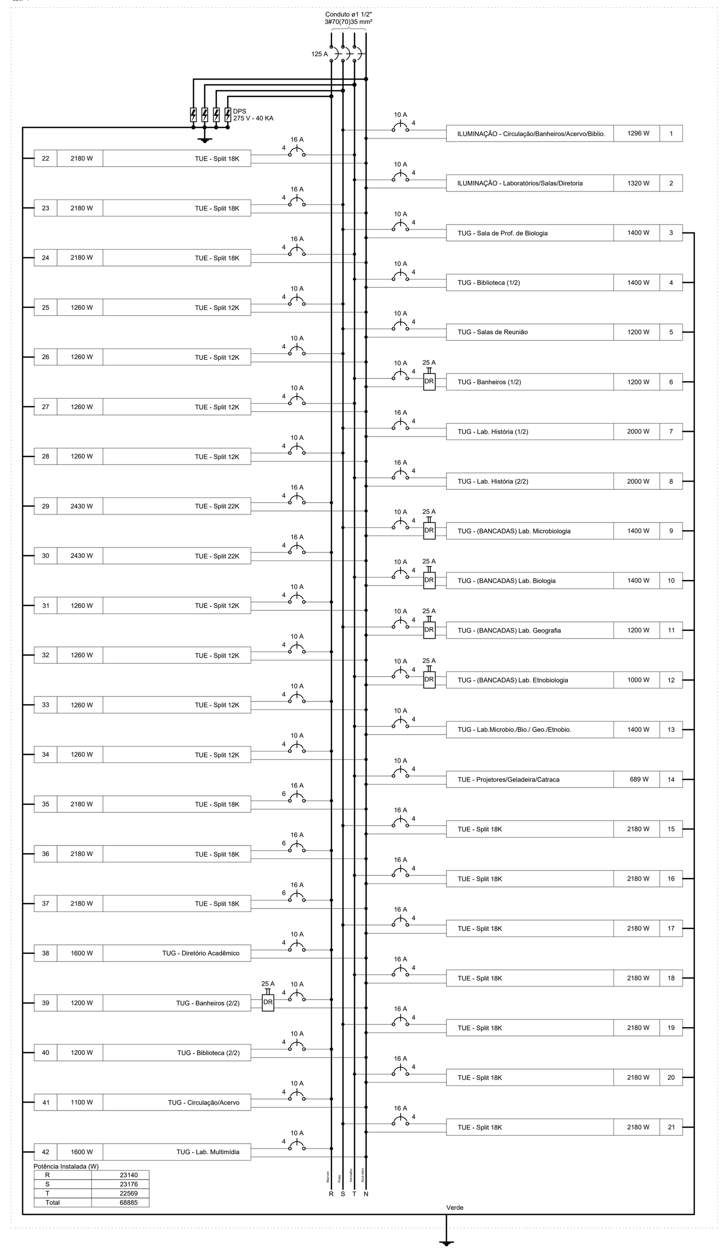
Quadro de Cargas (QD3)

Circuito	Descrição	Esquema	Método de inst.	V (V)	Iluminação (W) 18	24	30	Tomadas (W) 100	215	250	600	1260	2180	3380	Pot. total. (VA)	Pot. total. (W)	Fases	Pot. - R (W)	Pot. - S (W)	Pot. - T (W)	FCT	FCA	In' (A)	Seção (mm2)	Ic (A)	Disj (A)	dV parc (%)	dV total (%)	Status
1	ILUMINAÇÃO - Circulação/Banheiros	F+N	B1	220 V	25	10									750	690	S		690		0.87	0.45	3.0	4	32.0	10.0	0.58	3.33	Ok
	ae				21										411	378	S		378			1.00	2.1	4	32.0				Ok
	q					1									26	24	S		24			0.45	3.0	4	32.0				Ok
	r					4									104	96	S		96			0.45	1.2	4	32.0				Ok
	s					4									104	96	S		96			0.45	2.4	4	32.0				Ok
	t					1									26	24	S		24			0.45	2.7	4	32.0				Ok
	u				4										78	72	S		72			1.00	2.6	4	32.0				Ok
2	ILUMINAÇÃO - Laboratórios	F+N	B1	220 V			17								554	510	T			510	0.87	0.45	6.4	4	32.0	10.0	0.31	3.06	Ok
	ad						9								293	270	T			270		0.45	6.4	4	32.0				Ok
	v						4								130	120	T			120		0.45	1.5	4	32.0				Ok
	w						4								130	120	T			120		0.45	3.0	4	32.0				Ok
3	ILUMINAÇÃO - Salas	F+N	B1	220 V			24								783	720	T			720	0.87	0.45	9.1	4	32.0	10.0	0.42	3.17	Ok
	aa						6								196	180	T			180		0.45	5.3	4	32.0				Ok
	ab						2								65	60	T			60		0.45	9.1	4	32.0				Ok
	ac						6								196	180	T			180		0.45	8.3	4	32.0				Ok
	x						2								65	60	T			60		0.45	3.0	4	32.0				Ok
	y						6								196	180	T			180		0.45	2.3	4	32.0				Ok
	z						2								65	60	T			60		0.45	6.1	4	32.0				Ok
4	TUG - Sala 1	F+N+T	B1	220 V				16							2000	1600	S		1600		0.87	0.45	23.2	4	32.0	10.0	0.58	3.33	Ok
5	TUG - Sala 3	F+N+T	B1	220 V				16							2000	1600	T			1600	0.87	0.45	23.2	4	32.0	10.0	1.39	4.14	Ok
6	TUG - Banheiros (1/2)	F+N+T	B1	220 V							2				1333	1200	T			1200	0.87	0.45	15.5	4	32.0	10.0	0.57	3.32	Ok
7	TUG - Lab. de Botânica/Zoologia/Biologia (1/3)	F+N+T	B1	220 V				12							1500	1200	S		1200		0.87	0.45	17.4	4	32.0	10.0	0.94	3.69	Ok
8	TUG - (BANCADAS) Lab. de Botânica/Zoologia	F+N+T	B1	220 V				20							2500	2000	T			2000	0.87	0.45	29.0	4	32.0	16.0	0.56	3.32	Ok
9	TUG - (BANCADAS) Lab. de Biologia	F+N+T	B1	220 V				12							1500	1200	T			1200	0.87	0.45	17.4	4	32.0	10.0	1.42	4.17	Ok
10	TUE - Projetores/Geladeira	F+N+T	B1	220 V					3	1					973	895	T			895	0.87	0.45	11.3	4	32.0	10.0	0.35	3.10	Ok
11	TUE - Split 12K	F+N+T	B1	220 V								1			1370	1260	S		1260		0.87	0.57	12.6	2.5	24.0	10.0	0.45	3.20	Ok
12	TUE - Split 12K	F+N+T	B1	220 V								1			1370	1260	T			1260	0.87	0.57	12.6	2.5	24.0	10.0	0.42	3.18	Ok
13	TUE - Split 18K	F+N+T	B1	220 V									1		2370	2180	S		2180		0.87	0.50	24.8	4	32.0	16.0	0.69	3.44	Ok
14	TUE - Split 18K	F+N+T	B1	220 V									1		2370	2180	T			2180	0.87	0.50	24.8	4	32.0	16.0	0.71	3.47	Ok
15	TUE - Split 30K	F+N+T	B1	220 V										1	3674	3380	S		3380		0.87	0.50	38.4	10	57.0	20.0	0.64	3.39	Ok
16	TUE - Split 30K	F+N+T	B1	220 V										1	3674	3380	T			3380	0.87	0.50	38.4	10	57.0	20.0	0.67	3.42	Ok
17	TUE - Split 30K	F+N+T	B1	220 V										1	3674	3380	S		3380		0.87	0.50	38.4	10	57.0	20.0	0.91	3.66	Ok
18	TUE - Split 30K	F+N+T	B1	220 V										1	3674	3380	S		3380		0.87	0.50	38.4	10	57.0	20.0	0.93	3.68	Ok
19	TUE - Split 30K	F+N+T	B1	220 V										1	3674	3380	R	3380			0.87	0.50	38.4	10	57.0	20.0	1.18	3.93	Ok
20	TUE - Split 30K	F+N+T	B1	220 V										1	3674	3380	R	3380			0.87	0.50	38.4	10	57.0	20.0	1.20	3.95	Ok
21	TUE - Split 30K	F+N+T	B1	220 V										1	3674	3380	R	3380			0.87	0.50	38.4	10	57.0	20.0	1.48	4.23	Ok
22	TUE - Split 30K	F+N+T	B1	220 V										1	3674	3380	R	3380			0.87	0.50	38.4	10	57.0	20.0	1.50	4.25	Ok
23	TUG - Sala 2	F+N+T	B1	220 V				16							2000	1600	R	1600			0.87	0.45	23.2	4	32.0	10.0	0.92	3.67	Ok
24	TUG - Lab. de Biologia (2/3)	F+N+T	B1	220 V				12							1500	1200	T			1200	0.87	0.45	17.4	4	32.0	10.0	1.28	4.03	Ok
25	TUG - Banheiros (2/2)	F+N+T	B1	220 V							2				1333	1200	R	1200			0.87	0.45	15.5	4	32.0	10.0	0.41	3.16	Ok
26	TUG - Circulação	F+N+T	B1	220 V				3							333	300	T			300	0.87	0.45	3.9	4	32.0	10.0	0.08	2.83	Ok
27	TUG - Lab. de Biologia (3/3)	F+N+T	B1	220 V				12							1500	1200	R	1200			0.87	0.45	17.4	4	32.0	10.0	1.30	4.05	Ok
TOTAL					25	10	41	119	3	1	4	2	2	8	57429	51035	R+S+T	17520	17070	16445									

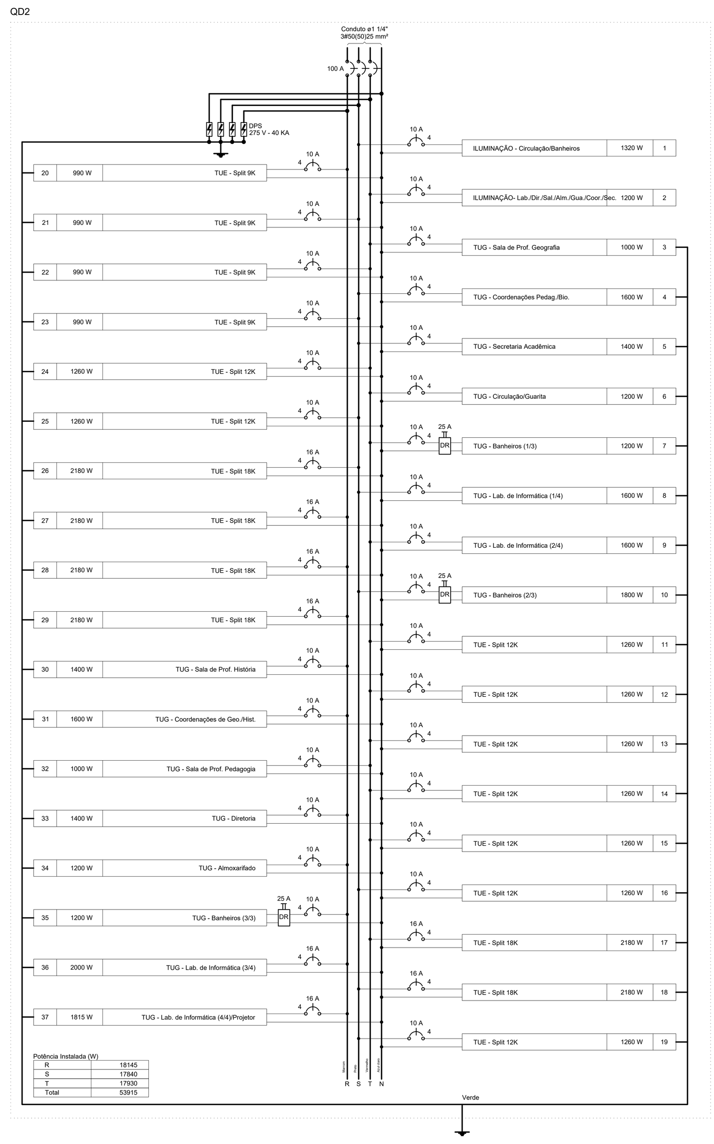
Quadro de Cargas (QD4)

Circuito	Descrição	Esquema	Método de inst.	V (V)	Iluminação (W) 18	24	30	Tomadas (W) 100	215	600	3380	Pot. total. (VA)	Pot. total. (W)	Fases	Pot. - R (W)	Pot. - S (W)	Pot. - T (W)	FCT	FCA	In' (A)	Seção (mm2)	Ic (A)	Disj (A)	dV parc (%)	dV total (%)	Status
1	ILUMINAÇÃO - Circulação/Banheiros	F+N	B1	220 V	25	10						750	690	R	690			0.87	0.50	2.7	2.5	24.0	10.0	0.98	2.64	Ok
	k					1						26	24	R	24				0.50	0.5	2.5	24.0				Ok
	l					1						26	24	R	24				0.50	0.3	2.5	24.0				Ok
	m					4						104	96	R	96				0.50	1.6	2.5	24.0				Ok
	n					4						104	96	R	96				0.50	2.7	2.5	24.0				Ok
	o				4							78	72	R	72				1.00	2.6	2.5	24.0				Ok
	p				21							411	378	R	378				1.00	2.1	2.5	24.0				Ok
2	ILUMINAÇÃO - Salas	F+N	B1	220 V			40					1304	1200	T			1200	0.87	0.50	13.6	2.5	24.0	10.0	0.84	2.50	Ok
	a						2					65	60	T			60		0.50	2.7	2.5	24.0				Ok
	b						6					196	180	T			180		0.50	2.0	2.5	24.0				Ok
	c						2					65	60	T			60		0.50	5.5	2.5	24.0				Ok
	d						6					196	180	T			180		0.50	4.8	2.5	24.0				Ok
	e						2					65	60	T			60		0.50	8.2	2.5	24.0				Ok
	f						6					196	180	T			180		0.50	7.5	2.5	24.0				Ok
	g						2					65	60	T			60		0.50	10.9	2.5	24.0				Ok
	h						6					196	180	T			180		0.50	10.2	2.5	24.0				Ok
	i						2					65	60	T			60		0.50	13.6	2.5	24.0				Ok
	j						6					196	180	T			180		0.50	12.9	2.5	24.0				Ok
3	TUG - Sala 4	F+N+T	B1	220 V				16				2000	1600	S		1600		0.87	0.50	20.9	2.5	24.0	10.0	0.77	2.43	Ok
4	TUG - Sala 6	F+N+T	B1	220 V				16				2000	1600	T			1600	0.87	0.50	20.9	2.5	24.0	10.0	1.23	2.89	Ok
5	TUG - Sala 8/Circulação	F+N+T	B1	220 V				19				2333	1900	S		1900		0.87	0.50	24.4	4	32.0	16.0	1.50	3.16	Ok
6	TUG - Banheiros	F+N+T	B1	220 V						4		2667	2400	T			2400	0.87	0.50	27.9	4	32.0	16.0	1.19	2.85	Ok
7	TUE - Projetores	F+N+T	B1	220 V					5			1168	1075	T			1075	0.87	0.50	12.2	2.5	24.0	10.0	0.62	2.28	Ok
8	TUE - Split 30K	F+N+T	B1	220 V							1	3674	3380	S		3380		0.87	0.60	32.0	6	41.0	20.0	0.59	2.25	Ok
9	TUE - Split 30K	F+N+T	B1	220 V							1	3674	3380	T			3380	0.87	0.60	32.0	6	41.0	20.0	0.62	2.28	Ok
10	TUE - Split 30K	F+N+T	B1	220 V							1	3674	3380	S		3380		0.87	0.52	36.9	10	57.0	20.0	0.62	2.28	Ok
11	TUE - Split 30K	F+N+T	B1	220 V							1	3674	3380	T			3380	0.87	0.52	36.9	10	57.0	20.0	0.64	2.30	Ok
12	TUE - Split 30K	F+N+T	B1	220 V							1	3674	3380	S		3380		0.87	0.52	36.9	10	57.0	20.0	0.88	2.54	Ok
13	TUE - Split 30K	F+N+T	B1	220 V							1	3674	3380	T			3380	0.87	0.52	36.9	10	57.0	20.0	0.91	2.57	Ok
14	TUE - Split 30K	F+N+T	B1	220 V							1	3674	3380	R	3380			0.87	0.52	36.9	10	57.0	20.0	1.15	2.81	Ok
15	TUE - Split 30K	F+N+T	B1	220 V							1	3674	3380	R	3380			0.87	0.52	36.9	10	57.0	20.0	1.18	2.84	Ok
16	TUE - Split 30K	F+N+T	B1	220 V							1	3674	3380	R	3380			0.87	0.52	36.9	10	57.0	20.0	1.42	3.08	Ok
17	TUE - Split 30K	F+N+T	B1	220 V							1	3674	3380	R	3380			0.87	0.52	36.9	10	57.0	20.0	1.44	3.10	Ok
18	TUG - Sala 5	F+N+T	B1	220 V				16				2000	1600	S		1600		0.87	0.50	20.9	2.5	24.0	10.0	0.65	2.30	Ok
19	TUG - Sala 7	F+N+T	B1	220 V				16				2000	1600	R	1600			0.87	0.50	20.9	2.5	24.0	10.0	1.81	3.47	Ok
TOTAL					25	10	40	83	5	4	10	52962	47465	R+S+T	15810	15240	16415									

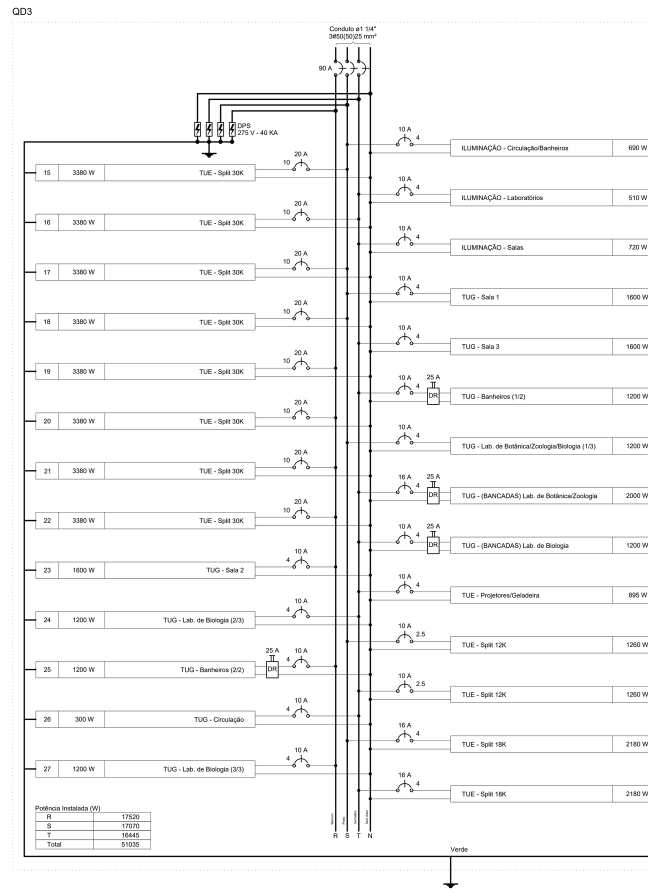
QD1



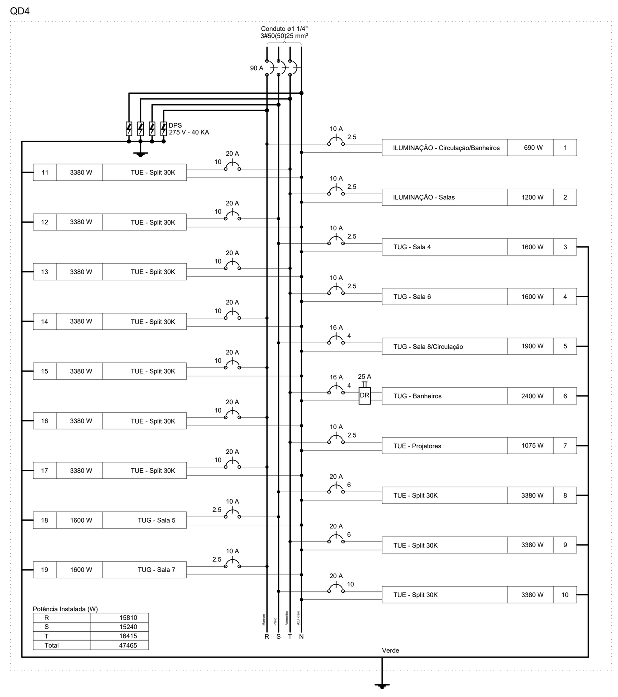
QD2



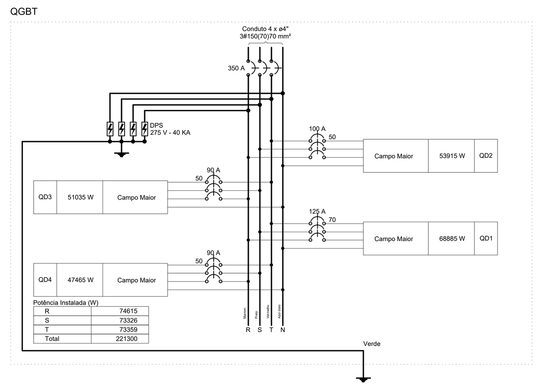
QD3



QD4



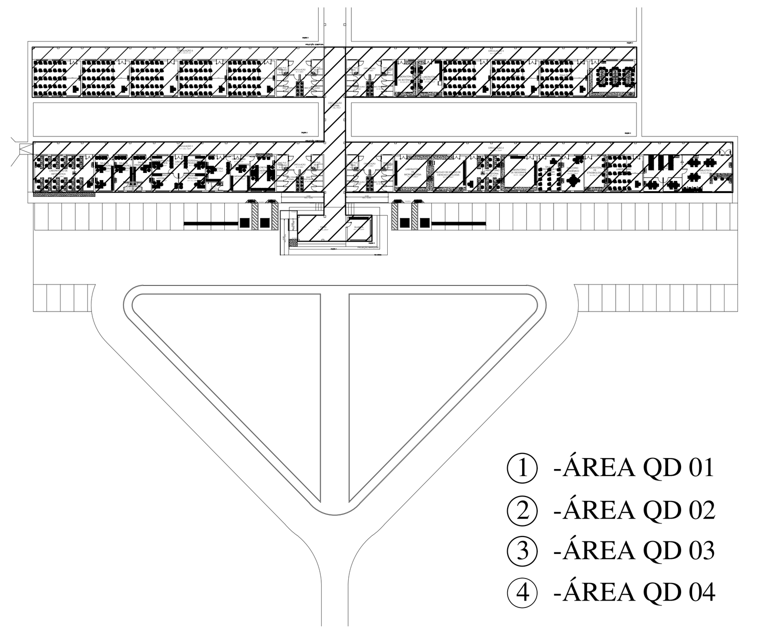
QGBT



Legenda

14 9 CATRACA	CATRACA
530x530x152	Caixa de passagem de embutir na parede
530x530x152	Caixa de passagem de embutir no piso
120x120x75	Caixa de passagem de sobrepor no teto
	Entrada de serviço aérea - Saída aérea
p	Interruptor intermediário 1 tecla - 1,10m do piso
p	Interruptor paralelo 1 tecla - 1,10m do piso
k	Interruptor simples 1 tecla - 1,10m do piso
a a	Interruptor simples 2 teclas - 1,10m do piso
1 p 18 LED 18W	LED 18W
1 r 24 LED 24W	LED 24W
2 b 30 LED 30W	LED 30W
7 215 PROJ	Projetor de teto
	Quadro de distribuição - embutir a 1,50m do piso
	Quadro de distribuição - sobrepor a 1,50m do piso
Split 12000BTU 34 1260	Split 12000BTU
Split 18000BTU 16 2180	Split 18000BTU
Split 22000BTU 29 2430	Split 22000BTU
Split 30000BTU 16 3380	Split 30000BTU
Split 9000BTU 21 990	Split 9000BTU
GLC 10 250	Tomada hexagonal (NBR 14136) - 2P+T 10 A a 0,30m do piso
5	Tomada hexagonal (NBR 14136) - 2P+T 10 A a 1,10m do piso
2PT 8 (2x)	Tomada universal (2)2P+T a 1,10m do piso
2PT 5 (2x)	Tomada universal (2) 2P+T a 0,30m do piso

OBSERVAÇÃO: Para os eletrodutos não cotados no desenho considerar bitola 3/4"



Projeto de Instalações Elétricas - Multifilar e Quadros de Cargas
Esc 1/200

Documento assinado digitalmente
DAVID HENRY SOARES BRANDAO
Data: 19/07/2024 13:30:40-0300
Verifique em https://validar.iti.gov.br

David Henry Soares Brandão
Eng. Eletricista | CREA-PI, Reg.Nac.: 191.074.791-2

FUESPI
CNPJ: 07.471.758/0001-57

Revisao	Data	Modificações
R00	11/06/24	Emissão Inicial

Obra
REFORMA E AMPLIAÇÃO CAMPUS
UESPI - CAMPO MAIOR

Endereço
AVENIDA SANTO ANTÔNIO S/N SÃO LUÍS, CAMPO MAIOR - PI, 64280-000
Campo Maior - PI

Disciplina
INSTALAÇÕES ELÉTRICAS

Conteudo
MULTIFILAR E QUADRO DE CARGAS

Desenho
David Henry

Nome do arquivo digital:

1/200
ESCALA

Prancha
ELE 02/02