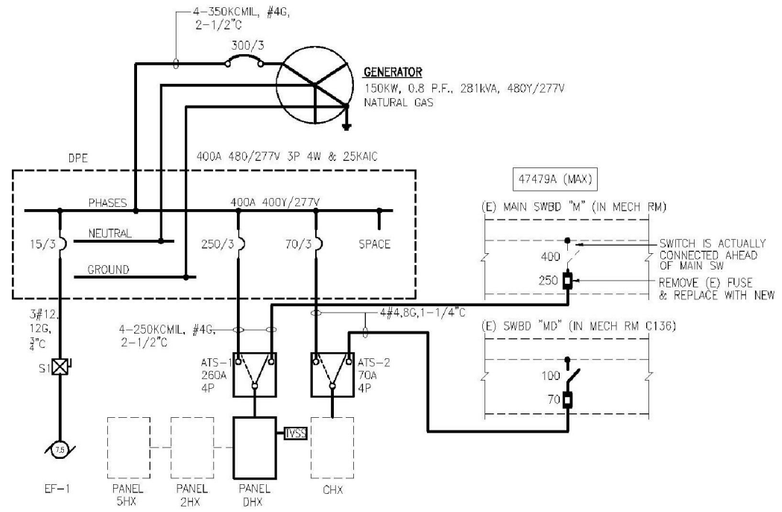


4 EXISTING ELECTRICAL ONE LINE DIAGRAM

PANEL CLC (SECT 2) ☐ EXISTING PANEL 120/208 VOLTS 3 Ø 4 WIRE ☒ SURFACE ☐ FEED THRU LUGS ☒ NEMA 1
_____ AMP MCB 400 AMP MLO 10 IAIC LOCATION C136 ☐ FLUSH ☒ 200% NEUTRAL ☐ NEMA 3R

* WIRE SIZE	LOAD DESCRIPTION	LOAD KVA	BRKR SIZE	CKT. NO.	A B C	CKT. NO.	BRKR SIZE	LOAD KVA	LOAD DESCRIPTION	WIRE * SIZE
#12	REFRIG – C137	1.2	20/1	43		44	20/1	1.2	RECEPTACLES – C137	#12
#12	HAND DRYERS – C106	1.6	20/1	45		46	20/1	1.6	HAND DRYERS – C105	#12
	RECEPTACLES – C148	1.8	20/1	47		48	40/2	6	RANGE – C158A	4#8
	RECEPTACLES – C148	1.8	20/1	49		50				1"C
	RECEPTACLES – C148	1.8	20/1	51		52	20/1	1.8	RECEPTACLES – C148	
	RECEPTACLES – C148	1.8	20/1	53		54	20/1	1.8	MICROWAVE	
	COLUMN ELEVATOR SUMP PUMP	1.2	20/1	55		56			SPACE	
	SPACE			57		58			SPACE	
	SPACE			59		60			SPACE	
	SPACE			61		62			SPACE	
	SPACE			63		64			SPACE	
	SPACE			65		66			SPACE	
	SPACE			67		68			SPACE	
	SPACE			69		70			SPACE	
	SPACE			71		72			SPACE	
	SPACE			73		74			SPACE	
	SPACE			75		76			SPACE	
	SPACE			77		78			SPACE	
	SPACE			79		80			SPACE	
	SPACE			81		82			SPACE	
	SPACE			83		84			SPACE	

(LOADS INCLUDED IN SECTION 1 SCHEDULE)

* ALL WIRING IS 2#12, 1#12G, ¾"C U.O.N. AS #10

2 EXISTING ELECTRICAL PANEL LAYOUT

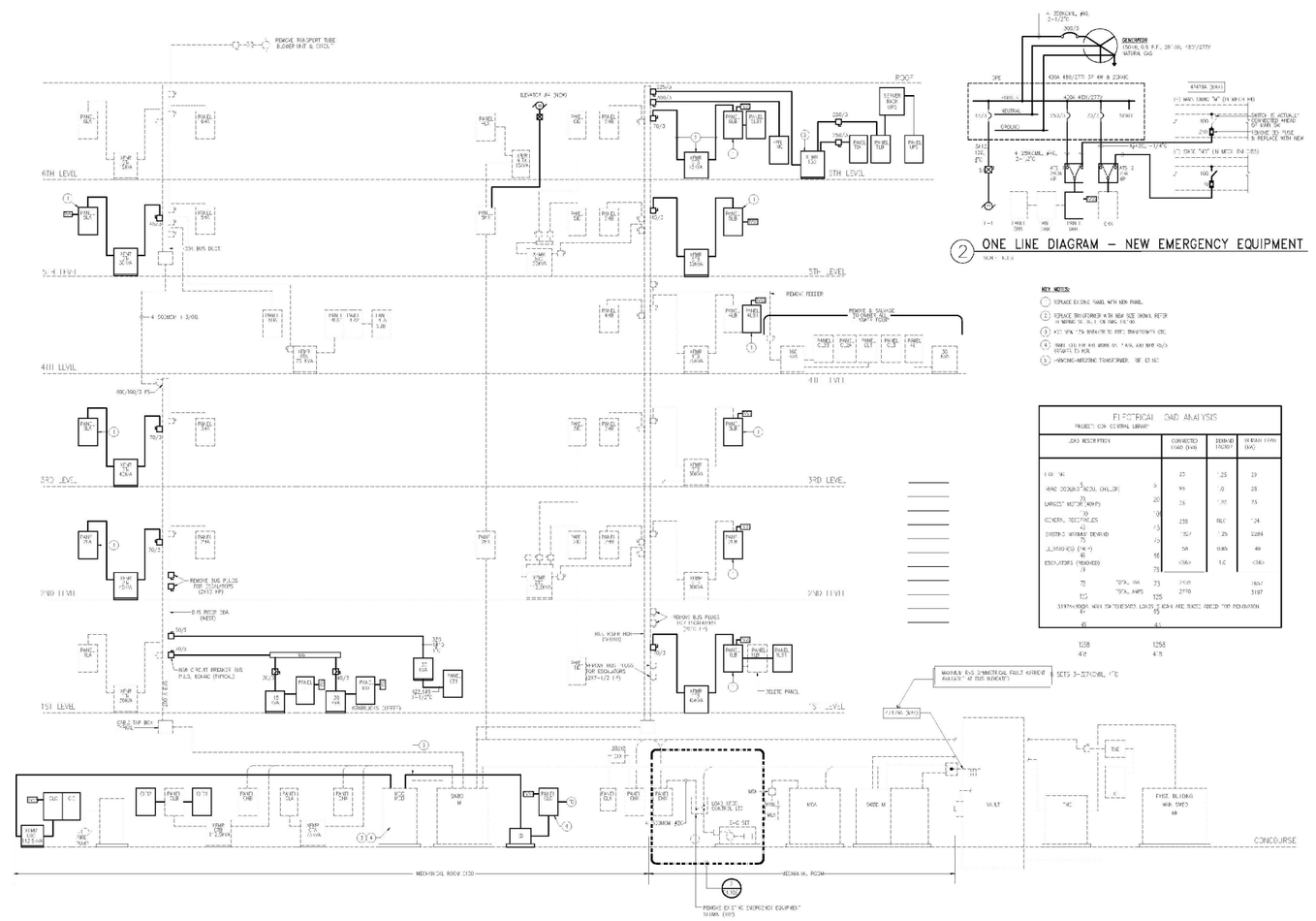
ELECTRICAL LOAD ANALYSIS
PROJECT: COH CENTRAL LIBRARY

LOAD DESCRIPTION		CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
LIGHTING		23	1.25	29
HVAC COOLING (ACCU, CHILLER)	5	98	1.0	98
LARGEST MOTOR (40HP)	20	58	1.25	73
GENERAL RECEPTACLES	100	238	NEC	124
EXISTING MAXIMUM DEMAND	45	1827	1.25	2284
ELEVATOR(S) (40HP)	75	58	0.85	49
ESCALATORS (REMOVED)	46	<66>	1.0	<66>
TOTAL KVA	79	2302		2657
TOTAL AMPS	73	2770		3197

3197A<4000A MAIN SWITCHBOARD. LOADS SHOWN ARE THOSE ADDED FOR RENOVATION.

3 EXISTING ELECTRICAL LOAD ANALYSIS

EXISTING ELECTRICAL PANEL LAYOUTS & REST OF ELECTRICAL INFORMATION MAY NOT REFLECT THE ACTUAL EXISTING CONDITIONS, FIELD VERIFY BY GENERAL CONTRACTOR PRIOR TO SUBMIT PRICING



1 EXISTING RISER DIAGRAM

FOR REFERENCE ONLY

CITY OF HOUSTON TEXAS

GENERAL SERVICES DEPARTMENT
DESIGN & CONSTRUCTION DIVISION

900 Bagby HOUSTON TEXAS 77002
ph: 832-393-8111 fax: 832.393.8009

REVISIONS

date	revision	comments

PROJECT LOCATION

CENTRAL LIBRARY
500 McKinney
Houston, Texas 77002

HOUSTON TEXAS

ELECTRICAL VEHICLE CHARGING STATION SITE PLAN

PROJECT NUMBER

ISSUE
12/07/10

SCALE
REFER TO DRAWING

DRAWN BY
A.R.

DRAWING NUMBER
2 OF 6

SHEET NUMBER

E1.0