

OCCUPANCY SENSOR SCHEDULE

- OS1** COOPER GREENGATE #OAC-DT-1000, CEILING MOUNTED 360", 1000 SQ. FT. DUAL-TECHNOLOGY OCCUPANCY SENSOR. CONNECT TO POWER PACK RELAY AS SHOWN PER THE DRAWINGS.
- OS2** COOPER GREENGATE #OAC-DT-2000, WALL MOUNTED 360", 2000 SQ. FT. DUAL-TECH OCCUPANCY SENSOR. CONNECT TO POWER PACK RELAY AS SHOWN PER THE DRAWINGS.
- OS3** COOPER GREENGATE #OAC-DT-0501, WALL MOUNTED 180", 500 SQ. FT. DUAL-TECH OCCUPANCY SENSOR. CONNECT TO POWER PACK RELAY AS SHOWN PER THE DRAWINGS.

LIGHTING EQUIPMENT SCHEDULE

- TMR-1** INTERMATIC #T101P, 24-HOUR MECHANICAL TIMER, SINGLE-POLE/SINGLE THROW, PLASTIC ENCLOSURE, RATED FOR 125V-40AMPS. CONNECT TO EXTERIOR LANDSCAPE LIGHT FIXTURES AS SHOWN PER THE FLOOR PLANS.

WIRE SIZE REQUIREMENTS

NOTE:
BASED ON A MAXIMUM OF 3.6-VOLT DROP (3%) ON 120V CIRCUITS.
WIRES FOR RUNS OVER 100'-0" SHALL BE DETERMINED ON THIS
A MAXIMUM OF A 3% DROP ALLOWED.

BRANCH CIRCUIT AMPS	LENGTH OF RUN - FROM PANEL TO FIRST CONNECTION - FEET								
	50'	60'	70'	80'	90'	100'	110'	120'	130'
15	#12	#12	#12	#10	#10	#10	#10	#10	#8
20	#12	#10	#10	#10	#10	#8	#8	#8	#8
30	#10	#10	#8	#8	#8	#6	#6	#6	#6

LIGHT FIXTURE SCHEDULE

ELECTRICAL CONTRACTOR (E.C.) SHALL VERIFY ALL LIGHT FIXTURE FINISHES WITH ARCHITECT/ENGINEER PRIOR TO ORDERING.

- A** METALUX #22CZ-LD4-34-UNV-L840-CD1, 2'x2' RECESSED LED GRID TROFFER, WITH ACRYLIC OPTIC, SINGLE 0-10V DIMMING DRIVER, WITH 35W, 4000°K, 85+ CRI, LED WITH 3600 DELIVERED LUMENS.
- A1** METALUX #22CZ-LD4-34-UNV-EL14-L840-CD1, SAME AS TYPE-A EXCEPT WITH INTEGRAL EMERGENCY LTG. FOR A MINIMUM OF 1400 LUMENS, WITH 35W, 4000°K, 85+ CRI, LED WITH 3600 DELIVERED LUMENS.
- A2** METALUX #22CZ-LD4-24-UNV-L840-CD1, 2'x2' RECESSED LED GRID TROFFER, WITH ACRYLIC OPTIC, SINGLE 0-10V DIMMING DRIVER, WITH 22.6W, 4000°K, 85+ CRI, LED WITH 2547 DELIVERED LUMENS.
- A3** METALUX #22CZ-LD4-24-UNV-EL-L840-CD1, SAME AS TYPE-A2 EXCEPT WITH INTEGRAL EMERGENCY LTG. FOR A MINIMUM OF 700 LUMENS, WITH 22.6W, 4000°K, 85+ CRI, LED WITH 2547 DELIVERED LUMENS.
- B** AXIS LIGHTING #ARWLED-B3-MF-500-40-S-2-AP-120-D-1, 2' LINEAR WALL BRACKET FIXTURE, SINGLE 0-10V DIMMING DRIVER, WITH 12.0W, 4000°K, 80+ CRI LED WITH 1000 NOMINAL DELIVERED LUMENS. CENTERED ABOVE VANITY MIRROR - FIELD VERIFY MNTG. HEIGHT.
- C** HALO #SLD060940WHJB, 6" ROUND LED SURFACE MOUNTED FIXTURE WITH DAMP LOCATION LISTING, WHITE TRIM FINISH, AND 13.2W, 4000°K, 90 CRI, AND 780 DELIVERED LUMENS. CEILING OR WALL MNTD. AS SHOWN PER THE FLOOR PLANS.
- D** METALUX #8TIAF-232-120V-ER81-AVC-CHAIN/SET-U, COMMERCIAL GRADE 8FT. LINEAR FLUORESCENT INDUSTRIAL FIXTURE WITH SINGLE PROGRAM-START BALLAST, APERTURED REFLECTOR WITH (4) 32WT8, 4100°K LAMPS, <10% THD. COORDINATE SUSPENDED MNTG. HEIGHTS AND FIXTURE ORIENTATIONS IN MECHANICAL SPACES WITH ALL OTHER TRADES IN THE FIELD.
- xEX** EXISTING EXIT SIGN, RELOCATE EXISTING EXIT SIGN. NOTIFY ARCHITECT/ENGINEER IF EXISTING EXIT CANNOT BE REUSED.
- EX** SURE-LITES #LPX-7-0-R-WH, LED SELF-POWERED POLYCARBONATE EXIT SIGN WITH RED LETTERS AND WHITE HOUSING, INTEGRAL LEAD CALCIUM BATTERY.
- EX1** SURE-LITES #LPXDH-7-0-R-WH, SAME AS TYPE-EX EXCEPT WITH DOUBLE ADJUSTABLE EMERGENCY LIGHTING FIXTURE HEADS.
- EM** DUAL-LITES #OCRS2080S, REMOTE EMERGENCY LIGHTING FIXTURE WITH DARK BRONZE FINISH. CONNECT TO HIGH-POWERED EXIT SIGN TYPE EX1 OR EX2 AS SHOWN PER THE FLOOR PLANS.
- EM1** LITHOINA #ELM2LED, INTERIOR EMERGENCY LIGHTING FIXTURE WITH TWO (2) 1.5W/3.6V, WHITE LED ADJUSTABLE LIGHTING HEADS. WALL MNTD. AT APPROX. 7'-0" AFF TO THE BOTTOM OF THE FIXTURE.
- F** LUMARK #XTOR2A-N, EXTERIOR LED WALL PACK WITH STANDARD BRONZE HOUSING FINISH, FULL CUTOFF DISTRIBUTION, 120-277V LED DRIVER, WITH A 20W, 3500°K LED, MOUNTED SO THAT BOTTOM OF THE FIXTURE IS APPROX. 14'-9" AFG (UON).
- G** AFX LIGHTING #SXPL450-40-RD-SN-MV, L.E.D. PENDENT WITH RED GLASS SHADE, SATIN SILVER MONO-POINT CANOPY AND ADJUSTABLE CABLE WITH INTEGRAL 120-277V L.E.D. DRIVER, AND (1) 6W, 4000°K LED, 80+ CRI LED WITH 450 SOURCE LUMENS. COORDINATE MNTG. HEIGHT WITH ARCHITECTURAL INTERIOR ELEVATIONS AND FIELD CONDITIONS.
- H** (ADD. ALTERNATE #5 ONLY)
METALUX #2GR8-332A-120V-ER81, 2'x4' RECESSED GRID TROFFER WITH ACRYLIC LENS, SINGLE ELECTRONIC BALLAST WITH (3) 32WT8, 4100°K LAMPS, <10%THD.
- H1** (ADD. ALTERNATE #5 ONLY)
METALUX #2GR8-332A-EL(#FBP240H)-120V-ER81, SAME AS TYPE A EXCEPT WITH EMERGENCY LIGHTING FOR 1 LAMP AT A TOTAL MINIMUM OF 1350 LUMENS WITH (3) 32WT8, 4100°K LAMPS, <10%THD.

xPANEL #A		EXISTING 200 AMPS M.C.B. 120/240V-100-3W SQUARE D TYPE OO SURFACE PANEL WITH TRIM KIT, GROUND BAR KIT, COPPER MAINS, AND SOLID NEUTRAL.					
CIR NO.	AMP/POLES	DESCRIPTION	LOAD	LOAD	DESCRIPTION	AMP/POLES	CIR NO.
1	x20/1	LIGHTS - BOOK STACKS	1750	2000	ELECTRIC HTR. (EH-2) - REAR ENTRANCE	x20/2	2
3	x20/1	LIGHTS - RECEPTION/COMM. RM./TLTS.	1595				4
5	x20/1	(4) ELECT. HTRS. (EH-3,4,5,6) - OFFICES & TLT.	1490	1000*	AUTO. DOOR - REAR ENTRANCE	x20/1	6
7	15/2	ELECTRIC HTR. (EH-1) - FRONT VESTIBULE	2000	540	RECEPTS. - RECEPTION DESK	x20/1	8
9				1050	RECEPTS. - DIRECT OFFICE WORK RM./VEST.	x20/1	10
11	x20/1	AUTO. DOOR - FRONT VESTIBULE	1000*	900	RECEPTS. - STAFF WORK RM. & BREAK RM.	x20/1	12
13	x20/1	RECEPTS. - NE BOOK STACK AREA	900	180	RECEPTS. - BREAK RM. COUNTER	x20/1	14
15	x20/1	RECEPTS. - SE BOOK STACK AREA	540	1000*	RECEPTS. - BREAK RM. COUNTER & REFRIG.	x20/1	16
17	x20/1	RECEPTS. - SW BOOK STACK AREA	540	720	RECEPTS. - BOOK DROP/STAFF WORK RM.	x20/1	18
19	x20/1	RECEPTS. - NW BOOK STACK AREA	360	900	RECEPTS. - WEST STAFF WORK RM.	x20/1	20
21	x20/1	RECEPTS. - SE COMPUTERS	540	800*	RECEPT. - COPIER	x20/1	22
23	x20/1	RECEPTS. - SW & NW COMPUTERS	720	540	RECEPTS. - NE COMMUNITY RM.	x20/1	24
25	x20/1	RECEPTS. - NE COMPUTERS	540	1000*	RECEPTS. - COMM. RM. COUNTER & REFRIG.	x20/1	26
27	x20/1	RECEPTS. - CORR. COMPUTER STATION	720	360*	RECEPTS. - COMM. RM. COUNTER & CORR.	x20/1	28
29	x20/1	SPARE C.B.	---	720	RECEPTS. & PROJ. - SOUTH COMMUNITY RM.	x20/1	30
TOTAL CALCULATED LOAD: 24.3 kVA - 101.3 AMPS							

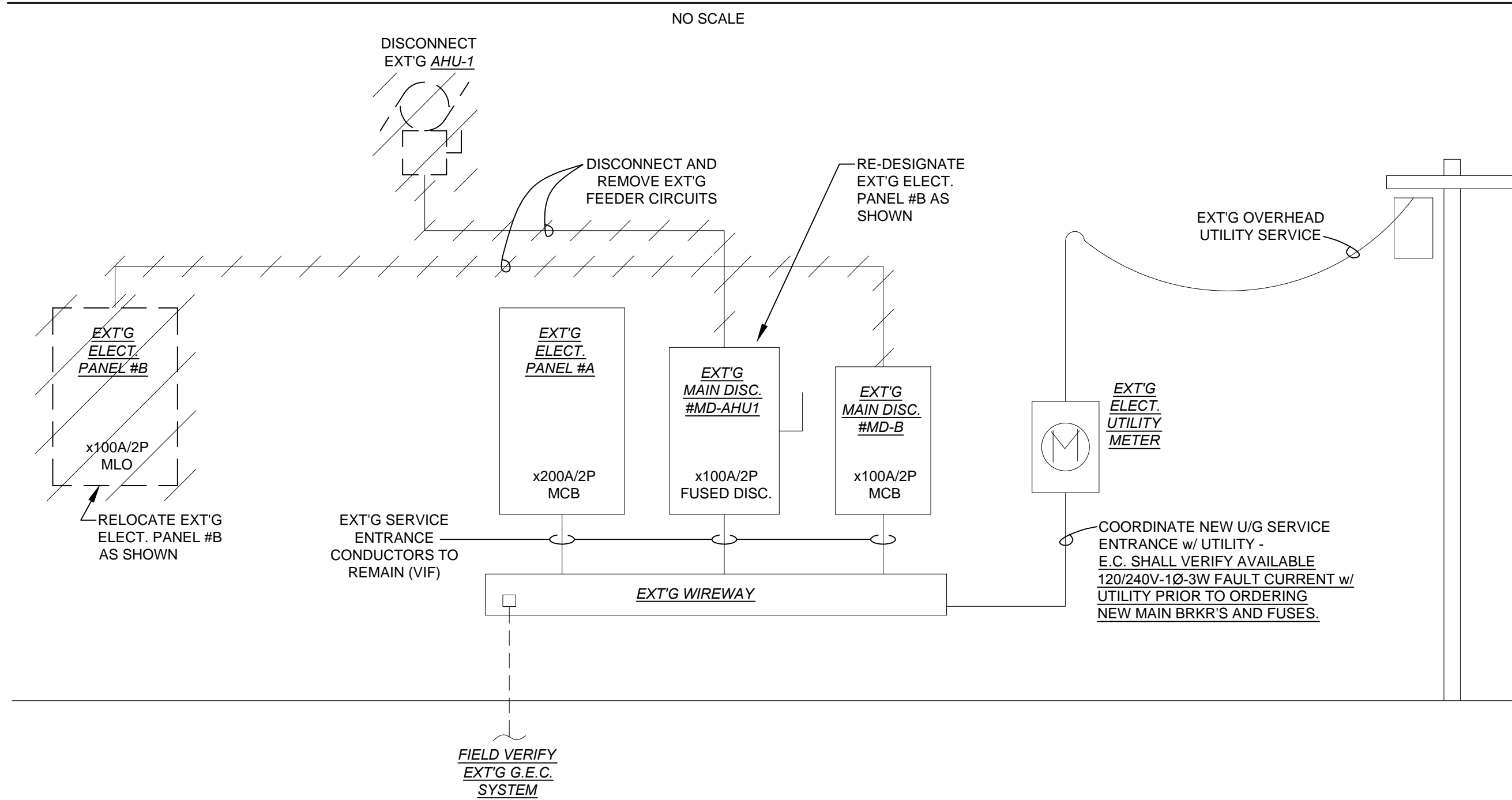
(A) RELOCATED EXTG BRANCH CIRCUIT BREAKER FROM xPANEL #A.

xPANEL #B		EXISTING 100 AMPS M.L.C. 120/240V-100-3W SQUARE D TYPE OO RECESSED PANEL WITH TRIM KIT, GROUND BAR KIT, COPPER MAINS, AND SOLID NEUTRAL. FED WITH 300A/2P MAIN DISCONNECT #MD-B.					
CIR NO.	AMP/POLES	DESCRIPTION	LOAD	LOAD	DESCRIPTION	AMP/POLES	CIR NO.
1	x20/1	FURNACE (F-1) - MECH. RM.	1380	7590	CONDENSING UNIT (CU-3) - EXTERIOR	50/2	2
3	x20/1	FURNACE (F-2) - MECH. RM.	1380				4
5	x20/1	FURNACE (F-3) - MECH. RM.	1380	900	RECEPTS. - BATHRMS./JANITOR/EWC	x20/1	6
7	x20/1	RECEPTS. - MECH. RM. & EXTR.	360	---	xSPARE C.B.		8
9	x20/1	COMM. BACKBOARD RECEPTS. - MECH. RM.	360	---	xSPARE C.B.		10
11	x20/1	ELECT. FIREPLACE - SW BOOK STACK	1500*	---	xSPACE		12
13	x20/1	ELECT. FIREPLACE - SE BOOK STACK	1500*	2600	ELECT. WTR. HTR. (EWH-1) & PUMP (RP-1)	x30/1	14
15	x20/1	xSPARE C.B.	---	---	xSPARE C.B.	x40/2	16
17	x20/1	xSPARE C.B.	---	---	xSPARE C.B.		18
19	x20/20	xSPARE C.B.	---	---	xSPARE C.B.	x20/1	20
21	x20/20	xSPARE C.B.	---	---	xSPARE C.B.	x20/1	22
23	--	xSPACE	---	---	xSPACE	--	24
TOTAL CALCULATED LOAD: 19.1 kVA - 79.6 AMPS							

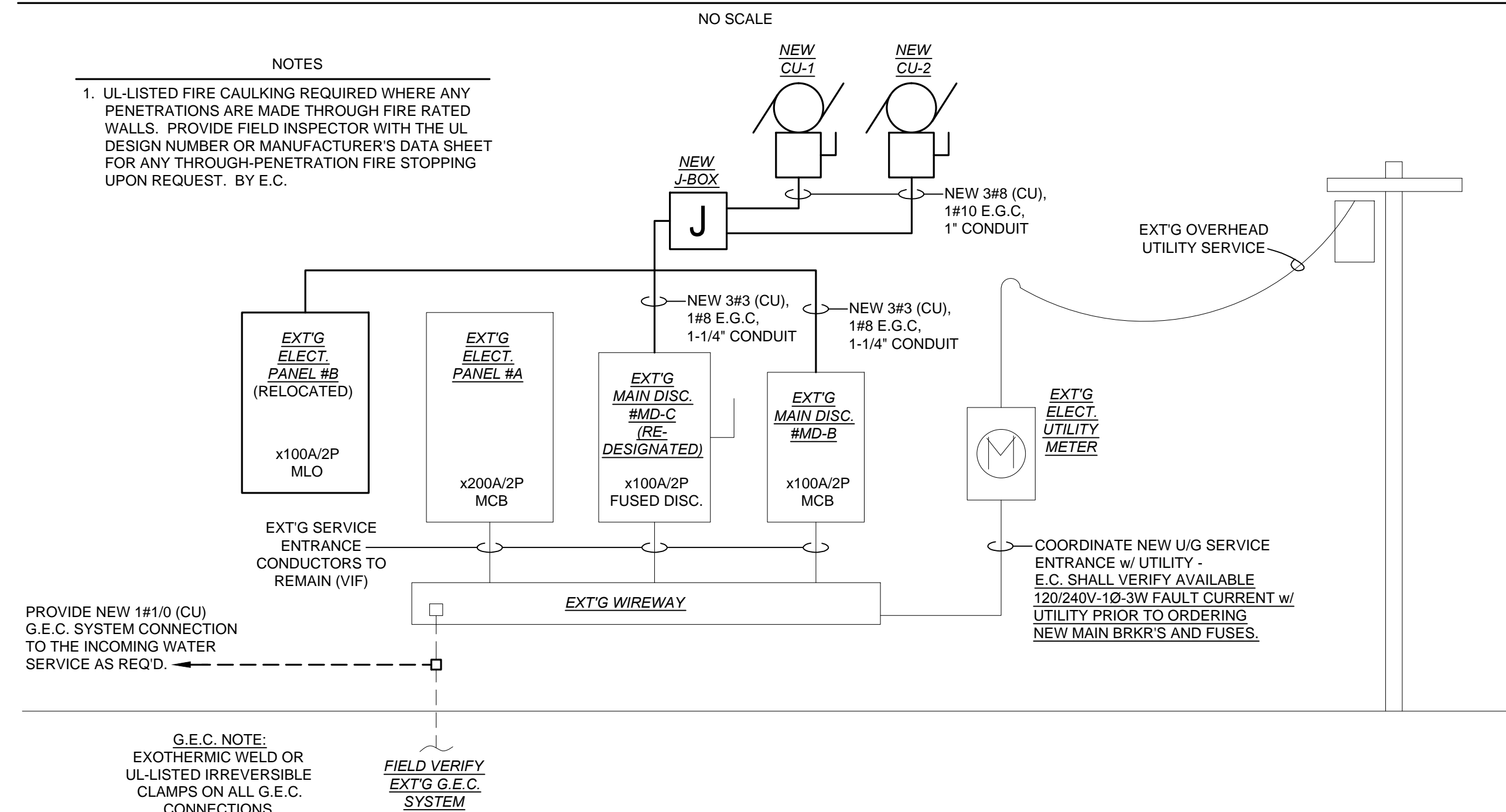
- * DENOTES AN ESTIMATED LOAD - FIELD VERIFY LOAD AND OVER-CURRENT PROTECTION REQUIREMENTS.
- (A) RELOCATED EXTG BRANCH CIRCUIT BREAKER FROM xPANEL #A.
- (B) RELOCATED EXTG BRANCH CIRCUIT BREAKER FROM xPANEL #B.

LOAD CALCULATIONS (400AMP-120/240V-10-3W SERVICE)	
PANEL #A:	24.3 kVA - 101.3 AMPS
#MD-B:	19.1 kVA - 79.6 AMPS
#MD-C:	14.3 kVA - 59.4 AMPS
TOTAL:	57.7 kVA - 240.4 AMPS

EXISTING ELECTRICAL RISER DIAGRAM



NEW ELECTRICAL RISER DIAGRAM



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Proposed Renovation for:
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1995 - CELEBRATING 20 YEARS - 2015

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