

FIRE ALARM section containing various symbols and their corresponding descriptions and specifications.

DEVICES section containing various symbols and their corresponding descriptions and specifications.

ABBREVIATIONS section containing various symbols and their corresponding descriptions and specifications.

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ELECTRICAL GENERAL NOTES section containing various notes and specifications.

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KEM ENGINEERS, INC License # EB-0007103 7901 4TH ST. NORTH, SUITE 200 ST. PETERSBURG, FL 33702 ■ 727 894-4668 ■ www.keminc.com PROFESSIONAL SEAL

BARBEE TOWERS RENOVATION 1100 E DRUID ROAD CLEARWATER, FL 33756

ISSUED DATE: 09-15-20 FOR CONSTRUCTION DOCUMENTS

REVISIONS table with columns for NO., DATE, and DESCRIPTION.

E001 ELECTRICAL GENERAL INFORMATION PROJECT NO: 19079.00 DRAWN BY: ULS PROJECT MANAGER: RW CHECKED BY: NDM DATE: 09-15-20 SCALE: 1/4" = 1'-0"

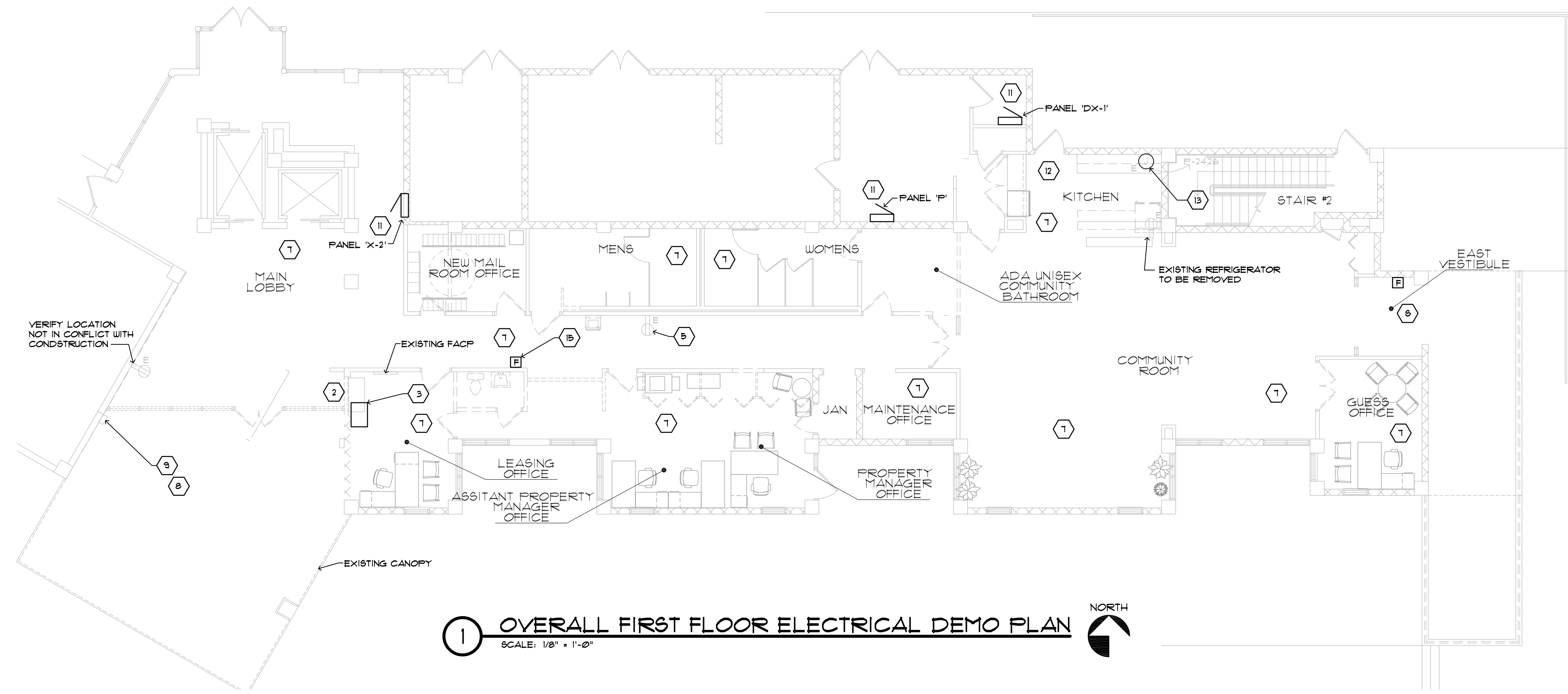
COMPLETION REQUIREMENTS WITHIN 30 DAYS OF CERTIFIED OCCUPANCY, THE ELECTRICAL CONTRACTOR SHALL PROVIDE A SINGLE LINE DIAGRAM OF THE ELECTRICAL DISTRIBUTION SYSTEM WITH FLOOR PLANS INDICATING LOCATION OF AREAS SERVED. ADDITIONALLY, MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT SHALL BE PROVIDED ALONG WITH THE NAMES AND ADDRESSES OF A QUALIFIED SERVICE AGENCY.

LOCATIONS OF SIMPLEX DUPLEX AND QUADRUPLEX DEVICES LOCATED ABOVE 24" SHALL BE VERIFIED WITH ARCHITECTURAL INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.

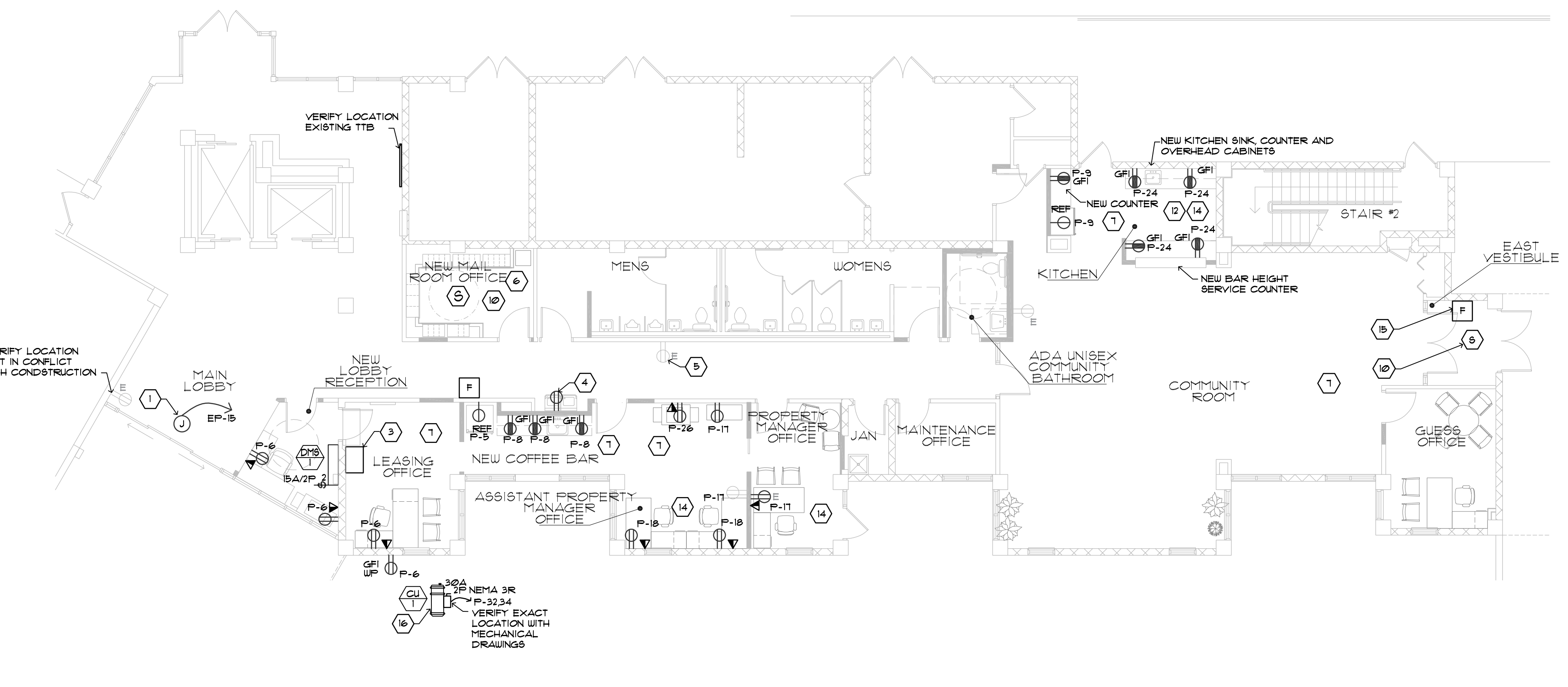
NOTES: ELECTRICAL COMPONENTS SHALL BE DEFINED AS ANY ELECTRICAL DEVICE(S), DEVICE BOXES, OUTLET BOXES, ENCLOSURES(S), MODULE(S), RELAY(S), BREAKER(S), FUSE, RACEWAYS, RACEWAY COUPLINGS OR CONNECTORS, LOCKNUTS, WASHERS, LUGS, WIRE NUTS, LUG BLOCKS WITH BOOTS, SLEEVES, SLIP WEDGES, BUSHINGS, TIE WRAPS, STRAPS, COVER PLATES, WIRE, CABLEING, DISCONNECTS, MOTOR STARTERS, PAINT, REBAR, CONCRETE, CURRENT TRANSFORMERS, BALLAST, FLYWOOD, ENGRAVED NAMEPLATES, ENGRAVED PLACARDS, CORD CAPS, CORDS, JACK CHAIN, CHANNEL, FIRE CAULKING, SCREWS, BEAM CLAMP, PROGRAMMING, LAMPS, DRIVERS, BALLAST, STROBES, DOTM LIGHTS, HORNS, SPEAKERS, BATTERIES, GROUNDING / BONDING CONDUCTORS, WIRE TAGS, ETC.

MC CABLE THE USE OF MC, MC-FCB, MC-HCP IS ALLOWED ON THIS PROJECT SUBJECT TO THE LIMITATIONS SET FORTH BELOW AND ACCORDING TO PARAMETERS SET FORTH IN NEC 10 ARTICLE 330. 1. MC CABLE CAN BE USED TO CONNECT LUMINAIRES INSTALLED WITHIN AN ACCESSIBLE CEILING TO A JUNCTION BOX WHEN THE LENGTH DOES NOT EXCEED SIX FEET. IN SUCH INSTALLATIONS, THE MC CABLE FITTINGS SHALL BE PERMITTED AS MEANS OF CABLE SUPPORT. 2. MC CABLE CAN BE USED TO CONNECT DEVICES INSTALLED CONCEALED INSIDE A WALL CAVITY. 3. MC CABLE CAN BE USED TO CONNECT THE LAST DEVICE IN A CIRCUIT TO A HOMERUN JUNCTION BOX MOUNTED ON OR ADJACENT TO THE FRAMING JOINT PLATE. 4. MC CABLE USE SHALL BE LIMITED TO #2, #10 AND #8 COPPER CONDUCTORS. 5. MC CABLE SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO BUILDING LINES AND FRAMING MEMBERS. 6. MC CABLE SHALL BE USED FOR BRANCH CIRCUITS ONLY. HOMERUNS SHALL BE IN CONDUIT. 7. MC CABLE SHALL BE PROTECTED WHEN INSTALLED THROUGH OR RUN PARALLEL TO FRAMING MEMBERS SO THAT THE NEAREST OUTSIDE SURFACE IS AT LEAST 1/4" FROM THE NEAREST EDGE OF THE FRAMING MEMBER. WHEN THIS DISTANCE CAN NOT BE MAINTAINED, THE CABLE SHALL BE PROTECTED FROM SCREW OR NAIL PENETRATION BY A STEEL PLATE, SLEEVE, OR EQUIVALENT OF AT LEAST 1/16" THICK. 8. THE RADIUS OF INNER BEND IN CORRUGATED SHEATH MC CABLE SHALL BE GREATER THAN 4" FOR MC CABLE CONTAINING #2 CONDUCTORS AND 4.5" FOR MC CABLE CONTAINING #10 CONDUCTORS. 9. MC CABLE SHALL BE SUPPORTED AT LEAST EVERY 6' WITHIN 12" OF EVERY BOX, FITTING OR OTHER TERMINATION.

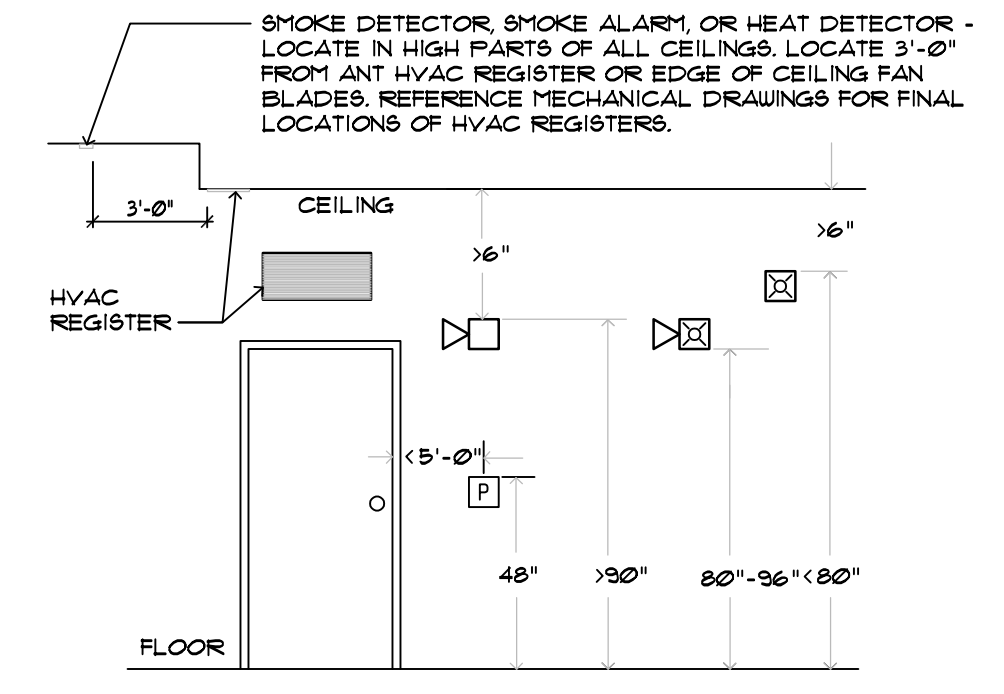




**1 OVERALL FIRST FLOOR ELECTRICAL DEMO PLAN**  
SCALE: 1/8" = 1'-0" NORTH



**2 OVERALL FIRST FLOOR ELECTRICAL PLAN**  
SCALE: 1/8" = 1'-0" NORTH



**3 FIRE ALARM DEVICE DETAIL**  
SCALE: NOT TO SCALE

**GENERAL NOTES:**

- FOR ABBREVIATIONS, SYMBOLS, LEGEND, AND GENERAL NOTES, SEE DRAWING E001.
- CONTRACTOR SHALL COORDINATE NEW CONDUIT ROUTES WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
- EXISTING ELECTRICAL RACEWAYS, CONDUITS, WIRING, DEVICES, JUNCTION BOXES, OUTLET BOXES, AND OTHER ELECTRICAL COMPONENTS THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE RELOCATED AND OR RE-ROUTED / EXTENDED TO A NEW LOCATION IN ORDER TO AVOID CONFLICTS.
- ANY OUTAGE CONCERNING POWER, COMMUNICATION, DATA, AND FIRE ALARM SHALL BE COORDINATED WITH THE 48 HOURS PRIOR TO OUTAGE.
- BRANCH CIRCUITS SHOWN ON DRAWINGS ARE FROM EXISTING DOCUMENTS PRIOR TO WORK. PROVIDE THE TIME AND LABOR TO VERIFY BRANCH CIRCUITS INVOLVED IN CONSTRUCTION.
- PROVIDE THE TIME AND LABOR REQUIRED TO FIELD COORDINATE ALL FINAL LOCATIONS OF MECHANICAL EQUIPMENT WITH INSTALLATION TECHNICIANS PRIOR TO ROUGH-IN, AND DURING INSTALLATION FOR ANY MODIFICATIONS THAT MAY BE REQUIRED DUE TO EXISTING STRUCTURES OR EXISTING EQUIPMENT.
- ALL EXISTING EXPOSED CONDUIT AND CABLES SHALL BE CONCEALED INTO WALLS. PROVIDE ALL ELECTRICAL COMPONENTS TO EXTEND INTO WALLS AS REQUIRED. COORDINATE WITH OWNER FOR ALL RELOCATED EQUIPMENT - FIRE ALARM, SECURITY PANELS, LOW VOLTAGE ENCLOSURES, ETC.
- ALL WALLS WITH NEW FINISHES, AND NEW CEILING, SHALL HAVE THE DEVICE PLATES REPLACED.

**KEY NOTES:**

- NEW STOREFRONT WITH NEW AUTOMATIC DOOR CONNECT DOOR CONTROLLER TO EXISTING SECURITY SYSTEM. PROVIDE ALL ELECTRICAL COMPONENTS AS REQUIRED FOR COMPLETE AND OPERATIONAL AUTOMATIC DOOR.
- NEW LOBBY RECEPTION OFFICE PROVIDE BRANCH CIRCUITS, AND LOW VOLTAGE CABLING.
- PROVIDE THE TIME AND LABOR TO RELOCATE EXISTING RACK AND ASSOCIATED EQUIPMENT. PROVIDE ALL ELECTRICAL COMPONENT IN ORDER TO EXTEND CABLING TO NEW LOCATION. RELOCATE EXISTING BRANCH CIRCUITS PROVIDING POWER.
- NEW ELECTRIC WATER COOLER. CONNECT TO EXISTING WATER COOLER BRANCH CIRCUIT. PROVIDE AND COORDINATE RECEPTACLE LOCATION BEHIND COOLER. PROVIDE GFCI CIRCUIT BREAKER AT PANEL. VERIFY BRANCH CIRCUIT PRIOR TO WORK.
- EXISTING ELECTRIC WATER COOLER LOCATION.
- NEW MAIL ROOM - REMOVE EXISTING DEVICES THAT INTERFERE WITH NEW CONSTRUCTION. MAINTAIN EXISTING TO REMAIN UP STREAM AND DOWN STREAM DEVICES. EXISTING DEVICES THAT REMAIN SHALL BE PROVIDED WITH NEW TRIM PLATES.
- EXISTING SMOKE DETECTORS, SPEAKERS, CCTV CAMERAS, AND OTHER CEILING DEVICES SHALL BE RELOCATED TO NEW CEILING. PROVIDE TIME AND LABOR TO COORDINATE NEW AND SUITABLE EXISTING WALLS THAT ARE SCHEDULED FOR PAINT OR NEW FINISHES SHALL HAVE NEW TRIM PLATES FOR ALL DEVICES.
- ALL EXISTING EXPOSED CONDUIT AND CABLES SHALL BE CONCEALED INTO WALLS. PROVIDE ALL ELECTRICAL COMPONENTS TO EXTEND INTO WALLS AS REQUIRED. COORDINATE WITH OWNER FOR ALL RELOCATED EQUIPMENT - FIRE ALARM, SECURITY PANELS, LOW VOLTAGE ENCLOSURES, ETC.
- RELOCATE EXISTING DOOR ENTRY ACCESS DEVICE TO LOCATION SHOWN. PROVIDE ALL ELECTRICAL COMPONENTS AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM INTEGRATED WITH NEW SLIDING DOOR.
- PROVIDE NEW SMOKE DETECTOR. PROVIDE ALL ELECTRICAL COMPONENTS REQUIRED FOR ADDITIONAL DEVICES ADDED OR REQUIRED TO BRING NEW CONSTRUCTION AREAS IN COMPLIANCE WITH FIRE ALARM CODE. PROVIDE CERTIFICATION OF EXISTING FIRE ALARM SYSTEM UPON FINAL ELECTRICAL INSPECTION.
- VERIFY PANEL LOCATION PRIOR TO RENOVATION WORK.
- EXISTING KITCHEN TO BE DEMOLISHED. VERIFY AND DE-ENERGIZE BRANCH CIRCUITS AS CONSTRUCTION REQUIRES. ADJUST DEVICES TO NEW ROOM LAYOUT. REPLACE EXISTING RECEPTACLES WITH NEW GFI TYPE. LOCATE RECEPTACLES TO NEW COUNTER HEIGHTS AT LOCATIONS REQUIRED BY THE OWNER OR NEW EQUIPMENT. PROVIDE ALL ELECTRICAL COMPONENTS REQUIRED TO ENSURE DEVICE RE-LOCATIONS. PROVIDE THE TIME AND LABOR TO COORDINATE WITH ARCHITECTURAL DRAWINGS AND OTHER TRADES IN ORDER TO AVOID CONFLICTS.
- EXISTING BRANCH CIRCUIT. RELOCATE TO ACCESSIBLE LOCATION IN ORDER TO CONCEAL FOR NEW CONSTRUCTION.
- RELOCATE AND REPLACE DEVICES AND TRIM PLATES.
- RELOCATE EXISTING FIRE ALARM DEVICE. PROVIDE ALL ELECTRICAL COMPONENTS FOR COMPLETE AND OPERATIONAL FIRE ALARM SYSTEM. PROVIDE CERTIFICATION OF FIRE ALARM UPON FINAL ELECTRICAL INSPECTION.
- DM5 SYSTEM. VERIFY EXACT LOCATION FOR DM5 AND CU UNITS WITH MECHANICAL DRAWINGS. PROVIDE ALL REQUIRED POWER AND CONTROL CONNECTIONS BETWEEN CU AND DM5 UNIT.

**WALL LEGEND**

	DEMOLISHED WALL
	EXISTING WALL
	EXISTING CMU WALL
	EXISTING CONCRETE WALL
	NEW FRAMED WALL
	NEW CMU WALL
	NEW CONCRETE WALL

**BESSOLO**  
DESIGN GROUP, INC.  
ARCHITECTURE ■ DEVELOPMENT  
License #AA-C002117  
7901 4TH ST. NORTH, SUITE 200  
ST. PETERSBURG, FL 33702  
727 894-4453 ■ www.bessolo.com

**KEM**  
ENGINEERS, INC.  
License # EB-0007103  
7901 4TH ST. NORTH, SUITE 200  
ST. PETERSBURG, FL 33702  
727 894-4668  
PROFESSIONAL SEAL  
Nestor D. Martinez, P.E.  
State of Florida 61726

**BARBEE TOWERS RENOVATION**  
1100 E DRUID ROAD  
CLEARWATER, FL 33756

**ISSUED**  
DATE: 09-15-20  
09-15-20 CONSTRUCTION DOCUMENTS

REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT NO: 19079.00  
DRAWN BY: UG  
PROJECT MANAGER: RW  
CHECKED BY: NDM  
DATE: 09-15-20  
SCALE: AS NOTED

**E101**  
OVERALL FIRST FLOOR DEMO AND ELECTRICAL PLANS



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**GENERAL NOTES:**

- FOR ABBREVIATIONS, SYMBOLS, LEGEND, AND GENERAL NOTES, SEE DRAWING E201.
- CONTRACTOR SHALL COORDINATE NEW CONDUIT ROUTES WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
- EXISTING ELECTRICAL RACEWAYS, CONDUITS, WIRING, DEVICES, JUNCTION BOXES, OUTLET BOXES, AND OTHER ELECTRICAL COMPONENTS THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE RELOCATED AND OR RE-ROUTED / EXTENDED TO A NEW LOCATION IN ORDER TO AVOID CONFLICTS.
- ANY OUTAGE CONCERNING POWER, COMMUNICATION, DATA, AND FIRE ALARM SHALL BE COORDINATED WITH THE 48 HOURS PRIOR TO OUTAGE.
- BRANCH CIRCUITS SHOWN ON DRAWINGS ARE FROM EXISTING DOCUMENTS. PRIOR TO WORK, PROVIDE THE TIME AND LABOR TO VERIFY BRANCH CIRCUITS INVOLVED IN CONSTRUCTION.
- PROVIDE THE TIME AND LABOR REQUIRED TO FIELD COORDINATE ALL FINAL LOCATIONS OF MECHANICAL EQUIPMENT WITH INSTALLATION TECHNICIANS PRIOR TO ROUGH-IN, AND DURING INSTALLATION FOR ANY MODIFICATIONS THAT MAY BE REQUIRED DUE TO EXISTING STRUCTURES OR EXISTING EQUIPMENT.
- CONNECT TO EXISTING LIGHTING CONTROL AND BRANCH CIRCUIT. VERIFY BRANCH CIRCUIT PRIOR TO WORK.
- PROVIDE NEW BRANCH CIRCUIT AND LIGHTING CONTROL AS REQUIRED.
- CONNECT NEW LIGHTS TO EXISTING LIGHTING BRANCH CIRCUIT AND LIGHTING CONTROL. VERIFY EXISTING BRANCH CIRCUIT INDICATED PRIOR TO WORK.
- EXISTING CEILING TO BE MODIFIED - RELOCATE EXISTING CEILING MOUNTED DEVICES, SMOKE DETECTORS, CCTV CAMERAS, SECURITY DEVICES, SPEAKERS, OCCUPANCY SENSORS, ETC. DEVICES SHALL BE RELOCATED TO NEW CEILING. INSPECT DEVICES AND IF DEVICE OR EQUIPMENT IS BROKEN REPLACE WITH NEW IN ACCORDANCE WITH EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.

**KEY NOTES:**

- EXISTING DEVICES MOUNTED TO EXISTING CEILING SHALL BE RELOCATED TO NEW CEILING. PROVIDE ALL ELECTRICAL COMPONENTS FOR RELOCATION ON NEW CEILING. VERIFY BRANCH CIRCUIT OR WIRING CONTINUITY AS REQUIRED.
- EXISTING LOCATION OF EXISTING EXTERIOR LIGHTING. LOCATE TO NEW LOCATION. LOCATIONS SHALL APPEAR TO BE SYMMETRICAL WITH EXISTING TO REMAIN LIGHTING.
- EXISTING LIGHTING CONTROL DEVICE. VERIFY LOCATION. PROVIDE NEW TRIM PLATE. INSPECT DEVICE. IF DIRTY OR FAULTY DEVICE SHALL BE REPLACED. TYPICAL THROUGH-OUT ALL AREAS OF CONSTRUCTION.
- EXISTING LIGHTING CONTROL AND BRANCH CIRCUITS SHALL BE MAINTAINED.



**1 OVERALL FIRST FLOOR LIGHTING PLAN**  
 SCALE: 1/8" = 1'-0"

**ISSUED**  
 DATE: 10-15-20  
 20-15-20 CONSTRUCTION DOCUMENTS

REVISIONS		
NO.	DATE	DESCRIPTION
Δ	10-15-20	OWNER'S REVIEW

PROJECT NO.: 19079.00  
 DRAWN BY: US  
 PROJECT MANAGER: RW  
 CHECKED BY: NDM  
 DATE: 09-15-20  
 SCALE: 1/8" = 1'-0"

**E201**  
 OVERALL  
 FIRST FLOOR  
 LIGHTING PLAN



LUMINAIRE SCHEDULE

TYPE	MANUFACTURER, CATALOG NUMBER	LUMINAIRE DESCRIPTION	LAMP CODE	VOLT	WATTS	REMARKS
A	LITHONIA: 2GTL 2 20L FW A1215 120 EZI LP830 GLR	RECESSED 2x2, ACRYLIC LENS	LED	120	30	
B	SEA GULL LIGHTING 1874120/DEN3	OUTDOOR WALL LANTERN LED	LED	120	35	
D	VANTAGE: A6VEFLLED 115 30K 4 L601 WHT	6" APERTURE RECESSED IN CEILING	LED	120	25	
DI	JUNO: J8F 1IN 10LM 30K 90CRI 120 ZT W4 H16	1.5" APERTURE SLIM FORM FLUSH MOUNT WHITE	LED	120	10	
X	PROGRESS: PEALE-D-R-EM-16	UNIVERSAL MOUNT	LED	120	2	
F	AFX LIGHTING: ALDF2032LAJDYGT	4.5" HEIGHT X 2.0" DIAMETER, GREY LINEN	LED	120	19	
FI	AFX LIGHTING: ALDF2032LAJDYGT	4.5" HEIGHT X 2.0" DIAMETER, GREY LINEN	LED	120	19	WITH EXTENSION ROD
V	KICHLER: 1146N1LED	4.75" HEIGHT X 2.575" WIDTH, BRUSHED NICKEL	LED	120	19	

NEW LUMINAIRE SCHEDULE

SCALE: NOT TO SCALE

Existing Panel X-2		A.I.C.: 22K		M.C.B.:		Mounted: Recess									
EXISTING NORMAL POWER		VOLTS: 120/208/240		M.L.O.: 100A											
S	Cr	Circuit Description	Breaker	KVA Phase Load			Phase	KVA Phase Load			Breaker	Circuit Description	Cr.	S	
L	1	LIGHTS AND EQUIPMENT	20	1	1.90		X		1.90		1	20	LIGHTS AND EQUIPMENT	2	R
L	3	LIGHTS AND EQUIPMENT	20	1	1.90		X		1.90		1	20	LIGHTS AND EQUIPMENT	4	L
L	5	LIGHTS AND EQUIPMENT	20	1	1.90		X		0.45		1	20	EGRESS LIGHTS	6	L
L	7	LIGHTS AND EQUIPMENT	20	1	1.90		X		0.51		1	20	EGRESS LIGHTS	8	L
L	9	SPACE	20	1	0.00		X		0.00		1	20	SPACE	10	L
L	11	SPACE	20	1	0.00		X		0.00		1	20	SPACE	12	L
L	13	SPACE	20	1	0.00		X		0.00		1	20	SPACE	14	R
L	15	SPACE	20	1	0.00		X		0.00		1	20	SPACE	16	R
L	17	SPACE	20	1	0.00		X		0.00		1	20	SPACE	18	R
L	19	SPACE	20	1	0.00		X		0.00		1	20	SPACE	20	R
L	21	SPACE	20	1	0.00		X		0.00		1	20	SPACE	22	R
L	23	SPACE	20	1	0.00		X		0.00		1	20	SPACE	24	R
			Sub-Total:		3.80	3.80			2.35	2.41					

S	Total Demand KVA	Percent	A	B	C
H	Heating ****	80%	0.00	0.00	0.00
L	Lighting	125%	2.38	4.75	0.00
R	Receptacle *	---	1.90	0.00	0.00
W	Water Heater	125%	0.00	0.00	0.00
M	Motor/HVAC/Fan **	125%	0.00	0.00	0.00
G	General Lighting	50%	0.00	0.00	0.00
T	Xfm/Panel/Eqpt	100%	0.00	0.00	0.00

A	B	C	KVA
4.28	4.75		
35.63	39.58		AMPS

Connected Amperes: 59.423  
Demand Amperes: 43.39

\* SHUNT-TRIP CIRCUIT BREAKER  
PER 2014 NEC

EXISTING PANEL X-2

DESCRIPTION	KW
EXISTING PANEL X-2 LIGHTING LOADS REMOVED	= 1120
NEW PANEL X-2 LIGHTING LOADS ADDED	= 960
SUBTRACT FOR NEW PANEL X-2 LOAD CONSIDERATIO	= 160

BRANCH CIRCUITS INVOLVED REDUCE LOAD BY 85%  
EXISTING FLUORESCENT LIGHTING REPLACED WITH LED

EXISTING PANEL X-2 ADEQUATE FOR NEW LIGHTING

EXISTING PANEL P

DESCRIPTION	KW	AMPS
EXISTING PANEL P DEMO LIGHTING LOADS	= 6.72	
NEW PANEL P LIGHTING LOADS	= 1.95	
SUBTRACT FOR NEW LIGHTING LOAD IMPACT	= 4.77	

NEW AC LOAD  
NEW PANEL RECEPTACLE LOAD  
ADD FOR NEW EQUIPMENT LOAD

EXISTING PANEL P LOAD FROM EXISTING DRAWINGS  
SUBTRACT EXISTING LIGHTING LOAD LIGHTING LOAD  
NEW PANEL P LOAD

NEW LOAD FOR PANEL P	KW	AMPS
A ADD NEW LIGHTING LOAD	1.95	
B ADD NEW EQUIPMENT LOAD	5.7	
C ADD NEW PANEL P LOAD	4.766	
NEW PANEL P LOAD	12.416	59.69

EXISTING PANEL P ADEQUATE

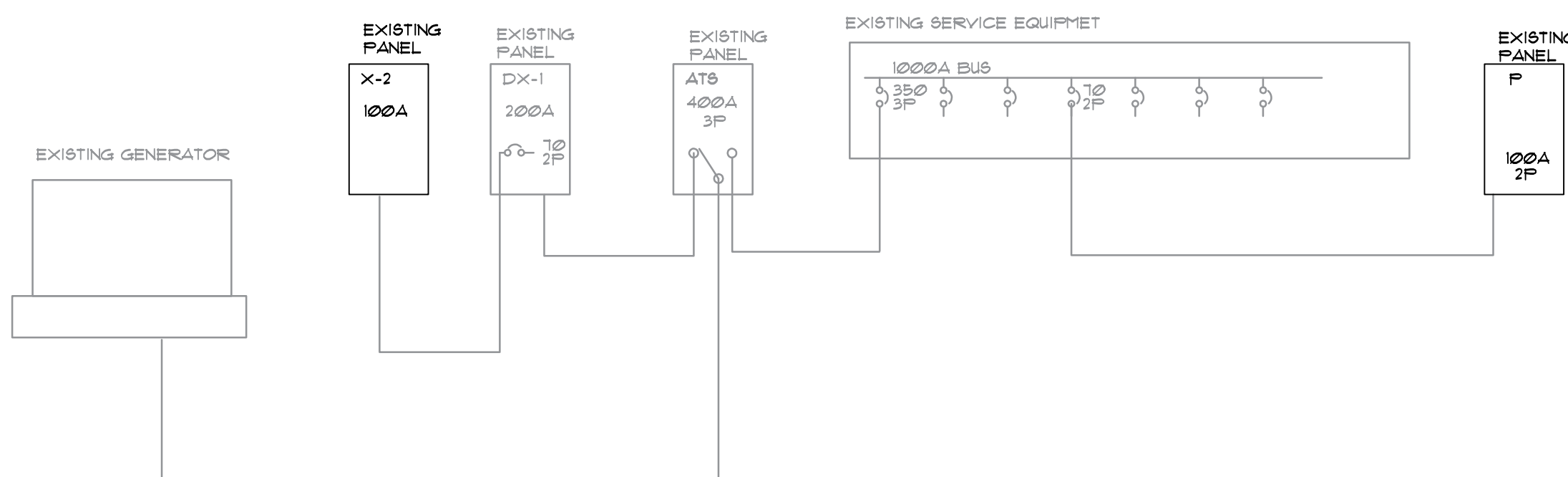
Existing Panel P		A.I.C.: 22K		M.C.B.:		Mounted: Recess									
EXISTING NORMAL POWER		VOLTS: 120/208/240		M.L.O.: 100A											
S	Cr	Circuit Description	Breaker	KVA Phase Load			Phase	KVA Phase Load			Breaker	Circuit Description	Cr.	S	
L	1	LIGHTS AND EQUIPMENT	20	1	0.35		X		0.40		1	20	LIGHTS AND EQUIPMENT	2	L
L	3	LIGHTS AND EQUIPMENT	20	1	0.45		X		0.36		1	20	LIGHTS AND EQUIPMENT	4	R
L	5	LIGHTS AND EQUIPMENT	20	1	0.50		X		0.50		1	20	LIGHTS AND EQUIPMENT	6	R
L	7	LIGHTS AND EQUIPMENT	20	1	0.42		X		0.50		1	20	LIGHTS AND EQUIPMENT	8	L
L	9	LIGHTS AND EQUIPMENT	20	1	0.50		X		0.45		1	20	LIGHTS AND EQUIPMENT	10	R
L	11	LIGHTS AND EQUIPMENT	20	1	0.40		X		0.40		1	20	LIGHTS AND EQUIPMENT	12	R
L	13	LIGHTS AND EQUIPMENT	20	1	0.20		X		0.43		1	20	LIGHTS AND EQUIPMENT	14	R
L	15	LIGHTS AND EQUIPMENT	20	1	0.35		X		0.36		1	20	LIGHTS AND EQUIPMENT	16	R
L	17	LIGHTS AND EQUIPMENT	20	1	0.50		X		0.50		1	20	LIGHTS AND EQUIPMENT	18	R
L	19	LIGHTS AND EQUIPMENT	20	1	0.41		X		0.36		1	20	LIGHTS AND EQUIPMENT	20	R
L	21	LIGHTS AND EQUIPMENT	20	1	0.50		X		0.36		1	20	LIGHTS AND EQUIPMENT	22	R
L	23	LIGHTS AND EQUIPMENT	20	1	0.50		X		0.72		1	20	KITCHEN RECEPTACLES	24	R
L	25	LIGHTS AND EQUIPMENT	20	1	0.34		X		1.00		1	20	COPIER	26	R
L	27	LIGHTS AND EQUIPMENT	20	1	0.20		X		0.50		1	20	LIGHTS AND EQUIPMENT	28	R
L	29	LIGHTS AND EQUIPMENT	20	1	0.65		X		0.50		1	20	LIGHTS AND EQUIPMENT	30	R
L	31	LIGHTS AND EQUIPMENT	20	1	0.61		X		1.10		2	15	DMS-CU	32	M
L	33	LIGHTS AND EQUIPMENT	20	1	0.45		X		1.10					34	M
L	35	LIGHTS AND EQUIPMENT	20	1	0.41		X		0.50		1	20	LIGHTS AND EQUIPMENT	36	R
L	37	LIGHTS AND EQUIPMENT	20	1	0.50		X		0.40		1	20	LIGHTS AND EQUIPMENT	38	R
L	39	LIGHTS AND EQUIPMENT	20	1	0.40		X		0.40		1	20	LIGHTS AND EQUIPMENT	40	R
L	41	LIGHTS AND EQUIPMENT	20	1	0.45		X		0.50		1	20	LIGHTS AND EQUIPMENT	42	R
			Sub-Total:		4.94	4.15	0.00		6.14	5.20	0.00				

S	Total Demand KVA	Percent	A	B	C
H	Heating ****	80%	0.00	0.00	0.00
L	Lighting	125%	2.24	1.75	0.00
R	Receptacle *	---	1.83	1.62	0.00
W	equipment	100%	2.50	2.50	0.00
M	HVAC	125%	0.00	0.00	0.00
G	General Lighting	50%	0.00	0.00	0.00
T	Xfm/Panel/Eqpt	100%	0.00	0.00	0.00

A	B	C	KVA
6.57	5.87	0.00	
54.73	48.92	0.00	AMPS

Connected Amperes: 98.221  
Demand Amperes: 59.80

\* SHUNT-TRIP CIRCUIT BREAKER  
PER 2014 NEC



EXISTING PARTIAL RISER DIAGRAM

SCALE: NOT TO SCALE

GENERAL NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING ALL CEILING TYPES BEFORE ORDERING FIXTURES - PROVIDE REQUIRED FLANGE PER CEILING TYPE, PROVIDE FOR FIRE AND OR INSULATION RATING AS REQUIRED.
- EACH LUMINAIRE SHALL HAVE BEEN TESTED AND CERTIFIED FOR PROPER OPERATION BY THE LUMINAIRE MANUFACTURER FOR THE TYPE OF CEILING AND MOUNTING ON OR WHICH IT IS INSTALLED.
- LUMINAIRE SHALL BE SET LEVEL, PLUMB, AND SQUARE WITH CEILING AND WALLS. INSTALL LAMPS IN EACH LUMINAIRE - VERIFY LED LAMP TYPE AND LAMP BASE FOR FIT AND FINISH.
- INSTALL A MINIMUM OF FOUR CEILING SUPPORT SYSTEM RODS OR WIRES FOR EACH LUMINAIRE. LOCATE NOT MORE THAN 6 INCHES (150 mm) FROM FIXTURE CORNERS.
- LAMP TEMPERATURE SHALL BE 3000K, WITH CFI OF 80 MINIMUM.
- CONFIRM LUMINAIRE WEIGHT AND PROVIDE REQUIRED BRACING FOR SECURE SUPPORT OF FIXTURE.
- PRIOR TO ROUGH-IN OF WALL MOUNTED SCENES, VANITY LIGHTS, PENDANT MOUNTED LUMINAIRE, UNDER / UPPER CABINET LUMINAIRE, AND ART WORK LUMINAIRE, CONTRACTOR SHALL PROVIDE THE TIME AND LABOR TO COORDINATE AND CONFIRM MOUNTING HEIGHTS WITH ELECTRICAL DETAILS, ARCHITECTURAL / INTERIOR ELEVATIONS AND THE APPROPRIATE TRADES IN ORDER TO AVOID CONFLICT WITH MILLWORK, AND DESIGN INTENT.
- ROOMS WITH LUMINAIRE (STORAGE, JANITORS CLOSETS, PUBLIC RESTROOMS, LAUNDRY, ELECTRICAL ROOMS, MECHANICAL ROOMS, OFFICES, MEDICAL IT ROOMS, BREAK ROOMS, REHABILITATION, ETC.) SHALL HAVE LIGHTING CONTROL PROVIDED.
- EMERGENCY BATTERY BACK UP LUMINAIRE SHALL BE CONNECTED TO A LOCAL LIGHTING BRANCH CIRCUIT AHEAD OF SWITCHING. GENERATOR LIGHTING CIRCUITS SHALL BE UTILIZED WHEN NON-GENERATOR BRANCH CIRCUITS ARE UTILIZED IN THE SAME SPACE.
- LOW VOLTAGE LUMINAIRE INSTALLED INTO COVE AND MILLWORK - TRANSFORMERS, DRIVERS, WIRING CONDUIT, JUNCTION BOXES, ETC. SHALL BE ACCESSIBLE AND CONCEALED TO THE GREATEST EXTENT POSSIBLE. PROVIDE REQUIRED LABOR IN ORDER TO COORDINATE WITH ARCHITECTURAL INTERIOR DESIGN ELEVATIONS, MILLWORK DRAWINGS, AND OTHER TRADES IN ORDER TO AVOID CONFLICTS. PROVIDE STRAPS TO SUPPORT COVE LIGHTS. SUPPORT LIGHTING WITH STRAPS PROVIDED BY MANUFACTURER.
- LUMINAIRE THAT ARE SUBSTITUTED SHALL BE SUBMITTED WITH IES FILES FOR A PHOTOMETRIC CONFIRMATION. AN HOURLY FEE SHALL BE CHARGED TO THE CONTRACTOR.
- LUMINAIRE SHALL NOT BE SUPPORTED FROM FIRE RATED CEILING. SUPPORT FIXTURES FROM BUILDING STRUCTURE, ABOVE FIRE RATED CEILING.
- ATTIC ACCESS HATCHES SHALL BE PROVIDED WITH A SWITCH, NEAR ACCESS, AND A PORCELAIN KEYLESS LAMP HOLDER (SYLVANIA 1920) LED LAMP). REFERENCE NEC 210.63 AND NEC 210.10(A)(3).
- LIGHT FIXTURE AND CEILING FAN LOCATIONS SHALL NOT INTERFERE WITH THE OPERATION OF DOORS. PROVIDE THE TIME AND LABOR REQUIRED FOR COORDINATION PRIOR TO ROUGH-IN.
- EACH ROOM SHALL BE PROVIDED WITH A LIGHT FIXTURE AND LIGHTING CONTROL.
- ALL LED FIXTURES AND FIXTURES WITH LED LAMPS SHALL BE DIMMABLE.
- VERIFY ALL LED LAMPS TO BE COMPLIANT WITH FIXTURE PROVIDED.
- LIGHT FIXTURES LOCATED IN ELECTRICAL AND MECHANICAL ROOMS SHALL BE COORDINATED WITH CONDUITS, DUCT WORK, PIPES, AND BUILDING STRUCTURES. COORDINATE SUITABLE AND ACCESSIBLE LOCATIONS.
- EXIT LIGHTS SHALL BE CONNECTED AHEAD OF LIGHTING CONTROL BRANCH CIRCUIT FOR THE ASSOCIATE SPACE OR ROOM.
- FIXTURES WITH NON-DIMMABLE LAMP / BALLAST SHALL NOT BE CONNECTED TO A DIMMING CONTROL DEVICE.
- LED RETRO FIT LAMPS REPLACING FLUORESCENT OR INCANDESCENT LAMPS - CONTRACTOR SHALL CONFIRM COMPATIBILITY OF LAMPS WITH BALLAST, DRIVERS, VOLTAGES, DIMMER, AND MANUFACTURER.
- CEILING FANS SHALL NOT BE CONNECTED TO DIMMERS.

**BESSOLO**  
DESIGN GROUP, INC.  
ARCHITECTURE ■ DEVELOPMENT  
License #AA-C00217  
7901 4TH ST. NORTH, SUITE 200  
ST. PETERSBURG, FL 33702  
727 894-4453 ■ www.bessolo.com

**KEM**  
ENGINEERS, INC.  
License # EB-0007103  
7901 4TH ST. NORTH, SUITE 200  
ST. PETERSBURG, FL 33702  
727 894-4658  
PROFESSIONAL SEAL

Nestor D. Martinez, P.E.  
State of Florida 61736

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**BARBEE TOWERS**  
**RENOVATION**  
1100 E DRUID ROAD  
CLEARWATER, FL 33756

ISSUED  
DATE: 10/15/20  
CONSTRUCTION DOCUMENTS

NO.	DATE	DESCRIPTION
1	10-15-20	OWNER'S REVIEW

PROJECT NO.: 19019.00  
DRAWN BY: US  
PROJECT MANAGER: RW  
CHECKED BY: NDM  
DATE: 09-15-20  
SCALE: NOT TO SCALE

**E601**  
ELECTRICAL RISER  
AND SCHEDULES