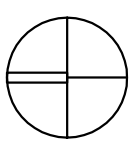


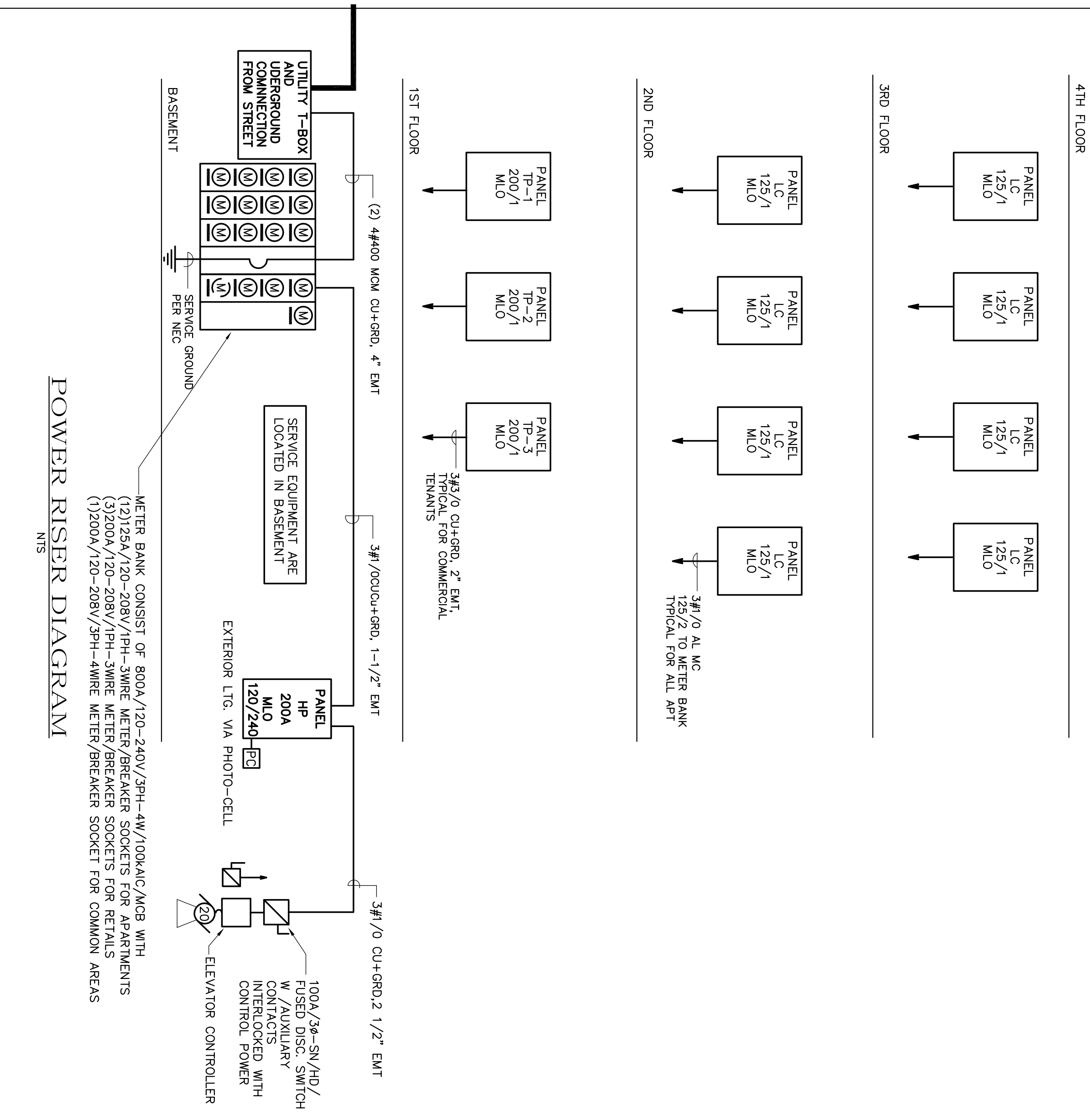
James Sterling AIA
 Architect
 142 High Street
 Portland, Maine
SHWARTZ BUILDING
 RENOVATIONS



ELECTRICAL
 RISER DIAGRAM AND
 DETAILS
 scale: NTS

E-7

LOAD BREAKDOWN				
LOAD	KVA	FACTOR	KVA	
RESIDENTIAL	372	0.41	152	
RETAIL	48	1.00	48	
HOUSE	30	1.00	30	
SPARE	50	1.00	50	
TOTAL	500		280	



PANEL SCHEDULE							
ITEM	VOLT/PHS/W	MLO	MCB	CIRC	F:Flush S:Surf. B:Boff	BRANCH BREAKERS	SPR=SPARE SPC=SPACE
PANEL HP	120-208/3/4	200	-	42	S	B	(1)100/3, (4)30/2, (24)20/1
PANEL LC	120-208/1/3	125	-	30	F	P	(1)50/2, (2)30/2, (6)20/1, (8)20/1 AFL, (8)15/1 AFL
PANEL TP-1	120-208/1/3	200	-	42	S	B	(2)50/2, (2)30/2, (30)20/1
PANEL TP-2	120-208/1/3	200	-	42	S	B	(2)50/2, (2)30/2, (30)20/1

GENERAL POWER DISTRIBUTION NOTES

-BEFORE ORDERING ANY EQUIPMENT AND/OR START ANY CONSTRUCTION OR EXCAVATION ELECTRICAL CONTRACTOR AND/OR GENERAL CONTRACTOR SHALL CONTACT ELECTRIC/TELEPHONE/CAVY COMPANIES FOR SERVICE POINT AND ROUTING. SERVICE AVAILABILITY.

THIS ENGINEER HAS MADE APPLICATION TO UTILITY COMPANY BUT YET NO ANSWER HAS BEEN RECEIVED. CONTRACTOR SHALL NOT PROCEED WITHOUT SUCH CONFIRMATION.

-FEEDERS ARE SIZED BASED ON 75% VD.

50A, UP TO 100FT #6, INCREASE BY ONE SIZE FOR EVERY 30FT.

100A, UP TO 100FT #3, INCREASE BY ONE SIZE FOR EVERY 30FT.

200A, UP TO 150FT #2.0, INCREASE BY ONE SIZE FOR EVERY 50 FT.

400A, UP TO 200FT #500, INCREASE BY ONE SIZE FOR EVERY 50FT.

-FOR SWITCHGEAR SHORT CIRCUIT RATINGS, SEE NOTES UNDER PANEL SCHEDULES.

-PRIOR TO ORDERING ANY SWITCHGEAR ELECTRICAL CONTRACTOR SHALL CONFIRM CIRCUIT BREAKER SIZES WITH HVAC AND OTHER MECHANICAL EQUIPMENT SHOP DRAWINGS. DUE TO SUBMITTAL TIMING FROM VARIOUS CONTRACTORS, ENGINEERS APPROVAL IS GIVEN FOR QUALITY ONLY.

-CONTRACTOR SHALL COORDINATE WITH OTHER TRADES SO THAT NO OTHER TRADE SHALL PASS THROUGH ELECTRIC ROOM OR ABOVE DEDICATED SUCH INSTALLATIONS OCCUR.

-ELECTRIC ROOM DIMENSIONS ARE BASED ON CERTAIN MANUFACTURERS EQUIPMENT DIMENSIONS. CONTRACTOR SHALL CONFIRM ROOM DIMENSIONS PRIOR TO ORDERING EQUIPMENT

GENERAL NOTES :

1- EXACT LOCATION OF ALL UTILITIES PIPES AND INSTALLATION DETAILS SHALL BE AS SHOWN ON THE LATEST ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION/INSTALLATION DETAILS.

2- UNLESS NOTED OTHERWISE ALL WIRING SHALL BE FED FROM PANEL HP VIA #12 AWG-CU 20A/1P CB. HOMERUNS LONGER THAN 100 FEET SHALL BE #10CU.

3- MOUNTING HEIGHTS SHALL BE AS FOLLOWS :

MALL SOCKETS : 7'-0" TO CENTER LINE
 HORN/STROBES : 8'-6" TO CENTER LINE
 RECEPTACLES : 18" TO CENTER LINE
 EMERGENCY LIGHTS : 4'-6" TO CENTER LINE
 HC UNIT PANELS : 4'-0" TO TOP BREAKER
 ALL CONTROL DEVICES SHALL BE MIN 18" AWAY FROM CORNER
 ALL CONTROL DEVICES SHALL BE MOUNTED ON WALLS
 6'-6" AFF TO THE BOTTOM

ELECTRICAL SPECIFICATIONS

- 1.1 General
 - A. The General Conditions and Drawings issued for this Project shall be considered as part of the Electrical Specifications.
 - B. Drawings shall mean the Electrical Contractor.
- 1.2 Scope of Work
 - A. The work under this Specification includes the furnishing of all labor and material of specified kind and quantity to the project necessary to install a complete and ready for operation. Manufacturer's catalogue numbers are shown for reference purposes only. They are meant to provide a general description of the design and quality of materials required. Equivalent products by other manufacturers will be considered.
- 1.3 Codes and Specifications
 - A. The work shall be conducted in accordance with the latest rules and regulations of the State of MASSACHUSETTS and the local codes as most recently issued, OSHA codes, National Electrical Codes and NFPA.
 - B. All exposed wiring shall be in electric metallic tubing. All concealed wiring shall be in raceway.
 - C. All branch circuit conductors shall be copper, minimum #12 AWG size THHN or THW as required, 600V rated.
 - D. All feeder conductors shall be copper, AWG size as noted XHHW insulation, 600V.
- 1.4 Coordination of Work
 - A. The Contractor shall schedule and coordinate his work with all trades involved to insure proper installation and operation.
 - B. The Contract Drawings are diagrammatic only and indicate the extent, general locations and arrangement of the piping and wiring of equipment. The exact details shall be coordinated with Architectural Drawings and Documents of other trades.
 - C. This Contractor shall verify fixture mounting and location against plans, elevations and detail drawings. Exact location of all fixtures shall be confirmed with owner's representative prior to rough-in.
 - D. Submit Shop Drawings and product data within thirty (30) days after award of the Contract. Check, stamp and mark with project name, submittals, before submission to the Architect.
 - E. This Contractor shall give notices, the plans, obtain permits and licenses, pay fees and back charges, and obtain the necessary approvals from authorities that have jurisdiction.
 - F. Material and equipment shall be UL, ASME and ASA approved for intended service.
 - G. Guarantee work in writing for one year from date of final acceptance. Repair or replace defective work at no cost to the Owner. The Contractor shall be responsible for damage caused in making necessary repairs and replacements under guarantee of no cost to the Owner.
 - H. Submit guarantee to Architect before final payment.