

IF THIS SHEET IS NOT 24 X 36 IT IS A REDUCED SCALE PRINT - SCALE ACCORDINGLY

### GENERAL ELECTRICAL NOTES

- A. ALL HOMERUNS/CIRCUITS TO BE 2#12, 1#12G., 3/4"C TO A 20A-1P CIRCUIT BREAKER IN DESIGNATED PANEL, UNLESS NOTED OTHERWISE. NUMBERS SHOWN AT EACH DEVICE/HOMERUN REPRESENT BRANCH CIRCUIT NUMBER IN PANELBOARD.
- B. WIRE AND RACEWAY SIZES INDICATED ON HOMERUNS/CIRCUITS SHALL BE CONTINUOUS FOR ENTIRE LENGTH, UNLESS NOTED OTHERWISE.
- C. ALL WIRING (CONDUITS, ETC.) TO BE CONCEALED. NO SURFACE WIRING SHALL BE INSTALLED IN FINISHED AREAS.
- D. ALL WIRING ABOVE CEILING THAT IS NOT IN CONDUIT AND IS LOCATED IN A PLENUM SPACE SHALL BE PLENUM RATED. REFER TO MECHANICAL PLANS FOR PLENUM AREAS.
- E. ELECTRICAL CONDUITS, WIRING, BOXES, ETC. SHALL NOT PENETRATE STAIR ENCLOSURE, UNLESS THEY ARE FEEDING DEVICES LOCATED WITHIN THE STAIR ENCLOSURE.
- F. PROVIDE ELECTRICAL OUTLET PLATE GASKET SEALS AT RECEPTACLES, SWITCHES AND OTHER ELECTRICAL BOXES ON EXTERIOR WALLS AND INTERIOR WALLS BETWEEN CONDITIONED AND NON-CONDITIONED SPACES.
- G. ALL INDIVIDUAL OR GENERAL PURPOSE BRANCH 120 VOLT CIRCUITS OVER 100'-0" IN CONDUCTOR LENGTH SHALL BE INCREASED ONE WIRE SIZE (i.e. FROM #12AWG TO #10AWG) AND CIRCUITS OVER 170'-0" IN CONDUCTOR LENGTH SHALL BE INCREASED TWO WIRE SIZES (i.e. FROM #12AWG TO #8AWG) UNLESS NOTED OTHERWISE.
- H. ALL INDIVIDUAL OR GENERAL PURPOSE BRANCH 277 VOLT CIRCUITS OVER 230'-0" IN CONDUCTOR LENGTH SHALL BE INCREASED ONE WIRE SIZE (i.e. FROM #12AWG TO #10AWG) AND CIRCUITS OVER 380'-0" IN CONDUCTOR LENGTH SHALL BE INCREASED TWO WIRE SIZES (i.e. FROM #12AWG TO #8AWG), UNLESS NOTED OTHERWISE.
- I. PROVIDE UNIVERSAL BLANK PLUGS ON ALL SPARE CONDUIT EQUAL TO CARLON 'MAEPG' SERIES.
- J. SEAL ALL CONDUITS AT THE LAST STRUCTURE PRIOR TO CONDUITS ENTERING A BUILDING AND WHERE CONDUITS ENTER A BUILDING WITH CARLON 'MAT' OR 'MAQ' SERIES DUCT PLUG FOR CONDUITS WITH WIRES AND CARLON 'MAE' SERIES FOR SPARE CONDUITS OR EQUAL. ALL SPARE CONDUITS SHALL HAVE NYLON PULL STRING AND FOOTAGE TAPE.
- K. RACEWAY AND WIRING INDICATED ON DRAWINGS ARE RECOMMENDATIONS FOR SPECIFIC ROUTES OR SPECIAL CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR DETERMINING ACTUAL ROUTING.
- L. ALTHOUGH ALL FEEDER AND BRANCH CIRCUIT WIRE AND CONDUIT IS NOT SPECIFICALLY SHOWN, IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE FEEDER AND BRANCH CIRCUIT WIRING SYSTEM BE INSTALLED.

### GENERAL LIGHTING NOTES

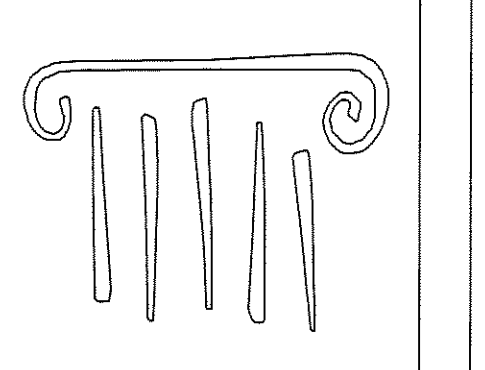
- A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN DRAWINGS FOR FINAL LOCATION OF ALL LIGHT FIXTURES AND CEILING MOUNTED ELECTRICAL DEVICES.
- B. REFER TO ARCHITECTURAL ELEVATIONS AND DETAILS FOR ACTUAL LOCATION OF WALL MOUNTED LIGHTING FIXTURES AND TASK LIGHTING.
- C. REFER TO LIGHTING DETAILS FOR TYPICAL WIRING SCHEMATICS.
- D. REFER TO DRAWINGS FOR LIGHTING FIXTURE SCHEDULE.
- E. SWITCHING SHOWN ON PLANS DOES NOT SHOW SWITCH LEG/TRACER WIRE BETWEEN SWITCHES. PROVIDE ALL REQUIRED WIRING FOR SWITCHING OF LIGHTING.
- F. ALL EXIT SIGNS AND AREA OF REFUGE SIGNS SHALL BE WIRED TO LINE SIDE OF THE LIFE SAFETY (EMERGENCY) LIGHTING CIRCUIT SERVING THE SAME AREA FOR CONTINUOUS ILLUMINATION.
- G. LIGHTING FIXTURES NOTED WITH THE SUBSCRIPT 'NL' (NIGHT LIGHT) SHALL BE WIRED FOR CONTINUOUS NON-SWITCHED ILLUMINATION.
- H. EMERGENCY BATTERY UNITS AND BATTERY BALLASTS SHALL BE WIRED AHEAD OF ANY SWITCHED LEGS ON LOCAL EMERGENCY LIGHTING BRANCH CIRCUIT SERVING THE SAME AREA, FOR CONTINUOUS CHARGING AND AC CIRCUIT MONITORING, AND SUCH THAT FIXTURE ILLUMINATES UPON FAILURE OF LOCAL POWER.
- I. LIGHT FIXTURES IN MECHANICAL ROOMS ARE SHOWN FOR QUANTITY ONLY. COORDINATE LIGHT FIXTURE LOCATIONS WITH THE MECHANICAL EQUIPMENT, DUCTWORK, PIPING, ETC. IN MECHANICAL ROOM TO GIVE ADEQUATE WELL DISTRIBUTED ILLUMINATION LEVELS THROUGHOUT THE SPACE.
- J. INSTALL CONDUIT AND WIRING FOR EXTERIOR BUILDING MOUNTED LIGHT FIXTURES, CONCEALED WITHIN BUILDING, NOT EXPOSED ON BUILDING EXTERIOR.
- K. ALL EXTERIOR LIGHTING FIXTURES SHOWN ON FLOOR PLANS SHALL BE WIRED WITH 2#10, 1#10G., 3/4"C TO PANEL DESIGNATED, UNLESS OTHERWISE NOTED.
- L. CONNECT UNDERCABINET LIGHTING TO LOCAL NON-COMPUTER BRANCH RECEPTACLE CIRCUIT.
- M. A SWITCH IN A SPACE SHALL CONTROL LIGHTING IN THAT SPACE UNLESS OTHERWISE INDICATED.

### GENERAL POWER NOTES

- A. COORDINATE EXACT LOCATION OF ELECTRICAL DEVICES SUCH AS RECEPTACLES, SWITCHES, FIRE ALARM DEVICES, ETC. WITH ARCHITECTURAL PLANS, ELEVATIONS AND DETAILS PRIOR TO START OF WORK. REQUEST CLARIFICATIONS FROM ARCHITECT PRIOR TO INSTALLATION.
- B. ANY RECEPTACLE LOCATED WITHIN 6'-0" OF A WATER SOURCE SHALL BE A GFI RECEPTACLE OR PROTECTED BY A GFI CIRCUIT BREAKER.
- C. UNLESS OTHERWISE INDICATED, REFER TO MOTOR CIRCUIT SCHEDULE FOR ELECTRICAL REQUIREMENTS OF ALL MECHANICAL (HVAC, PLUMBING, FIRE PROTECTION, ETC.) EQUIPMENT. REFER TO DRAWINGS FOR EACH TRADE FOR EXACT LOCATION OF EQUIPMENT.
- D. DO NOT INSTALL OUTLETS BACK TO BACK. PROVIDE MINIMUM 24 INCH HORIZONTAL SPACING IN FIRE RATED WALLS. MOUNT LOW VOLTAGE AND POWER OUTLETS IN DIFFERENT STUD WALL CAVITIES.
- E. WHEN THE COMBINING OF CIRCUITS OR HOMERUNS IS PERMITTED ELSEWHERE IN THE CONTRACT DOCUMENTS, RACEWAYS SHALL BE LIMITED TO SIX CURRENT CARRYING CONDUCTORS (THREE PHASE AND THREE NEUTRALS) AND GROUNDING CONDUCTOR UNLESS OTHERWISE INDICATED. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH SINGLE PHASE CIRCUIT UNLESS AN OVERSIZED NEUTRAL IS SPECIFICALLY INDICATED. CONDUCTORS MUST BE DERATED PER THE NATIONAL ELECTRICAL CODE WHEN MORE THAN THREE CURRENT CARRYING CONDUCTORS ARE RUN IN THE SAME RACEWAY.
- F. PROVIDE NYLON PULL STRING IN ALL EMPTY CONDUIT SYSTEMS FOR USE IN INSTALLING SYSTEM WIRING.
- G. PROVIDE GFI TYPE CIRCUIT BREAKER TO SERVE RECEPTACLE IF THEY ARE DESIGNATED BOTH GFI AND IG TYPE.
- H. ALL CIRCUITS WIRED TO ELECTRONIC GRADE PANELBOARDS SHALL BE 2#12, 1#12 EQUIP. GND., 1#12 ISOLATED GND., IN 3/4"C. RECEPTACLES FED BY THESE CIRCUITS SHALL BE ISOLATED GROUND TYPE. REFER TO PANELBOARD SCHEDULE TO IDENTIFY ELECTRONIC GRADE PANELBOARDS.
- I. COORDINATE CABLETRAY ROUTING ABOVE CORRIDOR CEILINGS WITH MECHANICAL EQUIPMENT AND PIPING. ADJUST RUNS AS REQUIRED.
- J. REFER TO TELECOMMUNICATION, SECURITY AND AUDIO/VISUAL DRAWINGS FOR EXACT LOCATION OF ALL TELECOMMUNICATION OUTLETS, SECURITY DEVICES, VIDEO OUTLETS, AMPS, SPEAKERS, ETC. PROVIDE ALL REQUIRED RACEWAY FOR THESE SYSTEMS FOR A COMPLETE INSTALLATION. SEE ELECTRICAL, TELECOMMUNICATION, SECURITY AND AUDIO/VISUAL SPECIFICATIONS AND DRAWINGS FOR ADDITIONAL REQUIREMENTS.
- K. COORDINATE EXACT LOCATION OF JUNCTION BOX FOR EQUIPMENT WHICH IS FURNISHED BY OWNER OR OTHERS WITH EQUIPMENT SUPPLIER PRIOR TO CONSTRUCTION. PROVIDE WIRING FROM JUNCTION BOX TO EQUIPMENT CONNECTION AS REQUIRED.
- L. WIRING INDICATED BY CIRCUIT NUMBER SYMBOL SHALL INCLUDE A NEUTRAL WHEN THE LOAD SERVED HAS PROVISIONS FOR, OR REQUIRES A NEUTRAL. TYPICALLY, ALL FEEDERS AND BRANCH CIRCUITS WILL REQUIRE A NEUTRAL, EXCEPT MOST MOTOR CIRCUITS.

### GENERAL SITE ELECTRICAL NOTES

- A. PRIOR TO ANY EXCAVATION, CALL 1-800-922-4455 "CALL BEFORE YOU DIG" TO NOTIFY AFFECTED UTILITIES.
- B. ALL TRENCHING AND BACKFILLING SHALL BE PROVIDED BY DIV. 2
- C. ALL CONCRETE PADS ARE PROVIDED BY DIV. 3.
- D. MAINTAIN MINIMUM 30" FROM FINISHED GRADE TO TOP OF ALL DUCTBANKS AND CONDUIT RUNS UNLESS OTHERWISE NOTED.
- E. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR UTILITY COMPANY CHARGES.
- F. ANY EXISTING CONDUIT, WIRING, ETC. ROUTED IN AREAS THAT ARE DISTURBED BY CONSTRUCTION WORK OR LOCATED WHERE THE NEW CONSTRUCTION IS BEING ADDED SHALL BE RE-ROUTED AS REQUIRED TO ENSURE CONTINUITY OF EXISTING CIRCUITS.
- G. COORDINATE ALL SITE WORK WITH OWNER AND UTILITY COMPANIES.
- H. IF AREA IS BEING EXCAVATED, ABANDONED ELECTRICAL SHALL BE REMOVED. (REMOVE CONDUCTORS AND CONDUIT.) IF NO SITE WORK IS BEING DONE IN THESE AREAS, REMOVE CONDUCTORS AND ABANDON CONDUIT IN PLACE AND CAP.
- I. EXISTING UTILITIES SHALL REMAIN TO SERVE EXISTING STRUCTURES UNTIL THEY ARE VACATED. PROVIDE TEMPORARY SERVICES AS REQUIRED. COORDINATE WITH UTILITIES AND OWNER.
- J. ALL CONDUITS SHALL BE PROVIDED WITH NYLON PULL STRINGS.
- K. REFER TO SITE ARCHITECTURAL, LANDSCAPING AND CIVIL ENGINEERING PLANS FOR ADDITIONAL INFORMATION, DETAILS, AND EXACT LOCATION OF EQUIPMENT.
- L. THE LOCATION AND QUANTITY OF EXISTING UNDERGROUND UTILITIES ARE SHOWN APPROXIMATELY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ENGINEER. DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH OCCUR DUE TO FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- M. CONTRACTOR SHALL VERIFY ALL EXISTING SERVICE LOCATIONS.
- N. REFER TO DRAWINGS FOR SITE LIGHT FIXTURE SCHEDULE. REFER TO SPECIFICATIONS FOR ADDITIONAL LIGHTING REQUIREMENTS.
- O. WHERE PVC CONDUIT, WHETHER DIRECT BURIED OR IN DUCTBANK, TERMINATES WITHIN A BUILDING OR UTILITY STRUCTURE, THE PVC CONDUIT SHALL TRANSITION TO RIGID METAL CONDUIT AT LEAST 10 FEET PRIOR TO ENTERING BUILDING OR UTILITY STRUCTURE



**PORT CITY ARCHITECTURE**

65 NEWBURY STREET  
 PORTLAND, ME 04101  
 207.761.9000  
 fax: 207.761.2010  
 lita@portcityarch.com

**VANZELM ENGINEERS**

VANZELM HEYWOOD & SHADFORD, INC.  
 15 TALCOTT NOTCH FARMINGTON, CT 06032  
 TEL: (860) 384-3966 FAX: (860) 384-3968

PROJECT NO.: 2007120.00

**BECKER**  
 structural engineers, inc.

**SYTDesign CONSULTANTS**  
 CIVIL ENGINEERING & LANDSCAPE ARCHITECTURE

**ALLIED/COOK CONSTRUCTION**

**Favreau**  
 CONSULTANTS

**Titan Mechanical, Inc.**  
 Geog. Build. Engineering - Mechanical Contracting

**UNIVERSITY OF NEW ENGLAND**

**COLLEGE OF PHARMACY**

716 STEVENS AVENUE,  
 PORTLAND, ME

#	DATE	DESCRIPTION
		BID SET
	02/08/08	Date Issued
	06506	Project Number

SHEET NAME  
**ELECTRICAL GENERAL NOTES**

Drawn By  
 AMM  
 Checked By  
 MER

**E0.1**

**BID SET - NOT FOR CONSTRUCTION**