

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



# CITY OF PORTLAND

# BUILDING PERMIT

This is to certify that MANCINI ELECTRIC  
of 179 Sheridan St, Portland, ME 04101

For installation at 71 BEDFORD ST  
Masterton Hall Sim Lab

Job ID: 2011-08-1984-FAFS

CBL: 114 - A - A - 001 - 001 - - - -

has permission to fit up Sim Lab fire alarm

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be

*[Signature]*  
Fire Prevention Officer

58

Code Enforcement Officer / Plan Reviewer

**THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY  
PENALTY FOR REMOVING THIS CARD**

## BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: [buildinginspections@portlandmaine.gov](mailto:buildinginspections@portlandmaine.gov)

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



# PORTLAND MAINE

*Strengthening a Remarkable City, Building a Community for Life* • [www.portlandmaine.gov](http://www.portlandmaine.gov)

Director of Planning and Urban Development  
Penny St. Louis

Job ID: 2011-08-1984-FAFS  
Fire alarm fit up

For installation at:  
71 BEDFORD ST  
Masterton Hall Sim Lab

CBL: 114 - A - A - 001 - 001 - - - -

## **Conditions of Approval:**

### **Fire**

The fire alarm system shall comply with the City of Portland Standard for Signaling Systems for the Protection of Life and Property. All fire alarm installation and servicing companies shall have a Certificate of Fitness from the Fire Department.

In field installation shall be installed per code as conditions dictate.

Records cabinet, FACP, annunciator(s), and pull stations shall be keyed alike.

Central Station monitoring for addressable fire alarm systems shall be by point.

All fire alarm records required by NFPA 72 should be stored in an approved cabinet located at the FACP labeled "FIRE ALARM RECORDS".

Installation of a Fire Alarm system requires a Knox Box to be installed per city ordinance.

The fire alarm system shall be certified by a master fire alarm company and have a new fire alarm inspection sticker.

System acceptance and commissioning must be coordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule.

Fire Alarm system shall be maintained. If system is to be off line over 4 hours a fire watch shall be in place. Dispatch notification required 874-8576.

Fire alarm system requires a wireless master box connection per city ordinance. A separate fire alarm permit will be required.

# City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2011-08-1984-FAFS	Date Applied: 8/16/2011	CBL: 114 - A - A - 001 - 001 - - - - -	
Location of Construction: USM – Masterton Hall ( 71 Bedford St.)	Owner Name: UNIVERSITY OF MAINE	Owner Address: 107 MAINE AVE BANGOR, ME - MAINE 04401	Phone:
Business Name:	Contractor Name: Paul Doughty, Simplex Grinnell	Contractor Address: 20 Thomas DR WESTBROOK ME 04092	Phone: (207) 845-6440
Lessee/Buyer's Name:	Phone:	Permit Type: <b>Fire Alarm</b>	Zone: <b>R-5 (USM overlay)</b>
Past Use: USM – Masterton Hall	Proposed Use: Same – Masterton Hall – install fire alarm in simulation lab	Cost of Work: 2000.00	CEO District:
		Fire Dept: <input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A	Inspection: Use Group Type:
		Signature: <i>[Signature]</i> (58)	Signature:
Proposed Project Description: Fire Alarm for Simulation Lab Permit#2011-04-932		Pedestrian Activities District (P.A.D.)	
Permit Taken By:	<b>Zoning Approval</b>		

Special Zone or Reviews	Zoning Appeal	Historic Preservation
<input type="checkbox"/> Shoreland	<input type="checkbox"/> Variance	<input checked="" type="checkbox"/> Not in Dist or Landmark
<input type="checkbox"/> Wetlands	<input type="checkbox"/> Miscellaneous	<input type="checkbox"/> Does not Require Review
<input type="checkbox"/> Flood Zone	<input type="checkbox"/> Conditional Use	<input type="checkbox"/> Requires Review
<input type="checkbox"/> Subdivision	<input type="checkbox"/> Interpretation	<input type="checkbox"/> Approved
<input type="checkbox"/> Site Plan	<input type="checkbox"/> Approved	<input type="checkbox"/> Approved w/Conditions
<input type="checkbox"/> Maj <input type="checkbox"/> Min <input type="checkbox"/> MM	<input type="checkbox"/> Denied	<input type="checkbox"/> Denied
Date: <i>OK 8/16/11 ABM</i>	Date:	Date: <i>ABM</i>

### CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT ADDRESS DATE PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE



# Fire Alarm Permit

If you or the property owner owes real estate or property taxes or user charges on any property within the city, payment arrangements must be made before permits of any kind are accepted.

Installation address: 25 Bedford St (96 Falmouth St) CBI: 114 AA 1

Exact location: (within structure) Simulation Lab

Type of occupancy(s) (NEPA & ICC): Classrooms

Building owner: University of Maine System

System Designer (point of contact): Must be Simplex Grinnell (Paul Doughty)

Designer phone: 207-842-6440 E-mail: pdoughty@simplexgrinnell.com

Installing contractor: Mancini Electric Certificate of Fitness No: T1010

Contractor phone: 207-774-5829 E-mail: gmancini@mancinielectric.com

This is a new application: YES  NO  New AES Master Box: YES  NO   
(Include Master Box approval form)

Amendment to an existing permit: YES  NO  Permit no. \_\_\_\_\_

The following documents shall be provided with this application:

- Floor plans
- Wiring diagram
- Annunciator details
- Input Output Matrix
- Equipment data sheets
- Electrical Permit Pulled (check alarm com)
- Scope of Work
- U 1/2 x 175
- pdf copy (may be e-mailed)
- Designer qualifications
- Battery voltage drop calcs

Master box approval only: YES  NO   
(If yes check New AES Master Box above)

COST OF WORK: \$2000.00

PERMIT FEE: \$40.00  
(\$10 PER \$1,000 - \$30 FOR THE FIRST \$1,000)

RECEIVED

AUG 16 2011

Dept. of Building Inspections

The designer shall be the responsible party for this application. Download a copy of this application at [www.portlandmaine.gov/fire](http://www.portlandmaine.gov/fire) for every submittal. Submit all plans in electronic PDF in addition to readable PDF to the Building Inspections Department, 389 Congress Street, Room 315, Portland, Maine 04101.

Prior to acceptance of any fire alarm system, a complete commissioning and acceptance test must be coordinated with all fire system contractors and the Fire Department, and proper documentation of such test(s) provided.

All installation(s) must comply with the *City of Portland Technical Standard for Signaling Systems for the Protection of Life and Property*, available at [www.portlandmaine.gov/fire](http://www.portlandmaine.gov/fire)

Applicant signature: [Signature] Date: 8/13/11



# CITY OF PORTLAND, MAINE

Department of Building Inspections

## Original Receipt

8.11.11 20 11

Received from William Morrison

Location of Work 2101 1st St

Cost of Construction \$ \_\_\_\_\_ Building Fee: \_\_\_\_\_

Permit Fee \$ \_\_\_\_\_ Site Fee: \_\_\_\_\_

Certificate of Occupancy Fee: \_\_\_\_\_

Total: 40

Building (IL) \_\_\_ Plumbing (I5) \_\_\_ Electrical (I2) \_\_\_ Site Plan (U2) \_\_\_

Other \_\_\_\_\_

CBL: 114-AA1

Check #: 14579 Total Collected \$ 40

**No work is to be started until permit issued.  
Please keep original receipt for your records.**

Taken by: [Signature]

WHITE - Applicant's Copy  
YELLOW - Office Copy  
PINK - Permit Copy

**LIGHTING**

- 2x4 FLUORESCENT FIXTURE ASSOCIATED CONTROL DEVICE FIXTURE TYPE (SEE LIGHT FIXTURE SCHEDULE)
- 1x4 FLUORESCENT FIXTURE
- 2x2 FLUORESCENT FIXTURE
- FIXTURE WIRED TO UNSWITCHED NORMAL CIRCUIT
- FIXTURE WIRED TO UNSWITCHED EMERGENCY CIRCUIT
- FIXTURE WIRED TO SWITCHED EMERGENCY CIRCUIT
- DOWN LIGHT
- FLUORESCENT STRIP
- WALL MOUNTED FIXTURES
- TRACK LIGHTING
- WALL WASH LIGHT FIXTURE
- EXIT SIGN, CEILING MOUNTED ARROW INDICATES EGRESS DIRECTION SHADING INDICATES SIGN FACE
- EXIT SIGN, WALL MOUNTED SHADING INDICATES SIGN FACE
- DUAL HEAD EMERGENCY LIGHT BATTERY PACK TD - TIME DELAY RESET
- REMOTE EMERGENCY LIGHTING HEAD
- 3-WAY TOGGLE SWITCH
- SINGLE POLE TOGGLE SWITCH INDICATES CONTROLLED FIXTURE
- 4-WAY TOGGLE SWITCH
- KEY SWITCH
- DUAL LEVEL SWITCHING
- DIMMER SWITCH, INCANDESCENT OR FLUORESCENT AS REQUIRED
- TOGGLE SWITCH WITH PILOT LIGHT
- TIMER SWITCH, SPRING WOUND
- SINGLE POLE DOUBLE THROW TOGGLE SWITCH, CENTER POSITION OFF
- WEATHER PROOF
- EXPLOSION PROOF
- UNSWITCHED CONTINUATION OF BRANCH CIRCUIT
- HOME RUN
- OCCUPANCY SENSOR  
0 - INDICATES CONTROLLED FIXTURE  
1 - INDICATES TYPE  
1=WATTSTOPPER WALL SWITCH DW-100  
2=WATTSTOPPER WALL SWITCH DW-200  
3=WATTSTOPPER WALL SWITCH TS-400  
4=WATTSTOPPER CEILING SENSOR W-50GA  
5=WATTSTOPPER CEILING SENSOR W-100GA  
6=WATTSTOPPER CEILING SENSOR W-200GA  
7=WATTSTOPPER CEILING SENSOR W-200OH
- INDICATES AIMING DIRECTION

**COMMUNICATION & DATA SYSTEMS**

- TELEPHONE SYSTEM WALL JACK W - INDICATES WALL MOUNTED AT 48" AFF P - INDICATES PAYPHONE (2) - INDICATES 2 OUTLETS, SINGLE BOX
- DATA SYSTEM OUTLET
- COMBINATION VOICE/DATA SYSTEM OUTLET
- UNDERFLOOR TELEPHONE SYSTEM OUTLET
- UNDERFLOOR DATA SYSTEM OUTLET
- UNDERFLOOR VOICE & DATA OUTLET
- CABLE TELEVISION SYSTEM OUTLET, MOUNT 18" AFF UNLESS OTHERWISE NOTED
- CLOSED CIRCUIT TELEVISION OUTLET, MOUNT 18" AFF UNLESS OTHERWISE NOTED
- PAGING SYSTEM CONTROL PANEL AND PAGING AMPLIFIER
- PAGING SYSTEM SPEAKER, CEILING MOUNTED
- PAGING SYSTEM SPEAKER, WALL MOUNT AT 7'-8" AFF  
1. FLUSH, 2. SURFACE, 3. HORN, 4. DUAL HORN
- MICROPHONE OUTLET, WALL MOUNT 6"-0" AFF UNLESS OTHERWISE NOTED
- VOLUME CONTROL
- INTERCOM SYSTEM HAND KEY
- CLOCK SPEAKER
- INTERCOM SYSTEM HAND SET
- WALL MOUNTED CLOCK
- CEILING MOUNTED TELEPHONE SYSTEM OUTLET
- CEILING MOUNTED DATA SYSTEM OUTLET
- CEILING MOUNTED VOICE & DATA OUTLET

**POWER**

- NON-FUSED SAFETY SWITCH AMPERE RATING
- FUSED SAFETY SWITCH, TOP NUMBER INDICATES SWITCH AMPERE RATING, LOWER NUMBER INDICATES FUSE RATING
- NEMA ENCLOSURE
- MAGNETIC MOTOR STARTER, FVNR UNLESS INDICATED OTHERWISE
- NEMA ENCLOSURE RATING
- NEMA SIZE (TYPICAL)
- COMBINATION CIRCUIT BREAKER/MAGNETIC MOTOR STARTER FIRST NUMBER INDICATES CIRCUIT BREAKER AMPERE RATING SECOND NUMBER INDICATES NEMA STARTER SIZE
- COMBINATION FUSED DISCONNECT/MAGNETIC MOTOR STARTER NUMBERS INDICATE DISCONNECT AMPERE RATING/FUSE RATING/NEMA STARTER SIZE
- NON-FUSED DISCONNECT/MAGNETIC MOTOR STARTER FIRST NUMBER INDICATES CIRCUIT BREAKER AMPERE RATING SECOND NUMBER INDICATES NEMA STARTER SIZE
- MANUAL MOTOR STARTER, TOGGLE OPERATED, 1, 2 OR 3 POLE AS REQUIRED, OVERLOAD PROTECTION
- MANUAL MOTOR SWITCH, TOGGLE OPERATED, SINGLE PHASE, 1 OR 2 POLE AS REQUIRED (NO OVERLOAD PROTECTION)
- ENCLOSED CIRCUIT BREAKER AMPERE RATING
- ELECTRIC MOTOR, NUMBER INDICATES HORSEPOWER RATING
- EXPLOSION PROOF MOTOR
- VARIABLE AIR VOLUME CONTROL ACTUATORS
- LOCAL SELECTOR SWITCH H/O/A - HAND/OFF/AUTO
- EMERGENCY OFF BREAK GLASS STATION
- PUSHBUTTON STATION
- JUNCTION BOX
- TRANSFORMER
- POWER POLE
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- EYE CONDUIT SEAL
- DUPLEX RECEPTACLE, NEMA 5-20R INSTALLED ON EMERGENCY CIRCUIT (TYPICAL)
- HOSPITAL GRADE DUPLEX RECEPTACLE, NEMA 5-20R
- HOSPITAL GRADE GFCI DUPLEX RECEPTACLE, NEMA 5-20R
- HOSPITAL GRADE ISOLATED GROUND DUPLEX RECEPTACLE, NEMA 5-20R
- SINGLE RECEPTACLE, NEMA 5-20R
- DOUBLE DUPLEX (QUADRUPLEX) RECEPTACLE, NEMA 5-20R
- HOSPITAL GRADE DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R
- SWITCHED RECEPTACLE
- FLOOR OUTLET, DUPLEX RECEPTACLE, NEMA 5-20R
- CEILING MOUNTED DUPLEX RECEPTACLE, 5-20R
- POWER RECEPTACLE, 480 VOLT NEMA CONFIGURATION AS NOTED.
- POWER RECEPTACLE, 240 VOLT NEMA CONFIGURATION AS NOTED.
- PANELBOARD, NORMAL POWER
- PANELBOARD, EMERGENCY POWER
- MULTI OUTLET ASSEMBLY

**NURSE CALL SYSTEM**

- NURSE CALL CALL LIGHT
- PATIENT CALL BUTTON
- NURSE CALL PULL CORD
- NURSE CALL MASTER STATION

**LINE TYPES**

- EXISTING
- NEW
- DEMOLITION

**FIRE ALARM**

- FIRE ALARM CONTROL PANEL
- FIRE ALARM ANNUNCIATOR
- FIRE ALARM MASTER BOX
- FIRE ALARM MANUAL PULL STATION
- FIRE ALARM SPEAKER/STROBE UNIT
- FIRE ALARM AUDIBLE/VISIBLE NOTIFICATION APPLIANCE (GENERAL EVACUATION)
- FIRE ALARM AUDIBLE/VISIBLE NOTIFICATION APPLIANCE CLEAN ROOM NOTIFICATION (LOCAL)
- FIRE ALARM VISIBLE ONLY NOTIFICATION APPLIANCE CANDELA INTENSITY-15/75 UNLESS OTHERWISE NOTED CEILING MOUNTED
- PHOTOELECTRIC SMOKE DETECTOR, CEILING MOUNTED INDICATES AUXILIARY CONTACT.
- FIXED TEMPERATURE HEAT DETECTOR, CEILING MOUNTED. INDICATES EQUIPMENT INTERLOCKED WITH THE DETECTOR
- CLEAN ROOM SMOKE DETECTOR
- INDICATES EQUIPMENT INTERLOCKED WITH THE SMOKE DETECTOR
- COMBINATION RATE-OF-RISE/FIXED TEMPERATURE HEAT DETECTOR, CEILING MOUNTED.
- DUCT SMOKE DETECTOR, PHOTOELECTRIC WITH AUXILIARY CONTACT.
- SPRINKLER SYSTEM FLOW SWITCH
- SPRINKLER SYSTEM TAMPER SWITCH
- FIRE ALARM SYSTEM MAGNETIC DOOR HOLDER
- INTERLOCK RELAY
- SMOKE DAMPER
- DUCT SMOKE DETECTOR REMOTE TEST INDICATOR
- KNOX BOX

**SECURITY SYSTEMS**

- 2-WAY CEILING MOUNTED INTERCOM SPEAKER
- CEILING MOUNTED PAGING SPEAKER
- WALL MOUNTED PAGING HORN
- CEILING OR WALL MOUNTED FIXED CAMERA
- CEILING OR WALL MOUNTED PTZ CAMERA
- PAGING CONTROL EQUIPMENT
- INTERCOM MASTER STATION
- DOOR CONTROL EQUIPMENT
- MONITORED DOOR POSITION SWITCH AND CONTROLLED DOOR HARDWARE
- MONITORED DOOR POSITION SWITCH
- STANDARD INTERCOM STATION
- VISITATION TELEPHONE
- WALL MOUNTED DURESS BUTTON
- GRAPHIC CONTROL PANEL
- TOUCH SCREEN WORKSTATION
- CCTV CONTROL OR DISPLAY EQUIPMENT
- PERIMETER CONTROL EQUIPMENT
- DURESS CONTROL EQUIPMENT
- DURESS ALARM RECEIVER
- OFFICER CONTROLLED COLLECT-ONLY PUBLIC TELEPHONE
- OFFICER CONTROLLED FIRE SPRINKLER (DELUGE) HEAD
- DUAL TECHNOLOGY VOLUMETRIC SENSOR
- LOCAL DOOR RELEASE BUTTON
- OFFICER CONTROLLED SHOWER WATER SUPPLY
- OFFICER CONTROLLED LIGHTING AND ELECTRICAL OUTLETS
- DOOR CONTACT
- CARD READER
- KEY PAD
- CLOSED CIRCUIT TELEVISION CAMERA
- ELECTRIC STRIKE
- MAG LOCK

**ONE LINE DIAGRAM**

- MEDIUM VOLTAGE DRAWOUT CIRCUIT BREAKER
- LOW VOLTAGE DRAWOUT CIRCUIT BREAKER  
AF - AMP FRAME  
AT - AMP TRIP  
EO - ELECTRICALLY OPERATED
- MOLDED CASE CIRCUIT BREAKER
- SHUNT TRIP  
GF - GROUND FAULT  
EO - ELECTRICALLY OPERATED
- DISCONNECT, ISOLATION OR SAFETY SWITCH
- FUSED CUTOUT
- FUSED LOAD BREAK SWITCH
- MEDIUM VOLTAGE MOTOR STARTER
- MAGNETIC MOTOR STARTER, NUMERAL INDICATES NEMA SIZE FVNR UNLESS OTHERWISE NOTED. FVR - FULL VOLTAGE REVERSING RVAT - REDUCING VOLTAGE AUTO TRANSFORMER 2S - TWO SPEED
- VARIABLE FREQUENCY DRIVE
- POWER TRANSFORMER  
OA - LIQUID TYPE SELF COOLED  
AA - DRY TYPE SELF COOLED  
FA - FAN COOLED CONNECTION
- SHIELDED ISOLATION TRANSFORMER
- POTENTIAL TRANSFORMER  
RATIO - NUMBER REQUIRED
- CURRENT TRANSFORMER  
RATIO - NUMBER REQUIRED
- GROUND FAULT CURRENT TRANSFORMER
- MOTOR, NUMBER INDICATES HORSEPOWER
- GENERATOR
- ATS - AUTOMATIC TRANSFER SWITCH  
MTS - MANUAL TRANSFER SWITCH
- METER  
A - AMMETER  
V - VOLTMETER  
W - WATTMETER  
WH - WATT HOURMETER  
KWH - KILOWATT HOUR  
KVAR - KILOWATT VAR  
VAR - VAR METER  
HZ - FREQUENCY METER  
PF - POWER FACTOR METER
- DIGITAL POWER METER
- METER TRANSFER SWITCH  
AS - AMMETER SWITCH  
VS - VOLTMETER SWITCH
- TRANSIENT VOLTAGE SURGE SUPPRESSOR
- LIGHTNING ARRESTOR
- KEY INTERLOCK
- FUSE
- ELECTRONIC POWER FUSE
- DRAWOUT DEVICE
- GROUND

**ABBREVIATIONS**

- |       |  |        |                                    |
|-------|--|--------|------------------------------------|
| AAMP  | AMPERE                                 | LA     | LIGHTNING ARRESTOR                 |
| AFF   | ABOVE FINISHED FLOOR                   | LTC    | LIGHTING                           |
| AFG   | ABOVE FINISHED GRADE                   | MC     | METAL CLAD                         |
| AHJ   | AUTHORITY HAVING JURISDICTION          | MCB    | MAIN CIRCUIT BREAKER               |
| AIC   | AMPERE INTERRUPTING CAPACITY           | MFR    | MANUFACTURER                       |
| AWG   | AMERICAN WIRE GAUGE                    | MI     | MINERAL INSULATED                  |
| BFG   | BELOW FINISHED GRADE                   | MLO    | MAIN LUG ONLY                      |
| BOS   | BOTTOM OF STEEL                        | MTD    | MOUNTED                            |
| C     | CONDUIT, CONDUCTOR                     | MV     | MEDIUM VOLTAGE                     |
| CATV  | CABLE TELEVISION                       | NC     | NORMALLY CLOSED                    |
| CB    | CIRCUIT BREAKER                        | NEC    | NATIONAL ELECTRICAL CODE           |
| CCIV  | CLOSED CIRCUIT TELEVISION              | NEG    | NEGATIVE                           |
| CPT   | CONTROL POWER TRANSFORMER              | NEUT   | NEUTRAL                            |
| CT    | CURRENT TRANSFORMER                    | NIC    | NOT IN CONTRACT                    |
| CU    | COPPER                                 | NO     | NORMALLY OPEN                      |
| DACT  | DIGITAL ALARM COMMUNICATOR TRANSMITTER | NTS    | NOT TO SCALE                       |
| DB    | DIRECT BURIED                          | PF     | POWER FACTOR                       |
| DISC  | DISCONNECT                             | PH     | PHASE                              |
| DN    | DOWN                                   | PVC    | POLYVINYL CHLORIDE                 |
| EMT   | ELECTRICAL METALLIC TUBING             | RGS    | RIGID STEEL CONDUIT                |
| EWO   | ELECTRIC WATER COOLER                  | RSC    | RIGID STEEL CONDUIT                |
| FAA   | FIRE ALARM ANNUNCIATOR                 | RTD    | RESISTANCE TEMPERATURE DETECTOR    |
| FACP  | FIRE ALARM CONTROL PANEL               | SN     | SOLID NEUTRAL                      |
| FBD   | FURNISHED BY OTHERS                    | STP    | SHIELDED TWISTED PAIR              |
| FU    | FUSE                                   | STT    | SHIELDED TWISTED TRIPLET           |
| FWE   | FURNISHED WITH EQUIPMENT               | SWBD   | SWITCHBOARD                        |
| CEN   | GENERATOR                              | SWGR   | SWITCHGEAR                         |
| GFCI  | GROUND FAULT CIRCUIT BREAKER           | TOS    | TOP OF STEEL                       |
| GND   | GROUND                                 | TRANSF | TRANSFORMER                        |
| HIP   | HORSEPOWER                             | TVSS   | TRANSIENT VOLTAGE SURGE SUPPRESSOR |
| HTR   | HEATER                                 | V      | VOLT                               |
| IG    | ISOLATED GROUND                        | VA     | VOLT-AMPERE                        |
| IMC   | INTERMEDIATE METAL CONDUIT             | VAR    | VOLT-AMPERE REACTIVE               |
| K     | KILO                                   | WM     | WATT METER                         |
| KCMIL | THOUSAND CIRCULAR MILS                 | WP     | WEATHER PROOF                      |
| KV    | KILOVOLT                               | XFMR   | TRANSFORMER                        |
| KVA   | KILOVOLT-AMPERE                        | XP     | EXPLOSION PROOF                    |
| KVAR  | KILOVOLT-AMPERE REACTIVE               |        |                                    |
| KW    | KILOWATT                               |        |                                    |
| KWH   | KILOWATT-HOUR                          |        |                                    |

**GENERAL NOTES:**

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NFPA-70, NATIONAL ELECTRICAL CODE (NEC).
- ALL MOTOR SAFETY SWITCHES, DISCONNECTS AND MOTOR STARTERS ARE PROVIDED BY DIVISION 260000 UNLESS NOTED AS FURNISHED WITH EQUIPMENT (FWE).
- UNLESS OTHERWISE NOTED CONVENIENCE RECEPTACLES SHALL BE MOUNTED 18-INCHES AFF, LIGHTING TOGGLE SWITCHES 48-INCHES AFF, DATA SYSTEM OUTLETS 18-INCHES AFF, FIRE ALARM NOTIFICATION DEVICES 80-INCHES AFF OR 6-INCHES BELOW CEILING, WHICHEVER IS LOWER, AND FIRE ALARM MANUAL PULL STATIONS 48-INCHES TO TOP OF DEVICE.
- ALL PENETRATIONS THROUGH FLOORS, RATED WALLS AND PARTITIONS SHALL BE SEALED WITH UL APPROVED FIRE SEALANT MATERIAL TO MAINTAIN THE RATING OF SEPARATION.
- ALL ENCLOSURES, CONDUIT BODIES AND THEIR COVERS CONTAINING FIRE ALARM SYSTEM CONDUCTORS SHALL BE PAINTED RED.
- AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED WITH EVERY FEEDER AND BRANCH CIRCUIT.
- UNLESS OTHERWISE NOTED, WIRING SHALL BE 2#12 AWG CONDUCTORS AND #12 GND. HOME RUNS FED FROM 20A-1P CIRCUITS IN EXCESS OF 100 FEET SHALL BE #10 AWG. FEEDERS AND MOTOR BRANCH CIRCUITS SHALL BE INSTALLED IN A 3/4" CONDUIT UNLESS OTHERWISE NOTED.
- FLEXIBLE CONNECTIONS TO MOTORS SHALL BE LIQUID TIGHT FLEXIBLE METAL CONDUIT, UNLESS OTHERWISE NOTED.
- LIGHTING TOGGLE SWITCHES SHALL BE COMMERCIAL SPECIFICATION GRADE 120 VOLT, SIDE WIRED AND PROVIDED WITH GROUNDING SCREW. HUBBELL, LEVITON, PASS AND SEYMOUR OR APPROVED EQUAL DIMMER SWITCHES SHALL BE LEVITON SURE SLIDE 6867-31 OR APPROVED EQUAL. COORDINATE COLOR WITH ARCHITECT.
- CONVENIENCE RECEPTACLES SHALL BE COMMERCIAL SPECIFICATION GRADE OR HOSPITAL GRADE AS SHOWN ON THE DRAWINGS, GROUNDING TYPE NEMA 5-20R, SIDE WIRED, HUBBELL, LEVITON, PASS AND SEYMOUR OR APPROVED EQUAL. RECEPTACLE WITH AN "E" SUBSCRIPT SHALL BE RED EVEN THOUGH THEY ARE NOT INSTALLED ON AN EMERGENCY CIRCUIT. COORDINATE COLORS OF OTHERS WITH ARCHITECT.
- PROVIDE WALL PLATES FOR ALL WIRING DEVICES, NYLON SMOOTH TYPE. WALL PLATE COLOR SHALL MATCH DEVICE COLOR. ALL WALL PLATES SHALL BE PROVIDED WITH A CLEAR ADHESIVE LABEL STATING PANELBOARD AND CIRCUIT NUMBER.
- WIRING AND DEVICES FOR VOICE/DATA JACKS, CATV JACKS, NURSE CALL SYSTEMS, CARD READERS, MICROPHONES, SPEAKERS, VOLUME CONTROL AND SECURITY EQUIPMENT ARE PROVIDED BY THE OWNER. PROVIDE RECESSED BOXES IN THE WALL OR CEILING WHERE INDICATED ON THE DRAWINGS AND 3/4" CONDUIT FROM WALL BOXES TO ABOVE AN ACCESSIBLE CEILING. IF DEVICES COME WITH THEIR OWN BACK BOX, A SEPARATE BOX IS NOT REQUIRED. COORDINATE WITH OWNER.

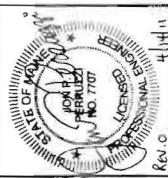
**GENERAL NOTE**

1. ALL GENERAL NOTES, SYMBOL LISTS, AND DETAILS ARE TO BE CONSIDERED AS APPLICABLE TO ALL ELECTRICAL DRAWINGS FOR THIS PROJECT. SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND DO NOT INDICATE THEIR INCORPORATION IN THE DESIGN.

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UNIVERSITY OF SOUTHERN MAINE  
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PORTLAND, MAINE

ISSUED FOR BIDDING & CONSTRUCTION  
4-15-11

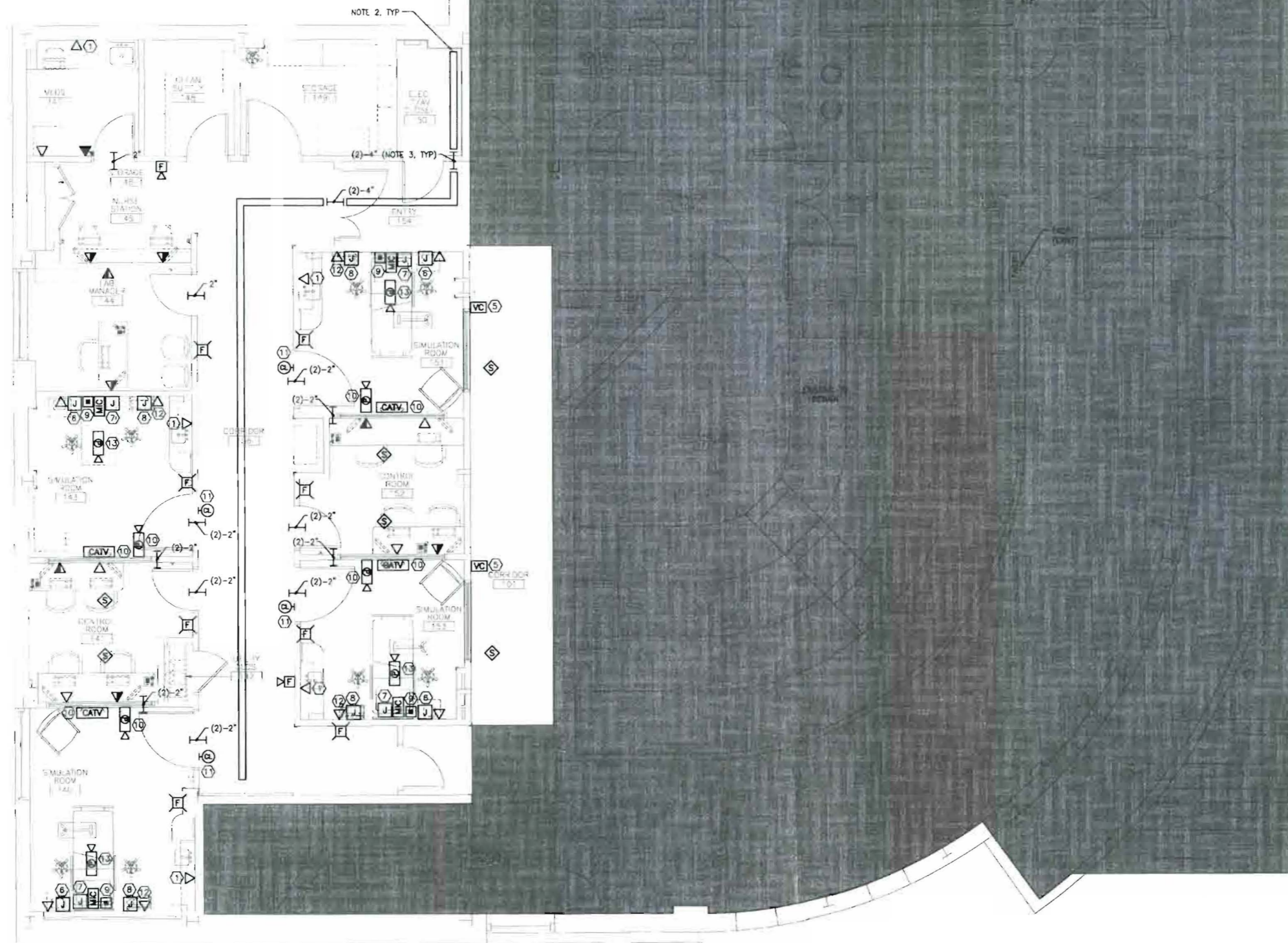
NO.	DATE	DESCRIPTION
1	4-15-11	ISSUED FOR BIDDING & CONSTRUCTION

GRAPHIC SCALE:  
0" = 1'

SCALE: NONE  
PROJECT MANAGER: SLE  
JC/DRAWN BY: CDS  
A/E OF RECORD: JPP  
CAD FILE: E-001-10150  
PROJECT NO.: 10150-03  
DATE: 4-15-11  
SHEET TITLE:

LEGEND AND GENERAL NOTES

SHEET No.  
**E-001**

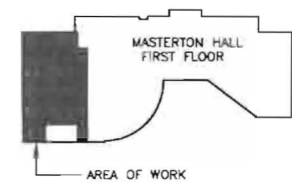


**NOTES:**

- SEE SHEET E-001 FOR LEGEND AND GENERAL NOTES.
- CABLE TRAY (WIRE BASKET TYPE) 6" WIDE UNLESS OTHERWISE NOTED. INSTALL ABOVE CEILING.
- CONDUIT SLEEVE ABOVE CEILING. QUANTITY AND SIZE AS NOTED. INSTALL ABOVE CEILING. SLEEVES THAT PROJECT INTO/OUT OF CORRIDORS SHALL BE 3M FIRE BARRIER PASS THROUGH DEVICES OR APPROVED EQUAL.

**KEYED NOTES:**

- INSTALL 6" ABOVE COUNTER.
- INSTALL 42" AFF TO CENTER.
- INSTALL 72" AFF TO CENTER.
- INSTALL 84" AFF TO CENTER.
- PROVIDE RECESSED BOX IN WALL, 48" AFF 1" CONDUIT FROM BOX TO ABOVE ACCESSIBLE CEILING.
- PROVIDE RECESSED BOX IN WALL, 18" AFF, BEHIND THE LINK BOX LOCATION AND (1) 2" CONDUIT FROM THE BOX TO ABOVE ACCESSIBLE CEILING AND (1) 2" CONDUIT FROM THIS SAME BOX TO A BOX LOCATED BEHIND THE PATIENT BED AT 6" AFF. SEE KEYNOTE 7 FOR PATIENT BED BOX LOCATION. PROVIDE GROMMETTED OPENINGS IN BOTH BOXES; ONE 4" DIAMETER OPENING IN THE BOX NEAR THE LINK BOX AND ONE 2" DIAMETER OPENING IN THE PATIENT BED BOX LOCATION.
- PROVIDE RECESSED BOX IN WALL, CENTERED ON BED LOCATION, 6" AFF. REFER TO KEY NOTE 6 FOR CONDUIT AND BOX OPENING REQUIREMENTS.
- PROVIDE RECESSED BOX IN WALL, 5'-0" AFF BEHIND THE MONITOR AND (1) 2" CONDUIT FROM THE BOX TO ABOVE ACCESSIBLE CEILING. PROVIDE 2" GROMMETTED OPENING IN BOX.
- INSTALL 60" AFF TO CENTER.
- INSTALL 96" AFF TO CENTER.
- PROVIDE BOX IN WALL ABOVE DOOR FOR NURSE CALL DOME LIGHT.
- INSTALL 42" AFF. COORDINATE WITH OWNER FURNISHED FLIP DOWN PC.
- CEILING MOUNTED.



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PROJECT NORTH

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ISSUED FOR BIDDING & CONSTRUCTION  
4-15-11

CURRENT ISSUE STATUS:

REV	DESCRIPTION	DATE
1	ISSUED FOR BIDDING, PERMITS & CONSTRUCTION	4-15-11

GRAPHIC SCALE:  
0" = 1'

SCALE: 1/4" = 1'-0"

PROJECT MANAGER: SLB  
JC/DRAWN BY: CDS  
A/E OF RECORD: JPB  
CAD FILE: EY101-10150  
PROJECT NO: 10150-00  
DATE: 4-15-11

SHEET TITLE:  
FIRST FLOOR SYSTEMS PLAN

SHEET No. **EY101**

A1 FIRST FLOOR PLAN

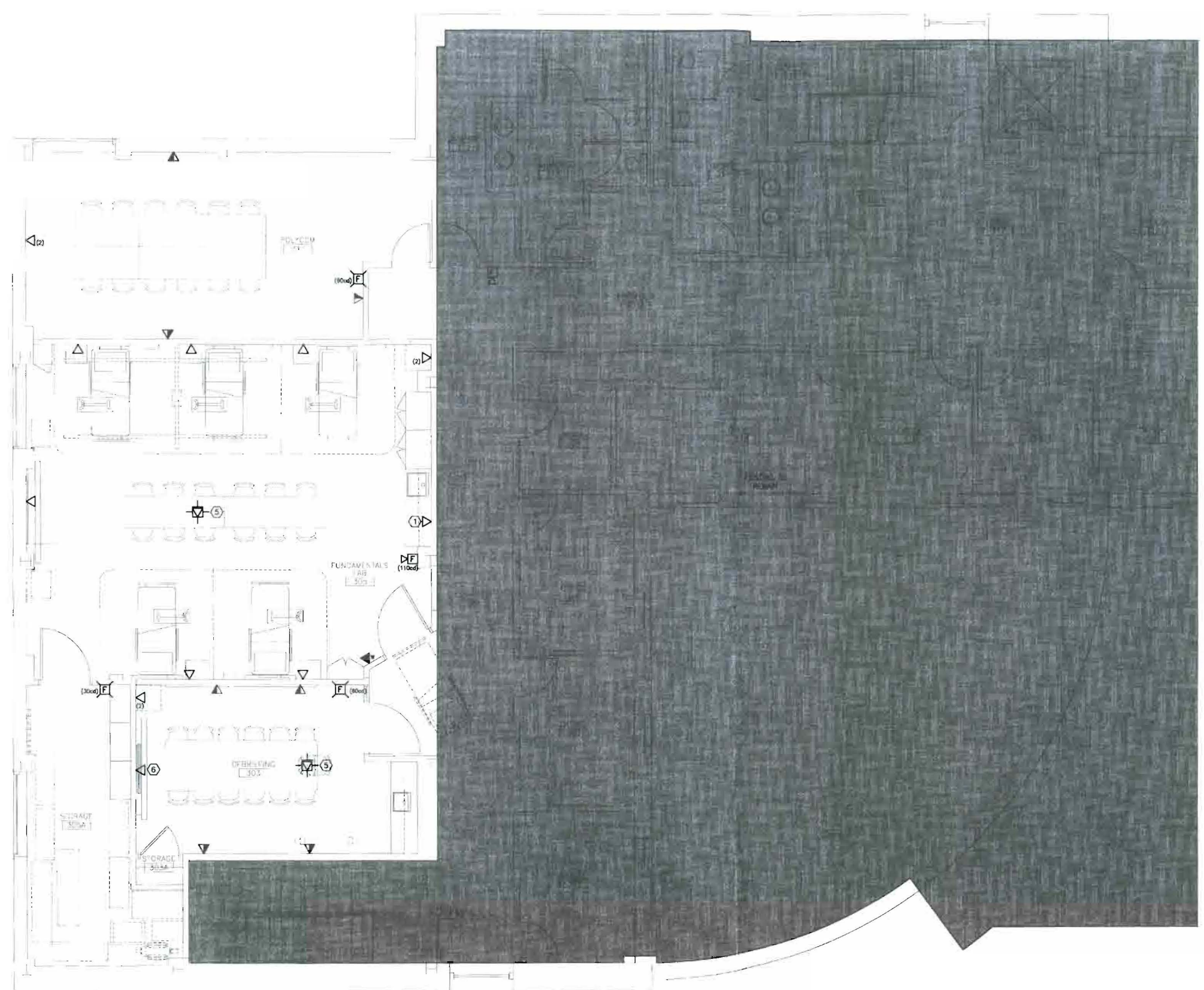
A14 KEY PLAN

1/4" = 1'-0"

NTS

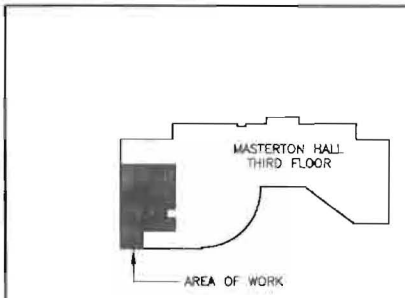
EY101





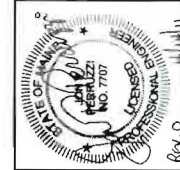
**NOTE:**  
 1. SEE SHEET E-001 FOR LEGEND AND GENERAL NOTES.

- KEYED NOTES:**
- ① INSTALL 6" ABOVE COUNTER.
  - ② INSTALL 42" AFF TO CENTER.
  - ③ INSTALL 72" AFF TO CENTER.
  - ④ INSTALL 84" AFF TO CENTER.
  - ⑤ INSTALL IN CEILING 12' FROM PROJECTOR SCREEN.
  - ⑥ INSTALL 54" AFF TO CENTER.



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 4-15-11

REV	DESCRIPTION	DATE
0	ISSUE FOR BIDDING, PERMITTING & CONSTRUCTION	4-15-11

GRAPHIC SCALE:  
 0" = 1"  
 SCALE: 1/4" = 1'-0"  
 PROJECT MANAGER: SLB  
 JC/DRAWN BY: CDS  
 A/E OF RECORD: JPP  
 CAD FILE: EY102-10150  
 PROJECT NO: 10150-00  
 DATE: 4-15-11  
 SHEET TITLE:

THIRD FLOOR  
 SYSTEMS PLAN

SHEET No.  
**EY102**

A1 THIRD FLOOR PLAN

1/4" = 1'-0"

A14 KEY PLAN

NTS