

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

BUILDING INSPECTION PERMIT

Permit Number: 031373

Please Read Application And Notes, If Any, Attached

This is to certify that University Of Maine/n/a has permission to Temporary Use of fit-out of second floor AT 96 Falmouth St 114A A001001

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

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and work on permit must be completed before this building or part thereof is opened or closed-in. HEAVY NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS Fire Dept. Health Dept. Appeal Board Other Department Name

Signature and Date 12/2/03 Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD



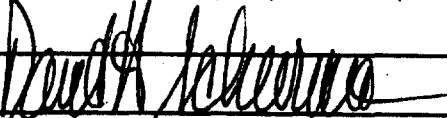
# All Purpose Building Permit Application

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

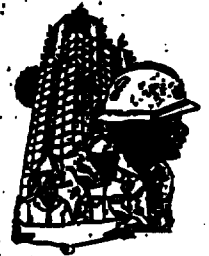
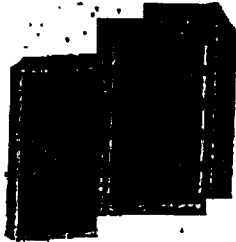
Location/Address of Construction: <u>University of Southern Maine- 70 Falmouth St.</u>		
Total Square Footage of Proposed Structure <u>9,000</u>	Square Footage of Lot <u>N/A</u>	
Tax Assessor's Chart, Block & Lot Chart# <u>114A</u> Block# <u>A</u> Lot# <u>1</u>	Owner: <u>University of Maine System</u>	Telephone: <u>780-4751</u>
Lessee/Buyer's Name (if Applicable)  <u>N/A</u>	Applicant name, address & telephone: <u>Dave Schurman</u> <u>USM 96 Falmouth Street</u> <u>Portland, ME 04104</u>	Cost Of Work: <u>\$ 75,000</u>  Fee: <u>\$696.00</u>
Current use: <u>Research</u>		
If the location is currently vacant, what was prior use: <u>None</u>		
Approximately how long has it been vacant: <u>6 months</u>		
Proposed use: <u>Research</u>		
Project description: <u>Temporary use level of fit-out of 2nd floor</u>		
Contractor's name, address & telephone:		
Who should we contact when the permit is ready: <u>Dave Schurman</u>		
Mailing address: <u>University of Southern Maine</u> <u>96 Falmouth Street</u> <u>Portland, ME 04104</u>		
We will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work, with a Plan Reviewer. A stop work order will be issued and a \$100.00 fee if any work starts before the permit is picked up. <b>PHONE: 780-4661</b>		

**IF THE REQUIRED INFORMATION IS NOT INCLUDED IN THE SUBMISSIONS THE PERMIT WILL BE AUTOMATICALLY DENIED AT THE DISCRETION OF THE BUILDING/PLANNING DEPARTMENT, WE MAY REQUIRE ADDITIONAL INFORMATION IN ORDER TO APPROVE THIS PERMIT.**

*I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.*

Signature of applicant: 	Date:
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**This is NOT a permit, you may not commence ANY work until the permit is issued.  
If you are in a Historic District you may be subject to additional permitting and fees with the  
Planning Department on the 4<sup>th</sup> floor of City Hall**



**CITY OF PORTLAND  
BUILDING CODE CERTIFICATE**  
389 Congress St., Rm 315  
Portland, ME 04101

**TO:** Inspector of Buildings City of Portland, Maine  
Department of Planning & Urban Development  
Division of Housing & Community Service

**FROM:** SYMMES, MAINI & MCLEE ASSOCIATES

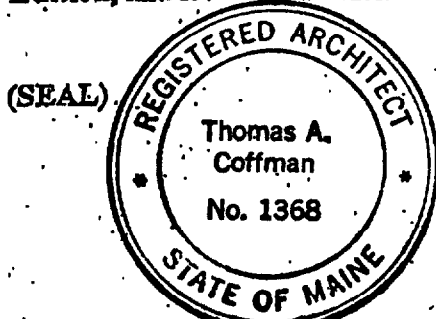
**RE:** Certificate of Design

**DATE:** 29 October 2003

These plans and/or specifications covering construction work on:

the 2nd floor of the Research Wing of the Science Complex  
on Falmarth Street on the USM Portland Campus.

Have been designed and drawn up by the undersigned, a Maine registered architect/engineer according to the BOCA National Building Code/1999 Fourteenth Edition, and local amendments.



Signature: [Handwritten Signature]  
Title: Sr. V.P.  
Firm: Symmes, Maini & McLee Associates  
Address: 1000 Massachusetts Ave.  
Cambridge, MA 02138

As per Maine State Law:

\$50,000.00 or more in new construction, repair, expansion, addition, or modification for Building or Structures, shall be prepared by a registered design Professional.



CITY OF PORTLAND  
ACCESSIBILITY CERTIFICATE

Designer: Symmes, Maini & McKee Associates

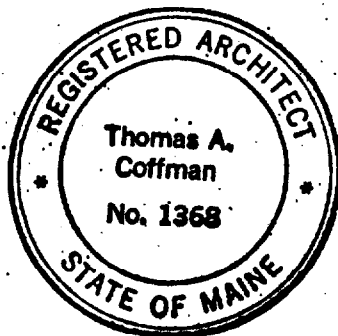
Address of Project 70 Falmouth St., Portland, ME

Nature of Project Provide open office area  
on the 2nd floor of the Research Wing

Date 10.28.03

The technical submissions covering the proposed construction work as described above have been designed in compliance with applicable referenced standards found in the Maine Human Rights Law and Federal Americans with Disability Act.

(SEAL)



Signature [Handwritten Signature]

Title Sr. V.P.

Firm Symmes, Maini & McKee Associates

Address 1000 Massachusetts Ave

Cambridge, MA 02138

Telephone 617-547-5400



CITY OF PORTLAND, MAINE  
Department of Building Inspection

# Certificate of Occupancy

LOCATION 96 Falmouth St

CBL 114A A001001

Issued to University Of Maine/Pizzagalli

Date of Issue 07/15/2003

This is to certify that the building, premises, or part thereof, at the above location, built — altered — changed as to use under Building Permit No. 02-0367, has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES

Bsmnt level, 1st Floor, & 2nd Floor

APPROVED OCCUPANCY

Academic Research Building  
BOCA 1999 Use Group B Type 2B

**Limiting Conditions:**

Supersedes CofO issued on 4/04/2003.  
Permits MUST be applied for prior to fitting up the third floor

This certificate supersedes  
certificate issued

Approved

7/15/03

(Date)

Inspector

*[Signature]*  
7/17/03  
Inspector of Buildings

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.



State of Maine  
Department of Public Safety



RECEIVED JUL 01 2003 Construction Permit

Reviewed  
for Barrier  
Free

# 13316

Sprinkled  
Sprinkler Supervised

UNIV. OF SO. MAINE - PORTLAND - BIOSCIENCE INST,  
Located at: 96 FALMOUTH STREET  
PORTLAND  
Occupancy/Use: BUSINESS

Permission is hereby given to:  
DAVE EARLY

25 BEDFORD STREET  
PORTLAND, ME 041099300

to construct or alter the afore referenced building according to the plans hitherto filed with the Commissioner and now approved.  
No departure from application form/plans shall be made without prior approval in writing. This permit is issued under the provision of Title 25, Chapter 317, Section 2448 and the provisions of Title 5, Section 4594 - F.  
Nothing herein shall excuse the holder of this permit for failure to comply with local ordinances, zoning laws, or other pertinent legal restrictions. Each permit issued shall be displayed/available at the site of construction.

This permit will expire at midnight on the 01 th of Decemb 2003

Dated the 01 th day of June A.D. 2003

*Michael P. Cantara*

Commissioner

Copy-1 Owner

Comments:

DAVE EARLY  
25 BEDFORD STREET  
PORTLAND, ME 041099300

Post-It* Fax Note	7671	Date	7/1/03	# of pages	1
To	Brian Holmes Leslie Glynn	From	Dave Barbour		
Co./Dept.	PCC Summer	Co.	USM		
Phone #		Phone #			
Fax #		Fax #			

FYI

# UNIVERSITY OF SOUTHERN MAINE

PORTLAND CAMPUS  
PORTLAND, MAINE

SMMA PROJECT #03049.00

THE BIOSCIENCES INSTITUTE AND  
THE INFORMATIONAL SCIENCES INSTITUTE

10/28/2003  
SECOND FLOOR FIT-UP

LEGEND	
Ⓢ	ISSUED OR REISSUED WITH CHANGES
Ⓜ	PREVIOUSLY ISSUED
Ⓝ	REMOVED FROM SET

DATE	PACKAGE TITLE
10/03/03	00 Set
10/17/03	Revisions
10/28/03	Revisions

GENERAL - INDEX OF DRAWINGS	
<b>ARCHITECTURAL DRAWINGS</b>	
AT00	PROJECT COVER SHEET
AT01	SECOND FLOOR PLAN & SPECIFICATIONS
AT01	ENLARGED REFLECTED CEILING PLANS, NOTES AND SPECIFICATIONS
AT01	INTERIOR SECTION AND ELEVATIONS
<b>MECHANICAL DRAWINGS</b>	
MT01	SECOND FLOOR PART PLAN - LEG, SCH, & SPEC
MT02	SECOND FLOOR PART PLAN
<b>ELECTRICAL DRAWINGS</b>	
ET1	LEGEND, SPECIFICATIONS, PARTS SCHEDULE AND SECOND FLOOR DEMOLITION PLAN
ET2	SECOND FLOOR PLAN - LIGHTING AND POWER

**SMMA**  
SYMMES MAINI & MCKEE ASSOCIATES

1000 Massachusetts Avenue Cambridge, Massachusetts 02138  
617.547.5400 Fax 617.354.5758



13. Closeout Submittals: Submit the following as a prerequisite to final payment.
- Record Drawings: 2 copies of the approved CADD-based drawings on CD and 2 hard copies.
  - Record specifications: One copy.
  - Operating and Maintenance Data: Bind data, including flow-charts and diagrams and one copy of each warranty, in a 3-ring, 8-1/2" x 11" binder. Label binder with name of project; separate items with tabbed dividers.
  - Extra stock, spare parts and similar maintenance items. Wrap, label, and place in storage at location designated by Owner.
  - Warranties: Bind executed originals into a 3-ring, 8-1/2" x 11" binder. Label binder with name of project; separate items with tabbed dividers.
  - Certificate of Occupancy
  - Certificate of Inspection. For fire-protection, plumbing, electrical work, and for other systems if required by local authorities having jurisdiction.

**SELECTIVE DEMOLITION**

- Perform selective demolition as required to prepare the existing space for new construction under this Contract. Remove structures, finishes, equipment and materials which are (1) shown to be demolished, (2) required to be removed to permit the construction of the Work, or (3) not indicated to remain and which would detract from the intended appearance of the finished work.
- Refer to mechanical, plumbing, fire-protection and electrical drawings for selective demolition and salvage related to MEP equipment.
- Protect from damage construction and finishes which are to remain.
- Unless materials are indicated to be reinstated or turned over to the Owner, remove them from the site and dispose of them legally.

**DIVISION 3 - CONCRETE**

Not Applicable to this job.

**DIVISION 4 - MASONRY**

Not Applicable to this job.

**DIVISION 5 - METALS**

**05600 - Miscellaneous Metals**

- Provide miscellaneous metal fabrications, such as hanging battens or miscellaneous supports required to support work installed under this Contract, whether or not they are shown on the Drawings.
- Submittals: Shop drawings and calculations, as requested by the Architect; product data for materials such as paints.
- Quality Assurance: Engineering calculations, if required, shall be prepared by, or under the supervision of, a Professional Engineer registered in Massachusetts, and shall bear the PE's seal.
- Installation: As shown and in accordance with approved shop drawings. Install to support design loads. Fit exposed work with tight joints. Comply with AWS code for field welding procedures, and grind welds smooth on exposed surfaces.

**DIVISION 6 - WOOD AND PLASTICS**

**06100 - Rough Carpentry**

- Blocking and Notters: Provide wood blocking in partitions for support of wall-mounted items such as casework, counters, and window treatment, whether or not shown. Blocking: Fire-retardant treated "UNITY" grade lumber.

**06400 - Casework**

- Submittals:
  - Shop Drawings: Each item of casework and countertop.
  - Samples: Plastic laminate & cabinet hardware.
- Plastic Laminate: High pressure decorative laminate (HPDL) complying with NEMA LD 3; color as scheduled; laminated to medium density (45 lb minimum) fiberboard or particleboard core; except furnish with waterproof plywood core for "wet" counters in kitchen spot.
  - Laminate Covered Cabinets: Full flush overlay style. Semi-exposed surfaces in cabinet interiors may be cabinet-linear grade HDPL or manufacturer's standard low-pressure laminate such as "melamine".
  - Hinges: Concealed, "European" type; 180° self-closing.
  - Pulls: Stainless steel "staple" pulls, 5/16" diameter x 4" high.
  - Magnetic catches.
  - Drawer slides: Full extension type; sized for 75 lb load.
  - Levelers: Manufacturer's standard.
- Laminate Covered Tops: AM Section 400 C "Premium Grade."
- Installation of Cabinets: Level and plumb floor cabinets. Anchor to built-in blocking or to stripping attached to substrates. Scribe to flanking walls; furnish additional scribe pieces matching cabinets, if required. Complete the installation of hardware. Adjust hardware to center doors and drawers in openings and for smooth operation.
- Countertops: Anchor casework tops securely to casework. Anchor counters which are independent of casework securely to wall-mounted undercounter supports of type shown. Set backplash in a bed of sanitary silicone sealant. Scribe top edge of splash to wall.

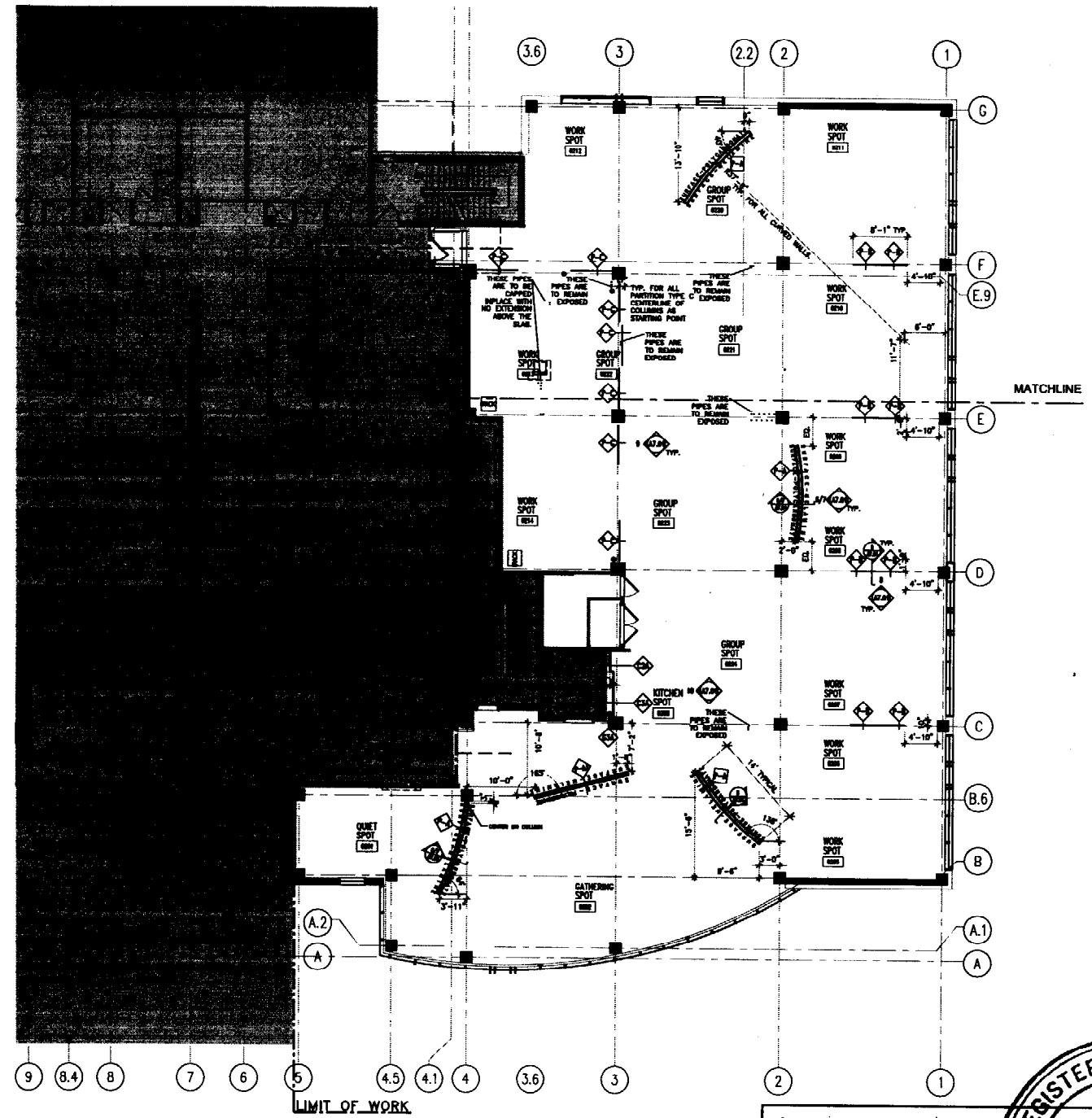
**DIVISION 7 - THERMAL AND MOISTURE-PROOFING**

**07200 - Vapor Retarder**

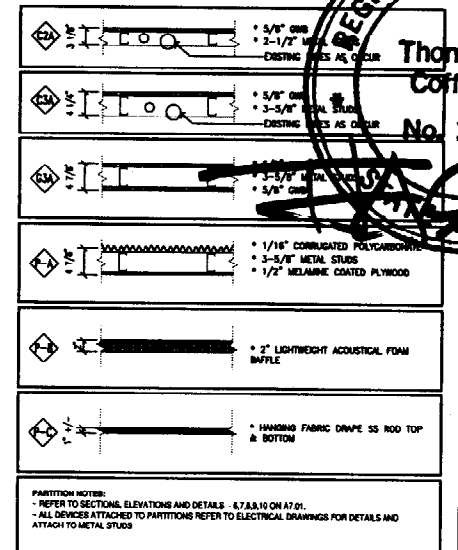
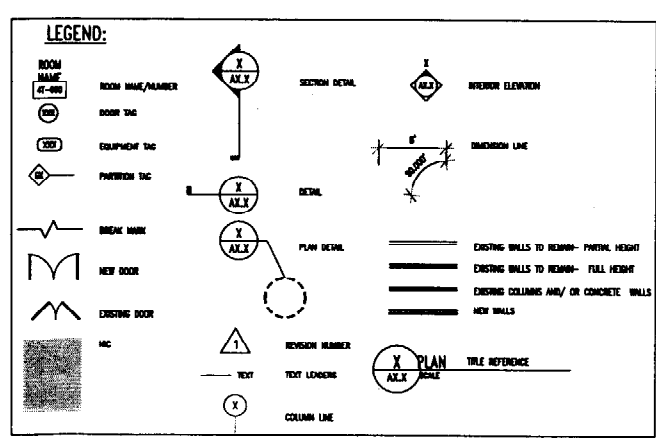
- Scope: All insulation in exterior walls should be covered by a vapor barrier applied to the inside face of studs. In many locations this is existing. Repair or replace vapor retarder where it is damaged or missing, using material of the same type and appearance as the existing, as much of it will be exposed to view.
- Submittals: Sample; product data.
- Materials: The vapor retarder shall be no less than 6 mil polyethylene, with a perm rating of 0.1 perm or less. Furnish compatible seam tape in neutral color.
- Installation: Remove damaged portions of existing vapor retarder so that new sheets can be installed full width; do not make spot-patches. Tape seams and tape vapor retarder sheet at edges and penetrations to make it vapor-tight. Apply tape neatly, in straight lines to the greatest extent possible.

**DIVISION 1 - GENERAL REQUIREMENTS**

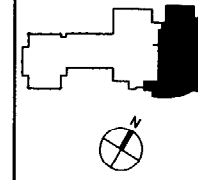
- Field Measurements: Take field measurements before ordering or fabricating shop-fabricated items. Do not scale dimensions off drawings. Where surrounding construction will not be built in time to be measured, provide means for field adjustments at time of installation.
- Study drawings and compare the drawings and notes with each other. Report any discrepancies discovered to the Architect in writing and request clarification before proceeding with the Work.
- Temporary Controls: Adjacent areas in this building will be occupied during construction. Perform work in a manner which minimizes disturbance to occupants in adjacent areas. Without limitation:
  - Enclose the construction area with dust barriers. Contain construction materials and debris inside the enclosed area, or in other storage areas designated by the Owner.
  - Do not expose occupants to hazardous or offensive materials.
  - Do not interrupt building services, including but not limited to plumbing, heat, ventilation, electricity, data, communications, to areas which remain in use, without prior written authorization from the Owner. Give at least 48 hours notice to Owner before interrupting such services.
  - Do not shut-off or disable fire detection and fire suppression systems without prior written approval by fire marshal. If temporary shut-off is permitted, give adequate prior notice to the Owner, keep down-time brief, and provide adequate temporary protection of type acceptable to the authorities having jurisdiction.
- Submittals:
  - Coordinate and review submittals from subcontractors before transmitting to the Architect. Verify materials, field dimensions, adjacent construction, feasibility, coordination with other work, and conformance with the Contract Documents. Stamp with Contractor's approved stamp, and sign.
  - Attach a transmittal form which shows the project name, submittal date, and the name of the Contractor and subcontractor, supplier or manufacturer; identifies the item and calls out deviations from the Contract documents, if any.
  - Shop Drawings: Prepare drawings specific to this Project; do not submit manufacturer's pre-printed standard details. Draw at a scale appropriate to the work. Show field dimensions of adjacent construction.
  - Samples: Provide samples of adequate size to permit proper evaluation of material. Attach identifying tag.
- Products and Substitutions:
  - Furnish products specified or scheduled, or formally request substitutions in writing.
  - When requesting a substitution, provide sufficient information about both the named product and the substitution to permit the Architect to judge the merits of the proposed substitution.
  - Inform the Architect of changes which will have to be made to other work to accommodate the substitution. Make these changes at no additional cost to the Owner.
  - For items exposed to view, furnish item with custom color or finish if necessary to match specified color or finish.
- Protect materials stored on site from damage. Leave protective wrappings on materials until the time of installation.
- Temporary Heat and Ventilation: Put in place and maintain temporary heat and ventilation inside the work area as required for proper installation, drying and curing of materials. Coordinate with Owner; Owner will pay costs of power and fuels consumed. Contractor may use the existing unit heaters until permanent radiant heat is installed and in operation. Do not operate permanent air distribution and return systems without filters.
- Installation, General: As a minimum, comply with generally accepted industry standards and with product manufacturer's printed installation instructions and additional recommendations for best performance and appearance. In addition, comply with more stringent requirements described in these notes. Where codes and regulations govern installation - for example related assemblies and electrical work - install work in strict compliance with these codes.
- Cutting and Patching:
  - Cut, fit and patch new and existing work as required to complete the Work and to make its general parts fit together properly. General Contractor shall be responsible for cutting and patching structural components, such as beams and bearing walls; mechanical and electrical subcontractors shall be responsible for routine coring for piping and electrical conduit.
  - Before cutting any structural member obtain written approval from the Architect. Provide temporary support as necessary until the structure is repaired.
  - Cutting: Select methods which will not damage other work and which will leave remaining construction in proper condition to receive repairs. Protect adjacent work by appropriate methods.
  - Patching: Select materials and methods so that the completed Work complies with the requirements of these Contract Documents. Use the same materials used for the original work. If possible, employ the original installer. Patch items and surfaces exposed to view so that patch is not visible. Fill work airtight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.
  - Within the limit of work line there is no sprayed-on fireproofing. However, should it be necessary to perform work outside the delineated work area, it is to be done in a manner which does not disturb existing fireproofing, patch fireproofing to restore to original fire-resistance rating.
  - If penetrations are made through, or removed from, an existing wall, partition, or floor which is fire-rated or designated as a smoke-barrier, firestop the penetrations and unused openings to maintain the fire-resistance or smoke-barrier performance of the wall, floor or partition.
  - Refinishing: Refinish continuous surfaces to nearest intersection; for an assembly, refinish the entire unit. Provide an even finish matching adjacent surfaces of the same type.
- Routine Cleaning: At the end of each day's work, and more frequently if necessary, clean up the construction area. Remove and dispose of packing materials, excess construction materials, trash and debris.
- Final Cleaning: Clean Work thoroughly just before inspection.
  - Employ skilled workers. Employ cleaning materials and methods recommended by manufacturer for specific item to be cleaned. Do not use hazardous solvents or abrasive cleaners.
  - Remove grease, mortar, adhesive, dust, dirt, stains, fingerprints, labels from surfaces exposed to view.
  - Vacuum floors and dust other surfaces. Dust light fixtures and clean lenses and baffles.
  - Wash the interior of the existing windows.
  - Clean exposed surfaces of existing piping, conduit and similar systems, so that no construction dust is left behind in the space.
  - Ventilating Systems: If units were operated during construction, clean or replace the filters.
- Record Documents:
  - Maintain at the site one copy of the Drawings and one copy of the Specifications and mark these up to indicate actual products and installations which deviate from the work as originally shown. Give particular attention to concealed work which would be difficult to measure and record at a later date.
  - Note related change-order numbers where applicable.
  - Drawings: At completion of the construction work, prepare CADD-based "as-built" drawings. The Architect will provide a copy of the Construction Documents in AutoCAD 2000 format. Employ experienced CADD drafters to transfer record information from the marked-up prints to the electronic drawings. Deliver hard copy to the Architect for review; make changes requested by the Architect.
  - Specifications: Transfer mark-up information neatly onto a clean copy of the Specifications.



1 SECOND FLOOR PARTIAL CONSTRUCTION PLAN  
A7.01



**SMMA**  
STRATEGIC MANAGEMENT & DESIGN ASSOCIATES  
1000 Massachusetts Avenue  
Cambridge, Massachusetts 02138  
617.547.5400 Fax 617.364.5750



OWNER REVIEW  
NAME \_\_\_\_\_ DATE \_\_\_\_\_

NO.	DATE	REVISIONS
1	10-28-03	REVISIONS
2	11-20-03	CD SET
3	12-15-03	DESCRIPTION
4	01-14-04	DESCRIPTION
5	02-11-04	DESCRIPTION
6	03-11-04	DESCRIPTION
7	04-14-04	DESCRIPTION
8	05-14-04	DESCRIPTION
9	06-14-04	DESCRIPTION
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96	09-14-11	DESCRIPTION
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98	11-14-11	DESCRIPTION
99	12-14-11	DESCRIPTION
100	01-14-12	DESCRIPTION

REGISTERED ARCHITECT  
UNIVERSITY OF SOUTHERN MAINE  
Thomas A. Coffman  
No. 1368  
SCALE: 1/8" = 1'-0"  
CHECKED BY: SMH  
DRAWN BY:  
PROJ. ARCH / ENGR. LG  
PROJ. MGR. RCH  
JOB NO. 02046.00  
© STRATEGIC MANAGEMENT & DESIGN ASSOCIATES, INC. 2003  
A1.01

DIVISION 10 - SPECIALTIES

10020 - Fire Protection Specialties

1. Fire Extinguishers: 5 lb. 2A-10BC multi-purpose dry chemical extinguishers. Furnish brackets to hold extinguishers. Furnish 4, to be installed at locations designated by the Architect.

DIVISION 11 - EQUIPMENT

11150 - Audio-Visual Equipment

1. Scope: Install one manual projection screen furnished by the Owner. Provide blocking or miscellaneous metal supports as required to hang screen at the location indicated.

11450 - Residential Appliances

1. Scope: Furnish and install appliances at the kitchen spot.

2. Submittals: Illustrated product data; installation instructions; warranties.

3. Manufacturer: GE, Hotpoint, Whirlpool or equal.

4. Products:

- a. Refrigerator: 21.7 cu. ft. capacity, top freezer, Energy Star rating, GE Model # GTM22SBNBS or equal.
b. Dishwasher: GE Monogram Model #PDW806GSS or equal; Energy Star rated or qualified for rating.
c. Microwave Oven: 2.0 cu. ft., 1200 Watts; GE Monogram Model # ZE2160SF or equal.

5. Finish: Stainless steel.

DIVISION 12 - FURNISHINGS

12470 - Fabric Screens

1. Scope: Install hanging fabric panels at locations shown on Drawings.

2. Submittals: Samples of fabric and hardware for verification.

3. Fabric: 100% fire-retardant-treated polyester; see 9/A7.01 for manufacturer, product and color. Furnish in 72" widths, so there will be no seams.

4. Hardware: Nominal 3/4" diameter nickel-plated steel rods or tubes with 4" long cylindrical end caps. Furnish cable and fittings required to hang from concrete slab above.

12490 - Window Treatment

1. Vertical Blinds: To match Building standard.

2. Extra Stock: 2 complete blind units.

09200 - Special Partition Assemblies

1. Scope: Stud-framed partitions faced with materials other than gypsum board. Drawing A7.01 for details.

2. Materials

- a. Metal Framing: As specified in 09250.
b. Corrugated Polycarbonate Panels: Lightweight, impact resistant, formed polycarbonate panels; McMaster-Carr product number B5795K35, Wave pattern, 8' x 42" sheets; opaque white.
c. Melamine Coated Plywood Panels: 1/2" thick flexible plywood with one white melamine side.

3. Stud Framing: As specified for gypsum board partitions in 09250. Install to smooth curve of diameter indicated on the Drawings.

4. Facing Panels: Refer to Plan A1.01 to see where to install each type of facing material. Bend facing panels to smooth curve to fit the stud framing. Handle, cut and drill facing panels in accordance with panel manufacturer's instructions. Pre-drill evenly spaced holes in panels and fasten panels to studs with exposed Phillips head screws and washers.

09800 - Acoustical Treatment

1. Scope: Acoustical foam hanging baffles and ceiling mounted panels.

2. Submittals: Product data; samples; shop drawings for installation of hanging baffles.

3. Products:

- a. Baffles: Melamine acoustical foam baffles, "Sonexvoluline" as furnished by Acoustical Surfaces, Inc.; 2' x 4' panels 2" thick; painted finish; Architect will specify paint color.
b. Ceiling Panels: Open cell polyurethane sound-absorbing foam panels, "Foam S.T.O.P. Soundwave" as furnished by Acoustical Surfaces, Inc. Furnish 4' x 4' panels, 2" thick, beige color.
c. Accessories: Furnish hanging and installation hardware of types indicated on Drawings; adhesive of type recommended by panel manufacturer.

4. Hanging Baffle Installation: See detail on Drawings. Size and install anchors with sufficient margin of safety so that they will not pull out when panels are impacted under anticipated conditions of use.

5. Ceiling Panel Application: Glue to the concrete deck. Prepare concrete surfaces as recommended by the adhesive manufacturer. Arrange in pattern shown and butt panels snugly. Provide temporary support for panels until the adhesive cures.

09900 - Paint

1. Scope: Paint surfaces as indicated on Drawings and scheduled below. Where painting is indicated in a wall section or detail, paint the entire surface to change of materials.

2. Submittals:

- a. Manufacturer's technical data sheets and application instructions for each type of primer and paint.
b. Color samples: On 12" x 12" piece of masonite.
c. Acceptable Manufacturers: Benjamin Moore, Sherwin-Williams, PPG.

4. Paint Systems: Best professional grade paints; Moore's "SuperSpec," PPG "Speedhide," or Sherwin-Williams "Promar 200." Furnish primer of same quality and compatible with the top-coat specified, per top-coat manufacturer's technical data sheets.

a. Steel: Rust inhibiting alkyl primer and two top coats of low-odor alkyl enamel semigloss; Moore "SuperSpec Alkyd Semi-Gloss 271"; PPG "Speedhide 6-1110," or S-W "Promar 200" B34WZ200 Series.
b. Gypsum Board: PVA primer sealer and two top coats of latex paint, eggshell sheen; equal to Moore "SuperSpec Latex Eggshell Enamel 274," PPG "Speedhide Eggshell Latex Enamel 6-411," or S-W "Promar 200 B20WZ00 Series."

5. Colors: Architect will indicate colors by reference to one manufacturer's color naming system; match colors selected. Mix custom colors if color selected by architect is not standard with the approved paint manufacturer.

6. Preparation:

- a. Remove wall plates, surface mounted hardware, and similar items which are not being painted. Mask items which cannot be removed.
b. Lay drop cloths to protect floors, furnishings and equipment which cannot be removed during painting.
c. Clean areas just prior to painting and keep them free of dust until paint dries.

7. Application: Apply with brush or roller of fiber type recommended by paint manufacturer; no spray, except for application of primers and primers on steel doors and frames. Achieve smooth, even appearance with even color and sheen. No skips, drips, holidays, suction spots or areas where previous coats or prime coat shows through.

a. Gypsum board: One prime coat and two top coats. Top coats may be omitted on surfaces which are going to be covered with casework.
b. Shop-primed steel doors and frames: Remove rust. Spot prime bare steel; apply two top coats.

8. Clean-up: Remove paint splatters and overspray. Comply with regulations governing disposal of hazardous wastes; do not wash points down drain.

09930 - Concrete Stain

1. Scope: Stain and seal concrete floor in accordance with pattern and color schedule on Drawing A7.01.

2. Submittals:

- a. Manufacturer's specifications and application instructions.
b. Color Samples: For selection, submit chips or color cards. For verification of colors selected, submit samples on actual 12" x 12" pieces of concrete.

3. Stain: Penetrating, reactive stain that combines chemically with cured concrete to produce permanent variegated and translucent color; L. M. Scofield Co. "Lithochrome Chemstain," in four colors; to be selected by the Architect from full range of Scofield's standard colors, or a blend of standard colors.

4. Examination and Preparation:

- a. Verify that concrete surface conforms to manufacturer's requirements for successful application of stain. Pretreat and fill cracks and voids and remove protrusions as recommended by stain manufacturer.
b. Clean floor to remove dust, grease, incompatible sealers, and other materials which will interfere with penetration of the stain.
c. Before applying stain, mask adjacent floor areas to maintain as sharp a boundary as possible between areas of different colors.

5. Job-Site Sample: Apply selected stains in a limited area designated by the Architect, using same materials which will be used in the finished work, to demonstrate finished effect and quality of workmanship. Modify colors or application as directed by Architect.

6. Application of Stain: Prepare surface and mix and apply stain in accordance with manufacturer's instructions, Scofield Tech-Data Bulletin A-414, using the recommended minimum coverage rate, and at least two applications, to match the appearance of the approved job-site samples.

07840 - Firestopping

1. Submittals:

- a. Product Data: Manufacturer's technical specifications and installation instructions; color selections for exposed materials.
b. U.L. Designs: For each different through-penetration firestopping condition. Include schematic illustration, design designation number, and list of approved products.
c. Shop drawings, where actual conditions vary from the specifics of the tested design.

2. Products: Furnish firestopping fill materials manufactured JM, Hilti, IPC, STI, Rectorseal, or an equal established manufacturer who can offer a fully-tested firestopping product line.
a. Furnish accessory materials, such as forming and damming materials, which have been tested and approved by U.L. for the specific design conditions.
b. Colors: Furnish exposed materials in color selected by the Architect.

3. Install firestop systems in accordance with published U.L. designs, approved shop drawings, and manufacturer's instructions.

07920 - Joint Sealants

1. Submittals:

- a. Product data.
b. Samples for selection and verification of color.

2. Project Conditions:

- a. Coordinate product selection with joint widths and anticipated joint movement.
b. Install sealants only when environmental conditions are within ranges acceptable to sealant manufacturer.

3. Products:

- a. Sanitary Silicone Sealant: Single-component, mildew resistant sanitary silicone sealant complying with ASTM C920, Type S, Grade NS, Class 25; Dow Corning "786 Mildew Resistant," GE Silicones, "Sanitary SCS1700," Tremco "Tremal 200 White."
b. Latex Sealant: ASTM C 834, Type P (pigmented), Grade NF, paintable latex sealant; Pacora Corp. "AC-208," Sonneborn Div. of ChemRex, Inc. "Sololac"; Tremco "Tremflex 834."
c. Accessories: Furnish backings, bond breaker tape, substrate primers, masking tape and cleaners recommended by the sealant manufacturer to suit project conditions.

4. Preparation: Clean joint surfaces; remove loose material, grease, and other contaminants that can interfere with bond. Prime joint surfaces where recommended by joint sealant manufacturer, or where testing indicates priming is required. Mask adjoining surfaces to protect them from staining.

5. Installation: Install sealant backings and sealant in accordance with ASTM C 1193. Comply with sealant manufacturer's printed installation instructions applicable to products and applications indicated. Maintain correct sealant depth to joint width ratio for optimum performance. Tool immediately after application to slightly concave profile in order to eliminate air pockets and ensure contact and adhesion of sealant with sides of joint.

6. Field Quality Control: Install sealant in a limited area designated by the Architect. Test for adhesion after installation by hand pull method recommended in ASTM C 1193. If sealant fails, modify substrate preparation techniques, or change to another acceptable sealant, and retest.

7. Schedule:

- a. Install sanitary silicone sealant at joint between countertops and wall, to make them water- and dust-tight.
b. Install latex sealant to seal gaps between different materials, such as gypsum wall board and abutting surfaces or penetrations, in preparation for painting.

DIVISION 8 - DOORS AND WINDOWS

Not Applicable to this job.

See Section 09900 for painting existing doors and frames.

DIVISION 9 - FINISHES

Finishes, General Requirements:

1. Field measure for quantities; do not scale drawings.

2. Furnish finish materials in patterns and colors indicated in these notes or on the Drawings. If not indicated, they will be selected by the Architect from the manufacturer's standard patterns and colors.

09250 - Gypsum Board Systems

1. Scope: Install drywall stud framing and furring for support of gypsum board and special facing materials specified in Section 09620. Install gypsum board, trim, and tape and finish joints ready for application of painted finish.

2. Materials

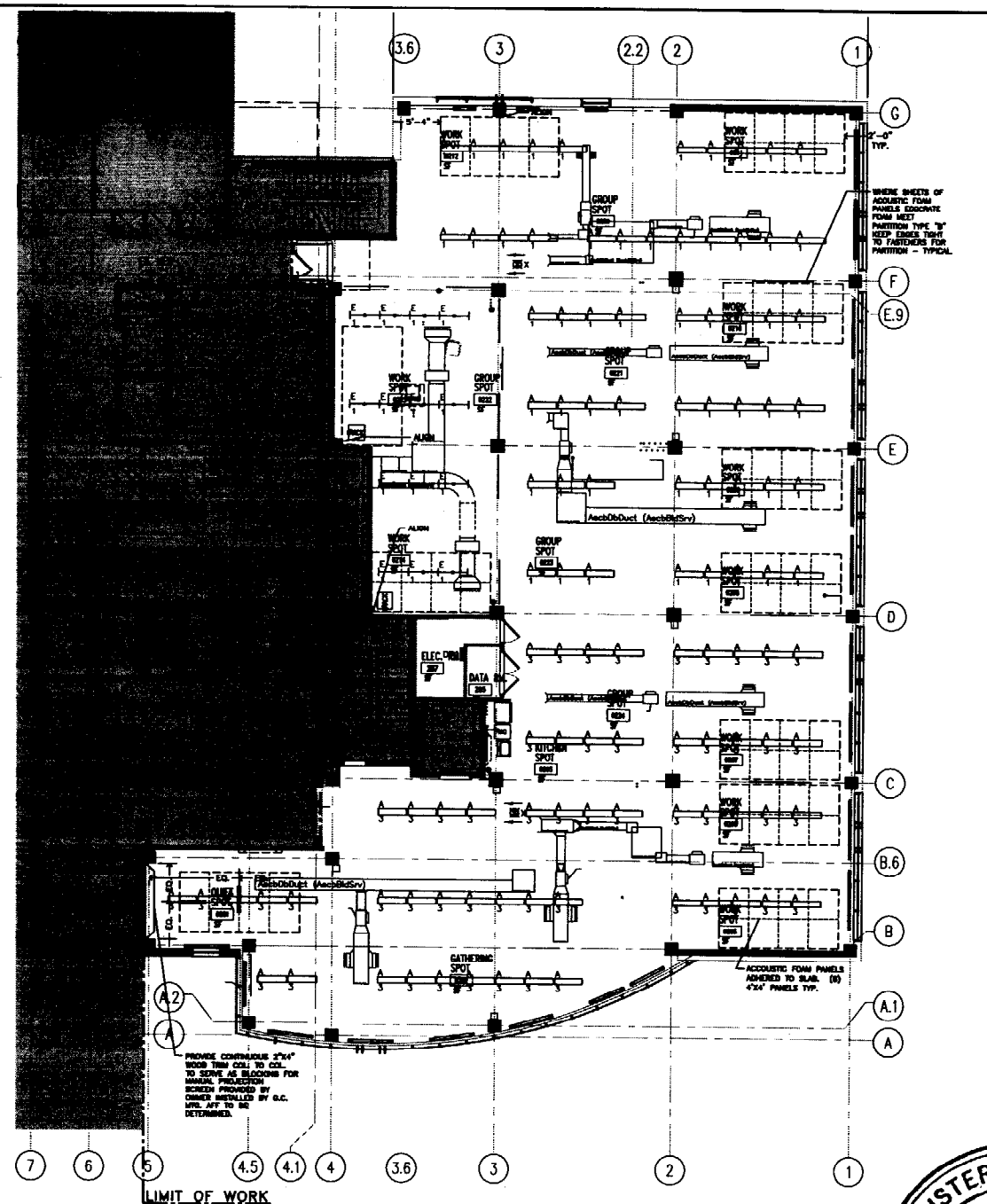
- a. Metal Framing: Furnish steel studs, runners, furring channels, furring brackets and related components complying with ASTM C 845, manufactured from cold-rolled steel, ASTM A 568 or A525 with 600 zinc coating.
- Minimum metal thickness 0.0329 inch (20 gauge) before application of protective coating.
b. Gypsum Board: ASTM C 36, with long edges tapered for joint finishing. Furnish foil-faced gypsum board where indicated for installation on exterior walls behind tin-tube radiation.
c. Fasteners: ASTM C1002 bugle-shaped, Phillips head, drywall screws, Type "S-12" for 20 gauge studs.
d. Drywall Trim: Galvanized steel with perforated flanges.
e. Joint finishing materials: ASTM C475. Perforated tape. Chemical-hardening joint compound for bedding and filling; vinyl-base compound-type for topping.

3. Install steel stud framing in accordance with ASTM C-754 and details. Space studs 16" o.c. unless otherwise shown. Anchor tracks securely to concrete floor slabs above and below, unless otherwise indicated.

4. Install gypsum board in accordance with ASTM C-840. Unless otherwise indicated, install boards vertically, full height of wall. Tape joints and finish with three coats of joint compound over joints, fastener heads and flanges of metal trim. Sand joints smooth and flush with face of drywall; leave ready for painting.

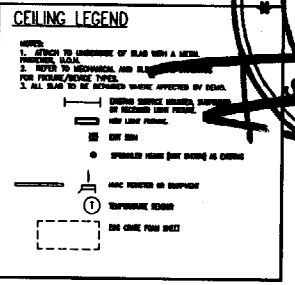
5. Gypsum Board Installation Tolerances

- a. Plumb, Level, and Flat: Do not exceed a variation of 3/16" in 8'-0", and 1/8" in 4'-0" (all directions).
b. Joints between panels: Do not exceed 1/16" offset of planes.



1 SECOND FLOOR PARTIAL REFLECTED CEILING PLAN

GENERAL CEILING PLANE NOTES:
- SEE ELECTRICAL AND MECHANICAL DRAWINGS FOR EXACT LOCATIONS OF ALL DEVICES/FIXTURES.
- CUT AROUND ACOUSTICAL FOAM TO FIT TIGHT TO ALL SLAB HUNG EQUIPMENT
- PROVIDE BLOCKING FOR WINDOW TREATMENT FOR ALL PERIMETER WINDOWS

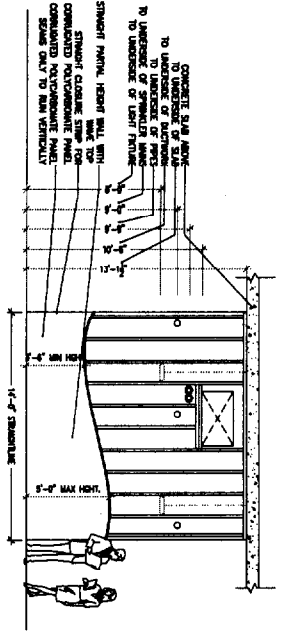


REGISTERED ARCHITECT
UNIVERSITY OF SOUTHERN MAINE
Thomas A. Coffman
No. 1368
REVISIONS
DATE
BY
REASON

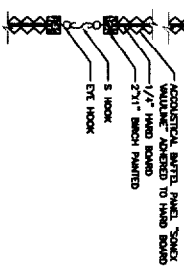
SMMA
1000 Massachusetts Avenue
Cambridge, Massachusetts 02138
978.241.2400 Fax 978.364.5758

SCALE: 1/4" = 1'-0"
DRAWN BY: SMH
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PROJ. MGR.: RCH
JOB NO.: 02048.00
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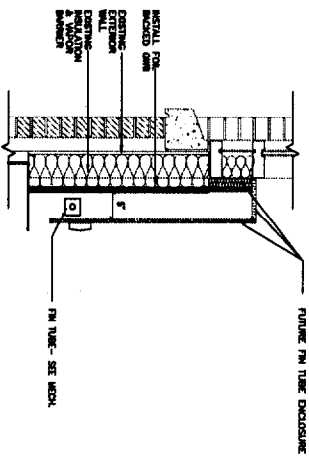
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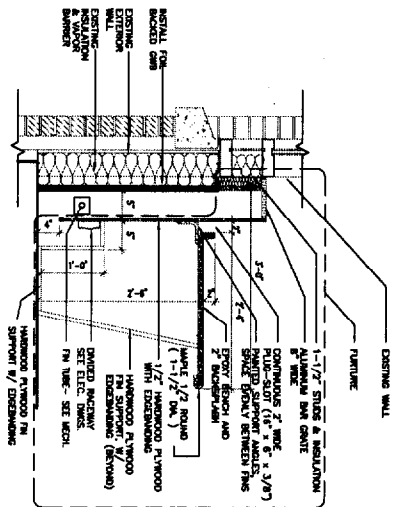
13 ELEVATION OF TYPICAL PARTITION TYPE P-1 WITH DIMENSIONS.



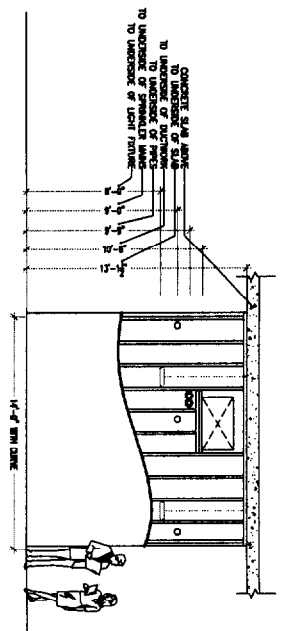
14 ENLARGED DETAIL OF THE TOP OF PARTITION TYPE P-8



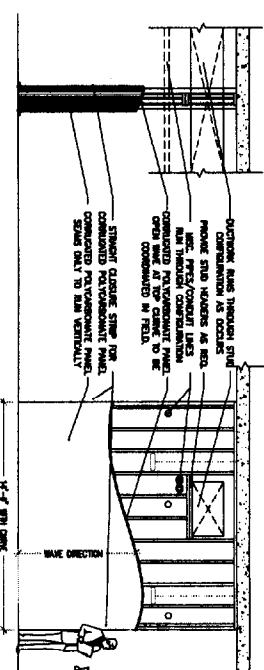
15 PARTITION ENCLOSURE (NO BENCH TOP)



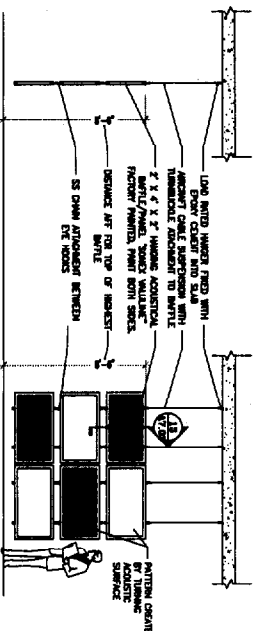
16 LOW BENCH SECTION



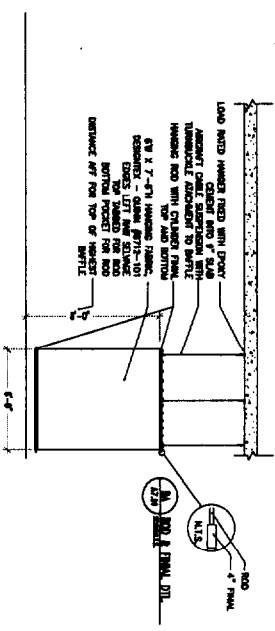
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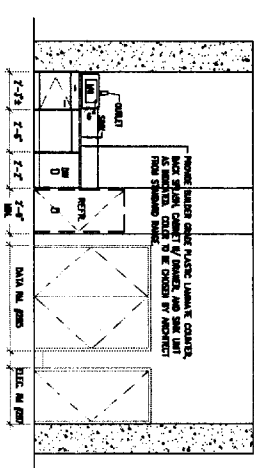
18 ELEVATION OF TYPICAL PARTITION TYPE P-1 WITH MATERIALS SPECIFIED



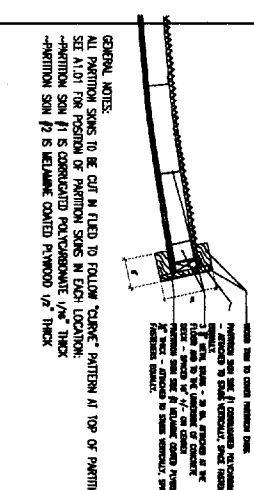
19 SECTION A ELEVATION OF TYPICAL PARTITION TYPE P-1



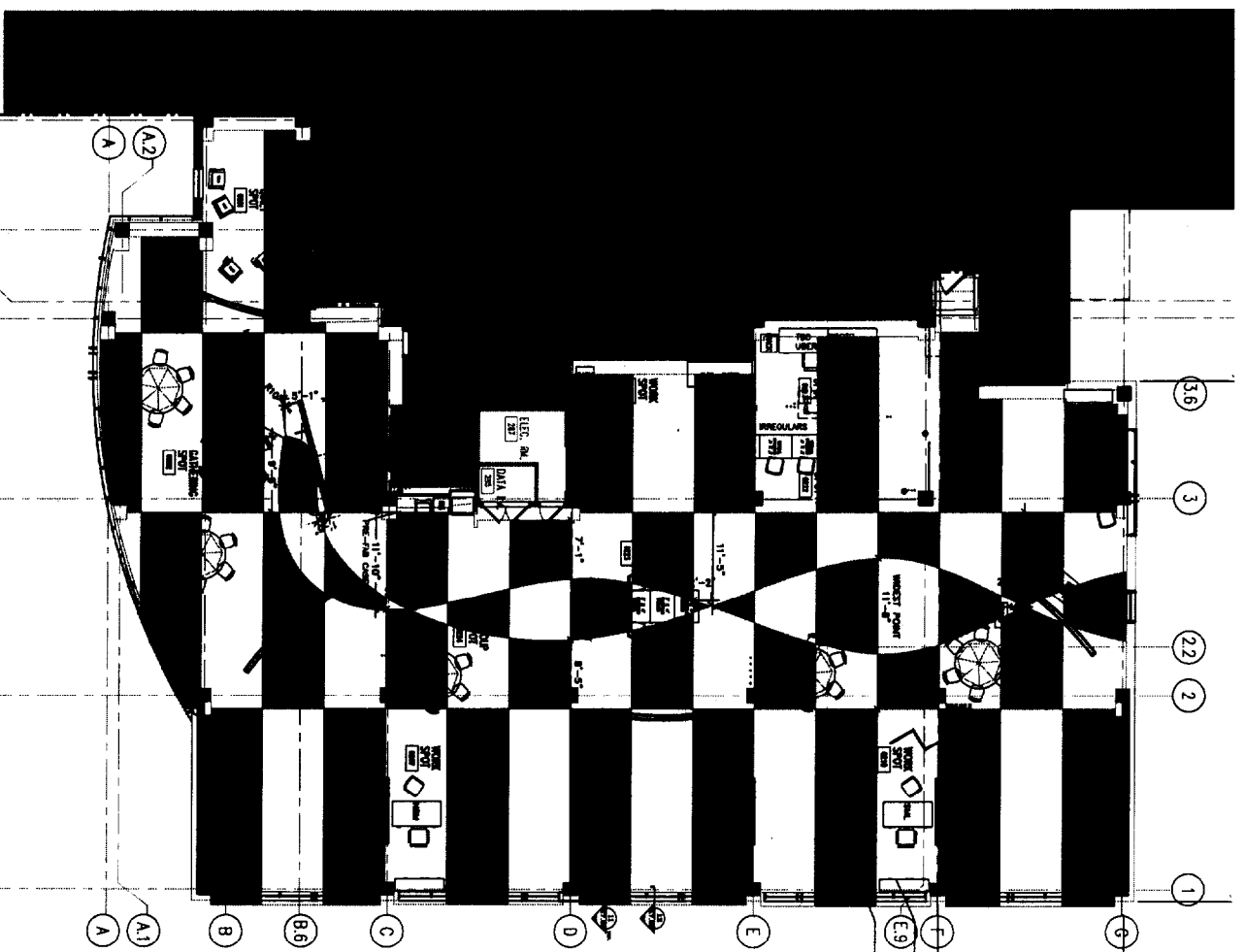
20 SECTION B ELEVATION OF TYPICAL PARTITION TYPE P-1



21 ELEVATION OF WALL WITH CEILING AND FLOOR

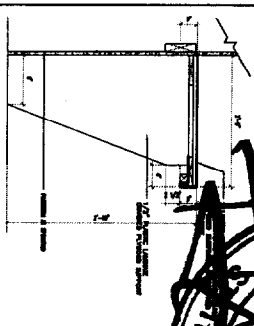


22 CROSS SECTION OF PARTITION TYPE A

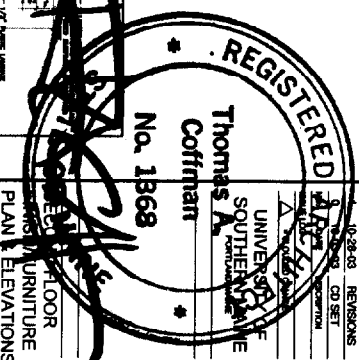


23 SECOND FLOOR PARTIAL FINISH & FURNITURE PLACEMENT PLAN

GENERAL FURNITURE NOTES:  
 1. ALL FURNITURE TO BE COVERED OVER ALL WIRING/DATA & POWER) LAM ON SLAB FLOOR. COVERS ARE TO BE SHOWN IN YELLOW. ALLOW 8 +/- PER WORK SPOT.

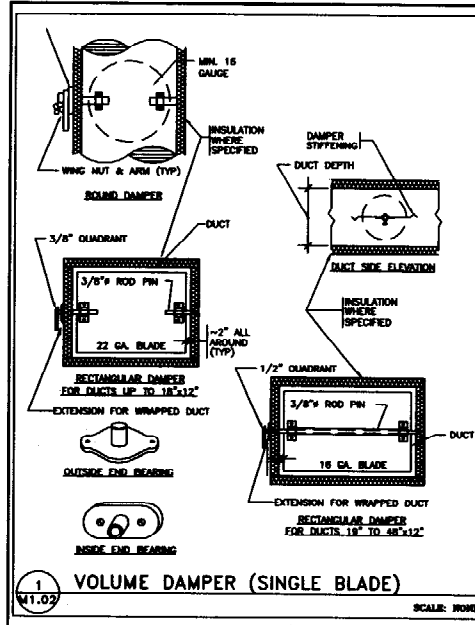


24 COUNTER WITH SUPPORT PANEL

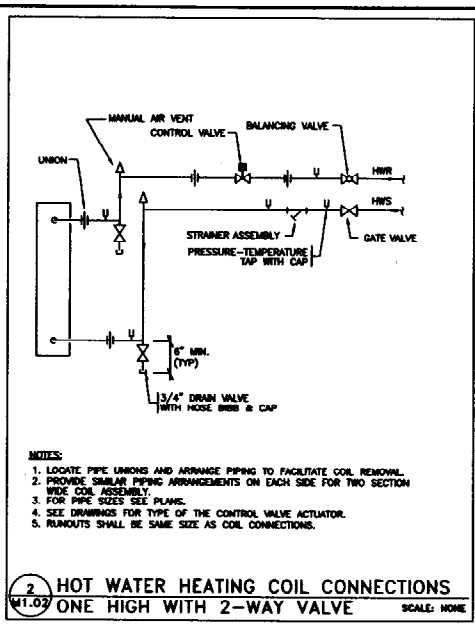


DATE: \_\_\_\_\_  
 OWNER REVIEW: \_\_\_\_\_  
 NAME: \_\_\_\_\_  
 SCALE: AS NOTED  
 DRAWN BY: SMH  
 CHECKED BY: RCH  
 PROJECT: UNIVERSITY SOUTHERN NEW HAMPSHIRE  
 FLOOR PLAN ELEVATIONS  
 SHEET NO. A7.01

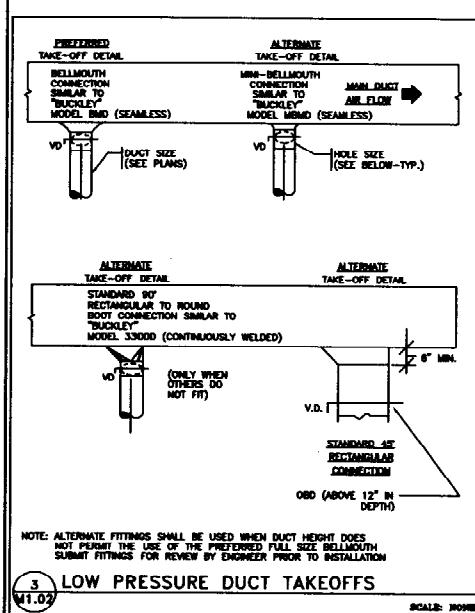




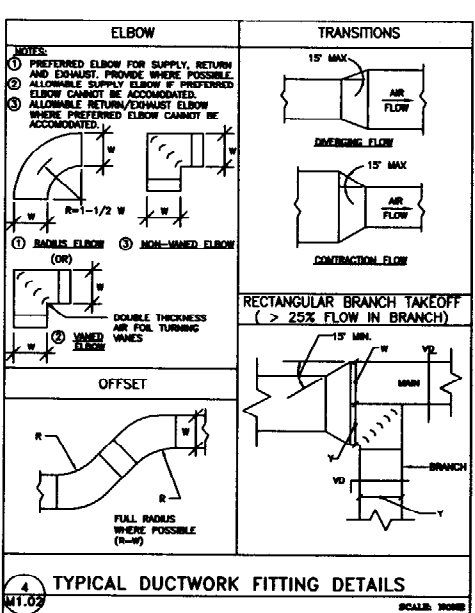
1 VOLUME DAMPER (SINGLE BLADE) SCALE: NONE



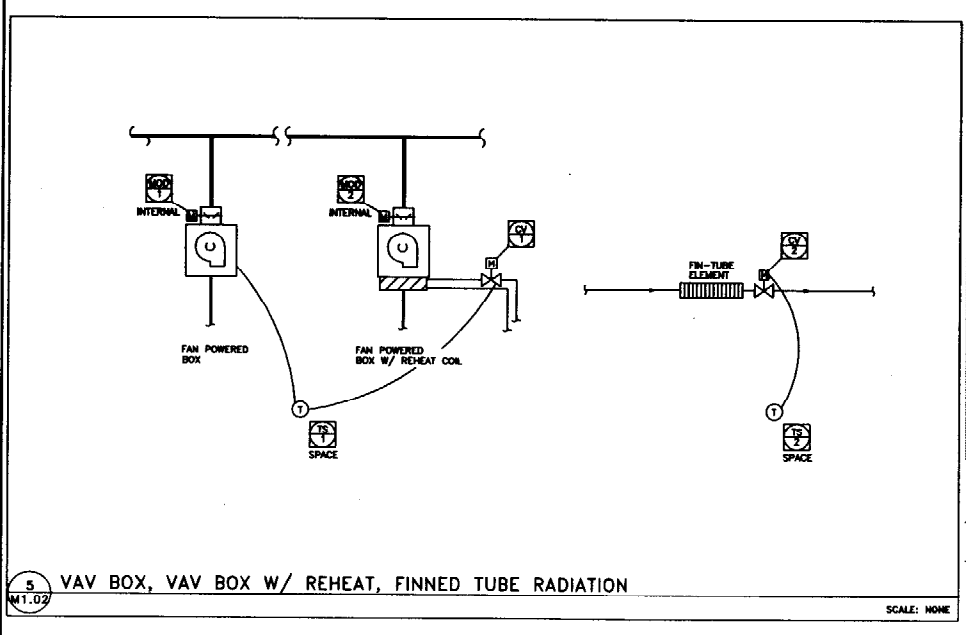
2 HOT WATER HEATING COIL CONNECTIONS ONE HIGH WITH 2-WAY VALVE SCALE: NONE



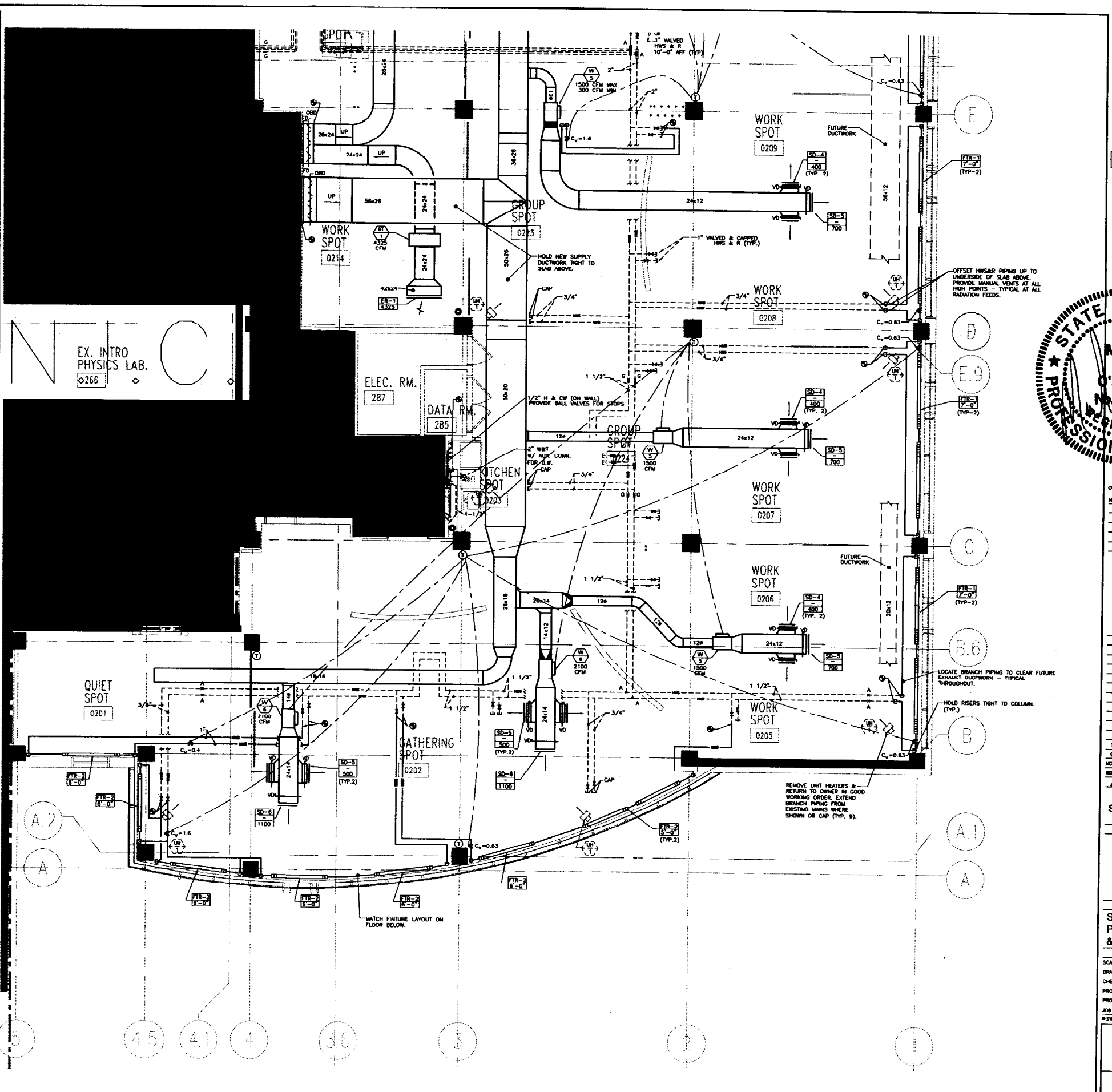
3 LOW PRESSURE DUCT TAKEOFFS SCALE: NONE



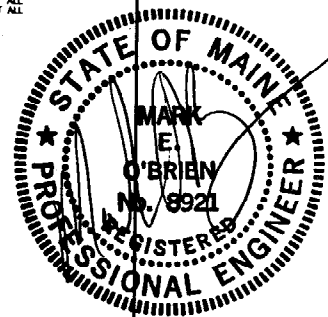
4 TYPICAL DUCTWORK FITTING DETAILS SCALE: NONE



5 VAV BOX, VAV BOX W/ REHEAT, FINNED TUBE RADIATION SCALE: NONE



SMMA  
1000 Massachusetts Avenue  
Cambridge, Massachusetts 02138  
617.547.5400 Fax 617.554.5758



OWNER REVIEW  
NAME \_\_\_\_\_ DATE \_\_\_\_\_

1 10-28-03 REVISIONS  
0 10-03-03 CD SET  
NO. DATE DESCRIPTION  
ISSUE LOG  
△ = CLOUSED CHANGE  
UNIVERSITY OF SOUTHERN MAINE  
PORTLAND, MAINE

SECOND FLOOR  
PART PLAN  
& DETAILS

SCALE 1/4" = 1'-0"  
DRAWN BY JMC  
CHECKED BY PHL/LS  
PROL. ARCH. / ENGR. LG  
PROL. MGR. RCH  
JOB NO. 03040.00  
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M1.02

**DEMOLITION NOTES:**

- EXISTING LIGHTING, POWER AND SYSTEM DEVICES, EQUIPMENT AND WIRING REMAIN UNLESS OTHERWISE SHOWN ON THE PLAN.
- REMOVE CONDUITS AND BRANCH CIRCUIT WIRING FOR THE EQUIPMENT AND FIXTURES THAT SHALL BE DEMOLISHED. REMOVE CONDUITS AND WIRING BACK TO THE PANEL.
- EXISTING JUNCTION BOX AND HOMERUN CIRCUIT "EDP1-8" SHALL REMAIN AND RE-USED FOR NEW LIGHTING WIRING. SEE DWG E1.2.
- EXISTING FIXTURES TYPE "E" (TOTAL OF 18) INSTALLED IN THE OPEN SPACE AREA AND THEIR WIRING SHALL BE REMOVED. FIXTURES SHALL BE RE-USED FOR NEW LIGHTING PLAN. SEE DWG E1.2. RETURN (2) TO OWNER.

LIGHTING FIXTURE SCHEDULE						
FXIT. TYPE	MANUFACTURER	CATALOG NO.	VOLTS	NO. OF LAMPS	LAMP TYPE	DESCRIPTION
A	CORELITE	NAVIGATOR MILKTEB-1C-AC	277	2	F032/835	TRUSS/ARMED FIXTURE, 200 UP/700 DOWN, FOR FIXTURE LENGTH AND NO. OF SECTIONS SEE PLANS, AIRCRAFT CASE.
E	METALLUX	M-232	277	2	F032/835	4' FLUORESCENT INDUSTRIAL FIXTURE WITH 30 UPLIGHT
X	LIGHTPANEL TECHNOLOGIES, LLC	DCA-AC-2A	277	-	ELECTROLUMINESCENT	THE "OSY" ALUMINUM TUB SHOWN WITH ELECTROLUMINESCENT LAMP LIGHT SOURCE, GREEN LETTERS, ARROWS AND DOUBLE FACE REFER TO DRAWING

- NUMBER OF LAMPS IN CROSS SECTION.
- EXISTING FIXTURES TO BE RE-USED.
- FURNISH AND INSTALL WIRE GUARD (WG/1C-4T-U)

**ELECTRICAL SPECIFICATION:**

- A. ELECTRICAL WORK INCLUDES BUT IS NOT NECESSARILY LIMITED TO THE FOLLOWING:**
- GROUNDING.
  - POWER PANEL.
  - SAFETY SWITCHES AND CIRCUIT BREAKERS.
  - PANEL FEEDER WIRING AND CONDUIT.
  - BRANCH CIRCUIT WIRING AND CONDUIT FROM PANELS TO ALL OUTLETS.
  - RECEPTACLES, SWITCHES AND OTHER DEVICES.
  - OUTLET BOXES, RECEPTACLES, SWITCHES AND OTHER DEVICES.
  - EMERGENCY LIGHTING SYSTEM.
  - LIGHTING FIXTURES COMPLETE WITH LAMPS, BALLASTS AND RELATED WIRING.
  - TESTING.

**B. WORK BY OWNER OR SEPARATE CONTRACTOR:**

- TELEPHONE AND DATA EQUIPMENT, TRUNK CABLES TO THE TELEPHONE CLOSETS, OUTLETS WIRING AND RELATED ITEMS.

**C. GENERAL:**

- THE WORK SHALL BE EXECUTED IN STRICT CONFORMITY WITH NATIONAL ELECTRICAL CODE, ALL LOCAL REGULATIONS THAT MAY APPLY AND THE REQUIREMENTS OF THE OWNER'S INSURANCE UNDERWRITERS. IN CASE OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND A GOVERNING CODE OR ORDINANCE, THE MORE STRINGENT STANDARD SHALL APPLY.
- THIS CONTRACTOR SHALL SECURE ALL PERMITS, PAY FEES, PERFORM ALL TASKS, AND ARRANGE FOR INSPECTIONS REQUIRED FOR THE WORK SPECIFIED UNDER THIS SECTION.
- REFER TO ALL DRAWINGS ASSOCIATED WITH THE PROJECT, PRIOR TO THE INSTALLATION OR REWORKING OF THE ELECTRICAL OUTLETS, CONDUIT AND EQUIPMENT, TO DETERMINE THEIR EXACT LOCATION.
- THE ELECTRICAL DRAWINGS ARE DIAGNOSTIC ONLY AND ARE NOT INTENDED TO SHOW EVERY DETAIL OF CONSTRUCTION OR ARBITRARY LOCATION OF WIRING. EACH SYSTEM SHALL BE COMPLETE WITH MINOR PARTS NOT SPECIFICALLY NOTED ON THE DRAWINGS, BUT REQUIRED FOR A PROPERLY FUNCTIONING SYSTEM CONFORMING TO ALL APPLICABLE CODES.

**D. SUBMITTALS:**

- PRODUCT DATA FOR ALL SPECIFIED PRODUCTS AND MATERIALS.

- CONDUIT.
- WIRE AND CABLE.
- DISCONNECT SWITCHES.
- WIRING DEVICES AND PLATES.

**2. SHOP DRAWINGS:**

- POWER AND LIGHTING PANELS.
- LIGHTING FIXTURES.

**E. GROUNDING:**

- FEEDER AND BRANCH CIRCUIT EQUIPMENT GROUNDING CONDUCTORS SHALL HAVE GREEN INSULATION.
- CLAMP, CONNECTORS, BOLT, NUTS AND OTHER HARDWARE SHALL BE HIGH CONDUCTIVITY COPPER ALLOY PRODUCTS AS MANUFACTURED BY D-2/DEWEY, THOMAS & BETTS CO., ETC. OF EQUAL.

**F. WIRING METHODS:**

- IN GENERAL, WIRING SHALL BE INSULATED RIGID CONDUCTORS INSTALLED IN CONDUIT OR ELECTRICAL METALLIC TUBING RUN CONCEALED OR EXPOSED. MINIMUM CONDUIT SIZE SHALL BE 1/2 INCH.
- ARMORED CABLE ("MC") WITH A SEPARATE GREEN GROUNDING WIRE MAY BE USED ABOVE SUSPENDED CEILING AND IN CRYSTALLINE PARTITIONS. SUPPORT MC TYPE AT INTERVALS NOT EXCEEDING 8 FT.
- CONDUCTORS SHALL HAVE 75 DEGREE C INSULATION RATED FOR 900 VOLTS AND SHALL BE COPPER, 120 VOLT BRANCH CIRCUITS OF MORE THAN 100' FROM CENTER OF LOAD TO PANEL SHALL BE NO. 10.
- MINIMUM SIZE WIRE FOR POWER AND LIGHTING CIRCUITS SHALL BE NO. 12 AWG. CONTROL WIRING AND LOW VOLTAGE SYSTEMS SHALL BE MINIMUM NO. 14 AWG. CONDUCTORS #10 OR LARGER SHALL BE STRANDED, COLOR CODED PER NATIONAL ELECTRICAL CODE.
- FITTINGS FOR ELECTRICAL METALLIC TUBING SHALL BE STEEL SET SCREW TYPE.

**G. MATERIALS:**

- ALL MATERIALS SHALL BE LISTED BY UNDERWRITER'S LABORATORIES.

**H. WIRING DEVICES:**

- ALL WIRING DEVICES SHALL BE SPECIFICATION GRADE AS MANUFACTURED BY ARROW-HART, HUBBELL, GENERAL ELECTRIC, LEVITON OR AN APPROVED EQUAL. COORDINATE LOCATIONS WITH ARCHITECT AND OWNER.
- ALL WIRING DEVICES SHALL HAVE FACES AND SWITCH HANDLES OF NYLON. DEVICE COLOR AND FACE PLATE SHALL MATCH EXISTING.
- DUPLEX CONVENIENCE OUTLETS SHALL BE INTD 20 AMP, 120-VOLTS GROUNDING TYPE, EQUAL TO HUBBELL #3624.
- TOOLIE SWITCHES SHALL BE INTD 20-AMP AT 120-277 VOLTS AND SHALL BE UL LISTED FOR MOTOR LOADS UP TO 80 PERCENT OF RATED AMPERAGE AND 100 PERCENTAGE OF RATED AMPERAGE FOR FLUORESCENT, RESISTANCE OR TUNGSTEN LOADS.

**I. LIGHTING:**

- LIGHTING SYSTEMS: THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE SYSTEM CONSISTING OF FEEDER, CONDUIT AND FITTINGS, WIRE, JUNCTION BOXES, SWITCHES, AND LIGHT FIXTURES, COMPLETE WITH LAMPS. SEE DRAWINGS FOR FIXTURE SCHEDULE.
  - BALLASTS FOR FLUORESCENT LAMPS SHALL BE RAPID-START TYPE ETI, CERTIFIED, CLASS P, UL LISTED, HIGH POWER-FACTOR TYPE, ELECTRONIC, CLASS A NOISE, 100 LESS THAN 20dB.
  - LAMPS SHALL BE ENERGY SAVING TYPE OR FOR FLUORESCENT LAMPS SHALL BE NOT LESS THAN .82 ALL AS LISTED ON FIXTURE SCHEDULE.
- J. PANELBOARDS:**
- PANELBOARDS SHALL BE OF THE DEAD FRONT CIRCUIT BREAKER TYPE, TRIM SHALL BE HINGED FULL LENGTH (DOOR-IN-DOOR CONSTRUCTION) WITH BOTH LOCKS KEYS ALIKE. PANEL ENCLOSURE - NEMA 1.
  - CIRCUIT BREAKERS SHALL BE OF THE THERMAL-MAGNETIC TYPE, MOLDED CASE, BOLT-ON TYPE.
  - TRIM-PLATED ALUMINUM PHASE AND NEUTRAL BUS, COPPER EQUIPMENT GROUND BAR.
  - PANELBOARDS SHALL BE MINIMUM OF 100 AMPERE FRAME.
  - PANELBOARD DIRECTORY SHALL HAVE A PLASTIC COVER AND BE FILLED OUT COMPLETELY, IDENTIFYING ALL CIRCUITS.
  - PANELBOARD SHALL BE IDENTIFIED WITH ITS NAME ENGRAVED ON A SCREW FASTENER, BRASS PLATE TYPE NAMEPLATE.
  - PANELBOARDS SHALL BE MANUFACTURED BY GENERAL ELECTRIC, SQUARE D, SIKEM or APPROVED EQUAL.
- K. INSPECTION AND TESTS:**
- ALL WORK SHALL BE SUBJECT TO THE INSPECTION OF THE OWNER, THE ARCHITECT AND SUCH OTHER INSPECTORS AS HAVE JURISDICTION. A PROPERLY DULCATED CERTIFICATION OF INSPECTION SHALL BE PROVIDED.

**LEGEND**

NOTE: ALL SYMBOLS ON THIS LIST ARE NOT NECESSARILY USED ON THIS JOB.

**CONDUIT AND WIRE:**

- PP1-1A: HOMERUN TO PANELBOARD "PP21", CIRCUIT NOS. 1,3,5. DIAGONAL LINES INDICATE NUMBER OF PHASE AND NEUTRAL WIRES. NO DIAGONAL LINES INDICATES 1/2" - 2 1/2" & 1 1/2" SWG, UNLESS OTHERWISE NOTED.
- : RACEWAY CONCEALED IN CEILING OR WALLS, OR EXPOSED IN UNFINISHED AREAS.
- : CONDUIT UP.
- : CONDUIT DOWN.

**LIGHTING:**

- : CEILING OR WALL SURFACE OR RECESSED MOUNTED FLUORESCENT LIGHTING FIXTURE. "A" DENOTES TYPE (REFER TO FIXTURE SCHEDULE), NUMERAL DENOTES CIRCUIT NUMBER, "S" DENOTES FIXTURE CONTROLLED BY SWITCH "S".
- : SURFACE MOUNTED STRIP FLUORESCENT LIGHTING FIXTURE. "A" DENOTES TYPE (REFER TO FIXTURE SCHEDULE), NUMERAL DENOTES CIRCUIT NUMBER, "S" DENOTES FIXTURE CONTROLLED BY SWITCH "S".
- : CEILING RECESSED OR SURFACE MOUNTED INCANDESCENT COMP. FLUOR OR HD LIGHTING FIXTURE. "A" DENOTES TYPE, NUMERAL DENOTES CIRCUIT NUMBER, AND "S" DENOTES FIXTURE CONTROLLED BY SWITCH "S". (WALL MOUNTED)
- ⊙: EXIT LIGHT CEILING MOUNTED WITH DIRECTIONAL ARROW AS INDICATED ON PLAN. (WALL MOUNTED WITHOUT ARROWS)
- ⊙: LIGHTING FIXTURE WIRING TO NIGHT OR EMERGENCY LIGHTING CIRCUIT.

**SWITCHING:**

- S: SINGLE POLE SWITCH MOUNTED 4'-0" A.F.F.
- S<sub>2</sub>: TWO POLE SWITCH MOUNTED 4'-0" A.F.F.
- S<sub>3</sub>: THREE WAY SWITCH MOUNTED 4'-0" A.F.F.
- S<sub>4</sub>: FOUR WAY SWITCH MOUNTED 4'-0" A.F.F.
- S<sub>M</sub>: MOTOR RATED SWITCH WITH THERMAL OVERLOAD PROTECTION.

**COMMUNICATION AND SIGNAL:**

- ▷: COMBINATION DATA/TELEPHONE OUTLET, MOUNTED 18" A.F.F. "M" INDICATES MOUNTED 24" A.F.F. "S" SQUARE BOX WITH SINGLE GANG PLASTER RING, 3/4" CONDUIT UP TO THE STRUCTURAL CEILING WITH 90° ELBOW. TERMINATE WITH PLASTIC BUSHING.

**ABBREVIATIONS:**

- WP: WEATHERPROOF.
- N.L.C.: NOT IN CONTRACT.
- A.F.F.: ABOVE FINISHED FLOOR.
- XP: EXPLOSION PROOF.
- N.T.S.: NOT TO SCALE.
- ER: EXISTING DEVICE SHALL REMAIN.
- XR: EXISTING DEVICE SHALL BE RELOCATED AS SHOWN ON PLANS.
- EX: EXISTING DEVICE SHALL BE REMOVED.

**RECEPTACLES:**

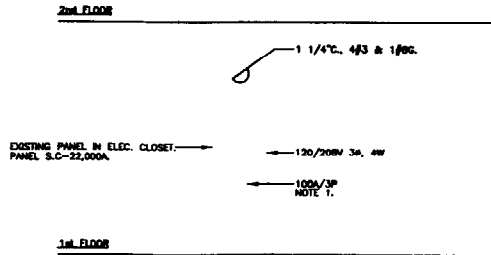
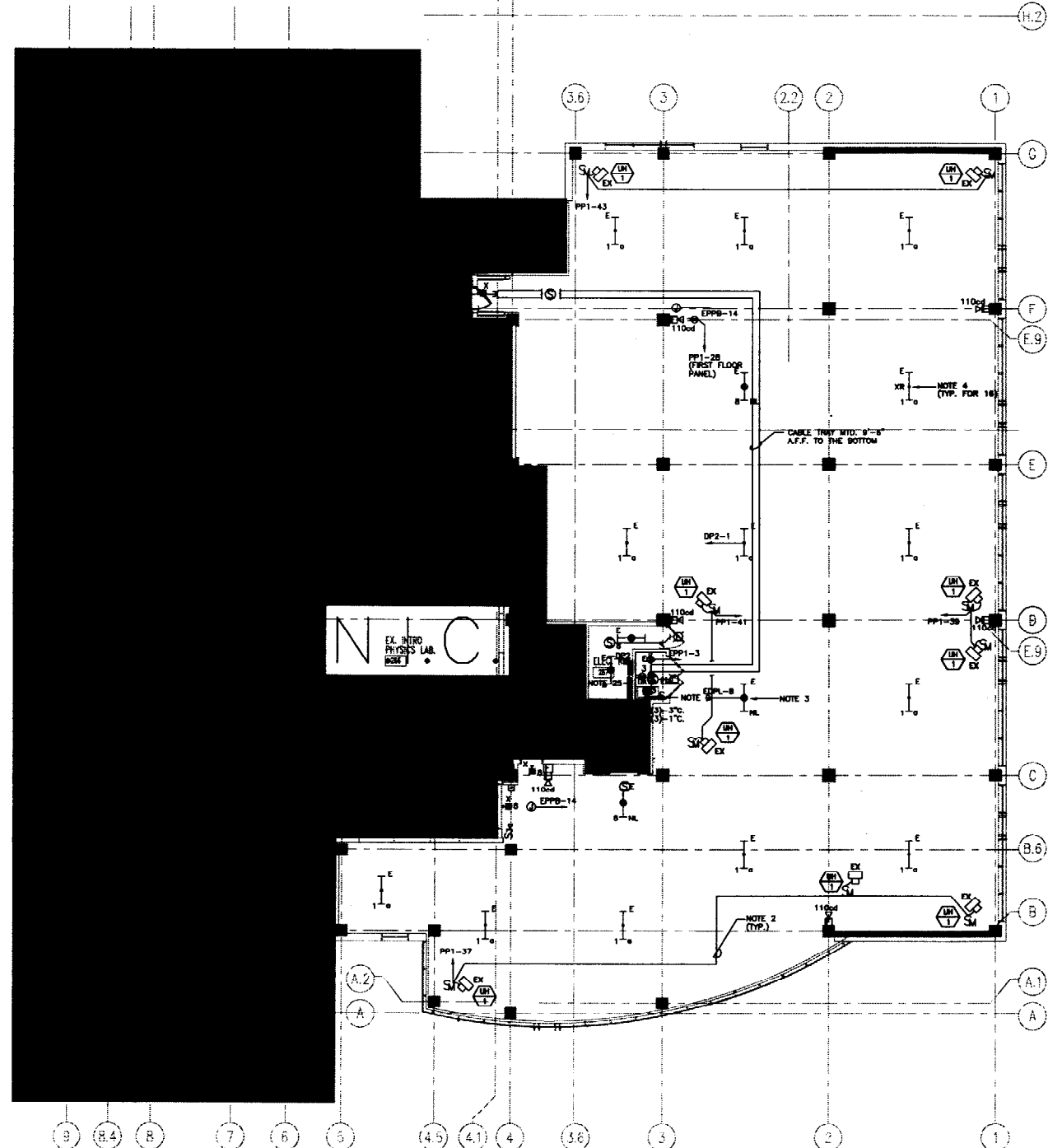
- : DUPLEX RECEPTACLE - GROUNDING TYPE - MOUNTED 18" A.F.F. UNLESS OTHERWISE INDICATED. NUMERAL INDICATES CIRCUIT NUMBER.
- : DUPLEX RECEPTACLE - GROUNDING TYPE - MOUNTED AT 42" A.F.F. OR 6" ABOVE COUNTER TOP OR BACK SPLASH WHERE EXISTENT.
- : DUPLEX RECEPTACLE - GROUNDING TYPE - "90" INDICATES GROUND FAULT INTERRUPTING TYPE - MOUNTED 42" A.F.F. OR 6" ABOVE COUNTER TOP OR BACK SPLASH WHERE EXISTENT.
- : DOUBLE DUPLEX RECEPTACLE - GROUNDING TYPE - MOUNTED AT 18" A.F.F. UNLESS OTHERWISE INDICATED.

**FIRE ALARM:**

- : FIRE ALARM PULL STATION MOUNT BOTTOM OF DEVICE AT 4'-0" A.F.F.
- : FIRE ALARM HORN/STROBE COMBINATION MOUNT BOTTOM OF DEVICE AT 6'-0" A.F.F. OR 6" BELOW CEILING, WHICHEVER IS LOWER. "110dB" DENOTES STROBE CANDELA RATING. NO "dB" VALUE INDICATES PROVIDE "75dB" STROBE.
- : FIRE ALARM STROBE ONLY MOUNT BOTTOM OF DEVICE AT 6'-0" A.F.F. OR 6" BELOW CEILING, WHICHEVER IS LOWER. "110dB" DENOTES STROBE CANDELA RATING. NO "dB" VALUE INDICATES PROVIDE "75dB" STROBE.
- : FIRE ALARM HEAT DETECTOR, FIXED TEMPERATURE TYPE. "130" INDICATES TEMPERATURE SETTING.
- : FIRE ALARM HEAT DETECTOR, COMBINATION RATE OF RISE/FIXED TEMPERATURE. "130" INDICATES TEMPERATURE SETTING.
- : FIRE ALARM SMOKE DETECTOR.
- : FIRE ALARM DUCT TYPE SMOKE DETECTOR.
- : MAGNETIC DOOR HOLDER.
- : TAMPER SWITCH.
- : FLOW SWITCH.
- : REMOTE (LED) INDICATOR LIGHT.
- : DUCT SMOKE DETECTOR REMOTE INDICATOR/TEST STATION MOUNTED 6'-0" A.F.F. OR 6" BELOW FINISHED CEILING WHICHEVER IS LOWER.

**MISCELLANEOUS:**

- : MOTOR. NUMERAL INDICATES HORSEPOWER.
- : NON-FUSED DISCONNECT SWITCH. 3 POLE, 30 AMP, UNLESS OTHERWISE NOTED.
- : FUSED 3 POLE DISCONNECT SWITCH. "30A" DENOTES SWITCH SIZE, "20A" DENOTES FUSE SIZE.
- : COMBINATION STARTER/NON-FUSED DISCONNECT SWITCH. 3 POLE, 30 AMP SWITCH, WITH NEMA SIZE 1 STARTER UNLESS OTHERWISE NOTED. (WITH FUSED DISCONNECT SWITCH)
- : MAGNETIC MOTOR STARTER.
- : JUNCTION BOX.
- : SURFACE MOUNTED 120/208 VOLT PANELBOARD 6'-8" A.F.F. TO TOP. (FLUSH MOUNTED)
- : SURFACE MOUNTED 277/480 VOLT PANELBOARD 6'-8" A.F.F. TO TOP. (FLUSH MOUNTED)
- : DRY TYPE TRANSFORMER, RATING AS INDICATED ON SCHEMATIC RISER DIAGRAM.



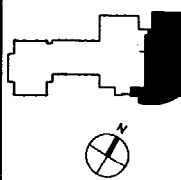
**NOTES:**

- FURNISH AND INSTALL NEW CIRCUIT BREAKER IN THE EXISTING SPACE. CIRCUIT BREAKER TYPE AND SHORT-CIRCUIT RATING TO MATCH EXISTING.
- PANEL 100A MLD, 120/208V, 3φ, 4W, SURFACE MTD. (24) 20A/1P CIRCUIT BREAKER, TOTAL 42 POLES, S.C.-10,000A.

1 SECOND FLOOR PLAN - DEMOLITION  
1/8" = 1'-0"

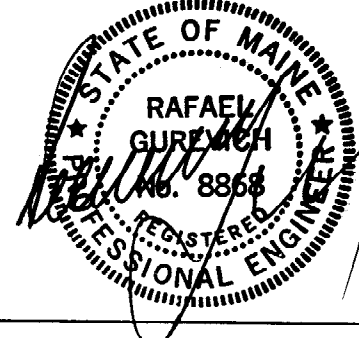
2 ONE-LINE DIAGRAM  
NONE

**SMMA**  
1000 Massachusetts Avenue  
Cambridge, Massachusetts 02138  
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OWNER REVIEW  
NAME \_\_\_\_\_ DATE \_\_\_\_\_

0 10-03-03 CD SET  
NO. DATE DESCRIPTION  
ISSUE LOG  
\* CLOSER CHANGE  
**UNIVERSITY OF SOUTHERN MAINE**  
DEPARTMENT OF THE BIOSCIENCES HERITAGE & THE INFORMATIONAL SCIENCES HERITAGE



LEGEND, SPECIFICATIONS, FIXTURE SCHEDULE, ONE-LINE DIAGRAM AND DEMOLITION PLAN

SCALE AS NOTED  
DRAWN BY SFM  
CHECKED BY  
PROJ. ARCH / ENGR. RM  
PROJ. MGR. JCH  
DATE 020408.00  
\* 2008, MAIN E-LOCKE ASSOCIATES, INC. 280

E1.1

